

# Are Islamic Banks More Smes Friendly Than Their Conventional Counterparts? Evidence From Indonesian Industry Level Data

Dyah Titis Kusuma Wardani<sup>1</sup>, Akhmad Akbar Susamto<sup>2</sup>, Danes Quirira Octavio<sup>3</sup>

[dyah.wardani@umy.ac.id](mailto:dyah.wardani@umy.ac.id), [akhmad.susamto@ugm.ac.id](mailto:akhmad.susamto@ugm.ac.id), [danesquiriraoctavio@lecturer.undip.ac.id](mailto:danesquiriraoctavio@lecturer.undip.ac.id)

Universitas Muhammadiyah Yogyakarta, Yogyakarta, Indonesia<sup>1,2</sup>  
Universitas Diponegoro, Semarang, Indonesia<sup>3</sup>

**Abstract.** This research compares Islamic and conventional banks' support for SMEs. This study uses panel regression estimates for SMEs financing growth and percentage of overall financing in Islamic and conventional banking. Otoritas Jasa Keuangan, OJK's website provides SMEs financing data. The same source provides bank numbers, total assets, capital adequacy ratios, and FDR or LDR for each banking system. Real GDP growth, percent change in CPI, and government domestic debt growth are collected from Statistics Indonesia (BPS) and Bank Indonesia, respectively. Islamic banks are not friendlier to SMEs, according to the results. Islamic financing must fit into the global SME finance agenda. G20 Investment and Infrastructure Working Group (IIWG) and Global Partnership on Financial Inclusion (GPII) priority reform measures may help introduce Islamic financial products.

**Keywords:** Financing, Islamic Banking, Conventional Banking, Small and Medium Enterprises (SMEs)

## 1. Introduction

The role that Small and Medium Enterprises (SMEs) play towards the achievement of sustainable development goals (SDGs) cannot be overlooked. SMEs account for up to one-third of gross domestic product (GDP) in developing economies [7]. SMEs also account for the creation of in these economies, there are job opportunities for both skilled and unskilled employees.[5]. According to some estimates, SMEs in emerging market countries account for 90% of all employment when the informal sector is taken into consideration. SMEs furthermore contribute to the reduction of inequality.

For the SDGs to be achieved, there is thus a need to overcome challenges that hinder the development of SMEs. One of the most persistent challenges is access to finance [2]. The projected \$2.4 trillion financing gap for micro, small, and medium-sized companies (MSMEs) in developing nations includes a gap of around \$1.3 trillion in G20 nations included in the [7] Financing Gap database. Since financial institutions like banks typically view SMEs as being too hazardous due to things like a lack of collateral and a weak credit history, the financing gap in Emerging Markets and Developing Countries (EMDCs) is considerably worse. In developing

nations, between 55 and 68 percent of SMEs are either underserved financially or not supported at all, which results in missed opportunities for SMEs to grow.

Islamic banking, which strives to become an interest free alternative to conventional banking, is expected to offer new opportunities for SMEs financing. In a special session about SMEs, the Organization of Islamic Cooperation (OIC) in 20125, characterized as its primary objective to “develop appropriate policies to accelerate the convergence between Islamic finance and SME industries. In this context, promote the use of Islamic finance products, which are more linked to the real economic activity, to enable SMEs in the member countries to tap into the rapidly growing pool of *Shari’ah*-compliant funds”.

No less than the International Monetary Fund (IMF) claims that Islamic banking could benefit small and medium-sized businesses since it places a strong emphasis on asset-backed financing and risk-sharing. [9]. Remarkably, the extent to which Islamic banks support SMEs’ development has not been thoroughly evaluated. This paper uses regression estimates to evaluate the extent to which Islamic banks support SMEs’ development as compared to their conventional counterparts. The data sample includes aggregate industry level data from Indonesian Islamic and conventional banking sectors over the period 2002-2017. Estimations are carried out using Generalized Method of Moments (GMM). The results provide no indication that Islamic banks are more SMEs friendly than conventional banks. This paper adds to the literature in that it gives evidence of the no indication that Islamic banks are more SMEs friendly than conventional banks.

The plan of this paper is as follows. Section two provides a brief review of the literature on Islamic banks and SMEs financing. Section three describes methods and data used in the regression estimates. Section four summarizes the results. Finally, Section 5 provides conclusion and suggestions for further research.

## **2. Literature Review**

Supposedly, the relevance of Islamic banking to the financing of SMEs goes beyond standard services provided by conventional banking. The *raison d’etre* behind the establishment of Islamic banking is that Islamic economists consider that it is important to establish the realization of *maqasid al-shariah*. Islamic banks should therefore involve in activities that can strategically improve the welfare of the society rather than merely focus on maximizing their profits. In the context of this paper, Islamic banks should pay more attention on SMEs financing than their conventional counterparts.

Moreover, despite the prohibition of interest, Islamic banking allows diverse financial product offerings, which can potentially help boost Islamic banks’ competitive advantage compared to conventional banks in term of SMEs financing. These include asset-based products such as *murabahah* and equity-based products such as *mudharabah* and *musharakah*. *Murabahah* is a resale contract with a certain stated price and profit margin. In practice, it is implemented in a form that customers approach a bank to, first, buy particular assets on their behalf and, second, resell the assets to them on an installment payment basis with agreed profit margins. It has been argued [1] that, different from conventional debt which involves *riba*, *murabahah* meets the core requirement of Islamic finance that financial transactions must be part of a real economic activity and closely linked to real assets.

*Murabahah* can potentially help boost Islamic banks' competitive advantage in term of SMEs financing because, on the one hand, it provides partial safeguard to the bank against risk and, on the other hand, it reduces the need for SMEs to provide collateral in advance. In *murabahah*, asset ownership remains with the bank until the terms of the contract come to an end. The traded assets can therefore serve as a collateral-by-contract.

*Musharakah* is a type of joint venture or partnership used in Islamic finance where stakeholders split an enterprise's gains and losses. *Musharakah* permits the financier of a project or business to receive a return in the form of a percentage of the actual earnings in accordance with a predefined ratio because Islamic law (Sharia) forbids benefitting from interest in lending. But unlike a traditional creditor, the financier will also proportionately share in any losses that might arise. One variety of *shirkah al-amwal* (or partnership), known as *musharakah*, is "sharing".

*Mudharabah* and *musharakah* by themselves require no collateral in advance. This can potentially help boost the competitive advantage of Islamic banks in term of SMEs financing. Besides, the risk-sharing nature of *mudharabah* and *musharakah* increases the alignment of the banks' and the SMEs' interests. In addition, the relevance of Islamic banking to the financing of SMEs is perhaps clearest for those who would not opt for conventional banking due to religious reasons [7].

Recent trends have led to criticism that Islamic banks limit their services to a great extent to high-net worth customers. As the main Islamic financial institutions in society, Islamic banks should instead strive to provide a wide range of goods and services that will satisfy the demands of all societal groups and guarantee that risks and benefits are distributed fairly. Unfortunately, Due to their perceived dangers, lack of collateral, and poor credit histories, Islamic banks, like conventional banks, have failed to serve SMEs and start-ups.

The failure to offer profit and loss sharing equity-based financial instruments like *Musharakah* and *Mudharaba* to SMEs is the main cause of the unmet demand of SMEs through Islamic banks. This trend ignores the fundamental ideas of Islamic finance and constitutes a missed chance to provide financial inclusion for SMEs who are ignored by interest-based banking providers. This unmet need or desire by Islamic banks is caused by a combination of factors, including depositor expectations and a shortage of human resources capable of structuring and managing such equity-based financing arrangements, as well as a reluctance to assume the risks associated with SME financing. Having emphasized the relevance of Islamic banking to SMEs financing, it is natural to hypothesize that some other factors also affect SMEs financing. These may include SMEs-specific factors, bank-specific factors as well as macroeconomic factors.

The relevance of SMEs-specific factors to SMEs financing has been examined, for instance in [4] and [5]. Banks must analyze the credit risk of potential borrowers in order to make informed lending decisions. To do this, they must have access to current, trustworthy financial information. However, dealing with SME borrowers is challenging and expensive for banks due to the opaqueness of SMEs, or information asymmetries between SMEs and banks. As a result, banks frequently decide to restrict loans to this industry or demand greater collateral than they typically do for major businesses. From the side of the banks, According to this hypothesis, small banks are therefore better able to deal with information asymmetries than giant banks. This suggests that small banks are able to lend to SMEs at a higher rate than major banks. Through the 1990s, this strategy gained acceptance thanks to studies by Petersen and Rajan (1994), Rajan (1992), Keeton (1995), and [4]. These research found that compared to small banks, large banks distributed a smaller proportion of their assets to SMEs. In several research,

it was also discovered that larger banks formed through bank mergers and acquisitions reduced the amount of loans they provided to small firms. [4].

The relevance of macroeconomic factors to SMEs financing has been emphasized, for example, by [5]. Based on the survey results of 91 banks from 45 countries, they write that “banks perceive the SME segment to be highly profitable but perceive macroeconomic instability in developing countries [...] as the main obstacles”. Using different datasets, other authors [7],[6], [8] report that economic growth, inflation, government domestic borrowing and market competition in corporate lending have a significant effect on SMEs financing.

### **3. Empirical Strategy and Data**

To evaluate the extent to which Islamic banks support SMEs’ development as compared to their conventional counterparts, this paper uses panel regression estimates where the dependent variables are the growth of SMEs financing and the share of SMEs financing to total financing in Islamic and conventional banking. Indonesia is emerging as a nation with significant economic support from micro, small, and medium-sized firms as a result of growing deregulation. In Indonesia, tiny companies make up the bulk of all establishments. According to Act Number 20, 2008 on Micro, Small, and Medium Enterprises, a micro-enterprise is defined as a company with net value of less than Rp50 million and yearly sales of less than Rp300 million. Small businesses are defined as those with net worths between Rp50 and Rp500 million and annual sales between Rp300 and Rp2.5 billion. On the other side, the medium is a company with yearly sales of between Rp2.5 billion and Rp5 billion and a net worth between Rp500 million and Rp10 billion. The growth of SMEs units increased from 15% to 29% of the country’s overall industry in just three decades, which represents a massively significant investment (BPS, 2015).

To account for the notion that the growth of SMEs financing and the share of SMEs financing to total financing tend to be persistent, and to address the possible presence of omitted variable bias, all estimations in this paper are carried out using dynamic rather than static models. That means, in each regression, the lag of the dependent variable is included as one of the independent variables.

Besides, to keep the models simple, three assumptions are made regarding the key independent variable and the control variables. First, the effect of the banking system as the key independent variable can be captured using a dummy that takes the value 1 for Islamic banking system and 0 otherwise. This assumption is common and has been used implicitly in many works. Second, the effect of banking specific control variables can be represented by the effects of the number of banks, the level of total assets, capital adequacy ratio and financing or loan to deposit ratio (FDR or LDR) in each banking system. These effects are lagged by one quarter and the relationship between SMEs financing and banking specific control variables are, further, assumed to be predetermined. Third, the effect of macroeconomic control variable includes the effects of government domestic debt growth, real GDP growth and percent change in consumer price index (CPI). These effects are lagged and, except for the effect of government domestic debt growth, assumed further to last over one year period.

The basic regression equation is given by

$$F_{i,t} = \alpha + \beta_0 F_{i,t-1} + \beta_1 D_{i,t} + \sum_{j=1}^4 \beta_{2j} I_{i,t-j} + \sum_{j=1}^4 \beta_{3j} M_{t-j} + \beta_4 T_t + \varepsilon_{i,t} \quad (1)$$

where  $F_{i,t}$  denotes two different variables, namely the growth of SMEs financing and the share of SMEs financing to total financing in banking system  $i$  at the end of period  $t$  respectively,  $F_{i,t-1}$  denotes the lagged dependent variable included in the model in correspondence with the applicable dependent variable, and  $D_{i,t}$  represents the dummy whose value equals 1 for Islamic banking system and 0 for conventional banking system. The alphabet  $I_{i,t-j}$  and  $M_{t-j}$  denote banking specific and macroeconomic control variables respectively,  $T_t$  denotes yearly and quarterly time specific fixed effect dummies, and  $\varepsilon_{i,t}$  denotes the error term.

Data for the level of SMEs financing are taken from the website of Indonesian Financial Services Authority (OJK). Data for the number of banks, the level of total assets, capital adequacy ratio and FDR or LDR in each banking system are also taken from the same source. Data for real GDP growth and percent change in CPI are taken, or calculated based on data obtained, from the website of Statistics Indonesia (BPS), while data for government domestic debt growth are calculated based on data obtained from the website of the central bank of Indonesia, Bank Indonesia.

The dynamic nature of the model in equation (1) implies that common panel regression estimation techniques such as fixed effects estimation technique cannot properly be used. Regression in equation (1) is therefore estimated using dynamic system-GMM estimations (Arellano and Bover 1995; Blundell and Bond 1998). To the extent that instruments are appropriately chosen, this Generalized Method of Moments (GMM) type estimations will result in efficient and consistent estimates.

The sample in this paper includes aggregate industry level data from Indonesian Islamic and conventional banking between the third quarter of 2010 and the second quarter of 2017. It has been mentioned that during the periods of analysis, there happens a change in the definition of SMEs in the dataset. To avoid bias caused by this change, transitional data from second quarter of 2013 to second quarter of 2014 are dropped. Besides, a special dummy is added into the regression, taking the value 1 for periods after the SMEs definition change and 0 otherwise.

## 4. Results

Table 1 summarizes the results for estimations with SMEs financing growth as the dependent variable. In column 1, only banking specific control variables are included in the regression along with the key independent variable, the lagged dependent variable, a dummy for SMEs definition change and dummies for time-specific fixed effects (i.e., a dummy each for the years 2011-2016 and for the quarters 2-4). In columns 2 and 3, macroeconomic control variables instead of banking specific control variables are included, while in columns 4 and 5, all of these variables are included in the regression.

The coefficient of the dummy for Islamic banking is significant in columns 1, 4 and 5, but not in columns 2 and 3. This indicates that the significance of the dummy for Islamic banking is subject to the presence of other banking specific characteristics in the model. However, from an economic and econometric point of view, it is clear that the results of the model including banking specific control variables are of the greatest merit.

	The growth of SMEs financing				
	Model 1	Model 2	Model 3	Model 4	Model 5
Lagged dependent variable	0.019 (0.082)	-0.004 (0.084)	0.077 (0.109)	0.002 (0.090)	0.118*** (0.008)
Dummy for Islamic banking	17.914** (8.704)	0.103 (0.074)	-0.504 (0.855)	20.771*** (5.470)	38.297*** (7.333)
N. banks in the industry ( $t - 1$ )	-10.087*** (2.623)			-9.777*** (2.974)	-8.590** (3.583)
Industry's total assets ( $t - 1$ )	0.554*** (0.013)			0.558*** (0.028)	0.737*** (0.203)
Industry's c. adequacy ( $t - 1$ )	0.474*** (0.076)			0.731*** (0.226)	0.552*** (0.195)
Industry's FDR or LDR ( $t - 1$ )	0.014 (0.044)			-0.052 (0.076)	0.053 (0.067)
% growth of gov. d.debt ( $t - 1$ )		-0.179*** (0.016)	-0.662*** (0.124)	-0.343* (0.180)	-0.726* (0.391)
% growth of real GDP ( $t - 1$ )		-0.097 (0.287)	2.250*** (0.385)	-0.743*** (0.026)	3.530*** (1.586)
% growth of real GDP ( $t - 2$ )			0.848 (0.724)		2.673*** (0.418)
% growth of real GDP ( $t - 3$ )			2.614*** (0.336)		4.741** (1.898)
% growth of real GDP ( $t - 4$ )			2.244*** (0.087)		4.630*** (1.773)
% change in CPI ( $t - 1$ )		0.501*** (0.125)	-0.044 (0.092)	0.030 (0.217)	-0.641 (0.396)
% change in CPI ( $t - 2$ )			0.636 (0.450)		1.199 (1.233)

% change in CPI ( $t - 3$ )	-1.405***	-0.759***
	(0.169)	(0.120)
% change in CPI ( $t - 4$ )	1.511	1.050
	(1.320)	(1.278)

---

N observations	44	44	44	44	44
2nd order test					
Sargan test					

---

Note: The dependent variable is the quarterly growth of SMEs financing. Each regression includes a constant, a dummy for a change in the definition of SMEs, six dummies for year fixed effects (i.e. a dummy each for the years 2011-2016) and three dummies for quarter fixed effects (i.e. a dummy each for the quarters 2-4). The lags of the number of banks, the level of total assets, capital adequacy ratio and FDR or LDR are assumed to be predetermined, while the lags of government domestic debt growth, real GDP growth and percent change in CPI are assumed to be strictly exogenous. Parabolas indicate robust standard errors.  $P$ -values > 0.05 for the second order test suggests that the regression's error term isn't serially correlated.  $P$ -values > 0.05 According to the Sargan test, there is no correlation between the instruments and the error term. \*\*\*, \*\* and \* denotes significance at the 1, 5 and 10 percent level respectively.

---

	The share of SMEs financing				
	Model 1	Model 2	Model 3	Model 4	Model 5
Lagged dependent variable	0.497***	0.697***	0.712***	0.484***	0.457***
	(0.130)	(0.174)	(0.151)	(0.043)	(0.033)
Dummy for Islamic banking	-18.904**	2.880	2.759	-12.023***	-10.826***
	(7.780)	(2.013)	(1.782)	(1.135)	(1.895)
N. banks in the industry ( $t - 1$ )	-13.347***			-13.625***	-13.699***
	(4.833)			(3.273)	(2.531)
Industry's total assets ( $t - 1$ )	0.177***			0.257**	0.268***
	(0.041)			(0.115)	(0.099)
Industry's c. adequacy ( $t - 1$ )	0.523			0.704***	0.774***
	(0.364)			(0.153)	(0.167)
Industry's FDR or LDR ( $t - 1$ )	-0.016			-0.025	-0.006
	(0.089)			(0.048)	(0.042)
% growth of gov. d.debt ( $t - 1$ )		0.128	-0.037	0.122***	-0.016

		(0.150)	(0.102)	(0.038)	(0.156)
% growth of real GDP ( $t - 1$ )	0.834	-1.700	0.237	-1.820	
		(0.565)	(2.029)	(0.239)	(1.493)
% growth of real GDP ( $t - 2$ )		-3.566		-3.019	
		(3.149)		(2.415)	
% growth of real GDP ( $t - 3$ )		-2.814		-2.259	
		(2.983)		(2.088)	
% growth of real GDP ( $t - 4$ )		-1.533		-1.189	
		(2.061)		(1.329)	
% change in CPI ( $t - 1$ )	-0.244***	-0.884**	-0.030	-0.850	
	(0.034)	(0.416)	(0.193)	(0.702)	
% change in CPI ( $t - 2$ )		-0.789		-0.991	
		(0.795)		(0.649)	
% change in CPI ( $t - 3$ )		-0.220***		-0.453	
		(0.012)		(0.372)	
% change in CPI ( $t - 4$ )		0.765		0.156***	
		(0.538)		(0.046)	
<hr/>					
N observations	45	45	45	45	45
2nd order test					
Sargan test					

Note: The dependent variable is the quarterly growth of SMEs financing. Each regression includes a constant, a dummy for a change in the definition of SMEs, six dummies for year fixed effects (i.e. a dummy each for the years 2011-2016) and three dummies for quarter fixed effects (i.e. a dummy each for the quarters 2-4). The lags of the banking industry's total assets, the number of banks in the industry, capital adequacy ratio and FDR or LDR are assumed to be predetermined, while the lags of government domestic debt growth, real GDP growth and percent change in CPI are assumed to be strictly exogenous. Robust standard errors are in parentheses.  $P$ -values > 0.05 for the 2nd order test implies that the error term in the regression is not serially correlated.  $P$ -values > 0.05 the Sargan test implies that the instruments are not correlated with the error term. \*\*\*, \*\* and \* denotes significance at the 1, 5 and 10 percent level respectively.



---

## 5. Concluding Remarks

This paper evaluates the extent to which Islamic banks support SMEs financing as compared to conventional banks. The evaluation is conducted using dynamic panel regression estimations, where the sample includes aggregate level data from Indonesian Islamic and conventional banking industries. The findings show that there is no evidence that Islamic banks are more accommodating to SMEs than traditional banks. The failure to offer profit and loss sharing equity-based financial instruments like Musharakah and Mudharaba to SMEs is the main cause of the unmet demand of SMEs through Islamic banks.

The majority of SMEs have either limited or no access to credit. The combination of demand, supply, institutional, regulatory, and other policy variables that impede the expansion of SMEs is reflected in SMEs' restricted access to credit. SMEs are also ignorant of Islamic banking products and what products can be appropriate for their needs.

Studies on bank lending either look at the demand side or the supply side because investigating the demand side requires looking at the variables that influence how much money people and businesses want to borrow from banks [11]. The supply side, however, is more concerned with the variables that influence the volume of loans made by banks, including those that are related to the banks themselves, such as their size, liquidity, and deposit levels, as well as variables related to the overall economy, such as economic growth, inflation rate, and exchange rates.

To promote SME financing, Islamic finance needs to be placed within the larger global agenda. The G20 Investment and Infrastructure Working Group's (IIWG) and Global Partnership on Financial Inclusion's (GPII) prioritized reform initiatives could serve as a guide for successfully implementing Islamic financial products.

## References

- [1] Askari, H., Iqbal, Z., and Mirakhor, A. (2014). *Challenges in Economic and Financial Policy Formulation: An Islamic Perspective*. Palgrave Macmillan.
- [2] Beck, T., and Demirgüç-Kunt, A. (2006). Small and Medium-size Enterprises: Access to Finance as a Growth Constraint. *J. Bank. Finance* 30 (November (11)), 2931–2943.
- [3] Beck, T., Demirgüç-Kunt, A., Peria, M., Soledad, M. (2008). Bank Financing for SMEs around the World: Drivers, Obstacles, Business Models, and Lending Practices (November 1, 2008). World Bank Policy Research Working Paper Series, 11(2).
- [4] Berger, A., Klapper, L., and Udell, G. (2001). The Ability of Banks to Lend to Informationally Opaque Small Businesses. *J. Bank. Finance* 25, 2127–2167.
- [5] Beck, T., Demirgüç-Kunt, A., and Maksimovic, V. (2005). Financial and Legal Constraints to Firm Growth: Does Firm size Matter? *J. Finance* 60, 137–177.
- [6] De la Torre, A., Martinez Peria, M.S., Schmukler, S.L. (2010). Bank involvement with SMEs: Beyond relationship lending. *J. Bank. Finance* 34, 2280–2293.

- [7] IFC (2007). *Benchmarking SME Banking Practices in OECD and Emerging Markets*. International Finance Corporation, Washington, USA.
- [8] Jenkins, H., and Hossain, M. (2017). An Analysis of the Macroeconomic Conditions Required for SME Lending: Evidence from Turkey and Other Emerging Market Countries *Panaeconomicus*, 64(1),77-9.
- [9] Kasri, R. A., & Azzahra, C. (2020). Do Islamic banks more stable than conventional banks? Evidence from Indonesia. *Jurnal Ekonomi & Keuangan Islam*, 6(2), 149–164. <https://doi.org/10.20885/jeki.vol6.iss2.art6>
- [10] Yasushi, S. & Uddin, S. M. S. (2016). “Recent Trends in Islamic Banks’ Lending Modes in Bangladesh: An Evaluation.” *Journal of Islamic Accounting and Business Research*, 7(1), 28-41.