Innovative Systems Design and Engineering
ISSN 2222-1727 (Paper) ISSN 2222-2871 (Online)
Vol.5, No.5, 2014

Impact of Trade Liberalization on the Economy: Cross-country Analysis of Selected Asian Economies

Muhammad Tariq Mahmood[1*] Irfan Nazir[2] Sadaf Shahab[3]

[1, 2, 3] Respectively Assistant Professor, M.Phil Scholar and Assistant Professor at School of Economic Sciences, FUUAST, G-7/1, Islamabad Pakistan.

* E-mail of the corresponding author: tm76pk@gmail.com

Abstract

There exists a controversy on the direction of the causality and relationship among trade liberalization and economic growth. This controversy motivates us to reinvestigate the determinants of the economic growth in the framework of multivariate model. The present study is an attempt to see the impact of trade liberalization on the economic growth of the selected countries of SAARC and ASEAN over the period of 1990 to 2009. To capture the growth effects of trade liberalization an index is calculated on the bases of principal component analysis. With the help of this index, we test the hypothesis that whether the trade liberalization along with other variables is an important determinant of the economic growth. For this purpose we use the fixed and random effect models. We come up with the conclusion that the trade liberalization may improve the economic growth of the developing countries depending on their policy response to the relative factors. Additionally we also find elasticities of capital and labor exhibiting constant return to scale production function in the presence of meager trade parameters.

Keywords: Trade Liberalization Index, Fixed and Random Effect Models, Constant Return to Scale, Hausman Test, Economic Growth

1. Introduction and Background

International trade being an extension of domestic trade certainly differs from it due to barriers that prevent the free movement of goods, persons and capital across international borders. These obstacles may be social, political or economic. The economic barriers custom duties, direct trade restrictions or exchange controls.

The significant economic growth of the developing countries like China, India, Korea, Indonesia and many others over the last two decades is one of the most important events in the history of modern economics. A number of researchers connect the link of economic growth of these countries with financial development (Levine et. al. 2000, Jalil and Fridun 2010 and many others) and trade liberalization [among others, [Dinopoulos and Syropoulos (1997), Lloyd et al (2000) , De Jong et al (2004), Kim et al (2005), Rao et al et al (2008) , and Herzer et al (2008)]. Despite the clear arguments on these issues, the different schools of thoughts have the different views on the direction of linkages regarding trade liberalizations. Therefore, indeed, the investigation about the impact of trade liberalization on the economic growth is not a unique idea. However, the controversial arguments of scientific studies motivate the researchers for further research.

Keeping in view the above controversy among the researchers about effectiveness of trade liberalization for the economic growth of the countries, we also reinvestigate the determinants of the economic growth in the framework of multivariate model. As mentioned earlier that the empirical results are sensitive to the measure of the variable which may be a cause of the differences among the studies. Therefore, we will introduce the composite index for the trade liberalization to bridge this gap. To accomplish our task we shall take the different commonly used indicators for the trade liberalization for constructing the required index.

Therefore, we, in this study, focus on trade liberalization index and its implications on economic growth, for a cross-section of five countries from SAARC & ASEAN, following Khan and Ahmed (2012) and Yen (2009). The major contribution this study makes is in the development of trade liberalization indices of the middle income countries and then to assess their effectiveness.

The roots of the idea of considering trade as a significant factor of growth can be traced back to Adam Smith. It regained popularity in the end of the 20th century and the recent flow of empirical literature that explains the relationship between trade liberalization and economic growth gives a new birth to this discussion. However, the empirical results may be inconclusive. The review of existing literature is summarized as follows: (II) growth and trade liberalization nexus; and (II) nexus between growth and other factors.

I. The positive impact of Trade openness on the economic growth can be illustrated by the different research studies as: Dinopoulos and Syropoulos (1997), Lloyd et al (2000), Mazumdar(2001), De Jong et al (2004), Kim et al (2005), Yao et al (2007), Rao et al et al (2008), Kose et al (2009), Herzer et al (2008), Chang et al

(2010), Lee (2011) and Rao et al, (2011) take the sample of the different countries and different indicators. Dinopoulos and Syropoulos (1997) develops a dynamic multi-country, multi-commodity model of Schumpeterian growth, trade, and tariffs. The presence of a non-traded final goods sector generates differences in long-run growth across countries. Furthermore, if the growth intensity of the non-traded good is lower than the growth intensity of traded goods, then the liberalization of trade raises the long-run growth of all trading partners. The relationship between trade openness and economic growth is examined by Lloyd et al (2000). The data set constitutes East Asian countries after the Asian crises and investigated the performance in real trade sector. The results indicate that fast growing East Asian economies were early openers. Therefore, it contributed to their fast growth. Similarly Mazumdar (2001) finds evidence that imported machinery leads to higher growth and investment in domestically produced goods reduces growth rate. An index of globalization is presented by Dreher (2006) covering its three main dimensions: economic integration, social integration, and political integration. The results show that globalization promotes growth, but not to an extent necessary to reduce poverty on a large scale. Although not much strongly, information flows also promote growth whereas political integration has no effect. To Lee (2011) both trade openness and export specialization promote economic activities, technological opportunities and are important for sustained growth. Additionally, Rao et al, (2011) found that the robust long run relationship between globalization and growth for African countries.

The market failures such as positive production externalities in import-competing sectors and trade restrictions provide some evidence of negative relationship between trade openness and economic growth, for example Barro et al (1994), Yanikkaya (2003) Edwards (1993) Gylfason (1999), Gries et al (2009) Misati et al (2011). However, the various studies take the different indicators for measuring the trade liberalization. Similarly, free flow of international trade may also conflict with the internal domestic policy objective of the trading partners for example; each country has its own specific needs and domestic regulations on taxes, investments, competition, wages and prices, which will significantly affect trade and investment. Furthermore, national currencies make it essentials to have a foreign exchange market, and movement in such markets can be affected by speculators and arbitrageurs. This adds a further source of instability in international trade that is not present in domestic trade. In Barro et al (1994), a marginally significant negative relationship is initially estimated, but the result is not robust. When import duties as a fraction of imports is used as a measure of the average tariff rate, no statistically significant relationship is found between growth and openness. Misati et al (2011) document the dual role of openness on growth using a bank crisis model. The study uses data covering Sub-Saharan African countries and indicates that the growth retarding effects of openness are dominant over growth enhancing effects.

II. The impact of human capital, trade liberalization and financial development on economic growth has been studied by Kar, et.al (2008). The empirical results obtained from study confirmed the positive effects of above said factors on growth in Turkey. A considerable body of literature suggests a strong and positive link between trade liberalization, financial development and economic growth. It has been argued that trade and financial liberalization policies reduce the inefficiency in the production process and positively influence economic growth. This argument is strengthened by the fact that countries with more open trade and financial policies may grow faster than those with restricted trade policies [see for example: Fry, 1995; Levine, 1997; and World Bank, 1989]. There is growing consensus that both liberalization policies are expected to exert positive impacts on economic growth. Most developing countries that formerly followed restraining policies have started liberalizing their trade in order to increase economic growth. The main argument for this policy change was that both trade liberalization policy reduces inefficiency in the production process and positively influence economic growth. Khan (2009) found both long run and short run relationship between economic growth, trade openness and an array of controlled variables. It concludes that both trade liberalization and financial policies play an important role in the long run only and low short run response of real deposit rate. Contrasting to all this Herzer et al (2008) examine the ambiguous results and indicate no clear association among economic growth, trade openness, and financial markets development.

In this discussion, it is now evident that the results may differ from study to study, country to country and methodology to methodology. Therefore, the researchers are still motivated to explore the link among these variables. The present study is also an attempt in this way.

2. Analytical Framework

Pagano (1993) for explicitly incorporates the financial sector development into economic growth framework. This model implies that the economic growth, which is measured by output growth, depends on total factor productivity and the saving rate. Therefore, basic model can be written as:

$$Y_{it} = AK_{it} \qquad \mathbf{1}$$

Where, Y_{it}, A and K_{it} denote the output, total factor productivity and capital, respectively. The subscript it is the indicative of the cross-sectional and time series observation, respectively. Pagano (1993) postulates that a certain proportion of savings, the size of (1−λ) with 0<λ<1, is the cost of financial intermediation per unit of savings. This cost, for example, may be the spread between borrowing and lending rates; may be the fees on various transactions of the banking sector, etc. All these costs are the resources absorbed in producing intermediate services. Only the fraction (λ) of total savings can be used to finance investment. The smaller the spreads, the more efficient is the financial system. Therefore, the saving–investment relationship can be written as $I_{it} = \lambda S_{it}$

Then it is well known that the economic growth of the economies may be expressed in the form of growth in total factor productivity and growth rate of physical capital, written as:

$$gy_{it} = gA + gK_{it} \quad \textbf{2}$$

Eq. (2) expresses that economic growth depends on the total factor productivity (A), the efficiency of financial intermediation (λ), and the rate of savings (s). Here

$$gK_{it} = \frac{K_{it+1} - K_{it}}{K_{it}} \quad \textbf{3}$$

Which is further expanded as

$$gK_{it} = \frac{I_{it} + (1+\delta)K_{it} - K_{it}}{K_{it}} \quad \textbf{4}$$

Further solution of (4) implies that gK approaches a permanently positive and exogenous value which is determined by the difference between $A\lambda s_{it}$ and δ. Since this model represents a closed economy, it does not take into account the capital flows. To overcome this shortcoming, Beck (2002) includes the trade in AK model of Pagano (1993). Furthermore, a number of prominent endogenous growth studies provide a different array of models in which trade restrictions or trade openness are among the vital determinant of the economic growth. We shall also take care of the tariff rates as a measure of trade restriction or, alternatively, trade liberalizations. For this purpose, to avoid the loss of information, we develop an index of trade liberalization which includes not only the tariff rates but trade volumes as well along with other policy reforms like changing of exchange rate regimes and ratification of WTO. Therefore, the relationship between economic growth and openness is specified as:

$$Y_{it} = \alpha_0 + \alpha_1 TL_{it} + \alpha_2 K_{it} + \alpha_3 L_{it} + \alpha_4 P_{it} + u_{it} \quad \textbf{5}$$

Where Y natural log of real GDP is, TL is a proxy to trade liberalization, K is the capital, L is the employed labor force and P is the consumer inflation in a country.

3. Econometric Strategy

We consider a model in which there are four explanatory variables for the panel data estimation. It enables us to study more complicated behavioral models e.g. phenomenon such as economies of scale and technological changes can be better handled by panel data than by pure time series or cross sectional data. In short panel data can enrich the empirical results in ways that may not be possible if we use only cross section or time series data.

3.1. The Fixed and Random Effects Model

In fixed effect Model, panel model has constant slopes but intercepts that differ according to the cross-sectional (group) unit—for example, the country. Although there are no significant time effects, there are significant differences among countries in this type of model. While the intercept is cross-section (group) specific and in this case differs from country to country, it may or may not differ over time. These models are called fixed effects models. For example, the subscript i on intercept term in eq (5) shows that intercept of selected country may be different; and it may be due to special features of each country, such as trading style or tariff policies. Through differential intercept dummies we allow the (fixed effect) intercept to vary among countries. So write as:

$$Y_{it} = \gamma_1 + \gamma_2 D_{2i} + \ldots + \gamma_5 D_{5i} + \alpha_1 TL_{it} + \alpha_2 K_{it} + \alpha_3 L_{it} + \alpha_4 P_{it} + \mu_{it} \quad \textbf{6}$$

Where $D_{2i} = 1$ if the observation belongs to Bangladesh, 0 otherwise. Same interpretation will be done for all dummies with all the countries under analyses.

Greene (2003) calls random effects model a regression with a random constant term.

$$Y_{it} = \alpha_0 + \alpha_1 TL_{it} + \alpha_2 K_{it} + \alpha_3 L_{it} + \alpha_5 P_{it} + \omega_{it} \quad 7$$

Where $\omega_{it} = \varepsilon i + \mu_{it}$

FEM is better if time series is larger than cross sectional units. The Hausman specification test is the classical test of whether the fixed or random effects model should be used after testing the correlation between the unobserved cross sectional-specific random effects and the regressors.

3.2. Variables and Data

We develop both trade liberalization indexes following the recent methodologies reviewed so far. In the proceeding discussion we have gone through this data generating process.

3.2.1. Trade Liberalization Index

As tariff and non-tariff barriers directly restrict trade, import liberalization depends mostly on the extent of restriction caused by the tariffs and non-tariff barriers (Yen, 2009). Similarly fixed exchange rate system could be considered as trade restriction. Lowering of tariffs and non-tariff barriers produces a significant impact on imports. In order to conduct quantitative analysis of the impact of liberalization it is necessary to construct liberalization policy index and its weights for tariff and non-tariff barriers. The tariff rate is a measure of trade liberalization. Therefore, we have used average tariff rate proxy by import tax revenue over total imports.

Different countries joined WTO at different time as pointed by Wacziarg (2001), for example in case of Pakistan, which was signatory of World Trade Organization (WTO) in 1995 but enforced liberalization measures in 2001. Therefore a time dummy (dum_wto) for non-tariff barriers removal was assigned value 1 for (2001-2010) and zero for the previous period (1990-2000).

The third indicator is the existence of flexible exchange rate system for trade liberalization. Different countries adopt flexible exchange rate system at different time. We have constructed a dummy variable (dum_er). The liberalization policy index can be expressed in equation

$$\text{TLI}_{\text{it}} = \beta_1 atr_{it} + \beta_2 Dum\_e_{it} + \beta_3 Dum\_w_{it}$$

Principal Component Analysis for TLI

Principal components analysis (PCA) is a statistical method used to transform a number of correlated variables into a smaller number of uncorrelated variables called principal components, while retaining most of the original variability in the data (see Feridun & Sezgin, 2008)**.** We calculate the PCA for the five selected developing countries. The results of the component analysis for TLI are presented in table 1.

Table 1: Component Analysis for Trade Liberalization Index

	Eigen values of Components			Proportion of components		
Country	**First**	**Second**	**Third**	**First**	**Second**	**Third**
Bangladesh	1.7754	0.7389	0.4857	0.5918	0.2463	0.1619
Indonesia	2.0575	0.8062	0.1363	0.6858	0.2687	0.0454
India	2.0192	0.6783	0.3025	0.6731	0.2261	0.1008
Malaysia	2.0728	0.8373	0.0899	0.6909	0.2791	0.0300
Pakistan	1.8660	0.8486	0.2854	0.6220	0.2829	0.0951

This proportion varies from country to country. For example the lowest proportion of the first component is for 59 percent in the case of Bangladesh and the highest for Malaysia, that is, 69 percent. Therefore, we shall keep the first component in the all cases.

Loading Factors of the Principal Component Analysis of TLI

The table 2 presents the loading score of the individual contributions of atr, dum_wto and dum_er to the standardized variance of the first principal component in the case of eighteen developing countries.

Table 2 : Loading for Trade Liberalization

Country	ATR	dum_wto	dum_er
Bangladesh	0.3547	0.3876	0.2576
Indonesia	0.4124	0.4305	0.1571
India	0.3961	0.3555	0.0915
Malaysia	0.4357	0.4324	0.1318
Pakistan	0.4430	0.3910	0.1659

In the case of Bangladesh, the standardized proportion of the ATR is 35.47%, dum_wto 38.76% and dum_er 25.76%. Therefore, the trade liberalization index of Bangladesh is:

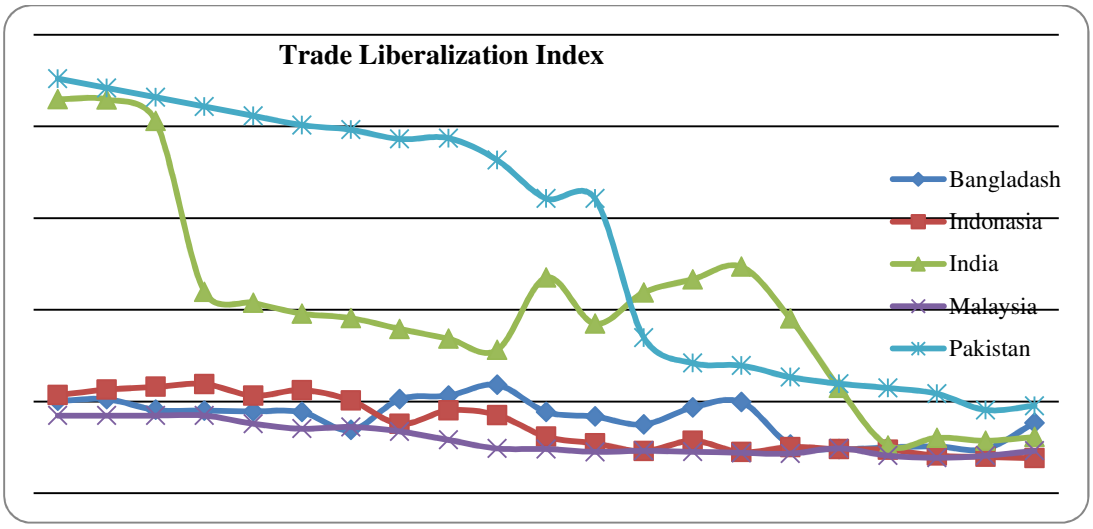
$$TLI = 0.3547 * atr + 0.3876 * dum\_wto + 0.2576 * dum\_er.$$

Similarly in the case of Pakistan the liberalization index is:

$$TLI = 0.0.4430 * atr + 0.3910 * dum\_wto + 0.1659 * dum\_er$$

We develop the index for all countries through same process.

It is obvious that the lower value of the trade index shows the higher level of trade liberalization. Almost all countries in our sample are showing the higher level of trade liberalization over the last 20 years. An interesting observation is Pakistan and India have been too restrictive on trade but slightly became liberal as compared to other three countries of our sample. The financial crises may be a possible argument in this regard. A number of countries put a restriction on the capital account for mitigating the risk of capital flight. Except this era we may see a liberalized trade in the selected area.



3.2.2. Other Variables

The economic growth is proxied by the real per capita GDP. The time series data spans from 1990 to 2009. Following standard studies of Astorga (2010), Buch and Toubal (2007) and Shupp (2002) physical capital is one of the important determinants of comparative advantage. Therefore, it is useful to take physical capital as an important variable while canvassing trade openness. It is a known fact that data series of capital stocks is not directly available. Therefore, the researchers are used to construct the capital series from the data of investment flows. Inflation as measured by the annual growth rate of the GDP implicit deflator shows the rate of price change in the economy as a whole. The GDP implicit deflator is the ratio of GDP in current local currency to GDP in constant local currency. Labor force is an important factor of production in the production function (Solow, 1956). We take the direct measure of total employed labor force and then take the natural log of it.

Sources of these data include; World development indicator published by the World Bank and PennWorld table version 7.2.

4. Empirical Results

In this section we present the detailed empirical results of the model discussed above. Initially we will estimate both FEM and REM models and then test the specification for the choice between both models; using Hausman test. After identification of appropriate model we will forward the analysis based on that model only. We estimate the model by fixed effect method, which is also known as least square dummy variable (LSDV) model, for trade liberalization. We are using natural log of GDP as proxy for growth because of model specification (the TLI cannot be converted into growth forms). The explanatory variables include natural log of Liberalization Index, natural log of Labor Force, natural log of Consumer Price Index and natural log of Capital series.

4.1. Results of Fixed and Random Effect Models

Because the tariff and other trade barriers is the part of the indicator. However, the present study concentrates only on the average tariff rates due to the unavailability of the data for the effective tariff rate. Our results show that the direction of the co-efficient of TLI is different in random effects and fixed effects models, however the magnitude is same. Reduction in trade barriers are GDP enhancing in fixed effects models of this panel. The statistically significant signs imply that the economic growth of the developing countries may be increased by the reduction of the average tariff rate or increase in the trade liberalization. Our findings are consistent with Rodríguez et al (2001),Vamvakidis (2002), Dreher (2006), Rao et al (2008), Chang et al (2010), and Rao et al, (2011) and inconsistent with Barro et al (1994), Gylfason (1999), and Gries et al (2009) among others.

The effect of CPI inflation on GDP in both models exhibit standard signs but again huge difference in magnitude. Then high and volatile inflation may reduce the real rate of return on capital which in turn reduces economic growth Hernando et al (2004). The developing countries, mostly if not all, are plagued with high and undesirable level of inflation. However, the result of REM is highly insignificant. The negative sign in FEM case appear to be consistent with the argument of Levine and Zervos (1993) and Hernando et al (2004).

Table5: Results of Fixed and Random Effects Models

	FEM	**REM**
Trade Index	.041(.0198)	-.0417(.0095)
Consumer Price Index	-.0554(.0250)	-.0117 (.0144)
Labor Force	.3521(.0968)	.0809 (.0132)
Capital	.7152(.0441)	.8834 (.0181)
Constant	.6466(1.3780)	.7385 (.2757)
R-Sqaured	0.9701	0.9679
sigma_u	.2737	0
sigma_e	.0464	.0464
Rho	.9720	0
F(5,109)	789.66	
Wald		22244.95

- Standard errors in the parentheses.

Labor force is a core determinant of the economic growth in theoretical models of classical school of thoughts. However, the recent endogenous growth theories take care of the quality of labor force as well. The coefficient of the labor force enters significantly positive in the model .3521. It implies that .3521 percent GDP may increases by 1 percent increase in the labor force, if all other factor remains constant. This outcome is in line with the major studies of the field. The other important determinant is capital which is incorporated in the regression. The signs and significance are in line with the theory. That is, the GDP may increase by the increase in the level of capital in a country. The coefficient of capital enters significantly positive in the regressions. The coefficient .743 implies that the GDP may be increase by .7152 percent by the increase of 1 percent in the level of capital in the selected developing countries.

R^2 explains how much the variation can be explained through the independent variables. It is obvious that the high value of R^2 in the case shows the strength of the model. The other important statistics is rho. Furthermore, rho is known as the interclass correlation. 97 % of the variance is due to differences across panels.

Furthermore, Fixed Effect Model shows that there is CRS (constant returns to scale) type of production function

due to fact that sum of elasticites of labor and capital is approximately equal to one i-e $\alpha_2 + \alpha_3=1$ (.7152+ .3521=1.06) while Random Effect Model shows DRS (decreasing returns to scale) i-e $\alpha_2 + \alpha_3<1$ (.8834+ .0809=.9643). Fixed Effect Model shows that long run growth rate of selected countries is 1.70 % while Random Effect Model shows that it is 5.386 %.

Table 6: Hausman Fixed Random Test

	Coefficients			
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
Variables	**Fixed**	**Random**	**Difference**	**S.E.**
Trade Index	0.0410622	-.0416632	-.0827254	.0174933
Capital	7152007	.883374	-.1681733	.0402348
Labour Force	.3520776	.0809397	.2711379	.0958752
Consumer Price Index	-.0117469	-. 055469	-.0437222	.0204781
Test: Ho: difference in coefficients not systematic				
chi2(5) = (b-B)'[(V_b-V_B)^(-1)](b-B) = 49.67				
Prob>chi2 = 0.0000				
(V_b-V_B is not positive definite)				

As we said earlier, we are using a Hausman (1978) test for model selection. The results of the Hausman test are presented in Table. The p-value of the all three regression is showing that the null hypothesis of the Hausman test is being rejected. The null hypothesis states that the random effect model is consistent with the explanatory variables. Therefore we shall prefer the results of fixed model for further analysis.

4.2. Analysis

Following features of the empirical results of the FEM are worthy;

(i) For large sample size we usually find no or less difference in the magnitude of FEM estimates and REM estimates.

(ii) Fixed effect model shows that the effect of trade index (though significant) is too low for the selected panel of developing Asian economies. This may be due to inconsistency in the trade openness policy. Particularly, Pakistan and India both have in too much restrictive on the trade side. Bangladesh and Malaysia have shown relatively higher liberalization.

(iii) The results also indicate that the sum of elasticities of Labor and Capital is almost equal to unity, showing constant return to scale.

(iv) Correspondingly, as an aftermath of currency crises, the ASIAN economies (Malaysia and Indonesia have also shown financial conservations after 1997. These two economies have developed robust trade liberalization policies, though, already more liberal than the South Asian economies of this study.

5. Conclusions

The researchers are not in the consensus about the linkage between the economic growth and trade liberalization. All possibilities; a monotonic positive link, a monotonic negative link and no link between two variables are reported in the literature. Using the different indicators for measuring the trade liberalization may be one of the reasons for these inconclusive results. In this study the trade liberalization is measured by tariff rate restriction, WTO dummy and Exchange rate dummy. We used the principal component analysis to get the common information among the underlying variables. We selected panel data of 5 Asian economies from 1990 to 2009. The rationale for the selecting the countries and data span is the availability of a balanced panel data for all countries. For more understanding the relationship we provided a vivid review of literature on the liberalization-growth nexus. Then we estimated the model using fixed and random effect methodology of panel data estimations. The findings of the present study show that openness has a significant impact on the economic growth of the developing countries.

Our analysis implies that these developing Asian economies can grow faster by lifting trade barriers. Even the capital and labor are on the edge of the constant –return-to-scale production function. So, imported capital stock means more trade and more capital, may result in higher growth. Furthermore, we also confirm that the Malaysia and Indonesia can be good examples for Pakistan, India and Bangladesh, on account of trade liberalization, despite low initial productive capacity. This may also trigger the economic growth.

References

Barro., Robert., Lee, J-N., (1994), " Data set for a panel of countries", Harvard University.
Beck, T. (2002), "Financial development and international trade: Is there a link?" Journal of International Economic, 57, 107−131.
Chang, C. P., Lee, C. C., (2010), "Globalization and Economic Growth: A Political Economy Analysis for OECD Countries." Global Economic Review Vol. 39, No. 2, 151-173.
Dinopoulos, E., and Syropoulos, C.,(1997), "Tariffs and Schumpeterian growth." Journal of International Economics, 42, 425-452.
Dreher, A. (2006), "Does Globalization Affect Growth? Empirical Evidence from a new Index." Applied Economics, Vol. 38, No. 10, pp. 1091-1110.
Edwards, S. (1993), "Openness, Trade Liberalization, and Growth in Developing Countries." Journal of Economic Literature, Vol. 31, pp. 1358-93.
Feridun, M., & Sezgin, S. (2008), "Regional underdevelopment and terrorism: The case of south eastern Turkey." Defense and Peace Economics, 19(3), 225−233..
Fry, M.J. (1995), "Money, Interest Rate, and Banking in Economic Development." Second Edition, London: The Johns Hopkins University Press. Generalization of the General Theory.
Gries, T., Kraft, M., Meierrieks, D., (2009), "Linkages between financial deepening, trade openness and economic development: Causality evidence from SSA", World Development 37; 1849-1860.
Gylfason, T., (1999), "Exports, inflation and growth." World Development 27, 1031-1057.
Hausman, J. A. (1978),"Specification Tests in Econometrics",Econometrica 46 (6): 1251–1271.
Hernando Z., 2004, "A note on scale effects, review of economic dynamics." Elsevier for the Society for Economic Dynamics 7, pages 237-242.
Huang, Y. (2005). Will political liberalization bring about financial development? Bristol Economics Discussion Paper no. 05/578.
Jalil, A., Feridun, Ma, Y., (2010), " Finance-growth nexus in China revisited: New evidence from principal components and ARDL bounds tests", International Review of Economics and Finance 19 , 189-195.
Kar, Muhsin, Osman Peker, and Muhittin Kaplan,(2008), "Trade Liberalization, Financial Development and Economic Growth in The Long Term: The Case of Turkey" , South East European Journal.
Kim, M. K., Beladi, H., (2005), "Is free trade deflationary?" Economics Letters, 89 343-349.
Kose, M., Prasad, E., Terrones, M., (2009), " Does openness to international flows raise productivity growth", Journal of International Money and Finance 28, 554-580.
Lee, J. E., 2011, " Inequality in the globalizing Asia." Applied Economics, 42, 2975-2984.
Levine, R. (1997): "Financial Development and Economic growth: Views and agenda", Journal of Economic Literature, Vol. 35, pp. 688-726.
Levine, R. and S. Zervos. (1993). "Looking at the Facts: What We Know About Policy and Growth from Cross-Countiy Studices." Policy and Research Working Paper No. 1115, World Bank, Washingtoa D.C.
Levine, R., Loayza, N., & Beck, T. (2000), "Financial intermediation and growth: Causality and causes." Journal of Monetary Economics, 46, 31−77.
Lloyd, P. J., Laren, D. M, (2000), "Openness and growth in East Asia after the Asian crises." Journal of Asian Economics, 11, 89-105.
Mazumdar, J.,(2001), "Imported machinery and growth in LDCs." Journal of Development Economics 65, 209-224.
Misati, R. N., Nyamongo, E. M., (2011), "Financial liberalization, financial fragility and economic growth in SSA." Journal of Financial Stability, 1-11.
Rao, B. B., Arthur, T., Chaitanya., V. K.,(2008), "Growth effects of a comprehensive measure of globalization with country specific time series data." MPRA paper No 7917.
Rao, B.B., Vadlamannati, C. K., (2011), "Globalization and growth in the low income African countries with the extreme bounds analysis." Economic Modelling 28, 795-805.
Shupp, F. R., 2002, "Growth and income inequality in South Africa." Journal of Economic Dynamics & Control 26 , 1699-1720.
Wacziarg, R. (2001), "Measuring the Dynamic Gains from Trade" The World Bank Economic Review, Vol. 15, pp. 393-429.
World Bank (1989), "World Development Report 1989." Oxford University Press, New York.
Yanikkaya, H.,(2003), "Trade openness and economic growth: A cross-country empirical investigation." Journal of Development Economics 72, 57-89.
Yen, D. T. H. (2009), "Impact of Import Liberalization Policy on Economic Growth in Vietnam: A Channel Analysis." DEPOCEN Working Paper Series No. 2009/19.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
http://www.iiste.org

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: http://www.iiste.org/journals/ All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Recent conferences: http://www.iiste.org/conference/

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library , NewJour, Google Scholar