

The Role of Regional Economic Integration in Attracting FDI: A Case Study of ASEAN Economic Community (AEC)

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© 2025 جامعة العلوم والتكنولوجيا، المركز الرئيس عدن، اليمن. يمكن إعادة استخدام المادة المنشورة حسب رخصة مؤسسة المشاع الإبداعي شريطة الاستشهاد بالمؤلف والمجلة.

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Abstract:

Regional economic integration is widely recognized as a means to enhance trade and investment flows. In Asia, the ASEAN Economic Community (AEC) represents one of the most advanced efforts, aiming to create an integrated market and promote free movement of investment within the region. This study examines trends in Foreign Direct Investment (FDI) inflows in ASEAN countries over 2010–2019, comparing periods before and after the implementation of the AEC, and explores the key factors driving FDI. The analysis shows that while intra-ASEAN FDI growth slowed slightly after the AEC, overall FDI inflows to the region showed a clear upward trend, reflecting the rising attractiveness of ASEAN as an investment destination. FMOLS estimation highlights that larger markets and greater trade openness, along with innovation, stability in exchange rates and prices, governance quality, and productivity, are important drivers of FDI, indicating that the AEC has contributed to a more integrated and stable economic environment. These findings provide insights for policymakers on how effective regional cooperation can sustain investment flows and also shed light on why similar initiatives in South Asia have struggled due to political and strategic challenges.

JEL Classification Codes: F15, F02, R10, R11, R58 and O47

Keywords: FDI Inflow, Economic Integration, ASEAN Economic Community, Determinants of FDI, Panel Data Analysis, South Asian Economic Integration.

(AEC) دور التكامل الاقتصادي الإقليمي في جذب الاستثمار الأجنبي المباشر: دراسة حالة لمجتمع آسيان الاقتصادي

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الملخص:

يُعد مجتمع آسيان الاقتصادي (AEC) أحد أكثر أشكال التكامل الاقتصادي الإقليمي الواعدة والمتطورة في آسيا، ويسعى لأن يكون الأفضل على مستوى العالم. ولقد كان أحد المعايير الرئيسية في المخطط التأسيسي لآسيان لعام 2007 هو ضمان التدفق الحر للاستثمار من خلال الاستثمار الأجنبي المباشر والاستثمار داخل منطقة آسيان. تسعى هذه الدراسة إلى إظهار اتجاهات تدفقات الاستثمار الأجنبي المباشر إلى دول آسيان بمقارنة الفترات السابقة واللاحقة لتنفيذ مجتمع آسيان الاقتصادي، وركزت على محددات الاستثمار الأجنبي المباشر لتحديد ما إذا كانت العوامل المتعلقة بمجتمع آسيان الاقتصادي قد أثرت على التدفق. كما اهتمت الدراسة بالتحقق من أسباب عدم تبلور فكرة التكامل الاقتصادي لجنوب آسيا على أرض الواقع. استخدمت الورقة بيانات لمدة عشر سنوات من 2010 إلى 2019 لدول آسيان، ووجدت أن متوسط معدل النمو للاستثمار الأجنبي المباشر داخل آسيان قد انخفض، بينما شهد متوسط معدل النمو للاستثمار الأجنبي المباشر الإجمالي إلى آسيان تحسناً ملحوظاً. أثبت نموذج الانحدار القياسي لتحليل بيانات البائل وجود علاقة إيجابية وهامة بين تدفق الاستثمار الأجنبي المباشر وبعض العوامل المرتبطة بمجتمع آسيان الاقتصادي، وهي: حجم السوق، والبنية التحتية، والإنتاجية، ورأس المال البشري، والانفتاح التجاري، والابتكار، والاستقرار السياسي. ستكون هذه النتائج مفيدة جداً في فهم تأثير التكامل الاقتصادي الإقليمي في توسيع تدفقات الاستثمار الأجنبي المباشر.

رموز تصنيف JEL: F15, F02, R10, R11, R58, O47

الكلمات المفتاحية: آسيان؛ محددات الاستثمار الأجنبي المباشر؛ تدفق الاستثمار الأجنبي المباشر؛ تحليل بيانات البائل؛ التكامل الاقتصادي لجنوب آسيا.

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Introduction

With the target of "one vision, one identity, and one community," the Association of Southeast Asian Nations (ASEAN) was commenced in 1967. Since its establishment, ASEAN has been very promising and is evolving as an integrated regional body. The initial target of ASEAN was mostly political, with the aim of preaching peace in this volatile region. Later with time, its target shifted to economic development. After 25 years of its inception in 1992, this association made its first attempt at economic cooperation by forming the ASEAN Free Trade Area (AFTA). The purpose of AFTA was to support local trade and manufacturing in the member countries and enable economic amalgamation with regional and international allies.

A proposal to form a regional economic integration by 2020 was put forth at the ASEAN Summit at Phnom Penh in 2002. Afterwards, in 2007, the proposal was validated by the formation of the 'ASEAN Blueprint' with a deadline to implement the ASEAN Economic Community (AEC) by 2015. Four goals were set for AEC: the formation of a single market and production base, a competitive economic region, equitable economic development, and integration into the global economy. Free flow of investment is one criterion under 'a single market and production base' in the 'ASEAN Blueprint.' The blueprint mentions Foreign Direct Investment (FDI) and intra-ASEAN investment as the catalyst to enhance the economic competitiveness of ASEAN.

This paper is designed with the aim of addressing three objectives. Primarily, this work addressed the pattern of intra-ASEAN FDI inflow and total FDI inflow to ASEAN countries. The second focus of this work was to find the determinants of FDI inflow in the ASEAN countries to investigate if the related components of AEC have influenced the growth of FDI inflow in this region. The final objective was to bring the reasons for the failure of the attempts of South Asian economic integration into the light.

There have been a considerable number of works on the impact analysis of ASEAN and AFTA. On the contrary, very few studies have focused on the ASEAN Economic Community. Even if some studies were done on AEC, those did not focus on its impact on FDI inflow. Besides, though notable studies were carried out on South Asian economic integration, very few could mention all the major reasons for this idea not being successful even after multiple attempts. Hence, this study tried to cover all the critical factors that contributed to the failure of South Asian economic integration.

The scope of this study is limited to analyzing the pattern of FDI inflow and its determinants for only ten years. This work was considered only four years after the implementation of AEC to cite the pattern. Four years is a relatively small time frame

to understand the impact of macroeconomic variables. Concisely, this work is targeted to investigate the role of regional economic integration in attracting FDI inflow and addressing this development prospect in the context of South Asia.

LITERATURE REVIEW

A few numbers of studies were carried out on the impacts of Regional Economic Integrations (REI) and their impacts, including the European Union (EU), ASEAN Free Trade Area (AFTA), and African Economic Community (AEC). Many earlier studies on REI had mainly concentrated on trade diversion and trade creation suggested by Viner (2014). After the establishment of the European Economic Community, the association between REI and FDI got attention. Currently, studies focusing on the association of REI and FDI are getting more priority in developing countries. Motta et al. (1996) showed how the enhancement of market reachability through economic integration persuades foreign firms to invest in the regionally integrated countries. A positive association between trade openness and injection of foreign investment was found by Neary (2002).

A few studies have been undertaken on ASEAN and the ASEAN Free Trade Area (AFTA) and their impacts. Besides, a few works are done on the determinants of FDI of the ASEAN countries. Petri et al. (2010) utilized a computable general equilibrium model and found the possibility of AEC yielding benefits like the European Union. They also mentioned that the world, as a whole, would benefit from the AEC. Anis et al. (2021) showed that though the growth of total FDI inflow increases, the growth of intra-country FDI inflow decreases after implementing Regional Economic Integration (REI). Kawai et al. (2015) investigated the long-run challenges for FDI and trade of the member countries of ASEAN. Their econometric analysis suggested that there is a mutual reinforcement between FDI and trade, indicating the stimulation of inward FDI by the rise in trade flow and vice versa. They also revealed large markets, free trade areas, institutional strength, infrastructure capacity, and low cost of business as the reasons for stimulating FDI.

Ismail et al. (2009) analyzed the data from 1995 to 2003 to study the role of AFTA in attracting direct investment from both member countries and others. This analysis found that the old ASEAN countries invested more among themselves than they did in the new ones. Lee et al. (2011) used a dynamic computable general equilibrium (CGE) model to investigate the outcome of the AEC and found its positive impact on economic well-being, trade, and productivity. Another study was done by Hoang et al. (2015), analyzing the factors of FDI inflows from 1991 to 2009 in ASEAN countries. Their findings indicated that factors like market size, trade openness, infrastructural development, and human capital positively influence FDI inflow. The Regional Economic Cooperation and Integration (RECI) report of UNESCAP-2018 published the potential of South Asia in this regard. This report suggested, "The South Asian countries should take bold steps to broaden the

horizons of economic relations with neighboring subregions of Central Asia, Southeast Asia, and beyond.” Moinuddin (2013) mentioned that in comparison to other regions, South Asia lags in market-driven integration. In his work, he highlighted the importance of REI in this zone's prosperity and development process.

Nguyen (2025), using quantitative analysis, found that greater economic integration is associated with higher economic growth. The study highlights that FDI positively influences growth in the short term, with its impact becoming even more pronounced over the long term. Garg et al. (2025) aimed to investigate the key determinants of foreign direct investment (FDI) in ASEAN economies, with the goal of providing insights to policymakers and governments for attracting sustainable investment to the region. Their findings highlighted that market size, human capital, and trade openness significantly enhanced FDI inflows by emphasizing the importance of economic scale and liberalized trade in ASEAN nations. Jaloliddin (2024) analyzed the impact of Regional Trade Agreements (RTAs) on boosting international trade and investment, with particular emphasis on the Regional Comprehensive Economic Partnership (RCEP). The study highlights how RCEP enhances regional economic growth and stability by improving market access, simplifying trade procedures, and fostering investment across member countries.

Methodology

This study is designed to analyze the pattern of FDI inflow in ASEAN countries before and after the implementation of AEC. Besides, it desired to detect if the economic cointegration has contributed to the FDI inflow of the ASEAN countries. The study wanted to detect the determining factors of FDI in the ten ASEAN countries to investigate whether the ASEAN Economic Community has impacted the FDI inflow. For this reason, this study explored the data of the ASEAN countries from 2010 to 2019, considering the period 2010-2015 as the studied period before AEC and the period 2016-2019 as the period after AEC.

This study used the endogenous growth function that is analysed as:

$$FDI = F(MS, IR, F, PRS, TO, C, LP, HC, I, BE, P, PS, ER) \quad \text{.....(1)}$$

Where FDI symbolizes FDI inflow, whereas the explanatory variables are represented by Market Size (MS), Interest Rate (I), Finance (F), Price Stability (PRS), Trade Openness (TO), Corruption (C), Logistic Performance (LP), Human Capital (HC), Innovation (I), Business Environment (BE), Productivity (P), Political Stability (PS), and Exchange Rate (ER).

The adopted linear econometric model is specified as:

$$FDI_{it} = \alpha_0 + \beta_1 MS + \beta_2 IR + \beta_3 F + \beta_4 PRS + \beta_5 TO + \beta_6 C + \beta_7 LP + \beta_8 HC + \beta_9 I + \beta_{10} BE + \beta_{11} P + \beta_{12} PS + \beta_{13} ER + \epsilon_t \quad \text{.....(2)}$$

Here,

The subscript i and t denote country and year, respectively.

α_0 is the coefficient term.

β terms indicate the slope coefficients of the respective explanatory variables and ϵ_t is the error term.

In this model, a linear relationship was established between FDI and its determinants, and the slope coefficients represent the intensity of the relationships. This study aimed to calculate the value of the slope coefficients using appropriate statistical methods.

In this process, this study first focused on selecting between fixed and random effect models. For this reason, this paper used the Hausman Specification test. After that, to find out if a pooled estimation approach is appropriate, this study used an F test. This study also adopted the Breusch-Pagan Lagrange Multiplier (LM) test to pick between a Random Effect (RE) and a Pooled OLS model. Once the model was selected, this study proceeded to perform some diagnoses on the quality of the panel data set.

The study adopted Pesaran's (2015) Cross-Sectional Dependence (CD) test to scrutinize if all the units in the same cross-section are correlated. Following this test, group-wise heteroscedasticity was checked by undertaking the Modified Wald Test. Besides, this paper also conducted the Wooldridge Test to identify if serial correlation was present. After these tests were done, this work focused on checking for the stationarity of the panel data set. For this purpose, this paper used the Pesaran (2007) CIPS panel unit root test, which accounts for cross-sectional dependence in heterogeneous panels. The Kao Panel Cointegration test was conducted afterwards. Finally, this paper utilized the Fully Modified Ordinary Least Squares (FMOLS) estimation technique to frame the results of slope coefficients and estimated the long-run relationship between FDI and the independent variables accordingly.

Data Source

This study conducted the analysis using the longitudinal data of 10 years from 2010 to 2019 of the ten ASEAN countries: Brunei Darussalam, Cambodia, Laos, Indonesia, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

The data sources of the variables used in this discussion are mentioned in the following table.

Table 1: Data source of the variables

Variables	Data	Data Source
FDI	FDI Inflows	ASEAN
MS	GDP (current US\$)	World Development Indicator
IR	Real interest rate (%)	World Development Indicator
F	Domestic credit to private Sector (% of GDP)	World Development Indicator
PRS	Inflation, consumer prices (annual %)	World Development Indicator
TO	Trade (% of GDP)	World Development Indicator
C	Corruption perceptions Index Score	Transparency International
LP	Logistics performance index: Quality of trade and transport-related infrastructure	World Development Indicator
HC	Labor force with intermediate education	World Development Indicator
I	Innovation index score	World Development Indicator
BE	Ease of doing business Rank	World Development Indicator
P	Value added per worker (constant 2010 US\$)	World Development Indicator
PS	Political Index risk	International Country Risk Guide
ER	Official exchange rate (LCU per US\$, period average)	ExchangeRates.org.uk

Results and Discussion

Trend of FDI inflows from 2010 to 2019

Foreign Direct Investment (FDI) is essential for the economic prosperity of any nation. When ASEAN decided to create a new and reformed economic integration for its member states, the main target was to ensure the free flow of investment. The blueprint of AEC mentioned that a liberalized investment strategy is crucial to bring FDI through enhancement in competitiveness. This study analyzed the data of FDI inflow within the ten ASEAN countries and total FDI inflows to these ASEAN countries from 2010 to 2019.

Data from 2010-2015 were used to detect the trend of growth before AEC. Hence, AEC was implemented in 2015; data from 2016 to 2019 were used to

investigate the trend after AEC. As data of FDI inflows within the ASEAN countries from 2010 to 2019 were plotted, it showed the following trend:

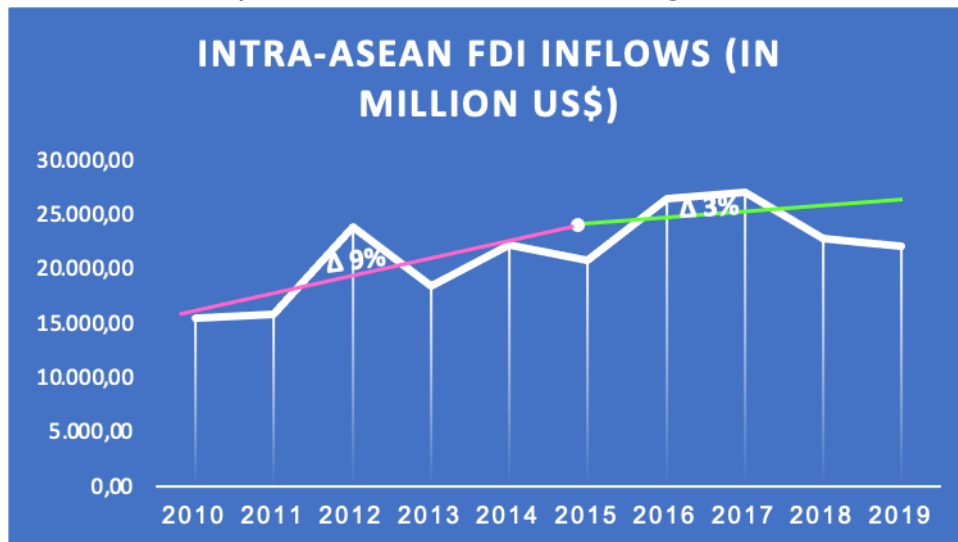


Figure 1: Inflows of intra-ASEAN FDI from 2010 to 2019

Figure 1 shows that the average growth rate lessened after the implementation of AEC. Before five years of implementation, AEC experienced an average growth rate of 9%, whereas the latter four years experienced only 3%. This suggests that after the implementation of AEC, the average growth rate of intra-ASEAN FDI inflow reduced significantly. The AEC Blueprint aimed to increase the competitiveness of intra-ASEAN investment, which was far from making any progress in the first four years of implementation of the AEC.

This study also explored the growing trend of total inward foreign investment to the studied region from 2010 to 2019.

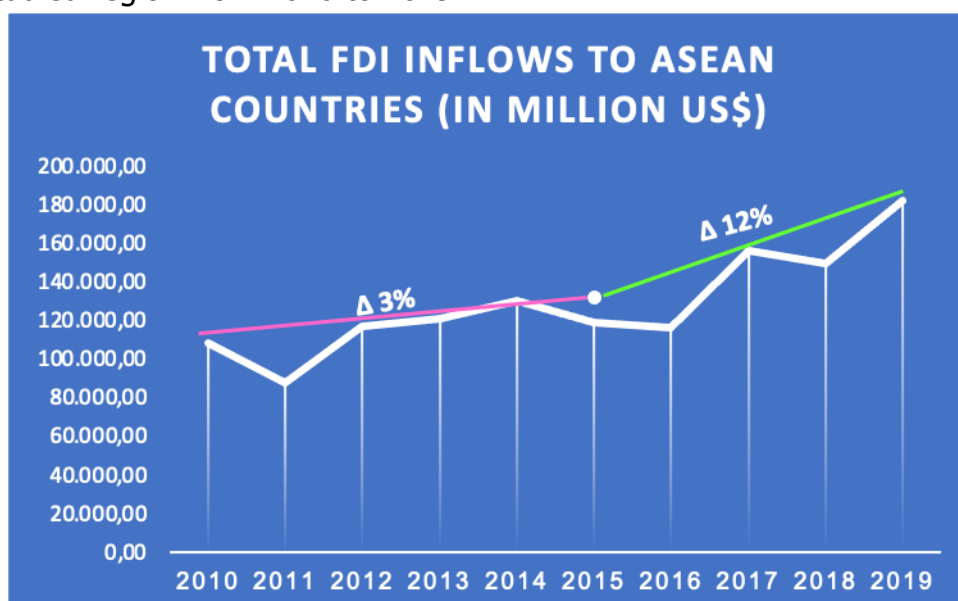


Figure 2: Total Inflows of FDI to ASEAN Countries from 2010 to 2019

The result is quite the opposite of the one obtained in the case of intra-ASEAN inflows. This shows that the average growth rate increased after AEC was implemented. The average growth rate is 12% in the later period, which was only 3% in the period before AEC was implemented. This indicates that the ASEAN countries experienced an increase in total FDI inflow growth significantly after AEC was implemented.

Preliminary Specification Diagnostics

Before conducting the cointegration-based estimations, preliminary specification tests (Hausman, F, and LM) were performed to examine whether a fixed, random, or pooled OLS structure might be appropriate under a classical static panel data framework. These results are reported here only as diagnostic information about the panel data structure. This study took the help of the Hausman test to select whether to use fixed or random effect models. "Individual effects being not correlated with any regressor in the model" is considered the null hypothesis in the Hausman Specification Test (Hausman, 1978).

H0: Random effect model is appropriate

H1: Fixed effect model is appropriate

Table 2: Hausman Specification Test for FE and RE Models

	Fixed Effect(re)	Random Effect (fe)	Difference (re-fe)	Standard Error
MS	0.0379322	0.0165065	0.0214257	-
IR	-5.14e+07	-9.72e+07	4.57e+07	1.05e+08
F	-2.27e+08	-5.95e+07	-1.67e+08	1.14e+08
PRS	1.11e+08	-6.46e+07	1.75e+08	1.09e+08
TO	2.37e+08	2.03e+07	2.17e+08	9.89e+07
C	1.02e+07	1.72e+08	-1.62e+08	2.88e+08
LP	1.13e+09	2.50e+08	8.80e+08	3.62e+08
HC	3.59e+08	-2.89e+07	3.88e+08	1.84e+08
I	4.13e+08	1.18e+08	2.96e+08	1.66e+08
BE	1.28e+08	-1.12e+08	2.40e+08	9.01e+07
P	411143.7	785158.1	-374014.5	-
PS	4.01e+10	6.40e+09	3.37e+10	1.69e+10
ER	-31853.49	-2296962	-2265109	-
P-Value			(0.0000)***	

Note: ***, ** and * indicate 1%, 5% and 10% significance level.

The result obtained indicates that the Fixed effect model is more suitable for this panel data set.

This study used the F test to see if the Pooled Ordinary Least Squares (OLS) model or the Fixed Effect model is appropriate for the studied data set.

H0: Pooled OLS Model is appropriate

H1: Pooled OLS Model is not appropriate

Table 3: F Test

F (9, 39)	1.13
P- Value	(0.3680)

The result obtained suggests non-rejection of the null hypothesis, leading to the decision that the pooled OLS model is more suitable for this panel data set.

The LM test is used to choose between a random-effects regression and a pooled OLS regression. In other words, it helps to examine if random effects exist.

H0: Pooled OLS Model is appropriate ($\sigma_u = 0$)

H1: Pooled OLS Model is not appropriate ($\sigma_u \neq 0$)

Table 4: Breusch-Pagan LM test

	Variance	Standard Deviation
FDI	6.11e+20	2.47e+10
E	4.86e+19	6.97e+09
U	0	0
P value	(1.0000)	

The result obtained suggests that the pooled OLS model is appropriate for the studied panel data set. The Hausman test indicated that the fixed-effects model would be preferable to random effects under the assumption of no cointegration. However, the F test results suggested that pooled OLS could not be rejected in favor of fixed effects, while the LM test likewise pointed towards pooled OLS being appropriate in the absence of cointegration.

Importantly, these specification diagnostics were considered preliminary only. Since subsequent unit root and cointegration tests (reported in Sections 5.4 and 5.5) established the presence of cross-sectional dependence and long-run relationships among variables, static estimators such as pooled OLS, fixed effects, or random effects were deemed unsuitable. Therefore, the final long-run estimation was conducted using FMOLS, which is specifically designed to handle cointegrated panels while correcting for endogeneity and serial correlation.

Tests for Cross-sectional Dependence, Heteroskedasticity and Serial Correlation

This test used the Pesaran (2015) cross-sectional dependence (CD) test to investigate if all units in the same cross-section are correlated. "Presence of weak cross-sectional dependence" is used as the null hypothesis of this CD test. Then the presence of heteroskedasticity in the model was checked utilizing the Modified Wald Test. This test for group-wise heteroscedasticity considers the "presence of no heteroscedasticity" as the null hypothesis. As panel data with serial correlation may cause some severe problems, this study used the Wooldridge test for autocorrelation. The Wooldridge test considers the null hypothesis of no first-order autocorrelation.

Table 5: Test for Cross-sectional Dependence, Heteroskedasticity, and serial correlation

Test	Result	
Pesaran Cross Sectional Dependence (CD) test	FDI	2.048 (0.041)**
	MS	13.778 (0.0000)***
	IR	1.383 (0.167)
	F	0.433 (0.665)
	PRS	4.025 (0.0000)***
	TO	-1.704 (0.283)
	C	9.609 (0.0000)***
	LP	2.536 (0.011)**
	HC	-1.023 (0.306)
	I	15.856 (0.0000)***
	BE	0.475 (0.635)
	P	7.473 (0.0000)***
	PS	7.077 (0.0000)***
	ER	11.085 (0.0000)***
Modified Wald test	Chi2	7.6e+30 (0.0000)***
Wooldridge test for autocorrelation	F	0.093 (0.7709)

Note: Values in the parenthesis indicate the p-value, and ***, ** and * indicate 1%, 5% and 10% significance level.

The result obtained from the CD test is significant for nine (09) variables, including the dependent variable. The modified Wald test confirmed the presence of heteroskedasticity, while the Wooldridge test indicated no evidence of first-order serial correlation.

Panel Unit Root Test:

The panel unit root tests were conducted using the Pesaran (2007) CIPS test, which accounts for cross-sectional dependence across countries, as preliminary cross-sectional dependence tests indicated significant interdependencies among the variables.

Table 6: Pesaran CIPS Panel Unit Root Test

Variable	Level CIPS	Decision at Level	First/Second Diff CIPS	Decision at First/Second Diff	Order of Integration
FDI	-1.231	Non-stationary	-2.687**	Stationary	I(1)
MS	-1.477	Non-stationary	-2.653**	Stationary	I(1)
IR	-2.596**	Stationary	–	–	I(0)
F	-2.330*	Stationary	–	–	I(0)
PRS	-2.957**	Stationary	–	–	I(0)
TO	-1.456	Non-stationary	-2.395*	Stationary	I(1)
C	-2.662**	Stationary	–	–	I(0)
LP	-1.084	Non-stationary	-3.903***	Stationary	I(2)
HC	-0.491	Non-stationary	-2.637**	Stationary	I(1)
I	-1.642	Non-stationary	-2.908**	Stationary	I(1)
BE	-1.400	Non-stationary	-3.633***	Stationary	I(2)
P	0.264	Non-stationary	-2.619**	Stationary	I(2)
PS	-2.847**	Stationary	–	–	I(0)
ER	-2.260	Non-stationary	-3.456***	Stationary	I(1)

Note: ***, ** and * indicate that at 1%, 5% and 10% significance level the variable is stationary.

The results indicate that most variables are integrated of order one (I(1)), while a few are stationary at level (I(0)) or require second differencing (I(2)) to achieve stationarity. For instance, FDI, MS, TO, HC, I, and ER are I(1), whereas IR, F, PRS, C, and PS are I(0). Variables such as LP, BE, and P are I(2), reflecting higher persistence. The Pesaran CIPS results reinforce the choice of a panel cointegration framework for the subsequent long-run estimation.

Panel Cointegration Tests

With the aim of exploring the presence of cointegration, this study used the Kao (1999) test for panel cointegration. This test considers “no cointegration” as the null hypothesis.

H0: No cointegration

H1: All panels are cointegrated

The result obtained is shown in the following table.

Table 7: Kao Test for Panel Cointegration

Variables	Tests	Statistic
MS	Unadjusted DF (Modified)	-7.8064 (0.0000)***
	Unadjusted DF	-14.6456 (0.0000)***
IR	Unadjusted DF (Modified)	-8.9783 (0.0000)***
	Unadjusted DF	-13.9297 (0.0000)***
F	Unadjusted DF (Modified)	-9.321 (0.0000)***
	Unadjusted DF	-15.2242 (0.0000)***
PRS	Unadjusted DF (Modified)	-9.3123 (0.0000)***
	Unadjusted DF	-15.1366 (0.0000)***
TO	Unadjusted DF (Modified)	-9.3020 (0.0000)***
	Unadjusted DF	-15.1253 (0.0000)***
C	Unadjusted DF (Modified)	-9.3005 (0.0000)***
	Unadjusted DF	-15.1221 (0.0000)***
LP	Unadjusted DF (Modified)	-9.2907 (0.0000)***
	Unadjusted DF	-15.0846 (0.0000)***
HC	Unadjusted DF (Modified)	-9.3388 (0.0000)***
	Unadjusted DF	-15.2277 (0.0000)***
I	Unadjusted DF (Modified)	-6.5142 (0.0000)***
	Unadjusted DF	-11.1813 (0.0000)***
BE	Unadjusted DF (Modified)	-8.6627 (0.0000)***
	Unadjusted DF	-14.7924 (0.0000)***
P	Unadjusted DF (Modified)	-7.8906 (0.0000)***
	Unadjusted DF	-13.2505 (0.0000)***
PS	Unadjusted DF (Modified)	-8.2176 (0.0000)***
	Unadjusted DF	-12.8971 (0.0000)***

ER	Unadjusted DF (Modified)	-9.2941 (0.0000)***
	Unadjusted DF	-15.1618 (0.0000)***

Note: Values in the parenthesis indicate the p-value, and ***, ** and * indicate 1%, 5% and 10% significance level.

The test considered the variables at the level and found the existence of cointegration among the variables. The rejection of the null of no cointegration provides the basis for applying panel FMOLS as the long-run estimation method. While preliminary diagnostic tests initially indicated that pooled OLS might be appropriate, the detection of cointegration among variables makes static estimators like pooled OLS or FE/RE unsuitable. Therefore, FMOLS was employed for the long-run estimation, as it corrects for both endogeneity and serial correlation, ensuring consistent and unbiased results.

Estimation of Model

To explore the long-run relationships among the variables, this study used Fully Modified Ordinary Least Squares (FMOLS), a panel econometric method introduced by Phillips and Hansen (1990). FMOLS is particularly useful because it adjusts for endogeneity and serial correlation that can occur when regressors are cointegrated, ensuring more reliable results. It provides unbiased and efficient estimates of long-run coefficients, making it well-suited for our dataset, which is relatively small and includes variables with different integration orders, as indicated by the Pesaran CIPS test.

The results indicate that most variables are integrated of order one (I(1)), including FDI, MS, TO, HC, I, and ER, while a few, such as IR, F, PRS, C, and PS, are stationary at level (I(0)). In contrast, LP, BE, and P exhibit higher persistence, requiring second differencing (I(2)). This mixed integration order underscores the suitability of FMOLS, as it can effectively handle cointegrated panels with such data properties while ensuring valid long-run estimates. To conduct the FMOLS estimation, the I(0) variables were retained in levels, as differencing them would eliminate meaningful long-run information. Likewise, the I(1) variables were also employed in levels, given that FMOLS adequately corrects for both endogeneity and serial correlation in the long-run cointegration relationship. However, I(2) variables are not directly suitable for cointegration-based methods such as FMOLS, DOLS, VECM, or ARDL. Therefore, these variables were transformed to achieve I(1) stationarity before being incorporated into the estimation framework. Finally, the variables are log-transformed to address heteroskedasticity, improve normality, and facilitate interpretation of the estimated coefficients as long-run effects.

Table 8: FMOLS Regression Results for Long-Run Determinants of FDI

Variable	Coefficient	Variable	Coefficient
lnMS	0.3613 (0.00)***	lnPRS	0.1748 (0.001)***
lnTO	0.1190 (0.045)**	lnC	0.1344 (0.029)**
lnHC	-0.0709 (0.84)	lnPS	-0.5058 (0.005)**
lnI	4.1325 (0.000)***	Δ lnBE	0.1389 (0.371)
lnER	0.0877 (0.000)***	Δ lnLP	0.1367 (0.771)
lnIR	0.1858 (0.080)*	Δ lnP	1.0385 (0.000)***
lnF	-0.4571 (0.000)***	Constant	-0.6093 (0.727)

Note: Values in the parenthesis indicate the p-value, and ***, ** and * indicate 1%, 5% and 10% significance level.

The FMOLS estimation identifies several significant determinants of FDI inflows in the ASEAN countries. Market size (lnMS, 0.3613, $p < 0.01$) and trade openness (lnTO, 0.1190, $p < 0.05$) are positively associated with FDI, suggesting that larger markets and higher levels of trade encourage investment. Other significant positive factors include innovation (lnI, 4.1325, $p < 0.01$), exchange rate stability (lnER, 0.0877, $p < 0.01$), price stability (lnPRS, 0.1748, $p < 0.01$), governance quality (lnC, 0.1344, $p < 0.05$), real interest rate (lnIR, 0.1858, $p < 0.10$), and productivity (Δ lnP, 1.0385, $p < 0.01$). Negative effects are observed for political stability (lnPS, -0.5058, $p < 0.01$) and domestic credit (lnF, -0.4571, $p < 0.01$). Variables such as human capital (lnHC), business environment (Δ lnBE), and logistics performance (Δ lnLP) are not statistically significant. The model demonstrates reasonable explanatory power, with $R^2 = 0.503$, indicating that about 50% of the variation in FDI inflows is accounted for by the included determinants.

South Asian Economic Integration

A good number of studies have already been done on the benefits of regional economic integration and have established positive and significant relationships for many. For instance, Balassa and Stoutjesdijk (1975) concluded that regional economic integration helps developing countries create economies of scale and enables their yet-to-be-established production structure to compete with the world. Clegg, Forsans, and Reilly (2003, p. 191) stated that "Regional integration offers insider firms incentives to invest more locally by reducing transaction costs and thereby increasing the rate of return on capital. At the same time, it creates motives for outsider firms to become insider firms." Kato, Suphal, and Piseth (1998) studied

the link between Cambodia's long-run sustainable economic development and its membership in regional integration like AFTA and ASEAN. They concluded that membership in regional integration has a positive and significant effect on the long-term sustainable economic development of Cambodia.

After seeing the benefits and success of regional economic integration around the world, like the European Union (EU), the North American Free Trade Agreement (NAFTA), the Asian Pacific Economic Cooperation Forum (APEC), the African Union (AU), the Association of Southeast Asian Nations (ASEAN), and many more, one may wonder why not South Asian economic integration. Regional integration is more of a political decision than a social, cultural, or religious one. In South Asia, several attempts have already been made for economic integration and regional economic cooperation.

On December 8, 1985, the South Asian Association for Regional Cooperation (SAARC) was established as the first attempt at regional cooperation to promote a free trade agreement with the aim of apprehending economic potential. The SAARC Preferential Trading Arrangement (SAPTA) was formalized in 1993 to facilitate economic cooperation with tariff concessions among SAARC countries. In 1997, the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) was formed with seven South Asian and Southeast Asian countries. Later, another agreement was validated in 2004 for the South Asian Free Trade Area (SAFTA), which constituted a free trade area of 1600 million people. Another notable sub-regional initiative was the BBIN Motor Vehicle Agreement among Bangladesh, Bhutan, India, and Nepal.

Although South Asian countries share homogeneity in historical, social, economic, and cultural aspects, SAARC has struggled to evolve into a cohesive economic grouping, resulting in delays in regional economic cooperation (Das, 1992). Muzaffar, Jathol, and Yaseen (2017) stated that SAARC could not achieve its desired progress because of regional power politics. They claimed the absence of discussion of political and other issues in the SAARC Charter as the main problem behind this. Several regional agreements have been made under SAARC, but their adequate implementation is questionable. Bhattacharjee (2018) opined that even though SAFTA has been in effect since 2006, which is regarded as one of the major successes of SAARC, the intra-regional trade remains at only 5%. BIMSTEC has emerged as another potential prospect of South Asian integration, although it leaves out three important South Asian countries: Afghanistan, Pakistan, and the Maldives. One can only hope that, seeing the enormous success of regional integration around the globe, the political leaders of South Asia could agree on establishing effective regional integration.

Conclusion

This study examined the trends of FDI inflows in ASEAN countries over 2010–2019, comparing the periods before and after the implementation of the ASEAN Economic Community (AEC). The analysis reveals that while intra-ASEAN FDI growth slowed after AEC, total FDI inflows to the region showed a clear upward trend, indicating that the overall attractiveness of ASEAN as an investment destination strengthened in the post-AEC period.

The FMOLS estimation highlights several key factors that underpin the attraction of FDI in ASEAN countries. In particular, larger markets and more open trade emphasize the role of the ASEAN Economic Community (AEC) in creating an integrated market and promoting cross-border trade, which in turn encourages investment. Innovation, exchange rate and price stability, governance quality, and productivity also contribute positively, further suggesting that the AEC fosters a more stable and cohesive economic environment. These findings provide a solid foundation for understanding how regional economic integration can support and sustain FDI inflows in the ASEAN region.

Finally, by highlighting the trends and determinants of FDI, this study provides insights that can inform policymakers in ASEAN and other regions. It also underscores why similar initiatives in South Asia, such as SAARC and SAFTA, have struggled to achieve meaningful economic integration, largely due to political and strategic challenges. The findings suggest that regional cooperation, if effectively implemented, has the potential to enhance investment flows and economic development, emphasizing the value of initiatives like the AEC in promoting long-term regional prosperity.

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