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Research paper



Does Financial Liberalization Foster Economic Growth? Empirical Evidence from ASEAN-6 Countries

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Abstract

This paper aims to investigate the impacts of financial liberalization towards the economic growth in ASEAN-6 countries (Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam) throughout the study period of 1990 to 2015 by employing the Pooled Mean Group (PMG) estimations technique. The proxies for financial liberalization are the domestic private credit (DPC) and the stock market capitalization (SMC); while the indicator for economics growth is represented by gross domestic products (GDP) growth per capita. The results show greater DPC foster the ASEAN-6 economic growth in the long-run and more relaxed loans as well as non-equity securities regimes of the private sector provide greater opportunity and eventually trigger the development of the private sector which result in a healthier economy. Interestingly, the SMC results confirm the positive relationship between financial liberalization and economic growth of ASEAN-6. Hence, the results offer an evidence of the growth-stimulating effect of financial liberalization among ASEAN-6 countries.

Keywords: *Financial Liberalization; Economic Growth; ASEAN-6*

1. Introduction

There is a bulk of academic debates centred around the nexus between the financial liberalization and economic growth (1); a sound financial system promotes financial institutions to be more effective and efficient which results in better economic growth (2, 3), while a poorly behaved financial systems ultimately affect economic growth and reduce economic opportunities (4). It is noteworthy that the link between financial system and economic growth is well researched; nevertheless, there is an impending question of why some countries are financially excluded? Thus, a sound financial system is critical in carving an ideal policy to stabilize economy and progress towards developed nation.

Theoretically, financial liberalization policies foster savings; as the results, the investment and economic growth of a nation are also improved (5, 6). The McKinnon-Shaw hypothesis postulates that market liberalization has resulted in higher interest rate which led to better resource allocation, a higher investment and economic growth. Contrarily, the regulated financial system has resulted in financial repression; subsequently, financial system poorly performed and eventually, it hampers the economic growth of a nation.

Although there are immense works on the finance-growth link, results of past studies offer mixed evidence (7-10). Dal Colle (9)states financial development fosters economic growth and Falvey, Foster and Greenaway (2008) claim financial development has insignificant effect on economic growth; while, other past studies argue that financial liberalization causes fragility which caused the risk to the economy (11)(Ang & McKibbin, 2005). Hence, empirical studies of the finance-growth nexus remain to be a popular topic of interest, particularly in developing countries (10, 12-14).

Although the Southeast Asia region has suffered a concatenation of economic crisis, the ASEAN countries have experiencing an astounding structural change and an evident increase in the standard of living from the 1970s to date (Asian Development Bank, 2013). It is noteworthy to mention that ASEAN-6 has taken numerous steps of liberalization since the 1970s. The formation of ASEAN Free Trade Area (AFTA) in 1992, complemented by the 1998 ASEAN Investment Area (AIA) and recent ASEAN Economic Community (AEC) are integral efforts in the pursuit of creating a single market and production base within the Asian region. An essential part of the AEC is targeted at improving her countries' financial policies before promoting ASEAN to the global market (15). With regards to financial liberalization, the ASEAN Comprehensive Investment Agreement (ACIA) was formed under the AEC. The ACIA offers free and open investment by 2015 with the most favorite nation initiative (MFN) and a reduction or removal of investment restrictions on all other countries. In view of the progressing liberalization processes in ASEAN (through the formation of AFTA, AIA, and AEC), this study embarks on a learning journey to investigate financial liberalization and its link to economic growth in ASEAN-6 countries.

For the past 10 years, countries of ASEAN-6 has proven their utmost commitment in liberalizing their economy and enhance growth. Majority of ASEAN-6 countries are ranked top hundred in the Ease of Doing Business Index; Singapore is ranked first, Malaysia and Thailand are at the seventeenth and forty-sixth place respectively while Vietnam and Philippines are at ninety three and ninety seventh place (World Bank, 2015). ASEAN-6 countries forecasted to transform from middle-income to high-income countries in the future (Organization for Economic Co-operation and Development (OECD), 2013). Malaysia is expected to achieve the target in year 2020 while Vietnam will achieve high-income in year 2058 and the other four countries are within the range of year 2020 to year 2058.

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The transition for liberalized economy requires the need for financial sector reform in order to provide a cushion to the sudden onset injection of investment and financial assistance in the region. The capability of the financial sector to meet the ever-increasing demand from external sectors is often put to the test. However, the question of does the financial reform create a stable and sustainable economic development in ASEAN-6 remains unaswered. Different development paths of member countries have been a key challenge for ASEAN since its establishment in 1967 (OECD, 2013). As a result, the Initiative for ASEAN Integration (IAI) was launched in 2000 to narrow development gap among member countries. However, the issue seems to be unresolved; it is unclear if liberalization would benefit all countries of ASEAN. Falianty (16) analyse the readiness of ASEAN-5 countries (without Vietnam) to implement the idea of a single currency; the author suggests Indonesia and the Philippines are not ready to take part in this endeavor. According to (17), ASEAN has a disparity of economic benefits.

A notable concern by many developing countries is whether a more liberalized financial system guarantees the volatility of an economy. Despite the fact that trade openness and financial development yield positive gains to economics, it can also be the source of instability due to its susceptibility to volatility (18). Aghion, Bacchetta (19) claims if the United States of America (US) with a well-developed financial system can suffer the backlash of financial development, then developing countries with the intermediary level of financial policies may be exposed to more intensify financial risks which may lead to economic crises.

The above discussion highlights that the findings of past studies on the financial growth relationship remain inconclusive. Furthermore, as far as this study is concerned, there is no past literature that has evaluated the effects of financial liberalization on economic growth in ASEAN-6. In view of this, this study is motivated to fill the gap in existing literature by examining the effects of financial liberalization towards economic growth, particularly in ASEAN-6 countries. This study is organized as follows; the subsequent section provides the theoretical studies and the empirical studies of financial liberalization. The next section provides the model development, econometric specifications and describes the data used in the empirical section. The results and discussion section presents and discusses the empirical results while the last section concludes the paper and presents the future research directions.

2. Literature Review

The great Schumpeter (1911) is the first to advocate the positive nexus between the financial intermediation and economic growth; since then, the economists have been debating on the impacts of financial policies to economic growth. While Gesell (20) stress that money holding should be made less attractive to the public to encourage spending, Tobin (21) argues that tax played an important role in improving economic growth. Robinson (22) claims financial intermediation is a consequence of industrialization and does not cause economic development. The view of Robinson subjugated the debate up to the middle of the 1960s era. On the other hand, the financial sector plays important role to economic development (23, 24).

The McKinnon-Shaw hypothesis states the regulations of financial systems such as interest rate ceiling, high reserve requirements, and direct credit programs dampen the financial deepening. The policy recommendation of the McKinnon-Shaw model is to liberalize the financial system in order for financial intermediaries to take effect of the economic growth. Goldsmith (24) is the pioneer of the positive nexus between the financial development and economic growth; nevertheless, Tobin (21) suggests financial repression improves capital-labour ratio and eventually, the gain to economic growth while Lucas (25) claims the role of financial regulation is exaggerated. Stiglitz and Weiss (26), add the asymmetric information problem results in higher financial constraints.

In the early 1990s, past studies such as Bencivenga and Smith (27) and Greenwood and Jovanovic (28) suggest the endogenous growth literature is in line with the positive nexus between financial liberalization and economic growth while Claessens, Demirgüç-Kunt (29) and Stulz (30) claim liberalization has yield gains to the efficiency of the financial system through the financial infrastructure. Of late, a stream of studies (31-33) investigate the auxiliary role of openness in financial development. The additional role of trade openness and its link to financial development has received attention since the seminal contribution of Rajan and Zingales (32) namely the interest group theory. The theory postulates that when a country is opened to trade and capital flows, it is more likely to develop its financial system.

Another stream of studies (9, 34-36), investigates the dynamic link between financial liberalization and economic growth. In a more elaborated context, some studies claim there is a positive nexus (8, 10, 35), through the allocation of resources (37, 38) and a more liberalized investment regime (39). On the contrary, Bumann, Hermes (36) conclude that financial liberalization aids the financial system of the country, but the effect is not robust. Beck (31) examine financial openness in 74 countries between 1960-1995 using both cross-sectional analysis and panel techniques.

Studies on the link between financial openness and economic growth in the Asian region appear to be limited due to lack of data, until recently. Goh, Alias (40) analyse the importance of external factors in determining interest rate to estimate the financial openness in Malaysia. The former indicate financial liberalization triggers domestic interest rates to respond well to foreign interest rates; and the latter suggests that contrary to conventional views, in the long-run, output growth causes financial depth. In another study, Habibullah and Hidthiir (41) examine the link between financial liberalization and higher savings in Malaysia, Philippines, and Thailand with results showing that monetization and financial intermediations are important for savings. Bilquess, Mukhtar (8) contributed to existing empirical by determining the appropriate indicators for financial liberalization, covering the D-8 region. The dynamic panel data technique is employed, capturing data from years 1985-2008 and the results show that the indicators are strong significant of financial development adding that the measures could also be used in other estimation methods.

3. Data and Methodology

3.1. Data and Variables

This study confines the analysis on ASEAN-6 countries namely, Indonesia, Malaysia, Philippines, Thailand, Singapore and Vietnam over the period of 1990- 2015. The source of dataset is from World Development Indicator. The variables of this study are the growth rate of GDP per capita as the dependent variable while private credit divided by GDP (DPC) and stock market capitalization (SMC) represent the financial liberalization. This study uses both the financial liberalization proxies interchangeably. Financial development is measured by the gross fixed capital formation as a share of GDP (GFCF).The control variables are trade openness index, the most commonly used measurements for trade openness is trade shares (TO), inflation rate (INF) and government expenditure (GOV)[1]. Table 1 shows the description of all variables employed in this studyThese control variables are most commonly used in past studies estimating liberalization (Blanco, 2011; Kim, Lin and Suen, 2014). A high gross fixed capital formation indicates more liberalized economy. Inflation rate is used as proxy for price stability while government expenditure measures the government's role in the economy

Table 1: Description of Variables

Variable	Description	Source	Past Studies
GDP	GDP per capita. Proxy for the level of economic development. A positive relationship with growth rate.	World Bank	(42) Awojobi (43)
DPC	Domestic Private Credit (as a ratio of GDP). Proxy for financial liberalization. Financial liberalization helps facilitate the flow of fund from private sector development. The level of investment and income increase and eventually accelerate economic growth.	World Bank	Beck, Demirguc-Kunt and Levine (44) Galindo et al (45) Kim, Lin and Suen (46) Kaya, Lyubomov and Miletkov (47) Awojobi (43) Agu et al., (48)
SMC	Stock Market Capitalization. Another proxy for financial openness. Countries with well-developed stock markets tend to have well-developed banking sector, thus leading to higher economic growth.	World Bank	Demirguc-Kunt and Levine (49) Morck et al (50) Waliullah (51)
TO	Trade Openness. Proxied by export+import (as a ratio of GDP). Used as a control variable. Trade openness improves allocative efficiency for financial liberalization; liberalized trade flows are generally also more open to financial flows	World Bank	Abiad et al. (52) Bilquess, Mukhtar, and Sohail, (8) Gehringer (10) Kiyota (53) Falvey, Foster and Greenaway (54) Awojobi (43)
GFCF	Gross Fixed Capital Formation. Proxy for investment. Used as a control variable to measure financial depth. an important determinant of growth	World Bank	Braun and Raddatz(35) Bilquess, Mukhtar and Sohail (8) Bumann, Hermes and Lensink (36)
Inf	Inflation Rate. Used as a control variable commonly used as a proxy for price stability in a country	World Bank	Blanco (55) Kim, Lin and Suen (56) Huang and Chang (57)
Gov	Government expenditure. A higher government expenditure rate implies that a country is dependent on the government to spearhead economic growth	World Bank	Batuo and Asongu(58) Huang and Chang(57)

3.2. Econometric Specification

Econometric assessments of financial liberalization should ideally be capable of uncovering the relevant long-run parameters as well as the short-run link between liberalization and growth (46, 59). The panel technique that explicitly separates trend effects of financial liberalization from short-run impact is employed. The autoregressive distributed lag (ARDL) model is specified for each country, pooling them together in a panel, and testing the cross-equation restriction of a common long-run relationship between the two variables using the pooled mean group (PMG) estimator of Pesaran, Shin, and Smith (1999). In this context, the impact of liberalization shows an in a delay of a specific time period. Therefore, the ARDL method which is a co-integration technique to analyze the lagged values is introduced Pesaran and Smith (60). The country-specific ARDL approach enables the adjustments of cross-country heterogeneity, and to capture time-series and cross-section relations analysis.

An autoregressive distributive lag (ARDL (p, q, q, q)) dynamic panel specification is applied for this estimator. Additionally, vector error correction model (VECM) is employed, whereby the short run dynamics of the variables in the system are subjective to the deviation from equilibrium. To allow for dynamic heterogeneity over time, the ARDL (p, q, q, q) used for the PMG estimator is specified as follows

$$y_{it} = \sum_{j=1}^{m} \emptyset_{ij}\, \Delta y_{it-j} + \sum_{j=0}^{n} \partial'_{ij}\, \Delta x_{it-j} + \mu_i + u_{it} \quad (1)$$

where y_{it} is growth $_{it}$ or uncertainty $_{it}$ x_{it} is the *k x1* vector of explanatory variables for group *i* and μ_i is the fixed effects. The coefficient lagged dependent variables $\emptyset_{ij}$ are scalars and ∂'_{ij} are *k x 1* coefficient vectors. This panel is balanced and m and n can differ across countries. The re-parameterized version of this model as a vector error correction model (VECM) is then presented as

$$\Delta y_{it} = \varphi_i y_{it-1} + \beta'_i x_{it} + \sum_{j=1}^{m-1} \emptyset^*_{ij}\, \Delta y_{it-j} + \sum_{j=0}^{n-1} \partial'^*_{ij}\, \Delta x_{it-j} + \mu_i + u_{it} \quad (2)$$

where $\varphi_i = -(1 - \sum_{j=1}^{m} \emptyset_{ij})$; $\beta_i = \sum_{j=0}^{n} \partial_{ij}$; $\emptyset^*_{ij} = -\sum_{p=j+1}^{m} \emptyset_{ip}, j = 1,2,\ldots,m-1$ and $\partial^*_{ij} = \sum_{p=j+1}^{n} \partial_{ip}, j = 1,2,\ldots,n-1$.

By grouping the variables in levels, equation (2) can be rewritten as

$$\Delta y_{it} = \varphi_i (y_{i,t-1} - \theta'_i x_{it}) + \sum_{j=1}^{m-1} \emptyset^*_{ij}\, \Delta y_{it-j} + \sum_{j=0}^{n-1} \partial'^*_{ij}\, \Delta x_{it-j} + \mu_i + u_{it} \quad (3)$$

where $\theta_i = -\frac{\beta_i}{\varphi_i}$ represents the long run parameters between y_{it} and x_{it}. $\emptyset^*_{ij}$ and ∂'^*_{ij} are short run coefficients relating growth to its past values and determinants x_{it} while φ_i is the speed of adjustment coefficient that measures the speed of which y_{it} and x_{it} towards long-run equilibrium. Following a change in x_{it}; $\varphi_i < 0$ to confirm that there is a presence of long-run relationship. Subsequently, a significant negative value of φ_i is evidence in support of co- integration between y_{it} and x_{it}. The long-run coefficients on x_{it} is restricted to be homogenous across countries and can be tested using the Hausman statistic.

According to Catao and Terrones (61), the ARDL approach shown in equation 6 assumes all explanatory variables enter the regression with lags. This approach also allows for estimation of long and short-run effects of economic liberalization with a data field composing of a large sample of the country and annual observations. There are a few methods to estimate this model. On one hand, the mean group (MG) estimator by Pesaran and Smith (60) assumes a fully heterogeneous coefficient model, with no cross-country coefficient constraints and can estimate on a country by country basis. On the other hand, there is also the dynamic fixed-effect (DFE) procedure, which allows the intercepts to differ in countries, but this method enforces homogeneity of slope coefficient and error variances. Pesaran, Shin, and Smith (62) intro-

duced the pooled mean group (PMG) estimators that restrict long-run parameters to be identical but allows short-run coefficient and error variances to vary across groups on the cross section. This paper presents the results of all the above-mentioned methods to ensure the robustness of the PMG method.

4. Results and Discussion

The PMG estimator developed by Pesaran et al. (1999) is used to estimate a long-run relationship while allowing for unrestricted country heterogeneity in the adjustment dynamics. Table 2 illustrates the descriptive statistics of the model.

Table 2: Descriptive Statistics

n = 156	GDP	DPC	SMC	TO	GFCF	INF	GOV
Panel A: Summary Statistics							
Mean	8.29	4.13	4.06	4.81	3.28	4.96	2.28
Standard Deviation	1.21	0.69	0.87	0.63	0.21	5.82	0.27
Minimum	6.10	2.29	2.26	3.82	2.93	-1.71	1.69
Maximum	10.85	5.11	5.77	6.09	3.77	58.38	2.85
Panel B: Correlation							
GDP	1.00						
DPC	0.63	1.00					
SMC	0.83	0.58	1.00				
TO	0.78	0.66	0.68	1.00			
GFCF	0.20	0.37	0.18	0.19	1.00		
INF	-0.29	-0.23	-0.40	-0.31	-0.06	1.00	
GOV	0.39	0.43	0.54	0.19	-0.07	-0.38	1.00

Notes: GDP is proxied by the log of GDP per capita. DPC is the logarithm of domestic private credit divided by GDP while SMC is the logarithm of stock market capitalization divided by GDP. GFCF is the logarithm of gross fixed capital formation divided by GDP. Control variables TO is the logarithm of the sum of exports and imports divided by GDP, GOV is the logarithm of government expenditure divided by GDP, and INF is annual inflation rate

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Table 2 presents the descriptive statistics of the model consisting of the minimum values, maximum values, mean values, and the values of standard deviations of all. The mean value provides an idea about the central tendency of the values of a variable. The number of observations of each variable is 156. Standard deviations and the extreme values (minimum in comparison to the maximum value) give an idea about the dispersion of the values of a variable from its mean value. The results reveal that stock market capitalization is highly positively correlated with annual GDP per capita with 0.83. The inflation rate is negatively correlated with annual GDP per capita while government expenditure is shown to have a positive nexus with -0.29 and 0.39 respectively. It is also noteworthy to mention that trade shares are positively correlated to financial liberalization indicator (domestic private credit and stock market capitalization) with 0.66 and 0.68 respectively.

Next, Table 3 presents the estimates obtained when using the PMG estimator to determine the short- and long-run effects of financial liberalization and economic growth for the sample of countries in ASEAN-6 using stock market capitalization as a proxy. With a significant negative sign, the error correction term falls into the dynamically stable range. This suggests strong evidence of co-integration between the explanatory variable and stock market capitalization. To test for robustness of the findings, this paper also compares the PMG estimation with a mean group (MG) and dynamic fixed effect (DFE) estimators to determine the short- and long-run effect of financial liberalization and economic growth for the sample of the countries ASEAN-6 region.

Table 3: Impact of Financial Liberalization on Economic Growth in ASEAN-6

	PMG	MG	DFE
Dependent Variable: Stock Market Capitalization			
Long-run coefficients			
GDP per capita	0.897***	1.879**	0.564***
Trade Openness	-0.221	-1.112	-0.435*
Financial Development	0.281	0.150	0.219
Inflation	0.047***	0.039***	0.023*
Government Consumption	1.409***	0.746	0.813**
Error-Correction Coefficient-ϕ	-0.768***	-1.07***	-0.678***
Short-run coefficients			
$d(GDP)_t$	5.83***	5.54**	2.62***
$d(to)_t$	-0.023	-0.194	-0.318
$d(fd)_t$	0.164	-0.081	-0.055
$d(inf)_t$	-0.052***	-0.034*	-0.008
$d(gov)_t$	0.298	0.525	-0.163
Intercept	-5.47***	-8.78***	-0.893
Hausman Test	3.72(0.59)		
No. of Countries	6	6	6
No. of Observations	150	150	150

Note: GDP = the GDP per capita; DPC = the ratio of domestic private credit divided by GDP; SMC = the ratio of stock market capitalization divided by GDP; TO the ratio of exports and imports and GDP; GOV = the ratio of government expenditure and GDP; GFCF = the ratio of gross fixed capital formation and GDP; and INF = annual inflation rate.
ARDL (1,1,1,1,1) on ASEAN-6
*, ** and *** indicate significance at 10, 5 and 1 percent respectively.

Table 3 displays the results of the PMG, MG and DFE estimation and the pooled error-correction coefficients are significantly negative, and within dynamically stable range. This shows evidence that financial liberalization and economic growth are co-integrated. , With regards to the long-run openness coefficients, the PMG estimates are somewhat similar to the DFE results but vary from the MG estimates. Furthermore, the Hausman statistical test for long-run homogeneity restrictions cannot be rejected, thus signifying that PMG estimation is preferred than the MG estimation. Overall, the findings support financial liberalization significantly affects growth in the long run[2]. However, it is also worth noting that financial depth (proxied by gross fixed capital formation) does not affect market capitalization. Trade openness is not significant to stock market capitalization. Inflation and government expenditure are positively significant to stock market capitalization. Income level proxied by GDP per capita increases by 89 percentage points. These findings are in tandem with the findings of Wu, Hou (63) and Caporale and Spagnolo (64). Meanwhile, short run estimation provides evidence that financial liberalization affects economic growth in ASEAN-6. Control variables inflation is negatively significant with market capitalization while trade openness, financial depth, and government expenditure are not significant.

[2] Stock market capitalization indicator is left out of the analysis for the time being is to allow this study to compare results of Table 2 with past studies that focused directly on private credit and growth [59] Cheng S-Y, Ho C-C, Hou H. The finance-growth relationship and the level of country development. Journal of Financial Services Research. 2014;45(1):117-40..

Table 4: Impact of Financial Liberalization on Economic Growth in ASEAN-6

	PMG	MG	DFE
Dependent Variable: Domestic Private Credit			
Long-run coefficients			
GDP per capita	1.142***	0.22	1.64***
Trade Openness	0.635***	6.372	-0.191
Financial Development	1.557***	6.512	2.499***
Inflation	0.012	0.225	-0.139**
Government Consumption	0.107	1.633**	-1.373
Error-Correction Coefficient-ϕ	-0.264***	-0.531***	-0.088**
Short-run coefficients			
$d(GDP)_t$	-0.165	0.974	-0.002
$d(GDP)_{t-2}$	1.057	-1.13	-0.847
$d(GDP)_{t-3}$	-0.587	0.329	0.109
$d(to)_t$	0.215	0.509**	0.353***
$d(fd)_t$	-0.330***	-0.095	0.135
$d(inf)_t$	0.005**	-0.01**	0.005**
$d(gov)_t$	0.325**	-0.211	0.235*
Intercept	-3.52***	-1.31	-1.132**
Hausman Test	3.07(0.69)		
No. of Countries	6	6	6
No. of Observations	150	150	150

Note: GDP = the GDP per capita; DPC = the ratio of domestic private credit divided by GDP; SMC = the ratio of stock market capitalization divided by GDP; TO the ratio of exports and imports and GDP; GOV = the ratio of government expenditure and GDP; GFCF = the ratio of gross fixed capital formation and GDP; and INF = annual inflation rate.

ARDL (1,3,1,1,1) on ASEAN-6

*, ** and *** indicate significance at 10, 5 and 1 percent respectively.

Table 4 illustrates the PMG estimator when using domestic private credit as a proxy to determine the short- and long-run effects of financial liberalization and economic growth for the sample of countries in ASEAN-6. With a significant negative sign, the error correction term falls into the dynamically stable range. This suggests strong evidence of co-integration between the explanatory variable and domestic private credit. This is shown by the significantly negative pooled error-correction coefficient estimates, falling within a dynamically stable range for all specifications (PMG, MG, and DFE). Robustness tests are carried out by comparing the PMG estimation with a mean group (MG) and dynamic fixed effect (DFE) estimators to determine the financial growth nexus. As shown in Table 4 above, the PMG results are somewhat similar to the DFE results but vary from the MG estimates. Similarly, the Hausman test replicates the results in Table 3, whereby, PMG estimation is more desirable than the MG estimation. The findings show that in the long run, financial liberalization significantly affects growth by 114 percent. These findings are similar to the findings of Kose, Prasad (38), Blanco (55) and Hazman (18). It is also worth noting that financial depth (proxied by gross fixed capital formation) significantly affects private credit by 157 percent. Trade openness is also positively significant to domestic private credit. However, control variables, inflation, and government expenditure do not affect domestic private credit. On the other hand, the short run financial-growth nexus is insignificant in ASEAN-6. Financial depth is negatively significant with private credit while financial inflation and government expenditure is positively significant.

The results displayed in Table 4 above is is consistent with the findings of Loayza and Ranciera(65) and Blanco(55). Wynne (66), Gaytan and Ranciere (67) and Dell'Ariccia and Marquez (68) postulates that among financial institutions, there has to be a trade-off between decreasing money available for investment or protecting the country from financial crises; banking institutions run the risk of credit volatility and low output growth during a crisis. . However, financial liberalization results in higher and more stable productivity growth in the long-run. To summary, financial liberalization in eminent in explaining economic growth for both stock market capitalization and domestic private credit in ASEAN-6.

5. Conclusion

This paper analyses the impact of financial liberalization on economic growth in countries of ASEAN-6 over the study period of 1988 to 2014. The analysis of the short and long-run impact of financial growth nexus uses the ARDL model which captures both the time-series dimension and cross-country difference. To date, researchers argue that there is multifaceted trade-off between Although financial liberalization may increase the chance of financial fragility in the short run, it can also improve long-run financial deepening and affect economic growth (46).

Based on a panel of countries over a time period, two financial openness proxies is employed interchangeable; domestic private credit and stock market findings. The PMG analysis yields two main findings; to begin with, stock market capitalization is beneficial to economic growth in the short and long-run. This conclusion proposes that the stock markets are essential for economic growth and one may assume that investing in the stock market of emerging countries encourages the likelihood for an increment in economic growth. It is noteworthy to mention that policymakers should therefore deliberate on decreasing its barriers to liquidity in the stock market, thus improving the confidence level of potential investors and to encourage small and medium companies to participate in the stock market (69).

Subsequently, this study also finds short-run pains and long-run gains in the process of financial globalization (proxied by domestic private credit). The results advocate that a flexible private credit system can preserve economic volatility in the long-run through the improvement of risk management and profitable investments. Moreover, relaxing the barriers of domestic private credit complements the features of banking sector development; capital structure improvement with enhanced resource allocation preserves positive economic activity that leads to better economic growth (2). Kose et al. (38) stresses that a well-developed financial system reduces volatility as it provides access to capital which helps diversify production base to reduce the effect of industrial specific shocks. In conclusion, financial openness has a favorable impact on economic growth as it is a sound platform in providing long-term financing and greater banker capabilities in detecting riskier investments. This finding is relevant to numerous policies implemented by Asian countries to liberalize their financial system in the last several decades and therefore, should be considered when designing policies that promote growth in ASEAN-6.

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