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**Article**

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Contemporary Economics

**Provided in Cooperation with:**

University of Finance and Management, Warsaw

*Suggested Citation:* Long Thanh Tran (2022) : The impact of capital flows from commercial banks and FDI on sustainable economic growth in ASEAN countries, Contemporary Economics, ISSN 2300-8814, University of Finance and Management in Warsaw, Faculty of Management and Finance, Warsaw, Vol. 16, Iss. 3, pp. 361-373,  
<https://doi.org/10.5709/ce.1897-9254.487>

This Version is available at:

<https://hdl.handle.net/10419/297610>

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Primary submission: 14.11.2018 | Final acceptance: 02.06.2021

# The Impact of Capital Flows from Commercial Banks and FDI on Sustainable Economic Growth in ASEAN Countries

Long Thanh Tran<sup>1,2</sup>

## ABSTRACT

The paper is aimed at assessing the impact of capital flows from commercial banks and FDI on sustainable economic growth in ASEAN countries. The study has conducted quantitative secondary analysis on data collected from 1980 to 2018 for Thailand, Vietnam and Malaysia. Descriptive statistics, correlation and ARDL are applied to measure the impact of each variable on sustainable economic growth. The study has shown a significant long-run relationship of short-term debt, long-term debt, technology, capital flows and savings and investment on sustainable economic growth. Short-term debt is found to have a negative impact in the long run. The short-run relationship between long-term debt, short-term and sustainable economic growth is significant while insignificant for all other variables. The study is useful for countries that are aiming for sustainable economic growth since all the factors are helpful to consider. Future researchers can use other regions to empirically examine the same model. The study is focused on only 3 countries from ASEAN countries and is only focused on one region. As economic and political scenarios different, results might not be same in other parts of the world.

## KEY WORDS:

capital flow, foreign direct investment, sustainable economic growth, ARDL.

## JEL Classification: F21, O11, C33.

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## 1. Introduction

The presence of cash flows and initiation of cash-based operations are one of the massive reasons for the countries that can create the opportunities towards economic growth. Based on the assessment of Nasir et al. (2019) it has been observed that the countries belonging to the ASEAN has been focusing towards the external financing for gaining better economic growth and sustainability in the financial operations. Yulek and Gur (2017) has highlighted that the operations based on the cash flows and the incom-

ing foreign direct investment in the countries have a huge impact on the country's performance and profitability that can contribute towards economic growth and development in the country. Based on the current situation analysed by Qamruzzaman and Weng and Söderbom (2018) has highlighted that the means of FDI in the country has been playing a major role in shaping the economic growth and increasing the cash flows in the country. The role of external finances has been effective for the countries for dealing with the positive growth in terms of developing infrastructure and bringing out the new businesses forward that

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can be effective and can also be highly profitable for the country in this regard as referred to the study of Pandya and Sisombat (2017). However, according to the assessment of Haini (2019) there is a difference between the effects of cash flows from the banks and the FDI that is coming from other countries. The following research is focused towards the examination of impact of cash flow from the banks and the FDI from the other countries that can be imperative for reviewing the trends of cash flow in the ASEAN countries.

The researcher aim is to assess the current significance of cash flow and the FDI in the countries that can be imperative for the businesses to grow and effect the overall profitability of the country in this regard. Fernandez et al. (2018) investigate that the countries have different opportunities for expanding its businesses and increase the economic growth that can be used for advancement of the country and making it better towards development. However, there is a limited research carried out based on the following area of investigation. The following research has contributed towards the assessment of cash flows from the banks and FDI from the countries that can create a significant impact on the country's performance and economic growth. Nejad, Ahmad, and Rahim (2018), has addressed that the importance of FDI can be observed through the assessment of incoming businesses opportunities in the country. Therefore, the following research is highlighted these areas and assess the factors of cash flow and the FDI in the ASEAN countries. Most of the ASEAN countries are in the process of development and requires the means of economic growth that can be profitable towards the future of the country (Mohsin et al., 2021; Nawaz, et al., 2020a). The following research has underlined the process of economic growth and has discussed regarding the opportunities that can be gained by the countries with the help of this cash flow and FDI from different countries.

The rationale behind the following assessment is to assess the areas of cash flow and FDI in the countries that has not been discussed by the previous researchers in detail. Muliana (2017) has argued that there is a massive need of growth and economic development in the ASEAN countries that can be carried out with the help of better growth and earning in the country. The research has highlighted the factors that can be profit-

able for the countries towards the economic growth and also has addressed the challenges that are faced by the countries towards economic growth and development. The researcher has also discussed regarding the presence of foreign markets in the country where it can be observed to have a huge role for managing the financial markets and dealing with the economic growth of the country in this regard.

The importance of banking sector as the backbone of the economy and economic growth impotence to survive in the global market (Nawaz, et al., 2020b; Shair et al., 2021), motivates the researcher to examine the sustainable economic growth of ASEAN countries. In addition, a study by Ndlovu and Inglesi-Lotz (2020) conducted on the economic growth through research and development (R&D) and recommended that R&D is the changing phenomenon across countries and organizations and needs to examine R&D's role on sustainable economic growth using different countries and the present study fulfil this gap using ASEAN countries context. Moreover, Dornean et al., (2021) also suggested that the cash flows, investment and savings are varied from country to country and need to investigate this area in future in a different context. Thus, the current study fulfils this gap and examine saving and investment role on sustainable economic growth in ASEAN countries. Finally, Pegkas (2018) also examined the government debt impact on economic growth and recommended that more relevant factors should add to the upcoming studies to examine economic growth. The current study fulfils this gap by adding four other factors such as R&D, technology, cash flow and FDI to examine sustainable economic growth. Thus, the aim of the current research is to investigate the cash flow from the banking sector and FDI impact on the sustainable economic growth of ASEAN countries. Based on this aim, the research questions of the study are as follow:

Q1: What is the relationship among the capital flow from banking sector and sustainable economic growth.

Q2: How much FDI effect the sustainable economic growth of ASEAN countries.

The current study contributes in the existing literature by providing detailed literature related to savings and investment and economic growth. In addition, the present article also contributes to the existing lit-

erature by providing the literature related to the initiation of technology and economic growth. Moreover, the current article has examined the joint impact of initiation of technology, R&D, long and short term debts and savings and investment on sustainable economic growth that is also one of the first and attempt and significant contributions in the existing literature. This study provides help to the policymakers while developing policies related to enhancing sustainable economic growth using initiation of technology, R&D, long and short term debts and savings and investment.

The remaining structure of the study show the literature of the past study about variables and their links mentioned in the second section. While the third section show the methods of data collection and techniques of data analysis and fourth part deals with the analysis of the data. Finally, the fifth section show the discussions and sixth section show the conclusion, implications and limitations.

## 2. Literature Review

Based on the assessment of Hu et al. (2017) the cash flow is referred to as the movement of cash in the country for the purpose of trade and carrying out the business operations. It has been observed that the means of cash flow that is generated by the countries is used for further investment that can contribute towards the growth and development of the country (Chien et al., 2021a; Remeikienė et al., 2020). In addition to the following aspects, the cash inflow and outflow can bring about several opportunities for the country for gaining economic growth and higher suitability in the country (Albu & Albu, 2021; Anh Tu et al., 2021; Chien, Hsu, Zhang, Vu, & Nawaz, 2021c; Sun et al., 2020). The research based on the cash flow and the assessment of cash inflow in the country carried out by Beladi, Deng, and Hu (2021) has highlighted that the cash inflow in the country can have subsequent impact in the country. It can be used for dealing with the performance and progress of the country for better contributions towards the economic growth and sustainability (Chien, et al., 2021b; Skvarciany et al., 2018).

FDI is referred to as the foreign direct investment that is a sum of money that is transferred to some other party for the sake of ownership and controlling the business in the country. The study of Malik et al.

(2020) has highlighted that the concept of FDI has become common as the countries are found to invest in other businesses belonging to other countries that can generate higher profitability and can also contribute towards the controlling of operations and maintaining the sustainability of the country in this regard. In reference with the study of Raza et al. (2019) there are several benefits that can be gained by the countries by gaining FDI from other countries and it contributed towards the initiation of new business opportunities that is effective for the country in this regard. Siddique et al. (2017), has highlighted another aspects of businesses operations and the means of trade with other countries by investing in the means of business for better returns and higher profitability. The presence of FDI can also be observed in the ASEAN countries where the businesses can be established and can provide with the profitable returns in this regard. It can also contribute towards the increasing economic growth of the country.

According to the analysis of Sakyi and Egyir (2017) the economic growth is referred to the progress and prosperity of the country where the country gains maximum profits and can create significant returns out of the activities that are performed. The countries look forward towards the options and opportunities that can be used for increasing the economic growth of the country (Roszko-Wójtowicz & Grzelak, 2020) and can support in performing the activities that can allow them in gathering the maximum returns out of the activities that are carried out within the country (Chien et al., 2021d; Palos-Sanchez et al., 2020). Moreover, based on the arguments of Ahmad et al. (2018) the opportunities that are there in the countries can be used in an effective manner for dealing with the maximum returns for increasing the profitability of the country. However, if the country does not work on increasing the profitability of the country (Li et al., 2021a; Ulger, 2020), it may result in gaining poor sustainability in the economic performance. Therefore, it is imperative for the countries to carry out the practices and perform the operations that can be used for gaining higher economic return.

A study of Kintu et al. (2019) has highlighted that the cash inflow in the country has been considered to be as the major source of development in the country that can contribute towards the development of better

opportunities for the economic growth of the country. It has been observed that the better amount of cash inflow in the country can be essential for ensuring that the countries might gain better means of economic growth and better opportunities for developmental projects in this regard. As referred to the study of Asamoah et al. (2019) the countries can gain maximum profitability and higher growth measures with the help of cash inflow in the country that can be essential for investing in the developmental programs in the country. However, the study Olagbaju and Akinlo (2018) has also presented the arguments that the countries may face huge limitations with the increasing amount of cash flow in the country as referred to the examples of Turkey and Argentina where the increasing amount of cash flow in the country has created massive issues for the country and also has created overheating of the macroeconomics pressure form the economy of the country (Chien et al., 2021f).

The increasing rate of FDI in the countries can be profitable for the countries for dealing with maximum growth and the opportunities for sustainable growth in the economy of the country (Baloch et al., 2021; Chien et al., 2021e). However, the increasing amount of FDI in the country can also create higher control and regulations applied from the external environment that can affect the performance and profitability of the country in this regard. Based on the consideration of Suliman et al. (2018) the foreign direct investment in the country can contribute towards the initiation of better business opportunities and allowing the businesses to gain innovation and growth in this regard. According to the assessment of Wu et al. (2020) there is a huge impact on the FDI on the sustainable economic growth of the country as the countries may get better options for increasing sustainability and growth in the country for the long run. Flora and Agrawal (2017), has highlighted that the countries may get a maximum chance for developing the current situation and contributing towards the growth aspects of the country for gaining better suitability and profitability in this regard. The means of FDI can contribute towards the betterment of different sectors in the country that can be effective for the country in terms of dealing with the better terms of

profitability and progress in this regard.

Based on the assessment of Bakar and Afolabi (2017) the countries can contribute towards the increasing amount of investment and savings through the presence of FDI and the cash flow in the country that can ultimately affect the financial reserves of the country for further use. The financial stability of the country has a major contribution towards the economic growth of the country as the country can be strengthened with the amount of financial reserves it has.

The use of cash flow and the country may also bring about the means of technology in the country within the businesses that can contribute towards the economic growth of the country (Baneliene & Melnikas, 2020; Chien et al., 2021h; Zhuang et al., 2021). It has been observed that the technological advancement in the country can be essential for the countries for bringing the sustainable growth in the country (Nguyen et al., 2021; Nizam et al., 2020). The use of this technological advancement can be effective for the country for dealing with the economic growth of the country in this regard (Liu et al., 2022; Othman et al., 2020; Sadiq et al., 2020).

The countries with better and sustainable programs of research and development can be essential for bringing economic growth and development in the country (Chien et al., 2021g; Krajňáková et al., 2020; Li et al., 2021b). It has been observed that the advanced methods for the research and development in the country can be essential for the countries for dealing with sustainable returns and showing massive developmental approach towards the growth in the country.

The long term and short-term debt in the countries can be essential for gaining the long and short developmental programs for the country to gain better approaches of development in this regard. As referred to the study of Alvarado et al. (2017) the core aim of the countries for sustainable economic development of the country can be the short and long advancements that are made by the countries for development and advancement. Therefore, the use of FDI can be imperative for the countries for gaining massive growth opportunities in the country. Based on these literature, following hypotheses are developed:

H1: FDI has a significant positive impact on sustainable economic development of ASEAN countries in long-run.

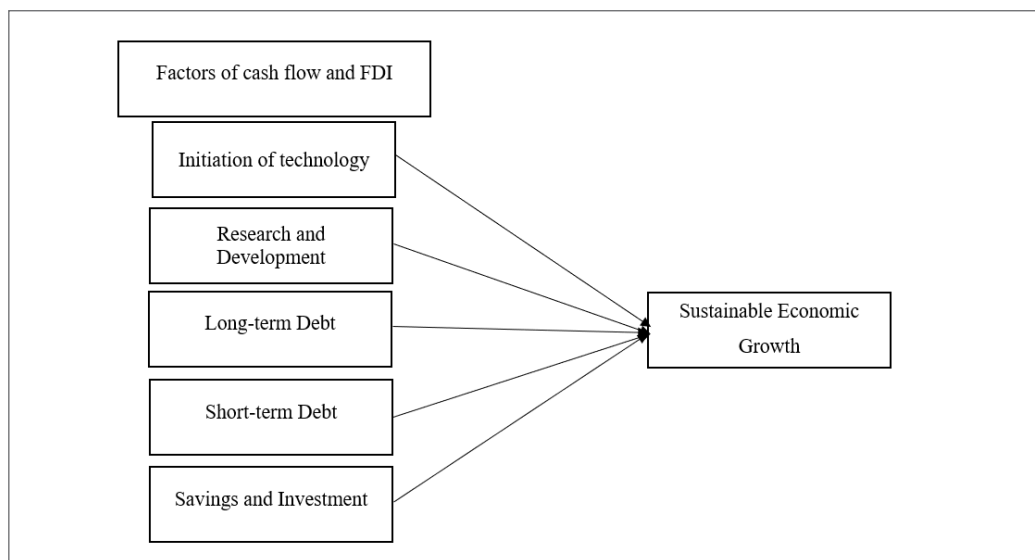
H2: Capital flows has a significant positive impact on sustainable economic development of ASEAN countries in long-run.

According to the analysis of Acquah and Ibrahim (2020) the neo-classical theory for the cash inflow represents the measures for stimulating growth in the country. It has been observed to have an explicit impact on the country's economic growth and development that can be achieved with the contributions of FDI in the country. Similarly, the dual-gap theory or two-gap approach has also been observed for explaining the impact of foreign debt in the country that can contribute towards the economic growth and sustainable development in the country (Chien et al., 2020i; Hussain et al., 2020). The dual gap analysis presents the functions of investment that can be used for ensuring the process of development in the country with the help of foreign

investment in the country (Huang et al., 2020; Hussain et al., 2019). The conceptual model presents the graphical presentation of the variables that are selected for assessing the research. The variables of research have been pressed in the following model that can be presented below in the model that has presented the factors of cash flow and FDI in the country and has provided its impact on the sustainable economic growth in the country. The theoretical framework is mentioned in Figure 1.

The conceptual framework shown above indicates the impact of factors of FDI and cash flow on sustainable economic growth. In this context, it is observed that FDI and cash flow includes initiation of technology, research and development, long-term debt, short-term debt and savings and investment which are all independent variables. The dependent variable in the current study is sustainable economic growth. The arrows indicate the impact of independent variables on the dependent variable.

**Figure 1**  
*Theoretical Framework*



### 3. Method

Methodology is a critical component of the research. Methodology guides the researcher in paving the way for accurate and reliable results. For this purpose, it is important to make rationale choices to get results. The study has selected positivism philosophy to conduct the study since the design is quantitative and based on numbers. The positivism philosophy allows for objective results and testing therefore, the topic related to cash flow and FDI in ASEAN countries is best suited for positivism philosophy. Moreover, the approach selected is deductive since hypothesis testing is being done. The current article has used the saving and investment as the predictor that is the significant determinant of economic growth in term of capital formation. In addition, initiation of technology has also used as the predictor that is also a significant determinant of economic growth in term of technology. In addition, the current article also used short and long term debts as the predictor to examine the economic growth.

The study is focused towards the impact of cash flow and the FDI in the ASEAN countries where the researcher has collected the data from the secondary sources belonging to the years 1980-2018. The use of secondary data has allowed the researcher to gain the detailed aspects of cash flows and FDI of the ASEAN countries and the impact it has on the economic sustainability of the country. The variables of research have been assessed using the statistical tool of Stata. The tests were applied with the help of Stata and the results were analysed with respect to the research objectives that were designed by the researcher for addressing the research problem. The use of this method of assessment has allowed the researcher to gain detailed assessment for the research topic and has allowed the researcher to adopt the results that is reliable and is unique to be used by future researchers.

Particular to this study, the research techniques applied are descriptive statistic to know the characteristics of data. The correlation analysis is used to determine the interrelationship and association between the variables. The unit root test to check the stationarity of the variables. The estimation equation for Augmented Dickey-Fuller test (ADF) is as follow:

$$d(Y_t) = \alpha_0 + \beta t + \gamma Y_{t-1} + d(Y_t(-1)) + \varepsilon_t \quad (1)$$

Lastly, Panel Autoregressive Distributed Lag (ARDL) is used to test the long-run relationships between time-

series variables. The estimation equation for panel ARDL is as follow:

$$\begin{aligned} \Delta SEG_{it} = & \alpha_0 + \sum \delta_1 \Delta SEG_{it-1} + \sum \delta_2 \Delta IT_{it-1} + \sum \delta_3 \Delta CF + \\ & \sum \delta_4 \Delta LTD_{it-1} + \sum \delta_5 \Delta SRD_{it-1} + \sum \delta_6 \Delta SI_{it-1} + \varphi_1 SEG_{it-1} + \\ & \varphi_2 IT_{it-1} + \varphi_3 CF_{it-1} + \varphi_4 LTD_{it-1} + \\ & \varphi_5 SRD_{it-1} + \varphi_6 SI_{it-1} + \varepsilon_i \end{aligned} \quad (2)$$

All of the techniques are applied through STATA as it enhances the econometric viability of the data set. The preceding section provides results based on test conducted. The econometric equation for this is as follows:

$$SEG_{it} = \alpha_0 + \beta_1 IT_{it} + \beta_2 CF_{it} + \beta_3 LTD_{it} + \beta_4 SRD_{it} + \beta_5 SI_{it} + e_{it} \quad (3)$$

Where,

$\alpha$  = Constant

SEG = Sustainable economic growth

IT = Initiation of technology

CF = Cash Flow

LTD = Long-term debt

STD = Short-term debt

SI = Savings and investment

$\varepsilon$  = Error term

### 4. Results

This section presents the results along with interpretation from the data collection pertaining to the impact of FDI and cash flow factors on sustainable economic growth. The data is analysed with the help of STATA utilising the techniques of descriptive statistics, correlation and Panel autoregressive distributed lag (ARDL). This study is based on ASEAN countries of Thailand, Vietnam and Malaysia where data is collected from 1980 to 2018. The variables selected for analysis include sustainable economic growth acting as the dependent variable whereas independent variables include initiation of technology, research and development, long-term debt, short-term debt, and savings and investment. The results are presented in Table 1 as follows. The variables taken for this study are already mentioned above. The sustainable economic growth is measured to LGDP which is log of GDP and LTD is taken as log of long-term debt (LTD). The values to be considered important in descriptive statistics are mean, median, standard deviation and number of

**Table 1**  
*Descriptive Statistics*

	LGDP	LTD	CF	SI	STD	IT
Mean	11.030	10.061	3.435	21.888	9.463	20.848
Median	10.899	10.001	1.224	23.971	6.987	13.590
Maximum	12.433	11.614	22.668	37.011	23.778	46.217
Minimum	9.904	8.483	0.027	0.566	0.856	2.701
Std. Dev.	0.711	0.975	5.445	9.989	5.978	14.593
Skewness	0.431	-0.111	2.227	-0.762	0.709	0.632
Kurtosis	2.085	1.812	6.792	2.770	2.231	1.588
Observations	114	114	114	114	114	114

**Table 2**  
*Correlation Matrix*

	LGDP	LTLD	CF	SI	STD	IT
LGDP	1					
LTLD	0.691	1				
CF	-0.121	-0.617	1			
SI	0.584	0.760	-0.401	1		
STD	0.490	0.549	-0.285	0.597	1	
IT	0.846	0.759	-0.216	0.546	0.216	1

observations. It is important to have equal number of observations since the data is valid if the number of observations are equal. In this case, the following dataset has a total of 114 observations for all variables.

With regards to analysis, the mean value for LGDP is 11.03 which shows that on an average, the log of GDP for ASEAN countries is 11.03. On the other hand, the standard deviation is 0.71 which shows lesser deviation as compared to the mean values hence, it shows that values are closely fitted within the regression line. In terms of LTD, the mean value is 10.06 which shows that log of long-term debt for ASEAN countries is 10.06. The standard deviation illustrates a value of 0.97 which is less than 1 and hence, it represents that data is not much scattered. Thirdly, the variable of capital flows is investigated having a mean value of 3.43 which shows that capital flows on an average account for 3.43% of GDP for ASEAN countries. The standard deviation of 5.44 shows higher value than mean indicating that data has scattered values particularly due to Malaysia being an emerging economy and Vietnam being economically weak.

Saving and investment have a mean value of 21.88 showing that on an average, the savings and average account for 21.88% of GDP for the country with a standard deviation of 9.98 which is less than mean. This shows that values are not much scattered. Short term debt indicates a value of 9.45 on an average. The standard deviation shows very less variability in short term debt. The technology has a mean value of 20.84 with a standard deviation of 14.59 showing that technology is although advancing but is much volatile in ASEAN countries.

The correlation analysis is used to describe the relationship between two or more variables to determine their association. This study has examined the relationship between factors associated with cash flow and FDI, and sustainable economic growth. The table above represents the correlation analysis conducted. It has been observed that log GDP has a positive and moderate relationship with long-term debt. This is denoted through the coefficient value of 0.69 with a positive sign showing 69% relationship between LTD and LGDP. The capital flows on the other hand has a nega-



tive and weak relationship with LGDP. The coefficient of -0.12 or -12% indicates that when capital flows tend to increase, GDP decreases. Thirdly, investment and savings positively contribute towards GDP because of the coefficient value of 0.58 showing that increase in unit of investment and savings leads to an increase of 0.58 units in GDP. Savings and investments are money kept in the country that is rolled by banks in economic cycle towards factors of production hence, GDP tends to increase. Technology has a positive and strong relationship with GDP at 0.84 or 84%. It shows that technological innovation, initiation and infrastructure are the most important aspects contributing towards sustainable economic growth because technology fosters innovation which improves the competitive position of firms eventually improving the GDP.

This study has checked the stationarity of the variables by using Augmented Dickey-Fuller test (ADF) and the results have indicated that LGDP, LTLD, Cpital flow and STD are stationary at level while saving and investment and technology are stationary at first difference. These values are mentioned in Table 3.

The co-integration between constructs is essential to run the panel ARDL, and examined by applying

panel ARDL bound test. The results indicated that the calculated f-statistics (6.68) is higher than the critical values that exposed the panel ARDL model could be executed. These figures are hoghlighted in Table 4.

Table 5 show the panel ARDL results for the study where long-run and short-run relationship between the variables is generated from the data accumulated. In long-run equations, the lags are not considered where in short run, level, first order lag and second order lags are considered for all variables. Here, the important values to consider are coefficient of determination which indicates the individual impact of each variable over the dependent variable. The probability value is considered to test the significance. If the threshold value for probability is less than 0.05 then the impact is considered significant otherwise insignificant. The third value is t-statistics that is also used to measure the impact. Value of t-statistics falling between -1.97 to +1.97 shows the acceptance of null hypothesis whereas any value outside this range causes rejection of null hypothesis.

From the results, it can be observed that in long run, all the variables have a significant impact on LGDP which shows that all variables considered are important for long term sustainable economic growth. Apart from

Table 3  
Unit Root Test

Augmented Dickey-Fuller Test (ADF)	Level	t-statistics	p-values
LGDP	I(0)	-6.739	0.010
LTLD	I(0)	-4.013	0.043
CF	I(0)	-5.245	0.030
SI	I(1)	-7.699	0.010
STD	I(0)	-5.285	0.000
IT	I(1)	-3.325	0.020

Table 4  
Unit Root Test

Model	F-statistics	Lag	Level of Significance	Bound test critical values	
				I(0)	I(1)
LGDP/(LTLD,CF,SI,STD,IT)	6.68	4	1%	5.21	5.37
			5%	4.17	4.49
			10%	3.03	3.09

**Table 5***Panel ARDL*

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Long Run Equation				
LTLD	1.303	0.090	14.365	0.000
CF	0.102	0.021	4.876	0.000
SI	0.032	0.004	6.536	0.000
STD	-0.016	0.004	-3.761	0.007
IT	0.027	0.009	2.864	0.007
Short Run Equation				
COINTEQ01	-0.275	0.037	-7.395	0.000
D(LTLD)	-0.019	0.215	-0.091	0.928
D(LTLD(-1))	0.293	0.137	2.130	0.041
D(LTLD(-2))	0.202	0.396	0.511	0.612
D(CF)	0.010	0.053	0.205	0.838
D(CF(-1))	-0.004	0.008	-0.557	0.581
D(CF(-2))	-0.007	0.020	-0.355	0.724
D(SI)	-0.008	0.005	-1.523	0.137
D(SI(-1))	-0.003	0.006	-0.464	0.645
D(SI(-2))	0.009	0.005	1.731	0.093
D(STD)	0.009	0.002	4.015	0.000
D(STD(-1))	0.002	0.001	1.669	0.105
D(STD(-2))	0.003	0.009	0.373	0.711
D(IT)	-0.003	0.014	-0.289	0.774
D(IT(-1))	-0.009	0.005	-1.726	0.094
D(IT (-2))	-0.005	0.005	-1.044	0.304
Mean dependent var	0.027	S.D. dependent var	0.115	
S.E. of regression	0.093	Akaike info criterion	-3.163	
Sum squared residue	0.271	Schwarz criterion	-1.576	
Log likelihood	193.625	Hannan-Quinn criter.	-2.524	

short-term debt, all variables exhibit a positive impact whereas, short-term debt has a weak but negative impact in the long run. This is because short term debt disrupts the capital flow as cash inflow and outflow is frequent. The strongest impact is of long-term debt with a coefficient of 1.3 indicating one-unit change in long-term debt enhance sustainable economic growth by 1.3

units. However, the case for short-run equations is not the same. In short-run, only long-term debt with first lag order and short-term debt at level significantly impact economic growth. Both illustrate a positive impact on the regress.

Based on the above results following decisions have been made by the study:

**Table 6***Hypotheses Results*

Hypotheses	P-Value	Empirical Result
H1: FDI has a significant positive impact on sustainable economic development of ASEAN countries in long-run.	0.000	Accepted
H2: Capital flows has a significant positive impact on sustainable economic development of ASEAN countries in long-run.	0.000	Accepted

## 5. Discussions

The paper has found that there exists a long-run impact of FDI and factors of cash flow on sustainable economic development of ASEAN countries. The factors analysed were long-term debt, short-term debt, initiation of technology, and savings and investment while FDI was measured through capital flows. The results show that all the variables had a positive and significant impact on economic growth except for short-term debt in the long-run. The findings can be supported by the study of Flora and Agrawal (2017) who state that short- and long-term debts are source of economic prosperity for the country in the long run. However, this study partially defies the findings as short-term debt is observed to have a negative impact on economic growth. The studies by Alvarado et al. (2017); Olagbaju and Akinlo (2018) can also be used to validate the findings of study who state that FDI, savings and investment and technology are a vital source of economic advancement for any country. Siddique et al. (2017) found a significant impact of technology on economic growth which is also proven empirically through this paper in the preceding section.

## 6. Conclusion and Recommendation

The aim of study was to analyse the impact of FDI and cash flow factors on sustainable economic growth in ASEAN countries. The results revealed that all variables have a significant impact on sustainable economic growth. The variables were also found to have a positive impact on economic growth in the long-run except for short-term debt which influenced economic growth. Thus, the significant association among capital flow and economic growth was the answer of the first research questions. In addition, the significant effect of FDI on economic growth was also the answer of the second research question. The findings were applicable in case of ASEAN countries and these countries must keep in check all the factors studied to ensure sustainable economic development. For this purpose, following recommendations are provided;

- The countries need to balance the short and long-term debt acquired from World Bank and central banks to ensure that in long-run, country observes economic growth.
- FDI was an important part of economic growth and countries in ASEAN should try to attract FDI for enhanced economic growth.
- The technological infrastructure and ability to em-

braced technology that help these countries to grow. Hence, it was the responsibility of government to ensure and tackle barriers in the way of innovation for long term economic prosperity.

The findings of this study are only applicable to ASEAN countries namely Thailand, Vietnam and Malaysia. Future researchers can consider more countries to conduct the analysis. Moreover, the time period can be extended to a decade back for more accurate results. Moreover, researchers can conduct similar studies in emerging economies such as Vietnam, Thailand, Malaysia, and Singapore to check whether the findings are applicable to them or not.

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