

Themed Section: Science and Technology

# Long Term for Macroeconomic and Shariah Banking With Cointegration

#### Suhono

Lecture at FEB Universitas Singaperbangsa, Jawa Barat, Indonesia

## **ABSTRACT**

This study aims to see how the relationship between macroeconomic Indonesia that can affect the ratio of sharia banks indirectly, a case study on a syariah bank in Indonesia is the bank muamalat. in this study using descriptive statistical data analysis and cointegration test. In the result is not the long-term relationship for the variable in detail.

Keywords: IRF, FEVD, Macroeconomics, Financial Performance of Islamic Bank

## I. INTRODUCTION

## II. LITERATURE REVIEW

According to Karim Consulting Indonesia President Director Adiwarman A. Karim Syariah banking industry is expected to grow better in 2016. This is in line with the national economic growth in 2016 which has shown improvement compared to 2015 ago. "The year 2016 is a good year for sharia banking in Indonesia. Hopefully sharia banking can go forward. But now depends on the speed of Indonesia's economy. Nevertheless, he warned, that there are still challenges for the sharia banking industry in the future, one of them the risk of non-performing loans (NPL). Therefore, sharia banking is expected to maintain its credit quality. In the world of the Indonesian economy, to prepare sharia banking should be mature enough. And should be designed and planed better, because the risk is different, ". The risk will still shadow sharia banking in 2017. But on the other hand, the most severe challenges in sharia banks will happen next year. However, it can be resolved as long as the national macroeconomic condition improves. With this background, the author aims to conduct this research under the title "Long Term For Macroeconomic and Shariah Banking With Cointegration".

The current macroeconomic condition is indeed a cause for concern, Indonesia's macroeconomic indicators are currently declining. Based on the graph below, the value of the rupiah has depreciated since the middle of last year despite appreciating in October 2014. After that, the rupiah continued to weaken until Friday, March 20, 2015, which touched the number Rp 13,075.00 per dollar (Source: Bank Indonesia). The weakening of the rupiah against the US dollar is still ongoing until now that touches at the level of about 13,800 / USD coupled with the rise of a number of food commodities such as meat, sembako, and fuel oil because of the scarcity of supply adds to the inflation rate that further erodes the value of the rupiah to weaken purchasing power community. Here is a graph of inflation occurring from 2012 to 2014. By the end of 2014 Indonesia has reached the inflation rate of 8.36. Obviously this gives a significant influence on the banking in Indonesia in general and sharia banking in particular. The weakening rupiah exchange rate will greatly affect the smooth business of customers. If the value of the rupiah falls compared to foreign exchange and if the business is run using imported materials, it will hit the customer's business and can increase the ratio of non-performing

financing. While the effect of inflation changes on the NPF is high inflation will cause the decline in real income society so that people's living standards also fell. Before inflation, a debtor is still able to pay its credit installment, but after inflation occurs, the prices have increased quite high, while the debtor's income is not increased, then the debtor's ability in paying the installment becomes weakened because most or even all of his income has been used to meet household needs as a result of rising prices.

From the observation of financial statements of major syariah banks in Indonesia such as BSM, BNIS, BRIS, and Muamalat decreased profitability ratios. NPF nett all the banks almost touched the threshold of 5%. This indicates that there is a slowing growth of national banks, one of which is indicated from the aggregate rise in NPF value of national banks. Considering the main sectors of national banking financing is still concentrated in 3 sectors, namely households, processing industries, and trade, the impact of the declining purchasing power of the people here is evident from the rise of national banking NPF, most of which is concentrated in the consumption and retail sectors. Other effects will also affect the ROA, ROE, NIM which also participate decreased.

#### III. RESEARCH METHOD

For this study conducted by the authors in February 2018. This study consists of 3 economic variables and 3 variables of sharia banks. The shariah bank in the example is the Indonesian muamalat bank. In this research, there are several variables, which include BI RATE, BOPO, consumer price index, FDR, Indonesia inflation and ROA. For the report on bank financial ratios used in accordance with the financial statements of muamalat banks for fiscal year ending in 2010 to 2016. For data analysis in this study using cointegration and causality test.

#### IV. RESULT AND DISCUSSION

Sharia-based businesses not only contribute to economic growth alone, but also a more equitable distribution of the economy. The principle of business activity in sharia economy puts the economic benefit aspect and humanity aspect in balance, expected to create a financial system that is not merely oriented to profit, but also pay attention to humanity aspect. This ethical-based investment and financial management activity has also become a trend in several countries around the world. Such ethical investment spirits are related to the impact on the environment and society in line with the spirit embodied in this universal sharia economy. These values have long been embedded has become a noble tradition of the Indonesian nation.

**Table 1.** Result statistic descriptive model

	BI_RA					
	TE	BOPO	FDR	IHK	INF	ROA
	6.8363	79.161	100.67	4.3216	5.8535	1.8351
Mean	10	90	77	67	71	19
Media	6.7500	79.055	100.47	4.3850	6.0700	1.9500
n	00	00	50	00	00	00
Maxi	7.7500	93.500	111.72	5.5200	8.7900	2.5200
mum	00	00	00	00	00	00
Minim	5.7500	70.430	87.130	2.5500	3.3500	0.0800
um	00	00	00	00	00	00
Std.	0.7033	3.6710	6.5729	0.7147	1.4856	0.4833
Dev.	63	45	86	46	87	75
	-		-	-		-
Skewn	0.3988	0.9869	0.0465	0.4896	0.0700	1.5229
ess	90	82	21	09	69	74
Kurtos	1.6292	6.2071	2.0587	2.6190	1.9093	5.5400
is	88	56	25	70	67	44
Jarque	8.8035	49.638	3.1312	3.8639	4.2319	55.053
-Bera	68	33	92	15	16	69
Proba	0.0122	0.0000	0.2089	0.1448	0.1205	0.0000
bility	55	00	53	64	18	00
	574.25	6649.6	8456.9	363.02	491.70	154.15
Sum	00	00	30	00	00	00
Sum						
Sq.	41.061	1118.5	3585.9	42.401	183.20	19.393
Dev.	76	55	44	57	31	10

Obser						
vations	84	84	84	84	84	84

Source: Process author with software STATA

Through the results of the test, it can be seen the general picture of data that can be the initial information of all research variables, such as Mean (Mean), Total (Sum), Maximum and Minimum.

**Table 2.** Result cointegraton model

Series: BI	_RATE BO					
IHK INF	ROA					
Lags inte	es): 1 to 2					
Hypothe						
sized		Trace	0.05			
No. of	Eigenvalu		Critical			
CE(s)	e	Statistic	Value	Prob.**		
None *	0.438896	100.5461	95.75366	0.0224		
At most						
1	0.244778	53.74033	69.81889	0.4728		
At most						
2	0.171690	31.00006	47.85613	0.6665		
At most						
3	0.087611	15.74231	29.79707	0.7303		
At most						
4	0.077601	8.315539	15.49471	0.4323		
At most						
5	0.021646	1.772612	3.841466	0.1831		
Trace test indicates 1 cointegrating eqn(s) at the 0.05 level						
* denotes rejection of the hypothesis at the 0.05 level						

Source: Process author with software STATA

\*\*MacKinnon-Haug-Michelis (1999) p-

values

The cointegration test was popularized by Engle and Granger (1987) (Damodar Gujarati, 2009). The cointegration approach is closely related to testing the possibility of a long-term equilibrium relationship between economic variables as required by economic theory. The cointegration approach can also be viewed as a theory test and is an important part of the

formulation and estimation of a dynamic model (Engle and Granger, 1987). In the concept of cointegration, two or more time-stationary non-stationary variables will be cointegrated when the combination is linear as time goes on, although it can happen that each variable is not stationary.

## V. CONCLUSION

The strengthening of the existence of sharia financial institutions domestically is seen as an opportunity for foreign investors who want to invest their capital in the form sharia investment. Investment opportunities based on sharia principles as a diversified portfolio of capital sources from abroad that are useful to support the national development program. At this time the development of sharia investment instruments are increasingly developed internationally that has been able to be utilized well by the international community. However this is not in line with the results of the current author's research, which shows no significant relationship between macroeconomic variables and financial ratios of sharia banks.

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