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Corruption and Government Intervention on Bank Risk-Taking: Cases of Asian Countries

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Abstract

This paper aims to addresses the impact of corruption, anti-corruption commission, and government intervention on bank's risk-taking using banks in Asian Countries such as Indonesia, Malaysia, Thailand, and South of Korea during the period 1995-2016. This paper uses corruption variable, bank-specific variables, macroeconomic variables, dummy variables and interaction variable to estimate bank's risk-taking variable. Using data from 76 banks in Indonesia, Malaysia, Thailand and South Korea over 21 years, this research finds consistent evidence that higher level of corruption and government intervention in crisis-situation will increase the risk-taking behaviour of banks. In the other hand, bank risk-taking behaviour minimized by the existence of anti-corruption commission. In addition, this paper also finds that government intervention amplifies corruption's effect on bank's risk-taking behaviour because of strong signs of moral hazard and weaknesses in the governance and supervision.

Pengaruh Tingkat Korupsi dan Intervensi Pemerintah terhadap Pengambilan Risiko Bank: Kasus Negara-Negara Asia

Abstrak

Penelitian ini bertujuan menganalisis pengaruh tingkat korupsi, keberadaan komisi anti korupsi, dan intervensi pemerintah terhadap pengambilan risiko bank di Indonesia, Malaysia, Thailand, dan Korea Selatan pada tahun 1995-2016 dengan menggunakan metode analisis fixed effect model GLS. Variabel dalam penelitian ini dibagi menjadi variabel korupsi, variabel spesifik bank, variabel mikroekonomi, variabel dummy dan variabel interaksi untuk estimasi pengambilan risiko bank. Menggunakan data 76 bank dari negara Indonesia, Malaysia, Thailand, dan Korea Selatan selama 21 tahun, penelitian ini menemukan bahwa bank melakukan transaksi yang lebih berisiko di negara dengan tingkat korupsi yang tinggi. Intervensi pemerintah ketika terjadinya krisis finansial juga meningkatan pengambilan risiko bank. Namun kegiatan berisiko bank tersebut diminimalkan dengan keberadaan komisi anti korupsi. Selain itu, penelitian ini menemukan bahwa intervensi pemerintah memperkuat pengaruh tingkat korupsi terhadap pengambilan risiko bank karena moral hazard yang tinggi serta pengawasan yang rendah.

JEL Classification: D73, G01, G18, G21

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INTRODUCTION

In recent light of events, numerous research paper regarding financial crises surfaced and banking sector emerge as the focus of the topic. Some researchers suggest excessive bank risk-taking behavior as one of the main reason of the crisis (Mishkin, 1996; Beck et al., 2006; Diamond & Rajan, 2009; Acharya & Naqvi, 2012). In Indonesia, 1997/1998 financial crisis was the worst crisis that ever hit the country. Banks' large-scale use of short-term debt in U.S. denomination to fund long-term investment exposing maturity-gap risk and exchange rate risk for the banks and eventually causes the financial turmoil (Miller, 1998). Lack of banking supervision, numerous of politically motivated lending and no adequate regulation for bankruptcy plays a role in the crisis (Chowdhry & Goyal, 2000). Indonesian Government intervene directly to banks by providing liquidity support, introducing blanket guarantee scheme, recapitalize and liquidate some banks in addition of monetary policy and financial institutions reforms to prevent further damage to the economy (Agusman et al., 2014).

However, the closing down of 16 small insolvent banks did not help the current predicament by encouraging panic bank runs and lowering investors' confidence in Indonesian banking sector. In addition, liquidity support is employed to banks without taking any collateral and proven to be controversial. The process is exposed by strong signs of moral hazard, as indicated by dubious interbank transactions, and weak governance of the liquidity support. The liquidity support process later become one of the biggest corruption case in Indonesian history (Batunanggar, 2002)

Corruption is prevalent in the developing countries. Using Transparency International's Corruption Perception Index (CPI), OECD countries have lower level of corruption with average CPI of 68.37 with only 17.14% of its members scored below 50 (on the scale of 0-100) than Southeast Asian countries which averaging 41.27 in CPI with 81.81% of its members scored below 50.

The corruption and its effects have spark some debate among researchers. The common wisdom of the corruption is that it has negative effect on the development and growth of the economy. On the other hand, numerous studies found otherwise, thus the term "sand the wheel" versus "grease the wheel" coined. Mauro (1995) found negative relationship between level of corruption and foreign direct investment that leads to growth of the economy. Moreover, Detragiache et al. (2008) and Park (2012) found that growth of lending decrease and nonperforming loans increase in countries with high level of corruption. In contrast, Leff (1964) and Huntington (1968) argues that corruption may bring benefits in a second best world because of the weak governance institutions. Inefficient bureaucracy makes bribes or so called "speed money" necessary to circumvent it. Bribes' role is as a trouble-saving device in this situation and can increase efficiency and eventually investment. There is also so called "Asian Paradox" where some Asian countries have high economic growth with high levels of corruption, such as China and Indonesia (Rock & Bonnett, 2004; Vial & Hanoteau, 2010). Despite of the previous researches, the effect of corruption to the economy is still inconclusive.

This paper aims to addresses the effect of corruption and government intervention on bank-risk taking behavior during period 1995 to 2016. This paper mainly based on Chen et al. (2015) which found positive relationship between corruption and bank risk-taking in emerging countries. Agusman (2014) also find positive relationship between government intervention and bank risk-taking in Indonesia.

Using annual data from banks in Indonesia from 1995 to 2016, this paper will examine the effect of corruption on bank risk-taking. To measure bank risk-taking, we use Z-Score and to measure corruption, we use adjusted corruption index derived from corruption perception index by Transparency International.

This paper's implications are to contribute to academia, regulators, and banking industry. This paper expected to contribute to

the literature on the determinants of bank risk-taking behavior and on the effects of corruption. For regulators, this paper's finding justifies the urgency of anti-corruption efforts by reforming bureaucracy and legal institutions. For banking industry, this paper's finding expected to provide an overview to management about risk faced by banks and help to improve corporate governance of the banks.

This study has several novelties: (1) addressing in Asian countries, which are Indonesia, Malaysia, Thailand and South Korea; (2) focus on risk-taking in banking industries during 21 years.

Hypothesis Development

Corruption as the abuse of entrusted public power for private gain and it is prevalent globally but more pervasive in developing countries (Chen et al., 2015). In addition to bribery and extortion, corruption is also including collusion, deception, cronyism, embezzlement, nepotism, misuse of power and fraud. The effects of corruption on the economy generally divided into two views. Sand the wheel hypothesis stated that corruption have the negative impact on economy, whereas grease the wheel hypothesis stated that corruption have positive impact on the economy.

The debate on the impact of corruption on economy goes beyond the moralistic view that condemn corruption. One side of the literature argue that corruption might take place in line with a weak governance thus reduce the inconvenience of such low quality which some called "grease the wheels" hypothesis. Another side stresses although bribery might have benefit if the weak governance is existed, additional costs might occur in the same circumstances thus the term "sand the wheels" hypothesis. The focus of the debate is the combination of corruption with a weak governance (Meon & Sekkat, 2005).

Supporting the "grease the wheel" hypothesis, corruption may be beneficial in a secondbest world because of weak institutions and inefficient bureaucracy (Leff, 1964; Huntington, 1968). The weakness of the bureaucracy is considered as the main thing that corruption could grease. In terms of economic growth, the only thing worse than a society with a rigid, over-centralized, dishonest bureaucracy is one with a rigid, overcentralized, honest bureaucracy (Huntington, 1968). There are various aspects of weak bureaucracy that can be compensated by act of corruption, one of which is slowness. Corruption could decrease the time spent in queues, mainly the act of bribes gives officials an incentive to speed up the process (Lui, 1985). Corruption could help bypass tedious bureaucratic process and increase growth, for example in the 1870's and 1880's in United States, the corruption in railroad, utility, and industrial corporations made economic grow faster (Huntington, 1968).

Take those into account, corruption could increase bank's risk through fund misallocation (Chen et al., 2015) and it is aligned with corruption's "sand the wheel" argument.

H1: Country's level of corruption has a positive effect on bank risk-taking.

Corruption can improve the quality of officials, if wages in government service are insufficient, the existence of corruption as perks that might add incentives to attract more able government officials (Leys, 1965; Bailey, 1966). Corruption might enhance the likelihood of the right decisions by officials if there are limited information or are not competent for some decisions (Beck & Maher, 1986; Lien, 1986). For example, corrupt officials granted loans or awarding contracts to the bidder with the highest amount of bribes because only the most efficient producer can afford the largest bribe. Moreover, it enhanced when the officials do not have enough information or are not competent enough for some decisions.

Bribes could help private sector to evade public policy created to solve a specific problem, they may thereby allow them to find overlooked and better-suited solution (Bailey, 1966). This might in turn allow an improvement of the policy's outcome. Bribes might simply be a

hedge against bad public policies (Leff, 1964; Bailey, 1966). This is particularly true if government biased against entrepreneurship, due to an ideological bias. By impeding inefficient regulation, corruption might limit the adverse effect of the policy. Bribes in some circumstance may improve the quality investment, for example when government spending are inefficient. The bribers can invest more efficient, the overall efficiency of investment could be improved (Leff, 1964). In addition, bribery makes more productive firm granted larger loans in China with Entertainment and Travel Cost (ETC) account as a way to bribe Chinese banker (Chen, 2013).

In the other hand, there are numerous studies that support the "sand the wheel" effect of corruption. Corrupt officials may cause delays that would not appear otherwise, just to get the opportunity to extract the bribes (Myrdal, 1968). The ability of official to speed up the process can be limited when the administration is made of a succession of decision centers. Indian high officer once declared that he could not be sure to be able to move files faster but could immediately stop it (Bardhan, 1997).

Business may be able to pay the highest bribe simply because it compromises the quality of the goods (Rose-Ackerman, 1997). The corruption may be a hedge against risk in weak governance environment if only the corruption does not imply additional risk-taking (Meon & Sekkat, 2005). Corruption might increase the risk associated with a weak rule of law instead of compensating it (Lambsdorff, 2008). Delis (2012) and Dell'Ariccia (2017) found that banks' risk increase with weak supervision and Anti-Corruption committee serves as proxy to supervision body.

H2: Anti-Corruption Committee has negative effect on bank risk-taking.

Politically connected firms obtain more loans from banks but end up with a higher default rate (Khwaja & Mian, 2005). Firms with political connection have better access to long-term bank loans and need less collateral (Charumilind et al., 2006). Both finding act as an

example of nepotism in banking industry whereas banks are more lenient in the loan assessment of firms that has connection to politicians and overlooked the risk of the loan. Growth of lending decrease with more severe corruption as the corrupt political system is a deterrent to financial development and can trigger macroeconomic instability, increase the cost of doing business and increase uncertainty about property rights (Detragiache, 2008).

Non-performing loans (NPL) increase in countries with high level of corruption and also find that corruption distort the allocation of bank funds thus decrease the quality of private investments. In Indonesia, political connection reflects through related lending in banking industries. It creates non-performing loan and reduce banking soundness and finally banking collapse and banking crises (Rokhim & Harmidy, 2013; Park, 2012). In contrast, depositors perceived banks with political connection to be less-risky than non-politically connected banks so they have less effort in monitoring politically connected banks (Trinugroho, 2017).

Risk-taking is the option on taking unsafe decision by the company among of other possible decision. There are two chains of activities related to this: (1) acknowledging individual reasons for choosing an action compared to other actions and (2) measuring the implications of the treatment. Atkinson argues the motives, expectation, and incentives determine the risk-taking behavior of the firm (Atkinson, 1957).

Afonso et al (2014) bank-risk taking in "too-big-to-fail" banks might be engaged in more risk-taking behaviors in a moral hazard fashion if it believes that it would be bailed out by government when it is in trouble. Banks' liquidity can affect risk-taking behavior because of that Basel III calls for higher liquidity requirements to protect banks against the risk imposed (Marques et al., 2013). A more efficient bank is expected to incur lower risk because of the number of experienced managers, who lower the operational cost of the bank, could better in assessing the risk of the loans (Berger & De Young, 1997).

Banks with more diversified revenue in Indonesia have higher risk than more specialized banks because diversification may lead to new environment with relatively more unstable and uncertain situation (Hafidiyah & Trinugroho, 2016).

This paper also includes fee income share as a proxy for the importance of banks' non-interest generating activities that can affect bank risk-taking because when the non-interest generating income falls, banks may push the income diversification too far thus causing higher risk (Demirgüç-Kunt & Huizinga, 2004). Bank risk-taking decreases when GDP growth rate rises because a boomed economy might result in higher and more stable bank returns and increases during the periods of higher inflation (Chen et al., 2015).

In addition, Agusman et al. (2014) found that government intervention can lead to increase in bank risk-taking behavior because of the moral hazard of the intervention process and lack of accountability and supervision in the process.

H3: Government Intervention have positive effect on bank risk-taking.

METHOD

This paper employs unbalanced bank-level panel data consist of 76 listed banks in Indonesia and covers the period 1995-2016. Research data are obtained from bank's financial statement which we extract from Thomson Reuters Database, World Bank for country level indicator, Transparency International for corruption data, report of Audit Board of Indonesia and central bank's working paper and supervision report for government intervention data. Sample selection solely based on the availability and the completeness of the data. In total, data used are 43 banks in Indonesia, 11 banks in South Korea, 10 banks in Malaysia, and 12 banks in Thailand.

Our benchmark econometric model is as follows:

Model 1:

$$\begin{aligned} \operatorname{Risk}_{it} &= \alpha + \beta_1 Corruption_{jt} + \beta_2 Size_{it} \\ &+ \beta_3 Liquidity_{it} + \beta_4 Efficiency_{it} \\ &+ \beta_5 Fee_Income_Share_{it} + \beta_6 GDP_{jt} \\ &+ \beta_7 Inflation_{jt} + \varepsilon_{ijt} \dots (1) \end{aligned}$$

Model 2:

$$\begin{aligned} \operatorname{Risk}_{it} &= & \alpha + \beta_1 Corruption_{jt} + \beta_2 Size_{it} \\ &+ \beta_3 Liquidity_{it} + \beta_4 Efficiency_{it} \\ &+ \beta_5 Fee_Income_Share_{it} + \beta_6 GDP_{jt} \\ &+ \beta_7 Inflation_{jt} + \beta_8 DACC_{jt} \\ &+ \beta_9 DGovInt_{it} + \varepsilon_{ijt} \dots (2) \end{aligned}$$

Model 3:

$$\begin{aligned} \operatorname{Risk}_{it} &= \alpha + \beta_1 Corruption_{jt} + \beta_2 Size_{it} \\ &+ \beta_3 Liquidity_{it} + \beta_4 Efficiency_{it} \\ &+ \beta_5 Fee_Income_Share_{it} + \beta_6 GDP_{jt} \\ &+ \beta_7 Inflation_{jt} + \beta_8 DACC_{jt} \\ &+ \beta_9 DGovInt_{it} \\ &+ \beta_{11} Corruption * DGovInt_{it} \\ &+ \varepsilon_{ijt} \dots (3) \end{aligned}$$

Dependent Variable

Z-Score

Z-Score is a measure of bank stability. Some studies use Z-Score as proxy for bank risk (Leaven & Levine, 2009; Chen et al., 2015). Higher score of Z-score shows that the bank is more stable and can be interpreted as bank's higher exposure to insolvency risks. Because Z-score is highly skewed, we use the natural logarithmic value of 1+Z-score, which is more normally distributed. Three-year rolling time window is used rather than the full sample period. The Z-score variable is specified as follows:

$$Z_{i,t} = In(1 + \frac{ROA_{i,t} + EA_{i,t}}{\sigma(ROA)_{i,t}})$$

Independent Variable

Following Chen et al. (2015) this paper use Adjusted Corruption Index (Adj.CI) as indicator of corruption. Adj.CI calculated using Corruption Perception Index (TI Index) from Transparency International. TI Index is frequently employed by other studies (Wei, 2000;

Mo, 2001; Adit, 2009). Corruption Perception Index basically a poll of polls from various surveys of business people and the assessment of country analyst regarding the levels of corruption. Higher value of CPI indicates less corruption perceived in the country. For uniformity reasons, we rescale CPI by letting 10 deducted by the CPI index. The outcome is presented by CI:

$$CI = 10 - TI index$$

Since 2012, Corruption Perception Index scale changed from 0-10 to 0-100 so we employed CI since 2012 as follows:

$$CI = 10 - \left(\frac{TI\ index}{10}\right)$$

However, a country's corruption doesn't perfectly show year-to-year comparison as the changes not necessarily implied the changes in corruption, but by the changing number of surveys or methodology adopted by Transparency International (Lambsdorff, 2008). To counteract this bias, we employ Adj.CI by dividing CI index with the mean of CI indices across all countries each year denote the outcome as Adj. CI that is:

$$Adj. CI_{j,t} = \left(\frac{CI_{j,t}}{\sum_{j=1}^{N} CI_{j,t}}\right)$$

Control Variable

To control the influence of the other variables that may affect the relationship between bank risk taking, this paper uses bank-specific control such as size, liquidity, efficiency, and fee income share and macroeconomic control such as GDP growth and Inflation rate as control variable in the model. The extent of bank-risk determinants have been found to be associated with a variety of factors, including bank size (Afonso et al., 2014), efficiency (Berger & De Young, 1997), liquidity (Marques et al., 2013), and banking operations and funding diversifi-

cations (Demirgüç-Kunt & Huizinga, 2004). In addition, macroeconomic variable also associated with bank risk-taking (Chen et al., 2015).

Size =
$$Ln(Total Assets)$$

Liquidity = $\frac{Liquid Assets}{Total Assets}$
Efficiency = $\frac{Operating Expense}{Operating Income}$
Fee Income = $\frac{Non Interest Income}{Net Interest Income}$
GDP Growth = $\frac{(Real GDP_t - Real GDP_{t-1})}{Real GDP_{t-1}}$
Inflation = $\frac{(CPI_t - CPI_{t-1})}{CPI_{t-1}}$

Since the research data is panel data, we use Chow-test and Hausman-test to determine the estimation techniques between Pooled Least Square, Fixed Effect Model and Random Effect Model. For the Chow Test, if p-value is less than 1%, then Fixed Effect Model is more appropriate to use. If not, then the Pooled Least Square Model will be used. Meanwhile, for Hausman-test, if p-value is less than 1%, then Fixed Effect Model is more appropriate to use. If not, then the Random Effect Model will be used. The result of Chow-test and Hausmantest shown in the Table 1 and Table 2.

Table 1. Chow Test Result

Model	Chow Test			
	Prob.	Chi-Sq. Stat	Regression Model	
Model 1	.0000	521.5535	Fixed Effect Model	
Model 2	.0000	481.9705	Fixed Effect Model	
Model 3	.0000	481.7288	Fixed Effect Model	

Table 2. Hausman Test Result

Model	Hausman Test			
	Prob.	Chi-Sq. Stat	Regression Model	
Model 1	.0000	57.0535	Fixed Effect Model	
Model 2	.0001	34.3937	Fixed Effect Model	
Model 3	.0002	33.8547	Fixed Effect Model	

RESULT AND DISCUSSION

Descriptive statistics for the data are shown in Table 3. The average Z-Score in the sample is 3.5065 with standard deviation of 1.5586. The Z-Score in year 1997 and 1998 are mostly negative because of the equity-to-assetratio and ROA, the component of Z-Score, is negative. Largely because negative equity and return due to financial crisis in the region. Meanwhile, the liquidity ratio is really high, on average of 93.71% with a standard deviation of 0.0568. The number of observations for data is 1172 consisting 76 banks in Indonesia, Malaysia, Thailand, and South Korea.

Regression results are shown in Table 4. Based on the results shown, the bank risk-taking, which is inverse of Z-Score, is increasing with the higher level of corruption which is shown by the negative relationship and statistically significant between Z-Score and Adj.CI. It means that bank risk-taking behavior is increases with high level of corruption. This finding supports the "sand the wheel" hypothesis and Chen et al. (2015), banks are found to be engaged in more

risk-taking behavior in economies with more severe corruption. This result could be due to increasing number of related lending in severe corruption economies lead to increase of bank risk taking (Khwaja & Mian, 2005; Charumilind et al., 2006; Rokhim & Harmidy, 2013).

Test result on the control variables show that bank stability decreases as the bank size increase but only statistically significant on second model. This means the data of bank size in the Indonesia, Malaysia, Thailand, and South Korea is statistically insufficient to prove moral hazard theory in large banks. The negative relationship largely due to moral hazard exposed to "too-big-to-fail" banks which have more incentives to engage more risky activities because the government have to bail them out if they're happen to be insolvent (Afonso et al., 2014). Negative relation between liquidity and bank risk-taking in the regression results support Basel III recommendation for higher requirements to counteract against the risk exposed to the banks (Marques et al., 2013). The higher value of efficiency measure inversed to the level of efficiency, so the higher value of the efficiency

Table 3. Descriptive Statistics

	Mean	Std. Dev.	Min	Max	Observations
n 1 n 1 . 1 ·	Mean	Std. Dev.	WIIII	IVIdX	Observations
Bank Risk-taking					
Z-Score	3.5065	1.5586	-2.5766	9.0121	1.172
Corruption Index					
Adjusted CI	1.1415	2122	.7360	1.7692	1.172
Bank Specific					
Size	22.0983	2.2783	14.3029	26.6287	1.172
Liquidity	.9371	.0568	.2097	.9934	1.172
Efficiency	.6301	.3657	-1.5158	5.0196	1.172
Fee Income Share	.5952	1.2696	-14.0515	20.7132	1.172
Macroeconomic Variable					
GDP Growth	.0450	.0308	1312	.1131	1.172
Inflation	.0551	.0613	0090	.5838	1.172
Dummy Variable					
Government Intervention (Gov.Int)	.0537	.2256	0	1	1.172
Anti-Corruption Commission (ACC)	.7943	.4043	0	1	1.172
Interaction Variable					
Adj. CI*Gov.Int	.0620	.2655	0	1.5836	1.172

Table 4. Regression Results

	Dependent Variable = Z-score			
	Model 1	Model 2	Model 3	
A 1: 4 1 CT	-4.5901****	-3.4307****	-3.3603****	
Adjusted CI	(.5871)	(.4769)	(.4794)	
C:	0081	0644*	0558	
Size	(.0368)	(.0405)	(.0401)	
T :: 1:	2.1326***	2.3032***	2.2569***	
Liquidity	(.8467)	(.9091)	(.8836)	
τα ·	3446****	3881****	3844****	
Efficiency	(.0960)	(.1026)	(.1024)	
E I Cl	0772****	0703****	0698****	
Fee Income Share	(.0153)	(.0221)	(.0219)	
CDD	6.2167***	4.1493***	4.2144***	
GDP	(2.7434)	(1.6510)	(1.6636)	
Inflation	-2.4829****	-2.7652****	-2.6086****	
	(.9612)	(.8718)	(.9038)	
D_ACC	-	.8056****	.8138****	
	-	(.1806)	(.1832)	
D_GovInt	-	9008****	.0692	
_	-	(.2867)	(.4938)	
Adj_CI*D_GovInt	-	-	8541**	
·- -	-	-	(.4687)	
\mathbb{R}^2	.6910	.6906	.6922	
N	1.172	1.172	1.172	

Regression results using GLS fixed effect *model*. The p-value is presented in parantheses*, **, ***, **** indicates significance at the 15%, 10%, 5%, and 1% level.

actually implies lower level of bank efficiency. The results on efficiency shows that more efficient bank is incurring lower bank risk and it is in line to Berger and De Young (1997). Fee Income Share is a proxy for the importance of banks' non-interest generating activities and the results shows positive relation between fee income share and bank risk-taking. It is largely because of banks may push for income diversification too far causing higher risk to the bank when those non-interest generating business fall and it is consistent with Demirgüç-Kunt and Huizinga (2004).

Direct government intervention during financial crisis, while it is necessary in financial turmoil, could make bank take on more risky activities. It is shown in the results above where there is positive relationship between bank risk-

taking and government intervention. It is largely due to banks' believe it will be intervened even the banks are in collapsing stage and weak governance of the intervention process due to crisis condition (Batunanggar, 2002; Agusman et al., 2014). Government intervention also strengthen the impact of corruption on bank risk taking. The existence of Anti-Corruption Commission is lowering the bank risk-taking behavior in the regression results. Bank-risk taking behavior is increasing when the supervision is limited (Delis et al., 2012; Dell'Ariccia et al., 2017).

CONCLUSION AND RECOMMENDATION

Various determinants of bank risk-taking have been documented in extant literature, but

study on the effects of corruption on bank risktaking is still very limited. Although, numerous researches support for the "sand the wheel" hypothesis effect on economy, there are also some papers suggesting otherwise.

Using the data from banks in Indonesia, Malaysia, Thailand, and South Korea from 1995 to 2016, this paper shows excessive bank risk-taking behavior in economies with high level corruption. This is largely because of the higher risk exposed from related and politically connected lending. This paper also found that government intervention increases the banks' risk-taking behavior while the existence of anti-corruption commission might lower the excessive risk-taking behavior. Government intervention also strengthening the effect of corruption on bank-risk taking. This may be due to moral hazard from banks' during the financial crisis and the intervention process.

This paper expected to contribute to the growing literature on the determinants of bank riskiness and also offer deeper understanding about the effect of corruption in banking system. This paper's findings have policy implications for developing countries that are growing but are faced with increasing suspicion on whether their growth is slowing down. This finding also justify the urgency of the anti-corruption campaigns in these countries. Regarding the effect of government intervention, government have to imposed stricter regulation and supervision in government process intervention to prevent the moral hazard implied in the process. It is also important for banks and bank's managers not to resort to corruption, especially bribery, to speed up the activities because it imposes more risk to banks.

REFERENCES

- Acharya, V., & Naqvi, H. (2012). The Seeds of a Crisis: a Theory of Bank Liquidity and Risk-Taking Over the Business Cycle. *Journal of Financial Economics*, 106(2), 349-366.
- Adit, T. (2009). Corruption, Institutions, and Economic Development. Oxford Review of Economic Policy, 25(2), 271-291.

- Afonso, G., Santos, G., & Traina, J. (2014). Do "Too-big-to-fail" Banks Take on More Risk?. Federal Reserve Bank of New York Economic Policy Review, 20(2), 1-18.
- Agusman, A., Cullen, G., Gasbarro, D., Monroe, G., & Zumwalt, J. (2014). Government Intervention, Bank Ownership and Risk-Taking during the Indonesian Financial Crisis. *Pacific Basin Finance Journal*, 30, 114-131.
- Atkinson, J. W. (1957). Motivational Determinants of Risk-Taking Behavior. *Psychological Review*, 64(6), 359-372.
- Bailey, D. H. (1966). The Effects of Corruption in a Development Nation. *Western Political Quarterly*, 19(4), 719-732.
- Bardhan, P. (1997). Corruption and Development: a Review of Issues. *Journal of Economic Literature*, 35(3), 1320-1346.
- Batunanggar, S. (2002). Indonesia's Banking Crisis Resolution: Lessons and the Way Forward. Banking Crisis Resolution Conference, Bank of England, 9.
- Beck, P. J., & Maher, M. W. (1986). A Comparison of Bribery and Bidding in Thin Markets. *Economics letters*, 20(1), 1-5.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2006). Bank Concentration, Competition, and Crises: First Results. *Journal of Banking & Finance*, 30(5), 1581-1603.
- Berger, A. N., & DeYoung, R. (1997). Problem Loans and Cost Efficiency in Commercial Banks. *Journal of Banking & Finance*, 21(6), 849-870.
- Charumilind, C., Kali, R., & Wiwattanakantang, Y. (2006). Connected Lending: Thailand Before the Financial Crisis. *The Journal of Business*, 79(1), 181-218.
- Chen, M., Jeon, B. N., Wang, R., & Wu, J. (2015). Corruption and Bank Risk-Taking: Evidence from Emerging Economies. *Emerging Markets Review*, 24, 122-148.
- Chen, Y., Liu, M., & Su, J. (2013). Greasing the Wheels of Bank Lending: Evidence from Private Firms in China. *Journal of Banking & Finance*, 37(7), 2533-2545.
- Chowdhry, B., & Goyal, A. (2000). Understanding the Financial Crisis in Asia. *Pacific-Basin Finance Journal*, 8(2), 135-152.
- Delis, M. D., Tran, K. C., & Tsionas, E. G. (2012). Quantifying and Explaining Parameter Heterogeneity in the Capital Regulation-Bank

- Risk Nexus. *Journal of Financial Stability*, 8(2), 57-68.
- Dell'Ariccia, G., Laeven, L., & Suarez, G. A. (2017).

 Bank Leverage and Monetary Policy's Risk-Taking Channel: Evidence from the United States. *The Journal of Finance*, 72(2), 613-654.
- Demirgüç-Kunt, A., & Huizinga, H. (2004). Market Discipline and Deposit Insurance. *Journal of Monetary Economics*, 51(2), 375-399.
- Detragiache, E., Tressel, T., & Gupta, P. (2008). Foreign Banks in Poor Countries: Theory and Evidence. *The Journal of Finance*, 63(5), 2123-2160.
- Diamond, D. W., & Rajan, R. G. (2009). The Credit Crisis: Conjectures about Causes and Remedies. *American Economic Review*, 99(2), 606-10.
- Hafidiyah, M. N., & Trinugroho, I. (2016). Revenue Diversification, Performance and Bank Risk: Evidence from Indonesia. *Jurnal Dinamika Manajemen*, 7(2), 139-148.
- Huntington, S. (1968). *Political Order in Changing Societies*. New Haven, Connecticut: Yale University Press.
- Khwaja, A. I., & Mian, A. (2005). Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market. *The Quar*terly Journal of Economics, 120(4), 1371-1411.
- Lambsdorff, J. (2008). The Methodology of the Corruption Perceptions Index. Passau, Germany: Transparency International (TI) and University of Passau.
- Laeven, L., & Levine, R. (2009). Bank Governance, Regulation and Risk Taking. *Journal of Financial Economics*, 93(2), 259-275.
- Leff, N. H. (1964). Economic Development through Bureaucratic Corruption. *American Behavior*al Scientist, 8(3), 8-14.
- Leys, C. (1965). What is the Problem about Corruption?. The Journal of Modern African Studies, 3(2), 215-230.
- Lien, D. H. D. (1986). A Note on Competitive Bribery Games. *Economics Letters*, 22(4), 337-341.
- Lui, F. T. (1985). An Equilibrium Queuing Model of Bribery. *Journal of Political Economy*, 93(4), 760-781.
- Marques, M. L. B., Correa, M. R., & Sapriza, M. H.

- (2013). International Evidence on Government Support and Risk Taking in the Banking Sector. Washington, D. C: International Monetary Fund
- Mauro, P. (1995). Corruption and Growth. The Quarterly Journal of Economics, 110(3), 681-712.
- Méon, P. G., & Sekkat, K. (2005). Does Corruption Grease or Sand the Wheels of Growth?. *Public Choice*, 122(1/2), 69-97.
- Miller, M. H. (1998). The Current Southeast Asia Financial Crisis1. *Pacific-Basin Finance Journal*, 6(3-4), 225-233.
- Mishkin, F. S. (1996). Understanding financial crises: a developing country perspective (NBER Working Paper No. 5600). Retrieved from https://www.nber.org/papers/w5600.
- Mo, P. H. (2001). Corruption and Economic Growth. *Journal of Comparative Economics*, 29(1), 66-79.
- Myrdal, G. (1968). Asian Drama: an Inquiry into the Poverty of Nations. New York: Pantheon.
- Park, J. (2012). Corruption, Soundness of the Banking Sector and Economic Growth: a Cross-Country Study. *Journal of International Money and Finance*, 31(5), 907-929.
- Rock, M. T., & Bonnett, H. (2004). The Comparative Politics of Corruption: Accounting for the East Asian Paradox in Empirical Studies of Corruption, Growth and Investment. *World Development*, 32(6), 999-1017.
- Rokhim, R., & Harmidy, J. A. (2013). Ownership Structure, Risk and Their Impacts towards Performances in Indonesian Commercial Banks. *Jurnal Keuangan dan Perbankan*, 15(1), 22-37.
- Rose-Ackerman, R. (1997). *The Political Economy of Corruption*. Washington DC: Institute for International Economics.
- Trinugroho, I. (2017). A Recent Literature Review on Corporate Political Connections. *Jurnal Dinamika Manajemen*, 8(2), 269-278.
- Vial, V., & Hanoteau, J. (2010). Corruption, Manufacturing Plant Growth and the Asian Paradox: Indonesian Evidence. World Development, 38(5), 693-705.
- Wei, S. J. (2000). How Taxing is Corruption on International Investors?. *Review of Economics and Statistics*, 82(1), 1-11.