

Impact of the Development of Financial Sector on the Real Production Sector in ASEAN Countries

Kesan Perkembangan Sektor Kewangan Terhadap Sektor Pengeluaran Sebenar di Negara ASEAN

Mohamed Noordeen Mohamed Imtiyaz

Kulliyah of Economics and Management Sciences

International Islamic University Malaysia

msfinition@gmail.com

Dzuljastri Abdul Razak

Kulliyah of Economics and Management Sciences

International Islamic University Malaysia

dzuljastri@iium.edu.my

Keywords:

[ASEAN;
Financial Sector;
Real Production
Sector; Domestic
Lending]

ABSTRACT

Sustainable economic growth depends on the ability to raise the rates of accumulation of physical and human capital, to use the resulting productive assets more efficiently, and to ensure the access of the whole population to these assets. Financial development helps economic growth through allocation of scarce investments to various sectors. The countries in ASEAN region are in different stages of development process. Singapore is considered to be a developed country with GDP per capita competing with the richest countries in the world. Malaysia, Indonesia, Thailand Brunei Darussalam and Philippines are significantly developing countries with large populations and consumer base. Laos PDR, Cambodia, Vietnam and Myanmar are the countries in the least developed countries in the region. The development of financial sector is one of crucial factor to the overall development of real economic sector. This study attempts to analyse the impact of development of financial sector on the real sector according to different stages of development. The study evaluates the development of financial sector using level of domestic lending and market capitalization as independent variable and the dependent variable, GDP growth rate as an indicator for growth of real sector. The study carried regression analysis to explain the variation in the dependent variable. The results indicate that the GDP growth of Malaysia and Thailand is significantly explained by the growth of domestic lending. Because of the lack of data available for countries, Vietnam, Laos PDR,

Brunei Darussalam, Cambodia and Myanmar may there were no significant statistical evidence to relationship among selected variables. This outcome of the study has certain limitation and results may different if other variables were applied. However, the study contributes significant insight to relevant stakeholders to understand the impact of the financial sector to the real sector.

Kata Kunci:

[ASEAN; Sektor
Kewangan;
Sektor
Pengeluaran
Sebenar;
Pinjaman dalam
Negeri]

ABSTRAK

Pertumbuhan ekonomi yang mampan bergantung kepada keupayaan untuk meningkatkan kadar pengumpulan modal fizikal dan insan, untuk menggunakan aset produktif yang terhasil dengan lebih cekap, dan untuk memastikan akses seluruh penduduk kepada aset ini. Pembangunan kewangan membantu pertumbuhan ekonomi melalui peruntukan pelaburan yang terhad kepada pelbagai sektor. Negara-negara di rantau ASEAN berada dalam pelbagai peringkat proses pembangunan. Singapura dianggap sebagai negara maju dengan KDNK per kapita bersaing dengan negara terkaya di dunia. Malaysia, Indonesia, Thailand Brunei Darussalam dan Filipina merupakan negara membangun dengan ketara dengan populasi dan jumlah pengguna yang besar. Laos PDR, Kemboja, Vietnam dan Myanmar adalah negara-negara di negara paling kurang membangun di rantau ini. Pembangunan sektor kewangan merupakan salah satu faktor penting kepada pembangunan keseluruhan sektor ekonomi sebenar. Kajian ini cuba menganalisis kesan pembangunan sektor kewangan terhadap sektor sebenar mengikut peringkat pembangunan yang berbeza. Kajian ini menilai perkembangan sektor kewangan menggunakan tahap pinjaman domestik dan permodalan pasaran sebagai pembolehubah bebas dan pembolehubah bersandar, kadar pertumbuhan KDNK sebagai penunjuk pertumbuhan sektor sebenar. Kajian ini menjalankan analisis regresi untuk menjelaskan variasi dalam pembolehubah bersandar. Keputusan menunjukkan bahawa pertumbuhan KDNK Malaysia dan Thailand dijelaskan dengan ketara oleh pertumbuhan pinjaman domestik. Oleh kerana kekurangan data yang terdapat di negara, Vietnam, Laos PDR, Brunei Darussalam, Kemboja dan Myanmar menunjukkan kemungkinan tiada bukti statistik yang signifikan untuk hubungan antara pembolehubah terpilih. Hasil kajian ini mempunyai had tertentu dan keputusan mungkin berbeza jika pembolehubah lain digunakan. Walau bagaimanapun, kajian ini menyumbangkan pandangan yang signifikan kepada pihak berkepentingan yang berkaitan untuk memahami kesan sektor kewangan kepada sektor sebenar.

INTRODUCTION

Long-term sustainable economic growth depends on the ability to raise the rates of accumulation of physical and human capital, to use the resulting productive assets more efficiently, and to ensure the access of the whole population to these assets. Financial development supports this investment process by mobilizing household and foreign savings for investment by firms; ensuring that these funds are allocated to the most productive use; and spreading risk and providing liquidity so that firms can operate the new capacity efficiently. Financial development involves the establishment and expansion of institutions, instruments and markets that support this investment and growth process. Historically the role of banks and non-bank financial intermediaries ranging from pension funds to stock markets, has been to translate household savings into enterprise investment, monitor investments and allocate funds, and to price and spread risk. Financial development and economic growth are clearly related, and this relationship has been explained by a number of economists; although there is a clear lack of research on this throughout ASEAN countries. That greater financial depth is associated with higher levels of productivity. Higher levels of productivity are associated with move away from banking to stock market. Development of the financial system facilitates portfolio diversification for savers reducing risk, and offers more choices to investors increasing returns. Moreover, the wide range of organizational forms involved excluded any clear conclusion as to what kind of financial institutions might maximize economic growth. The main arguments for the impact of financial growth on economic development are highlighted here. First, that greater financial depth is associated with higher levels of productivity and thus income per capita. Second that the latter are also associated with a more advanced financial structure that is the move from banks towards non-bank financial intermediaries, and from both of these towards stock markets. The development of financial sector is one of important factor to the development of real economic sector. The main objective of the study is to to analyse the impact of development of financial sector on the real sector according to different stages of the development. The study measures the development of financial sector evaluating the variables such as domestic lending, real interest rate and consumer price index and market capitalization the growth rate of GDP adopted as a key indicator to gauge the growth of real sector. The finding of the study indicates that the GDP growth of certain countries is significantly explained selected variables. However, the findings of the study have certain drawbacks and outcome may differ if other sets of variables were adopted for the study. However, the study provides significant insight into relevant stakeholders to understand the impact of the development financial sector to the development of real sector.

The ASEAN

The Association of Southeast Asian Nations (ASEAN) was established on 8 August Indonesia, Malaysia, Philippines, Singapore and Thailand. Brunei Darussalam then joined on 7 January 1984, Viet Nam on 28 July 1995, Lao PDR and Myanmar on 23 July 1997, and Cambodia on 30 April 1999, making up what is today the ten Member States of ASEAN. Of these countries Singapore is considered to be a highly developed country while Malaysia, Thailand, Indonesia, Philippines and Brunei Darussalam is considered to be

fast developing countries. Viet Nam, Lao PDR, Myanmar and Cambodia are considered as less developed countries in ASEAN. By selecting the ASEAN countries for this study, it attempts to analyse the impact of financial growth on real economic growth in countries in different stages of development.

This paper has been organized as the section 1 discussing the introduction and objectives of study followed by a comprehensive literature review in the section 2. Thereafter the section 3 discusses about the research methodology including the data sources. The section 4 discusses the findings of the study and Section 5 conclude the study indicating contributions and limitations.

LITERATURE REVIEW

The chapter presents a comprehensive review of existing literature on the selected topic. The chapter first discuss about financial sector and real sector. Thereafter about the financial sector and real sector in ASEAN contexts.

Relationship among Growth of Financial Sector and Real Sector

Nasreen et al., (2020) utilized panel data for the period from 1989 to 2016 applying several dimensions of financial market in European countries and found that with development financial sector is positively correlated with growth of real economic sector and institutional quality. Similarly, Shahbaz et al. (2018a) applying time series data for the period covering 1971-2013 found there is the long-run relationship growth of real economic sector and financial development in India.

The study of Jokipii and Monnin (2013) highlights that the relationship between the degree of banking sector stability and the subsequent evolution of real output growth and inflation which has a positive link between banking sector stability and real output growth. Their finding is predominantly driven by periods of instability rather than by very stable periods. In addition, they show that an unstable banking sector increases uncertainty about future output growth. No clear link between banking sector stability and inflation seems to exist. They then argue that the link between banking stability and real output growth can be used to improve output growth forecasts. Using Fed forecast errors, they show that banking sector stability (instability) results in a significant underestimation (overestimation) of GDP growth in the subsequent quarters (Jokipii and Monnin, 2013).

The study of Samargandi et al., (2014) indicate that financial development has a positive impact on economic growth of the Saudi non-oil sector in the long-run. In contrast, they find a negative or insignificant impact of financial development on the economy as a whole, and on the oil sector, which is a significant finding. The inherent economic nature of Saudi Arabia, which is predominantly an oil-dominated economy. Second, they could be indicative of relative under-development of the Saudi banking system, which could lead to imbalances between saving and investment and may distort investment decisions. The financial sector in Saudi Arabia is still in the transition stage. Hence, it

needs to go beyond a certain threshold before it can be instrumental in promoting economic growth. Their findings also highlight the specific nature of oil and resource rich economies like Saudi Arabia.

According to study of Calderón and Liu (2003) five interesting results. First, financial development enhances economic growth for all countries. This suggests that financial deepening in many countries has yielded the desired result—a more prosperous economy. Second, they find evidence of bidirectional causality when they split the sample into developing and industrial countries. This implies that financial depth stimulates growth and, simultaneously, growth propels financial development. The expansion of the real sector can significantly influence development of the financial sector, although this is more the case in developed economies. Third, financial depth contributes more to the causal relationships in developing countries, thus, implying that financial intermediaries have larger relative effects in less-developed economies than in more developed ones. Hence, developing countries have more room for financial and economic improvement. Fourth, the longer the sampling interval, the larger the effect of financial development on economic growth.

This suggests that the impact of financial deepening on the real sector takes time. Fifth, they find that financial development may enhance economic growth through both more rapid capital accumulation and technological changes, though it appears that the productivity channel is stronger. In addition, the causal relationship from finance to TFP growth is stronger for developing countries, whereas the converse is stronger for industrial economies. The same result holds for capital accumulation.

Finally, their studies provide an empirical basis for promoting financial and economic development. It has two important policy implications, especially for developing countries. First, to gain sustainable economic growth, it is desirable to further undertake financial reforms. Second, to take advantage of the positive interaction between financial and economic development, one should liberalize the economy while liberalizing the financial sector. In other words, strategies that promote development in the real economy should also be emphasized (Calderón and Liu, 2003).

According to the study of Christopoulos and Tsionas (2004), which highlights the long run causality runs from financial development to growth, that the relationship is significant, and that there is no evidence of bi-directional causality. Time series evidence is also supportive to the idea that there exists a unique cointegrating vector between growth, financial development and ancillary variables (investment share and inflation). The empirical evidence also points to the direction that there is no short run causality between financial deepening and output, so the effect is necessarily long run in nature.

The important policy implication is that policies aiming at improving financial markets will have a delayed effect on growth, but this effect is significant (Christopoulos and Tsionas, 2004). Gerhard et al., (2009) states that “Growth of financial intermediation in developed countries alone had either no significant effect on growth or, it has affected the

economic performance negatively as in the case of domestic and private credit and for the first measure of total financial intermediation.

The financialization of real sector investments may be behind the slowing down of capital accumulation leading to deindustrialization in developing countries where as the expectations of the proponents of uncontrolled financial liberalization and deregulation, increasing availability and accessibility of financial investments to real sector firms may actually be detrimental to long-term investment and growth prospects of developing countries (Demir, 2009).

Recommendations by Demir (2009) is to increase real investment rates in developing countries include elimination of capital market imperfections in the form of opening up of long-term credit channels for fixed investments, provision of macro and microeconomic stability that helps reduce market volatility and real interest rates (through risk premium), and increase planning horizons of real sector firms,

Domestic financial reforms should precede policies that aim at liberalizing the stock market but from a policy sequencing perspective it pays to reform the trade regime before liberalizing fully the (portfolio component of the) capital account which enables countries to first organize their domestic production in a way that is more consistent with efficient resource allocation, and then allows them to channel future capital inflows to specializations based on true comparative advantage in the domestic economy before opening it fully to foreign participation (Naceur , Ghazouani and Omran , 2007).

Financial Sector and Real Sector of ASEAN Countries

ASEAN Leaders have declared the formation of the AEC as a single market but not to the extent of forming a fiscal and monetary union, not even a customs union. With respect to the factor market, they are aiming only at a free flow of skilled labor and limited liberalization in the flow of short-term capital.

The study of Malarvizhi et al., (2019) found a significant relationship between development of financial sector and growth of real economic sectors of 5 ASEAN countries (Singapore, Thailand, Malaysia, Indonesia and Philippines) using data for period covering 1980 to 2011.

A Study of Azam and Raza (2018) investigated the impact of development of financial sector on income inequality in 5 ASEAN countries, namely Singapore Indonesia, Malaysia, the Philippines, and Thailand period covering 1989 to 2013 and found the significant negative relationship between development of financial sector and income inequality in above 5 countries.

According to the study of Wattanapruttipaisan (2003), which states that the development of SMEs has long been restrained by a low share of institutional financing which is far from commensurate to their critical socioeconomic importance in most developing countries, those in ASEAN included. Such an outcome reflects, in part, the various biases against the SME sector which are inherent or still remain in the domestic

policy and institutional framework. Author also mentions about SME financing problems which cannot be resolved just by lending not least because of the limited amount of financial resources available for development.

The Methodology Used and Findings of Previous Research

This amount of studies on the relationship between the financial sector and the real sector is in abundance. Most of the literature has a common outcome of strong positive correlation between the extent of financial development and economic growth. But these researchers emphasize different methods of transmission of this development onto the real sector. Some researchers argue that financial intermediaries play a central role in allocating capital to its best possible use. Although empirical studies often find a positive relationship between indicators of financial development and growth, there is difference of opinions on how to interpret these results. There are two main sources of controversy. First, there is argument over the issue of how to measure empirically the extent of financial intermediation.

Notable number of researchers' measure financial intermediation has by the level of the real interest rate and by various monetary aggregates. The second area of controversy concerns the channel of transmission from financial development to growth. In our empirical research we will measure growth by using the ratio of bank credit to the domestic sector to GDP as the indicator of financial development. This indicator, as we explain in more detail later, has a clear advantage over measures of real interest rates or monetary aggregates such as M1, M2, or M3, in that it more accurately represents the actual volume of funds channelled to the private sector.

Certain previous researches conducted mainly by IMF shows that they find a positive effect of their measure of financial development on long-run growth of real per capita GDP. This positive effect is particularly strong in middle- and low-income countries. They argue that the weak relationship observed in high-income countries is due to the fact that financial development occurs to a large extent outside the banking system, while their proxy for financial development focuses on banking sector development. Their findings also suggest that the effect of financial intermediation on growth is due mainly to its impact on the efficiency of investment, rather than its volume. The relative importance of improved efficiency of investment is higher in low and middle-income countries than in high-income countries.

They also found a significant negative correlation between financial intermediation and economic growth in the Latin American countries. They explained this effect using the financial experiments conducted on these countries during this period. In another research conducted by Roubini and Sala-i-Martin (1992), they analyse the relationship between financial intermediation and growth by emphasizing the role of government policy. In an optimal taxation framework where the tax instruments at the government's disposal are the inflation tax and an income tax that is subject to tax evasion,

A study by Aghion et al. (2004) has confirmed this relationship for a cross-section of

70 OECD and non-OECD countries. They surmise that mitigating the response to volatility and exogenous shocks may be the most important transmission channel for the effects of deeper credit markets. Finally, a related empirical literature has also started to look at the impact of financial development on income inequality and poverty. While growth itself appears to be broadly neutral with respect to income distribution it is possible that specific growth determinants could have a regressive effect, while others may have a progressive one. Li et al., (1998) found that financial depth (proxied by private sector credit) entered strongly and significantly as a contributor to lower inequality and raise the average income of the lower 80 percent of the population.

As discussed by Honohan (2004) initial evidence suggesting that private sector credit reduced absolute poverty rates in a sample of 70 countries. On the other hand, adding stock market capitalization and/or market turnover to the equation did not significantly alter fit or other coefficients, while the new variables were not significant. Beck et al. (2004) also provide empirical evidence showing that financial development reduces income inequality and absolute poverty levels. Also, the proponents of financial liberalization as leading to financial development have emphasized two main channels through which private investment is expected to rise. The first channel is through an increase in the availability of credit that would follow the removal of interest rate ceiling due to increased private saving; and the second is through the enhanced screening of investment projects due to the higher cost of capital, thereby increasing the marginal productivity of investment (McKinnon, 1973).

Contrarily the critics of this model such as Taylor (1983) are sceptical that increased financial intermediation will result from liberalization, because of shifts from curb markets that are not subject to the reserve requirement that apply to banks. Hence, if substitution takes place between time deposit and curb market, total supply of funds available to the business sector will decline. Moreover, if banks then lend to the public sector (e.g. by investing in T-bills), the diversion of funds away from the curb market may result in net decline in the availability of private sector credit. Due to limited access of the small and medium firms to bank credit, a shift of fund from curb market to the banking system may reduce the availability of credit for these types of firms unless liberalization of banking system reduces bias against small borrower.

Experience of financial liberalization across countries suggests that the process of liberalization varied widely, as did the outcome. Moreover, in most developing countries where both market and non-market imperfections exist within broader liberalized macroeconomic framework, there is host of factors other than the volume and cost of credit that influence firms' investment decisions. For instance, evidence from four African countries (Uganda, Kenya, Malawi and Lesotho) does not support the hypothesis that increase in financial depth increases the volume of savings or access to credit of the commercial banks in rural areas, except for those who already have collateral (Mosley, 1999). Conventional financial institutions are biased against small borrowers due to the high unit costs of loan administration and lack of effective collateral, which translate into low returns and high risk.

This is a major problem for all developing countries as small firms account for the bulk of production and the great majority of employment. This ‘gap’ has traditionally been addressed by public sector development banks and extension schemes; but these have generally been dismantled as part of financial reforms, and not effectively replaced by micro-credit schemes, which are systemically limited in their coverage and scope. In sum, there is little evidence that financial liberalization has in fact resulted in higher savings rates, which was supposed to be the main contribution to higher investment and thus growth.

There are two reasons for this outcome. First, financial reform has the effect of shifting savings out of assets such as precious metals, property or currency into bank deposits and marketable securities. This will raise the recorded financial ‘depth’ without raising savings rates. Second, financial liberalization expands access to consumer credit in the form of factoring systems, credit cards and personal loans. These in turn reduce aggregate household saving because this is simply the difference between the increase in household financial assets and the increase in household financial liabilities. There is no robust evidence that financial deepening (measured by the widest possible measure – total market capitalization) increases the rate of saving and thus investment or growth. In fact, savings rates appear to depend on other factors such as demographic and tax influences on pension provision, funding of health and education, and the ownership structure of corporations or even family organization. Of course, the effect of financial development and liberalization might still be positive through the quality of investment improving due to the monitoring and discipline exercised by financial markets, even if absolute investment levels do not rise.

Rajan and Zingales (1998) thus attempt to establish whether industrial sectors that are relatively more in need of external finance develop disproportionately faster in countries with more-developed financial markets. They use the ratio of credit to (claims on) the private sector to GDP as the financial depth indicator; but add an indicator of compliance with international accounting standards to reflect the quality of that finance. They get significant results from a panel of 55 countries over 1980-90, indicating that financial development does have a positive effect on growth through the corporate finance channel. The analysis of net sources of finance for physical investment in Germany, Japan, the UK and the US reveal not only the predominance of retained profits to be higher in the UK and the US despite their more developed financial markets, but the key role of banks in all cases among external sources (Corbett and Jenkinson, 1997). Only in the case of the US are bonds a significant source of corporate investment finance, and even here it should be recalled that banks hold a considerable share of these bonds.

In summary this chapter covered a comprehensive review of existing literature on the selected topic. The chapter first discussed about financial sector and real sector. Thereafter about the financial sector and real sector in ASEAN contexts. An existing literature presented on how these two sectors are interrelated.

DATA AND METHODOLOGY

In order to analyse the impact of development of financial sector on the real economic sector the study used the empirical data, which represent development of both sectors. In order to analyse the data study employs linear regression and assess the amount of change, which is caused to the real sector growth by the development of financial sector. Bekaert, Harvey and Lundblad. (n.d.) used linear regression to find that, equity market liberalizations, on average, lead to a 1% increase in annual real economic growth. Their study included variables controlling for macroeconomic reforms, financial development, the extent of the social security system, the quality of political institutions, political unrest proxies. To analyse the development of financial sector based on the previous research, this study observed that the most representative way to analyse the impact would be to analyse the development of domestic lending in relation to the development of GDP as well as to study the impact of market capitalization on the development of GDP.

Domestic Lending

We collected Domestic credit provided by financial sector as a percentage of GDP for the ASEAN countries from World Bank database. Domestic credit provided by the financial sector includes all credit to various sectors on a gross basis, with the exception of credit to the central government, which is net. The financial sector includes monetary authorities and deposit money banks, as well as other financial corporations where data are available (including corporations that do not accept transferable deposits but do incur such liabilities as time and savings deposits). Examples of other financial corporations are finance and leasing companies, moneylenders, insurance corporations, pension funds, and foreign exchange companies.

Market Capitalization

To analyse the development of financial sector we also have collected information about the market capitalization of the ASEAN countries since 2001-2019. Market capitalization (also known as market value) is the share price times the number of shares outstanding. Listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year. Listed companies do not include investment companies, mutual funds, or other collective investment vehicles.

The study reviewed the data set by controlling for certain variables. Some previous literatures have shown that the depth of the financial sector helps in allocating resources in the real sector and this may cause the development of real sector. Therefore, to check the real sector economic growth we controlled the following variables.

Real Interest Rate (%)

Real interest rate is the lending interest rate adjusted for inflation as measured by the GDP deflator.

Consumer Price Index

Consumer price index reflects changes in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The “Laspeyres” formula is generally used.

Average Annual Growth Rate in Money and Quasi Money (Annual Percentage)

Money and quasi money comprise the sum of currency outside banks, demand deposits other than those of the central government, and the time, savings, and foreign currency deposits of resident sectors other than the central government. This definition is frequently called M2; it corresponds to lines 34 and 35 in the International Monetary Fund's (IMF) International Financial Statistics (IFS). The change in the money supply is measured as the difference in end-of-year totals relative to the level of M2 in the preceding year. In our empirical research we will measure growth by using the ratio of bank credit to the domestic sector to GDP as the indicator of financial development. This indicator has a clear advantage over measures of real interest rates or monetary aggregates such as M1, M2, or M3, in that it more accurately represents the actual volume of funds channelled to the private sector.

Data Source

The data for all variables were available on a yearly basis. Therefore, study have collected the secondary data from 2001 to 2019 on a Domestic lending, Market Capitalization, Real Interest Rate and Consumer Price Index on yearly basis to analyse the impact. However, lack of data for some countries such as Myanmar, Laos PDR and Vietnam caused difficulty in our analysis. Separately to see the impact on GDP through the variables. The study examined effect of domestic lending, and market capitalization (as independent variables) on dependent variable, GDP growth rate (as an indicator for growth of real sector). The study conducted regression analysis to explain the variation of dependent variable. The analysis is conducted on each country.

RESULTS

As the analysis is conducted on each country separately with GDP as the independent variable and Domestic Lending and Market Capitalization as the independent variables with CPI, Real Interest Rate and Money supply as the control variables, the results will also be presented for each country separately.

Indonesia

As we have mentioned earlier in this paper Indonesia is a fast-growing country with a large population and natural resources. Our analysis of the Indonesian Real economic growth, proxy by GDP growth, showed statistically significant changes caused by the development of the financial sector. The model explained 87.1% of the changes in GDP.

Table 1: Regression Results for Indonesia

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.934 ^a	.871	.831	1.81006

The model is also statistically significant at $p < 0.001$.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	355.508	5	71.102	21.702	.000 ^b
	Residual	52.421	16	3.276		
	Total	407.929	21			

Only one of the coefficients of the variables we have used in the model is statistically significant in explaining changes in GDP growth throughout the period of the study. Only CPI, which is not a proxy for financial development, is significant in explaining the changes in GDP and none of the variables representing financial growth has a statistically significant impact on the changes in GDP.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.332	1.235		5.938	.000
	DL	.025	.037	.109	.673	.511
	MC	.003	.008	.051	.433	.671
	CPI	-.396	.069	-1.013	-5.776	.000
	MNQ	.080	.062	.208	1.301	.212
	RI	-6.583E-005	.002	-.003	-.031	.976

Malaysia

The results of the analysis of the variables in regard to Malaysia shows that the model explains only 42% of the changes in GDP growth. This may be due to other factors which have a higher impact on the growth of GDP than the factors we have chosen in this study

Table 2: Regression Results for Malaysia

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.651 ^a	.423	.243	3.59088	2.018

The model is statistically significant in explain the changes in GDP at $p=0.089$.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	151.342	5	30.268	2.347	.089 ^b
	Residual	206.311	16	12.894		
	Total	357.653	21			

From the variables we have analysed in this research only Domestic Lending has a significant impact on the growth of GDP. This may be due to the greater dependence of the Malaysian firms on the banking sector than the capital markets.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.104	1.882		2.713	.015
	DL	.225	.087	1.070	2.586	.020
	MC	.018	.022	.174	.803	.434
	CPI	-.035	.638	-.012	-.055	.957
	MNQ	-.173	.135	-.584	-1.283	.218
	RI	4.827E-005	.000	.020	.101	.920

Philippines

The impact on the GDP growth of Philippines by Domestic Lending and Market Capitalization showed that the model could explain only 47.7%.

Table 3: Regression Results for Philippines

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.690 ^a	.477	.313	1.92369	1.589

The model is significant in explaining the growth of GDP at $p=0.047$.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.936	5	10.787	2.915	.047 ^b
	Residual	59.209	16	3.701		
	Total	113.146	21			

However, the domestic lending or the market capitalization does not explain the growth in GDP statistically significantly in the case of Philippines. This may be due to lack of the development of these two sectors in Philippines. Lack of data for our empirical research may also have caused the coefficients been not significant.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.136	1.042		5.889	.000
	DL	-.009	.023	-.105	-.368	.718
	MC	.001	.010	.032	.142	.888
	CPI	-.538	.159	-.793	-3.383	.004
	MNQ	.088	.083	.288	1.061	.304
	RI	-.004	.004	-.214	-1.136	.273

Thailand

The analysis in the case of Thailand showed that the model could explain 47.9 percent of the growth of GDP.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.692 ^a	.479	.316	3.85479	1.708

However, the model is statistically significant in explain the changes in GDP at $p=0.045$.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	218.341	5	43.668	2.939	.045 ^b
	Residual	237.751	16	14.859		
	Total	456.091	21			

Domestic Lending is statistically significant in explaining changes in GDP in Thailand. But none of other coefficients can explain the growth in GDP. The domestic lending may be the main source of financing in Thailand unlike capital markets.

Table 4: Regression Results for Thailand

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	3.348	2.093		1.599	.129
	DL	.196	.059	.669	3.302	.004
	MC	.004	.017	.052	.251	.805
	CPI	-.277	.529	-.129	-.522	.609
	MNQ	-.017	.219	-.019	-.076	.941
	RI	.000	.014	.005	.025	.981

Singapore

In the case of Singapore, the model is not statistically significant in explaining the growth of GDP.

Table 5: Regression Results for Singapore

Model		ANOVA ^a				
		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	84.243	5	16.849	.898	.506 ^b
	Residual	300.077	16	18.755		
	Total	384.319	21			

Vietnam

The model is not statistically significant in explain the growth of GDP in Vietnam as well.

Table 6: Regression Results for Vietnam

Model		ANOVA ^a				
		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.429	5	.686	.706	.658 ^b
	Residual	2.914	3	.971		
	Total	6.343	8			

Laos PDR

The model is not statistically significant in explaining growth of GDP for Laos PDR as well.

Table 7: Regression Results for Laos PDR

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.603	4	.901	.848	.521 ^b
	Residual	12.742	12	1.062		
	Total	16.345	16			

Cambodia

In the case of Cambodia as well the model does not explain the growth of GDP statistically significantly.

Table 8: Regression Results for Cambodia

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.644	3	1.548	.154	.925 ^b
	Residual	150.503	15	10.034		
	Total	155.147	18			

Myanmar

In the case of Myanmar, the model is not statistically significant in explaining the growth of GDP.

Table 9: Regression Results for Myanmar

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.277	4	16.569	2.043	.226 ^b
	Residual	40.542	5	8.108		
	Total	106.819	9			

Discussion

According to the findings the study highlights that the level of domestic lending as financial sector development indicator, significantly explains the economic growth in the case of Malaysia and Thailand. These findings are consistent with the empirical studies of Nasreen et al., (2020) and Malarvizhi et al., (2019). The results for Vietnam, Laos PDR, Brunei Darussalam, Cambodia and Myanmar would not be statistically significant because of the lack of data available for these.

CONCLUSIONS

The ASEAN countries represent a large portion of the global population and relatively huge GDP of combined countries. The countries in ASEAN are in different stages of development. Singapore is considered to be a highly developed country with GDP per capita competing with the richest countries in the world. Malaysia, Indonesia, Thailand Brunei Darussalam and Philippines are fast growing countries with large populations and consumer base. Laos PDR, Cambodia, Vietnam and Myanmar are the countries in the least developed countries list. By analysing the impact of the development of financial sector on the real sector we are able to analyse the impact of financial sector on real sector in countries in different stages of development. The GDP growth of Malaysia and Thailand is significantly explained by the growth of domestic lending. These two countries are relatively advanced economies although not in the category of the developed countries. The banking sector in these two countries is highly developed. This may be the reason why domestic lending can statistically significantly explain the growth of GDP in these two countries. The results for Vietnam, Laos PDR, Brunei Darussalam, Cambodia and Myanmar may be statistically not significant because of the lack of data available for these countries. In the case of Singapore other variables may be more important in explaining the growth of GDP than the variables we have chosen, domestic lending and market capitalization. The main limitation of this research is the lack of data available for some countries such as Myanmar, Cambodia, Laos PDR and Vietnam. As the GDP data is published quarterly for most countries the sample size is relatively small which might cause some problems during the analysis of the data. The ASEAN countries in different stages of development can learn lessons from each other on the impact of the financial growth on real sector growth. The development of the banking sector seems to play a significant role in increasing the speed of development of the real sector. But for highly developed countries such as Singapore the impact of domestic lending and market capitalization does not play a major role in explaining the growth of GDP. The abundance of the availability of the funding sources in countries such Singapore may explain this divergence from the normal contributors to the GDP growth countries.

ACKNOWLEDGEMENT

Special thanks to the university and the parties involved directly and indirectly who have provided support in completing this study.

REFERENCES

- Aghion, P., Bacchetta, P., & Banerjee, A. (2004). Financial development and the instability of open economies. *Journal of Monetary Economics*, 51(6), 1077-1106.
- Azam, M., & Raza, S. A. (2018). Financial sector development and income inequality in ASEAN-5 countries: does financial Kuznets curve exists? *Global Business and Economics Review*, 20(1), 88-114.
- Beck, T., Demirguc-Kunt, A., & Levine, R. (2004). Finance, inequality, and poverty: Cross-country evidence.
- Bekaert, G., Harvey, C., & Lundblad, C. (n.d.). Growth volatility and financial liberalization. *Journal of International Money and Finance*, 370-403.
- Calderón, C., & Liu, L. (2003). The direction of causality between financial development and economic growth. *Journal of development economics*, 72(1), 321-334.
- Christopoulos, D. K., & Tsionas, E. G. (2004). Financial development and economic growth: evidence from panel unit root and co-integration tests. *Journal of development Economics*, 73(1), 55-74.
- Corbett, J., & Jenkinson, T. (1997). How is investment financed? *A study of Germany, Japan, the United Kingdom and the United States*. The Manchester School, 65(S), 69-93.
- Demir, F. (2009). Capital Market Imperfections and Financialisation of Real Sectors in Emerging Markets: *Private Investment and Cash Flow Relationship Revisited*. ELSEVIER, 953-964.
- Fink, G., Haiss, P., & Vukšić, G. (2009). Contribution of financial market segments at different stages of development: Transition, cohesion and mature economies compared. *Journal of Financial Stability*, 5(4), 431-455.
- Honohan, P. (2004). *Financial development, growth and poverty: how close are the links?*. In *Financial development and economic growth* (pp. 1-37). Palgrave Macmillan, London.
- Li, H., Squire, L., & Zou, H. F. (1998). Explaining international and intertemporal variations in income inequality. *The economic journal*, 108(446), 26-43.
- Malarvizhi, C. A. N., Zeynali, Y., Mamun, A. A., & Ahmad, G. B. (2019). Financial development and economic growth in ASEAN-5 countries. *Global Business Review*, 20(1), 57-71.
- McKinnon, R. I. (1973). Money and capital in economic development (Washington, DC: Brookings Institution, 1973). *McKinnon Money and Capital in Economic Development 1973*.
- Mosley, P. (1999). Micro-macro linkages in financial markets: the impact of financial liberalization on access to rural credit in four African countries. *Journal of International Development: The Journal of the Development Studies Association*, 11(3), 367-384.
- Naceur, S. B., Ghazouani, S., & Omran, M. (2007). The determinants of stock market development in the Middle-Eastern and North African region. *Managerial Finance*.
- Nasreen, S., Mahalik, M. K., Shahbaz, M., & Abbas, Q. (2020). How do financial globalization, institutions and economic growth impact financial sector development in European countries? *Research in International Business and Finance*, 54, 101247.
- Rajan, R. G., & Zingales, L. (1998). Power in a Theory of the Firm. *The Quarterly Journal of Economics*, 113(2), 387-432.

- Roubini, N., & Sala-i-Martin, X. (1992). Financial repression and economic growth. *Journal of development economics*, 39(1), 5-30.
- Samargandi, N., Fidrmuc, J., & Ghosh, S. (2014). Financial development and economic growth in an oil-rich economy: The case of Saudi Arabia. *Economic modelling*, 43, 267-278.
- Shahbaz, M., Mallick, H., Mahalik, M. K. and Hammoudeh, S. (2018a). Is globalization detrimental to financial development? Further evidence from a very large emerging economy with significant orientation towards policies. *Applied Economics*, 50, 574-595.
- Taylor, L., (1983), *Structuralist Macroeconomics: Applicable Models for the Third World*, Basic Books, New York.
- Terhi Jokipii, P. M. (2013). The impact of banking sector stability on the real economy. *International Money and Finance*, 232-248.
- Wattanapruittipaisan, T. (2003). Four proposals for improved financing of SME development in ASEAN. *Asian Development Review*, 20(2), 66-104.