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Impact of Global Economic Trends on International Capital Flows: A Case of Selected Developing Countries

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ABSTRACT

The dynamic link between foreign capital flows in emerging nations and global economic trends is examined in this study. Trade and foreign direct investment (FDI), two important dependent variables, are the main focus of the research, which also looks at how they interact with other independent variables such broad money, CO2 emissions, GDP constant, gross fixed capital creation, and labor force. The study uses data taken from the World Development Indicators for the years 2000–2022 and uses unit root tests to evaluate the stationarity of the variables at the level and first difference. According to our research, wide money, CO2 emissions, GDP constant, gross fixed capital creation, and labor force have a favorable and substantial influence on trade and foreign direct investment (FDI) in developing nations. The results of the unit root tests reinforce the validity of our research by showing that the chosen variables are stable at the level. The study sheds light on the variables impacting the economic dynamics of emerging countries and offers insightful information on the complex relationships between global economic trends and international capital flows. The ramifications of these discoveries extend to stakeholders, investors, and policymakers who must comprehend and maneuver through the intricacies of capital flows within the dynamic framework of worldwide economic patterns.

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1. Introduction

The financial landscapes of emerging countries are significantly shaped by the dynamics of global economic trends in an era marked by growing interconnection and interdependence among states. The flow of international capital, which includes financial transactions like portfolio investments, foreign direct investment (FDI), and other types of investment, is greatly influenced by the state of the world economy. With a particular focus on 58 developing nations, this study explores the complex link between global economic trends and international capital flows. Financial market globalization has made economies more integrated and more vulnerable to the knock-on effects of changes in the world economy. Policymakers, investors, and other stakeholders must comprehend the intricate effects of global trends on these emerging countries' capital flows as they adeptly navigate the ever-changing international economic landscape. Capital flows are impacted both directly and indirectly by global economic patterns, which can range from interest rates and geopolitical events to trade dynamics and commodity prices. Financial crises, trade disputes, and economic recessions can cause a capital flight from developing countries, making them more susceptible to outside shocks. On the other hand, times of global economic expansion and stability frequently draw in foreign capital inflows, which can propel economic growth. Capital flows are impacted both directly and indirectly by global economic patterns, which can range from interest rates and geopolitical events to trade

dynamics and commodity prices. Financial crises, trade disputes, and economic recessions can cause a capital flight from developing countries, making them more susceptible to outside shocks. On the other hand, times of global economic expansion and stability frequently draw in foreign capital inflows, which can propel economic growth. Furthermore, innovation and technology improvements play a crucial part in this study. The accessibility and speed of international capital flows have changed in an era of rapid fintech innovation and digitization, which affects investors' expectations for risk and return in emerging nations. This research seeks to add to the body of knowledge by providing a thorough analysis of the complex interaction, within the framework of 58 developing nations, between international capital flows and world economic patterns. It aims to offer insightful information for investors, financial institutions, and politicians navigating the possibilities and difficulties brought about by the constantly changing global economic landscape by illuminating the subtleties of this related.

2. Literature Review

Sethi, Guisinger, Phelan, and Berg (2003) explained how macroeconomic and business strategy concerns have led to shifting trends in the flow and drivers of foreign direct investment (FDI). We pinpoint several variables that influence these patterns and formulate theories that may provide a general explanation for the phenomena. Subsequently, the study offers initial empirical backing for the claims made and delineates the necessary avenues for future research to explore further causal relationships. Findings show that US multinational enterprises (MNEs) are investing more in Asia to take advantage of low wages and open up new markets. A statistical analysis of investments made by MNEs in the US reveals significant shifts in the regional distribution of foreign direct investment (FDI) as well as a modification in certain of its traditional features. Alfaro, Chanda, Kalemli-Ozcan, and Sayek (2010) explored the role of financial markets on linkages. There is currently conflicting evidence about the impact of foreign direct investment (FDI) on growth. Some research indicates no discernible impact. We propose an approach that highlights the role of local financial markets in facilitating FDI's ability to drive growth through backward links, in an effort to better explain this empirical ambiguity. We quantify the growth response to FDI using plausible parameter values, and we demonstrate that in financially developed nations, a rise in the share of FDI leads to stronger incremental growth than in less developed ones. Jarret & Chinn. (2023), using a 25-year (pre-Covid) dataset, we investigate the impact of uncertainty on foreign direct investment inflows for developed, emerging markets, and developing nations. By applying a push-pull model and accounting for both local and global influences, we show that policy uncertainty affects inflows in a noticeable and significant way, with differing degrees of intensity and direction across various nations. Moreover, it seems that ambiguity regarding the host country is less important than uncertainty regarding the globe at large. We also see that a significant degree of uncertainty matters. In the end, developing and emerging markets are more vulnerable to the consequences of uncertainty due to financial openness.

Ali (2015) pre-tested stationarity using the Augmented Dicky-Fuller (ADF) unit root test before undergoing a regression analysis. The econometric program E-Views was used to assist in the regression analysis after the co-integrating component was ascertained using the Johansen Co-integration and Vector Error Correction Model (VECM) approaches. GDP is the determinant of the following variables: trade openness or trade liberalization policies; private physical capital investment; public capital investment ratio to GDP; gross fixed capital formation or gross fixed capital investment; and Pakistan's economic development. Since there is actual expected evidence of a long-term link with economic growth, all of the factors are important. The article argues that having access to skilled labor might boost productivity and that exporting finished items could boost the home economy. The variables under consideration include education, technical education, literacy rate, capital goods price index, and financial development, measured by the ratio of M3 to GDP (FD). Since there is actual expected evidence of a long-term link with economic growth, all of the factors are important. Qayyum and Zaman (2019) examined the long-term relationships between global trade, GDP, labor force participation, and economic growth in the context of Pakistan is the goal of the study. The findings in emerging nations are still unclear, despite a wealth of studies in several economic scenarios demonstrating a positive association between international trade and economic growth. This study looked at the impact of trade liberalization on Pakistan's economic growth from 1980 to 2017. The total labor force and gross fixed capital formation are the study's control variables. The Granger causality test and Johansen co-integration were employed in the investigation to provide dependable findings. In a particular nation, the findings support the

growth-led trade hypothesis. The results also show a unidirectional causal association between trade openness and gross fixed capital creation, as well as between total labor and economic growth. The research presented numerous policy recommendations for dispersing trade openness in a given nation to ensure long-term, sustainable growth. By integrating labor and capital into the trade-growth modeling to assess the endogenous production function—which is essential for the nation's long-term growth—the study contributes to the body of current work.

Wall (2022) used emission trading systems, which are based on the market, and placing a price on greenhouse gases are two ways to internalize the negative externality of pollution. However, pollution is a necessary instrument for economic growth, according to economic theory. This article aims to analyze the economic effects of the EU emission trading scheme, the first worldwide system for the trading of greenhouse gases, by analyzing gross fixed capital creation and economic development. In line with the theory of Mankiw, Romer, and Wiel (1992), this study conducts an empirical analysis using the fixed effects model on cross-country and cross-state panel data collected between 1999 and 2012. The results demonstrate that, in comparison to states and nations that do not participate in an emission trading scheme, the EU emission trading system impedes the growth of real gross domestic product per capita. Furthermore, the first phase outcomes have a favorable impact on economic growth, however the second phase results have a negative impact, as compared to states and countries that do not engage in an emission trading scheme. Statistics do not support the impact on gross fixed capital creation as a percentage of GDP. The results might be used by organizations to evaluate whether developing nations can afford the consequences of implementing a carbon trading system, which tends to impede economic growth. Further study is required to fully understand the consequences of the 2008 financial crisis and how the EU carbon pricing plan should be understood.

Kanu, Ozurumba, and Anyanwu (2014) assessed the agricultural productivity effects of gross fixed capital formation, exchange rate, and agricultural tariff. The study utilized secondary data spanning the years 1980–2022. The extended Dickey-Fuller Test was used to determine if the variables were stationary, and the co-integration test was used to determine how long-term the relationship between the variables was. The vector error correction model was used to analyze the effects of currency rates, agricultural tariffs, and gross fixed capital formation on agricultural production. The exchange rate and agricultural tariff became stationary on the first differencing; however, the variables agricultural production and gross fixed capital formation were determined to be stationary at a level using the Augmented Dickey-Fuller (ADF) test for unit root. One co-integrating equation exists for the variables, according to additional research using the Johansen co-integration mechanism to examine the series features of the variables. The co-integrating equation was shown to be statistically significant and negative (-0.1716) at the 1% probability level in the long-run ARDL data. Therefore, the research suggested that to promote imports and exports within the agricultural sector, the government should cut tariffs on agricultural items. Productivity will increase and local manufacturing will be encouraged.

Essandoh, Islam, and Kakinaka (2020) promoted economic integration with complex global supply chains, which is becoming more widely recognized as a crucial factor in determining CO2 emissions international production reallocation, which is frequently linked to foreign direct investment, facilitates trade in items with integrated emissions. Panel models of the pooled mean group-autoregressive distributive lag (PMG-ARDL) are used. This study explores the long-term significance of CO2 emissions, international commerce, and FDI inflows while taking into account the short-run dynamics spanning 52 nations from 1991 to 2014. This analysis focuses on potential differences between developed and developing nations and finds that CO2 emissions have a negative long-term relationship with trade for developed nations alone, but a positive long-term link with FDI inflows for developing nations exclusively. Due to increasing trade and foreign direct investment (FDI), which has resulted in the transfer of high-emission industrial units from developed to developing countries, rich countries have reduced their emissions at the expense of poor countries. Dou, Zhao, Malik, and Dong (2021) examined the possible impact and internal driving force of trade openness within the framework of the agreement on the carbon emissions of this region between 1970 and 2019. By dividing the sample into two subsamples—one from before and one from after the agreement was signed—we can ascertain the agreement's impact even more. Then, we look at imports and exports

separately in terms of carbon emissions and discover that: (i) trade openness increases the greenhouse effect and that signing an agreement can lessen the promotion effect of trade openness on carbon emissions; (ii) imports increase carbon emissions while exports significantly lower carbon emissions within a nation; and (iii) increasing trade openness has an impact on carbon emissions both directly and indirectly through three main effects (i.e., scale effect, technical effect, and structure effect).There are a number of important policy proposals offered in the conclusion to lessen the greenhouse effect and promote high-quality trade openness.

Chappin and Dijkema (2009) made short-term operational adjustments and long-term decisions on technology selection and (dis)investment in power-producing facilities. An agent-based model is introduced to clarify how CET influences electricity firms' choices in an oligopolistic market. Extensive scenario-space simulations demonstrate that CET does matter. There has been a long-term movement in the portfolio toward electricity production with lower CO2 intensity. CET does, however, have little impact and takes time to manifest. In most cases, the total emissions from the production of electricity increase. This is consistent with the predominant nature of the capacity growth currently planned in Germany (68%), where corporations have announced several new coal-based power plants, and the Netherlands (50%). Given that coal is the most carbon-intensive alternative available, it is remarkable that these plans for capacity development still show a preference for coal even with the implementation of CET. It seems that the financial benefits of CO2 emission trading in the electricity production sector are not great enough to offset the financial advantages of using coal. Rehman, Ma, Ahmad, Ozturk, and Işık (2021) ascertained how asymmetrically CO2 emissions affect commerce, FDI, expenditures, and Pakistan's use of renewable energy. The study utilized nonlinear autoregressive distributed lag, an asymmetric approach, to verify the positive and negative relationships between the variables. Additionally, the Granger causality test was employed to confirm the unidirectional relationship between the variables. The results of the study showed that in the short-run dynamics, the negative shocks of using renewable energy exposed significantly to an increase in CO2 emissions. On the other hand, positive shocks from renewable energy use show an adverse relationship with CO2 emissions. Moreover, the trend toward a decline in foreign direct investment helps mitigate the negative consequences of carbon dioxide emissions. Furthermore, variable costs harm the environment and have a positive correlation with CO2 emissions. There is no statistically significant correlation between trade and environmental damage. The findings also show that fluctuations in foreign direct investment can have a negative or beneficial impact on the quality of the environment. The use of renewable energy is positively correlated with CO2 emissions, a sign of decreasing pollution, according to long-term statistics. The advantages of this trend are marginally positive. The results also demonstrate that a decrease in CO2 emissions is a result of changes in FDI, both positive and negative. Moreover, it is shown that the expenses eventually cause the pollution issue to worsen once more. In the end, as the outcome shows, trade reduces CO2 emissions. By reducing carbon dioxide emissions, the research provides guidelines for a sustainable environment and will support the environmental policies for sustainable growth.

Shaari, Hussain, Abdullah, and Kamil (2014) looked at how economic expansion and foreign direct investment affect CO2 emissions. Panel data from fifteen developing nations were gathered over the years 1992 to 2012. The variables (FDI, CO2, and GDP) have a co-integrated connection, according to the findings of the Johansen co-integration. After that, the FMOLS was conducted, and the results showed that foreign direct investment had no long-term impact on CO2 emissions. As such, it suggests that increasing FDI has little effect on CO2 emissions. Conversely, an increase in economic growth might make CO2 emissions worse. Therefore, developing countries must enact environmental laws in order to attain economic sustainability. Last but not least, Granger causality based on VECM was used, and the results suggest that GDP and FDI have no immediate effect on CO2 emissions. Koçak and Şarkgüneşi (2018) stated that foreign direct investment has a growing impact on the level of pollution in the host nation, has been the subject of debate in the field of economics recently. This study uses the environmental Kuznets curve (EKC) model to investigate the possible effects of foreign direct investments on CO2 emissions in Turkey from 1974 to 2013, as part of a related topic. For this, three methods are used: the dynamic ordinary least square estimator (DOLS) by Stock and Watson (Econometrics 61:783–820, 1993), the bootstrap test for causality approach by Hacker and Hatemi-J (J Econ Stud 39(2):144–160, 2012), and the structural break cointegration test

by Maki (Econ Model 29(5):2011–2015, 2012). The results of the research indicate a long-term balanced relationship between FDI, GDP growth, energy use, and CO2 emissions. This equation (1) suggests that foreign direct investment (FDI) in Turkey may have a positive impact on carbon emissions. This result confirms the validity of PHH in Turkey. supposition in Turkey. Furthermore, this is a two-way link since changes in CO2 emissions have an influence on FDI inflows. (3) The results provide more evidence for the applicability of the EKC theory in Turkey. The research concludes numerous policies and offers several recommendations in light of these findings.

Slaughter (2001) appeared that demand is becoming less elastic with time. Third, there is, at most, equivocal evidence to support the claim that trade enhanced elasticities. When industry controls are the only factors considered, several trade-related variables for production labor have the anticipated impact on specifications, but these projected effects vanish. Things are slightly better for nonproduction work, but time is still a very powerful predictor of patterns of flexibility. As a result, time itself serves as a major residue in explaining the time series of labor-demand elasticities. This outcome is consistent with research showing growing salary disparity. The observed changes in factor demand elasticities over time appear to be accompanied by a sizable unexplained residual, much like the changes in factor prices. Johnson and Stafford (1999) explained the appropriate method of labor market analysis when the economy of focus is open as opposed to closed. The idea that, in some circumstances, the skill distribution of the labor supply in an economy does not influence the skill distribution of wages in that country is perhaps the most significant implication of neoclassical trade theory for labor economics. The extent to which these prerequisites are likely to be met is the main topic of our analysis of the trade literature. Inspired more by the empirical than the strictly theoretical branch of the trade sector, our basic conclusion is that the proper definition of the labor market's behavior is a combination of closed and open models.

Ramzan, Sheng, Shahbaz, Song, and Jiao (2019) based on data collected over 35 years, from 1980 to 2014, from a balanced panel of 82 countries and used the system GMM estimator that is intended for dynamic panel data models to reduce the potential endogeneity issue. The results reveal an intriguing non-linear connection between GDP growth and trade openness when the amount of TFP development is taken into account. Conversely, it is apparent that trade liberalization boosts GDP growth in nations that reach a minimal TFP development level. Trade may be detrimental to GDP development in countries with low levels of poverty and technical advancement. Consequently, trade openness and TFP development level show a complementarity pattern, indicating that trade openness influences GDP growth more at higher TFP development levels. Shafaeddin (1995) suggested that these nations liberalize their trade to increase GDP and exports as well as diversify their manufacturing-based production and export systems. However, this analysis finds that since the early 1980s, there hasn't been a clear and continuous correlation between trade liberalization and devaluation on the one hand, and the growth and diversification of output and exports of LDCs on the other. In many least-developed countries (LDCs), trade liberalization has been followed by deindustrialization, and the expansion of exports has not always been matched by an increase in supply capacity. On the other hand, the study ties the success or failure of GDP and industrial growth to a number of variables, including the quantity of investment and the accessibility of imports. The creation of trade policy modifications has been a major contributing factor to performance failure. Additionally, the author presents a unique plan for trade policy reform that emphasizes the need for greater supply capacity and makes distinctions between countries according to their unique characteristics, industrial base, and level of development.

Do and Dinh (2020) showed that GDP growth per capita has a long-term negative impact on CO2 emissions. Energy use and trade openness have a negative effect on CO2 emissions. Carbon dioxide emissions and foreign direct investment as a percentage of GDP have a positive link over an extended period of time. In addition, there is a one-year lag between energy usage and CO2 emissions and a two-year lag between short-run GDP per capita and CO2 emissions. These results have important implications for policymakers in Vietnam who are considering the long-term impacts of economic development on maintaining sustainable growth, having recently released the country's FDI policy. Aneja and Arjun (2022) utilized data from 1990 to 2019 in the study to examine the implications. GDP and Net Barter Terms of Trade have been analyzed using an autoregressive distributed lag model (ARDL). The

study's findings show that economic growth and trade are co-integrated in Egypt's economy, but this co-integration does not extend to Guinea. The study also shows that GDP and terms of trade are correlated both short- and long-term in Egypt, where a primary-sector-focused economy has a comparative disadvantage in terms of trade. Thus, the data provides some support for the Prebisch–Singer theory.

3. Data and Methods

The data examined the effects of broad money, CO2 emissions, GDP constant, gross fixed capital, labor force, trade, and foreign direct investment over the short and long terms in a worldwide sample of 58 developing nations. The purpose of this categorization section is to show how each variable directly affects trade and foreign direct investment. The time frame is from 2000 to 2022. The World Development Indicator is the source of the statistics. The precise unit of measurement for variables such as GDP constant, gross fixed capital formation, and broad money in US current dollars, as well as other variables like labor force in numbers units and CO2 emission measure in kilo tons. The unit root test and Pannel ARDL (Auto Regressive Distributed Lag) are data analysis techniques. Finding the data's incorporation sequence is the primary goal of this empirical method.

3.1. Model Specification

As per objectives of the study, the following model is specified;

$$\text{Trade} = f\begin{pmatrix} Broad\ money \\ Co2\ emission \\ Gross\ fixed\ capital \\ Labor\ Force \\ GDP\ constant \end{pmatrix}$$

$$\text{Foreign Direct Investment} = f\begin{pmatrix} Broad\ money \\ Co2\ emission \\ Gross\ fixed\ capital \\ Labor\ Force \\ GDP\ constant \end{pmatrix}$$

The apparent relationship between Trade and the other explanatory variable was clarified. The conversion of econometric form from functional form

$$In\ T_{it} = \alpha + \alpha_1 InGFC_{it} + \alpha_2 InBM_{it} + \alpha_3 InLF_{it} + \alpha_4 InGDPC_{it} + a_5 InCo2_{it}$$

Table 1: Description of variables

Variables	Description of variable	Unit of Measurement	Data Sources	Expected Relationships
Trade	Trade	% of GDP	WDI	positive
FDI	Foreign direct investment	% of GDP	WDI	positive
B M	Broad money	% of GDP	WDI	positive
FCF	Fixed capital Formation	Current US $	WDI	positive
LF	Labor Force	Numbers	WDI	positive
R GDP	Real GDP	Current US$	WDI	positive

4. Results and Discussion

4.1. Correlation Analysis

The correlation shows the degree of association between two variables. The value 1.00 has shown a strong association of Trade with other explorer variables. The broad money has a moderate correlation with trade. The given value of 0.40 relies relatively between weak and strong. The correlation proposed that there is strong and positive coordination between Co2 emission and trade. The CO2 emissions were highly correlated. But moderate with broad money. It is strongly affiliated with trade and CO2 emission. The value of broad money is divided between weak and strong. There were strong and positive correlations between trade, CO2 emission, General GDP constant, Gross fixed capital, and with Labor force. But, the degree of association between Broad money is positively weak.

Table 2

Correlation Probability	Trade	FDI	Broad Money	CO2 Emissions	GDP Constant	Gross Fixed Capital	Labor Force Total
TRADE	1.00						

FDI	0.12	1.00					
	0.00	-----					
Broad Money	0.47	0.50	1.00				
	0.00	0.00	-----				
CO2 EMISSIONS	0.81	0.27	0.45	1.00			
	0.00	0.00	0.00	-----			
GDP CONSTANT	0.89	0.05	0.37	0.90	1.00		
	0.00	0.04	0.00	0.00	-----		
GROSS FIXED CAPITAL	0.90	0.11	0.44	0.88	0.96	1.00	
	0.00	0.00	0.00	0.00	0.00	-----	
LABOR FORCE TOTAL	0.73	-0.14	0.07	0.79	0.86	0.82	1.00
	0.00	0.00	0.00	0.00	0.00	0.00	-----

Broad money has a moderate correlation with Foreign Direct investment. The given value of 0.50 relies relatively between weak and strong. Foreign direct investment and wide money have a weak and negative relationship. The emissions of CO2 were strongly connected. The value gives a weak but positive correlation with foreign direct investment. The value of broad money, co2 emission, and Labor force have strongly correlated with gross fixed capital formation. The values of Gross fixed capital and labor force and Co2 emission were significant and strongly correlated. but the scenario was different for broad money. Because broad money has weakly correlated variables.

4.2. Unit root test

For examining unit root, Levin, Lin and Chu – unit root test has been applied on the study and their results are provided in table 4. This table shows that Broad Money, FDI and GDP constant are stationary at level while Trade, Co2 Emission, Gross Fixed Capital formation and Labor force are stationary at 1st difference which guides us to apply Panel ARDL (PMG) technique for reliable estimates.

Table 3: Levin, Lin & Chu test at Level including Intercept

Variable	t-Statistics	p-Value	Remarks
At level including Intercept			
Trade	0.32	0.63	----
Broad money	-3.28	0.00	I(0)
Co2 emission	0.20	0.58	----
Gross fixed capital Formation	0.19	0.57	----
Labor Force	0.18	0.58	----
Foreign Direct Investment	-3.27	0.00	I(0)
GDP Constant	-5.22	0.00	I(0)
At 1st difference including Intercept			
Trade	-14.68	0.00	I(1)
Broad money	-5.37	0.00	----
Co2 emission	-10.94	0.00	I(1)
Gross fixed capital Formation	-11.46	0.00	I(1)
Labor Force	-6.78	0.00	I(1)
Foreign Direct Investment	-14.48	0.00	----
GDP Constant	-11.19	0.00	----

4.3. Econometric Results

The data research including 58 nations shows that trade and the other elements have a typically positive association. There is a positive correlation between the capital values of Broad Money and the trading sector. It makes potential inflationary tendencies easier for policymakers to understand. Central banks usually take into account both narrow and broad money when deciding on monetary policy. A robust relationship has been found by researchers between the money supply, inflation, and interest. The significance of CO2 emissions stems from their role Since 20 to 30 percent of global CO2 emissions come from international trade,

reducing these emissions is essential to larger efforts to slow down climate change. Interestingly and fortunately, the shifting GDP component affects commerce as well. GDP is significant because it provides details on the size and state of an economy. The real GDP growth rate is a widely used gauge of the state of the economy generally. Increasing real GDP is often regarded as a sign of a strong economy. Because growth, the direction, and the amount of capital flow were all more automated as gross fixed capital increased. Things would get better. The p-value for the Labor Force is significant.

Table 4: Model 1 (Trade)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
	Long Run Equation			
Broad Money	0.461044	0.027961	16.48868	0.0000
CO2 emission	-0.129409	0.024979	-5.180772	0.0000
GDP Constant	0.370065	0.039129	9.457577	0.0000
Gross Fixed capital	0.335350	0.031125	10.77426	0.0000
Labor Force Total	-0.898724	0.065461	-13.72916	0.0000
	Short Run Equation			
COINTEQ01	-0.276328	0.040589	-6.808008	0.0000
Broad Money	0.116694	0.065616	1.778447	0.0758
CO2 Emission	-0.014346	0.095837	-0.149692	0.8811
GDP Constant	1.796517	0.371555	4.835133	0.0000
Gross Fixed Capital	0.261984	0.062869	4.167117	0.0000
Labor Force Total	3.939223	1.648516	2.389556	0.0171
C	6.234657	1.036919	6.012672	0.0000
Log likelihood	1931.777			

Broad money: A nation's progress depends on foreign direct investment. Increased economic activity, the creation of jobs, the development of infrastructure, and exposure to cutting-edge technology are all advantageous to host countries. The data research including 58 nations shows that there is a usually positive association between foreign direct investment and the other characteristics. There is a positive correlation between the capital values of Broad Money and the trading sector. It makes potential inflationary tendencies easier for policymakers to understand. Federal Reserve's usually take into account both narrow and broad money when deciding on monetary policy. A robust relationship has been found by researchers between the money supply, inflation, and interest rates.

Co2 emission: Because of the strong yet unfavorable relationship that exists between CO2 emissions and foreign direct investment, since 20 to 30 percent of global CO2 emissions come from international trade, reducing these emissions is essential to larger efforts to slow down climate change. P value shows that co2 emission is negative but significant with trade.

GDP: Trade is also significantly and favorably impacted by the variable GDP constant. GDP is important since it tells us about the size and health of an economy. One often used gauge of the state of the economy generally is the real GDP growth rate. Growth in real GDP is usually regarded as an indication of a strong economy. There has been satisfactory progress achieved. The table p value shows positive and significant impact of GDP with trade.

Gross fixed capital: There is also positive and significant relationship like other explanatory variables. Countries with robust capital formation often attract foreign direct investment. FDI brings not only capital but also access to international markets, expertise, and technology. This can further stimulate trade by integrating local economies into global value chains. Diversification of the Economy Investment in diverse sectors can lead to economic diversification. A more diversified economy can produce a broader range of goods and services for export. This reduces reliance on a limited number of export commodities and spreads trade risk across various sectors. Development of Human Capital Investments in education and training, considered part of human capital formation, improve the skill level of the workforce. A more skilled workforce can enhance productivity and innovation, leading to the production of higher-value goods and services suitable for international markets.

Labor force: A skilled and motivated workforce enhances productivity, leading to higher output and efficiency. This productivity gain is crucial for meeting the demands of trade, ensuring timely delivery of goods and services. Quality Improvement Labor forces that are

well-trained and experienced contribute to better quality products and services. High-quality offerings are more competitive in the global market, driving trade growth. Innovation and Adaptability A diverse and dynamic labor force brings in new ideas and innovation. The p value is 0.00 that is positive and significant.

Table 5: Model 2 (Foreign Direct Investment)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
	Long Run Equation			
Broad Money	0.5618	0.0994	5.6507	0.0000
Co2 emission	-0.7833	0.1498	-5.2269	0.0000
GDP constant	-0.7792	0.1872	-4.1611	0.0000
Gross fixed capital	0.9351	0.0930	10.0556	0.0000
Labor Force Total	0.0838	0.2341	0.3582	0.7202
	Short Run Equation			
COINTEQ01	0.7177	0.0578	12.4001	0.0000
Broad Money	0.3431	0.3465	0.9901	0.3224
CO2 Emission	-0.4017	0.5574	-0.7206	0.4714
GDP constant	0.2121	1.4657	0.1447	0.8850
Gross Fixed Capital	0.5118	0.2561	1.9987	0.0460
Labor Force Total	7.6817	7.3444	1.0459	0.2960
C	-4.6409	0.4723	-9.8255	0.0000
Log likelihood	-320.5597			

Broad money: Broad money, often referred to as M2 or M3, includes not only physical currency but also savings deposits, money market securities, mutual funds, and other time deposits. It represents the total supply of money available in an economy. The panel ARDL model shows positive and significant results. Liquidity and Investment Environment **.**Increased Liquidity ,A higher level of broad money indicates greater liquidity in the economy. This liquidity facilitates the availability of capital for investment, making it easier for foreign investors to access the funds needed for their projects. Favorable Investment Climate, An ample supply of money signals a healthy and stable financial environment. This stability attracts foreign investors seeking low-risk investment destinations. Reduced Cost of Capital**,** money expansion often leads to lower interest rates. Lower borrowing costs are attractive to foreign investors as they can finance their investments more cheaply.

CO2 emission: The implementation of advanced technologies and practices helps reduce CO2 emissions in the host country. For example, newer manufacturing processes might be more energy-efficient and less polluting than older, outdated ones. FDI can stimulate local research and development in green technologies, as foreign companies may collaborate with local firms and institutions. This can drive innovation in sustainable practices and technologies tailored to the local context. Overall, FDI can play a crucial role in promoting sustainable development by facilitating the transfer of green technologies and practices, leading to a reduction in CO2 emissions and fostering a more environmentally conscious economic growth trajectory in the host country. The cofficent value is negative but the p value is significant and positive.

GDP constant: A constant GDP indicates a stable economic environment without significant fluctuations. This stability is crucial for foreign investors, as it reduces economic uncertainty and risk. Investors are more likely to commit to long-term investments when they can predict future economic conditions with greater confidence. Confidence in Market Stability,Stability in GDP growth suggests a reliable and steady market, encouraging foreign investors to invest in sectors such as manufacturing, services, and infrastructure. This predictability allows them to plan and allocate resources more effectively, enhancing their confidence in the sustainability and profitability of their investments. In summary, a constant GDP provides a stable and predictable economic environment, which is highly attractive to foreign investors looking for reliable long-term investment opportunities. The calculated p value is also positive.

labor Force: Modern infrastructure and equipment improve overall productivity and competitiveness of the local economy. This creates a more attractive environment for foreign companies looking to maximize their return on investment. In summary, a skilled labor force

and robust gross fixed capital formation create a favorable environment for FDI by increasing productivity, reducing operational costs, and enhancing the overall business climate. These factors collectively make a country more attractive to foreign investors seeking profitable and sustainable investment opportunities. Labor force is positively related with Foreign direct investment.

Gross fixed capital: Gross fixed capital formation, which includes investments in infrastructure, machinery, and buildings, plays a crucial role in attracting FDI. Well-developed infrastructure and a conducive business environment are key determinants for foreign investors. High levels of gross fixed capital formation indicate a growing and stable economy. This economic stability reduces risks for foreign investors, making them more likely to invest. Enhanced Productivity and Competitiveness: Modern infrastructure and equipment improve overall productivity and competitiveness of the local economy. This creates a more attractive environment for foreign companies looking to maximize their return on investment. The cofficent value is also shows positive relation.

5. Conclusion

In summary, the analysis of how international capital flows are affected by global economic trends in 58 developing nations has shed light on the dynamics of financial flows in the modern world. In the context of shifting global economic trends, two models—the trade model and the foreign direct investment model—have shown to be reliable resources for comprehending and forecasting capital flow patterns. Both the short- and long-term trade The model has demonstrated its flexibility in the analysis of capital movements, despite its conventional application in the field of international commerce. Its capacity to take into account elements like institutional characteristics, distance, and economic magnitude has made it possible to analyze the factors that influence capital flows in more detail. Due to the model's ability to accurately depict the gravitational attraction between economies, it is now even more crucial to take geographic and economic aspects into account when analyzing international capital flows. However, the correlation unit root test has offered a dynamic viewpoint on how long-term global economic patterns have affected things. This methodology has made it possible for scholars to see trends, cycles, and recurrent patterns in international capital flows by looking at historical data. Understanding how economic events, policy changes, and external shocks affect the direction and volume of capital movements has been made possible thanks in large part to this time dimension, which provides insightful information to investors and policymakers alike.

5.1. Recommendations

Going forward, we must leverage the advantages of both the Model and the Panel Analysis to improve the precision and resilience of our forecasts concerning how international capital flows are impacted by global economic patterns. A more thorough knowledge of the intricate interactions between economic, geographical, and temporal elements may be obtained by incorporating these models into an all-encompassing framework. In addition, future studies must concentrate on improving and modernizing existing models to incorporate new developments and shifting dynamics in the international economic scene. Technological developments, political stability, and environmental issues are a few other variables that may be included in a more thorough review to make sure the models are still applicable and useful in the face of changing economic situations. In addition, future studies must concentrate on improving and modernizing existing models to incorporate new developments and shifting dynamics in the international economic scene. Technological developments, political stability, and environmental issues are a few other variables that may be included in a more thorough review to make sure the models are still applicable and useful in the face of changing economic situations. In the end, the knowledge gathered from these models may help international organizations, investors, and governments make defensible choices that will support the sustainable economic growth of the developing nations under consideration. We can negotiate the difficulties presented by global economic trends and advance a more robust and inclusive global financial system by consistently improving and modifying our models.

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