#### FINANCIAL DEVELOPMENT-ECONOMIC GROWTH NEXUS: WHAT'S NEXT?

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# **Abstract**

The relationship between financial development and economic growth has received considerable debate among scholars. From the theoretical perspective, financial market plays an important role in fostering economic growth. Meanwhile, extensive empirical studies find that the relationship are mixed accordingly to the period either it is being studied at long run or short run and with various methodologies applied. Recent financial markets innovatively offers wide range of products and that will boost up the development of financial market and indirectly it is expected to contribute positively to the economic growth. Thus, this paper provides a selective review of past literature on financial development and economic growth nexus including new empirical evidence that covers developed and developing countries.

**Key Words**: Financial Market, Financial Development, Economic Growth.

# TINJAUAN HUBUNGAN PEMBANGUNAN KEWANGAN DAN PERTUMBUHAN EKONOMI

### **Abstrak**

Hubungan di antara pembangunan kewangan dan pertumbuhan ekonomi telah melalui pelbagai pendebatan di kalangan cendekiawan. Secara teori, pasaran kewangan memainkan peranan yang penting dalam merangsang pertumbuhan ekonomi. Sementara itu, banyak kajian empirikal mendapati hubungan di antara pembangunan kewangan dan pertumbuhan ekonomi adalah bercampur mengikut tempoh masa sama ada untuk pengajian jangka masa panjang atau pendek dengan pelbagai kaedah yang digunakan. Pasaran kewangan yang terkini menawarkan pelbagai rangkaian produk dan perkhidmatan secara inovatif dan besar-besaran di mana ia akan meningkatkan pembangunan pasaran kewangan dan dijangkakan secara tidak langsung akan menyumbang kepada pertumbuhan ekonomi. Oleh itu, kajian ini menyediakan tinjauan bagi kajian lepas yang terpilih termasuk bukti daripada kajian empirikal yang terkini yang meliputi negara maju dan membangun.

**Kata Kunci**: Pasaran Kewangan, Pembangunan Kewangan, Pertumbuhan Ekonomi.

#### 1.0 INTRODUCTION

Extensive literature has been discussed regarding the relationship of financial development and economic growth since decades ago. The theoretical foundation of the financial development-economic growth nexus has been researched since the earlier works by Schumpeter (1911) and later by McKinnon (1973) and Shaw (1973) where financial sector development has been recognized as a major catalyst that contributes positively to economic

growth. Financial markets with a well-functioning financial systems are shown to encourage economic growth by lowering transaction costs, reducing market frictions and ensuring that capital flows are directed towards the most productive use possible.

Many empirical studies have shown an evidence of a positive relationship between financial development and economic growth (see for examples, King & Levine 1993a,b; Levine & Zervos 1996, 1998; Beck & Levine 2004; Arestis et al. 2001, among others).

The emergence of financial market indicates significant contribution to the financial development and economic growth in any country. It acts as a forum to facilitate financial transactions through the creation, sale and transfer of financial securities among the participants that are categorized as the deficit units and surplus units. Basically, the deficit units referring to the companies and government that need capital to proceed with their project. Meanwhile, the surplus units are the investors who wish to earn a reasonable rate of return through investing in financial securities. Nowadays, the financial markets innovatively offered various types of financial instruments or products to cater the market demand. According to Securities Commission of Malaysia (SC), the current size of Malaysian Capital Market as at 31 October 2017 is RM3.14 trillion. It comprise of RM1.86 trillion of equities market and RM1.28 trillion bonds outstanding from bond market. The figures indicate the demand of Malaysian Capital Market keep increasing by comparing to the previous year that is around RM2.84 trillion in 2016. Thus, it is hopes that the greater demand for capital market instruments may finally lead to help promoting economic growth.

This study aims to provide an overview on financial development and explores its relationship with economic growth. This paper is organized as follows. Section 2 reviews related literature, explores the relationship between financial development and economic growth and Section 3 performs the conclusion of the study.

#### 2.0 LITERATURE REVIEW

The earlier study by Bagehot (1893) highlights the important role of the banking sector in promoting economy through the mobilization of productive financial capital. Schumpeter (1911) has further expanded the views in regard of finance where he argues that the financial services are more important when it comes to dealing with the development of the economy. Schumpeter (1911) discovers a well functioning financial system that provides various services; mobilizing savings, evaluating projects, managing risks, monitoring managers and facilitating transactions and encouraging technological innovations, all of which result in economic growth. Schumpeter (1911) also emphasizes the important role of financial intermediaries in lending to entrepreneurs as a key point in promoting economic growth since it can begin to stimulate other financial activities and innovations that eventually encourage economic circulations. Further, Goldsmith (1969) concludes that the country's level of financial development is positively related to economic growth, where the study focuses on the importance of financial development in the process of economic development through capital accumulation. The flows of funds are essential to the financial development since they ease an accomplishment of the technology transfer and entrepreneurship towards promoting economic growth.

Later works by Greenwood and Jovanovic (1990) construct a model that highlights a causal relationship of financial development and growth since financial intermediaries permit a higher rate of return to be earned on capital, that is through an efficient investment and in turn, growth supplies the means to execute costly financial structures. Moreover, Greenwood and Jovanovic (1990) also discover that income inequality across the rich and poor can broaden and in maturity, the distribution of income reaches stability as the economy has fully

developed a financial structure with more elevated growth rates. Furthermore, Levine (1997) provides a theoretical review which proves that financial development plays an important role to the country's economic growth through five functions of financial system that are facilitate risk management, allocate resources, exert corporate control, mobilize savings and ease trading of goods and services.

The empirical finding by Aghion et al. (2005) suggests that financial development is among the most effective force that contributes to non-convergence, particularly in accounting for educational achievement, initial relative output and a vast array of other variables that have no analogous effect when placed in the same regression with financial development. In addition, the findings suggest that productivity growth is the main channel which financial development affect convergence rather than capital accumulation. King and Levine (1993a) which conduct a purely cross-country regressions using data averaged over 1960-1989 and pooled cross-country, time-series study using data averaged over 1960s, 1970s and 1980s for three observations for 80 countries, empirically find that there is a strong and robust correlation between all indicators of the level of financial development and economic growth, physical capital rate, accumulation and improvements in the efficiency of capital allocation. This result shows that financial development is a good predictor for economic growth in the long-run.

King and Levine (1993b) extend their previous study of King and Levine (1993a) by incorporating key role of financial intermediaries of entrepreneurship that lead to innovation as a link of finance to the process of economic growth. The results of the study suggest that financial services have an important link with the economic growth and productivity improvements. Levine and Zervos (1998) provide strong evidence on the link of financial development and growth, where they empirically find a positive and robust correlation between stock market liquidity and banking development with growth rate, capital accumulation and productivity growth. The study employs Ordinary Least Square (OLS) and cross-country regression for the data of 47 countries for 1976-1993. Six indicators are used to measure the stock market development that comprises size in measuring capitalization, liquidity that includes turnover and value traded, and international integration measures, APT and volatility, and finally another indicator of bank credit is used to measure banking development.

More recent studies also show that finance is vital for economic growth (see, for examples Ergungor 2008; Hung 2009; Hasan et al. 2009a; Jalil et al. 2010; Kendall 2012; Law et al. 2013; among others). These studies collectively find that financial development has a positive link with economic growth. Ergungor (2008) and Hung (2009) provide evidence that there is a contingent relationship between the two. In addition, Hung (2009) finds that the effect of financial development on economic growth is determined by the magnitude levels of investment loans and consumption loans. Hasan et al. (2009) find that the development of the financial markets is associated with more robust economic growth. Another research by Jalil et al. (2010) re-examines the finance-growth nexus in China and it is discovered that the growth of the Chinese economies is driven by its financial development.

Kendall (2012) explores into the relationship of banking sector development, human capital and the economic growth in Indian districts and finds that banking sector development is positively linked with economic growth. Kendall (2012) discovers that the underdeveloped local banking sector contributes to the delayed growth in Indian districts. Kendall (2012) applies the regression analysis in a sample of 209 Indian districts across 9 Indian states in the period of 1991 to 2001. The study measures the banking sector development through the use of credits and deposits of commercial banks. Recent study by Law et al. (2013) that examine finance-growth nexus, discover that financial development is positively

related to growth after a certain threshold level of institutional development has been reached. In the study, Law et al. (2013) apply a threshold regression with a sample of 85 countries from 1980 to 2008, where three financial development indicators are employed in the study namely private sector credit, liquid liabilities and commercial bank assets.

Recent study by Nyasha and Odhiambo (2017) review the existing research on the causal relationship between bank-based financial development and economic growth in both developed and developing countries. They find that the numerous literatures popularized by Schumpeter (1911), Robinson (1952) and studies in favour of a bidirectional causality between financial development and economic growth have failed to distinguish between bank-based and market based development. They concludes that the causal relationship between financial development and economic growth is unclear and that notion is basically based on *prima facie* or superficial evidence.

Law et al (2017) examines the effect of banking sector development on economic growth in a panel of 87 countries focusing to the role of institutions in reducing the finance curse phenomenon. They use the dynamic generalized method-of-moments (GMM). The study concludes that institutions play an important role in mediationg the positive relationship between banking sector development and growth. Law et al (2017) suggests that the marginal impact of financial development on economic growth depends on institutional quality. Law et al (2013) empirically examines the growth effect of financial development in countries with distinct levels of institutional differs with using an innovative threshold estimation technique. They discover the financial development-growth nexus is contingent on the level of institutional quality, thus it support the idea of better finance leads to the long-run economic growth.

Alaabed and Masih (2016) study finance-growth nexus by focusing on interest-based debt financial system using a threshold regression model to Malaysian data. They finds that growth and financial development has non-linear relationship thus more credit expansion inversely impacts on GDP growth. Samargandi et al (2015) explore the relationship between financial development and economic growth in a panel of 52 middle-income countries over the 1980-2008. The finding from pooled mean group estimations in a dynamic heterogenous panel setting support Alaabed and Masih (2016) that too much finance leads to a negative impact on growth in middle-income countries. Contradict to Mishra and Narayan (2015), they use a nonparametric panel data model to estimate the financial system-economic growth relationship. They conclude as long as a country's domestic credit and private credit are above their cross-sectional mean, it will have positive relationship on GDP growth. Mishra and Narayan (2015) also discover positive relationship between market capitalization and GDP growth but statistically insignificant effect between stocks traded and GDP growth.

Besides the contribution from the banking sector on financial development, capital market also play a vital role in promoting economic growth. Sabariah and Norhafiza (2016) focuses their research on assessing the influence of stock market and debt market on Malaysian economy. They conclude that both, stock market and debt market has a significant impact on economy. However, they find that stock market is more influence the economy because the secondary market for stock trading is more active compared to the debt market instruments.

# 3.0 CONCLUSION

Overall, past literature has shown that financial development clearly functions as a key engine to economic growth. The substantial role of financial development is recognized in the promotion of growth through its various major functions. Financial management is important for growth, as a well-functioning financial system highlights the consequent low levels of asymmetric information and transaction cost which ultimately promote the flows of capital to be directed to the most productive use and to affect economic growth in a positive manner.

The emergence of financial market as a platform for issuer to raise funds and the investors to gain more return positively encourage financial development and economic growth However, the past studies also indicate that highly depending on financing or credit as the source of capital in financial market negatively impact to the financial development and economic growth. Huge credit obligation might lead to the high interest paying commitment and finally give impact to financial distress.

# 4.0 REFERENCES

- Alaabed, A. & Masih, M. (2016). Finance-growth nexus: Insights from an application of threshold regression model to Malaysia's dual financial system. *Borsa Istanbul Review*: 1-9.
- Arestis, P., Demetriades, P. & Luintel, K. B. (2001). Financial development and economic growth: the role of stock market. *Journal of Money, Credit and Banking* 33(1): 16-41.
- Beck, T. & Levine, R. (2004). Stock markets, banks and growth: panel evidence. *Journal of Banking & Finance* 28: 423-442.
- Hasan, I., Koetter, M. & Wedow, M. (2009). Regional growth and finance in Europe: is there a quality effect of bank efficiency? *Journal of Banking & Finance* 33: Hermes, N. & Lensink, R. 2003. Foreign direct investment, financial development and economic growth. *The Journal of Development Studies* 40(1): 142-163.
- Jalil, A., Feridun, M. & Ma, Y. (2010). Finance-growth nexus in China revisited: New evidence from principal components and ARDL bounds tests. *International Review of Economics and Finance* 19(2010): 189-195.
- Kendall, J. (2012). Local financial development and growth. *Journal of Banking & Finance* 36: 1548-1562.
- Low, S.H., Azman-Saini, W.N.M. & Ibrahim, M.H. (2013). Institutional quality thresholds and the finance-Growth nexus. *Journal of Banking & Finance* 37: 5373-5381.
- Low, S.H., Kutan, A.M. & Naseem, N.A.M. (2017). The role of institutions in finance course: Evidence from international data. *Journal of Comparative Economics* 000 (2017): 1-18.
- Levine, R. & Zervos, S. (1998). Stock markets, banks and economic growth. *The American Economic Review* 88(3): 537-558.
- McKinnon, R.I. (1973). *Money and Capital in Economic Development*. Washington, DC: The Brookings Institution.
- Mishra, S. & Narayan, P.K. (2015). A Nonparametric Model of Financial System and Economic Growth. https://www.researchgate.net/publication/281346636.
- Sabariah, N. & Norhafiza, N. (2016). The Impact of Capital Market on Economic Growth: A Malaysian Outlook. International *Journal of Economics and Finance Issues*,6(S7): 259-265.
- Samargandi, N., Fidrmuc, N. & Ghosh, S. (2015). Is the Relationship Between Financial Development and Economic Growth Monotonic? Evidence from a Sample of Middle-Income Countries. *World Development* Vol.68: 66-81.
- Shaw, E.S. (1973). Financial Deepening in Economic Development. New York: Oxford University Press.