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FINANCE-GROWTH NEXUS IN MALAYSIA: EVIDENCE FROM GRANGER CAUSALITY TEST

Siti Muliana Samsi
drsitimuliana@uitm.edu.my
Faculty Business Management, Universiti Teknologi MARA Cawangan Kedah

Abstract

This paper examines causal linkage between bank index and economic growth in Malaysia by incorporating selected macroeconomic variables into the model. The empirical findings from the pair-wise Granger causality reveal that exist bidirectional causality between bank and economic growth. The study finds that the bank index granger cause economic growth and economic growth granger cause bank. This suggests that banking sector play an essential part in explaining the changes in economic growth and vice versa in Malaysia. In other words, economic growth and banking sector can complement each other.

Introduction

There is a contradictory view on the effect of the bank on economic growth, with some empirical work found no statistically significant relationship between banking sector development and economic growth (Tang, 2005; Moshirian and Wu, 2012; Law and Singh, 2014). In the study of Tang (2005), his empirical work did not find any evidence of banking sector development causes economic growth or vice versa in three ASEAN countries (Indonesia, Malaysia and Philippines). His study revealed that the banking sector causes economic growth in Thailand, and economic growth causes the development of banking sector in Singapore. Hence, it indicates that the relationship between financial development and economic growth in ASEAN countries do not provide any definite conclusion on the nature and direction of this relationship and there is no consensus among economists about the nature of this relationship. Not surprisingly, the relationship between banking sector development and economic growth has received much attention and become an important area of discussion among researchers and policymakers (for instance, Levine and Zervos, 1998; Levine,1998; Levine et al., 2000; Caporale et al., 2004; Beck and Levine, 2004; Dritsaki and Dritsaki-Bargiota, 2005; Tang, 2005; Naceur and Ghazouani, 2007; Deidda and Fattouh, 2008; Cole et al., 2008; Wu et al., 2010; Banos et al., 2011; Moshirian and Wu, 2012; Kim and Lin, 2013; Pradhan et al., 2014a; Pradhan et al., 2014b; Law and Singh, 2014). However, what remains unclear is the direction of the causal effect between banking sector development and economic growth so far leading to the inconclusive findings. Thus, it is still open to question whether banking sector development enhances economic growth or whether it is economic growth that drives the development of the banking sector.

Sources of Data

The study analyzed quarterly data covering the period 1990:1 to 2016:4. The analysis involves banks index (bank) with selected macroeconomic variables of real gross domestic product (browth), broad money M3 (M3), the interest rate (interest), consumer price index (inflation), and the exchange rate (Exchange). The quarterly data of macroeconomic variables are taken from the International Financial Statistics compiled by the International Monetary Fund and all the variables under this study are obtained from the Datastream database.

Result and Discussion

Table 1
Result of Pair-Wise Granger Causality

Countries	Null Hypothesis	F-Stat	Prob.
Malaysia	Bank does not Granger Cause Growth	3.94132	0.0225**
	Growth does not Granger Cause Bank	2.74259	0.0692*
	M3 does not Granger Cause Growth	3.66397	0.0291**
	Growth does not Granger Cause M3	7.95271	0.0006***
	Interest does not Granger Cause Growth	1.96678	0.1452
	Growth does not Granger Cause Interest	5.57116	0.0051***
	Inflation does not Granger Cause Growth	1.85351	0.1620
	Growth does not Granger Cause Inflation	6.18828	0.0029***
	Exchange does not Granger Cause Growth	1.03445	0.3592
	Growth does not Granger Cause Exchange	0.87195	0.4213

Notes: *** ,** and * represents significant level at 1 percent, 5 percent and 10 percent respectively

The Granger causality test is employed to clarify the direction of any existing interactions and to verify the results of cointegration among variables (Granger 1969). Engle-Granger (1986) states that there is a causal relationship between two cointegrated non-stationary series, in at least one direction. The result of pair-wise Granger causality for bank is reported in Table 1. The finding reveals that the economic growth does Granger-cause banks at 5 and 10 percent significant level. It shows that there is a bidirectional causality form economic growth to banks and money supply. The study also reveals that, exist unidirectional causality from economic growth to interest rate and inflation at 10, 5 and 1 percent significant level respectively. The result suggests that the banks and M3 play an essential part in explaining the changes in economic growth in Malaysia.

Conclusion

The empirical findings showed that banking sector is an important determinant of economic growth in Malaysia. From this analysis, it can be said that the banking sector plays an important role in fostering economic growth and have a real effect on growth in the long-term prospects. This finding is consistent with the views that banking sector and economic growth is inextricably linked (Greenwood and Jovanovic, 1990; Kaya et al., 2011; Mishal, 2011). Thus, the study confirms that the banking sector can affect as well as promotes the economic growth as a whole (Pagano, 1993; Harrison et al., 1999; Ayadi et al., 2008).

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