ANALYSIS OF ECONOMIC GROWTH BASED ON PERFORMANCE SHARIA BANK IN CILACAP CENTRAL JAVA

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Abstract

Sharia banking saw rapid growth during the last four decades. There are many contributory factors for such growth, most notable of which are the financial. The prohibition of interest payments by Sharia bank has instead made equity and profit sharing the cornerstones of its operational structure activities. Furthermore, the risk-sharing principle provides theoretically better long-term allocation of funds for investments with higher risk-return profiles and subsequently greater economic growth. The purpose of this research is to provide empirical evidence concerning the impacts of Financial and the sharia bank performance on economic growth in cilacap, Central Java. The study indicates that effects are positive and significant on economic growth during the period 2013-2018 in term of financial.

Keywords: Economic growth, sharia banks, regression analysis

1. INTRODUCTION

The sharia banking system has indeed been attracting the attention of researchers, customers, and policymakers in the four decades, even more after the recent financial crisis following the subprime credit crisis. In any economy, banking sector contributes toward better financial performance and helps in better resource utilization. Similarly, Bourke reported that banks with high profitability remain well capitalized and have easy access to the funds. Indeed, a well-functioning banking system plays a significant role in resource allocation, economic growth, and financial performance. Further, better financial performance contributes toward investment uplift, which is beneficial for shareholders as well as for the whole economy.

Sharia banks offer financial products and services that are compatible with Islamic doctrine, wich allows musilm individuals and firms with religious concerns to have acces to finance or move from an informal to a formal financial system. In short, sharia banks can mitigate financial exclusion and bring financial service to a wider population. This can also promote better strategies for poverty alleviation.

The aim of this study is to examine The Effect of the Sharia Banks performance on the Economic growth in terms of liberalization financial. This paper is organized as follows. The first section tries to draw attention towards the important Studies that sharia finance and banking have known from a conceptual idea to an evolving and fast reality with financial liberalization. The second section deals with the different empirical works and gives an overview of the added value of Sharia finance to the economic growth. The third section starts with an econometric specification, we will adopt the subsequent panel specification for our analyses. Finally, discusses the results and concludes.

2. LITERATURE REVIEW

There are a large number of empirical studies in which researchers have evaluated the performance of banking sector using different statistical techniques, such as regression analysis, ratio analysis. Furthermore, numerous studies have attempted to explore the empirical determinants of bank performance across the globe. This section provides summary of the literature related to bank-specific, industry-specific, financial and macroeconomic determinants of financial performance

of banks. After reviewing the literature, the gaps relevant to this study have been identified. Also the shortfalls of the existing empirical studies have been highlighted.

First, unlike most of the existing studies, we preferred measuring financial performance of banks and ethical Financial because simple ratio based performance measures (e.g., returns on assets (ROA), returns on equity (ROA) are limited in considering different financial aspects of financial institutions.

Several studies try to estimate the sharia banks return and its effects on the real economy. Some of these studies concern the ratios of performance: Samad and Hassan, Masood and al. Other studies try to compare the Islamic banks with the classic banks in term of the performance and the profitability: Achraf and Zia-ur-Rehman, Jaffar and Manarvi, Siraj and Plundered, Usman and Kashif Khan. Among the studies which try to find the determiners of the performance of the Islamic banks: Haron, Izhar and Asutay, Sraïri, Idris and al., Hidayat and Abduh.

Haron examined the internal and external factors which influence the profitability of the Islamic banks. Haron (2004) found a strong correlation between the internal factors (of liquidity, the total spending, funds invested in Islamic titles, the percentage of the ratio of division(sharing) of the profits between the bank and the borrower of fund and the level of the total income perceived by the Islamic banks. The author found more or less the same impacts on the external factors such as the size of the bank, the interest rates and the part of the market.

Izhar and Asutay concluded that the activities of financing were the source of the ways of the Bank Muamalat Indonésia (BMI) profit-seeking, whereas the service activities of the contribution to the profitability of the studied bank were not significant. The document of the authors revealed that the short-term financing was based on the average activities of financing during period 1996-2001. Izhar and Asutay confirmed a positive relation between the inflation and the measure of the profitability. Sraïri worked a sample of Islamic and conventional banks in the countries of the Gulf cooperation council (GCC) during the period from 1999 till 2006 to test the impact of the financier.

Hidayat and Abduh tried to estimate the impact of the financial crisis of 2008-2009 on the financial performance of the Islamic banking industry in Bahrain. Hidayat and Abduh noticed that even if the impact of the financial crisis was not significant on the performance of the Islamic bank of Bahrain for the period of crisis and it was significant after the period of crisis.

In the model of Yeyati and Micco, they use a sample of commercial banks of eight Latin American countries during period 1993-2002. They found a positive link enter the banking risk (measured by Z-score) and the competition (measured by Hour-statistics), while the coefficient of banking concentration is not significant. This result confirms paradigm of "competition vulnerability".

Liu and al. Introduced some indicators of banking risks (The ratio of reserves on the irrecoverable credits with regard to the total of the credits, the reserves on the irrecoverable credits with regard to the total of the credits, the volatility of the ROA and the logarithm naperies of the indication Z) to study a similar relation for banks operating in the Southeast of Asia (Indonesia, Malaysia, the Philippines and Vietnam) between 1998 and 2008. They found that the competition measured by the model of Panzer and Thrashes is associated significantly with most of the indicators of risk, safe for the indication Z-score, which suggests that the competitiveness does not damage the banking stability. The researchers also noticed that the concentration is negatively.

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3. METHODOLOGY

This section presents discussion of methodology, data, sample, and variables description in detail. First, the performance index developed by Teker *et al.* is considered as a basic model to provide financial performance for each bank included in the sample over the study period 2015 to 2018 on economic growth. Next, this study analyzes the empirical determinants of economic growth by taking the GDP as dependent variable while bank-specific variables, macroeconomic factors, and financial indicators as independent variables.

3.1. Data and sample

All the data are declared on the balance assessments of banks and the statement of income is mainly obtained from the database of Bank Sharia in Cilacap who supplies us the information, the homogeneity and the classification of banks. In the case of lack of information, we use annual reports supplied by the individual banks through their Web sites.

First, unlike most of the existing studies, we preferred measuring financial performance of banks based on CAMELS because simple ratio based performance measures (e.g., returns on assets (ROA), returns on equity (ROE)... etc) are limited in considering different financial aspects of financial institutions.

Variables	Abbreviations		Mea	asures
	ROA			
Financial	KOA	* Retu	rns on assets – Rés	ultat net après impôts / Total
performance		Retu	ms on assets – Res	Assets.
periormance	ROE			1 Iddets.
		* Retu	urns on equity = 1	Résultat net après impôts /
		Total		
				equity
	RPR			division of the income =
			(financing	ina mayahamalaa) /Tatal
Ethique		financ		ing moucharaka) /Total
Eunque	RPZ	imanc	ing.	
Performance			* Ratio of the perf	Formance of Zakat = Zakat /
	RIRNI		Net	
				Assets
			Ratio of sharia retu	ırns vs not sharia returns =
			returned sharia / (re	eturned sharia + returned not
				Sharia)
			Abbreviation	
	Macro-economic Variables		S	Measures
	Industriel production index		IPI	Worlbank
Consumer Pr			CPI	Worlbank
Money Mark	et Rate		TMM	Worlbank

3.2 Correlation Total

	GDP	ROA	ROE	RPR	RPZ	RIRNI	PII	CPI	MMR	D_C
GDP	1									
ROA	0.0350	1								
ROE	0.0072	0.9640	1							
		-	-	1						
RPR	0.4176	0.0462	0.0231							
				-	1					
RPZ	0.0324	0.9342	0.9701	0.0133						
				-		1				
RIRNI	0.0078	0.407	0.0101	0.1860	0.0186					
		-	-	-	-	0.0429	1			
IPI	0.7301	0.2804	0.2684	0.5098	0.3221					
	-	-	-	-	-	0.1442		1		
IPC	0.1340	0.5378	0.4969	0.0127	0.5638		0.3094			
		-	-		-	-		1		
TMM	0.0361	0.2812	0.2547	0.1303	0.2885	0.0254	0.0078	0.615	51	
	-	-	-	-	-	-		0.050)8	1
D-C	0.1107	0.2814	0.2518	0.0734	0.2919	0.0333	0.0113	0.196	66	

3.3. The model

The model is estimated, for the economic growth in model of panel over the period 2013-2018. The analysis of the obtained results allows us to determine the variables which are directly connected to the joint of the economy such as implementation by the sharia banks by following the works of Demirgüc-Kunt. After a thorough analysis of the various ratios and their various possible connections, the problem of choice of the explanatory variable settled.

$$Y_{it} = \alpha_i + \beta_{it} ROA_{it} + \chi_{it} ROE_{it} + d_{it} RPR_{it} + \varphi_{it} RPZ_{it} + \eta_{it} RIRNI_{it} + \theta_{it} IPI_{it}$$

$$1 \qquad \gamma itCPI_{it} + \lambda it MMR_{it} + \varphi_{it} dC + \varepsilon it$$

Where we subscript denotes individual countries and t denotes the time dimension.

3.4 Empirical results

The tests of specifications show that our model can be formalized as a panel with fixed effect. To consider our model during the period going of 2013 to 2018, we shall be used techniques within and GLS. The picture below will recapitulate these two procedures of estimations in the observation of the static relations describing the linear equation which connects the economic growth according to the explanatory variables.

To distinguish between both techniques of estimation, Within or GLS, we shall use the statistics of Hausman. The test of specification of Hausman is a general test which can be applied to numerous problems of specification in econometrics. However, his most answered application is the one tests of specification of the individual effects in panel. He so serves to discriminate between the fixed and random effects.

Table 1: Estimation of model

GDP	Within	GLS			
ROA	1.435067** (0.0481)	2.555655** (0.0169)			
ROE	0.1634596 (0.511)	0.0444128 (0.839)			
RPR	0.0016293 (0.984)	-0.0026157 (0.872)			
RPZ	-0.4163889* (0.069)	-0.3174475*(0.0106)			
RIRNI	-0.3977812* (0.0830)	1.037543** (0.0569)			
IPI	0.0465853** (0.0403)	-0.098338** (0.000)			
CPI	-0.5223834** (0.0456)	-1.277682*** (0.001)			
MMR	-0.0591294** (0.0308)	-0.0736711** (0.008)			
D_C	1.014671* (0.0581)	2036262*(0.0883)			
Constant	2.414007 (0.613)	2.980239(0.164)			
*** indicate	e				
significance	at 1%,				
** indicate significance at 5%					
* indicate significan					

The matrix of the explanatory variables.

Hausman recommends to base its test of specification on the following statistics:

$$H = (\beta_k^F - \beta_k^A)'(Var(\beta_k^F - \beta_k^A))^{-1}(\beta_k^F - \beta_k^A) \quad \forall k = 1,2,3,4,5$$

Under the no hypothesis of correct specification, this statistics is asymptotically distributed according to a chi2 in k degrees of freedom. So, under the worthless hypothesis this theoretical model can be specified with random individual effects, so we have to hold the value of the MCG (the value BLUE). On the other hand, under the alternative hypothesis, the model must be specified with fixed individual effects and thus we have to hold the value Within or LSDV the not biased value).

Table 2: Hausman test

	Hausman Statistic	
GDP	22.19	
	(0.0046)	
Effect	fixed effect	

Into the trap the average over five years, the indication of the financial and the indication of the financial crises in the equation of growth represent the fraction of years during knew a crisis in an interval of 2 years (2017-2018). As the estimations in two stages of the growth model on average over five years are calculated by using the results of the model Within and GLS presented in him table 1, we present only the estimations for the equation of growth in the picture to tops. The results are similar to those obtained by using data with an annual frequency. The direct effect of the financial liberalization is almost identical, whereas the costs of the crises of growth are slightly more pronounced.

The effect of the inflation of the growth is now not significant whereas the effect of the commercial opening becomes stronger. Other explanatory variables have more or less the same impact. This picture presents the decomposition of the effects of the financial crisis on the growth. In comparison with the growth model considered of the annual data, at the same time the advantage of direct growth (IPI) and (TMM) has an a little raised cost.

We find that the presence of sharia banks is positively linked with financial sector performance and economic growth in our sample.

4. CONCLUSION

We are interested in the role of pure sharia banks on financial systems and the economic growth. We controlled the financial performance, ethic performance, inflation money market ratio and industrial production.

We try capture the heterogeneities associated with the structure of the banking sector in term of profitability and growth economic. We use fixed effects technique for our estimation, which accounts for unobservable factors, we control for a number of macroeconomic and institutional environment factors such as inflation, remittance inflow, GDP per capita, culture and religion.

We explored the relationship between the presence of sharia banks and the financial development and economic welfare for the sample of different countries. We estimated the fixed-effect technique, and illustrated the results. The first show a significantly positive relationship between the return on equity, return on asset of sharia banks profitability and economic growth. As expected, inflation is negatively associated with bank deposit. The trend variable has a positive coefficient.

The second results were in line with our finding in the regression the variables of ethical variables are positively linked of funding mobilization at the financial system level. Changes in market structure may affect banks performance. In a dual-banking system, sharia and conventional banks in Cilacap, Central Java do not merely play a supplementary role to one another, they compete with each other for clients and investors, whether and how conventional banks are affected by the presence of sharia banks is affected when they operate alongside sharia banks.

REFERENCE

Abdul-Majid, M., Saal, D.S., Battisti, G., (2010). "Efficiency in Islamic and Conventional banking: An International Comparison", *Journal of Productivity Analysis* 34 (1), pp. 25–43.

Abdul-Majid, M., Saal, D.S., Battisti, G., (2011a). "Efficiency and total factor productivity change of Malaysian commercial banks". Service Industries Journal 31 (13), pp. 2117–2143.

Abdul-Majid, M., Saal, D.S., Battisti, G., (2011b). "The Impact of Islamic Banking on the Cost Efficiency and Productivity Change of Malaysian Commercial Banks", *Applied Economics* 43 (16), pp. 2033–3054.

Abduh, M., Omar, M.A. & Duasa, J. (2011). "The Impact of Crisis and Macroeconomic Variables towards Islamic Banking Deposits". American Journal of Applied Sciences, 8 (12), pp. 1413-1418.

Ahmed, A. (2010). "Global Financial Crisis: An Islamic Finance Perspective", *International Journal of Islamic and Middle Eastern Finance and Management*, 3(4), pp. 306-320.

Ahmad, A.U.F., Hassan, M.K., (2007). "Regulation and Performance of Islamic Banking in Bangladesh". *Thunder bird Int. Bus. Rev.* 49 (2), pp. 251–277

Alexakis, C., Tsikouras, A., (2009). "Islamic Finance: Regulatory Framework Challenges Lying Ahead", *International Journal of Islamic and Middle Eastern Finance and Management* 2 (2), 90–104.

Al -Jarrah, I., Molyneux, P., (2005). "Efficiency in Arabian Banking". In. Iqbal, M., Wilson, R. (Eds.), *Islamic Perspectives on Wealth Creation*. Edinburgh University Press, Edinburgh, pp. 97–117.

Al-Khasawneh, J.A., Bassedat, K., Aktan, B., Thapa, P.D.P., (2012). "Efficiency of Islamic banks: Case of North African Arab countries". *Qual. Res. Finance*. Mark. 4 (2/3), pp. 228–239.

Al-Muharrami, S.,(2008). "An Examination of Technical, Pure Technical and Scale Efficiencies in GCC Banking" *American Journal of Finance and Accounting* 1 (2), pp. 152–166.

Akerlof George A. 2002. "Behavioral Macroeconomics and Macroeconomic Behavior". *American Economic Review*, 92(3), pp. 411-433.

Andersen Thomas B. et Finn Tarp (2003). "Financial Liberalization, Financial Development and Economic Growth in LDCs", *Journal of International Development*, 15(2), pp.189-209.

Archer S, Abdel-Karim R, Al-Deehani T (1998); "Financial Contracting, Governance Structure and the Accounting Regulation of Islamic Banks: An Analysis in terms of Agency Theory and Transaction Cost Economics". *J Manage Gov* 24, pp.1605–1628.

Ariff, M., Can, L., (2008). "Cost and Profit Efficiency of Chinese Banks: A Non-Parametric Analysis", *China Economic Review* 19 (2), pp. 260–273.

Arteta Carlos, Barry Eichengreen Charles Wyplosz (2001). "When does Capital Account Liberalization Help more than it Hurts?" *The National Bureau of Economic Research (NBER)*, Working Paper n° 8414.

Johnes. J. M, Izzeldin, and Pappas. V (2014), "A Comparison of Performance of Islamic and Conventional Banks 2004–2009", *Journal of Economic Behavior and Organization*, vol. 103, pp. 93–107,

Karim.R, and Ali.A, (2014); "Determinants of the Financial Strategy of Islamic Banks", *Journal of Business Finance and Accounting*, vol. 16, pp. 193-212,

Rosly SA, Abu Baker MA (2003) "Performance of Islamic and Mainstream Banks in Malaysia". *Int J Soc Econ* 30, pp.1249–1265.

Sayilgan. G, Yildirim. O. (2009), "Determinants of Profitability in Turkish Banking Sector: 2002-2007", *International Research Journal of Finance and Economics*, ISSN 1450-2887, Issue 28, pp. 207-214

Viverita, V., Brown, K., Skully, M., (2007). "Efficiency Analysis of Islamic Banks in Africa, Asia and the Middle East ". *Review of Islamic Economics* 11 (2), pp. 5–16. Warde, I., (2010). "Islamic Finance in the Global Economy". Edinburgh University Press,

Edinburgh. Willison, B., 2009. Technology trends in Islamic Investment Banking.