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AN ECONOMETRIC TIME-SERIES ANALYSIS OF THE DYNAMIC RELATIONSHIP AMONG TRADE, FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH IN INDIA

Nenavath Sreenu[1]

[1]*Assistant Professor in Finance and Accounts, Department of Business Management, Indira Gandhi National Tribal University (A Central University), Lalpur, Amarkantak, Anuppur (Dist), Madhya Pradesh, India*
Email: srinunaikphd@gmail.com

(+ Corresponding author)

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ABSTRACT

The study conducted to investigate the relationship among financial development, international trade and economic growth evolution and also examine the important considerable variables are economic growth, export services, import services, international trade, gross capital formation and exchange rate as independent variables. Further the study is to examine if there is any exists a long run relationship among various financial development, trade growth and macroeconomic variable development in India for the period 2000 to 2018. In this connection, the paper used the Johansen co-integration method, KPSS, ADF and PP to establish the survival of a long run relationship among financial development, economic growth and trade variables and Johansen co-integration approach is used to determine the long run relationship of GDP growth. The outcomes of the paper are that financial development, trade and economic development are co-integrated, but the relationship is supported by the constancy of the macroeconomic policy subsequently undesirable macroeconomic variables such as escalating inflation can constrain economic growth.

Contribution/ Originality: The study contributes in the literature by investigating the relationship among financial development, international trade and economic growth evolution.

1. INTRODUCTION

Gross domestic product progress is one of the furthermost significant principles to assess the concert of an Indian economy. To recognise the important drivers of Indian economic development and the prospective sources of development a huge no of research has been piloted. These research paper specify the dissimilar drivers of economic development including financial development, home country investment, and export goods and services. This research paper main objective is to examine the relationship among financial, economy growth and international trade, by using the Johansen co-integration method, ADF, PP and time series analysis. The relationship between good and services export and economic growth which is a significant factor of development and trade has taken the consideration of various researchers. Majority of the research papers outcomes that the goods and services export has constructive impact on economic growth of nation. Even though good and services export directed the growth of one country and the empirically has been examined intensively, the indication of causality is still under discussion. In a progressing economy, some of manufacturing companies may go through considerable variations as an outcomes of knowledge process, practical transformations, involvements and technology provision via FDI. Underneath these environments; even if there is no public policy and procedures that effort to accomplish growth by positive free trade policies, it is potential to improve output growth of monetary and economic development in India. If domestic product and services demand does not upsurge as much as the output development in these booming manufacturing sectors; manufacturers can product and services export the surplus. Henceforth, product export growth can be encouraged by economic growth, financial growth and built the international trade strongly in a country. Though, if domestic product demand development is more than manufacturing production growth, this may be major impact to a decrease in export the goods and services. As an outcome, the internal product demand induces an increase in internal nation output which is go together with by a reduction in export; so, efficiency in growth of finance, economy and international trade can depreciate the export performance to the India. The research study have collected and studied an enormous literature work concerning with the relationship among the international trade, economic growth and financial development. There is compromise in the literature review that financial development and international trade contributions to the economic development of India with help of the different channels, including goods and services export enlargement. An effective functioning of financial services in India and it can also have positive impact on export services in accumulation to its influence on results of growth. So, to have a better goods and services export segments in international trade it's significant to have a positive growth financial and economic development system. With connection of the above discuss the research paper has highlighted present position of Indian economy statues, financial development and relationship with financial trade, from view of Indian government of finance ministry, expert of finance analyst and economic scientist the discussion of specialisation to the arguments about import versus export changes, the study has found that the managed the growth of financial development and economy of India, economists who examined the factors of standards of living have also been fascinated in the possessions of international business trade on financial growth and financial development. The paper focused on the association among finance, trade and economic growth has employed the development of different sector with the debate for a prolonged period. However in spite of that the strength, there is a substantiation to connection with the effects of international trade on income of Indian economy growth. The strength and developing the interest in economics growth examinations correlated to the affiliation between international trade and development of social capital, economic and financial sector imitate the significance and intangibility positioned upon settling the argumentative issues both from a hypothetical viewpoint and a pragmatic viewpoint.

The international Trade can be affected returns through specialisation for the reason that of a comparative benefit, manipulation of revenues from economies of measurement of scale, statistics exchange arising from developed announcement channels and transportable and technological spill overs through investments and exposure to new goods and services. According to Yuan (2014) explored that the effect of financial development and international trade on economic growth has become a significant investigation of the study. With reference of the economic traditional theoretical the factor donation, initiative of enterprises can improve their capability to overcome liquidity deficiencies with the help of financial growth by boosting to the product and services exports with great requirement on external financing source and progressing the measurement scale and construction of trade manufacture. In the view of Rajan and Zingales (1998) has discussed about a comparative recipient theory of monetarist development and entitlement that economic growth supports to the enterprises to avoid ethical vulnerability and antagonistic selection difficulties and to enrich export development endorsed by the outside financing services. Economic growth signifies positive gradation of proportional benefit for those businesses which have sophisticated requirement on outside financing. Even though there is a huge review of literature that examines the affiliation among economic development, gross domestic product, disseminate export and financial growth; the review of literature on Indian context.

2. A THEORETICAL ANALYSIS

A number of research papers piloted to examine the impact of export on economic growth and constructive influence of disseminate on economic and GDP development has been long-established by numerous researchers are Ullah *et al.* (2009) according to Jordaan and Eita (2007). Though, Pazim (2009) the study examined the legitimacy of disseminate-led economic development model for Indonesia, Malaysia and Philippines, the researcher by using quantitative data examination and determine the important association between export and import growth. The survival of export-led development activity is also investigated for Pakistan by Shahbaz (2009) who authenticate export-led development hypothesis. Shahbaz and Mafizur Rahman (2014) his studied explore the association among GDP, exports, and financial development in Pakistan by Using the Restrictions testing method to co-integration and the vector error correction model (VECM) Granger causality test. Co-integration examination confirms the long run association. The collected works on the association between export and economic development is far from consent. The conclusions depend on the individualities of the country. This kind of variables that are adopted in the research paper. According Yanikkaya (2003) discovered that there is an affirmative and important association between trade and GDP growth. As a nation opens up its economy development and contributes more in international trade development, it becomes combined into the world economy and can appreciate the static and energetic welfares mount up from international trade. According to other researcher point of view explain the adopted the trade measure activities, export service and import services as an improvement of GDP growth as an openness the business trade measure, establish a important association between trade business openness and GDP improvement. The same dimension is also the one used to measure to the trade business related activity.

According to Zeren and Ari (2013) illustrated that the G7 nations trade development and economic improvement causality association from 1970 to 2011. They long-established that the rise of trade activity increases the G7 nation's development which in opportunity upsurges trades openness. Other hand the Brueckner and Lederman (2015) discovery dissimilar experiential outcome. By adopting influential variables, they projected the causal connection between trade business degree and financial development in African countries. The research paper outcome show that economic development negatively and significantly impacts on trade business activity. However, trade beginnings showed a statistically important and constructive outcome on financial development. According to Asfaw (2015) adopted for this study the panel data by employing Generalized Least Square Estimator (GLS) for 47 dissimilar Sub- Africa countries for the periods 2000 – 2008. The paper found positive relations between trade openness and economic growth. According to Hye and Boubaker (2011) research paper investigated the hypotheses of import, export growth and internal debt balance sustainability by bring up to yearly secondary data between 1960 and 2008 for the sample size of the nation, Tunisia. The statistical autoregressive distributed lag model was used to perceive the long-time association between exports services, import, GDP and to determine its course of action. The outcome of the paper put advancing a causality relation with following terms a trend from export to economic development in addition a causality relation between import product services and economic development. According to Zang and Baimbridge (2012) in his research paper determine the association between export, import, and economic development for South Korea and Japan by using vector auto regress model. In the view of the above discussion to the outcome, three variables are co-integrated for selected nations and there is a bi-directional causality between import and economic development for the two countries. According to Al-Khulaifi (2013) this paper examined the relation between export services and import services for Granger's causality test. Outcome designate that there is co-integration between export services and import services. The Granger causality outcome also show that import prime to export service in the long run.

According to Ang (2008) and Murinde (2012) explain about the financial development can elucidate the economic segment development or growth of monetary segment that drives economic development. The paper theory, typically known as 'demand-subsequent' struggles that finance development is led by moderately than indications economic development and also economics plays a negligible role in social development. In this paper of perceptive, finance is purely a by-product or a consequence of inclusive development in the real side of the economy. According to Robinson (1952). It is discussed that when an economy develops, increases the financial products, financial institutions, and financial services materialise in the financial market in reaction to advanced demand for financial services production. Therefore, the real segment of the economy development, the financial structure progresses thereby cumulative the openings for obtaining liquidity for capital venture and for dropping risk. According to King and Levine (1993) express his view on economic development can be prompt by the amount and the structure of economic development variables through growing investments which contain of current assets, thereby depositing capital creation. According to Hsu and Wu (2009) express in his debate that through the world indication cannot sustenance the development consequence of FDI through economic growth. It may be incidental that financial growth with improved developed capital markets are not indispensable to attain advantage more from FDI to fast-track their economic development. According Ljunwal and Li (2007) in his research paper the author examines the relationship between foreign direct investment and economic development with character of financial segment in China. The econometric analysis set preliminary data used during the year of 1986 up to 2003. The pragmatic outcomes reveal that financial expansion encourages economic development but FDI have undesirable impact on output growth. It is also contingent that an improved level of financial expansion enables Thailand's economy to obtain more from FDI. Correspondingly Shahbaz and Rahman (2012) maintain that the impact of FDI on output development can be better-quality through growth of financial markets.

According to Yucel (2009) studied the causality associations among the financial growth, trade and economic development in the turkey development theory for the period 1989 to 2007. The econometric approach used was the Johansen model and Granger causality to determine the relationship among the selected variables. The conclusions of the research paper presented the trade openness has a positive effect, financial growth has an undesirable outcome on growth. According to Hassan and Islam (2005) measured whether financial development and trade openness to and can be performance any positive role in declining poverty in any nation, through their expansion attractive effect for the period 1974-2003 Granger-causality test is used to determine whether financial activity. Variables values are established first alteration stationary without having any co-integrating association as reported by Johansen test. According to Soukhakian (2007) experimentally examined the causal affiliation among the financial development, trade openness and economic development in developed nation like japan. the Outcome recommend that a long run balance association exists between trade and economic development in Japan except between domestic credit, trade and growth. According to Katircioglu *et al.* (2007) intended at examining the conceivable co-integration and the course of causality among the international trade and economic development in India. Yearly data covering the 1965-2004 periods have been employed to examine co-integration and Granger causality tests among the, international trade, and development after used unit root tests to see if the variables under thought are stationary. Outcome discloses that there is a symmetry association among the international trade development and real income improvement in the case of India.

According to Maizels (1968) in his paper established the association between the rate of change in exports service and the rate of change in the nation GDP for emerging countries for the during time period from 1951 to 1962. In his study experiential an important association between export service and development rate and GDP development rate. Though, the paper did not shed light on the issue of causality. According Mathews (1973) explain about the investigated into the association among Britain's economic development, foreign trade service and her/his expenditures problematic. His paper adopted time series analysis covered the 100 year research studied. The study would have predictable the researcher to have probably alienated the historical information. According Papanek (1973) in his paper explain about the 85 emerging economy countries assessed the influence of fixed and foreign capital, FDI and home nation savings on economic development. The paper explain about the long-established the survival of a constructive association among economic growth, GDP and home nation savings. Additional, in his paper the explored that the external assistance and external investment certainly influenced economic growth.

According to Yang (2008) in his research studied the association between exports product service and economic growth over the period of 45 years from 1958 to 2006 throughout 44 nations. The outcome from most of the nations adopted in the paper gave credibility to the export service development hypothesis, while an insufficient of them demonstrated variables. The researcher also experiential that, due to the problematic of data obtainability in the emerging economy countries, the real exchange currency rate can help as a significant tool for characteristic between circumstances of exports productive service improvement and import service circumstances. According to Kehinde (2012) in his paper explored the effect of global business on economic development in undeveloped country like Nigeria from 1970 to 2010. The research paper prepared to practice of regression method and error correction procedures. Based on the model the paper exposed that 3 selected variables, called export service, FDI and exchange rate service are statistically important at 5%. According to Arodoye and Iyoha (2014) explain about the econometrically measured the relationship between foreign direct investment and economic growth in Nigeria by utilizing three-month time-series analysis based on the annually data set for the time duration from 1981 to 2010. A VAM was adopted, the outcome of the paper authorises a stable, long run construction between Trade openness and economic development. The paper drawn the conclusion based on the above analysis of his paper considers the acceptance of international trade development as a strong economic strategy mechanism for catalysing the procedure of financial development in Nigeria.

3. METHODOLOGY

The research methodology approach of the study mostly depends on different methods which used various methods. In this research study, the methods of time series econometrics tools have been used for data analysis such as unit root test, ADF test and VAR model as well as VEC method are employed in order to study the dynamic association among the financial, international trade and economic development in both long term and short term with outcome out the causality and its direction among them. In the sequence of the research study, the structure transformation in import and export of the India is investigated by adopting some descriptive statistics tools in direction to observe how international trade pattern of the nation changed. This research has consider 18 years' time period for collect the data from different sources and how it would have likely impact on the economic and GDP growth on nation. Secondary Data sources collected from the research paper and annual report of the government of Indian during period of 2000-2018 covering selected variables, Export, import, GDP and national credit to private sector financial institutions, Money and quasi money contains demand deposits excluding government of India how it has impact on the development of economy, financial and international trade relationship with other countries,

3.1. Data Sources of the Paper

The research paper has collected and utilised the secondary data information for this paper. Moreover the study elaborately, the paper adopted time-series yearly data for the time period of 2000 – 2018. For this study the researcher has used the explorative variables are real GDP, a substitution for economic growth, export services, import services, international trade, gross capital formation and exchange rate serves as the dependent variable. Further the paper also used the macro-economic dataset used as the sources from the RBI, NITI Aayog, SEBI, NSE, BSE and Indian Statistical Agency.

3.2. Data Analysis and Discussion

From the table 1 has shown the results of the data used in the modelling the association among trade, economic growth and financial growth in India for the period of 2000 -2018 are signified in the above table no 1. The results explain about the Indian economic, the financial activity development and trade development status, the average growth rate values of the selected variables GDP (5.236), export services (4.256), import services (2.457), trade value (1.4750, ex-change value rate (5.421), fixed capital form (3.867) and FDI (2.537).

Table-1. The summary of the descriptive statistics

Statistics tools	1	2	3	4	5	6	7
Mean	5.236	4.256	2.457	1.475	5.421	3.867	2.537
Median	4.236	5.147	4.457	5.577	3.578	4.589	6.589
Minimum	3.256	2.457	4.869	5.425	5.854	4.758	6.589
Maximum	4.235	3.256	6.589	7.568	9.568	5.528	9.568
Sum	98.235	91.536	68.530	75.865	69.528	49.523	53.568
Std. Dev.	1.536	1.857	2.869	2.754	3.568	2.380	1.458
Probability	0.4256	0.5487	0.4578	0.0685	0.4587	0.6589	0.4568
Sum Sq. Dev.	28.568	29.568	54.256	51.365	45.856	47.568	28.365
Skewness	-0.235	-0.258	-0.168	-0.568	-0.478	-0.935	-0.614
Kurtosis	1.568	1.457	1.369	1.745	1.857	1.187	.579
Observations		38	38	38	38	38	38

1-Gross domestic product, 2- Export services, 3- Import services, 4- Trade value, 5- Ex-change rate, 6- Fixed capital formation, 7- FDI

The average values of the selected variable showing the insignificant impact on the development of Indian economy, business trade development as well as international trade relationship. In the same sequence of the table 1 results shown about The Jarque-Bera measurements shows that not a single variables has shown a significant values from normality, thus, the selected variables are taking into measure the their significant level to have a normal distribution. The paper outcome shown the variability in the distributions is apprehended by the standard deviation in the table one. The outcome of the paper are as shown in the table as a standard deviation values are GDP (1.536), export services (1.857), import services (2.869), trade value (2.754), ex-change value rate (3.568), fixed capital form (2.380) and FDI (1.458). These selected variables values are insignificantly isolated towards economic, financial and international trade development activity and mean value and other statistical tools also not indicated there are wide variations among selected variables

3.2.1. Econometric Time Series Analysis Results

Table-2. Unit Root method results

Variables	ADF and PP			
	Order	Test	Constant	Constant and Trend
GDP	I (0)	ADF	-0.0045873	-1.5689456
Economic Growth	I (0)	PP	-0.1265897	-2.3569754
Export services	I (0)	ADF	-0.0045967	-3.4589675
Import Services	I (0)	PP	-1.0568975	-0.4578964
Trade	I (0)	ADF	-0.0869758	-4.5689736
Gross Capital formation	I (0)	PP	-2.0568978	-1.4587963
Exchange Rate	I (0)	ADF	-0.4589673	-2.4879645
FDI	I (0)	PP	-2.5689156	-0.4587968
GDP	I (1)	ADF	-2.5687350**	-4.5368902**
Economic Growth	I (1)	PP	-4.6758246**	-5.2356878**
Export services	I (1)	ADF	-1.2569875**	-2.5689815*
Import Services	I (1)	PP	-3.8569725**	-1.5678429**
Trade	I (1)	ADF	-1.8567690**	-2.4876902**
Gross Capital formation	I (1)	PP	-5.7391826**	-4.5368920*
Exchange Rate	I (1)	ADF	-0.4578964**	-3.4378412**
FDI	I (1)	PP	-1.5689754**	-4.4578964*

Test: Augmented Dickey Fuller (ADF) and Phillip- Perron (PP)

From the table no 2, the study draws the interpretation based on the outcomes from table no- 2 at present improvement in time series modeling has been to establish the relationship in order of integration of the variables adopted the in the model with diverse unit root test. The Econometric time series value disclosed the results to be integrated of order directed by order of integration, if the Econometric time series becomes stationary after being differenced order of integration times. This research paper used the two most common econometric tools but significant tests (Augmented Dickey Fuller and Phillip- Perron) of stationarity of time-series figures. The present table studies the stationarity tests among the seven variables (GDP, Economic Growth, Export service, import services Trade, Exchange Rate and formation of Fixed Capital) all this variable is consideration for the both at direction level I (1) and at first direction level I (0) variance. In order of the above table value the paper having measured the test of stationarity of all the seven variables, based on the above table outcome the research has observed and analysed that all the seven variables are non-mean regressive at the both level. However, upon variance among the selected variables, the paper become stationary. This results shows that the variables (GDP, Economic Growth, Export service, Import services Trade, Exchange Rate and formation of Fixed Capital) there would have a continuous mean and variance at integrated order 1 level. This improvement further imposes a co-integration test. Finally the paper conclude that all seven variables it should be co-integrate relationship among the all seven variables and the table value shown majority of variable values has shown insignificance.

3.2.2. SVAR Model Outcome.

From the table no 3, the research paper used the structural vector auto regression model to investigate the impact of import and FDI recognised and distinguished according to their demand and supply bases and their relation to the Indian stock market return, export, interest rate, ex-change rate, volatility, Trade and covariance, correspondingly. International trade and FDI can affect GDP, stock price return, Economic development and volatility by impact on expected cash inflow and on the discount rate practical to future earnings. The paper determine simultaneous correlations between Export, import, and volatility covariance are unimportant and statistically insignificant within a selected variables. The stationarity of the selected variables in the model is examined by piloting Kwiatkowski–Phillips–Schmidt–Shin (KPSS), Augmented Dicky–Fuller (ADF) and Phillips–Perron (PP), tests for every of the time series analysis, the leading variance of the natural logarithm of export and import services production, aggregate supply side, demand, exchange rate, trade openness and volatility covariance. From the table results shows that the researcher can reject the insignificant variables based on the table results. The study relationship can established on the KPSS, PP and ADF tests, that FDI. Trade, exchange rate, export, import and covariance a unit root at the 5% level majority of variables revealed the outcomes insignificant. Based on that the study also find that the three tests recommend that exchange rate and trade openness comprehends a unit root. The nonstationarity of exchange rate and trade openness may prime to a cost of an asymptotic effectiveness as reproduced in broader error groups in the approximation from the table value. Though, considering the first variance value may outcome in elimination of the sluggish moving component in the time series order.

From the table no 4, the results shown the subsequently the assessments apprehensions international trade, Indian economic development relationship, and are lead available inside a dynamic alignment, and ultimate significant to build the relationship among the variables or whether these selected variables can forecast a different other hand side with the Granger causality method. In specific, the model indicators are investigating to control whether lagged values of one variable do assistance to forecast another variable. From the Table no, has represented the outcome of the Granger-causality tests for the eight-variable VAR.

Table-3. stationarity test Results.

Variable	KPSS		ADF		PP	
	No tendency	Linear Tendency	No tendency	Linear Tendency	No tendency	Linear Tendency
Δ prod	-9.125**	-7.586***	-14.576***	-19.376***	0.004	0.005
GDP	-6.532**	-6.357***	-10.468***	-9.276***	0.047	0.105**
Capital	-2.475	-4.159**	-2.356	-4.678**	0.457**	0.008
Exports	-4.536**	-4.458**	-8.369***	-2.487	1.457***	0.059
Imports	-7.376**	-5.586**	-3.258**	-1.473	0.875**	1.056***
Trade	-4.890**	-1.819	-1.586	-4.687**	0.007	1.856***
ER	-3.105**	-2.361	-5.835**	-2.348	0.009	0.605***
IR	-1.421	-5.865**	-6.492**	-7.864***	1.087***	0.004
COV ^{realized}	-6.670**	-4.173**	-2.654	-11.716***	1.406***	0.081
COV ^{implied}	-8.563**	-8.937***	14.568***	-17.457***	0.614**	0.896**
COV ^{conditional}	-5.503**	-7.509***	-11.429***	- 9.670***	1.008***	1.853***

The Kwiatkowski–Phillips–Schmidt–Shin (KPSS), augmented Dickey–Fuller (ADF), and Phillips and Pierre Perron (PP)

Table-4. Granger-Causality Test

Regression	Dependent Variable in Regression							
	1	2	3	4	5	6	7	8
1	0.145	0.586	0.473	0.568	0.689	0.273	0.196	0.698
2	0.457	0.864	0.618	0.573	0.816	0.006*	0.173	0.261
3	0.007**	0.552	0.371	0.162	0.010*	0.005*	0.420	0.069
4	0.458	0.017	0.001**	0.608	0.420	.0503	0.123	0.321
5	0.051*	0.471	0.582	0.685	0.869	0.256	0.196	0.004*
6	0.004**	0.914	0.101	0.509	0.586	0.003*	0.510	0.325
7	0.506	0.685	0.527	0.672	0.561	0.859	0.683	0.000*
8	0.063	0.951	0.357	0.578	0.693	0.583	0.681	0.863

Sources: (a) ** average the rejection of the variables at level of 5%.
1-Gross domestic product, 2- Export services, 3- Import services, 4- Trade value, 5- Ex-change rate, 6- Fixed capital formation, 7- FDI and 8- economic growth

It would be noted that the p-values has significantly connected with the F-statistics supports to determine whether the significant value equals to zero. The table shown the outcome that exports services, import service, trade value and ex-change rate indeed, help in predicting output values. This research paper drawn the recommendation method is running from exports product to economic development and GDP growth. In other hand side, Indian public sector, through reviewed policy decision to implementation, would need to improve its export services activity in order to understanding economic and GDP growth.

3.2.3. VEC Model Result

Vector Error Correction model important objective is to determine the differentiate between long run and short run granger causalities, appropriate where the variables in the model are individually integrated of order 1, but demonstration co-integration method. Vector Error Correction model approximation contains and approximation of the error correction, their number be contingent on the rank of the co-integration matrix value.

These error correction terms relate to the long period association among the observed variables. The F-test of the descriptive variables communicates to the short-run effect, the importance of ECT communicates to the long-run relationship.

The research output has shown the results from table no 5 of Vector error correction model for the Czech information was assessed for the lag length of Vector Error Correction model equal to 1seven variable and a co-integration association of rank determine the significance of order rank among the variables. The important lags in the fixed capital formation, Trade, export and import comparisons are not appropriate significance, other side influence of GDP comparison contains quite constant standards of significant lags (for all the seven selected variables). As the outcome of table, no illustrations, improvement of FDI cannot be enlightened with an influence of lagged standards value of among any variables.

Table-5. Granger causality model

dependent variable	F-statistics							t-statistics		
	1	2	3	4	5	6	7	1	2	3
1	2.74 (0.009)	0.12 (0.003)	0.52 (0.008)	1.38 (0.005)	2.13 (0.002)	0.52 (0.008)	0.51 (0.013)	-2.530 (0.035)	1.634 (0.230)	3.567 (0.008)
2	1.85 (0.724)	0.56 (0.086)	-0.14 (0.048)	0.63 (0.573)	0.47 (0.951)	1.68 (0.378)	0.91 (0.052)	0.73 (0.147)	-1.51 (0.023)	0.37 (0.001)
3	0.85 (0.253)	0.36 (0.002)	-1.12 (0.570)	0.08 (0.007)	0.18 (0.071)	-1.87 (0.015)	-0.29 (0.183)	0.68 (0.005)	-0.86 (0.198)	0.18 (0.085)
4	0.86 (0.065)	0.17 (0.037)	-1.53 (0.008)	-0.29 (0.086)	0.08 (0.081)	0.86 (0.532)	-0.80 (0.158)	0.90 (0.601)	0.13 (0.839)	0.20 (0.825)
5	0.19 (0.258)	0.83 (0.003)	0.73 (0.753)	-0.29 (0.357)	0.61 (0.159)	-1.58 (0.863)	-0.13 (0.008)	037 (0.741)	-0.15 (0.951)	0.73 (0.792)
6	-0.86 (0.39)	-1.16 (0.749)	0.28 (0.298)	0.36 (0.376)	0.17 (0.470)	1.88 (0.916)	-0.64 (0.087)	0.83 (0.107)	-1.27 (0.863)	-0.58 (0.731)
7	-0.83 (0.753)	0.61 (0.357)	-1.43 (0.951)	1.47 (0.159)	0.89 (0.963)	1.18 (0.258)	-1.74 (0.741)	0.80 (0.456)	-0.29 (0.321)	0.67 (0.483)

1- Log (GDP), 2- Log (FDI), 3- Log (Export Service), 4- Log (Import service), 5- Log (Trade values), 6- Log (Ex-change rate), 7- Log (Fixed Capital Formation) and 1- ECT, 2-ECT, 3-ECT

Improvement of exchange is only dependent on the trade value development for the significance stage of 7%. Export development can be elucidated by its preceding growth of above mention variable, as well as by the improvement of FDI and Fixed capital formation, all for the stage of insignificance equivalent to 3% in the short run, in addition to in the long run in the perspective to the impact of the error correction coefficients. The outcome of the assessment support determine the projected value that FDI, export and import development Granger-causes economic development in India. Consequently, the Indian social economic development can be measured as FDI and Export product service. The contradictory course of action the interconnection among the economic issues and financial development, FDI, in exports was not distinguished (p-value is 0, 09). It can be only construed that improved trade value with neighbour countries, GDP and economic activity performance is reasonably insistent. Approximately all the error correction model terms are statistically shown that the insignificant, which symbolises the being of an adjustment procedure of the selected variables to reach a short-run stable stated but in long run majority of variable it shown that not stable shown the adjustment procedure. The effects of selected number of variables was verified, the economic, financial and trade development in India was establish in a strong negative relation with all the model variables. The research study majorly focused on the relationship between Indian Rupee and US Dollar exchange rate had an insignificant effects on FDI, Import and Export services comparison. The overall vector error correction model for the Indian statically data was estimated for the lag length 7 and co-integration of ranking order 7. The outcome of the causality examinations are accessible in the table (ECT1, ECT2 and ECT3) it has not shown the positive relationship among the variables and the other side individualities of the model are not strong relationship. As in the Indian Economy, the GDP growth comprehends moderately significant lags (for all the seven variables).

4. CONCLUSION

The research paper drawn the conclusion of this paper, the main intended to that the study founded if there exists a co-integrating affiliation among the Trade, Economic growth and financial development as the external variable, and international trade variables and macroeconomic variables values as external variables. The outcome of the paper directed that VAR model exists presented that there is a long run association between GDP and its export service. The table no 3 also established that a constant economic growth environment is also essential to boost to development of international trade relationship with neighbour nations and eventually economic development. the effect of trade attractive guidelines to function more efficiently in a more open trade business management which authorizations initiatives to take benefit of global openings to trade and investment and the conclusion based on the data analysis to assess the long run symmetry affiliation and the trend of causality among the financial development, economic growth and international trade. To this paper important objective, unit root tests has used to test the determine to the significant value among selected variables but the majority of variables not shown the significant impact on the development of economy, Trade and Financial activity in India. Though, the variance of the econometric analysis has originated to be stationary among the variables; from out of 7 variables five variables has shown the insignificant of unit root. Subsequently paper examined by using Johansen statically tool to fine that there is a negative long run symmetry association among the trade, economic and financial development. The course of causal affiliation is assessed by Granger Causality method. Granger causality test investigated the outcome show that a variation in financial development and economic development.

The research study has given recommend that trade policies meant at re-establishing global competitiveness for enlargement and diversification of exports service have the prospective of stimulating and nourishing economic development for the India economy in long run period. Further the study has given suggestion that the experiential outcomes specify that the Government of India would try to sustenance the financial Growth in order to speed up the economic development and to have an enhanced monetary structure to help the stable economic growth and trade development. To this paper objective a developed infrastructure, noble macroeconomic situation and eradication of all categories of trade obstacles is needed.

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REFERENCES

Al-Khulaifi, A.S., 2013. Exports and imports in Qatar: Evidence from cointegration and error correction model. Asian Economic and Financial Review, 3(9): 1122-1133.

Ang, J.B., 2008. A survey of recent developments in the literature of finance and growth. Journal of Economic Surveys, 22(3): 536-576. Available at: https://doi.org/10.1111/j.1467-6419.2007.00542.x.

Arodoye, N.L. and M.A. Iyoha, 2014. Foreign trade-economic growth nexus: Evidence from Nigeria. CBN Journal of Applied Statistics, 5(1): 121-141.

Asfaw, H., 2015. Trade policy and economic growth in Sub-Saharan Africa: A panel data approach. American Journal of Trade and Policy, 2(1): 7-14.

Brueckner, M. and D. Lederman, 2015. Trade openness and economic growth: Panel data evidence from Sub Saharan Africa. Economica, 16(2): 1302-1323.

Hassan, K.A. and R.M. Islam, 2005. Temporal causality and dynamics of financial development, trade openness, and economic growth in Vector Auto Regression (VAR) for Bangladesh, 1974-2003: Implication for poverty reduction. Journal of Nepalese Business Studies, 2(1): 1-12. Available at: https://doi.org/10.3126/jnbs.v2i1.50.

Hsu, C.-C. and J.-Y. Wu, 2009. FDI and economic growth: Revisiting the role of financial market development, Working Paper, Department of Economics, National Central University.

Hye, Q.M.A. and H.B.H. Boubaker, 2011. Exports, imports and economic growth: An empirical analysis of Tunisia. The IUP Journal of Monetary Economics, 6(1): 6-21.

Jordaan, A.C. and J.H. Eita, 2007. Export and economic growth in Namibia: A Granger causality analysis. South African Journal of Economics, 75(3): 540-547.

Katircioglu, T.S., N. Kahyalar and H. Benar, 2007. Financial development, trade and growth triangle: The case of India. International Journal of Social Economics, 34(9): 586-598. Available at: https://doi.org/10.1108/03068290710778615.

Kehinde, J., 2012. Talent management: Effect on organization performances. Journal of Management Research, 4(2): 178-186. Available at: https://doi.org/10.5296/jmr.v4i2.937.

King, R.G. and R. Levine, 1993. Finance, entrepreneurship and growth. Journal of Monetary Economics, 32(3): 513-542.

Ljunwal, C. and J. Li, 2007. Financial sector development, FDI and economic growth in China. OCER Working Paper-E2007005, Perking University.

Maizels, 1968. Exports and economic growth of developing countries: A theoretical and empirical study of the relationships between exports and economic growth, with illustrative projections for 1975 for the main overseas sterling countries. Political Science Quarterly, 86(3): 531-563.

Mathews, W.M., 1973. Narrative format testing reports and traditional testing reports: A comparative study. Journal of Educational Measurement, 10(3): 171-178. Available at: https://doi.org/10.1111/j.1745-3984.1973.tb00794.x.

Murinde, V., 2012. Financial development and economic growth: Global and African evidence. Journal of African Economies, 21(suppl_1): i10-i56. Available at: https://doi.org/10.1093/jae/ejr042.

Papanek, G.F., 1973. Aid, foreign private investment, savings, and growth in less developed countries. Journal of Political Economy, 81(1): 120-130. Available at: https://doi.org/10.1086/260009.

Pazim, K.H., 2009. Panel data analysis of export-led growth hypothesis in BIMP-EAGA coutries, MPRA, 13264.

Rajan, R.G. and L. Zingales, 1998. Financial dependence and growth. The American Economic Review, 88(3): 559-586.

Robinson, J., 1952. The rate of interest and other essays. London: Macmillan.

Shahbaz, M., 2009. A reassessment of finance-growth nexus for Pakistan: Under the investigation of FMOLS and DOLS techniques. IUP Journal of Applied Economics, 23(4): 65-82.

Shahbaz, M. and M. Mafizur Rahman, 2014. Exports, financial development and economic growth in Pakistan. International Journal of Development Issues, 13(2): 155-170. Available at: https://doi.org/10.1108/ijdi-09-2013-0065\.

Shahbaz, M. and M.M. Rahman, 2012. The dynamic of financial development, imports, foreign direct investment and economic growth: Co-integration and causality analysis in Pakistan. Global Business Review, 13(2): 201-219. Available at: https://doi.org/10.1177/097215091201300202.

Soukhakian, B., 2007. Financial development, trade openness and economic growth in Japan: Evidence from Granger causality tests. International Journal of Economic Perspectives, 1(3): 117-128.

Ullah, S., B. Zaman, M. Farooq and A. Javid, 2009. Cointegration and causality between exports and economic growth in Pakistan. European Journal of Social Sciences, 10(2): 264-272.

Yang, L., 2008. The real determinants of asset sales. The Journal of Finance, 63(5): 2231-2262. Available at: https://doi.org/10.1111/j.1540-6261.2008.01396.x.

Yanikkaya, H., 2003. Trade openness and economic growth: A cross-country empirical investigation. Journal of Development Economics, 72(1): 57-89. Available at: https://doi.org/10.1016/s0304-3878(03)00068-3\.

Yuan, 2014. Growing with capital control in China. IMF Economic Review, 62(3): 327-368.

Yucel, F., 2009. Causal relationships between financial development, trade openness and economic growth: The case of Turkey. Journal of Social Sciences, 5(1): 33-42. Available at: https://doi.org/10.3844/jssp.2009.33.42.

Zang, W. and M. Baimbridge, 2012. Exports, imports and economic growth in South Korea and Japan: A tale of two economies. Applied Economics, 44(3): 361-372. Available at: https://doi.org/10.1080/00036846.2010.508722.

Zeren, F. and A. Ari, 2013. Trade openness and economic growth: A panel causality test. International Journal of Business and Social Science, 4(9): 317-324.