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FOREIGN DIRECT INVESTMENT, EXCHANGE RATE AND FINANCE-GROWTH NEXUS

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ABSTRACT
Present study revisits the financial market development and economic growth nexus by examining the path through which exchange rate determines the role of foreign direct investment on finance-growth link. Sample data represents 22 Asian countries for the period of 1998–2018. Following the categorization of World Bank, study divides the data in developing and developed countries. Findings depict that the developing countries can achieve maximum growth in times of fewer foreign direct investments and weaker home currency. While, developed countries can maximize their economic progression by increasing foreign direct inflows and appreciated home country's currency. Policy makers of developing countries should develop guidelines that encourage their local industry to foster economic growth and make necessary steps to stabilize their currency. In comparison to this, regulators of developed countries should relax trade tariffs and quotas to increase foreign direct investments and economic growth.
Keywords: Financial Market Development, Economic Growth, Exchange Rate, Foreign Direct Investment, Asian countries.
JEL Codes: G2, O1 and N2

INTRODUCTION
Financial markets, being an important pillar of a country's economy, play a central part in the growth of the industry by allocating the savings on productive investments. In addition to this, it enhances the sources of financing for both public and private firms. Many practical demonstrations have found on the subject of the impact of strong financial markets on country's growth. For instance, from the last few decades, financial markets have substantially improved Economic Growth (EG) of developed countries like United States and United Kingdom through the introduction of a wide array of financial products that allow them to allocate their savings efficiently. Few researchers have proved a significant positive relationship between Financial Market Development (FMD) and EG (Kar & Pentecost, 2000; Boulila & Trabelsi, 2002) while others claimed a completely different view and showed an opposite conclusion (Lucas, 1988; Stern, 1989). The reason behind this mixed evidence might be because FMD depends on a number of factors, like ER, political instability and Foreign Direct Investment (FDI).

In this globalization times, added investments in the form of FDI bring technological advancement and organizational knowledge that enhance the link between FMD and EG (Adams, 2009; Adam & Tweneboah, 2009). Developing and emerging economies have tried to boost foreign inflows by means of FDIs and remittances as well as external debt for infrastructural development, which will lead to long-term economic benefits. De Mello (1997) reports two main channels through which FDI may enhance growth. First, through capital spillovers, FDI facilitates the adoption of new technology in the production process. Second, FDI might stimulate the transfer of knowledge, in terms of labor training and acquisition of skills, introduction of alternative management practices and better organizational capabilities. It is generally believed that the growth in the financial markets, both stock and debt, has been determined by the demand and supply factors. Thus, higher FDI raises the

demand of external financing which ultimately triggers the growth of the financial markets. Empirical literature, although, found adverse effects of FDI on domestic savings and financial prospects (Kolawole, 2013). These controversial results indicate that the influence of FDI on derivation of EG through FMD is dependent on some other macro factor like ERs, trade openness, inflation, political stability and etc.

Financial studies, on international trade, identify ER as one of the most dominant factors in influencing FDIs in source country. After the failure of Breton Wood agreement in 1973, volatility in exchange rates started to increase all over the world. At this time, international business group began to believe that FDI in any country was strongly influenced by ER movements as depreciation in host country's currency encouraged foreign investors to purchase host country assets which ultimately strengthened their currency by demand and supply factors. On the other hand, Froot and Stein (1991) showed that appreciated home currency increased the relative wealth of foreign investors by lowering down their relative cost of capital and inclined them to invest more aggressively in foreign assets.

Present study aims to analyze how the FDI and ER influence the relationship between FMD and EG. Study contributes to existing literature in number of ways: at first, in-depth analysis has been done by analyzing the variations in finance – growth link with the levels of FDI and ER. At second, empirical tests on nexus of the above said variables had previously done on a single country. Present research pools a sample data of 22 Asian countries, comprises of both developed and developing countries. At third, developed and developing countries have been comparatively analyzed regarding the way ER changes the FDI patterns of these countries and how these differences influence their finance-growth link. At last, study empirically identifies the level of ER, FDI, FMD at which developed and developing countries can achieve their maximum growth level.

The rest of the paper is designed as follows: Section 2 briefly summarizes the theoretical literature on finance-growth nexus with influential role of FDI and ER. Section 3 mentions methodology and variable descriptions. Section 4 presents empirical findings with discussion and section 5 concludes the study with the policy implications and future directions.

Empirical Literature and Hypothesis Development

Financial Market Development and Economic Growth

Empirical literature highlights the existence of the long-run causality between FMD and EG for instance; Caporale et al., (2015) examined newly developed EU members and found little evidence regarding the FMD – EG relationship. Samargandi et al., (2015) put found negative relationship between financial development and economic growth in short run, however relationship shifted to inverted U shaped in long run. Ahmad et al., (2016) suggested an indirect relationship existed between financial development and economic growth through international financial integration. Sehrawat and Giri (2016) also found positive effect of FMD on EG in SAARC countries. Durusu-Ciftci et al., (2017) empirically showed that credit market played a stronger role in influencing economic growth rather than equity market. Hoque and Yakob (2017) discussed that foreign capital inflows played an intervening role on the finance-growth link. Their research proved that FDI, with flexible ER, should be promoted to support stock market development and economic progression. Qamruzzaman and Wei (2018) argued that financial development based on market factors and financial innovation resulted in higher economic progression. Guru and Yadav (2019) stated that stock market development and debt market development plays a paired role in determining economic development. Yang (2019) stated that FMD lead to an economic growth through means of tangible capital investments and total factor output. Study, therefore, based on literature hypothesizes:

H_{1a}: There exist positive relationship between Financial Market Development and Economic Growth.

Foreign Direct Investment and Economic Growth

Large number of empirical studies supported the theory that FDI increases EG. Pegkas (2015) demonstrated FDI stock as a significant factor in determining economic growth. Rehman (2016) and Siddique et al., (2017) identified a unidirectional relationship between FDI and EG. Sakyi and Egyir (2017) suggested that incremental effect of FDI on EG is possible by liberalization the trade policies. Ahmad et al., (2018) proved positive relationship between FDI and EG in both long run and short run. Similar findings were observed by Asamoah et al., (2019) and Rao et al., (2020). Suliman et al., (2018) suggested that sustainable EG can only be obtained through promoting FDI inflows. Empirical tests on OECD countries by Hanif et al., (2019) showed significant increasing effect of FDI on EG.

Owusu-Nantwi and Erickson (2019) statistically demonstrated long run relationship between FDI and EG. Dinh, et al., (2019) studied developing countries and findings implied that FDI influenced EG in long run, but no short-term benefit can be achieved from FDI. Opposite to present literature, Wu et al., (2020) observed a diminishing role of FDI on EG and depicted an inverted U-shaped relationship between FDI and EG. Qureshi et al., (2021) demonstrated that FDI derived EG of developed countries more extensively in comparison to developing countries. Study therefore postulates that:

H_{2a}: There exist a positive/negative relationship between Foreign Direct Investment and economic growth.

Role of Foreign Direct Investment and Exchange Rate on Finance-Growth Link

Few studies have empirically tested the relationship among foreign direct investment, financial market development and economic growth. Raheem and Oyinlola (2013) suggested that strong financial sector worked as a pre-condition behind positive relationship between FDI and EG. Hermes and Lensink (2003) also found that FDI negatively influenced EG in countries having underdeveloped financial system. Similar results were obtained by Alfaro et al., (2004). Anwar and Sun (2011) identified that financial development of a country determined economic growth through domestic capital stock. Shahbaz and Rahman (2012) suggested that Pakistani Government should establish financial policies to promote the efficiency of local financial markets which also employed as a pre-condition for acquiring FDI benefits. Yeboua (2019) showed that FDI promoted economic growth only when financial development is above the threshold level. Acquah and Ibrahim (2020) found negative effect of FDI and financial sector development on economic growth. Results suggested that underdeveloped financial system minimized the growth enhanced role of FDI. Farouq et al., (2020) recommended that policies should define to upgrade EG by enhancing FDI and FMD. Present study adds to the existing literature by testing the role of foreign direct investment on the link of FMD and economic progression of Asian courtiers.

H_{3a}: Foreign direct investment moderates the relationship between financial market development and economic growth.

Basirat et al., (2014) argued that the negative effect of FMD and ER interaction on EG is due to number of other factors regarding trade barriers and restrictions. Ehigiamusoe and Lean (2019) observed that high volatility in real exchange rate weakened the relationship between FMD and EG. Hoque and Yakob (2017) examined the three-way interaction effect of FMD, Foreign capital inflows and ERs on EG and observed that foreign capital inflows and ER played a strong moderating role on the finance-growth link.

Financial studies have examined these variables independently by using different sample data, while results are inconclusive in nature. To the best of author's knowledge, no study till now has explored the threshold levels of ER and FDI at which the Asian countries can achieve maximum growth benefits through financial market development. Current study extends an existing literature by testing *'how'* interaction of FDI and ER affects the well-established finance-growth link of Asian countries. Study, therefore, postulates that ER moderates the moderating role of FDI on FMD-EG link. A hypothesis is described below:

H_{4a}: Exchange rate moderately moderates the role of foreign direct investment on finance-growth link.

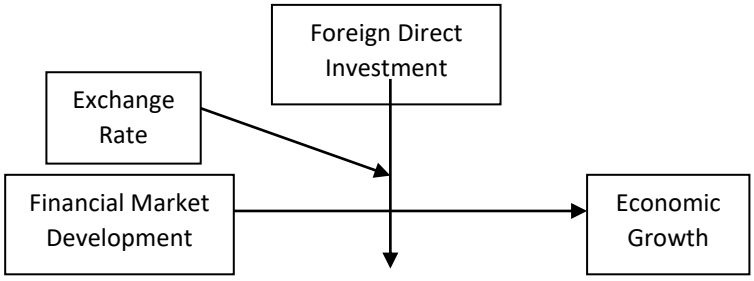
METHODOLOGY

Study investigates the role of FMD in determining EG, controlling the moderating effect of FDI and ER. Theoretical and empirical literatures have described these three as the main forces behind the economic development. The data on the explanatory variables of 22 Asian countries has found from the World Bank Database for the period of 1998-2018. The motive behind this study is to test *'how'* the finance-grown link influences positively by FDIs and ERs. Process software by Hayes (2012) has used for moderated moderation test. The theoretical framework of this study is as follows:

Following Beck and Levine (2004), EG is measured by GDP in terms of percentage. Present study employs three different indicators for FMD, i.e; Market Capitalization (MC), Domestic Credit to Private Sector (DCTPS) and bank Non-Performing Loans to total gross loan (NPL). The addition of equity investment with reinvestment of profits and long term & short-term capital is used to measure FDI. The value depicted the net foreign cash inflows in any country from foreign investors. In order to normalize the data, FDI inflows are scaled by GDP. ER is measured by considering the exchange rate

determined by the legal sanctioned exchange market and calculated as a mean of monthly averages (local currency in term of dollar). The econometric equation is described below:

$$EG_{i,t} = \beta_1 FMD_{i,t} + \beta_2 FDI_{i,t} + \beta_3 ER_{i,t} + \beta_4 (FMD_{i,t} * FDI_{i,t}) + \beta_5 (FDI_{i,t} * ER_{i,t}) + \beta_6 (FMD_{i,t} * FDI_{i,t} * ER_{i,t}) + \varepsilon_{i,t}$$



Where, β_1, β_2 and β_3 reflect the individual effects of Financial Market Development, Foreign Direct Investment and Exchange Rate on Economic Growth. Positive β_4 demonstrates an increasing role of foreign direct investment on finance – growth relationship. β_5 depicts the moderating effect of exchange rate on the relationship between foreign direct investment and economic growth. β_6 indicates the combined effect of foreign direct investment and exchange rate on the finance –growth link.

Empirical Findings and Discussion:

Table No. 1: Descriptive Statistics

	Mean	S.D
EG	1.96	3.76
MC	89.70	88.71
DCTPS	87.56	52.91
NPL	5.83	5.97
FDI	4.71	5.87
ER	134.42	325.55

Summary statistics, in table 1, depict those Asian countries have on average 1.95% GDP, which indicates their slow EG. Average value 89.7 % of Market Capitalization (MC) indicates that foreign investors could avail equity financing from Asian countries that can also provide an investment opportunity for foreign investors. Moreover, Domestic Credit to Private Sector (DCTPS) shows an average value of 87.52, which implies that financial institutions of Asian countries have capability to give loans to private sector as a source of financing. Lower value of Non-Performing Loans (NPL) to total gross loan shows that Asian countries have tighten their credit policies and have few defaulted loans. FDI depicts a value of 471%, which is high; indicating that foreign investors consider Asian countries as a source of investment opportunity due to its comparatively better financial markets and other low-cost factors of production. ER, relative to US dollar, illustrates a higher value of 134.51 which depicts that developed Asian countries from sample data have relatively strong currency in contrast to developing countries.

Table No. 2: Correlation Matrix

	EG	MC	DCTPS	NPL	FDI	ER
EG	1					
MC	0.157**	1				
DCTPS	-0.050	0.342***	1			
NPL	0.139*	-0.300***	0.231	1		
FDI	0.219***	0.477***	0.101	0.007	1	
ER	0.124*	-0.104	0.201***	-0.116	-0.203***	1

Note: ***, ** and * are significant at 1%, 5% and 10 respectively.

Correlation results in table 2 depict that stock market capitalization plays a strong correlation with the EG of Asian countries as an easy access to equity financing attracts foreign financiers for

investment. Opposite links of DCTPS and NPL with EG indicate that, despite of higher credit financing, Asian firms are less tending to payback loan on a timely basis. Positive correlation of FDI and ER with EG supports theoretical literature that higher investment by foreign investors and appreciated home countries foster EG. Significant positive correlation between debt market and stock market points towards the complementary role of equity and debt financial markets of Asian countries.

Table 3 reports empirical results regarding MC and EG link and 'how' FDI and ER affect such link. Findings regarding all Asian countries show surprising results as none of the individual effect of MC, FDI and ER turn to be significant, rejecting H_{1a}. Though, the combined effect of FDI and ER has significant negative influence on EG. This implies that in the presence of strong host country currency, FDI puts negative pressure on EG, though this effect is very small in magnitude. And this might be because strong currency enhances input costs of MNCs, which offset the growth benefits of FDI.

Table No. 3: Stock Market and Economic Growth

	All Countries	Developing Countries	Developed Countries
Constant	2.72***	3.86***	0.57
MC	-0.001	-0.01	0.01
FDI	0.032	-0.68***	0.06
MC*FDI	0.0002	0.02***	0.002
ER	0.000	-0.0003	-0.002
MC*ER	0.000	0.000	0.000
FDI*ER	-0.0002**	0.000	0.003*
MC*FDI*ER	0.000**	0.000	0.00
R square	0.03	0.16	0.12
F Statistics	2.03*	9.48***	3.49***
Test of Conditional MC*FDI interaction at value(s) of ER			
ER	Effect	Effect	Effect
Low	0.0002	-----	-----
Medium	0.0006	-----	-----
High	0.0106**	-----	-----
Conditional effect of the focal predictor at values of the moderator(s)			
FDI (ER)	Effect	Effect	Effect
Low (Low)	-0.0012	------	-----
Low (Medium)	-0.0012	-----	-----
Low (High)	-0.0022	-----	-----
Medium (Low)	-0.009**	-----	-----
Medium (Medium)	-0.0004**	-----	-----
Medium (High)	0.0125*	-----	-----
High (Low)	-0.0002	-----	-----
High (Medium)	0.0015	-----	-----
High (High)	0.0466**	-----	-----

Notes: ***, ** and * are significant at 1%, 5% and 10 respectively.

Nexus of MC, FDI and ER depict significant effect on EG, supporting H_{4a}; however, the magnitude of such effect is approximately zero. Conditional effects of the interaction term of MC and FDI, on various levels of ER, show that moderating role of FDI on the relationship between MC and EG is significantly positive only in case of strong host country currency. This shows that developed stock market increases foreign investor's confidence and they tend to enhance their investments by acquiring external financing at lower costs. Meanwhile, appreciated host country's currency increases the net realized return of parent companies. Detailed analysis, based on the conditional effects of FDI and ER on the relationship of MC and EG, provides robustness to earlier results that growth benefits of developed stock market is at maximum point in presence of high foreign direct inflows and appreciated host country currency. Surprisingly, no significant results have found when empirical tests are run separately for developing and developed countries.

Table 4 portrays the empirical results regarding the role of FDI and ER in determining the debt market and EG relationship. Results depict an insignificant effect of debt market on EG (nullifying H_{1a}), although, this effect turns to be significantly negatively in presence of FDI (supporting H_{3a}). This reflects that availability of cheaper domestic credit in host country will reduce the net return of parent company due to an increased interest costs attached with debt financing. Hence, despite of developed debt market, foreign investors are reluctant to acquire credit as strong currency increases their interest payments, which influence EG negatively (supporting H_{4a}).

Table No. 4 Debt Market and Economic Growth

	All Countries	Developing Countries	Developed Countries	All Countries	Developing Countries	Developed Countries
	X =DCTPS	X = DCTPS	X = DCTPS	X = NPL	X = NPL	X = NPL
Constant	2.37***	1.32	0.32	2.68***	5.40***	1.28***
X	0.003	0.03*	0.001	-0.015*	-0.18***	-0.07
FDI	0.27**	1.40*	0.41**	-0.03	-0.51	0.13*
X*FDI	-0.001**	-0.01	-0.002*	0.02***	0.06***	0.001
ER	0.0003	0.001**	0.003	-0.0002	-0.001**	0.003**
X*ER	0.000**	0.00***	0.000	0.000	0.00**	0.000
FDI*ER	0.0002**	0.0002*	0.001	0.0002*	0.0003***	-0.003***
X*FDI*ER	0.000**	0.000*	0.000	0.000	0.000***	0.0003*
R square	0.05	0.24	0.12	0.034	0.076	0.16
F Statistics	3.40***	8.97***	3.92***	2.29**	3.17**	6.21***
Test of Conditional X* FDI interaction at value(s) of ER						
ER	Effect	Effect	Effect	Effect	Effect	Effect
Low	-0.002**	-0.01	-----	0.023***	0.062***	0.002
Medium	-0.001**	-0.01	-----	0.022***	0.060***	0.003
High	-0.01***	-0.02**	-----	-0.005	0.008	0.004***
Conditional effect of the focal predictor at values of the moderator(s)						
FDI (ER)	Effect	Effect	Effect	Effect	Effect	Effect
Low (Low)	0.002	0.03*	-----	-0.02	-0.148***	-0.07
Low (Medium)	0.002	0.03*	-----	-0.02	-0.147***	-0.07
Low (Medium)	-0.014**	-0.02	-----	-0.02	-0.125***	-0.05
Medium (Low)	-0.0003	0.02**	-----	0.01	-0.093**	-0.07
Medium (Medium)	-0.001	-0.02*	-----	0.01	-0.094**	-0.07
Medium (High)	-0.021***	-0.03**	-----	-0.02	-0.12**	-0.05
High (Low)	-0.006	-0.01	-----	0.08**	0.049	-0.06

High (Medium)	-0.0072	-0.01	-----	0.08**	0.043	-0.05
High (High)	-0.04***	-0.09***	-----	-0.04	-0.01	0.27***

Notes: ***, ** and * are significant at 1%, 5% and 10 respectively.

In case of developing Asian countries, progressed debt market and FDI drives EG positively, while the combined effect of debt market and FDI on EG turns to be insignificant. Conditional effects underline the negative effect of debt on EG in states of high FDIs and ERs. This indicates that appreciated host country currency increases the firm's cost of capital and hence they are reluctant to acquire funds from the host country, which weakens the debt-growth link to a greater extent. In scenario of developed countries, findings show significant interacting role of FDI and debt market on EG which support the earlier view of 'demand side' theory of FDI. Results, furthermore, illustrate insignificant moderated moderating role of ER and FDI on debt-growth link.

Empirical findings turn to be surprisingly opposite in case when non-performing loans are used as a measure of debt market. Significant positive effect of interacting role of NPL and FDI on EG is perhaps because foreign investors feel comfortable in investing in countries with liberal investor's protection rights. Conditional effects give a detailed look on the debt-growth link at various levels of FDI and ER. Findings are quite interesting, as in developing countries, NPL's negatively influence EG with greater extent at low level of FDI and weaker host country currency, as explained earlier. Poorer investor protection rights in developing countries discourage foreign investments and lower down the ER that put downward pressure on EG. Hence, high NPL in this distress conditions slows down the economic progression. Contrary to it in developed countries, the effect of non-performing loans on economic growth is irrelevant of foreign direct inflows and country's exchange rate. This indicates an existence of other macro factors which may influences the debt market of developed countries and ultimately economic growth.

CONCLUSION

Study contributes to the current literature by empirically testing the bond of ER, FDI on finance-growth relationship by examine 22 Asian countries for the period of 1998-2018. Conditional findings suggest that high foreign direct inflows and appreciated home currency strengthen the relationship between the stock market and economic growth. However, debt market does not play a significant role in attracting foreign investment and economic progression. This implies high domestic debt increases the net realizable returns of foreign investors, and this reduction is higher in times of high foreign direct investments and appreciated host country currency. Although, developing countries can get growth benefits of debt markets by establishing policies, which encourage home industry by discouraging FDI inflows. In addition, policy makers should take steps to make home currency cheaper in order to increase their exports.

Contrary to it, developed countries can foster their economic progression by strengthening their home currency in order to acquire FDI inflows. Therefore, regulatory bodies should relax FDI restrictions and take necessary steps to appreciate their home currency. In addition to this, findings imply that economic advancement is irrelevant of stock market development, while well-established debt market will foster the economic growth of developed Asian countries. The study helps policymakers in identifying how drivers of EG in developing nations vary from developed ones. Findings, furthermore, empirically prove the theoretical literature that depreciated home country currency; strict FDI barrier and tariffs enhance local industry and exports of developing countries. Future research could be possible by including other macroeconomic factors on effect of FDI on finance-growth link. In addition to this, current study has examined only Asian countries; academicians can comparatively analyze the nexus of finance-growth with other developed regions of the world.

REFERENCES

Acquah, A. M., & Ibrahim, M. (2020). Foreign direct investment, economic growth and financial sector development in Africa. *Journal of Sustainable Finance and Investment*, *10*(4), 315-334.

Adam, A. M., & Tweneboah, G. (2009). Foreign direct investment and stock market development: Ghana's evidence. *International Research Journal of Finance Economics*, *26*, 178-185.

Adams, S. (2009). Foreign direct investment, domestic investment, and economic growth in Sub-Saharan Africa. *Journal of policy modelling*, *31*(6), 939-949.

Ahmad, F., Draz, M. U., & Yang, S. C. (2018). Causality nexus of exports, FDI and economic growth of the ASEAN economies: evidence from panel data analysis. *The Journal of International Trade and Economic Development*, *27*(6), 685-700.

Ahmad, R., Etudaiye-Muhtar, O. F., Matemilola, B. T., & Bany-Ariffin, A. N. (2016). Financial market development, global financial crisis and economic growth: evidence from developing nations. *Portuguese Economic Journal*, *15*(3), 199-214.

Anwar, S., & Sun, S. (2011). Financial development, foreign investment and economic growth in Malaysia. *Journal of Asian Economics*, *22*(4), 335-342.

Asamoah, L. A., Mensah, E. K., & Bondzie, E. A. (2019). Trade openness, FDI and economic growth in sub-Saharan Africa: do institutions matter? *Transnational Corporations Review*, *11*(1), 65-79.

Basirat, M., Nasirpour, A., & Jorjorzadeh, A. (2014). The effect of exchange rate fluctuations on economic growth considering the level of development of financial markets in selected developing countries. *Asian Economic and Financial Review*, *4*(4), 517-528.

Beck, T., & Levine, R. (2004). Stock markets, banks, and growth: Panel Evidence. *Journal of Banking and Finance*, *28*(3), 423-442.

Boone, P. (1994). The Impact of Foreign Aid on Savings and Growth. Centre for Economic Performance. Working Paper No. 677. London: London School of Economics.

Boulila, G., & Trabelsi, M. (2002). Financial development and long-run growth: Granger causality in a bivariate VAR structure, evidence from Tunisia: 1962-1997. *Faculte des SciencesEconomiqueset deGestion de Tunis*. (FSEGT).

Caporale, G. M., Rault, C., Sova, A. D., & Sova, R. (2015). Financial development and economic growth: Evidence from 10 new European Union members. *International Journal of Finance & Economics*, *20*(1), 48-60.

Caves, R. E. (1989). International differences in industrial organization. *Handbook of Industrial Organization*, *2*, 1225-1250.

Chenery, H. B., & Eckstein, P. (1970). Development Alternatives for Latin America. *Journal of Political Economy*, *78*(4), 966-1006.

De Mello Jr, L. R. (1997). Foreign direct investment in developing countries and growth: A selective survey. *The Journal of Development Studies*, *34*(1), 1-34.

Dinh, T. T. H., Vo, D. H., & Nguyen, T. C. (2019). Foreign direct investment and economic growth in the short run and long run: Empirical evidence from developing countries. *Journal of Risk and Financial Management*, *12*(4), 176.

Durusu-Ciftci, D., Ispir, M. S., & Yetkiner, H. (2017). Financial development and economic growth: Some theory and more evidence. *Journal of policy modeling*, *39*(2), 290-306.

Ehigiamusoe, K. U., & Lean, H. H. (2019). Influence of real exchange rate on the finance-growth nexus in the West African region. *Economies*, *7*(1), 23.

Farouq, I. S., Sulong, Z., Ahmad, A. U., Jakada, A. H., & Sambo, N. U. (2020). The effects of economic growth on financial development in Nigeria: Interacting role of foreign direct investment: An application of NARDL. *International Journal of Scientific & Technology Research*, *9*(3), 6321-6328.

Froot, K. A., & Stein, J. C. (1991). Exchange rates and foreign direct investment: an imperfect capital markets approach. *The Quarterly Journal of Economics*, *106*(4), 1191-1217.

Guru, B. K., & Yadav, I. S. (2019). Financial development and economic growth: panel evidence from BRICS. *Journal of Economics Finance and Administrative Sciences.*

Hanif, I., Raza, S. M. F., Gago-de-Santos, P., & Abbas, Q. (2019). Fossil fuels, foreign direct investment, and economic growth have triggered CO2 emissions in emerging Asian economies: some empirical evidence. *Energy*, *171*, 493-501.

Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling.

Hermes, N., & Lensink, R. (2003). Foreign direct investment, financial development and economic growth. *The Journal of Development Studies*, *40*(1), 142-163.

Hoque, M. E., & Yakob, N. A. (2017). Revisiting stock market development and economic growth nexus: The moderating role of foreign capital inflows and exchange rates. *Cogent Economics & Finance*, *5*(1),1329975.

Kar, M., & Pentecost, E. J. (2000). Financial development and economic growth in Turkey: further evidence on the causality issue. Uni.-und Land. Sac.-Anh..

Kolawole, B. O. (2013). Growth-effects of macroeconomic stability factors: empirical evidence from Nigeria. *Growth*, *3*(14), 47-56.

Lucas Jr, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22(1),3-42.

Owusu-Nantwi, V., & Erickson, C. (2019). Foreign direct investment and economic growth in South America. *Journal of Economic Studies*.

Pegkas, P. (2015). The impact of FDI on economic growth in Eurozone countries. *The Journal of Economic Asymmetries*, *12*(2), 124-132.

Qamruzzaman, M., & Wei, J. (2018). Financial innovation, stock market development, and economic growth: An application of ARDL model. *International Journal of Financial Studies*, *6*(3), 69.

Qureshi, F., Qureshi, S., Vo, X. V., & Junejo, I. (2021). Revisiting the nexus among foreign direct investment, corruption and growth in developing and developed markets. *Borsa Istanbul Review*, 21(1), 80-91.

Raheem, I., &Oyinlola, M. A. (2013). Foreign direct investment-economic growth nexus: the role of the level of financial sector development in Africa. *Journal of Economics and International Finance*, *5*(9), 327-337.

Rao, D. T., Sethi, N., Dash, D. P., &Bhujabal, P. (2020). Foreign aid, FDI and economic growth in South-East Asia and South Asia. *Global Business Review*, 0972150919890957.

Rehman, N. U. (2016). FDI and economic growth: empirical evidence from Pakistan. *Journal of Economic and Administrative Sciences*.

Sakyi, D., & Egyir, J.(2017). Effects of trade and FDI on economic growth in Africa: an empirical investigation. *Transnational Corporations Review*, *9*(2), 66-87.

Samargandi, N., Fidrmuc, J., & Ghosh, S. (2015). Is the relationship between financial development and economic growth monotonic? Evidence from a sample of middle-income countries', *World development*, *68*, 66-81.

Sehrawat, M., &Giri, A. K. (2016). The impact of financial development on economic growth. *International Journal of Emerging Markets*.

Shahbaz, M., & Rahman, M. M. (2012). The dynamic of financial development, imports, foreign direct investment and economic growth: co-integration and causality analysis in Pakistan. *Global Business Review*, *13*(2), 201-219.

Siddique, H. M. A., Ansar, R., Naeem, M. M., & Yaqoob, S. (2017). Impact of FDI on economic growth: Evidence from Pakistan. *Bulletin of Business and Economics*, *6*(3), 111-116.

Stern, N. (1989). The economics of development: a survey. *The Economic Journal*, *99*(397),597-685.

Suliman, A. H., Elian, M. I.,& Ali, H. E. (2018). Endogenous Specification of FDI and Economic Growth: Cross-Economies' Evidence. *International Journal of Business*, *23*(1), 89-109.

Wu, W., Yuan, L., Wang, X., Cao, X., & Zhou, S. (2020). Does FDI drive economic growth? Evidence from city data in China. *Emerging Markets Finance and Trade*, *56*(11), 2594-2607.

Yang, F. (2019). The impact of financial development on economic growth in middle-income countries. *Journal of International Financial Markets, Institutions and Money*, *59*, 74-89.

Yeboua, K. (2019). Foreign direct investment, financial development and economic growth in Africa: evidence from threshold modeling. *Transnational Corporations Review*, *11*(3), 179-189.