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The Effects of Regional Comprehensive Economic Partnership on Trade Openness of Lao PDR

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Abstract

This article aims to empirically investigate if the addition of infrastructure and FDI as control variables change the estimated coefficients for trade openness by RCEP (Regional Comprehensive Economic Partnership). Using the time series data from 2006 to 2024 and applying robust Ordinary Least Squares (OLS) estimation method, this article analyses how regionalization supported by domestic structural features is impacting Laos trade performance. The findings reveal that being an RCEP member promotes trade openness, referring to regional trade liberalization toward Laos's deeper integration into the world economy. Trade openness is similarly positively associated with infrastructure and foreign direct investment in an economy. Yet if the combined effort of these two elements leads them to operate negatively, it means that both their benefits drop when excessive even when not jointly designed in policy. We present diagnostics that indicate the regression model is consistent with some key econometric assumptions. Its value of R-squared =0.8718 indicates its strong explanatory power. The results support Infrastructure-based and Endogenous Growth Theories, demonstrating the value of implementing national reforms consistent with regional trading agreements. Policy implications emphasize the importance of coordinated policies on infrastructure investment, FDI invitation and trade facilitation in order to maximize potential benefits from RCEP. The study contributes to the understanding of how regional economic integration could help enhance trade openness in small landlocked developing economies, and has potential powerful policy implications and lessons for interested policy makers and researchers in the area of sustainable regionalism.

Keywords: *Regional comprehensive economic partnership, Trade openness, Infrastructure development, Foreign direct investment*

1. Introduction

However, in the last couple of decades, Lao PDR is gradually moving its development model into export-oriented one because it integrated into regional and global markets. Lao PDR is a landlocked least developed country, and its economic development is closely associated with trade facilitation and cooperation at the regional level (World Bank, 2023). The literature identifies trade openness as a cornerstone for achieving economic growth, structural change and poverty reduction, especially in the case of small developing economies (Dollar & Kraay, 2004). However, the trade performance of Lao PDR continues to be hampered by structural challenges such as poor infrastructure, low industrial diversification and modest inflows of FDI (Carruthers & Bajpai, 2021).

The formation of the RCEP (Regional Comprehensive Economic Partnership) was built on existing cooperation frameworks, including ASEAN+3 and ASEAN+6, with a particular focus on fulfilling the provisions contained in ASEAN's AEC Blueprint that involve strengthening economic integration across all of these Asia Pacific countries. Formal negotiations commenced in 2013 and continued over six years, with their conclusion on 4 November 2019 in line with the signing of the agreement by fifteen of its sixteen participant countries at a ceremony held on the sidelines of the 37th ASEAN Summit. In terms of economic scale, the RCEP bloc is the largest free trade arrangement globally, accounting for approximately 29 percent of global GDP and around 27 percent of total world trade (ASEAN, 2018).

RCEP offers Lao PDR reduced tariff and non-tariff barriers, trade rules that apply to all other members, without creating discrimination for products from outside RCEP area as well as better access to the market. This could render exports more competitive, making trade less difficult (Menon, 2022). But the size of such gains varies depending on how things are set up in the country. Infrastructure is a key factor in reducing transport and logistics costs, since this is a constraint to trade within landlocked least developed countries (Carruthers & Bajpai, 2021). Improved transportation, logistical and digital infrastructure durability can significantly reduce the cost of transaction and upgrade trading lure (Portugal-Perez & Wilson, 2012). FDI further spreads open trade doors through increasing the capacity to produce, through interconnecting local industry with global value chains, and by greasing the flow of technology across countries (Borensztein et al., 1998). Lao PDR A year after RCEP entered into effect in January 2022, Lao PDR ratified the new government regulation to improve the legal framework and facilitate trade affairs, thereby promoting trade relations not only with neighboring countries but also attracting incoming investment (ASEAN Secretariat, 2020). But the actual impact remains unclear because the country has a small production base, few types of export and geographical limitations. RCEP will work well if infrastructure and FDI inflows are strong. Without these, the potential benefits of trade may never materialize.

While RCEP has gained in prominence in the literature, little empirical research on it exists in relation to the Lao People's Democratic Republic. Studies on the agreement tend to evaluate its effects at the ASEAN or East Asian level (Wignaraja, 2020), typically paying less attention to more backward countries in terms of development. Besides, little existing research has paid attention to the aggregated effect of RCEP inclusion, infrastructure quality and foreign direct investment (FDI) on trade openness. This gap clearly calls for a careful empirical evaluation using country-specific data and robust econometric methodologies. This study, thus, utilize a robust OLS estimation to analyze the impact of RCEP on trade openness in Lao PDR controlling major infrastructure and FDI variables. The results are anticipated to add to the academic literature and bring policy-relevant evidence that can support policies in attempts of improving trade performance and long-term economic sustainability within RCEP.

Objective of study aims to determine whether the inclusion of infrastructure and FDI as control variables alters the estimated effect of RCEP on trade openness.

2. Materials and Methods

2.1 Research Design

The present study employed a quantitative econometric framework to examine how the RCEP has influenced the level of trade openness in the Lao PDR. The analytical framework for assessing the impact of the RCEP on trade openness is illustrated in the figure 1.

2.2 Data Collection

The data used in this analysis are annual time series for the period of 2006 - 2024. The data were obtained secondhand from the World Bank's World Development Indicators (WDI) database. The authors

downloaded the Trade Openness(TO), Infrastructure Index(Infra) and Foreign Direct Investment(FDI) variables directly from the WDI website by using World Bank Data portal.

To determine how open trade is, reseacher divide the total volume of trade (exports plus imports) by gross domestic product (GDP). To capture foreign direct investment, net FDI inflows are used as a % of GDP. The components of the Infrastructure Index were created utilizing infrastructure-related indicators that existed in the WDI database. The RCEP variable is also included as a policy indicator to capture the dynamics of regional trade integration over the study period.

It should also be noted that in September 2025, all data sets were retrieved and collected in order to ensure that a specific set of variables would stand up to comparison. The data were tested for fullness prior to the econometric analysis and no observations were imputed using standard time-series data treatment process.

2.3 Models

The analysis uses the Ordinary Least Squares (OLS) estimation technique with robust standard errors to correct for potential heteroskedasticity and ensure the reliability of parameter estimates. The general model specification is as follows:

$$TO_t = \underbrace{\alpha_0 + \alpha_1 RCEP_t}_{\text{Core explanatory variable}} + \underbrace{\alpha_2 Infra_t + \alpha_3 FDI_t}_{\text{Control variables}} + \alpha_4 Infra_t \times LnFDI_t + \varepsilon_t$$

TO is a trade openness ratio

RCEP is a dummy variable, which RCEP = 1 if ≥ 2015; before 2015= 0.

LnFDI is a Natural Logarithms of foreign direct investment

Infra is an infrastructure index, composite indicator from the logistics performance index, reflecting trade-related infrastructure quality (1=low, 5=high).

Infra x LnFDI is an interaction term between infrastructure index and foreign direct investment.

Hypothesis:

$\alpha_1 > 0$: RCEP has a positive and significant effect on trade openness in the Lao PDR.

$\alpha_2 > 0$: Improvements in infrastructure quality contribute positively to trade openness by enhancing connectivity and reducing transaction costs.

$\alpha_3 > 0$: FDI are associated with greater trade openness, reflecting the role of FDI in expanding production capacity and integrating domestic industries into global value chains.

$\alpha_4 > 0$: The interaction Infra × LnFDI exerts a moderating effect on trade openness, such that the combined influence of these two factors may either amplify or diminish the overall impact depending on their relative levels of development.

2.4 Data analysis

We used Stata (version 17) to analyze the data. The test was done in steps. To start with examined the correlation matrix of all available predictor variables to check for any multicollinearity issues, as well as to see if there were any linear relationships between the various features. Secondly, variance inequality factor (VIF) was used to formally test for multicollinearity. Then, we employed the OLS regression with the heteroskedasticity-robust standard errors to assure that the statistical inference remains valid even if error terms have non-constant variance. Finally, the estimates were subject to diagnostic testing to verify whether the model was satisfactory. We also conducted the White's test (White, 1980) and the Cameron &Trivedi (2005) IM-test to check the presence of heteroskedasticity and non-normal residuals.

3. Results

Strong and significant positive relationships are obsereved between RCEP membership and trade OPEN, between LnFDI and trade OPEN as indicated from the correlation results in Table 1. These results show that deeper regional integration and higher FDI inflows are positively associated with more trade openness in Lao PDR, which is consistent with the prescription of economic theory about trade liberalisation and capital movement. The high level of the correlation between RCEP and LnFDI is 0.7957, again manifesting that these two variables do gradually progress in a similar direction, providing warning regarding the possible issue of multicollinearity when jointly placed in one regression as dependent variables. Infrastructure however has a moderate correlation with RCEP (0.3684), trade openness (0.4689) and LnFDI (0.6478), signifying that it is representing a separate dimension of economic capacity pertaining to physical conditions underpinning trade movement. In general, the correlations are not extremely high, though they do approach those that require caution. So, diagnosis tests such as the VIF may also be employed to check if multicollinearity is a problem in the empirical model.

The average VIFs were 3.16, which are presented in Table 2. We know that the multicollinearity is not a serious problem in the model as all values are well below the commonly chosen cut-off of 10. Despite the highest VIF for LnFDI, it still falls within an acceptable limit and corresponds to our a priori belief about foreign investment and trade integration at regional level. The low VIF for Infrastructure, on the other hand, implies that it is capturing a different effect on trade openness. In sum, the evidence in Tables 1-3 indicate that all of the explanatorx variables can be included jointly without unduly influencing the stability or interpretability of the regression estimates, indicating that our empirical analysis is robust.

Five OLS robust regression models result (Table 3) give an integrated conclusion on the impact of RCEP participation, infrastructure quality, FDI and interaction effects on TO in Laos. In all of the models, robust standard errors were used to adjust for possible heteroskedasticity and to make reliable inferences about the significance of coefficients.

Model (1): Baseline Impact of RCEP on Trade Openness: In this section we assess the immediate effects of being party to RCEP on trade openness. The estimated coefficient on RCEP, of35.3575, is highly significant at the one percent level with a robust standard error of 5.6874. It shows that the participation and involvement of Lao PDR in the RCEP are positively correlated with trade grouping. In particular, a unit increase in the RCEP variable is expected to lead to approximately 35.36 percentage points increase of trade openness controlling for other factors. The model accounts for 71.15% of the overall variation in trade openness, and its F-statistic is significant, indicating that the model is significant as a whole. This is indicative of RCEP playing a significant role in advancing trade liberalisation and integration into the region's economy for Laos.

Model (2): If this specification also take infrastructure as part of the model, besides RCEP, the findings show that both are significant determinant of trade openness. The RCEP variable is still at a very high level of positivity inclined (32.5318) and statistically valid at 1 percent significant level suggesting that the impact of regional trade integration remain large effect after controlling for infrastructure facilities. The infrastructure enters the model with a positive and significant coefficient (8.2568), meaning that an improvement of physical and logistical capacity drives trade through transportation costs reduction, and an increase in connectivity. Adding infrastructure, the adjusted R2 increases to 74.05 percent and statistically significant F-statistic indicates that explanatory variables are jointly relevant. In general, the regression results reveal that trade policy integration and infrastructure are reinforcing factors in driving trade openness in Lao PDR.

Model (3): Addition of FDI Impact: Same as "model(2)" but including foreign direct investment (LnFDI). The RCEP coefficient reduces (to the value of 19.5477) with a standard error of 10.1878, and it is still weakly significant at the level of 10%, which indicates that part of the influence from RCEP on trade openness works through FDI efficiently. lnFDI is found to be positive but only significant at the 10 percent level with a coefficient of 12.8995; infrastructure becomes statistically insignificant (coefficient = -0.8633). This means that more FDI inflow is connected to more trade openness, which can be explained by technology transfer, production capabilities expansion and export promotion through investment. The R^2 = 0.7940 is evidence of significant explanatory power as over three quarters of the variance in trade openness can be attributed to this model.

Model (4): Joint Testing of RCEP, Infrastructure, and FDI: Keeping all three major variables' RCEP, infrastructure, and LnFDI with simultaneous inclusion. In this specification, all the RCEP and LnFDI coefficients (19.2260, 13.4030) remain to be positive however non-significant and no direct effect on infrastructure (Generator variable preserved). The constant term is highly negative (-29.2298), perhaps indicating that all three sense stages be considered, multicollinearity (overlapping effects) might not reveal the specific data's individual contributions. However, the overall statistical power of the model has remained significant (F = 21.14, p = 0.0000) with an R-squared value of 0.7941 showing consistent explanatory power. This model indicates that the individual effects of each factor attenuate when combined, presumably due to the correlation between them –RCEP causes both FDI and improvements in infrastructure.

Model (5): Introducing the Interaction Term Infrastructure × FDI This model introduces an interaction term Infra × LnFDI to account for the creating effect that the product of infrastructure and FDI may exert on trade openness. The interaction term is negative and highly significant, suggesting that, due to the substitution effect, the marginal impact of their product diminishes as Infrastructure and FDI both increase. Without proper coordination, excessive FDI in already well-developed sectors of the infrastructure does little to promote trade. At the same time, all main effects, i.e., RCEP, Infrastructure, and LnFDI, are positive and highly significant at the 1% level, which indicates that each of them independently promotes trade openness. However, their effect must be counterbalanced. Since the R-squared sharply increases to 0.8718, this model accounts for about 87.18% of the variation in trade openness. The F-statistic confirms that the model is highly significant, while the Root MSE indicates a good fit and enables more accurate predictions compared to previous models.

In all specifications, the evidence suggests that Laos' trade openness is most consistently and strongly affected by RCEP participation. Infrastructure investment and FDI are also important, but the influence of both depends on their extent of interaction. The negative interaction effect in Model (5) implies that although infrastructure and FDI independently facilitate the trade, their combined impact can lead to decreasing returns to scale effect if they are not strategically congruent. The fact that the R-squared value goes up to 0.87 in Model (5) from 0.71 in model (1), confirms significant improvement of model fit by including infrastructure, FDI and interaction terms. From economic perspectives, these findings suggest that trade openness of Laos is better off enhanced passively under regional integration (RCEP) regime and balanced infrastructure investment along with avoiding duplicative allocation of productive FDI.

The results of White's test for heteroskedasticity (table 4) tell us that the null hypothesis of homoscedasticity cannot by rejected. In particular, the corresponding Chi2 (12) = 11.92 and p=0.4520, which is far above the traditional levels of significance (i.e., level = 0:01, 0:05 or 0:10). It indicates that we do not have strong evidence of heteroskedasticity in the model

residuals. Additionally, Cameron and Trivedi's IM-test decomposition splits away from normality into three parts: heteroskedasticity, skewness and kurtosis. The homoskedasticity part is Chi2 (12) = 11.92, p = 0.4520 according to White's test. A three-factor model of skewness component was tested where it yielded Chi2 (4) = 3.43, p = 0.4885 and a two-factor model of kurtosis had the value Chi2 (1) = 0.57, p = 0.4485; considering that nonsignificant departures from normality in relation to asymmetry or tail behavior were detected. The joint test based on them has Chi2 (17) = 15.93, p = 0.5291, again indicating that the model is not materially mis-specified for heteroskedasticity, skewness and kurtosis.

4. Discussion

The results of this study yield unambiguous empirical proof that joining the RCEP is conducive to trade openness in the Lao PDR. In all models, RCEP remains robustly and positively associated with trade openness, thereby confirming the core argument that regional economic integration under RCEP construes an important tool in opening up trade and facilitating an open-policy orientation towards global markets for Laos. This result is consistent with trade liberalization theory which suggests that multilateral and regional trade agreements lower transactions costs, converge regulations and deepen market access (Frankel & Romer 1999; Dollar & Kraay 2004; Wignaraja 2020). The size and significance of the RCEP coefficient, especially in the baseline model, indicate that RCEP membership is a leading source of trade openness variation accounting for more than 70% of variation observed in the dependent variable. This supports the argument that trade policy liberalization through regional cooperation can serve as an effective process for small, landlocked economies to get around structural barriers and become more integrated into the global economy (ASEAN Secretariat, 2020; Menon, 2022). For Laos, the establishment of institutional structures under RCEP like common rules of origin, tariff elimination schedules and measures to facilitate investment had lowered the cost and risk for cross-border trade thus making domestic market more attractive for transnational capital (UNCTAD, 2024; Zhang et al., 2024).

Significant positive effect is observed for the introduction of infrastructure as a control variable, thus supporting Hypothesis. This finding is important as gains in the effectiveness of transport, logistics and communications directly contribute to Laos's capacity for effective participation in regional trade. Infrastructure serves as a trade facilitator by lowering time and cost barriers, particularly important for landlocked low-income countries (Carruthers & Bajpai, 2021; Donaubauer et al., 2018). The positive association between infrastructure development and trade openness is consistent with the larger "trade facilitation" model presented by Portugal-Perez and Wilson (2012), which suggests that both hard infrastructure such as roads, ports, electricity and soft infrastructure (including customs effectiveness, governance) together contribute to export performance. But as FDI is included in the following models, infrastructure loses its effect, suggesting endogeneity between infrastructure and inflows of investment. This implies that part of the effect by which infrastructure improves performance may work through being able to attract FDI leading to trade expansion. Hence the recent infrastructure projects by the Lao government like Laos-China Railway and cross-border connectivity projects might act as indirect triggers for trade, through creating conducive environment of investment (Asian Development Bank, 2022).

Results also provide support for the hypothesis 2 and past studies have suggested that FDI is positively and significantly related to trade openness (Borensztein et al.1998). This highlights the twin effect of FDI in facilitating export diversification and enhancing the production base of the host country. Through bring in new technologies, management and market access, FDI is conducive to expanding the participation of domestic

firms in international production network while increasing trade volume as well as competitiveness (Minh & Trinh, 2023; UNCTAD, 2022). The significant estimate of RCEP in the data set also implies that becoming a part of RCEP indirectly motivates trade openness by pulling FDI players who aspire for preferential access to regional markets. This is in line with the endogenous growth theory (Romer, 1986; Lucas, 1988) claiming that FDI and technology spillovers are essential sources of long-run productivity and openness. As such, RCEP functions as a means not only to liberalize trade but also to facilitate structural reform by attracting foreign capital and technology into the Lao economy.

Also, the interaction term (Infra × LnFDI) gives a negative and very significant coefficient. It is in line with hypothesis 4 and suggests that infrastructure and FDI have independent effects on trade openness, but their interaction has decreasing marginal effect when the values of both variables are high. In plain words, over-investment in infrastructure without accompanying institutional and regulatory enhancement may not significantly improve trade performance.

This scope for substitution corresponds to results of Donaubauer et al. (2018) who stressed that the influence of infrastructure on trade is highly dependent on policy supplements and absorption capabilities. When FDI inflows are highly channelized into sectors that already had good support from infrastructure facilities the marginal contribution of trade openness is reduced. Therefore, for Laos, it may be optimal to promote the complementarity choice of FDI location with infrastructure endowments especially in less developed areas for achieving higher trade efficiency rather than pursuing only aggregate investment expansion. The negative interaction effect also raises a point of policy: trade, investment and infrastructure strategies need to be coordinated in order to avoid resource overlap. By aligning public investment projects and private sector FDI, it is possible to strategically direct capital toward sectors with the highest trade potential (agro-processing, light manufacturing and logistics services). This policy coherence framework is in line with the World Bank (2023) and Asian Development Bank (2022) recommendation for balanced growth and efficient use of resources in developing economies.

The empirical results also have some policy implications. First, the RCEP's trade effects are positive only if physical and institutional infrastructure continues to be developed. Better logistics, connectivity (covering digital) and border facilitation will serve to reduce costs of transactions connect Laos to global value chains (Carruthers & Bajpai, 2021; Portugal-Perez & Wilson, 2012). Secondly, the policy coordination of TIA and IPIAs guarantee that FDI inflows are to export-based sectors. The creation of appropriate incentives for high value-added sectors, such as agro-industrial processing, renewable energy and manufacturing, would also amplify the trade effects and sustainable development (UNCTAD, 2034). The government should, at last, adopt an equitable approach that utilizes the infrastructure and FDI as supporting tools rather than at loggerheads. Either strategic PPPs or cooperation programs connected with RCEP members would improve the effectiveness of capital use and counteract the diminishing returns of the interaction term. It would help ensure that trade openness contributes to long term growth that is inclusive and supportive of Lao PDR's development objectives and the vision of ASEAN integration.

According to this study, RCEP membership has a robust and statistically significant impact on trade openness in Lao PDR. Infrastructure and FDI are significant endowments that facilitate the gains from regional integration, but also condition those gains. Infrastructure contributes to trade logistics and connectivity whereas FDI brings technology and market linkages that increase competitiveness. But their collective effect implies that in the absence of appropriate co-ordination, concurrent investment might undermine

efficiency gains. Such findings are supportive of the claim that when integrated with strategic domestic reforms, trade liberalization has the potential to lead to significant integration by Laos into regional and global trading systems.

5. Conclusion

The empirical results showed that's Laos's trade openness has improved significantly as a consequence of participation in RCEP, and this observation lends credence to the argument that regional economic integration is an effective driver for promoting globalization, attracting investment and bringing about structural transformation in developing economies.

The outcomes consistently indicate RCEP as the most significant factor determining Trade openness in Laos. The positive and statistically significant effect of RCEP suggests that membership in this regional arrangement has served to facilitate liberalization and cross-border trade through lowering tariffs, harmonizing trade rules, and enhancing firms' access to international markets. This observation is consistent with previous research that has stressed that multilateral liberalization enhances export expansion and economic co-dependency.

Apart from RCEP, the results emphasize the significance of infrastructure and FDI in influencing trade openness. Upgraded infrastructure increases connectivity, reduces logistics costs and improves the position of Laos in regional value chains. Likewise, FEE inflows ( ) enlarge productive capacity and the technology base and enhance the level of competition of host country industries. But the interaction term between infrastructure and FDI has a negative and significant impact which implies that they will not jointly work in such higher levels towards trade openness without strategic synergy. It emphasizes the importance of well-designed policies and effective capital allocation in creating complementarities between public investments and private sector involvement.

The model diagnostics also support the solidity and consistency of the econometric results. The good VIFR figures and a lack of heteroskedasticity also confirm that the regression assumptions are met, thus adding to the robustness of the results. Our ultimate model, which has an R-squared of 0.8718, is able to account for a significant amount of the variance in trade openness in Laos thus supporting that our choice of determinants can capture Lao's trade under the RCEP context.

5.1 Suggestions for use in this research

The policy implications of the findings in this paper are many. The Lao government needs to make the most of RCEP to further trade liberalization and increase export diversification. In addition, proactively engaging with RCEP members economies through trade facilitation initiatives, capacity building and digital trade rules will further promote competitiveness in, and integration into global value chains.

Second, trade-related infrastructure enhancement continues to be a strategic goal. Investments in logistics corridors, border crossings, energy supply and digital infrastructure will lower trade costs and allow the country to benefit more fully from regional trading opportunities. Such infrastructure projects as the Laos–China Railway and regional connectivity programmes in the framework of the ASEAN Master Plan on Connectivity (MPAC) should be connected with export promotion policies for optimal use.

Third, policies for FDI should be linked with national developmental objectives so that the investment inflows will lead to value-added production and export expansion. In the long term, stimulus would make trade expansion and employment creation through manufacturing, renewable energy and high-tech more robust by encouraging foreign investment. In addition, the government needs to enhance institutional mechanisms for processing FDI approvals, protection of intellectual property and PPPs.

5.2 Limitations

There are some limitations of this study despite its insightful findings. The estimation is based on secondary time-series and panel data that may not capture entirely well qualitative dimensions like institutional quality, governance or efficiency of trade facilitation. Future studies may utilise panel data on ASEAN least development countries (LDCs) to look at differences in variation across countries and more closely pinpoint structural impacts. Furthermore, the use of sophisticated econometric methods such as VECM and ARDL may enhance our understanding of the causal mechanisms that connect RCEP, FDI and trade openness.

Qualitative research through expert interviews or policy documents analysis would also help to supplement these findings by exploring how government agencies and businesses perceive the challenges of RCEP implementation. In addition, the nature of digital trade, e-commerce and the liberalization of the service sector would offer insightful implications of emerging trends related to trade openness in Lao PDR under RCEP.

6. Conflict of Interest

We certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

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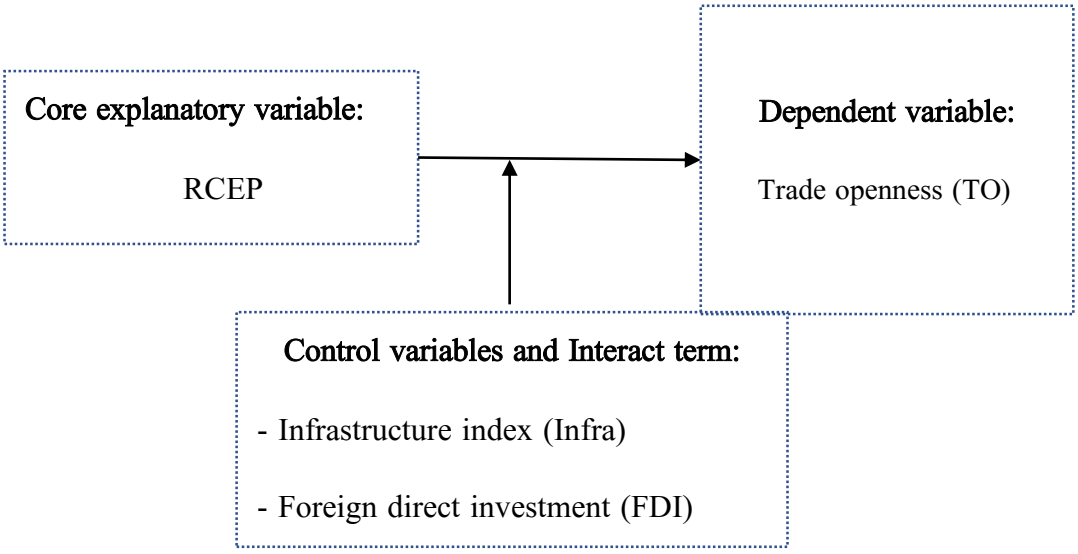

Figure 1: Theoretical Frameworks

Table 1: Multicollinearity Test

	TO	RCEP	Infra	LnFDI
TO	1.0000			
RCEP	0.8435	1.0000		
Infra	0.4689	0.3684	1.0000	
LnFDI	0.8451	0.7957	0.6478	1.0000

Table 2: Variance Inflation Factor (VIF) Test

Variables	VIF	1/VIF
LnFDI	4.52	0.2212
RCEP	3.03	0.3295
Infra	1.92	0.5213
Mean VIF	3.16	

Table 3: OLS Robust Regression Results

	TO is dependent variable				
Independent	OLS Robust				
Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)
RCEP	35.3575***	32.5318***	19.5477*	19.2260	16.8801
	[5.6874]	[5.6752]	[10.1878]	[11.7277]	[9.64995]

Infra		8.2568**		-0.8633	142.5655***
		[3.2597]		[6.571677]	[40.4859]
LnFDI			12.8995*	13.4030	56.4281***
			[6.6361]	[8.9220]	[15.2693]
InfraxLnFDI					-19.1674***
					[5.4186]
_Cons	47.8544***	30.3683***	-28.0938	-29.2298	-346.4894***
	[5.3876]	[8.4266]	[38.3437]	[42.9201]	[102.4886]
Number of obs	19	19	19	19	19
F-statistics	38.65	23.65	32.21	21.14	41.24
Prob	0.0000	0.0000	0.0000	0.0000	0.0000
R-squared	0.7115	0.7405	0.7940	0.7941	0.8718
Root MSE	11.884	11.619	10.353	10.687	8.7285

Note: ***,**,* Statistical significance levels of 0.01, 0.05 and 0.1 respectively

-The value in brackets "[ ]" is a robust std. error

Table 4: White's test

White's test
H_0: Homoskedasticity H_1: Unrestricted heteroskedasticity
Chi2(1) = 11.92; Prob > Chi2 = 0.4520

Cameron & Trivedi's decomposition of IM-test

Source	Chi2	df	P
Heteroskedasticity	11.92	12	0.4520
Skewness	3.43	4	0.4885
Kurtosis	0.57	1	0.4485
Total	15.93	17	0.5291

Note: ***,**,* Statistical significance levels of 0.01, 0.05 and 0.1 respectively