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Better tool for economic growth? Banks or secondary markets; Empirical evidence from selected ASIAN countries Aamir Azeem

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# ABSTRACT

Economic growth is the most desirous goal of any country and this article attempts to capture the impact of banking sector and secondary market on economic growth. Financial development has been categorized into bank based and secondary market based. In this model, seven high growing countries have been taken from Asian countries. A rare research technique, Panel SUR, has been adopted owing to hetroscadastidy and cross country correlation in the long panel. Finding shows that stock market liquidity is not significant in the panel whereas banking credit to private sector to specific country is negatively related with economic growth. Financial depth, foreign direct investment, stock market quantum and stock market efficiency have positive relationship with economic growth in the panel. Secondary market variables have more impact in contrast to bank based variables in the panel. Most influential country is China while least one is Bangladesh in the panel .Policymakers should focus especially on increasing financial depth, enhancing secondary market activities by introducing more stock markets, increasing foreign direct investment inflows and improving stock markets' liquidity to uplift economic growth in the countries.

**Key words.** Financial depth, economic growth, secondary markets, SUR, GDP

JEL classification: C11, C32, O16

## **INTRODUCTION**

A fundamental and thought provoking question is often faced by thinkers, policymakers and researchers; why do countries economically grow at different level in spite of similar financial infrastructures (Khan & Senhadji, 2006; Ranjan & Zingales, 2001)? The question has been responded by different researcher from different angles and diverse opinions. Many factors increase volatility in context of economic growth i.e. social stabilities indicators (King & Levine, 1993), limited breath of financial entities (Morley, 2006), regulatory environment, globalization symptoms (Fase & Abma, 2003) and resources availability (Halicioglu, 2007). A stimulating and solid issue, the role of financial development, has recently received much attention in perspective of financial organizations like stock markets, banks and resource allocation societies (King & Levine, 1993). Positive association between financial development and economic growth is fairly obvious (Wadud, 2009). The financial and economic policies of every economy are generally formulated based on some fundamental expectations and goals by thinking and views of policymakers, masses and government. Usually such policies stem from historical practices (Patrick & Park, 1994). According to Maxwell Fry (1978) financial role establishes many circles of saving, capital employed and productivity that boost the economic growth in long run.

Stock markets and financial intermediaries including lending institutes play a pivotal role in development and growth of any capitalistic economy. Stock markets and financial sector are the backbones of any economy, which strengthen economic growth that ultimately uplift living standard of the people (Levin, 2004). Financial development not only enhances the frequency of capital flow in economic setup but also facilitates the development of businesses and economic growth. No doubt, modern economic setup is considered as a by-product of incremental financial development. A country may get desired level of progression by adopting the better financial setup and by focusing upon the betterment and enrichment of financial sector. The gist of progress of developed countries lies in their wider, broader and developed financial sector; they always try to lay stress for the enrichment by adopting different advance financial instruments and effective policies to achieve long run results (Levin, 1991).

Financial development and economic growth have a unique and intimate relationship in any capitalistic mechanism; the relationship between these variables gives the direction to researchers or policy makers to infer some valuable findings (Shen & Lee, 2013). Long et al., (1989) traced impact of financial development on growth of any economy and found that it affected countries on macro as well as micro level. Leaving the importance of financial sector unattended lessens the pace of progress and it is considered as one of the major problems of developing countries (Ho & Odhaimbo, 2012). Many researchers laid down the impact of financial development on economic growth in single economy (Odhiambo 2011; Chakraborty & I, 2008; Ibrahim, 2007).

## **Recent Financial Position of China**

Chain known as intoxicated countries, started from scratches but progress of the country has manifested owing to hardworking, balance policy and leadership qualities. China, the emerging world leader has exposed progress during last 20 year in every field of life especially in financial matters financial infrastructure with the passage of time. Now it has been awarded 23th rank out of 62 major economies having stock exchanges. On average annual compound growth rate from 2007-2001 was 7.63% that show the capability of economy to become developed and market leader. It has share of 14.32% of overall world GDP, a major contributor of world economy and has been ranked first position in IPOs activities a sign of growth oriented economy. Economic growth has two causality with financial development in china (Shan and Jianhong, 2006). Barro (2003) also determined may other factors which promote economic growth in country enormously i.e. term of trade and openness played a vital role and improved recent economic growth level.

#### **Recent Financial Position of India**

India is an emerging economy with a better financial structure and financial infrastructure. India is also fighting to get the better rank in financial development and ranked 40<sup>th</sup> economies out of 62<sup>nd</sup>. India has compound annual growth rate form 2007-2011 was 6 % and GDP share of Overall world GDP is 5% (financial development report 2012, p.144).. It is also out of race to in top ten ranking countries in context of financial development. Major asset hold by Indian financial sector are public debt security, private debt securities, banking deposits and equity securities and their relevant share respectively is 22%,4%,30% and 43% in 2010. Alike Pakistan it has fail to get position in top ten in any pillar of financial development and has many financial disadvantage as compare to financial advantages. A brighter picture revealed by the outlook of life insurance density where India has been ranked as 1<sup>st</sup> position.

## **Recent Financial Position of Bangladesh**

Bangladesh is also a fragile economy with high level of volatility in stock exchanges which may be reason of slow economic growth. It has been ranked 57<sup>th</sup> out of 62<sup>nd</sup> in context of economic development index. It has share less than 1% of overall world GDP and compound annual growth 4.83% during 2007-2011. Major financial assets structure consist of 33.6% of public debt securities, 50.7% share of bank deposit and 15.7% share in equity securities in 2010. Bangladesh has also more financial development disadvantage compare to financial development advantage similar to Pakistan. But better situation arises from the data of consumer financial that boost the economy. It has been also ranked 1 position in easy to access loan especially in context of micro credit.

## **Recent Financial Position of Malaysia**

Malaysia, the Asian tiger, has been ranked at 18<sup>th</sup> position in financial development during 2012. This emerging economy has compound annual growth rate of 3.05% from 2007-2011, although having less than 1% of contribution in overall GDP of globe but a value able addition of world economies. Its positive aspect is enthusiastic role of private debt securities that was recorded 17.6% of financial assets of country in 2010. This role of private sector is major engine of economic development during this era. Malaysia is given first position in strength of legal right index in 2012 by independent entity, the publisher of economic development index.

## LITRATURE REVIEW

Chakraborty (2008) conducted a research to find out answer the question that "is financial development has 'caused' economic growth in India?" during the nineties, banking system was liberalized and foreign participation in the stock market was actively promoted in India. This study provided empirical evidence in the context of India on the quarterly data form the period of 1996 to 2005. Financial development was categorized into four variables viz., total market capitalization to nominal GDP, turnover to nominal GDP, stock price volatility and total bank credit to nominal GDP. This study analyzed data by using the concept of Granger causality after testing for co-integration using Engle-Granger and Johansen techniques. The empirical results suggested that existence of stable long-run relationship between stock market capitalizations, bank credit and growth rate of real GDP. Another finding reveals that causality run from growth rate of real GDP to stock market capitalization. The researcher interpreted that economic growth cause's financial development in India. However, coefficients are small in magnitude, suggesting that the relationship between financial development and economic growth is rather weak.

Wadud (2009) found the long run relationship between financial development and economic growth in context of India, Pakistan and Bangladesh. The researcher used the data of south Asian countries from 1976-2008 with vector error correction model to find the direction and intensity of causal relationship. This study used two variable one for financial development and other for economic growth. Financial development proxy was M2/Real GDP and economic development has been measured by average rate of real per capital. The author had divided financial system co-integrated vector autoregressive Model revealed positive relationship in all the countries under study. Only one vector is proving of long run positive relationship and stability in India, Pakistan and Bangladesh. Granger casualty test indicates unidirectional between financial development and economic growth flow form financial development to economic growth.

Fase and Abma (2003) investigated empirically the relationship between financial development and economic growth in context of South Asian countries. Pool and time series data consist of India, Pakistan, Bangladesh, Malaysia, Thailand,

Korea, Singapore, Philippine and Sri Lanka. Sample data is different country wise but converted almost 25 year of all the variables from 1974-1999. Variable of the study are log of GDP per capita, capital investment and aggregate financial assets. Unit root and granger causality test have been performed to confirm the nature and direction of relationship. Highest R square means 77% has been witnessed on the data of Bangladesh whereas minimum less than 2% R Square has been shown by Malaysia. Some of countries have shown better perforce i.e. India and Sri Lanka. The coefficients of financial development are statistically significant, indicating that in the equilibrium relationship for the sample countries. The low value of Durbin-Watson statistic for two countries Bangladesh and Sri Lanka may cause the picture blur but overall picture is well fitted in context of theoretical justification. In this research, causality flow from financial soundness or development toward economic growth and compel policies maker to devise policy in best interest of specific economy.

Khan and Senhadji (2003) empirically tested the theory of financial development and economic growth. The panel was accumulated with handsome units i.e 159 countries were in the panel. Annual Data of all the economies from 1960-1999 has been used in the analysis. Different financial depth proxies had been used in the study. Major four variables were domestic credit to private sector as percentage of GDP, FDI plus stock market specialization percentage of GDP, public bond capitalization to GDP and growth rate of GDP as dependent variable. Control variables of the study were investment, population growth and trade growth rate. Panel regression shows that all the indicators of financial depth have highly signification and positive relation with economic growth.

Enisan and Olufisayo (2009) investigated the long run and causal association between stock market development and economic growth for seven African countries over the period of 1980 to 2004. Autoregressive distributed lag (ARDL) bounds test and Granger causality test within the context of VECM framework were major research techniques in the study. Variables of study were market size, market liquidity and GDP growth. The results of the study suggested that stock market development had a significant positive long-run impact on economic growth. Granger causality test within the VECM framework further showed a unidirectional relationship running from stock market development to economic growth. However, Granger causality within VAR framework showed short-run bidirectional causality between stock market development and economic growth for Cote d'Ivoire, Kenya, Morocco and Zimbabwe. In the case of Nigeria, a weak evidence of unidirectional causality running from economic growth to stock market development was found in the research. Saci et al., 2009 tested the long run relationship between economic growth and financial development. The choice of variables and results presented approximately similar findings.

Halicioglu (2007) conducted the research on financial development and economic growth in context of Turkey. The time series data was used from 1968-2005. Main motive of the

research was lying in direction and flow of causality between the financial development and economic growth. For this purpose, a co-integration technique was followed by the ADF and causality tests. Major variable of the study were consisted of real per capital income, ratio of M2 to Nominal GDP and ratio of bank deposit to Nominal GDP. Alternative variable were also introduced in the study i.e. ratio M2 to GNP and ratio of Bank deposit to GNP. These financial development proxies find one long run relationship and reveal that improve financial sector will improve the growth in economy. Key fining was unidirectional relationship flow from financial development to economic growth.

Ho and Odhaiambo (2012) investigated the relationship between stock market development and economic growth by using time-series data from Hong Kong. The study was used three proxies of stock market development, namely: stock market capitalization, stock market traded value, and stock market turnover. ARDL-bounds testing approach was used to examine the nexus between stock market development and economic growth in a dynamic settings. The empirical results showed that the direction of causality between stock market development and economic growth depends on the proxy used to measure the level of stock market development. The researcher found by empirical analysis that all the proxies of financial development have unidirectional causal flow.

### METHODOLOGY

Secondary data have been used from 1991-2012 in the study across the counties to infer some meaningful results. Normally, six years data (Rakshit, 2006) is mostly used for one business cycle whereas our model utilized 22 years data means more than 3 business cycles to get the in-depth analysis. Data in this study is balanced across the entities. The data is comprises on selected Asian counties irrespective to any geographical location. Actual model consist of 07 counties having stock exchanges and better banking system. The selection criterion is based upon level of economic growth. All the countries in this analysis have shown above 5% GDP growth on 22 year average during the study period. Country is unit of analysis in this study (Levine et al., 2000). World Bank indicators publish data by World Bank is major source of data in this thesis. Missing data has been extracted from specific counties stock exchanges and their economic reports published by government sources.

## Hypothesis of the Study

Most the researches have used the hypothesis that financial development promotes economic growth in the country not only short run but also long run. This hypothesis has been empirically test mostly in the developed counties or emerging economy and witness differences in the results. But researcher are agree that financial development which is divided in bank based or credit based indicators and stock market related proxies are key agent in the growth of any country.

H<sub>1</sub>: There is effect of stock markets size, stock markets efficiency, stock markets liquidity, banking credit, FDI and

financial depth on economic growth.

 $H_2$ : There is a relationship between stock markets size and economic growth.

H<sub>3</sub>: There is a relationship between stock market liquidity and economic growth.

 $H_4$ : There is a relationship between stock market efficiency and economic growth.

 $H_5$ : There is a relationship between banking credit and economic growth.

 $H_6$ : There is a relationship between FDI and economic growth.  $H_7$ : There is a relationship between financial depth and economic growth.

## Modeling and Theoretical Framework

Research model has been designed to investigate the effect of financial development on economic growth in rapid growing countries. The sample consists of 7 countries having on average more than 5% GDP growth. This model uses the data of variable of seven countries i.e. china, Korea, India, Singapore, Malaysia, Bangladesh, and Indonesia. Financial development categorized into to two i.e. bank based and secondary market based. Financial Depth (M2T) is main variable of the research other supporting consist of Stock Markets Size (MCG), Stock Markets Efficiency STO, Stock Markets Liquidity (SVG), Foreign Direct Investment (FDIG) and Banking Credit (DCBSG) while Economic Growth (GDPG) is dependent variable. All variable are taken as growth level except STO.



#### Figure 1 Theoretical Framework

Panel equation of the model is given below with brief explanation.

$$\begin{split} \text{GDPG}_{\text{it}} &= \alpha_{\text{i}} + \gamma(\text{M2T})'_{\text{it}} + \gamma(\text{MCG})'_{\text{it}} + \gamma(\text{DCBSG})'_{\text{it}} + \\ \gamma(\text{STO})'_{\text{it}} + \gamma(\text{FDIG})'_{\text{it}} + \gamma L(\text{SVG})'_{\text{it}} + \epsilon_{\text{it}} \\ \textbf{Equation 1.1} \end{split}$$

$$\begin{split} \Delta \bar{G}DP_{it} &= \alpha_i + \gamma (M2/TR)'_{it} + \gamma (MC/GDP)'_{it} + \gamma (DCBSG/GDP)'_{it} + \gamma (SV/MC)'_{it} + \gamma (FDI/GDP)'_{it} + \gamma L(SV/GDP)'_{it} + \epsilon_{it} \\ \hline \textbf{Equation 1.2} \end{split}$$

M2T= M2/Total reserve, MCG= Market capitalization growth, STO= Stocks turnover %, FDIG= Foreign direct investment, net inflows % of GDP), SVG= Total value of Stocks traded as % of GDP, DCBSG= Domestic credit to private sector as % of GDP, Cit= Error term

## Variables of the Study

The primary purpose of the researcher is to check the relationship of different financial development proxies in perspective of banking related variables and stock market related variables. I ascertain the relationship of economic growth and different variables i.e. stock market turnover, stock market value, market capitalizing, money to GDP ratio, credit provided to economy by banking sector.

## Table1

Measurement Mecho	anism of the Variables
FDIG Foreign direct investment, net inflows (% of GDP)	FDIG is sum of net inflows of earnings reinvestment, capital equity, and short and long term capital in BOP account divided by GDP of the country
MCG Market capitalization of companies (% of GDP)	MCG is value of all listed companies on the country's stock exchanges divided by GDP. This value does not account any value of mutual funds and investment companies
SVG Stocks traded, total value (% of GDP)	SVG is total value of share traded in a specific period and complements the market size of the country.
STO Stocks traded, turnover ratio (%)	STO measure total value of shares traded during divided by the average market capitalization in a specific period.
DCBSG Domestic credit to private sector (% of GDP)	DCBSG shows the credit availability to private sector. It is measured amount divided by GD. Credit consist of loans, securities having no category of equity, trade credit and receivables during a period.
M2T M2/Total reserve	M2T is considered as financial deepening indicator of economy and measure as broader money to total reserve ratio. Broader money comprises of demand deposit. Time deposit, saving deposit, currency deposit and currency outside the banks however total reserve comprises gold reserve, foreign currency reserves and special drawing
GDP growth (annual %)	GDPG is annual growth rate of economy based on constant 2005 U.S. dollars. This growth rate does not consider depletion or degradation of natural resources along with subsidies.

# Financial Development and Economic Growth in Higher Growing Countries

Table 2

#### Empirical Results of Model

Variables	Coefficient	Std. Error	t-Statistic
M2T	0.08939	0.04449	2.00893**
MCG	0.01599	0.00386	4.14755***
DCBSG	-0.0384	0.0063	-6.0944***
STO	0.00075	0.00218	0.34179
FDIG	0.28141	0.07298	3.85617***
SVG	0.32069	0.09798	3.27305***

Table 2 shows major results of equation 1.1 of the study. Value of F test tell us the jointly all the variable are not equal to zero and have impact on dependent variable i.e. growth. The model has efficient value of goodness of fit; it gives us picture of better fitness of regression line. Approximately 77% of variation is explained in economic growth owing to independent variable of the model. Only 33% variation in growth is owing to other factor beyond the model which revel better finding of this research.

All the values of t.stat are in favor of rejection in null hypothesis except stock market efficiency or lower transactional cost. Hypothesis testing is normally built on the concept of type one error which is very low in this empirical study. Conventionally, in secondary data analysis, 5% chances of type one error are permitted but in this research only less than 5 % gives robustness of parameters estimation. Secondary market related variables, MCG and LSVG, are highly significant and have positive relationship with economic growth. STO has no relationship in this model; it means that the secondary market efficiency plays no significant role in the growth of economy in higher countries. If we look from another angle, combined beta of secondary market variables is 33% whereas combined beta of banking related variables is 35 %. It means that banking sector and financial deepening play an important role in higher growth countries in contrast to secondary markets.

Banking based variables, M2T and FDIG, are also significant and have positive relationship with economic growth. One exception has been witnessed in DCBSG, which has negative significant relationship with economic growth of countries. Banking credit to private sector negatively related with growth (Hassan and Yu, 2007; Saci at el., 2009) One banking related variable has negative relationship while Secondary market variables have more impact in contrast to bank based variables in the pane. Four out of six variables including M2T, MCG, STO, FDIG and log SVG, have significant positive relationship with economic growth on less than 2% level of significant. Secondary markets liquidity affects at highest level and MCG affects least in our analysis period and their coefficient are 0.32 and 0.01 respectively. Hausman test give us conclusion to fix the effect in our model. Table 3

Redundant	and	Omitted	Variable Tests
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Test name	Test type Values		P Value	Test variable	Finding				
					No superfluous				
Redundant				MCG M2T	variable in the model.				
Variables Test	F-statistic	14.69	0.00	FDIG					
				(M2T)^2	No important variable				
Omitted				LOG(SVG)	is missing and				
Variables Test	F-statistic	0.468	0.71	^2 NDC	parameters are linear				
T		1 1		( 1	· <b>T</b> 11 2)				

Two test of model specification (shown in Table 3) are performed and found no issue in model selection. P value of redundant and omitted test in favor of model incorporated in the research. These test shows on important and significant variable is missing and no superiors exist in the model.

## Table 4

R	esid	ual	1	ests	of	M	od	el	
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Tests	Test	Value	Pro.	Remedy	Decision	Problem	
Contemporaneous correlation	Pesaran's test	05.15	0.0	SUR cross section	P Value	Yes	
Heteroscedasticity	Wald test	1640.6	0.0	SUR cross section	P Value	Yes	
Residual normality	J.B test	5.43	0.6	-	P Value	No	
Autocorrelation	DW test	1.76		-	DW	No	

Table 4 sheds light on residual diagnostic of equation 1.1.Contemporaneous correlation is crucial in determining the nature of panel regression model. Basically it measures the correlation across the entities or across the equation's error term. It should not exist in the fixed or random model to declare results as unbiased. Failure to reject null hypothesis in Pesaran's test gives us a clue that the contemporaneous correlation exist in our panel. In other words, we can say our cross sections are correlated with each other. To give unbiased result the researcher has used the SUR cross section.

Hetrosacdaistity is another crucial problem in cross section or pooled data. In the existence of this particular problem, the result may be considered consist but cannot be BLUE. Wald test has been performed to check the issue and failure to reject null hypothesis give us information that heteroscedasticity exist in the data. To give unbiased result, I have used the SUR cross section.

Normality is not compulsory in panel fixed effect but it is crucial in determining the validity of T and F tests. P value JB test is 6% which should be more than 5% to claim the exact normality. So, I can claim that the normality exists in the residuals of the research model.

Durban Watson (DW) test of autocorrelation in residual is also given in the main Table. The DW value 1.76 shows that the residuals have not serially correlated with each other. Closer value to 0 indicates the negative auto correlation whereas closer to 4 indicates positive auto correlation. The value of 2 is considered as rule of thumb for declaring the non-existence of autocorrelation in residuals. The value of 1.76 is much closer to 2 and lies in in decision zone (Asteriou, 2006).

## **Multicollinearity Analysis of Model**

The Minimum Centered Variance inflated factor (VIF) has been witnessed in investment M2T, which reveals only 1.66 whereas highest value has been calculated in MCG as 3.46. A closer look on the Centered VIF shows a lessor correlation among independent variables. VIF values of other variables lie among 1.66 to 3.46 that point out lower level of correlation among explanatory variables.

## Table5

**Descriptive Statistics** 

	GDPG	LSVG	M2T	MCG	STO	FDIG	DCBSG
Mean	5.87	3.38	3.95	73.53	95.20	3.95	74.39
Median	6.23	3.57	3.54	42.64	66.21	2.16	78.93
Maximum	14.78	5.44	16.2	328.8	376.5	27.8	159.62
Minimum	-13.1	-1.53	0.97	0.53	10.05	-2.7	14.52
Std. Dev.	4.26	1.32	2.48	70.44	77.72	5.50	42.74

Descriptive analysis (Table 5) is given to check the unique qualities and characteristics of original data. In our model, descriptive analysis of range, mean and stand deviation has been performed to check the volatility of variables under study. Highest volatility has been witnessed in STO that is 77.72 % whereas lowest volatility has been witnessed in LAVG that is 1.32%. Average growth of the countries in this sample is 5.86

% with volatility of 4.2%. Lowest growth in this period is -13.13 % while the higher is 14.78%. MCG and DCBSG are having high level of volatility whereas FDIG and M2T have lower level of volatility in the sample. It means that M2T and FDI are having lower level of variation in higher growth countries compare to STO, MCG and DCBSG.



*Figure 2* Economic growth of China, India and Bangladesh From 1991 to 2012

Figure 2 reveals that China is the highest growth oriented country and figured as 10.3 %. The highest growth rate was 14.2% in 1992 and 2007 and never faced negative growth during the study. Lowest growth rate was in 1999 as 7.6%, which is enough in comparison of developed country. China has never witnessed negative economic growth during the period and considered highly growth oriented country in the sample. India never faced negative growth during last 22 years. Average growth rate of the period is 6.4% with highest and lowest level as 10.55% and 1.06% in 1991 and 2010 respectively. Bangladesh never faced negative growth during last 22 years. Average growth rate of period is 5.42% with highest and lowest level as 6.71 % and 3.34 % in 1991 and 2011 respectively. Bangladesh and India are facing the same trend in economic growth. China is most influential countries in the group and faced lower trend in context of economic growth from 1992 to 1999. Upward trend has been witnessed form 2000 to 2007 in context of GDP growth.



*Figure 3* Economic growth of Indonesia and Malaysia From 1991 to 2012

Figure 3 gives us clue of economic growth of Indonesia and Malaysia. Average rate of 22 years for Malaysia is more than 5.8%. The highest growth rate was in 1996 and lowest was in 1998 as 10% and -7.8% respectively. It touched negative growth in 1998 and 2009 owing to lower level of financial depth along with lower level of foreign direct investment. The highest growth rate was 8.93% in 1991 and lowest was -13.13% in





*Figure 4* Economic growth of Singapore and Korea From 1991 to 2012

Figure 4 provides comparison of Singapore and Korea in context of economic growth. Singapore is considered as growing country and its average growth of 22 years is 6.19%. Singapore has to face negative growth three times in recent 22 years. The highest growth rate was 14.78% in 2010, however, lowest growth rate was -2.17% in 1998. The highest and lowest growth rates in Korea were 9.17% and -6.85% in 1995 and 1997 respectively. Average rate of growth of 22 years is 5% because of positive and healthy financial depth in economic setup. Low rate of economic growth from 2007 to 2012 was owing to recession symptoms in the world.

## CONCLUSIONS

In this model, 7 high growing countries have been taken from Asian countries. Research technique is Panel SUR technique due of hetroscadastidy and cross country correlation in the long panel. Redundant and omitted variables test have been performed to validate the research model and boost their efficiency. Finding shows that stock market liquidity is not significant in the panel whereas banking credit to private sector to specific country is negatively related with economic growth. Financial depth, foreign direct investment, stock market quantum and stock market efficiency have positive relationship with economic growth in the panel. This study can generalize the finding that if countries want to grow, they should focus on the banking and secondary markets, which can foster and enhance the pace of growth in all types of economic setups. Policymakers should focus especially on increasing financial depth, enhancing secondary market activities by introducing more stock markets, increasing foreign direct investment inflows and improving stock markets' liquidity to uplift economic growth in the countries. These financial development proxies cause the economic growth and their improvement can uplift the economy and living standards of the people.

#### REFERENCES

- Abdul Wadud, M. (2009). Financial development and economic growth: a cointegration and error-correction modeling approach for south Asian countries". *Economics Bulletin*, 29(3), 1670-1677.
- Al-Tamimi, H. A. H., Al-Awad, M., & Charif, H. A. (2002).

Finance and growth: evidence from some Arab countries. *Journal of Transnational Management Development*, 7(2).

- Arestis, P., Demetriades, P. O., & Luintel, K. B. (2001). Financial development and economic growth: the role of stock markets. *Journal of money credit and banking*, 33(1).
- Baltagi, B. (2008). Econometric analysis of panel data. Wiley. com.
- Barro, R. J. (2003). Determinants of economic growth in a panel of countries. *Annals of economics and finance*, 4, 231-274.
- Beck, T., & Levine, R. (2008). Legal institutions and financial development (pp. 251-278). Springer Berlin Heidelberg.
- Beck, T., & Levine, R. (2008). *Legal institutions and financial development* (pp. 251-278). Springer Berlin Heidelberg.
- Chakraborty, I. (2008). Does financial development cause economic growth? The case of India. South Asia economic journal, 9(1), 109.
- Deb, S. G., & Mukherjee, J. (2008). Does stock market development cause economic growth? A time series analysis for Indian economy. *International Research Journal of Finance and Economics*, 21, 142-149.
- Enisan, A. A., & Olufisayo, A. O. (2009). Stock market development and economic growth: Evidence from seven sub-Sahara African countries. *Journal of Economics and Business*, 61(2), 162-171.
- Fase, M. M., & Abma, R. C. N. (2003). Financial environment and economic growth in selected Asian countries. *Journal* of Asian Economics, 14(1), 11-21.
- Fry, M. J. (1978). Money and capital or financial deepening in economic development? *Journal of Money, Credit and Banking*, 10(4), 464-475.
- Granger, C. W., & Lin, J. L. (1995). Causality in the long run. *Econometric Theory*, 11, 530-530.
- Halicioglu, F. (2007). The Financial Development and Economic Growth Nexus for Turkey.
- 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.
- Ho, S. Y., & Odhiambo, N. M. (2012). Stock Market Development And Economic Growth In Hong Kong: An Empirical Investigation. *International Business & Economics Research Journal (IBER)*, 11(7), 795-808.
- Ho, S. Y., & Odhiambo, N. M. (2012). Stock Market Development and Economic Growth in Hong Kong: An Empirical Investigation. *International Business & Economics Research Journal (IBER)*, 11(7), 795-808.
- Khan, M. S., & Senhadji, A. S. (2003). Financial development and economic growth: A review and new evidence. *Journal of African Economies*, 12(suppl 2), ii89-ii110.
- King, R. G., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *The quarterly journal of* economics, 108(3), 717-737
- Morley, B. (2006). Causality between economic growth and immigration: An ARDL bounds testing approach.

Economics Letters, 90(1), 72-76.

- N'Zué, F. F. (2006). Stock market development and economic growth: evidence from Cote D'Ivoire. African Development Review, 18(1), 123-143.
- Patrick, H. T., & Park, Y. C. (Eds.). (1994). The financial development of Japan, Korea, and Taiwan: Growth, repression, and liberalization. Oxford University Press.
- Rajan, R. G., & Zingales, L. (2001). Financial systems, industrial structure, and growth. Oxford review of economic Policy, 17(4), 467-482.
- Saci, K., Giorgioni, G., & Holden, K. (2009). Does financial development affect growth? *Applied Economics*, 41(13), 1701-1707.
- Saci, K., Giorgioni, G., & Holden, K. (2009). Does financial development affect growth?. *Applied Economics*, 41(13), 1701-1707.
- Schumpeter, J. A. (1961). The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle (Vol. 55). Transaction Books.
- Shan, J., & Jianhong, Q. (2006). Does Financial Development Lead' Economic Growth? The Case of China. Annals of Economics and Finance, 7(1), 197.
- Shen, C. H., & Lee, C. C. (2006). Same Financial Development yet Different Economic Growth--Why? *Journal of Money*, *Credit, and Banking*, 38(7), 1907-1944.
- Thangavelu, S. M., & Jiunn, A. B. (2004). Financial development and economic growth in Australia: An empirical analysis. *Empirical Economics*, 29(2), 247-260.
- Wooldridge, J. M. (2002). Econometric analysis of cross section and panel data. The MIT press.
- Zivengwa, T., Mashika, J., Bokosi, F. K., & Makova, T. (2011). Stock Market Development and Economic Growth in Zimbabwe. *International Journal of Economics and Finance*, 3(5), p140.