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Equity Financing and Islamic Banks' Profitability: Evidence from the Biggest Muslim Country

Abstract

It was highlighted in the literature that Islamic banks' equity financing was very risky in practice. Theoretically, equity financing could boost Islamic banks' profitability because the riskier financial instrument was always associated with the greater return that could be created. Using a sample of nine Islamic banks in Indonesia from 2009m1 to 2014m12, interestingly we found that higher proportion of equity financing was significantly associated with lower Islamic banks' profitability. However, this negative relationship diminished in the case of large Islamic banks, implying that the negative effect of equity financing on Islamic banks' profitability was more prominent for small banks rather than for large banks. Our results were robust using various estimations. Although equity financing was a core of Islamic banks and could differ Islamic from conventional banks' activities but Islamic banks altogether with policymakers should evaluate this instrument for the sake of Islamic banks' profitability and its prospects in the future.

Keywords: Equity Financing; Islamic Banks; Profitability

JEL Classifications: D25 ; G21 ; L25

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Abstrak

Telah dibahas di dalam literatur bahwa pembiayaan berbasis ekuitas oleh bank Syariah pada praktiknya sangat berisiko. Secara teori, pembiayaan berbasis ekuitas dapat meningkatkan profitabilitas bank Syariah karena instrumen keuangan yang berisiko selalu dikaitkan dengan kemungkinan tingkat pengembalian yang lebih besar. Dengan menggunakan sampel sembilan bank Syariah dari 2009m1 sampai 2014m12, secara menarik kami menemukan bahwa tingginya proporsi pembiayaan berbasis ekuitas secara signifikan berhubungan negatif dengan profitabilitas bank Syariah. Akan tetapi, hubungan negatif ini berkurang pada kasus bank Syariah yang besar. Hal ini mengindikasikan bahwa efek negatif pembiayaan berbasis ekuitas pada profitabilitas bank Syariah lebih terasa pada bank Syariah yang kecil. Hasil kami tidak berubah walau kami uji menggunakan beberapa estimasi yang berbeda. Meskipun pembiayaan berbasis ekuitas adalah inti dari bank Syariah dan dapat membedakan aktivitas bank Syariah dari bank konvensional, namun bank Syariah bersama dengan pemangku kebijakan harus mengevaluasi kembali instrumen pembiayaan ini demi profitabilitas bank Syariah dan prospeknya di masa depan.

Kata Kunci: Pembiayaan Berbasis Ekuitas; Bank Syariah; Profitabilitas

The creation of Islamic Development Bank in 1975 in Jeddah, Saudi Arabia, has become the Islamic banks' history. It has become the pioneer of the establishment of other Islamic banks that now widespread all around the world especially in the predominantly Muslim countries. Operating with Islamic values which are rooted in the *Quran* and *Sunnah*, Islamic banks contribute to the development of Islamic finance sector which in 2016 has \$2.2 trillion in assets. Islamic finance is expected to grow by 9.4 percent to reach \$3.8 trillion in the next 2022 (Thomson Reuters, 2017).

Similar to their conventional counterparts, Islamic banks have a function of financial intermediation. They collect money from the clients (depositors) in order to be used to finance other clients (entrepreneur) using a form of lending or financing. This paper studies financing method of Islamic banks which is obviously different to their conventional peers because of Islamic values they use. To finance business, Islamic banks are prohibited to use debt arrangement as in conventional banks. Instead, various methods are derived from the Islamic law to facilitate Islamic banks in serving their clients. Financing using equity arrangement, or simply equity financing, is one of the methods in Islamic banks' lending that believed to be the backbone of Islamic finance. It is expected as a replacement of debt-based arrangement. It is the representation of the main principle of Islamic banks, which is profit-and-loss-sharing or PLS. Thus, one could say that equity financing and PLS financing by definition is the same.

In this financing method, banks act as an investor who provides the fund or capital to the entrepreneur or banks' client. An entrepreneur could not guarantee that they will give steady return to their investor (Islamic banks) because the money takes the form of capital, not debt. From the banks' point of view, this instrument is very risky. Because of inconsistent return payment, Islamic banks subject to the high volatility of income. This is why Hamza & Saadaoui (2013) argue that in some extent

equity financing could deteriorate banks' stability. Also, Abdul-Rahman et al. (2014) highlight that PLS-related instruments are subject to the agency problem because entrepreneurs could have less incentive to put more effort on their business and also they are more likely to report lower profit to the banks or even hiding the actual profit from the banks. By employing equity financing in their business, Islamic banks also could not require collateral from their client because collateral is prohibited in the Islamic law although there are many cases that Islamic banks ask collateral for their financing (Aggarwal & Yousef, 2000). Equity financing consists of *mudaraba* (profit sharing) and *musharaka* (partnership). The former differs from the latter regarding the contribution of the capital. *Mudaraba* contract allows entrepreneurs to use all Islamic banks' fund (the capital 100 percent from Islamic banks) whereas *musharaka* require entrepreneurs to allocate some of their funds to the project. Either *mudaraba* or *musharaka* have high risk profile from the banks perspective, although the former might be less risky than the latter.

For above-mentioned reasons, equity financing is less popular for Islamic banks. Based on the data of Risfandy (2018), the average proportion of equity financing in countries where Islamic banks operate is less than 8 percent. Some banks even do not employ this type of financing at all. For most of the banks, they enjoy using markup financing. The most popular is *murabaha* or resale with a stated profit. Although criticized by many Islamic scholars (Aggarwal & Yousef, 2000), *murabaha* is still widespread in Islamic banks up to now because it is "collateral-by-contract" so that Islamic banks do not need to ask collateral from their clients anymore. It is less risky, less need for monitoring, and more applicable to the real banking work today.

This paper therefore questions whether equity financing that derived from Islamic banks main principle could facilitate better Islamic banks performance. More specifically, we investigate whether

Islamic banks profitability is also determined by the activity of equity financing in Islamic banks. Because equity financing is very risky as highlighted earlier, Islamic banks should have strong reason to use this instrument. Indeed, Risfandy et al. (2018) provide empirical evidence that Islamic banks use equity financing to face the pressure of banking market competition. Equity financing is believed could attract more entrepreneurs to join Islamic banks as a client. This paper thus will contribute to the literature in several respects. First, this paper contributes to the discussion of the equity financing application in Islamic banks. Even though become the main difference of Islamic banks to their conventional rivals, equity financing is rarely explored possibly because of the unavailability or completeness data. Prior research has investigated equity financing and its relation with the institutional environment (Alam & Parinduri, 2017), Shariah Supervisory Board (Risfandy, 2018), Competition and bank fundamentals (Risfandy et al., 2018), and efficiency (Othman, Abdul-Majid, & Abdul-Rahman, 2017). Second, to the best of our knowledge, our work is the first that investigates the impact of equity financing on Islamic banks profitability. Prior works often investigate Islamic banks equity financing as a dependent variable (Risfandy, 2018) while in this paper we examine its determinants. Third, because equity financing in Indonesian is considered as the highest among countries having Islamic banks (Abedifar, Molyneux, & Tarazi, 2013), the finding from this study will be very meaningful to either policymakers or regulators. Equity financing is crucial in Islamic banks and could impact their stability (Hamza & Saadaoui, 2013) so that the intensive monitoring might be needed.

METHODS

We retrieve data of Islamic and conventional banks from their balance sheet and income statement that published publicly in the website of the central bank of Indonesia (Bank Indonesia). We

choose a period from 2009m1 to 2014m12. Even though this paper mainly investigates Islamic banks' equity financing, we use both conventional and Islamic banks particularly when we compute Lerner index as a proxy for market competition or market power. This is because both banks type are indeed in the similar market so that computing Lerner index by using only Islamic banks could be biased (Meslier, Risfandy, & Tarazi, 2017b). After creating all variables, they are winsorized at the 1 percent and 99 percent percentile to eliminate outliers. Our final sample consists of 442 observations from 9 Indonesian Islamic banks; Bank BCA Syariah, Bank BNI Syariah, Bank BRI Syariah, Bank BJB Syariah, Bank Muamalat, Bank Syariah Mandiri, Bank Maybank Syariah, Bank Mega Syariah, and Bank Victoria Syariah.

This paper uses the following econometric model to examine the relationship between equity financing and profitability of Islamic banks.

$$ROA_{it} = \alpha + \beta_1 EqFin_{it} + \beta_2 Lerner_{it} + \beta_3 LoanTA_{it} + \beta_4 DepLiab_{it} + \beta_5 GrTA_{it} + \beta_6 LogTA_{it} + \varepsilon_{it} \quad (1)$$

Where subscripts i and t represent bank and time dimension respectively. Profitability is our dependent variable. It is proxy by ROA_{it} (return-on-assets) as a widely used measure of profitability. We also use ROE_{it} (return-on-equity) for robustness. Our measures follow most of the previous works in bank profitability such as Tran, Lin, & Nguyen (2016) and Trinugroho et al. (2017) among others.

In the right-hand side, we use a ratio of equity financing (sum of *mudharaba* and *musharaka* financing) to total financing as our main variable of interest ($EqFin_{it}$). We also employ an alternative measure for robustness, $EqFin_Alt_{it}$, defined as the ratio of equity financing to total assets. This variable is consistent with prior works on the similar topic (Alam & Parinduri, 2017; Risfandy, 2018; Othman, Abdul-Majid, & Abdul-Rahman, 2017). Because the application of equity financing is related with a high risk that Islamic banks should bear

Equity Financing and Islamic Banks' Profitability: Evidence from the Biggest Muslim Country

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Previous literature has highlighted several variables as determinants of bank profitability. We will consider these variables as a control in our model. The first control we use in this paper is Lerner index ($Lerner_{it}$). This is consistent with Yanikkaya, Gümü^o, & Pabuçcu (2018). A higher Lerner index is linked with higher market power or lower competition. Thus, a positive sign is expected from Lerner because banks generally could generate more profit when Islamic banks have monopoly power that usually can be achieved in the less competitive market. To calculate Lerner index, we follow Fu, Lin, & Molyneux (2014) by employing trans logarithm equation with two-factor prices. The second variable is a ratio of loan to total assets which can represent asset composition (Ahamed, 2017) or liquidity (Yanikkaya, Gümü^o, & Pabuçcu, 2018). Islamic banks that allocate more loan is predicted to have greater profitability (Yanikkaya, Gümü^o, & Pabuçcu, 2018). Therefore, a positive association is expected. The next controls we use in

this paper is total customer deposit to total liabilities ratio following Chen, Liang, & Yu (2018). We also use asset growth ($GrTA_{it}$) following Stiroh & Rumble (2006) and Chen, Liang, & Yu (2018). A positive sign from $GrTA_{it}$ is expected because banks that grow rapidly are more likely to have greater profitability ratio. Orthogonalized form of the natural logarithm of banks' total assets ($oLogTA_{it}$) is widely used to proxy Islamic banks' size as well as in this paper. An issue whether Islamic banks should stay small or should be bigger has been debated in the prior works. Cihak & Hesse (2010) empirically show that small Islamic banks perform better than the large ones whereas Ibrahim & Rizvi (2017) find a contradictory result. We therefore do not make a prediction of the sign of $oLogTA_{it}$.

Table 1 displays the descriptive statistics of all variables used in this study. The average value of ROA and ROE are 2 percent and 17 percent respectively. Equity financing has great proportion in Indonesia as suggested by some studies (Abedifar,

Table 1. Descriptive Statistics

Variable	Explanation	Obs.	Mean	S.D.	Min	Max
ROA	Return on Assets to proxy profitability	442	0.021	0.013	-0.005	0.036
ROE	Return on Equity to as alternative profitability proxy	442	0.174	0.116	-0.020	0.293
EqFin	Equity financing. Computed as a ratio of Equity mode of financing (<i>mudaraba</i> and <i>musharaka</i>) to total financing.	442	0.307	0.203	0.004	0.852
EqFin_Alt	Alternative proxy of equity financing, computed by dividing equity financing to total assets.	442	0.204	0.139	0.004	0.671
Lerner	Lerner index to proxy banks' market power or competition following Yanikkaya, Gümü ^o , & Pabuçcu (2018).	442	0.452	0.082	0.230	0.710
LoanTA	Loan to total assets ratio to proxy asset composition (Ahamed, 2017)	442	0.691	0.138	0.346	0.801
EqTA	Equity to total assets to proxy bank solvency risk following Chen, Liang, & Yu (2018) and Meslier, Tacneng, & Tarazi (2014)	442	0.143	0.087	0.072	0.464
DepLiab	Ratio of customer deposit to total bank liabilities following Chen, Liang, & Yu (2018)	442	0.919	0.058	0.711	0.984
GrTA	Growth of total assets following Chen, Liang, & Yu (2018)	442	0.024	0.040	-0.052	0.107
oLogTA	Orthogonalized form of natural logarithm of total assets	442	-0.090	0.606	-1.216	1.003

Table 2. Correlation Matrix

	EqFin	Lerner	LoanTA	EqTA	DepLiab	GrTA	oLogTA
EqFin	1						
Lerner	-0.081	1					
LoanTA	-0.226	0.003	1				
EqTA	-0.035	0.215	-0.434	1			
DepLiab	-0.060	0.050	-0.010	-0.193	1		
GrTA	0.060	-0.062	0.020	0.044	-0.042	1	
oLogTA	0.219	0.135	0.348	-0.590	0.115	-0.058	1

Molyneux, & Tarazi, 2013; Risfandy, 2018). Our average value is 30 percent for *EqFin* and 20 percent for *EqFin_Alt*. Lerner index of Indonesian banks is also considered high consistent to Cupian & Abduh (2017). With an average value 0.45, it means that Indonesian Islamic banks in average could set the price of their product 45 percent over their marginal costs. In average, our data shows that Islamic banks in Indonesia have 69 percent loan or 14 percent equity as a proportion of their assets. Deposit to liability ratio has a mean value of 91 percent. The growth rate of Islamic banks' assets is 2 percent on average.

The correlation matrix is shown in Table 2 in order to see whether there is multicollinearity problem between our independent variables. The highest score of correlation is -0.59, that is, the correlation between *EqTA* and *oLogTA*. For some researchers, this value could be considered as high. However, our size measure has been orthogonalized, meaning that we have strived to decrease its correlation value. We opt to include *oLogTA* in the model because bank size is a “must-be-there” control variable. Its role is very important in the model. It could lead to omitted variable bias problem if we do not put it there. Moreover, we have tested the VIF (Variance Inflation Factor) score (not shown) and it suggests that there is no multicollinearity problem because all values are far below the rule of thumb 10.

RESULTS

Baseline Result

We first present the result of our baseline regression. It is displayed in Table 3. All of our ex-

planatory variables are significant, implying that our model is sufficient enough to explain bank profitability. We also include time fixed effect in the model to control time changes. The heteroscedasticity problem is also diminished because we use robust standard errors. Surprisingly, the variable *EqFin* which represent the proportion of equity financing in Islamic banks shows negative sign. This is different from our prediction. This result suggests that higher equity financing activities in Islamic banks decrease bank profitability. This evidence could be linked with the real-world application of equity financing in Islamic banks. Most of the Islamic banks rarely use such kind of financing because of the risk embedded on them. We empirically find that although theoretically risky, equity financing could not foster Islamic banks profitability.

Table 3. Baseline Result

	Dep. Var. = ROA	
	Coef.	t-stat.
EqFin	-0.0177***	(-5.27)
Lerner	0.0307***	(3.32)
LoanTA	-0.0145**	(-2.50)
EqTA	-0.0390***	(-3.05)
DepLiab	-0.0347**	(-2.47)
GrTA	-0.0444**	(-2.01)
oLogTA	0.00241*	(1.76)
Constant	0.0760***	(5.74)
Time FE		Yes
Robust SE		Yes
N		442
R-sq.		0.272

Notes: ***, **, and * denotes significance in 1 percent, 5 percent, and 10 percent levels respectively

We then move to the control variables. First, as predicted, Lerner index is positively associated with profitability. A bank with a high market power is associated with greater profitability because they are able to set the higher price of banking product than low market power banks. In the less competitive market, banks can generate a high profit because of their monopoly power. Our result is slightly different to Yanikkaya, Gümü^o, & Pabuçcu (2018). They find a negative impact of Lerner index for Islamic banks sub-sample whereas a positive sign is obtained from the conventional ones. Yanikkaya, Gümü^o, & Pabuçcu (2018) argue that this could be due to the lack of differentiated products and this low market share of Islamic banks. Our result differs to them probably because of the sample. Yanikkaya, Gümü^o, & Pabuçcu (2018) use OIC countries which differs each other. We use only Indonesia, and Indonesian market is assumed to be less competitive and more concentrated compared to the other countries (Cho, 1990; Risfandy et al., 2017).

Second, *LoanTA* that we use to measure asset composition significantly and negatively affect ROA. Although higher loan ratio is often related to the aggressivity of banks that could boost profitability, our empirical testing proposes the different result. Our result then differs to Ahamed (2017). The plausible explanation behind this phenomenon could be because Muslims generally are risk-averse (Abedifar, Molyneux, & Tarazi, 2013), banks could not benefits from giving more loans to their Muslim entrepreneurs.

Third, we find a negative association between capital ratio proxy by equity to total assets (*EqTA*) and bank profitability. Holding greater capital for Islamic banks could reflect their risk-averse behavior (Stiroh & Rumble, 2006). This will decrease Islamic banks' probability to engage in a risky project that possibly leads more return to the bank. Islamic banks are not permitted to invest in high-risk financial products in order to comply with Islamic law (Chen, Liang, & Yu, 2018).

Fourth, consistent to Chen, Liang, & Yu (2018), we find a negative sign from *DepLiab* and *GrTA*, indicating that greater deposit proportion over liabilities and higher growth rate of banks' total assets is related to lower profitability. High growth banks usually experienced by small and relatively new banks. Such banks will have less profitability because they have high investment opportunity so that they should allocate a great proportion of their profit for retained earnings. This evidence is strengthened by another variable in our model, that is, size. Proxy by the natural logarithm of total assets, it has a positive sign, indicates that larger banks have significantly higher profitability. This result confirms Ibrahim & Rizvi (2017).

Further Analysis

In this paper we further investigate whether the impact of equity financing on bank performance is altered by bank size. The application of equity financing in Islamic bank could depend on Islamic bank size because small banks in reality concentrate on low-risk investment and fee income whereas larger banks do more PLS related business (Cihak & Hesse, 2010). We augment equation (1) into the following equation (2) to accommodate the issue.

$$ROA_{it} = \alpha + \beta_1 EqFin_{it} + \beta_2 Lerner_{it} * oLogTA_{jt} + \beta_3 LoanTA_{it} + \beta_4 EqTA_{it} + \beta_4 DepLiab_{it} + \beta_5 a GrTA_{it} + \beta_6 oLogTA_{jt} + \varepsilon_{it} \quad (2)$$

We present the result in Table 4. We do find that bank size moderates the association between *EqFin* and ROA. Specifically, the positive result from the interaction variable suggests that the negative impact of *EqFin* is lowered when Islamic banks larger. We could also see from the Wald test, in the small banks, the coefficient is -0.0391. The value decreases to -0.0187 when Islamic banks reach medium size. In the large banks, equity financing is positively impacting bank performance but it is not statistically significant. This evidence implies that

bank size in Islamic banks' case has a great role to maintain its profitability and stability as suggested in Ibrahim & Rizvi (2017) and Trinugroho et al. (2017).

Table 4. Equity Financing, Bank Size, and Profitability

	Dep. Var. = ROA	
	Coef.	t-stat.
EqFin x oLogTA	0.0304***	(3.65)
oLogTA	-0.0137***	(-4.24)
EqFin	0.0346***	(3.96)
Lerner	-0.00408	(-0.66)
LoanTA	-0.0282**	(-2.07)
EqTA	-0.0222	(-1.49)
DepLiab	-0.0421*	(-1.96)
GrTA	-0.00728**	(-2.54)
Constant	0.0508***	(3.23)
EqFin when oLogTA small (oLogTA<p25)	-0.0391***	(-5.18)
EqFin when oLogTA medium (p25 <oLogTA< p75)	-0.0187***	(-5.41)
EqFin when oLogTA high (oLogTA>p75)	0.00606	0.945
Time FE		Yes
Robust SE		Yes
N		442
R-sq.		0.305

Notes: ***, **, and * denotes significance in 1%, 5%, and 10% levels respectively

Table 5. Various Robustness Checks

	(1) ROA	(2) ROA	(3) ROA	(4) ROE
EqFin	-0.0177*** (-5.10)	-0.0154*** (-5.66)		-0.103*** (-4.31)
EqFin_Alt			-0.0158*** (-3.44)	
Lerner	0.0307*** (3.53)	0.0343*** (4.06)	0.0343*** (3.59)	0.204*** (2.77)
LoanTA	-0.0145*** (-2.69)	-0.0132** (-2.36)	-0.00198 (-0.33)	-0.0539 (-1.32)
EqTA	-0.0390*** (-3.42)	-0.0555*** (-4.99)	-0.0391*** (-2.90)	-0.822*** (-9.17)
DepLiab	-0.0347*** (-2.95)	-0.0449*** (-3.41)	-0.0364** (-2.50)	-0.336*** (-3.46)
GrTA	-0.0444** (-2.44)	-0.0453*** (-2.85)	-0.0482** (-2.10)	-0.354** (-2.23)
oLogTA	0.00241* (1.66)	0.00137 (1.08)	0.00121 (0.86)	0.0150 (1.54)
Constant	0.0760*** (5.29)	0.0697*** (5.55)	0.0651*** (4.74)	0.667*** (7.46)
Year FE	Yes	No	Yes	Yes
Robust SE	No	Yes	Yes	Yes
N	442	442	442	442
R-sq.	0.272	0.216	0.241	0.487

Notes: ***, **, and * denotes significance in 1%, 5%, and 10% levels respectively

Robustness Checks

To check whether our results are strong, we conduct several robustness tests. Results are displayed in Table 5. In column (1), we estimate the model without using robust standard errors whereas in column (2) we do not consider year fixed effect. The results are similar. Variable *EqFin* still negatively and significantly affect ROA. In column (3), we change our main dependent variable *EqFin* with our alternative proxy, *EqFin_Alt* but the result still does not change. In the last column, instead of using ROA to proxy bank profitability, we use ROE. A similar result is also obtained.

regression. We therefore estimate equation (1) using two most popular panel data regression, fixed effect (FE) and random effect (RE). The results are showed in Table 6. We do find that changing estimation techniques do not alter affect our main result. *EqFin* is significant either using fixed effect (column 1) or random effect (column 2) method. We do find some different result for our controls especially from the fixed effect method. However, as our Hausman test show insignificant result (p-value 0.99), we should rely on the random effect rather than the fixed effect.

DISCUSSION

From the empirical result we obtain, we notice an interesting result to be discussed. It is empirically proven in our work that total assets are an important determinant of profitability. The discussion about whether small or large Islamic banks are better has been rooted in the literature. The most interesting question is that do large Islamic banks are associated with better stability? A study from Èihák & Hesse (2010) starts the discussion by empirically showing that small Islamic banks tend to be more stable than both large Islamic and conventional banks. Additionally, they also find that large Islamic banks are relatively less stable than large conventional banks. Interestingly, Èihák & Hesse (2010) also argue that PLS activities are only suitable for large Islamic banks. The debate continues. Ibrahim & Rizvi (2017) empirically find that larger Islamic banks are more stable especially after they reach a particular size. This indeed contradicts with the previous finding. In this paper, regarding the bank size, we find two results. First, we find that larger banks have better profitability. Because they are large, they have greater incentives to make a profit. Second, we also find that negative impact of Islamic banks' PLS activities could be reduced in the larger Islamic banks. Our findings strengthen the issue that bank size matters for Islamic banks but researchers do not have one single view about its impact on Islamic banks stability and performance.

Table 6. Robustness: Panel Data Regression

	FE (1)	RE (2)
EqFin	0.00733** (2.27)	-0.0177*** (-5.14)
Lerner	-0.00190 (-0.42)	0.0307*** (3.53)
LoanTA	-0.00839** (-2.36)	-0.0145*** (-2.71)
EqTA	-0.0290*** (-2.75)	-0.0389*** (-3.42)
DepLiab	0.00433 (0.60)	-0.0349*** (-2.98)
GrTA	0.00865 (1.02)	-0.0443** (-2.44)
oLogTA	0.0207*** (5.08)	0.00243* (1.68)
Constant	0.0161* (1.91)	0.0609*** (4.70)
Hausman Test		
FE vs. RE		0.99
Year FE	Yes	Yes
N	442	442
R-sq. within	0.392	
R-sq. overall		0.271

Notes: ***, **, and * denotes significance in 1 percent, 5 percent, and 10 percent levels respectively

Next, we check whether using other estimation techniques will change the result. Our data varies over cross-section (bank *i*) and time series (time *t*). Econometricians might suggest that the most appropriate analysis for our data type is panel data

CONCLUSION AND SUGGESTIONS

Conclusion

In this work, we examine the determinant of bank profitability from the Islamic perspective. Specifically, we examine whether the PLS instrument that is translated into the equity financing could enhance bank profitability. We find a negative relation between equity financing and profitability of Islamic banks. Instead of increasing profitability, equity financing is found to be decreasing profitability. Although such mode of financing is very risky, it could not boost bank profitability. Nevertheless, we also find that such negative impact decrease in the large Islamic banks. It confirms prior study that PLS activities are more appropriate for the large banks since it is categorized as risky instruments (Cihak& Hesse, 2010).

Suggestions

Our result calls the policymakers to look again at the practice of equity financing especially in Indonesia. This is because equity financing is not empirically proven to increase Islamic banks profitability. Based on our data, equity financing constitutes 30% of total financing. Failed application of equity financing could significantly deteriorate Islamic banks' stability which could lead to the instability of the whole country banking system. Equity financing indeed could be a prominent difference between Islamic banks and their conventional one but it should be regulated and monitored in a detailed manner by both policymakers and regulators in order to maintain country financial stability.

REFERENCES

- Abdul-Rahman, A., Latif, R. A., Muda, R., & Abdullah, M. A. (2014). Failure and potential of profit-loss sharing contracts: A perspective of New Institutional, Economic (NIE) theory. *Pacific Basin Finance Journal*, 28, 136-151. <https://doi.org/10.1016/j.pacfin.2014.01.004>.
- Abedifar, P., Molyneux, P., & Tarazi, A. (2013). Risk in Islamic banking. *Review of Finance*, 17(6), 2035-2096. <https://doi.org/10.1093/rof/rfs041>.
- Aggarwal, R. K., & Yousef, T. (2000). Islamic banks and investment financing. *Journal of Money, Credit, and Banking*, 32(1), 93-120. <https://doi.org/10.2307/2601094>.
- Ahamed, M. M. (2017). Asset quality, non-interest income, and bank profitability: Evidence from Indian banks. *Economic Modelling*, 63, 1-14. <https://doi.org/10.1016/j.econmod.2017.01.016>.
- Alam, N., & Parinduri, R. A. (2017). Do Islamic banks shift from mark-up to equity financing when their contracting environments are improved? *Applied Economics Letters*, 24(8), 545-548. <https://doi.org/10.1080/13504851.2016.1210759>.
- Chen, N., Liang, H. Y., & Yu, M. T. (2018). Asset diversification and bank performance: Evidence from three Asian countries with a dual banking system. *Pacific Basin Finance Journal*. <https://doi.org/10.1016/j.pacfin.2018.02.007>.
- Cho, K. R. (1990). Foreign banking presence and banking market concentration: The case of Indonesia. *The Journal of Development Studies*, 27(1), 98-110. <https://doi.org/10.1080/00220389008422185>.
- Cihak, M., & Hesse, H. (2010). Islamic banks and financial stability: An empirical analysis. *Journal of Financial Services Research*, 38(2-3), 95-113. <https://doi.org/10.1007/s10693-010-0089-0>.
- Cupian & Abduh, M. (2017). Competitive condition and market power of Islamic bank in Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management*, 10(1), 77-91. <https://doi.org/10.1108/IMEFM-09-2015-0098>.
- Fu, X., Lin, Y., & Molyneux, P. (2014). Bank competition and financial stability in Asia Pacific. *Journal of Banking & Finance*, 38, 64-77. <https://doi.org/10.1016/j.jbankfin.2013.09.012>.
- Hamza, H., & Saadaoui, Z. (2013). Investment deposits, risk-taking, and capital decisions in Islamic banks. *Studies in Economics and Finance*, 30(3), 244-265. <https://doi.org/10.1016/j.econfin.2013.09.012>.

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- /doi.org/10.1108/SEF-Feb-2012-0016.
- Ibrahim, M. H., & Rizvi, S. A. R. (2017). Do we need bigger Islamic banks? An assessment of bank stability. *Journal of Multinational Financial Management*, 40, 77-91. <https://doi.org/10.1016/j.mulfin.2017.05.002>.
- Meslier, C., Risfandy, T., & Tarazi, A. (2017b). Dual market competition and deposit rate setting in Islamic and conventional banks. *Economic Modelling*, 63, 318-333. <https://doi.org/10.1016/j.econmod.2017.02.013>.
- Meslier, C., Tacneng, R., & Tarazi, A. (2014). Is bank income diversification beneficial? Evidence from an emerging economy. *Journal of International Financial Markets, Institutions, and Money*, 31(1), 97-126. <https://doi.org/10.1016/j.intfin.2014.03.007>.
- Othman, N., Abdul-Majid, M., & Abdul-Rahman, A. (2017). Partnership financing and bank efficiency. *Pacific Basin Finance Journal*, 46, 1-13. <https://doi.org/10.1016/j.pacfin.2017.08.002>.
- Risfandy, T. (2018). Empirical Essays on Islamic banking: Competition, stability, and governance. Doctoral thesis at Universite de Limoges, France. Retrieved from: <https://tel.archives-ouvertes.fr/tel-01775012/document>
- Risfandy, T., Harahap, B., Hakim, A. R., Sutaryo, S., & Nugroho, L. I. (2018). Equity Financing in Islamic Banks: Do Competition and Bank Fundamentals Matter? *SSRN Working Paper*.
- Risfandy, T., Trinarningsih, W., Harmadi, H., & Trinugroho, I. (2017). Islamic banks' market power, state-owned banks, and Ramadan: Evidence from Indonesia. *The Singapore Economic Review*, 1-18. <https://doi.org/10.1142/S0217590817500229>.
- Stiroh, K. J., & Rumble, A. (2006). The dark side of diversification: The case of US financial holding companies. *Journal of Banking and Finance*, 30(8), 2131-2161.
- Thomson Reuters. (2017). *State of the Global Islamic Economy Report 2017/18*.
- Tran, V. T., Lin, C. T., & Nguyen, H. (2016). Liquidity creation, regulatory capital, and bank profitability. *International Review of Financial Analysis*, 48, 98-109. <https://doi.org/10.1016/j.irfa.2016.09.010>.
- Trinugroho, I., Risfandy, T., Ariefianto, M. D., Prabowo, M. A., Purnomo, H., & Purwaningsih, Y. (2017). Does religiosity matter for Islamic banks' performance? Evidence from Indonesia. *International Journal of Economics and Management*, 11(2), 419-435.
- Yanikkaya, H., Gümü^o, N., & Pabuçcu, Y. U. (2018). How profitability differs between conventional and Islamic banks: A dynamic panel data approach. *Pacific Basin Finance Journal*, 48, 99-111. <https://doi.org/10.1016/j.pacfin.2018.01.006>.