"Impact of corruption on banking profitability in ASEAN countries: an empirical analysis"

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Abstract

Exploring key determinant variables that influence bank profitability is of interest to bankers and investors as well as regulators, as profitability is regarded as a necessary condition for the stability of the banking system. In this paper we conducted a study to determine the profitability of banking firms covering six countries in Association of Southeast Asian Nations (ASEAN): Indonesia, Malaysia, Singapore, Thailand, the Philippines and Vietnam. Our study found that a higher ratio of personnel expenses to total cost (PERSTC) and equity to total assets (EQTA), increase bank profitability and are negatively associated with higher regulatory capital (CAR), net loan total asset (NLTA) and cost to income ratio (CIR). Economic growth (EGRW) is positive but not significant. In terms of country effect, only Indonesia is significant. Surprisingly, the corruption index (CRPIX) is positive and its significance to profitability underlines the ability of banking firms to enjoy benefits in a bad governance environment.

Introduction

We are all aware that healthy and sustainable banking sector profitability is necessary for maintaining the stability of the financial system. Poor profitability can weaken the capacity of the system to absorb adverse disturbances because capital formation is limited. Lower profitability is also regarded as the seed of future vulnerabilities. However, when banks enjoy high profit, we can suspect that they may set too high interest rates on loans. If this happens, bank profitability comes from financially exploiting borrowers and dampens economic efficiency. Moreover, if high profits are the consequence of market power, this would imply some degree of inefficiency in the provision of financial services. In this case, high returns could be a negative outcome that should prompt policy-makers to introduce measures to lower risk, remove bank entry barriers if they exist (as well as other obstacles to competition), and re-examine regulatory costs.

Following the Basel Capital Accord in 1988, ASEAN approach to bank regulation on the importance of capital is undeniable for maintaining the stability of banking industry under the theme of banking prudential regulation. The prudential regulation set the obligation of banks to hold adequate capital as a buffer to cover the inherent business risks and provide adequate risk management and control systems to mitigate the risks. Regulators in ASEAN is ascertain when banks hold more capital, they should be better able to absorb losses with their own resources, without becoming insolvent or necessitating a bailout with public funds. Referring to Batunanggar (2008), in general all country under study implement Basel Committe on Banking Supervision (BCBS) framework for capital regulation,

where minimum capital is 8%. Thailand set the minimum capital of 8.5% while the Philippines set higher at 10%.

Banking profitability is an essential part of banking safety as it guarantees the going concern principle in the industry. From a regulatory perspective, profitability is also an essential part of the CAMELS rating. CAMELS rating system is a technique used by banking authority to asess the soundness of individual bank. The acronym "CAMELS" refers to the six components of a bank's condition that are assessed: Capital adequacy, Asset quality, Management quality, Earnings, Liquidity and Sensitivity to market risk.

This study empirically examines factors that may drive profitability measured by the return on asset (ROA) among a panel of banks in the ASEAN area and based on individual banks' annual accounting data over the period of 2003-2008. We aware that the profitability of banks is of interest to bank management, financial markets, bank supervisors and academics. This interest is driven by increasing consolidation in the banking sector, changes in production technology and regulation, and operation geographically. At the same time pressure to increase profit comes from shareholders as they require a higher return. In line with the pressure to achieve profitability, banks innovate and this innovation in the banking market is mostly driven by the pressure to achieve higher profitability. The increasing importance of higher profitability together with the lack of empirical research on this issue in ASEAN banking markets, provide the main motivation for this study.

1. Literature review

The importance of profitability has attracted many studies to determine bank profitability. Bourke (1989) pionereed an international study on the im-

pact of the capital adequacy position on profitability. He showed that the higher the capital ratio is, the more profitable a bank will be. This study was followed by Berger (1995) and Angbazo (1997) who produced a similar result that well-capitalized banks are more profitable than less capitalized banks.

In a European setting Molyneux and Thornton (1992) also found that the capital ratio impacts banks' performance positively. The most comprehensive study was done by Demirguc-Kunt and Huizinga (1999) who covered 80 countries. They came to a strong conclusion that more capitalised foreign banks have higher profitability than less capitalized domestic banks in developing countries. However, for developed countries less capitalised banks are more profitable. The overall results show support for the positive relationship between the capital ratio and financial performance.

The optimal capital structure for a bank will increase the rent absorbed by the banker, increase the buffer against shocks, and change the amount that can be extracted from borrowers. The optimal ex ante bank capital structure depends on the degree of competition in banking, the nature of the available pool of borrowers, and the amount of own capital the banker can bring to the business. In a deposit market a higher capital structure reduces the cost of borrowing and ultimately increases profitability.

McAllister and McManus (1993) studied the impact of size on profitability. Larger banks enjoy economies of scale and scope and have better risk diversification opportunities and thus size will lower the cost of funding compared to smaller banks. As a result, larger banks should exhibit relatively higher levels of profitability than smaller banks. Altunbas and Molyneux (1996) find positive economies of scale for a broader range of size classes for American banks.

Molyneux and Thornton (1992) and Goddard, Molyneux and Thornton (2004) link bank size and capital ratios to profitability. In general, their work conclude that profitability is positively related to bank size. It means that if bank size increases, profitability rises. However, many other researchers suggest that little cost savings can be achieved by increasing the size of a banking firm (e.g., Athanasogloua et al., 2008). However, some case studies also show that very large banks could face scale inefficiencies (e.g., Berger et al., 1987; Hirtle, 2007; and Ramla, 2009).

From a human resources perspective, the key is personnel as they perform all kinds of activities from planning to actions. Only qualified and well maintained staff will increase a bank's operating efficiency in the long run. Eichengreen and Gibson

(2001) state that the effect of staff expenses is positive and significant. This finding stresses the fact that quality is important in the service industry. This conclusion implies that banks willing to pay higher salaries may enjoy efficiency and higher productivity which implies higher revenue and less average costs.

Berger and Bonaccorsi di Patti (2006) provide a very different view on profitability and capital position. They offer two competing hypotheses with opposite predictions: the efficiency-risk hypothesis and the franchise-value hypothesis. The efficiency-risk hypothesis postulates that the expected high earnings from greater profit efficiency is a substitute for equity capital in protecting the firm from the expected costs of bankruptcy or financial distress. On other hand, under the franchise-value hypothesis, firms try to protect the expected income stream from high profit efficiency by holding additional equity capital.

Sufian and Habibullah (2009) conducted a study on the determinants of banking profitability in China using both bank-specific data and macroeconomic indicators. The purpose of the study is to answer: what are the determinants of the profitability of the Chinese banking sector during the post-reform period of 2000-2005. Using regression analysis they found that all the determinant variables have a statistically significant impact on Chinese banks' profitability. However, the impacts are not uniform across bank types. Bank-specific variables of liquidity, credit risk, and capitalisation have a positive impact on the profitability of the state-owned commercial banks. For the joint-stock commercial banks (JSCB), profitability is mostly determined by higher credit risk. For macroeconomic variables, the only economic growth is positive and significant on profitability levels.

Athanasogloua et al. (2008) use bank-specific, industry-specific and macroeconomic variables to study the determinants of bank profitability in Greece. The study basically tries to apply the industrial economics framework known as the structure-conduct-performance (SCP) hypothesis. The methodology applied is non-traditional regression known as the Genralized method of moments (GMM) technique which allows simultaneous estimation to be performed. The data covers the period of 1985-2001. The result shows that market structure is not so strong as indicated by a moderate extent profitability.

This study is to develop a model of bank profitability in ASEAN. It means the study covers more than one country. We refer to Molyneux and Thornton (1992) as they were the first to explore thoroughly the determinants of bank profitability on a set of

countries. They use a sample of 18 European countries during the 1986-1989 period. They find a significant positive association between the return on equity and the level of interest rates in each country, bank concentration and government ownership. Abreu and Mendes (2002), using a similar method, reported that well-capitalized banks face lower expected bankruptcy costs and this advantage "translates" into better profitability. However, with a negative sign in all regressions, the unemployment rate is relevant in explaining bank profitability; the inflation rate is also relevant.

On the impact of corruption, Mongid (2007) conducted a study on the determinants of banking crisis costs. Using data from the Transparency International and the Heritage Foundation, the study found that banking crisis cost is positively linked to a higher corruption index and lower legal enforcement index which indicate low governance. In general, the study found that corruption exaggerated the cost of crisis. Using Indonesia as a reference, the study suggested that Indonesia's cost of banking in 1998 can be reduced to half when the corruption level is at the lowest level. Sheng-Hung Chen and Chien-Chang Liao (2009) show that control of corruption is significant and negatively related to foreign bank's ROA in 16 Asian countries. The finding supports the joint effects in institutional governance on profitability. The empirical results reveal that in the corrupted environment, foreign banks are more profitable than domestic banks.

However, ASEAN banks tend to have very high debt to equity levels, more liquid liabilities than assets and because banks have deposit insurance, which is subsidised by the government, they are less risk averse than most institutions. As most ASEAN banking relies on credit as a source of income, then we will see loan to total asset ratio as the best indication of risk.

In this study, we focus on the relationship between profitability, bank-specific as well as macroeconomic and environmental factors across banks over time in ASEAN. Utilising bank level data for the period of 2003-2008, we adopt cross-sectional data regression to determine the important factors in achieving high profitability.

2. Methodology

2.1. Framework. The study by Haron (2004) and Molyneux and Thornton (1992) combine both micro-internal and macroeconomic aspects and environments that influence the profitability of the banking firm. We are aware that a banking firm is very specific in nature. Both macroeconomic and bank-specific factors appear to have a role to play, with real GDP growth and bank size being the most important determinants according to industrial economic theory. Under agency theory, a positive but weaker relationship was found between bank equity capital and profits. On the other hand, the regression model is a reduced form model and not derived from a structural economic model. This means that it is difficult to identify the exact nature of the links between size, capital and profitability based on the current approach as this approach is a one way approach. As the study aims to find a link between bank-specific factors and the macroeconomic environment, the implication is useful for policy assesment purposes.

Awareness should be given as most of the data used in the study is accounting data and it is possible that accounting ratios may also differ across countries due to differences in national taxation policy. The risk that data experiencing some treatment such as earnings smoothing is unavoidable. As not all countries adopt the international financial reporting standards (IFRS), the risk of differences may disturb the result. The use of reporting standards under Bankscope may reduce this kind of risk. The framework of the study is presented in Figure 1.
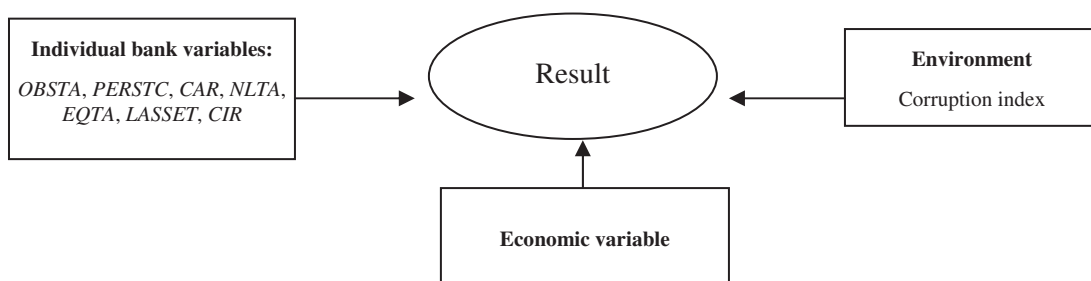

Fig. 1. Framework of analysis

2.2. Data. Different data sources are collected for empirical analysis on six ASEAN countries over the period of 2003-2008. We perform a panel data approach. The bank-level data on financial statement report is solely collected from the database of Bankscope, produced by the Bureau Van Dijk Corporation. Macroeconomic variables are obtained from the Asia regional information centre (ARIC), and the Asian development bank (ADB). Data on the corruption index is collected from Transparency International, Hong Kong.

2.3. Model. To examine the determinants of banking profitability (ROA) in ASEAN banking we use a simple linear regression model. The model can be formulated as:

$$ROA_{ij} = \alpha + \beta_1 \, OBSTA_{ij} + \beta_2 \, PERSTC_{ij} + \beta_3 \, CAR_{ij} +$$
$$+ \beta_4 \, NLTA_{ij} + \beta_5 \, EQTA_{ij} + \beta_6 \, LASSET_{ij} + \beta_7 \, EGRW_j +$$
$$+ \beta_8 \, CRPIX_j + \beta_9 \, CIR_{ij} + \beta_{10} \, DUMMY \, (COUNTRY) + \varepsilon_i,$$

where, ROA_{ij} – return on average assets of bank i in market j as the profitability indicator; $OBSTA_{ij}$ – total off-balance sheet activities divided by total asset of bank i in market j; $PERSTC_{ij}$ – the ratio of total personnel expsense to total asset of bank i in market j; CAR_{ij} – capital adequacy ratio of bank i in market j; $NLTA_{ij}$ – ratio of net loan to total asset of bank i in market j; $EQTA_{ij}$ – the ratio of total equity to total assets; $LASSET_{ij}$ – the size of each bank in log; $EGRW_j$ – annual economic growth of each corresponding country; $CRPIX_j$ – the index of corruption modified from Transparency International; CIR_{ij} – the ratio of total cost to total income of bank i in market j; $DUMMY \, (COUNTRY)$ – equal to one if the bank's nationality is that of the corresponding country and zero otherwise.

To assess the ability of the model to explain the profitability (ROA) of ASEAN banking, we use traditional regression testing technique such as t-tests and F-tests. The F-test is used to test the capaility of the model to explain the variability of the ROA while t-test is used to assess the capacity of the individual variable.

2.4. Econometric analysis. In this study we use a cross-sectional model mostly known as panel data. Panel data models combine a cross-section component (many banks observed at one point in time) with a time dimension (the same banks observed over different years). The cross-sectional nature of the panel controls for bank-specific factors and how these vary across banks. The addition of a time dimension allows other external factors – such as corruption level, economic freedom and macroeconomic situation – potentially to impact on bank profitability.

As the observation is limited, we simply follow the approach by Altunbas et al. (2007), who use level data as the availability of the data, is limited. The main hypothesis to be tested is that ROA is related to bank-specific characteristics such as size (+), capital (+), inefficiency (–), personnel expense (+) and loan provisions (–). For macroeconomic variables, we expect GDP growth to be (+). For the corruption index, we expect both signs on profitability (+/–), as we expect that banks operating in a corrupt environment may have the capacity to charge higher interest on loans and lower interest for deposits. In other situations, banks may spend more

for their operations. The estimation period covers the period of 2003-2008, using an unbalanced panel of data based on 475 banks with at least one year's data available.

2.5. Results. Table 1 presents the descriptive variables of the data used in the study. There are 475 banks as a sample. The study covers six countries: Indonesia, Malaysia, Singapore, Thailand, the Philippines and Vietnam. The number of banks indicating the scale of economy of the country under investigation: 43% of the sample come from Indonesia, 19% from Thailand and 17% from Malaysia. From Table 1 we can see that the average *ROA* is 1.7%, the lowest is -6.9% and the highest is 8.63%. *OBSTA* has a mean value of 0.36% with the minimum less than 1% and the maximum 15%. The *OBSTA* indicate that off-balance sheet (OBS) activities in ASEAN banking in general are less sophisticated than their conterparts in the USA, where *OBSTA* can achieve more than 100% of its assets.

Table 1. Descriptive statistics of the variables used

Variable	Obs.	Mean	Std. dev.	Minimum	Maximum
ROA	475	1.72557	1.506034	-6.958635	8.638091
OBSTA	475	.3615919	1.324407	.0000154	15.2405
PERSTC	475	.1888211	.0658259	.0248799	.4411276
CAR	475	23.31158	19.89497	1	136
NLTA	475	52.73474	18.07536	1	90
EQTA	475	12.75579	8.289548	0	53
LASSET	475	14.79621	1.751256	10.37055	18.9994
EGRW	475	5.612758	1.229295	1.15	9.3
CRPIX	475	67.39579	16.02988	6	81
CIR	475	55.28	22.73447	16	268

PERSTC is a variable to measure how the ASEAN banking industry views its staff. Banks that focus on human capital used to have a higher ratio. On average, *PERSTC* is 18% with a minimum value of 2% and a maximum of 44%. From the figures we can conlude that 68% of the sample have 12% to 25% of the total expenses to pay the personnel expenses. The *CAR* indicates how banking firms provide the capita which is quite satisfactory in general. The mean value of the *CAR* is 23.3% meaning it is beyond the minimum regulatory capital set mostly at 8% except in Thailand, where the minimum is 8.5%.

We understand that most ASEAN banking firms rely on their businesses as intermediary businesses. This means granting loans is the most important business. The *NLTA* on average is 53% with a minimum of 1% and a maximum of 90%. These numbers are quite good which indicate that the intermediation process is running well. If we look at the *CAR*, it is clear that ASEAN banking can extend their capacity to provide more loans to their customers. If we look at the *EQTA* ratio, the mean value is 12.76% and the maximum is 53% of its assets.

The *LASSET* variable, which is a logarithm measure of asset size, indicates how size matters in ASEAN banking. In average, the value of *LASSET* is 14.79%, the minimum value is 10.37% and the maximum value is 18.99%. We expect that the bigger the asset, the greater the possibility to earn a higher profitability. Variable *CIR* is a measure to judge bank efficiency. The higher the ratio, the less efficient the bank. In general, the mean value of *CIR* is 55.3%, the most efficient is 16% and the least efficient is 268%.

We also employ economic conditions of the countries we study. We use economic growth to investigate the impact of economic condition on bank profitability. This is because we believe, when the economy is in good condition, banks enjoy better profitability than when in reccession. With this situation, we can expect the positive relation between economic growth and bank profitability. In general, ASEAN economic growth is good with an average of 5.6% whilst minimum growth is 1.15% and the maximum is 9.3%. Higher economic growth in the region is supported by manufacturing and natural resources.

ASEAN, in general, is known as a mixed economic condition and governance. On the one hand, Singapore is known as the least corrupt economy in the world, whilst on the other hand, it is a different situation as Indonesia and Vietnam are regarded as the most corrupt in the region. In this study, we collect the data from Transparency International. We modified the index to indicate the index as for a proxy of corruption level. We found the average corruption index (*CRPIX*) is 67.4%. Based on the index, close to zero means low corruption perception index. Low index indicates low corruption and vice versa. Please note that the most corrupt economies show a higher index. The minimum corruption index is 9% and the maximum is 81%.

To get the result, we estimated the equation using the ordinary least squares method. Total observation is 475. The adjusted R-square is 62% meaning that the model can explain the variability of profitability by 62% leaving 37% as random. The results for ANOVA is 55.27 and it is significant at 1%. We are confident that this model is capable of explaining the profitability of the ASEAN banking market. Further analysis will be performed using this model.

Tabel 2 presents the estimation results. We expect that innovative banks, who try to increase their revenue by participating in innovative business will enjoy better profitability. Higher *OBSTA* indicates that a bank is innovative. From Table 2, our results indicate that the *OBSTA* has a negative sign and is not significant. It means that banks who employ

more OBS activities do not improve profitability. The result provides further evidence that, in general, the banking business in ASEAN is relatively traditional banking with few activities related to OBS. At the current stage, the tendency of the banking industry to circumvent the capital regulation by moving their activities into OBS activities is not viable.

Table 2. Regression results

ROA	Coef.	Std. err.	*t*-statistics	P > t
OBSTA	-.0375292	.0339023	-1.11	0.269
PERSTC	3.933337	.7358544	5.35	0.000
CAR	-.0107698	.0040722	-2.64	0.008
NLTA	-.0093773	.0030554	-3.07	0.002
EQTA	.0710928	.0101195	7.03	0.000
LASSET	.041361	.0384901	1.07	0.283
EGRW	.0176944	.0395821	0.45	0.655
CRPIX	.0390859	.0194508	2.01	0.045
CIR	-.0379769	.0023009	-16.51	0.000
Id (Indonesia)	.7381807	.2508232	2.94	0.003
Th (Thailand)	.0288715	.3126196	0.09	0.926
my (Malaysia)	.4826632	.5632654	0.86	0.392
Ph (Philippines)	.1666388	.2757829	0.60	0.546
Sg (Singapore)	1.824941	1.347965	1.35	0.176
_cons	-.9122091	1.748037	-0.52	0.602

PERSTC provides very strong results. We expect that personnel expense should have a dominant role in improving bank profitability because when the bank pays higher salaries, they can recruit and retain the best staff to manage the bank. In return the productivity and efficiency will be higher. The coefficient is 3.93 and significant at 1%. The result confirms our expectation that the banks that focus their expenses on personnel enjoy higher profitability. It may come from the efficiency and productivity effect of high calibre staff. A previous study by Eichengreen and Gibson (2001) produced a similar result underlining the importance of human capital. It implies that banks should focus their expense on human capital as this will increase profitability.

CAR is a variable to indicate the equity strength of the bank to its risk exposure. Although not exactly similar in all countries, risk exposure is mostly calculated from credit and market risk. Under the Basel II agreement, operational risk has been put in place since 2004. However, implementation of the new capital regime in ASEAN is very slow due to cost and regulatory burdens. Our result shows that *CAR* has a negative sign (-0.01) and is significant at 1%. It means that for any one percentage increase in *CAR*, a bank will experience a 0.01% profitability decrease. The result indicates that banks operating with a higher *CAR* ratio will enjoy lower profits. This result is very understandable as there is a relationship between risk and return in banking. When banks invest their funds on less

risky assets such as government bonds, they enjoy a low risk profile but the profit from such investments is very low compared to more riskier assets like loan granting.

In contrast to *CAR*, *EQTA* has a positive sign. It means a higher equity position increases profitability. A strong capital position guarantees the bank can take more risk that weakens capital. The coefficient is 0.07 and significant at 1%. It means any for any one percentage additional *EQTA*, the bank will enjoy a 0.07 increase in its profitability. From this result we can see that *EQTA* is a much better indicator for a profitability study than *CAR*. The contrasting results between *CAR* and *EQTA* underline the understanding that *CAR* may not indicate a strong capital position. Regulators should be more cautious on *EQTA* than on *CAR*.

Credit risk is very important to manage for most ASEAN banks. In general, they are lending oriented banks. Bank that experience higher credit risk may incure more losses and thus reduce profitability. However, lending is a profitable business in terms of interest margins being very high when managed properly. In theoretical framework, loan loss is an indicator of credit risk. However, the practice on loan loss provision in ASEAN banking does not follow international standard. Therefore, in this study, we use net loan to total assets as a proxy for credit risk.

On the other case, the contradiction is persistent in terms of *NLTA*. We expect that banks with a higher ratio should earn higher profitability as the loan is still a dominant source of income for ASEAN banking. On average, 54% of ASEAN banking asset is net loans. Although the ratio is very low (-0.009) these variables are significant meaning that the variable is important. We believe this is the case because loans have been achieving the maximum level as suggested by regulators. If we look at the descriptive statistics, maximum *NLTA* is 90, which means that 90% of bank asset are loans.

We expect that market dominance, measured by bank size, is important to banks' profitability. Our result shows that it is in line with the theory developed by Panzar and Rose (1987) and profit scale economies (Bikker and Bos, 2008). Our results show that *LASSET* has a positive sign (0.04) but is statistically not significant. The results provide evidence that bank size may be important but when the management is weak, the performance may be weak too. This result is not as strong as empirical works conducted by Molyneux and Thornton (1992), McAllister and McManus (1993), Bikker and Hu (2002) and Goddard et al. (2004).

Banking firm performance is related to the economy. However, our study found that economic growth (*EGRW*) is not important. The coefficient is 0.018 and the sign is still positive meaning that when economic growth is high, banks will have higher profitability. However, the economic growth is not significant. This finding is in contrast to other studies, such as Sufian and Habibullah (2009).

A surprising result comes from the corruption index (*CRPIX*) which is positive (0.04) and significant at 5%. As explained previously, we modify the corruption index from Tranparency International by reflecting it into the opposite number. It makes our interpretation quite straightforward. The result confirms our expectation that banks operating in a corrupt environment may enjoy excess pricing capacity in terms of lending rate and deposits rate. Indonesia and Vietnam are regarded as the most corrupt in the region. As the number of the observation is more than 50%, this makes the corruption influential. Even if banks operate inefficiently, they enjoy high profitability. It means banks may have the capability to compensate higher cost due to operating in the corrupt environment by increasing more revenue. This finding contradicts Sheng-Hung Chen and Chien-Chang Liao (2009) who found a negative impact of corruption on bank profitability.

CIR is a variable to indicate the operating efficiency of the bank. Less *CIR* means a bank operating in an efficient way. From our estimation, we found that the coefficient is negative, as our expectation. The coefficient of 0.04 means that any efficiency increase will increase profitability by 4%.

The impact of country effect is not so strong although all country dummies are positive. Indonesia is the only country with a significant result confirming that Indonesian banking is much more profitable than other ASEAN banking markets. The highest coefficient has Singapore (1.83). This figure can be interpreted that in general Singaporean banks enjoy 1.83%. For Indonesia the figure is 0.73%. The average ROA for Indonesia is 2.3%, Thailand has only 0.83% and it is the lowest ROA in the region.

To enhance the capability of the model to explain the profitability, we conducted testing on the residual value. We found that the mean residual is close to zero (1.11, E-18) with a median of zero. The maximum value is 0.148 and the minimum value is 1.148. The hypothesis that the residual is normally distributed is accepted at a 99% confidence level. The Jarque-Bera statistic is 0.0000002. If we assess the graph as in Figure 2, we see that the data is normally distributed meaning the error is random.
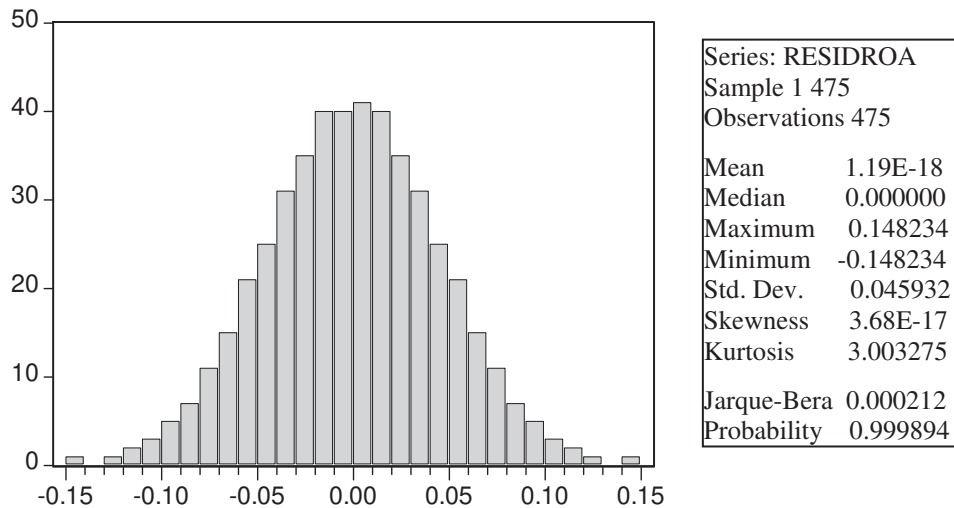
Series: RESIDROA	
Sample 1 475	
Observations 475	
Mean	1.19E-18
Median	0.000000
Maximum	0.148234
Minimum	-0.148234
Std. Dev.	0.045932
Skewness	3.68E-17
Kurtosis	3.003275
Jarque-Bera	0.000212
Probability	0.999894

Fig. 2. Residual results

Conclusion

Exploring the key factors influencing bank profitability is of importance for bank management as well as regulators as the findings can be used to improve bank internal management and implement better banking policies. Utilising bank level data for the period of 2003-2008, we adopt the cross-sectional data regression to determine the important factors in achieving high profitability. To achieve this, a comprehensive set of internal characteristics of the banks' economic variables and corruption index are examined. Using samples from 475 banks operating in six ASEAN countries, we found that banking profitability is related to internal bank and governance environments.

In general, a higher ratio of *PERSTC* and *EQTA* increase bank profitability and are negatively asso-

ciated with higher *CAR*, *NLTA* and *CIR*. Economic growth (*EGRW*) is positive but not significant. In terms of country effect, only Indonesia is significant. Surprisingly, the corruption index (*CRPIX*) is positive and significant to profitability which underlines the ability of banking firms to enjoy benefits in a bad governance environment. Based on the results, we can expect that banks can improve their profitability by increasing expenses on personnel and capital position.

In summary, our study provides some insights for policy makers on how to improve bank profitability. The implication of the finding is that, the campaign to eradicate corruption in the countries under study may have negative impact for the banking industry in the short term. However, in the long term, the benefits will exceed the costs.

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