



## Evaluating the Nexus Between Political Economy of Financialization and Trade Integration: New Empirical Evidence from Emerging and Developing Countries

Mehtab Arif <sup>1</sup> and Saima Sarwar <sup>2</sup>

<p><b>Keywords:</b> Financialization, Trade integration, Political Economy, Emerging and Developing Economies, Dynamic Panel Model</p>	<p style="text-align: center;"><b>ABSTRACT</b></p> <p><i>Financialization and trade integration are well-known synchronous terms in the literature on developed economies and their participation in the growing well-being of these nations. The emerging and developing world is trying to catch up to the developed countries by deregulating their economies to reap the benefits of both financialization and trade integration. The study's contribution is twofold in the literature on financialization and trade integration (GVCs) in emerging and developing countries, providing empirical evidence for the link between the two, using the Generalized Method of Moments (GMM) approach on a group of developing and emerging nations between 1995 and 2020. The findings indicate a robust positive link between trade integration and financialization. The macroprudential policy variable is highly significant, proving the right policy choice to tackle the financial sector in emerging and developing countries.</i></p>
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## 1 Introduction

The world economy experienced major shifts due to the policies of the Washington Consensus and the downfall of the Bretton Woods system. The two main principles of the well-known "Washington consensus" are trade integration and financial liberalization, which are considered natural extensions of the idea that competition should have "no barriers to entry,"

<sup>1</sup> Ph.D Scholar, Department of Economics, Government College University Lahore, Pakistan.

✉ mehtabarif@hotmail.com

<sup>2</sup> Associate Professor, Department of Economics, Government College University Lahore, Pakistan.

(Corresponding Author)

✉ saimasarwar@gcu.edu.pk

the first topic in economics. This is the main cause of the current global trend of financialization and trade integration (Gereffi & Luo, 2015).

Financialization is in the hot debates of scholars and intellectuals. Simply, the growing role and power of money in economic transactions, the conversion of one dollar of loan to the real economy into numerous dollars of financial transactions, as well as the increasing significance of financial activity as the foundation for economic profitability.

Financialization is a mode of accumulation wherein monetary channels, rather than commodity production and trade, are increasingly used to generate profits (Krippner, 2005). The most comprehensive definition is given by Epstein (2005): "The growing significance of financial markets, financial actors, financial institutions, and financial motives in the functioning of both domestic and global economies." (p.3). This is a broader classification as it does not cramp the financialization within the boundaries of geography, space, and specific periods. It also allows the multidimensional analysis of the occurrence of financialization (Krippner, 2005).

All the political and economic developments on the international stage paved the way for neo-liberalized financialization. Neoliberalism is a philosophy standing on the pillars of deregulation of capital markets and trade liberalization by swapping the government's job from regulator to deregulator (through privatisation) in the working of the economy (Palley, 2013). The neo-liberalized financialization shifted the power structure from labour to capital, thus making the latter more profitable (Gereffi & Luo, 2015; Harvey, 2010). Every academic has a different perspective on how to differentiate between an economy's production and monetary sectors, that the traditional or real economy is a production and employment-based economy, while the financial sector deals with financial matters only. Now, in this current regime of financialization, finance is the main driving force behind the real sector (Dunkley, 2016).

International comity has seen an expansion and diversification of international trade since the 1970s, the same period is characterized by the development of finance in the world. Hence, there is a growth of trade complementing the growing role of finance (Tyson & McKinley, 2014). A further and more relatable is the structural shift in world trade (Milberg, 1999) towards trade integration by global value chains (GVCs), and financialization is a prerequisite for that shift in trade and investment (Lippit, 2014). The onset of the 21<sup>st</sup> century rendered a new name of "global value chain" by looking into international business and trade. Global value chains are formed in the quest for cost-effective production techniques, along with the advancement in technology. Hence, the altered organization of the production process and world trade in cost-effective emerging and developing countries (Gereffi, 1994). It connected the industry's dispersed production process and explained the shifting global trade trends.

As the products and services are now "made in the world" instead of the domestic market, economic actors (countries) are contesting their role in the GVCs. It tries to bridge the breach between policy and reality. The growth of international trade in developing and emerging countries was evident from their significant involvement in the universal value chain, which almost doubled during this time.

The concept of value chains was present before the 1980s as the international economist Bertil Ohlin referred to the production process as a multistage phenomenon. Even at ancient times, Adam Smith noted that production is carried out in various steps at a production unit. But the large-scale outsourcing of production activities, across the world, was not envisaged before. Thanks to technological advancement, vivid policy transformation, financialization, and trade integration as the trade costs are significantly low in emerging economies and less developed countries. The increased involvement of countries in trade agreements, reducing trade barriers, which attracted manufacturers in developed countries to take advantage of low-cost labor and capital liberalization, permits firms to relocate their production units (Meyer, 2019). As a result, the emerging and developing economies of Asia, Africa, and South America have become the production hubs (Gereffi, 2019).

Transnational corporations also shifted their policy and searched for low-cost production locations in the international economy. During the 1960s and 1970s, the import substitution policy provided the opportunity for these corporations to integrate vertically through the intrafirm and interfirm production of emerging and developing countries (Vernon & Graham, 1971). This internationalization made the firms think about the restructuring of their business towards the cost-effective regions. Thus, brought about radical modifications in the patterns and structure of trade. The NFCs (non-financial corporations) have converted to offshore production activities, reducing reinvestment in the real sector within national boundaries. Instead, reinvestment occurred in the flourishing financial sector, which fetched more money (Braga et al., 2017; Stockhammer, 2008). This trend of cost-effective offshore production has promoted the financialization initially in Anglo-Saxon economies and then in the rest of Europe.

Trade and finance are profoundly synergetic. Trade integration depends on finance and creates financial ties. Management of financial assets and liabilities level pile up through trade results in more financial ties and trade integration. The potential relationship between trade integration and financialization is evident by the intrinsic bond between the two, supported by time, space, and theoretical backing. Globalization serves as a fuel to strengthen the bond between trade integration and financialization. It introduces new profit ventures for the producers to take advantage of the harmonized relationship between world trade and world finance. A modest explanation of the above relationship is that world trade is escorted by world financial flows; thus, more trade needs more ease and security in these financial tides, and this increased financial integration smoothens the international trade integration. Trade liberalization helps broaden the productive capacity and enhance the consumption landscape of a nation (Gabor, 2018). The current wave of trade integration is the “disintegration of Production” as multinational companies are making more money by outsourcing production activities domestically and abroad (Feenstra, 1998).

The objective of the ongoing research is to fill the void in literature by generating factual data regarding the connection between trade integration and financialization, taking into consideration the global value chains.

## **2 Literature Review**

To understand the symbiotic relationship between financialization and trade integration, one must understand the connotation of trade and financial openness. Remaining one of the challenging themes of international economics, earlier economists were keen about the order of policies – the opening of international trade preceding financial openness or vice versa. After the Washington Consensus, the implementation of neoliberal policies forced many developing countries to open the financial sector irrespective of trade openness (Aizenman, 2008). The transnational dimensions of financialization of emerging and developing economies brought qualitative changes in the integration of these economies towards the rest of the world and resulted in asymmetrical development (Bortz & Kaltenbrunner, 2018). Goldstein (2009) has studied the political nature of financialization as the subject has been the center of attention of political economists for many years. Haggard and Maxfield (1996) have studied financialization in less developed countries and found that the balance of payment deficit is the main driving force for politicians and policymakers to opt for financial liberalization. Bonizzi et al. (2020) asserted that the properties of financialization in less developed and emerging countries takes the form of country-specific (variegated financialization) at the national level and is subordinate to developed countries at the international level.

Since the inception of financialization, the transformed structures of trade, political and democratic systems, institutional amendments, and the well-thought-out plans can be best understood in the light of this new regime (Van der Zwan, 2014). Financialization changes the landscape of capitalism, the profit reinvestment in real sector decreases and is replaced by increased financial investments (Van Treeck, 2009).

Karwowski and Stockhammer (2017) conducted a study to check the complementarity of the ongoing financialization in 20 emerging economies of the world and identified six broader areas at the international, national, and city level in those countries, which are the main determinants of financialization. Rethel (2010) conducted a study on the Malaysian economy for the rise of financialization and identified that the institutional change and the external pressure for deregulation, combined with the domestic vested interests of politicians, paved the way for financialization. The same is the case with trade policy. Sarwar and Siddiqi (2014) checked the effectiveness of different trade policy measures in compatible institutional setups. The results of the empirical analysis proved the need for proper institutions for effective policy implementation. The domestic institutional framework supports the symbiotic and mutually beneficial interaction of the production and financial sectors of the economy.

Literature is more towards the estimation of impacts of financial integration on trade integration, and the impact of trade integration on financialization is the least visited area. The potential relationship between financialization and trade integration is manifold, as Lane and Milesi-Ferretti (2003) studied these impacts through the foreign assets and liabilities level by GDP. The positive relation financial and trade integration holds, is due to the financial transactions of trade activities. Trade integration provides an incentive for foreign asset holdings as it reduces the bias in home asset holdings. The increased capital liberalization and the resulting capital inflows towards the global south further surge the financial accumulation by investment and financing operations, contributing to the strengthening of these countries.

Capital liberalization enables the economies to invest in foreign assets and liabilities and to pile up foreign reserves. This trend is primarily attributed to the expansion in goods trade along with other policy drivers. The growing reliance on foreign assets and liabilities is indicative of the correlation, financial and trade integration have (Lane & Milesi-Ferretti, 2003). Increased capital mobility is behind the working of capital markets, and the financial and equity markets places are moving in accordance with international trade movements (Gilmore et al., 2008). Ratanavararak (2018) studied the interlinked relation between financial and trade integration in emerging countries. The connection between these two is essential as the financial integration lessens the production instability and foreign dependence, while on the other hand, trade integration relieves the consumption smoothing. Trade liberalization is a prerequisite for the enforcement of financial liberalization policy. A liberalized trade system is more maintainable by a liberalized financial system, as the exporters and importers require uncontrolled access to cross-border financial markets, and money is fungible, so to shield the financial transactions related to trade is worrisome (Tornell et al., 2004). This global financial integration is the outcome of an increase in bilateral and multilateral trade integration agreements. Many researchers have identified the reasons underlying this potential relationship. International trade creation always involved the exchange of money in the form of export insurance and trade credits across borders. Trade liberalization provides the incentive for international financial transactions, which supports the financial integration, and in turn supports the financialization. Joint assessment of trade in commodities and services, as well as financial places, is made possible by intra-industry trading (Vo, 2022). Technological advancement and trade liberalization result in the swollen domestic production of goods being

exported, and the resulting increase in spending and investment requires imported products and services. This is pointing towards an important potential channel for financial and trade integration (Kearney & Lucey, 2004). A similar assertion was made by Obstfeld and Rogoff (2000), who proposed that the level of goods and services trade is related to the rewards of international monetary divergence. Internationally, the trade costs are crucial in deciding the benefits of financial transactions.

Kose et al. (2006) identified the process of financial and trade liberalization by counting the dates of trade and financial liberalization agreements, both in emerging and developing countries, for the last two decades. The trade liberalization efforts on the part of the developing countries increased from 30 percent in 1985 to almost 85 percent in 2003. Similarly, the number of economies with financial liberalization policies surged from 20 percent to 55 percent during the same period. These liberalized policies sparked the international trade volumes and financial flows from the modern countries towards the less developed countries.

The relationship between trade integration and financialization was studied by Izurieta et al. (2018). They employed the relationship to study the growing inequality because of bilateral trade and financial agreements. Both trade integration and financialization indicate positive trends. As an increasing number of developing and emerging countries are engaging in bilateral and multilateral trade agreements so the phenomenon of financialization. The current trade integration agreements are no longer the same as the traditional ones; the era of financialization has transformed the structure of conventional trade agreements. In an analytical study, Milberg (2004) highlighted the structural shift in world trade patterns inclined towards the outsourcing of production activities and a hype in the trade of intermediate goods. These changing patterns in trade were promising for profit-making for large firms in developed countries. To better comprehend the current international trade, an analysis of GVCs is unavoidable.

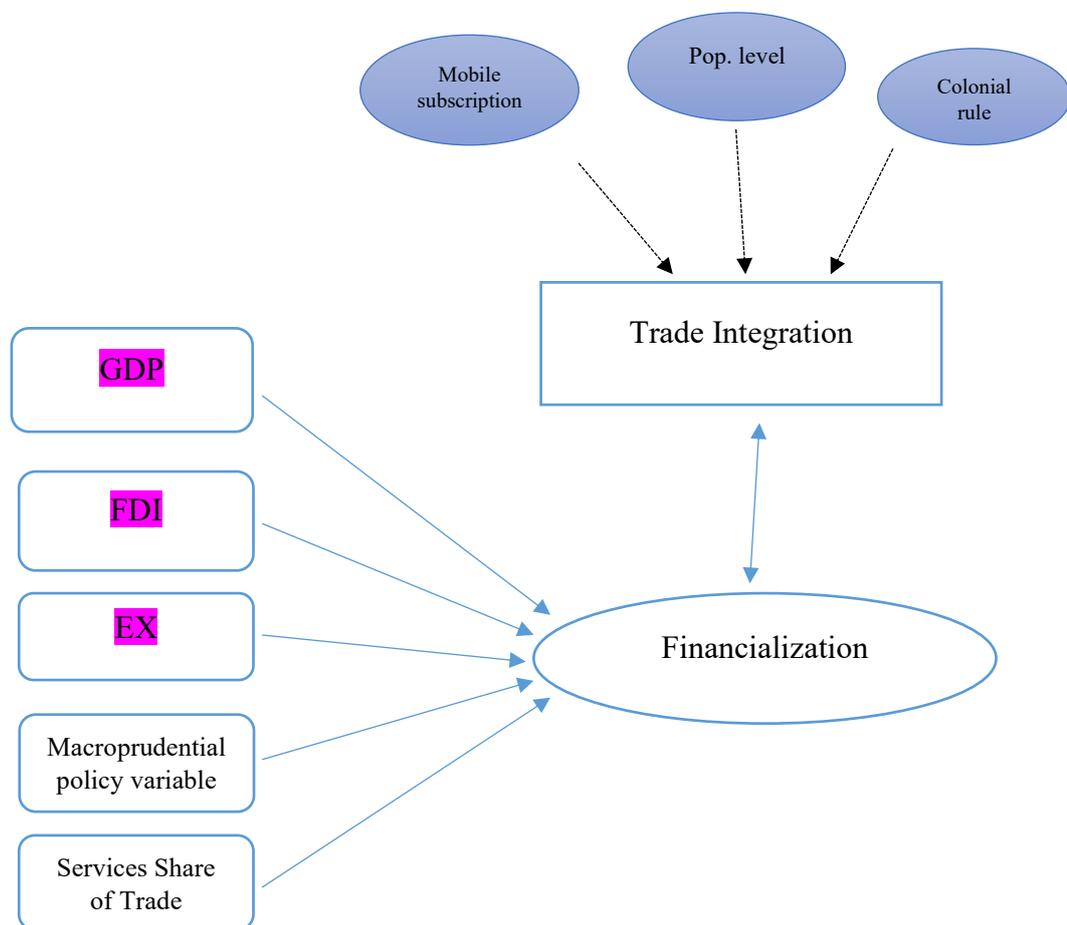
Financialization is boosted by the increased offshore production activities and greater engagement of less developed and emerging economies in the GVCs, resulting in greater trade integration. Milberg (2008) investigated offshoring in U.S. industries from 1998-2006, highlighting how offshoring in the U.S. is connected to financialization, the cause of investment decline in US economy, and concluded that production facilities outside the domestic boundary and the ongoing wave of financialization are the main reasons behind this trend. Financialization brought structural transformation in trade integration, and currently, around 70% of international trade comprises global value chains, which was 30% in 1995 (OECD). Auvray and Rabinovich (2019) run a panel regression analysis for US non-financial corporations for the period 1995 to 2011, confirming the interlocked nature of the relationship between financialization and GVC's also pointing towards the existing gap in the research about the connections between trade integration and financialization. Financialization is mainly impacting the firms integrated well into GVC's. Another empirical study on the relationship between financialization and global value chains is conducted by Tori and Onaran (2022) using the difference GMM estimation technique for the data set of emerging and frontier economies using the GVC participation index. The argument estimated is that the fall in investment in industrialized countries is the relocation of productive capacity towards the emerging economies and the ongoing process of financialization. According to their analysis, financial development and GVC integration are long-term cointegrated, meaning that countries with liberalized money sectors are more prone to integrate into global production chains. In less developed nations, the effect is noticeably less pronounced, suggesting structural and institutional barriers to successful financialization-led trade integration. Since little is known

about the connection between financialization and trade integration, more research is required to completely comprehend how trade dynamics impact financial practices and economic structures in developing and emerging nations (Lapavitsas & Soydan, 2022).

### 3 Theoretical Background

The financialization of developing and emerging countries is still in an evolutionary phase, and one can understand the process under the umbrella of different philosophical and theoretical approaches like the Regulations school of thought, Marxist political economy, the Post Keynesian theory, and the heterodox school of thought. The phenomenon of financialization finds its origin in the heterodox school of thought. The theory of financialization in emerging and developing economies falls under post-Keynesian, Marxist, and the Regulationist school; all these schools represent conceptual similarities but diverge from the mainstream Neoclassical economics (Karwowski & Stockhammer, 2017). Sweezy, a political economist of the Marxist school of thought, anticipated the issue of capital accumulation, which failed to be absorbed in the real production sector of the economy.

**Figure 1:** Conceptual Framework



Source: own conceptualization

Political economists consider financialization as an organized array of the accumulation of wealth in modern capitalism. The neo-liberalized financialization shifted the power structure from labor to capital, thus making the latter more profitable. The liberalization of capital markets plays a crucial part in financialization theories, particularly those that draw inspiration from Marx's ideas; "The monopoly capital school"(Baran & Sweezy, 1966; Fine, 2013;

Sweezy, 1974) shifts the focus from a competitive economy to a Monopolistic economy, incorporating big corporations in the current accumulation process.

The French regulationists (Aglietta, 1990; Orléan, 1999) termed the phenomenal working of any economy for an extended length of time as the regime of accumulation or accumulation regime (AR) and "mode of regulation" (MR) is a complete set of rules and regulations required for the smooth working of an economy.

World systems theory has presented a historical context of the regulationist school of thought. The theory described history in a cyclical process and identified four distinct cycles. The current cycle was termed as the US cycle, financialization and trade integration are prerequisites, and liberalization is the stepping stone of this new cycle since 1970 (Arrighi, 1994). The nature of financialization was cyclical as opposed to a linear one. Every new cycle ends up with increased welfare and development of the country (French et al., 2011). The regulation economist conceived the optimistic view of financialization as a tool for the upgradation of emerging and less developed economies.

The streamlining of neoliberalism elucidates the emergence of financialization instead of the latter justifying neoliberalism. Financialization has a profound history (Sawyer, 2013). After the demise of Fordism, political economists searched for an alternative system that best served the financial needs of the international community.

Mainstream economists tried to portray an optimistic picture of financialization by analysing financial development through multiple research projects. The heterodox economists investigated the phenomenon's disruptive effects on economic and social spheres. This school of thought attempted to link financialization to neoliberalism and globalization.

Financialization is also the subject matter of many post-Keynesian economists. The center of analysis of these economists was the appearance of moneylenders as rentiers. The power and prominence were studied by a large body of work by Epstein (2005), Crotty (1990), and Pollin (2007).

#### **4 Data and Variable Description**

Data sources employed in the current study are secondary. Data is longitudinal or panel in nature, spanning 25 years, from 1995 to 2020, and encompassing 40 emerging and developing nations. The cross-section was selected based on the available data.

The categorization of developing and emerging countries is based on the MSCI country classification for 2019. MSCI groups nations according to attributes such as investor protection, capital market openness, regulatory environment, and market accessibility. The World Bank classification is determined by the income levels of countries. Financialization is measured by external assets and liabilities (asstlb). The domestic value-added content of gross exports (DE) is used as a measure of trade integration. Several control variables are also included in the analysis, like Gross Domestic Product (GDP), exchange rate (ER), and foreign direct investment (FDI). The required reserve ratio (RRR) is used as an indicator of the macroprudential policy variable. To take into consideration systemic disruptions and structural shocks, which can significantly affect the dynamics of financialization and trade integration, a financial crisis dummy variable is incorporated. Table 1 provides the complete portrayal of the sources of data and proxies for those measures.

**Table 1:** Sources of Data and Variables

<b>Variables</b>	<b>Explanation</b>	<b>Sources of Data</b>
Financialization(asstlb)	Financialization is measured by the total assets and liabilities. “The amount and level of the economy's stock of external financial assets and liabilities, which come from the external transactions and accumulation accounts, are reflected in the external assets and liabilities account”. (UNSD)	(EWN) External Wealth of Nations (2018), compiled by Lane and Milesi-Ferretti
Trade integration (DE)	The domestic value-added content of exports, which approximately reflects the value added in the manufacturing of products and services for export by any nation, is used to measure trade integration.	TiVA database compiled by WTO and OECD (2022)
Gross Domestic Product (GDP)	Gross domestic product in constant 2015 US dollars	World Development Indicators (WDI) (2022)
Foreign Direct Investment (FDI)	As a percentage of GDP, it shows the net foreign investment inflows into the reporting economy, calculated as new investment inflows less disinvestment.	World Development Indicators (WDI) (2022)
Services share of Trade as percentage of GDP (SS)	It shows the sale and purchase of non-physical products. Trade in services increases sharply with the incidence of financialization.	World Development Indicators (WDI) (2022)
Macroprudential Policy variable (RRR)	Required Reserve Ratio is a new approach in managing the financial assets and liabilities, initially used as an effective monetary policy tool.	World Development Indicators (WDI) (2022)
Exchange rate (ER)	Exchange rate involves the trading of currencies and plays an important role in financialization.	World Development Indicators (WDI) (2022)
Dummy for financial crisis	A dummy variable was introduced to show the impact of the financial crisis	Global Financial Development database (2022)

## 5 Econometric Analysis

The functional form of the model is as follows:

Financialization =  $f$  (Trade Integration, Foreign Direct Investment, Gross Domestic Product, Exchange Rate, Macroprudential policy Variable, Financial Crisis Dummy)

The model follows the following econometric specification:

$$ASTLB_{it} = \beta + \delta asstlb_{i,t-1} + \alpha_1 DE_{it} + \alpha_2 GDP_{it} + \alpha_3 ER_{i,t} + \alpha_4 SS_{i,t} + \alpha_5 RRR_{i,t} + \alpha_6 FDI_{i,t} + \alpha_7 D_{i,t} + \varepsilon_{i,t}$$

The notation 'ASTLB' shows the total of all liabilities and assets, used as a proxy for the dependent variable, financialization. The domestic value-added content of gross exports (DE) is used to gauge the phenomenon of trade integration. 'GDP' is gross domestic product, and 'ER' is exchange rate. 'SS' represents the share of services in the trade integration process. After the liberalization of economies, the services share of trade as a %age of GDP increases, paving the way for financialization to flourish. 'RRR' is the required reserve ratio as a proxy for macroprudential policy variables. 'FDI' indicates the foreign direct investment, which is considered the starting point of financialization. A dummy variable called "D" is also added to the model in response to the financial crisis.

The slope coefficients of each regressor are represented by  $\alpha$ 's. The cross sections and time are symbolized by the subscripts 'i' and 't'.  $\beta$  is used for intercept, and the error term is represented by  $\varepsilon_{i,t}$ . Several diagnostic results were used to select an econometric technique to estimate the above equation. Stepwise Pooled OLS is employed for the quantitative analysis; however, the results may be biased due to heteroskedasticity.

Diagnostic tests include the Breusch-Pagan test to mark the heteroskedasticity, the Ramsey RESET to check the model for omitted variables. F-test for the validity of fixed effect estimator and the VIF (Variance Inflation Factor) to detect multicollinearity. Rooted in the Hausman test, the fixed effect mode is chosen. Durbin-Wu-Hausman test is used to check the existence of endogeneity; a significant value confirms the endogenous variable.

$asstlb_{i,t-1}$  shows the lagged value of assets and liabilities to incorporate the dynamic panel model, and ' $\delta$ ' is the coefficient of the lagged dependent variable. Given the consistent short- and long-term correlations between the dependent and independent variables, dynamic panels are the best option for incorporating the proper influence of regressors (Adeleye et al., 2017). The relationship between financialization and trade integration is taking time to evolve and showing impacts; a dynamic model is imperative to understand the relationship's enduring character. The panel bias (Anderson & Hsiao, 1982) is also reduced by using a dynamic model when the number of years is fewer than the countries (Baltagi, 2008).

The above model is estimated in many ways, and initial estimation is carried out by the application of pooled OLS, but in the presence of heteroskedasticity, the results are not reliable. In case of multiple regression analysis, the hypothesis of exogeneity is no longer valid if there is a correlation among the independent variables and the error term. In this scenario, there may exist the problem of model specification bias, measurement error, country-specific heterogeneity, and omitted variables bias. Panel fixed-effect regression is estimated to check the country-specific effects. But the estimates are not reliable because of the existence of cross-sectional dependence, heteroskedasticity and serial correlation. To deal with the concerns of

endogeneity, the instrumental variable (IV) or 2SLS regression analysis is carried out. The instrumental variable technique is useful when the instruments are not related to the dependent variable but are highly related to one of the explanatory variables. The parameters of 2SLS are efficient if homoskedasticity is present in the model (Roodman, 2009), but in case of heteroskedasticity, results are not reliable for interpretations (Baum et al., 2003).

To handle the persistent correlation, endogeneity, heteroskedasticity concerns, reverse causality, and omitted variable bias between financialization and trade integration, GMM (Generalized Methods of Moments) is the most suitable method to apply (Wooldridge, 2002). The assumption of orthogonality gives efficient estimates even in the presence of heteroskedasticity. GMM method employs moment conditions, lagged differences are used to instrument the level equation, and lagged levels are used to instrument the difference equation. The over-identification of instruments is not accepted in the case of GMM, but it is possible to add additional moment conditions beyond the anticipated parameters. As a rule of thumb, instrument's number should be fewer than the count of cross sections (Roodman, 2009). GMM validates the hypothesis of first-order serial autocorrelation (AR1) but no serial correlation of second order (AR2).

The estimation of the presented model is done by both difference GMM (Arellano & Bond, 1991) and system GMM (Blundell & Bond, 1998). The difference and system GMM are devised for micro-panels where  $T < N$  i.e time period is smaller than the cross-sections. The selection of difference GMM and system GMM is based on the estimated coefficient 'δ'. The pooled OLS estimates of 'δ' are considered the upper limit, and the fixed effect estimates are taken as the lower limit. If the estimated value of 'δ' for difference GMM is near the lower limit, one must choose the system GMM (Bond, 2002).

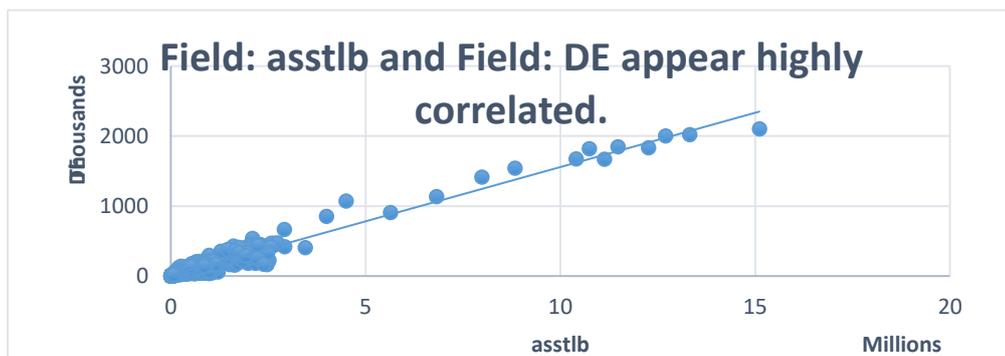
System GMM (two-step system GMM) (Roodman, 2009) is considered an upgraded version of conventional difference GMM approach. The difference GMM is better for instrumental variables, while the system GMM lessens the instrument proliferation, taking care of cross-sectional dependence (Windmeijer, 2005).

## 6 Results and Discussion

The summary statistics table provides the count of observations, maximum, and minimum values for all the variables.

The country with the maximum share of services is Jordan, and prior to the start of the 2008 financial crisis, and with minimum services share is Brazil. Lao PDR has the lowest rating for the domestic value-added content of exports, indicating less trade integration in the global economy, whereas China has the highest level of trade integration.

Figure 2: Relationship between independent and dependent variables



Source: Author's calculations using data from EWN and TiVA

Talking about the exchange rate value, the maximum value of the exchange rate is for Veitnam, indicating the exchange rate appreciation and domestic currency depreciation, while on the contrary, the minimum value of the exchange rate is for the developing nation Belarus. China is the emerging country that enjoys the maximum real GDP in the sample, and Lao PDR has the smallest real GDP. All other included countries have real GDP in between these two categorie.

**Table:2** Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
<b>Dependent variable</b>					
Inasstlb	1040	11.905	1.645	7.626	16.531
<b>Independent variable</b>					
Inde	1040	10.244	1.550	5.820	14.558
<b>Control variables</b>					
lnfdi	1018	1.3507	3.570	-6.522	23.349
lngdpcons	1040	25.724	1.550	22.029	30.314
lnexchrte	1019	3.728	2.956	-6.766	10.053
lnrrr	962	1.1976	.6007	-.590	3.438
lnserivishare	1040	2.5115	.5917	.7203	3.906
dumyvar	1040	.065	.2450	0	1

Source: Authors' computation.

The macroprudential variable is a key strategy utilized by emerging countries to stabilize their inherently fragile financial sectors (Galati & Moessner, 2018). Saudi Arabia has the lowest number of observations of the required reserve ratio (data has to be interpolated in this case), while South Africa has the maximum number of observations of the macroprudential policy indicator. Historically, regulators have focused on financial organizations, particularly commercial banks that accept money from the public, to ensure that they are safe, sound, and capable of carrying out their duties. Macroprudential policy is a crucial tool (Tovar Mora et al., 2012) used by emerging countries to stabilize the naturally unstable financial sector.

**Table: 3** Short run Estimation Results

variables	One step difference GMM		Two step difference GMM		One step system GMM		Two step system GMM	
	Coefficient	St. Error	Coefficient	St. Error	Coefficient	St. Error	Coefficient	St. Error
<b>lnasstlb-1</b>	.3929988***	.1180159	.515403***	.1183303	.8816915***	.0445746	.7172477 ***	.0701493
<b>Inde</b>	.0842342	.0887312	.1880998	.1262412	.013793	.0712885	.1732205**	.0882305
<b>lnfdi</b>	.0575304**	.0322477	.0521916	.0347721	.0022734	.002937	-.0000725	.0056736
<b>lngdpcons</b>	1.199239 ***	.2995402	.6688318	.3990643	.1346855**	.0536404	.1685141***	.0589165
<b>lnserivishare</b>	-.512191***	.1256292	-.396306**	.1442405	-.161674**	.0852997	-.0076493	.0073951
<b>lnexchrte</b>	-.0255278	.0653903	.1381582	.1039795	-.0006813	.018666	.0104434	.0327648
<b>lnrrr</b>	-.2958102 **	.143367	-.1954523	.1381582	-.4169845***	.09076	-.4801749 ***	.1524497
<b>dumyvar</b>	.0633443	.0881901	-.187232**	.0979009	-.1292143	0.2072	-.1230857	.142505

<b>cons</b>		-1.222666	1.204029	-2.056241 **	1.175212
<b>Diagnostic Tests:</b>					
<b>AR1</b>	Prob. = 0.061	Prob. = 0.005	Prob. = 0.000	Prob. = 0.003	
<b>AR2</b>	Prob. = 0.659	Prob. = 0.442	Prob. = 0.228	Prob. = 0.178	
<b>Hansen (J-test)</b>	Prob. = 0.044	Prob. = 0.301	Prob. = 0.11	Prob. = 0.148	
<b>C-Test GMM</b>			Prob. = 0.451	prob. = 0.427	
<b>Diff-in-hansen IV</b>	Prob. = 0.73	Prob. = 0.78	Prob. = 0.59	prob. = 0.938	
<b>No. Of instruments</b>	26	26	28	32	
<b>Cross sections</b>	36	35	36	35	
<b>Total observations</b>	831	841	877	852	

The significance levels at 1%, 5%, and 10% are indicated by the symbols \*\*\*, \*\*, and \*.

Estimations of the analysis are presented in the subsequent table. The values of ‘ $\delta$ ’ indicate the short-run coefficient, the dependent variable’s persistence, and speed of adjustment. The outcomes of GMM estimation reveal that the lag dependent variable of financialization (dependent variable) is statistically significant and point towards the fact that the current level of financialization is dependent upon the previous level of financialization. The value of ‘ $\alpha_1$ ’ gives the coefficient for trade integration, which is also statistically significant and confirms the relationship between financialization and trade integration. The instrument's joint validity is confirmed by the probability of Hansen (J-test). The Hansen J-test is borderline in one-step difference GMM (0.044), indicating that there may be over-identification concerns, but is more acceptable in other cases.

The C-test (difference-in-Hansen) indicates that the instruments used are valid and the total cross sections exceed the total number of instruments. Difference-in-Hansen tests in system GMM models (one-step and two-step) validate the additional instruments utilized in levels.

AR (1) is showing first-order autocorrelation, and the AR (2) test confirms the absence of second-order serial correlation. AR (2) p-values  $> 0.1$  in all models demonstrate the absence of second-order autocorrelation, which is a crucial GMM assumption.

To check the long-run estimates of financialization and trade integration, ‘nlcom’ command is used after the two-step system GMM in STATA, yielding long-run coefficients. The test is performed for the significant short-run indicators. Long-run estimates help to check the lasting relationship among the dependent and independent variables. Table 3 provides the long-run estimates.

**Table:4 Long run Estimates**

<b>Variables</b>	<b>Coefficients</b>	<b>Std. Errors</b>
<b>lnde</b>	.4815142**	.2659094
<b>lngdpcons</b>	.6992817**	.3134284
<b>lnrrr</b>	-1.699877***	.5656974
<b>cons</b>	-8.922344*	5.705278

The significance level at 1%, 5%, and 10% are indicated by the symbols \*\*\*, \*\*, and \*. The long-term impacts on the dependent variable are explained by the long-run coefficient of each variable, which is written as  $(\alpha_i/1-\delta)$ .

The long-run link between financialization and trade integration is evident from the significant relationship between the two. The outcome shows that a 1% age point rise in trade integration (domestic value added) brought about an increase in financialization by 0.48 points. The structure of trade has transformed, and the enhanced fragmentation of production activities across the world has given birth to global value chains. This increased and intensified GVC network prompted the process of financialization. In fact, a greater integration requires an increased participation in the GVC networks, and this increased participation is backed by enhanced financialization. In the case of less developed and emerging countries, this correlation is well explained by the long-run findings of this analysis. Transformation of traditional trade into GVCs has shifted the global production hub towards emerging and developing countries. Now, the local producers in these economies are the prime handlers of global production. The recent growth of emerging economies is evidence of this fundamental shift and embeddedness of the global south into GVCs (Gereffi & Fernandez-Stark, 2011).

The substantial long-run results of financialization and gross domestic product (GDP) also indicate the optimistic effects of financialization and trade integration on emerging and less developed economies. Result shows that 1% increase in the phenomenon of financialization brought a 0.69-point surge in the GDP of developing and frontier countries. The results also showed that, in the long run, economies gain from financialization and trade integration and help in the growth process of these countries (Guru & Yadav, 2019).

The relationship between financialization and required reserve ratio (rrr) used to as a macroprudential policy tool is highly significant with the expected sign. Macroprudential policies are famous and very effective in developed countries to tackle the process of financialization. In case of frontier and less developed economies, the management of macroprudential policies is somewhat novel, but they are very effective in the longer period of time, as the outcome shows 1% change in financialization can be corrected by 100 points by using appropriate macroprudential policy.

## **7 Conclusion and Policy Recommendations**

The political economy of financialization and trade integration in less developed and emerging economies uncovers an intricate interaction of features that impact economic growth, financial stability, and social equality. Financialization and trade integration are potentially beneficial but pose substantial challenges in the scenarios of increasing inequalities and economic fluctuations. Policy makers must be cautious about these complications to execute policies for sustainable and inclusive economic growth. The Anglo-Saxon economies are the best example of the successful execution of financialization (Karwowski & Stockhammer, 2017) and the findings of the analysis show that the emerging and developing countries show significant results for the case.

The claim developed in this space is that financialization is propagated by trade integration. The greater involvement of developing and emerging countries in global value chains (structural shift in trade) compels them to integrate financially and hence, paves the way for financialization to flourish. The current financialized capitalism is the result of greater transformation in trade and increased domestic value-added content of current trade.

The study's primary contribution is the empirical estimation of the dependence of financialization on trade integration (GVC). The result of this study confirms the positive relation between the two, by employing the appropriate proxy measures and econometric analysis it is proved that financialization is dependent on trade integration.

In this study, we conduct a dynamic panel assessment of the impact of the ongoing wave of trade integration (GVC) on financialization, taking a sample of emerging and developing countries over 1995-2020, by using the system GMM technique to cater to multiple sources of endogeneity. Our analysis finds that the current surge in trade integration by growing involvement in GVCs, is facilitated by financial integration and in turn boosted financialization. The intensified participation of frontier and less developed economies in GVCs makes it happen for them to reap the fruits of enhanced trade integration and the deregulation of their financial markets. Emerging and developing countries are the dynamic production hubs with cost-efficient techniques of production, thus attracting the large firms to outsource their production activities and take hold of greater global value chains.

Financialization and trade integration brought potential modification in the main avenues of economic growth. Countries can only achieve economic growth and development through significant participation in GVCs. Good governance, education, skills, and coordinated institutional structure are required for sustained contribution to global value chains. To benefit from financialization and trade integration, developing countries should work on enhancing their capabilities to promote economic growth and development (Gereffi & Fernandez-Stark, 2011).

Macroprudential policies are highly significant in this case, suggesting a best policy measure to control the capital movements and the side effects of financialization. For the internal balance of these economies, the macroprudential policy measures should apiece the domestic monetary policy to achieve the desired outcomes. Contractionary monetary policy is among the main drivers of financialization in these economies (Karwowski, 2020), and a vigilant macroprudential policy acts as a complementary policy tool in financial sector management.

Financialization and trade integration are a complex amalgam of political, economic, social, and geographical relationships, which is difficult to comprehend in this single study space. Based on this study, further research needs to be conducted in all these areas to better comprehend the interaction of these forces. An exact order of finance and trade linkage and the likelihood of reversibility leading to crisis are much-needed areas of empirical exploration.

Institutional structure and role are important areas to explore to get a clear picture of potential political economy consideration and their effects on the shaping of financialization in emerging and developing economies.

The following policy implications can be drawn based on the above results.

- Firstly, to reap the maximum benefits from the current phase of financialization, the frontier and less developed economies, specifically the developing nations, need to modernize the financial sector by creating awareness among the masses about financial liberalization. Steps should be taken towards financial development, financial liberalization and finally financial integration in the world economy. Policymakers should understand that there is no survival without this current regime of financialization and trade integration. Macroeconomic policy coordination is the need of the hour.
- Secondly, developing countries should create a conducive environment and compatible institutions for producers and exporters to participate more in global value chains, and provide incentives and security to producers and exporters to partake in the domestic value-added content of exports. This, in turn, will amass the GDP and growth of the

economy. Export diversification and industrial upgrading ought to be given top priority. Developing economies can more effectively integrate into GVCs with the support of initiatives like regional trade infrastructure, trade facilitation, and supplier development.

- Thirdly, macroprudential policy should be designed to make the financial sector more resilient and resistant to shocks. Financial transactions rely on trust between stakeholders and political institutions, so efforts should focus on overcoming confidence issues. Developing economies should strengthen regulatory institutions before opening capital accounts.
- Even though the effects of exchange rates were largely negligible and insignificant, developing economies may still be indirectly impacted. To prevent discouraging investment or overexposing themselves to currency mismatches, governments should preserve currency stability through sound fiscal and monetary policies.
- Lastly, an over-reliance on inconsistent or low-productivity service exports may be the cause of the services sector's detrimental impact on trade. Instead of just growing the traditional service sectors, emerging economies should concentrate on diversifying into high-value manufacturing and tech-based services.
- A basic repercussion of this study is that it does not allow for generalization, as more country-specific research is needed from the specific macroeconomic, social, and cultural aspects to further elaborate the varieties and forms of financialization in less developed and frontier economies.

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