

**The causal relationship between stock market development, bank  
development, Islamic and conventional insurance development, and  
economic growth**

**The Case of Malaysia**

**Thesis submitted for the degree of**

**Doctor of philosophy**

**At the university of New England**

**By**

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## **Declaration**

I certify that the substance of this thesis is my own and original work that has not already been submitted for any degree and is not currently being submitted for any other degree or qualification. I certify that any help received in preparing this thesis and all sources used have been acknowledged in this thesis.



Elhadi Abubaker Frag Salem

## **Abstract**

This thesis examines the causal relationships among bank development, stock market development, conventional insurance, Islamic insurance, and economic growth in Malaysia using annual data for the period from 1975 to 2012. These relationships are studied using a multivariate VAR framework to evaluate long-run relationships among bank development, stock market development, conventional insurance, Islamic insurance, real gross domestic product (GDP) per capita, fixed capital formation (FCF), trade openness, and the consumer price index. The study also uses vector error correction model-based (VECM) causality tests to establish long- and short-run causality relationships among bank development, stock market development, conventional insurance, Islamic insurance, and economic growth. It uses four bank development indicators: the ratio of commercial bank assets divided by commercial bank plus central bank assets (BTOT), liquid liabilities (M3), domestic credit to the private sector (DCP), and bank deposit liabilities (LBDL). It further uses the total value traded ratio (VT), turnover ratio (TR), number of listed companies (LC), market capitalization (MC), and total capital raised in the primary market (IPOs) as indicators for stock market development. It also uses five variables representing conventional insurance, specifically gross premium income (life insurance), gross premium income (non-life insurance), life insurance penetration, non-life insurance penetration, and non-life insurance density, and three variables for Islamic insurance: assets of family takaful funds (AFTF), assets of general takaful funds (AGTF), and total contributions by participants in the family takaful (CPFT). The empirical results indicate that the direction of causality among bank development, stock market development, conventional and Islamic insurance, and economic growth in Malaysia is sensitive to the choice of proxy used for bank development, stock market development, conventional insurance, and Islamic insurance. For example, the results suggest that there is a short-run unidirectional Granger causality between bank development and economic growth using the ratio of commercial bank assets divided by commercial bank plus BTOT and M3 as indicators for bank development when using real GDP per capita or FCF as an indicator for economic growth. However, when bank development is represented by LBDL and DCP, the results indicate no short-run causality between bank development and economic growth. As for the long run, when economic growth is represented by real GDP per capita or FCF, the study finds unidirectional causality between bank development and economic growth. With stock market variables of TR, VT, and MC, the results

indicate short-run Granger causality between stock market and economic growth. However, with LC, the results indicate no causality between the stock market and economic growth. The results also indicate no long-run Granger causality between the stock market (represented by LC) and economic growth (represented by real GDP per capita). However, there is evidence of unidirectional causality between the stock market and economic growth when VT, TR, and MC are used. There is no short-run causality between conventional insurance and economic growth when the following variables of conventional insurance are used: gross premium income (life insurance) (GPILF), gross premium income (non-life insurance) (GPINLF), non-life insurance penetration (NLIP), non-life insurance density (NLID), and life insurance penetration (LIP). However, the results indicate a short-run between conventional insurance and economic growth when GPILG and LIP represented insurance and either gross domestic product per capita (GDPPC) or FCF is used for economic growth. In the long run, the results show that most conventional insurance variables demonstrate no causality between conventional insurance and economic growth. When the Islamic insurance variables of AGTF and CPFT are used, the results indicate a short-run between Islamic insurance (Takaful) and economic growth as represented by real GDPPC. However, using AFTF, the results show no short-run causality between Islamic insurance and economic growth. The results also show no short-run causality when using the same variable of Islamic insurance and economic growth represented by FCF. Long-run Islamic insurance variables show unidirectional causality between Islamic insurance and economic growth.

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