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Does High Market Power Benefit Government Banks? Evidence From an Emerging Country

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ABSTRACT

This study examines whether government exert their monopoly power to mark their price higher thus increases their profitability. Using Indonesian dataset for period 2009-2019 we analyze the impact of market power on cost of intermediation and profitability. We focus on looking the different effect on smaller vs larger banks, or private and government banks. We extend further our investigation by looking into local vs central government. Our findings show that private banks exert more their monopoly power as their businesses is purely driven by profit maximization motives. Conversely government banks are less likely to exert their monopoly power as they are more likely to pursue non-profit maximization motives driven by political or social motives. Our findings therefore support the view on government ownership that is deemed to be detrimental to shareholder wealth.

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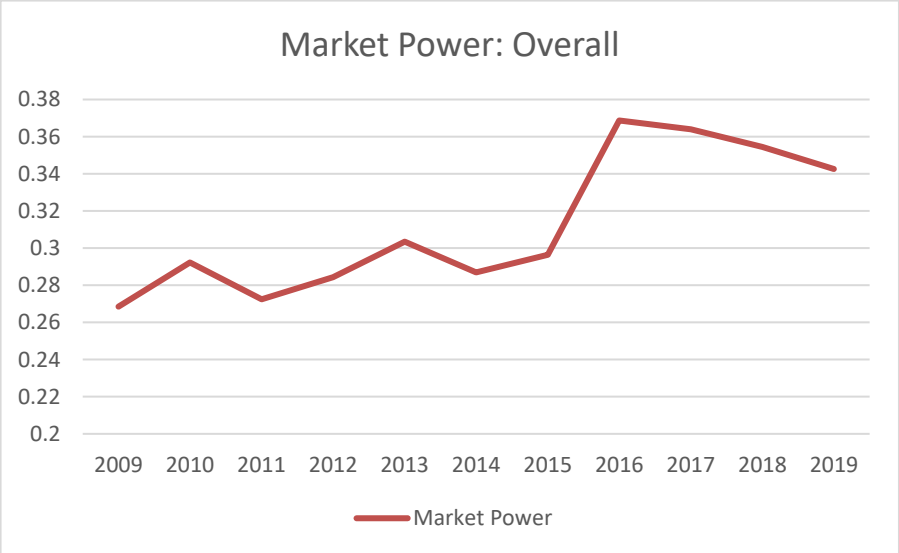
INTRODUCTION

It has been widely known that government ownership often pursues non-profit maximization driven by either social or political motives (Megginson, 2017; Shleifer and Vishny, 1994). This non-economic objectives, therefore, are widely regarded to be detrimental to minorities stakes (Berger et al., 2009; Bonin et al., 2005). Even worse, the expropriation is taken to the extent of financing the project that maximize the private welfare of the politicians instead of banks profit (Khwaja and Mian, 2005; Sapienza, 2004). Although many empirical literatures shows that state ownership in some cases comes with benefit such as preferential treatment in the difficult time (Beuselinck et al., 2017; Borisova et al., 2015) and cross-subsidization (Sheshinski and López-Calva, 2003), these benefits are only available in the hard times rather normal economic condition. Therefore, the presence of government ownership in banks particularly related to their performance has become an important area to explore. In particular, in the aftermath of global financial crisis in 2007-2008, governments around the world has increases their stakes substantially specifically to maintain control and to save their crumbling financial system (Megginson, 2017; Nash, 2017).

In this paper we focus on analyzing whether government banks do not benefit more from market power due to their non-economic objective. Our objective is to show that even the government banks have market power, they tend to not increase their price due to pursuing non-economic objectives. Our findings reveal that the impact of market power is positively associated with cost of intermediation and profitability. However, the effect is lower for government and larger banks compare to smaller and private banks implying that government banks are limited by their non-economic objectives. Private banks in the other hand exert more their market power to maximize their profit.

To thoroughly study the impact of competition on cost of intermediation and profitability we use combined dataset from annual and financial report of Indonesian banking and the available information of ownership from ministry of state-owned enterprises republic of Indonesia for period 2009-2019. We choose Indonesian banks as a sample due to several reason. First, the market concentration for banking industry in Indonesia is increasing over time. The Central bank of Indonesia provides a strong incentive for merger and acquisition by raising the minimum capital requirement to 1 trillion rupiah[1]. The implementation of the regulation indeed, forces smaller banks to join merger or being acquired by larger banks in order to be able to fulfil the minimum capital requirement. This leads into more market concentration overtime as M&A is a slow process and deteriorate competition in the banking market. As presented by Figure 1, the average market power increases over period of time alongside with the implementation of minimum capital requirement in Indonesian banks.

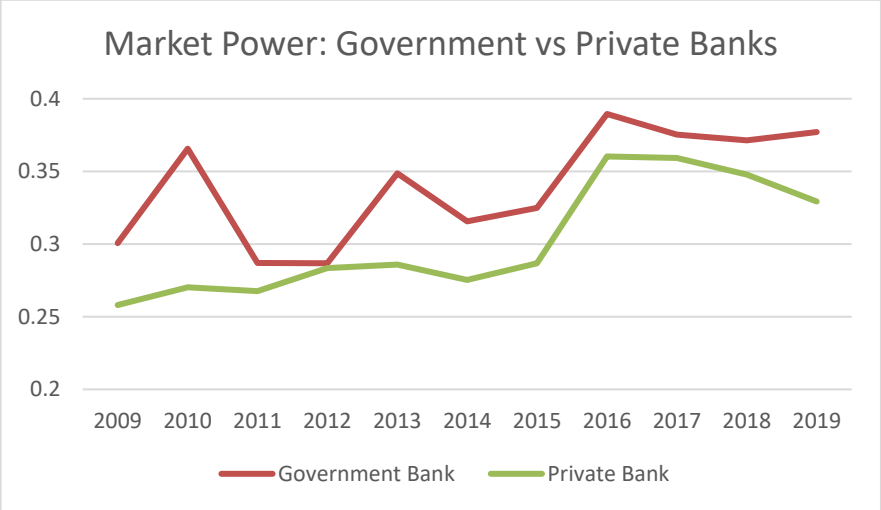


Source: Authors' calculation

Figure 1 Overall Market Power in Indonesia

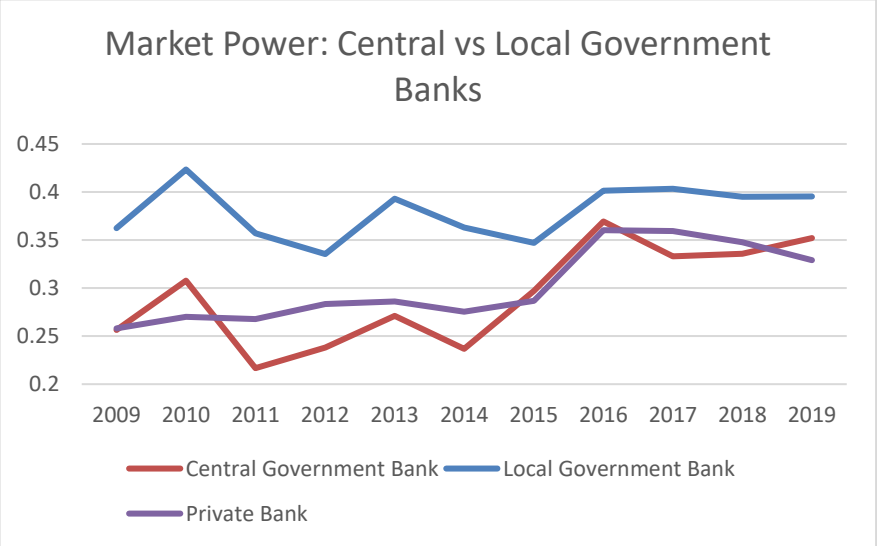
[1] WIth the enactment of. OJK Regulation No. 11/POJK.03/2016 the minimum capital requirement is slowly increased by the regulator in order to force banks to be able to withstand shock with larger capital requirement.

Secondly, the government ownership presence in the economics is quite significant particularly in banking industry where three of four biggest banks in Indonesia is state-owned banks with significantly high market share. As presented by Figure 2, State-owned banks tend to have higher market power compare to their private counterpart. Moreover, as presented by Figure 3, local government banks tend to have more market power compare to central government banks. Local government banks normally are protected by local government and benefited more from many local government policies including the obligation of salary transfer for public worker using local government banks.



Source: Authors' calculation

Figure 2 Market Power: Government vs Private Banks



Source: Authors' calculation

Figure 3 Market Power: Central vs Local Government Banks

Thirdly, Indonesia is widely considered to have weak investor protection increasing the probability of expropriation. The country itself is ranked 73rd by world bank doing business index that is far beyond its neighboring country such as Thailand (21st), Malaysia (12th) and Singapore (2nd). With weak institutional protection, majority or ultimate owner of the firms have more incentives to expropriate firms at the cost of minority interest. This is combined with lack of judicial authorities' surveillance provides stronger incentives for expropriation that in turn will be detrimental to banks' governance and profitability. Thus, examining the role of government ownership in banking industry using Indonesian perspective will bring particular insight that will shed the light upon yet undiscovered facts on government ownership relationship with market power

in country where the presence of government ownership is strong and where the competition is deteriorating overtime due to the regulation.

While previous study focuses on the relative merits of government ownership by showing directly the negative and positive impact of state capitalism (e.g. Bonin et al., 2005; Cull and Xu, 2003; Faccio et al., 2006; Lassoued et al., 2016; Wu et al., 2012) the effect of state ownership under different level of market power is yet to discover. We extend our study by examining deeper government ownership given to their level of market power to provide evidences that even with high market power the motives of government ownership are not merely driven by economic objectives but also by social and political objectives. Therefore this empirical study contributes to the literature of bank competition by showing that the impact of competition could be less in government bank compare to their private counterpart (King, 2013; Kusi et al., 2020; Meslier et al., 2017; Trinugroho et al., 2014). This study also contributes to the literature of state-ownership by showing that even with high market power, government banks find it relatively hard to improve their profitability due to their non-economic motives (Borisova and Megginson, 2011; Megginson, 2017; Mo et al., 2021; Wu et al., 2012). Our findings therefore are important to policy makers particularly in emerging countries where shareholder protection is considered weak and the presence of state ownership is common.

The rest of the paper is organized as follows. Section 2 presents previous empirical literature and the development of the hypotheses. Section 3 describes our sample, variable of interest and employed empirical model. Section 4 presents the empirical results and section 5 concludes the paper.

LITERATURE AND HYPOTHESIS DEVELOPMENT

Bank Competition

A competitive market is considered beneficial to improve efficiency particularly promoting innovation that will help to reduce cost thus decreases the cost of intermediation. However, in less competitive market, bank can use their market power to set their price higher, increasing the cost of intermediation. In line with this, previous empirical literature has shown that competition indeed decreases the cost of intermediation (Beck et al., 2013; Fiordelisi and Mare, 2014; Hasan et al., 2021; Kasman et al., 2010; Schaeck and Cihák, 2014; Trinugroho et al., 2014). Furthermore, larger banks tend to not exert their monopoly power as they have the capability of diversifying their income without too much relying from their traditional activities. Hence Hypothesis 1 and Hypothesis 2 are formulated as below:

H1: Market power is positively associated with cost of intermediation and profitability.
H2: the effect of market power to cost of intermediation and profitability is lower for larger banks compare to their smaller counterpart.

Government Ownership

A strand of literature has provided evidences on why government ownership is detrimental to the shareholders' interest (Bai et al., 2000; Berger et al., 2005; Berger et al., 2009; Bonin et al., 2005; Lin and Li, 2008). Government ownership has been empirically proven to be detrimental also to profitability (Berger et al., 2009; Bonin et al., 2005) and risk taking behavior (Chen et al., 2016; Lassoued et al., 2016). According to Megginson (2005), there are three possible factors driving the presence of state ownership in banking industry. First, the presence of government ownership on banks is to maintain control on financial system over the country. Second, government banks have both resources and capabilities to enter to the sector that lacks private financing particularly to sector that is socially or politically important giving more incentives for the government ownership to enter. Third, government banks are able to finance growth with sufficient risk tolerance compare to their private counterpart. Therefore, even in a fully competitive market government ownership over firms will be inefficient as it is mainly driven by non-profit maximization objectives (Shleifer and Vishny, 1994).

In contrast, another strand of literature has pointed out that government ownership can be beneficial by bringing better monitoring (Borisova et al., 2012), aids to resolve market failure (Cull et al., 2017), and cross-subsidization (Sheshinski and López-Calva, 2003). Government ownership in banks can also provide banks with numerous benefit of preferential treatments and connections (Beuselinck et al., 2017; Borisova et al.,

2015; Cumming et al., 2017; Faccio et al., 2006). However, this preferential treatment could lead into more inefficient decision potentially harmful for the profitability. Lin and Li (2008) shows that state-owned firms pursuing non-economic objectives, even after privatization still suffers inefficiency that affect their profitability thus greatly rely on subsidization to be able to survive. Hence even though government banks have more market power they are less likely to exert their monopoly power to maximize their profit due to their non-economic objectives. To examine the gap between the benefit and the drawback of government ownership, we argue that under normal economic condition, government ownership tend to be detrimental while the benefit of the government normally can only be benefited during financial difficult times. Hence the Hypothesis 3 is formulated as below:

H3: the effect of market power to cost of intermediation and profitability is lower for government banks compare to their private counterpart.

Moreover, Cheung et al. (2010) shows that harmful effect of government ownership holds only on local government rather than central government. Central government tend to receive more surveillance and wide national attention from media and judicial authorities. Conversely, local government receives less attention from media and judicial authorities, thus reducing surveillance and monitoring allowing them to be able to pursue more their interest at the cost of efficiency and profitability. Thus, Hypothesis 4 is formulated as below:

H4: the effect of market power to cost of intermediation and profitability is lower for local government banks compare to central government banks.

DATA AND METHODOLOGY

The Lerner index in Indonesian banks increases over the period of time although the average number is still below 0.5. Furthermore, government banks seem to have higher market power compare to their private counterpart. Furthermore, after we breakdown the government ownership by identifying local and central government, we observed that local government banks on average have higher market power compare to private banks. While these different types of banks compete in the same environment, local government bank have their certain-specific market. Normally, local government employees are required to have bank account in local government bank to receive their salary. Hence, local government banks normally have easier access to fund which is also cheaper.

To analyze the impact of market power to the cost of intermediation and profitability we employ econometric specification below:

$$NIM_{it} = \beta_0 + \beta_1 Lerner_{it} + \sum_m \theta_m Control_{it} + \varepsilon_{it} \quad (1)$$

$$Profitability_{it} = \beta_0 + \beta_1 Lerner_{it} + \sum_m \theta_m Control_{it} + \varepsilon_{it} \quad (2)$$

We use combined dataset of Indonesian banks from various sources for period 2009-2019 to examine our empirical model. We obtain the financial data from banks' annual report to construct our main variable of interest and control variables. We use the information from the Ministry of State-Owned Enterprises of Republic of Indonesia and ownership information from annual report to construct ownership variables. Our dependent variables are Net Interest Margin that reflect the cost of intermediation, ROA and ROE to account for banks' profitability.

Our main variable of interest is market competition measured by Lerner index as lerner index is widely used to proxy for market power and competition (Achsanta et al., 2021; Beck et al., 2013; Berger et al., 2009; Fiordelisi and Mare, 2014; Schaeck and Cihák, 2014; Yin, 2021). We follow Fu et al. (2014) constructing the Lerner as expressed by the Equation (3) where the Lerner index is measured as the markup price of the banking product over their marginal costs.

$$Lerner = \frac{(Price - Marginal\ Cost)}{Price} \quad (3)$$

We measure *Price* as the ratio of the total revenue to total asset. To measure marginal cost we follow Meslier et al. (2017) by using the translog cost function. The value of the Lerner index ranges between 0 and 1 where the lower value reflecting low market power or more competitive market to the higher value indicating high market power or less competitive market as banks with higher market power are able to set the price above their marginal cost in less competitive market (Meslier et al., 2017). Furthermore, the Lerner index could also reveal inefficiency in banks in case of negative value.

We also employ several control variables in the Equitation (1) And Equation (2). We follow Achsanta et al. (2021), Poghosyan (2010) and Trinugroho et al. (2015) by including the ratio of equity to total asset (*EQTA*) to account for risk aversion. Based on these previous empirical researches, we expect positive sign as the higher degree of risk association is associated with higher net interest margin set by banks. Following Barry et al. (2011), we consider the natural logarithm of total asset (*Size*) to account for the size of the banks and expect negative sign. We follow Achsanta et al. (2021) by including the ratio of loan loss reserve to gross loan (*LLRGL*) to account for credit risk. We further expect negative sign as the higher credit risk is associated with lower net interest margin. We follow Nguyen et al. (2020) by employing the square of market share (*MSSq*) to proxy for banks' share over the total asset of banking industry in Indonesia and expect positive sign based on their research. Banks with higher market share tend to be able to reach economic of scale and thus can maximize their profitability better while also having larger power to widen their net interest margin gap. We follow Achsanta et al. (2021) by employing also the ratio total loan to total asset (*TLTA*) and expect positive sign. The more banks channel the deposit into loan in the market the more profit banks can generate rather than holding idle-non-profitable asset. Lastly to account for efficiency we follow Maudos and Solís (2009) and Trinugroho et al. (2015) by employing the ratio of cost to income (*CIR*) where they find negative effect of CIR to the cost of intermediation. We expect negative relationship between efficiency and net interest margin as it reflects how much banks spend to obtain a unit of income.

Table 1 Data sources and summary statistic for variables

Variables	Data Sources	Mean	Min	Max	SD
NIM	Annual Report	0.103	-0.042	25.110	0.962
ROA	Annual Report	0.015	-0.052	0.162	0.023
ROE	Annual Report	0.104	-0.346	0.904	0.139
Lerner	Annual Report	.314	0.028	0.530	0.127
DGB	Annual Report & Ministry of SOE	0.277	0	1	0.448
DCG	Annual Report & Ministry of SOE	0.101	0	1	0.302
DLG	Annual Report & Ministry of SOE	0.176	0	1	0.381
EQTA	Annual Report	0.145	0.072	0.295	0.059
LLRGL	Annual Report	0.023	0.001	0.123	0.020
MS2Sq	Indonesian Financial Services Authorities	11.967	0.001	335.228	47.401
TLTA	Annual Report	0.635	0.003	0.826	0.107
CIR	Annual Report	0.172	0.014	0.833	0.104

Table 2 Correlation Matrix

	NIM	ROA	ROE	Lerner	DGB	DCG	DLG	EQTA
NIM	1.0000							
ROA	0.6362	1.0000						
ROE	0.5428	0.8662	1.0000					
Lerner	0.1904	0.4306	0.3604	1.0000				
DGB	-0.0335	0.0395	0.1406	0.1390	1.0000			
DCG	-0.0276	0.0043	0.0547	-0.0645	0.5945	1.0000		
DLG	-0.0168	0.0447	0.1243	0.2278	0.7020	-0.1552	1.0000	
EQTA	0.0501	0.2094	-0.0703	0.3639	-0.2273	-0.1408	-0.1546	1.0000
Size	-0.1315	-0.0668	0.1000	-0.1263	0.1745	0.2858	-0.0388	-0.4160
LLRGL	0.0190	-0.0206	-0.0274	0.0569	0.1786	0.2127	0.0310	-0.0445
MS2Sq	-0.0274	0.0404	0.0888	0.0964	0.2812	0.5121	-0.1081	-0.0574
TLTA	0.0355	-0.0668	-0.0287	0.0543	0.0822	0.0447	0.0614	-0.1532
CIR	-0.0969	-0.1563	-0.1358	-0.6136	0.0185	0.1477	-0.1081	-0.1238

Table 2 Cont.

	Size	LLRGL	MS2Sq	TLTA	CIR
NIM					
ROA					
ROE					
Lerner					
DGB					
DCG					
DLG					
EQTA					
Size	1.0000				
LLRGL	0.1495	1.0000			
MS2Sq	0.4691	0.2231	1.0000		
TLTA	0.0766	-0.1214	-0.0828	1.0000	
CIR	0.1546	0.0256	0.0064	-0.0629	1.0000

Table 1 shows descriptive statistic over our sample. Our sample consists 65 private owned banks and 24 government-owned banks, among which 9 banks are owned by central government and 15 banks are owned by local governments. We observe several banks which suffer from losses are most likely private banks rather than government banks. The average Lerner over the period of our sample is 0.127 indicating that market competition in Indonesia is quite high although our data also shows that there is an increase of average market power over period of time. To account for potential multicollinearity, we examine the correlation matrix for our sample presented in Table 2. Overall, we do not observe any concern related to the multicollinearity on our employed econometric model.

EMPIRICAL RESULT

Our results in Table 3 reveal that high market power is positively associated with higher net interest margin where banks with high market power tend have the more power set their interest margin. Furthermore, our evidences show that banks with high market power are associated with higher profitability. With inelastic demand and supply functions, bank can exert their monopoly power to obtain greater interest margin leading into higher profitability from their traditional activities.

Taken this altogether, our results are consistent with Hypothesis 1. We further observe that banks' size is negatively associated with interest margin indicating that larger banks tend to have lower interest margin. However, we do not observe any significant relationship between size and profitability. We also find that efficiency proxied by cost to income ratio (*CIR*) is positively associated with interest margin indicating that efficient banks tend to set their interest margin higher compare to their inefficient counterpart.

Table 3 The impact of market power to cost of intermediation and profitability

	(1) NIM	(2) ROA	(3) ROE
Lerner	0.533***	0.093***	0.613***
	(2.76)	(9.67)	(9.08)
EQTA	-0.460	0.014	-0.577***
	(-1.36)	(0.70)	(-4.67)
Size	-0.027***	0.000	0.005
	(-2.60)	(0.18)	(1.17)
LLRGL	0.430	-0.081	-0.744*
	(0.85)	(-1.35)	(-1.76)
MS2Sq	0.000	-0.000	-0.000
	(1.33)	(-0.30)	(-0.03)
TLTA	0.076	-0.017**	-0.121*
	(1.06)	(-2.06)	(-1.91)
CIR	0.181**	0.034***	0.206***
	(1.97)	(4.45)	(3.96)
_cons	0.304***	-0.009	-0.011
	(2.64)	(-0.76)	(-0.14)
Nbr.of obs.	723.000	723.000	723.000
Year Effect	Yes	Yes	Yes
R-Squared	0.061	0.224	0.225
Adj R-Squared	0.039	0.205	0.206

Note: *t* statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

We extend our analysis by interacting the market power with size and ownership to empirically study the determining factor of cost of intermediation and profitability. First, we interact market competition with the size of the banks to investigate how bank size will decrease the competition effect on net interest margin and profitability. Our results in Table 4 show that the effect of market power on net interest margin and profitability is lower for larger banks compare to smaller banks probably due to larger bank in Indonesia are dominated by government banks.

This evidence further supports our Hypothesis 2 where larger banks tend to have the capabilities to diversify their income through multiple financial products outside their traditional activities to benefit from economic of scope compare to smaller banks. Hence, larger banks tend to have less reliance on their traditional activity as their source of income has already been diversified.

Table 4 The impact of market power to cost of intermediation and profitability: Smaller vs larger banks

	(1) NIM	(2) ROA	(3) ROE
Lerner	0.845***	0.112***	0.682***
	(2.73)	(7.33)	(7.81)
DLarge	0.156***	0.014***	0.063**
	(2.87)	(3.29)	(2.29)
DLarge*Lerner	-0.653***	-0.039**	-0.137
	(-2.71)	(-2.43)	(-1.41)
EQTA	-0.282	0.020	-0.567***
	(-0.88)	(0.94)	(-4.51)
LLRGL	0.130	-0.098*	-0.799*
	(0.26)	(-1.68)	(-1.95)
MS2Sq	-0.000*	0.000	0.000
	(-1.88)	(0.05)	(0.74)
TLTA	0.078	-0.017**	-0.122*
	(1.02)	(-2.07)	(-1.89)
CIR	0.219**	0.038***	0.222***
	(2.08)	(4.92)	(4.37)
_cons	-0.227**	-0.016*	0.029
	(-2.18)	(-1.87)	(0.52)
Nbr.of obs.	723.000	723.000	723.000
Year Effect	Yes	Yes	Yes
R-Squared	0.073	0.237	0.231
Adj R-Squared	0.050	0.217	0.211

Note: *t* statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

To analyze whether government ownership benefit from high market power, we extend our analysis by interacting the market power with ownership to examine the differences effect of market power between government and private banks. In contrast with private banks that is driven by profit maximization, government banks motives are prone to be intervened by social and political objectives. Therefore, to pursue their non-economic objectives, government ownership is commonly known for imposing policy burden to state-owned enterprises including banks at the cost of profitability and further, minorities interest. Even though, government banks may have higher market power, government banks are less likely to benefit from their high market power due to inefficiency arising from their non-economic objectives (Lin, 2021; Lin and Li, 2008). Our result, therefore, will support our conjecture if the effect of market power to net interest margin and profitability is lower for government banks compare to private banks.

Our results in Table 5 reveal that the lower competition is indeed associated with higher cost of intermediation for private banks, while the impact seems less for the government bank. This evidence supports our Hypothesis 3 where government bank cannot benefit optimally from their market power as they also pursue social and political objectives costing their profitability. Hence, even though government banks may have high market power, they are less likely to exert their monopoly power to maximize their profit and set their price lower to finance socially impactful area.

Table 5 The impact of market power to cost of intermediation and profitability: Private vs state ownership

	(1) NIM	(2) ROA	(3) ROE
Lerner	0.718**	0.103***	0.648***
	(2.58)	(7.73)	(7.24)
DGB	0.099***	0.011***	0.071***
	(2.82)	(3.21)	(2.85)
DGB*Lerner	-0.478**	-0.036***	-0.189**
	(-2.40)	(-2.72)	(-2.22)
EQTA	-0.676	0.008	-0.576***
	(-1.52)	(0.35)	(-4.01)
Size	-0.029**	0.000	0.005
	(-2.58)	(0.10)	(1.14)
LLRGL	0.541	-0.083	-0.787*
	(0.97)	(-1.33)	(-1.81)
MS2Sq	0.000**	0.000	0.000
	(1.98)	(0.10)	(0.01)
TLTA	0.060	-0.019**	-0.134**
	(0.88)	(-2.25)	(-2.09)
CIR	0.231*	0.034***	0.196***
	(1.94)	(4.22)	(3.57)
_cons	0.316***	-0.009	-0.014
	(2.63)	(-0.75)	(-0.17)
Nbr.of obs.	723.000	723.000	723.000
R-Squared	0.075	0.231	0.230
Adj R-Squared	0.050	0.210	0.209

Note: *t* statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

We dig even further by differentiating local and central government. Although both government ownership type is widely known to be detrimental to minority interest and profitability, central government attracts wider national attention compare to local government. This reduces the incentive to expropriate the banks for non-economic objectives as any misconduct that will result in financial distress situation in banks could lead into political catastrophe. Therefore, central government tend to be careful in pursuing their non-economic objectives via state-owned banks. Different with central government that faces constant judicial authorities and mass media surveillance, local governments rarely gain national wide attention and receive surveillance intensity. Hence, local governments tend to be less transparent leading into higher chance of expropriation driven by non-economic objective motives which is detrimental to banks' profitability. Our result will support our conjecture if the impact of market power to the cost of intermediation and profitability in local government banks is lower than central government bank.

As shown by Table 6 consistently, higher market power increases net interest margin and profitability for any types of banks. Furthermore, the impact is lower for central and local government bank with local government bank is the lowest indicating that lower surveillance is associated with higher chance of expropriation that leads into lower profitability. Thus, this result support our Hypothesis 4. Taken altogether the result indicate that government banks tend to not exert their monopoly power to increase their profitability and price to pursue social objectives particularly entering the area where the private sector is reluctant to enter.

Table 6 The impact of market power to cost of intermediation and profitability: Local vs central government

	(1) NIM	(2) ROA	(3) ROE
Lerner	0.721**	0.103***	0.649***
	(2.58)	(7.71)	(7.21)
DCG*Lerner	-0.408**	-0.029	-0.158
	(-2.08)	(-1.44)	(-1.34)
DLG*Lerner	-0.493**	-0.032*	-0.196
	(-2.51)	(-1.94)	(-1.52)
DCG	0.091**	0.011**	0.067**
	(2.48)	(2.55)	(2.41)
DLG	0.100***	0.009	0.071
	(2.68)	(1.54)	(1.45)
EQTA	-0.682	0.007	-0.579***
	(-1.52)	(0.30)	(-3.99)
Size	-0.029**	0.000	0.005
	(-2.56)	(0.09)	(1.15)
LLRGL	0.524	-0.085	-0.795*
	(0.94)	(-1.37)	(-1.81)
MS2Sq	0.000	-0.000	-0.000
	(1.62)	(-0.42)	(-0.26)
TLTA	0.058	-0.020**	-0.135**
	(0.84)	(-2.28)	(-2.09)
CIR	0.233*	0.034***	0.197***
	(1.95)	(4.14)	(3.55)
_cons	0.317***	-0.008	-0.013
	(2.60)	(-0.69)	(-0.16)
Nbr.of obs.	723.000	723.000	723.000
R-Squared	0.076	0.232	0.230
Adj R-Squared	0.048	0.208	0.207

Note: *t* statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

CONCLUSION

This study examines whether government ownership in banks affects bank decision to exert their monopoly power to gain more profitability and set higher price of intermediation. We use Indonesian banking dataset for the period 2009 - 2019 to evaluate how market power will affect cost of intermediation and profitability in government and private banks. Lower degree of competition grants banks with high market power to have more bargaining power and able to set the price on their advantages. However, with the presence of government ownership, banks may not pursue profit maximization but rather social objective that could be more costly compare to their private counterpart. This includes providing financing in a sector where social role plays important part such as providing financing to SMEs. Hence, the impact of market power to profitability and cost of intermediation is lower than private banks.

Our findings reveal that private and smaller banks exert their monopoly power given their market power. In contrast, the impact of market power in larger banks, and government banks to net interest margin and profitability is lower indicating that their decision of marking up the price and profitability is less affected by market power. A plausible explanation is that the government are less likely to adopt profit maximization and instead pursue social objective including financing area that is less attractive to private sector. Therefore, although they have larger market power it is less likely for them to mark up the price higher due to their social objectives' boundaries. Our evidences therefore support the view that government ownership particularly in banks are not merely driven by profit maximization motives but also social and political objectives. Our evidences suggest that government banks are aligning both profit maximization and non-profit maximization that also affect their profitability. Therefore, limiting the adoption of non-profit maximization has become a necessity to keep the government owned banks on track and maximize shareholders' wealth.

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