

Financial Development and International Trade: Time Series Evidence from Sri Lankan Economy

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Abstract

This study examined the relationship between financial development and international trade in Sri Lanka using time series data from 1977 to 2019. The ARDL co-integration technique was used, and the study employed volume of exports of goods and services as the dependent variable, while five independent variables including two financial development indicators and three control variables. Our findings suggest that while domestic credit encourages exports in both the long and short run, financial development as measured by private credit does not. There exists, within the Sri Lankan context, a unidirectional impact on export coming from domestic credit however, no such causality can be detected from private credit. This highlights Sri Lanka's need to manage its domestic credit and export impact to achieve external stability. Therefore, a well-established and effective financial market gives the economies involved more opportunities for international trade.

Keywords: ARDL, Financial Development, International Trade, Sri Lanka

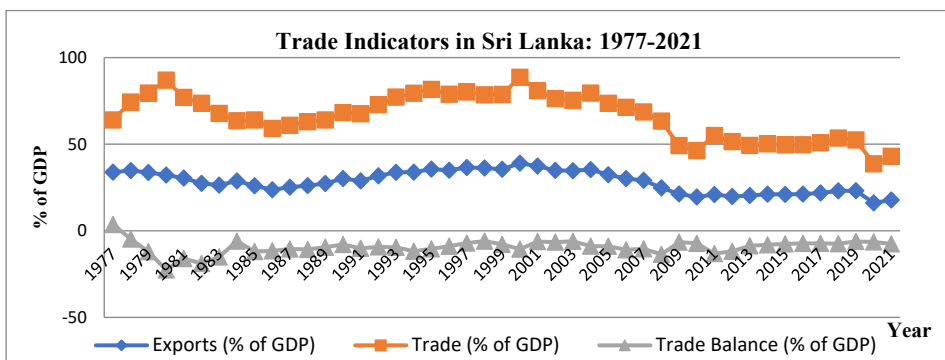
Introduction

The financial sector plays an important and enormous role in developing their economies. Because, according to many theoretical and empirical studies, it has a significant relationship with all economic activities such as trading, manufacturing. Previous studies imply that financial development is strongly related with international trade. International trade is the exchange of goods and services between countries. The first international trade theory is called "Mercantilism" and emerged in the 17th and 18th centuries in Europe. In 1776, the Scottish economist Adam Smith (1723-1790) developed the trade Theory of Absolute Advantage. Then, in 1817, David Ricardo presented the trade Theory of Comparative Advantage challenging Adam Smith's idea. According to Ricardo, countries can enter into trade based on the comparative advantage and obtain gains from trade through both exchange and specialization. Therefore, trading is a main economic activity that can lead to economic growth. Thus, every economy always tries to expand its trading with other economies in different aspects.

Beck (2002) found that economies with better developed financial system have comparative advantages in manufacturing industries. Therefore, if the country's financial

development level is higher, exports of goods and services in the manufacturing sector recorded a higher share of GDP. Thus, these countries obtain a higher trade balance in manufactured goods (Beck, 2002). Kim et. al. (2010) noted that the development of the financial sector may contribute to increase trade flows and trade liberalization. Caporale et. al. (2020) implied that the finance-trade nexus might be vital for countries looking to become higher income economies by growing their financial sector and implementing trade-led growth strategies. Samba and Yan (2009) found a positive relationship between financial sector development and trade in Asian countries. But, at the same time, Kim et. al. (2010) have noted in their article that it may be detrimental to international trade at cyclical frequencies especially for developing countries.

In 2009, we experienced a great trade collapse of the most remarkable phenomena that happened in recent years. The volume of world trade fell by 12% this year. WTO strongly emphasized that this explanation of the trade collapse is related financial crisis in 2007-2008 (WTO, 2010). Therefore, there is enough evidence to say that financial development and international trade are strongly linked. Therefore, this study aims to examine the relationship between financial development and international trade in Sri Lanka from 1977 to 2019. The dependent variable of this study is the volume of exports of goods and services as the trade indicator. Based on the literature survey, there are five independent variables including two financial development indicators and three control variables. These are private sector credit as a percentage of GDP, domestic credit provided by the financial sector, economic growth, government expenditure and inflation respectively (Caporale et. al.,2020; Leibovici, 2021). To more explanations, figure 1 was created including the main trade indicators in Sri Lanka.



Source: Author's Computation based on Central Bank Annual Data

According to the figure 1, the indicators of trade (% of GDP) and exports of goods and services (% of GDP) shows a decreasing trend between the period from 1977 to 2021 while in 2020 recording the lowest exports and trade value. Additionally, it shows a continues trade deficit in Sri Lankan economy since 1978. Although Sri Lanka

experiences a decreasing trend the volume of trade in both the South Asia region and the world has an increasing trend (World Bank Development Indicators, 2022).

As mentioned above, if trade between countries generates comparative advantages from exchange and specialization, it is important and necessary to expand international trade in Sri Lanka to achieve higher economic growth. Therefore, to find the link between financial development and trade in Sri Lanka, this study mainly aims to examine the relationship between financial development and international trade in Sri Lanka.

Literature Review

Heckscher Ohlin-Samuelson (H-O-S) trade model (Samuelson, 1949 and Heckscher et al., 1991) first introduces the theoretical background for financial development and trade. According to this model, differences in financial development among economies generate comparative advantages and gains from specialization in international trade (Caporale et. al., 2020). By adding the financial sector to the Heckscher-Ohlin trade model, Kletzer and Bardhan (1987) show that countries with a well-developed financial sector have a comparative advantage in businesses and sectors that depend more on outside finance (Kim et. al., 2010). Beck (2002) takes it a step further and focuses on the function of financial intermediaries in promoting large-scale, high-return initiatives and mobilizing savings. According to Beck (2002), the relative level of financial intermediation determines the intersectoral specialization and the structure of trade flows. In 1989, Baldwin explained financial markets as a source of comparative advantages (Samba and Yan, 2009). Following this theoretical background, the large number of empirical studies investigated the linkages between financial development and international trade using different methodologies, sample and employing different independent and dependent variables in different aspects.

Caporale et. al. (2020) investigated the relationship between financial development and international trade in six EU members. This study, mainly analyzes how financial development affects international trade, trade balance and trade openness. The study results revealed that financial development positively affects exports and trade openness in the long run. Therefore, there is a direct relationship between financial development and the structure of international trade and trade flows of selected EU countries. And also, through the links between financial development and sectoral value addition, there is an indirect relationship. Therefore, researchers suggest that the selected EU countries develop their financial sector to get more benefits from international trade. Katircioglu (2012) examined the long run equilibrium relationship and causal relationship between financial development, international trade and real income growth in Sub-Saharan Africa. The main finding of this study showed domestic credit has feedback linkages with both exports and imports. Therefore, the researcher concludes that financial development is a stimulus for global trade in the Sub-Saharan Africa. Samba and Yan (2009) examine this relationship for Asian countries. They found this positive relationship between financial sector development and trade exists for selected Asian countries; Indonesia, Korea, Malaysia, Philippines, Singapore and Thailand while China experiences a negative relationship. And also, Gokmenoglu et. al. (2015) found that a better financial system promotes international trade in Pakistan. Supporting these findings, Kim et. al. (2010) studied the effect of financial development on trade openness. In conclusion, Kim et. al. (2010) highlight that financial development may be detrimental to international trade at

cyclical frequencies especially for developing countries. Therefore they investigate the impact of cyclical and trend changes in financial intermediation on trade openness in 87 countries from 1960 to 2005. They have broken the sample into two sub groups for more advanced results: OECD and non-OECD countries. This study results show financial development has a positive impacts in the long run and negative impacts in the short run on trade openness in non-OECD countries while it has no significant effects on trade openness in OECD countries in both the short run and long run. Especially, in low-financial development countries, improvements in the financial sector have a strong favorable long run influence while there is a negligible impact on trade openness in the short run. Moreover, Mendoza et. al. (2007) find financial development negatively correlates with net exports and current account balance. Vaubourg (2016) has found an important point about the relationship between the development of finance and trade. It is there is a bidirectional causal relationship between these two variables. In addition, based on his literature review, the researcher able to find that external financial dependence of firms is a key determinant of the volume of exports. Therefore, when businesses rely on external financing, insufficient financial development and the financial crisis have a negative impact on exports. And, most of financial instruments play a key role in trade.

Leibovici (2021) found that financial development has a significant impact on international trade at the industry level while it has a minor impact at the aggregate level. In addition, the researcher has highlighted a number of previous studies to make enough evidence about the relationship between financial sector performance and trade. For example, Leibovici (2021) mentioned Kohn et.al. (2016) and Gross and Verani (2013)'s studies which have found that financial frictions are a key drivers of the dynamics of new exports. And also, according to Leibovici (2021), exporting goods and services is more financial intensive due to different types of cost components such as export entry costs, fixed export costs and variable trade costs. Hur et. al. (2006) find another two remarkable points. First, there are comparative advantages in industries characterized by intangible assets in countries with relatively well developed financial sectors. Second, countries with poor financial development also have comparative advantages in industries characterized by tangible assets. Because, the interaction between a firm's asset structure and financial development level may also affect the trade pattern. Contrasting with the above studies Manova (2008) investigates the adverse impact of financial market imperfections on international trade. But, supporting previous study results, Manova (2008) found that financial sector development increases countries' exports above and beyond its impact on overall production.

Most of the previous studies have used volume of exports, trade balance and trade openness as the dependent variables and, the ratio of credit to the private sector to GDP, domestic credit by banks and other financial institutions to the private sector as a share of GDP, the ratio of domestic credit by the banking sector to GDP and external financial dependence for industry as independent variables. Excluding a few studies, all others were based on the panel data. Therefore, they have used Generalized Method of Moments (GMM), Pooled Mean Group (PMG) estimators, Simulated Method of Moments (SMM) approach for their study methodology. A few studies have used Time Series Approach and VAR Model, Vector Error Correction Methodology and ARDL bounds testing approaches. Therefore, according to the literature review, there is not enough research work on the relationship between financial development and international trade for Sri

Lanka. Now a day, the Sri Lankan economy is in the stage of downturn economy. And also, Sri Lanka is in a financial crisis and the country is bankrupt. Therefore, according to theoretical and empirical evidence about the relationship between financial development and international trade, if that relationship exists in Sri Lanka, the development of the financial sector will lead to economic growth directly as well as indirectly through trading with the rest of the world. Therefore, this study aims to explore the link between financial development and international trade in Sri Lanka based on time series data from 1977 to 2019.

Research Methodology

In this study, we employed annual time series data from 1977 to 2019 in Sri Lanka to examine the causal relationship between financial development and international trade. The World Development Indicators were used as the source for the data. The volume of exports of goods and services which represents the value of all goods and other market services provided to the rest of the world is used as a proxy for the trade variable. We measure financial development by private sector credit as a percentage of GDP. Because, we deviate from the use of quantitative measures of finance which largely mirrors the size of the financial sector (See Yakubu et. al., 2018). This indicator, which evaluates credit advanced to the private sector on a qualitative basis, captures how money is used and allocated to more productive and efficient activities. The study examined domestic credit provided by the financial sector in addition to private credit as a proxy for financial development. Because, banks are not subject to mandated loans to priority sectors or obligated to hold government securities, which may not be suitable for developing countries (See Hasan et. al., 2011). With the exception of credit to the government, this measure refers to financial resources delivered to all sectors on a gross basis. Other standard controls that are chosen based on the literature are also included. They consist of inflation, government spending, and economic growth. GDP per capita is a proxy measure of economic growth. The annual percentage change in the consumer price index, which measures changes in how much it costs the average consumer to buy a basket of goods and services, is used to quantify inflation. It is possible to gauge the size of the government or the effectiveness of its fiscal policy by expressing government spending as a share of GDP. In order to analyze the effect of financial development on trade, we estimate the following regression including financial development variables:

$$LVEX_t = \beta_0 + \beta_1LPC_t + \beta_2LDC_t + \beta_3LEG_t + \beta_4LGE_t + \beta_5INF_t + U_t \quad (1)$$

Where, dependent variable LVEX is a trade indicator (volume of exports of goods and services); as for the regressors, LPC and LDC are financial development indicators (private sector credit as a percentage of GDP and domestic credit provided by the financial sector, respectively); LEG, LGE and INF are a set of control variables (economic growth, government expenditure and inflation); U_t is the white noise error term and t illustrate the time period.

The estimation of equation (1) begins with the identification of the order of integration of each variable using Augmented Dickey Fuller (ADF) unit root test for this analysis. In the second step of the estimation procedure, we have to identify the optimal lag length

that can be used in the model. Several methods have been proposed to deal with the problem of correctly determining the proper lag length for time series models. There are several criteria such as sequentially modified Likelihood Ratio (LR) statistics, Akaike Information Criterion (AIC), Swartz Information Criterion (SC), Hannan-Quin Information Criterion (HQIC) and Final Prediction Error (FPE) to select the optimal lag length that can be included in a time series model. However, we will adopt either one or more of these criteria in our analysis according to the results and the requirements. In the third step, we use ARDL cointegration technique developed by Pesaran et al. (2001) to empirically estimate the dynamic relationship between the variables described in equation (1). An ARDL representation of equation (1) is formulated as follows:

$$\begin{aligned} \Delta LVEX_t = & \delta_0 + \delta_1 LVEX_{t-1} + \delta_2 LPC_{t-1} + \delta_3 LDC_{t-1} + \delta_4 LEG_{t-1} + \delta_5 LGE_{t-1} + \delta_6 INF_{t-1} \\ & + \sum_{i=1}^{q1} \beta_{1i} \Delta LVEX_{t-i} + \sum_{i=0}^{q2} \beta_{2i} \Delta LPC_{t-i} + \sum_{i=0}^{q3} \beta_{3i} \Delta LDC_{t-i} \\ & + \sum_{i=0}^{q2} \beta_{4i} \Delta LEG_{t-i} + \sum_{i=0}^{q3} \beta_{5i} \Delta LGE_{t-i} + \sum_{i=0}^{q3} \beta_{6i} \Delta INF_{t-i} + e_t \end{aligned} \quad (2)$$

Where, Δ denotes the first difference operator, δ_0 is the drift component, e_t is the white noise error term, $\delta_1 \rightarrow \delta_6$: denotes the long-run coefficients, the remaining expressions with the summation sign ($\beta_{1i} \rightarrow \beta_{6i}$) represent the short-run dynamics of the model.

Next we employ the Bound testing procedure for equation (2) to identify the existence of the cointegrating relationship between the variables. Once we confirmed the cointegrating relationship among the variables using the above test, in the next step of the estimation procedure we obtain the short run dynamics of parameters and long run adjustment of the model by estimating the error correction version of ARDL model pertaining to the variables in equation (2) is as follows:

$$\begin{aligned} \Delta LVEX_t = & \delta_0 + \sum_{i=1}^{q1} \beta_{1i} \Delta LVEX_{t-i} + \sum_{i=0}^{q2} \beta_{2i} \Delta LPC_{t-i} + \sum_{i=0}^{q3} \beta_{3i} \Delta LDC_{t-i} + \\ & + \sum_{i=0}^{q2} \beta_{4i} \Delta LEG_{t-i} + \sum_{i=0}^{q3} \beta_{5i} \Delta LGE_{t-i} + \sum_{i=0}^{q3} \beta_{6i} \Delta INF_{t-i} + \lambda ECT_{t-1} + V_t \end{aligned} \quad (3)$$

Where, λ : speed of adjustment coefficient which should have statistically significant and negative sign to support the long run adjustment towards steady state line, V_t : pure random error term.

Finally, Granger causality test was employed to check the causality relationship between the variables, which is given below:

$$\Delta LVEX_t = C_i + \sum_{i=1}^p \alpha_i \Delta LPC_{t-i} + \sum_{i=1}^p \beta_i \Delta LVEX_{t-i} + U_{1t} \quad (4)$$

$$\Delta LVEX_t = C_i + \sum_{i=1}^p \delta_i \Delta LDC_{t-i} + \sum_{i=1}^p \gamma_i \Delta LVEX_{t-i} + U_{2t} \quad (5)$$

$$\Delta LPC_t = C_i + \sum_{i=1}^p \alpha_i \Delta LPC_{t-i} + \sum_{i=1}^p \beta_i \Delta LVEX_{t-i} + U_{3t} \quad (6)$$

$$\Delta LDC_t = C_i + \sum_{i=1}^p \delta_i \Delta LDC_{t-i} + \sum_{i=1}^p \gamma_i \Delta LVEX_{t-i} + U_{4t} \quad (7)$$

Results and Discussions

Table 1 presents the result of the augmented Dickey-Fuller (ADF) test for all series involved in the analysis in logarithmic form in levels and first-differenced.

Table 1: Unit Root Test

Variable	Level	1 st Difference	I(0)/ I(1)
LVEX	0.2325	0.0002*	I(1)
LPC	0.5003	0.0000*	I(1)
LDC	0.7696	0.0000*	I(1)
LEG	0.8530	0.0000*	I(1)
LGE	0.6780	0.0000*	I(1)
INF	0.1003	0.0000*	I(1)

Note: *indicates that variables are statistically significant at 01% level.

Source: Author's Computation

All the variables are nonstationary at their levels but stationary at their first differences, according to the results of the Augmented Dickey-Fuller (ADF) unit root tests. As a result, they are referred to as integrated of order I (1). The bounds test for cointegration inside the ARDL modeling approach will now be used to examine the long-run equilibrium connection given that all the variables under discussion are stationary at their first difference.

Table 2 lists the findings of the bounds test for cointegration between the variables LVEX, LPC, LDC, LEG, LGE, and INF. The ARDL (1, 4, 4, 3, 1, 0) model was recommended by the Akaike Information Criteria (AIC).

Table 2: The Results of ARDL (1, 4, 4, 3, 1, 0) Model

Panel A: F- Test for the existence of a co-integration						
F- Bound test 95% level of confidence						
F- Statistics	Lower Bound			Upper Bound		
6.638183	2.62			3.79		
Panel B: Long run coefficient estimates						
Constant	LPC	LDC	LEG	LGE	INF	R ²

10.26884	-2.083026*	0.924445**	-0.956376*	-1.719879*	0.017614**	0.9806
1	(0.0001)	(0.0394)	(0.0044)	(0.0002)	(0.0423)	
(0.0140)						

Note: P- Value is given in parenthesis. **, * indicates that variables are statistically significant at 5% and 1% level, respectively.

Source: Author's Computation

The computed F- Statistics in Table 2 is 6.63, which is higher than the upper bound critical value (at the 5% level of significance), indicating that the variables used in this study had cointegrating associations. This implies that all the explanatory factors affected the changes in the export simultaneously and jointly. Although the effect is significant at 5%, the regression results show a negative association between private credit and exports. This suggests that assessing financial progress through private credit has a negative impact on exports. Since a unit-percentage increase in private credit reduces exports by 2.0830 percent, it follows that private credit does not improve trade. However, domestic credit growth as a proxy for financial development promotes export. The present findings, however, go against the first instance and actually increase trade. In other words, if the financial system is improved or developed, exports will increase and so will trade. Given the varied effects of the two measures in this situation, it is obvious that the proxy utilized determines the direction of financial development on trade. In this study, we discover that domestic credit positively impact on exports and is significant at a 1% level. It means that an increase in domestic credit of a unit percentage causes an increase in exports of 0.9244 percent. Developing the domestic credit sector will be important for economies looking to increase exports since it will produce better dividends than other measures of finance.

We discover that GDP per capita negatively impact on export, indicating that trade is reduced as the economy expands. Exports are decreased by 0.9563 percent for every unit-percentage increase in GDP per capita. This inverse association may be caused by a number of things. Local consumption of goods and services may rise along with the economy's growth because more people will have jobs and higher wages, encouraging big-ticket purchases of locally produced products and services and lowering the economy's reliance on exports. Additionally, government spending has a negative impact on export. There is evidence that government spending boosts domestic output and income growth. Income growth may raise consumers' purchasing power, which could lead to an increase in the consumption of locally produced products and services and a decrease in exports. Aside GDP per capita and government expenditure, inflation has a positive and significant impact on export. Yakubu et al., (2018) also found the same results for Africa, that in the long run, private credit, economic growth and government expenditure have a negative and statistically significant impact on export while domestic credit has a positive impact on export.

Table 3: The Results of Error Correction Representation for the Selected ARDL (1, 4, 4, 3, 1, 0) Model

Short run coefficient estimates and error correction representation							
Lag order	$\Delta LVEX$	ΔLPC	ΔLDC	ΔLEG	ΔLGE	ΔINF	EC
0		0.081436 (0.1850)	0.193857*** (0.0590)	-0.415619** (0.0344)	-0.274597** (0.0205)	0.005447* * (0.0168)	-0 (0)
1	0.620990* (0.0024)	-0.105803*** (0.0793)	-0.004610 (0.9714)	-0.150528 (0.4351)	-0.347657** (0.0145)		
2		0.102442** (0.0172)	-0.187988** (0.0249)	-0.323219** (0.0484)			
3		-0.027766 (0.4838)	-0.066674 (0.3139)	0.495499* (0.0063)			
4		-0.118130* (0.0098)	0.220868* (0.0032)				
R ²	0.834758						

Note: P- Value is given in parenthesis. *, **, *** indicates that variables are statistically significant at 1%, 5% and 10% level, respectively.

Source: Author's Computation

Accordingly, ECT (-1) carries a negative sign, which is significant, indicating that there should be an adjustment towards a steady state line with the speed of 99.3% one period after the exogenous shocks in Sri Lanka. Previous year export (at lag 1), private credit (at lag 2), domestic credit (at lag 4), economic growth (at lag 3), current year domestic credit and inflation have a positive and significant impact on export. Whereas, the previous year private credit (at lag 1 and 4), domestic credit (at lag 2), economic growth (at lag 2), government expenditure (at lag 2), current period economic growth and government expenditure have a negative and significant impact on export in the short run. According to our error correction model results previous year private credit (at lag 2) also enhance the export in the short run.

Table 4: The Results of Diagnostic Test

Diagnostic	Test applied	P- Value	Conclusion
Serial correlation	Breusch-godfrey serial correlation LM test	0.1693	No serial correlation
Normality	Jarque- Bera	0.371322	Error is normal
Heteroscedasticity	Bruesch- Pagan- Godfrey	0.4991	No heteroscedasticity
Omitted variable	Ramsey RESET test	0.1721	No omitted variables

Source: Author's Computation

Table 5: The Results of Granger Causality Test

Null hypothesis	Obs	F- statistics	Prob.
D_LPC does not Granger Cause D_LVEX	41	1.28848	0.2634
D_LVEX does not Granger Cause D_LPC	41	0.23587	0.6300
D_LDC does not Granger Cause D_LVEX	41	2.85645***	0.0992
D_LVEX does not Granger Cause D_LDC	41	1.93948	0.1718

Note: *** indicates that variables are statistically significant at 10% level.

Source: Author's Computation

According to table 4, the results of the diagnostic tests show that model is correctly specified and the parameters are correctly estimated. Because, all the diagnostics test probability values greater than the significant level of 10%.

Table 5 above shows the results of Granger causality test. The Granger Causality test results for Sri Lanka suggest a unidirectional causality that runs from domestic credit to export. In summary, the ARDL Bound test and Error Correction Model results show that domestic credit and export are positively correlated in the long and the short-run. Further, the Granger Causality test emphasized that there is a unidirectional causality that runs from domestic credit to export in Sri Lanka. But private credit and export are negatively correlated in the long-run. However, two period lag value of private credit positively impacts export in the short run.

Conclusion and Recommendation

This study investigated the relationship between financial development and international trade in Sri Lanka using annual time series data from 1977 to 2019 and, the ARDL Co-integration technique developed by Pesaran et al. (2001) was followed to empirically estimate the dynamic relationships between the two variables: financial development and international trade. For better interpretation, the model also included GDP per capita, government expenditure and inflation as another explanatory variables. Bounds testing technique was employed to identify the existence of co-integrating relationship as well as long run correlation between variables. Once we confirmed the co-integrating relationship, the short run dynamics of parameters and long run adjustment of the model were estimated by the error correction version of the ARDL model pertaining to the variables in the equation. As the final step, Granger Causality test was used to test the causality between the variables.

Our findings suggest that while domestic credit seems to encourage exports, financial development as measured by private credit does not. According to Fujimura and Edmonds (2006), economies with higher incomes tend to be more attracted to product differentiation and specialization, hence boosting trade to the extent that higher GDP reflects higher income. In this study, we found that higher economic growth rates restrict foreign trade. Increases in GDP per capita are anticipated to decrease external trade while

raising internal demand if consumers are assumed to have the same tastes both within and between nations and if domestic aggregate demand is positively connected to aggregate income. In light of this, per capita income is important for both domestic and international trade. Looking at the existing literature, Yakubu et al., (2018) have come to similar conclusions with respect to financial development and its impact on international trade. They proved that domestic credit is a statistically significant determinant of export.

In sum, the analysis' congruency with the theories as well as empirical evidence makes it clear that domestic credit and export are positively correlated both in the long-run and in the short-run for Sri Lanka. There exists, within the Sri Lankan context, a unidirectional impact on export coming from domestic credit however, no such causality can be detected from private credit. This highlights Sri Lanka's need to manage its domestic credit and impact on export to achieve external stability. Therefore, a well-established and effective financial market gives the economies involved more opportunities for international trade. A thorough understanding of the ideal credit limit is necessary for long-term international trading. Therefore, it is essential that the Central Banks continue to exercise good supervision over the financial markets at the proper quality level and to enhance financial intermediation, supply quantity of financing. According to theory and data, the development of the domestic financial sector is thought to boost economic growth. There is proof that the production of ex ante information about potential investments, exact efficient corporate governance, diversification, and risk management, as well as the efficient mobilization and pooling of savings, are all benefits of financial development. It also makes the exchange of goods and services easier. As a result, the ability of financial development to mobilize productive savings and distribute resources effectively underlies its ability to boost growth. By raising agent income levels and expanding domestic markets due to rising aggregate demand, stronger economic growth also raises the volume of international trade among nations.

Looking at the study's limitations: Data before 1977 has been ignored due to Sri Lanka's structural changes. Furthermore, this paper attempts to fill the existing literature gap surrounding a possible direct connection between financial development and international trade. The current study failed to find the indirect effect of finance on trade via economic growth. For future research, comprehensive analyses including years with structural changes and an extension of the indirect effect of finance on trade via economic growth incorporating more developing countries from the Asian region can be suggested.

References

- Beck, Thorsten. (2002). Financial development and international trade: Is there a link? *Journal of International Economics* 57:107-33.
- Caporale, G. M., Sova, A. D., & Sova, R. (2020). The Direct and Indirect Effects of Financial Development on International Trade: Evidence from the CEEC-6.
- Fujimura, M., & Edmonds, C. (2006). Impact of Cross-Border Transport on Trade and Investment in GMS. *Discussion Paper No. 48*.

Gokmenoglu, K. K., Amin, M. Y., & Taspinar, N. (2015). The relationship among international trade, financial development and economic growth: The case of Pakistan. *Procedia Economics and Finance*, 25, 489-496.

Gross, T., and S. Verani (2013). Financing Constraints, Firm Dynamics and International Trade.

Hassan, M. K., Sanchez, B., & Yu, J. S. (2011). Financial development and economic growth: New evidence from panel data. *The Quarterly Review of economics and finance*, 51(1), 88-104.

Heckscher, E.F., Ohlin, B., Flam, H., & Juneflanders, M. (1991). Heckscher-Ohlin trade theory. MIT Press, Cambridge, Mass.

Hur, J., Raj, M., & Riyanto, Y. (2006). The impact of financial development and asset tangibility on export. *World Development*, 34(10), 1728-1741.

Katircioglu, S. (2012). Financial development, international trade and economic growth: the case of sub-Saharan Africa. *Ekonomista*, 15(1), 117-127.

Kletzer, K., Bardhan, P. (1987). Credit markets and pattern of international trade. *J.Dev. Econ.* 27 (1-2), 57-70.

Kim, D. H., Lin, S. C., & Suen, Y. B. (2010). Are financial development and trade openness complements or substitutes?. *Southern Economic Journal*, 76(3), 827-845.

Kohn, D., F. Leibovici, and M. Szkup (2016). Financial frictions and new exporter dynamics. *International Economics Review*, 57(2), 453-486.

Leibovici, F. (2021). Financial development and international trade. *Journal of Political Economy*, 129(12), 3405-3446.

Manova, K. (2013). Credit constraints, heterogeneous firms, and international trade. *Review of Economic Studies*, 80(2), 711-744.

Mendoza, E. G., Quadrini, V., & Rios-Rull, J. V. (2009). Financial integration, financial development, and global imbalances. *Journal of Political economy*, 117(3), 371-416.

Samba, M. C., & Yan, Y. (2009). Financial development and international trade in manufactures: An evaluation of the relation in some selected Asian countries. *International Journal of Business and Management*, 4(12), 52-69.

Samuelson, P.A. (1949). International Factor-Price Equalisation Once Again. *Econ.J.* 59
Vaubourg, A. G. (2016). Finance and international trade: A review of the literature. *Revue d'économie politique*, 126(1), 57-87.

WTO. (2010). World Trade Organization International Trade Statistics.

World Development Indicator. (2022).

Yakubu, A. S., Aboagye, A. Q., Mensah, L., & Bokpin, G. A. (2018). Effect of financial development on international trade in Africa: Does measure of finance matter?. *The Journal of International Trade & Economic Development*, 27(8), 917-936.