CHAPTER II

REVIEW OF LITERATURE

II.1. Introduction

Without a review of earlier studies, it will be difficult for the researcher to deal with the particular research problem. To identify the gaps in this field, previous research has been reviewed. A number of studies in the area of financial development are carried out in national and international level. A review of earlier studies related to the present study is provided as a backup for the present study in the following paragraph. The review is done mainly on Financial Development and Economic Growth, Banking Sector and Financial Development, Determinants of Financial Development, Financial Development Index and Economic Growth, Stock Market and Financial Development and Trade Liberalization and Economic Growth

II.2. Studies Related to Financial Development and Economic Growth

From the research papers reviewed it is found that there are studies carried out in different countries like India, Northern Cyprus, Pakistan, Ireland, Turkey, Malaysia, Morocco, Middle East and North African(MENA) countries & Sub-Saharan African(SSA) countries. All revealed that financial development has a significant effect on economic growth except Turkey and Morocco. Studies done in these countries considered only one indicator as a proxy for financial development. For example in Turkey Deren Unalmis(2002) considered private sector credit as a proxy for financial development and related this proxy with GNP and found that there is no long term relationship between financial development and economic growth. He has also considered various other proxies for financial
development and related them to economic growth and found that there is a relationship and also, it is a bidirectional relationship. So, this type of study will give different results with different proxies and it is difficult to conclude whether there is any relation between financial development and economic growth. In case of Pakistan, Sulaiman.D.Muhammad (2010) considered money supply as a proxy for financial development related with economic growth and found the existence of relationship, Where as when he considered domestic credit by banks as a proxy for financial development, he finds no relationship. This study validates the need for a common proxy or index to measure financial development.

**Gregorio, J.D; Guidotti, P.E;** (1995) examined the relationship between long run growth and financial development in 95 countries. For this study they have classified the countries as high income, middle income and low income countries. The variables used in the study were ratio of domestic credit to the private sector to GDP, primary and secondary enrolment ratio, GDP per capita, Government spending, investment rate. Cross section regression was applied for analysis. The empirical result showed that more financial development leads to improved growth performance. The level of growth differs from countries to country.

**Kar, M; Pentecost, E.J;** (2000) made an attempt to examine the causal relationship between financial development and economic growth in Turkey. The study has conducted for a period of 32 years (1963-1995). The variables used in this study were broad money, banking deposit liabilities and private sector claims. The data analysed by using Granger causality, co-integration and vector error correction methodology (VECM). The result showed that the direction of causality between financial development and economic growth is varying according to the selection of
proxies used for financial development. So there is no full acceptance of the view that finance leads growth or finance allows growth in case of Turkey.

Sinha, D.; (2000) evaluated the relationship between financial sector development and economic growth for eight Asian countries. Main features of the study is used much longer time series data set and performed multivariate causality test, no other previous study has undertaken in this area. The variables used in this study are growth rate of money supply as ratio of GDP, growth rate of real per capita income, growth rate of quasi money as a ratio of GDP, growth rate of domestic credit as a ratio of GDP, growth rate of real GDP, growth rate of real investment as a ratio of GDP, growth rate of population, growth rate of real money supply, growth rate of real domestic credit, growth rate of real broad money. Result shows that there exists a positive and significant relationship between the income and financial variables for India and Malaysia, Pakistan and Sri Lanka. From the multivariate causality test for India and Malaysia it is noticed that a two way relationship between the income and financial variables.

Xu, Z.;(2000) investigated the effects of permanent financial development on domestic investment and output in 41 countries. The data were collected for a period of 33 years (1960-1993) and included variables such as real GDP, real domestic investment and index of financial development. The index of financial development was constructed by taking total bank deposits in GDP and the geometric mean of this year’s bank deposits and last year’s bank deposits divided by GDP. VAR model was used to analyse the data. Impulse response analysis was applied to find out the effect of financial development on investment and real GDP. The study found strong evidence that financial development is important to GDP growth and domestic
investment is an important channel through which financial development effects economic growth.

**Liu, C.C.L;** (2002) investigated the direction of causality between financial development and economic growth in 109 developing and industrial countries. The study covered a period of over 34 years (1960-1994). The variables used in the study were ratio of broad money to GDP, ratio of credits provided by financial intermediaries to the private sector to GDP, real GDP per capita growth rate, Initial human capital, initial income level, a measure of Government size and black market exchange rate premium. Geweke Decomposition test was used to analyse the data. The result showed that financial development leads to economic growth for all the countries and found the evidence of bi-directional causality between financial development and economic growth.

**Choong, C.K;** et al(2002) focused to study financial development and economic growth in Malaysia by considering the stock market as a main factor for financial development. The data were taken for a period of 22 years (1978-2000). The researchers view is that it’s more important to study the financial development and economic growth relationship through stock market development. For this purpose two variables included in the study were the ratio of total market value to nominal GDP and the stock market turnover ratio. ARDL was applied to analyse the variables because of the limited number of samples and the level of integration. Finally, the result showed that stock market development is co-integrated with economic growth. Not only that the stock market development has a significant positive long run impact on economic growth and Granger Causality test revealed that the stock market development causes economic growth.
Omran, M; Bolbol, A; (2003) investigated the role of foreign direct investment for promoting economic growth and financial development in Arab countries. The data was taken for a period of 24 years (1975-1999) and 17 countries were selected for the study. The variables used in this study were domestic credit from commercial banks to the private sector as a ratio of GDP, foreign direct investment, commercial banks assets as a ratio of commercial banks and central bank assets, total value of shares traded to GDP, turnover ratio. The data were analysed by using cross country regression and pair wise granger causality test. They analysed the data by dividing it into three groups mainly reform countries, Gulf countries and other countries to find out the causality between financial direct investment and financial development. The result showed that Arab countries financial system is related with bank.

Bhattacharya, P.C; Sivasubramanian, M.N; (2003) tried to criticize the tools used to analyze the financial development and economic growth in former studies. For the study he has taken into account the period from 1970-71 to 1998-99. For this researcher has taken M3 as proxy for financial development and GDP for economic growth respectively. Three things are being examined here which are causality between GDP and M3, long run relationship between M3 and GDP and finally analyzing the structural breaks in time series data during pre and post liberalization period. Test for co-integration revealed that M3 and GDP are co-integrated. It is found that there were structural breaks in time series data. Causality is running from M3 to GDP not vice versa.

Ramlal, V; Watson, P.K; (2004) examined the long run relationship between financial development and economic growth in the three CARICOM countries. The study was done by taking data for 32 years (1970-2002) and variables such as broad money divided by GDP, domestic credit to the public sector divided by GDP, per
capita growth rate of real income were used. VAR model, impulse response, variance decomposition and VECM were used to analyse the data. The result showed causation between financial development and economic growth except in Trinidad & Tobago and Barbados.

Rahman, M.D.B; (2004) made an attempt to find out whether financial development results in higher investment and output growth in the long run. Study was conducted by taking data from 1976-2005. The variables considered for the study were weighted average annual interest rate on lending by banks, domestic credit to the private sector as a percent of GDP, total deposits as a percent of GDP, broad money as a percent of GDP, gross fixed capital formation as a percent of GDP and GDP per capita. VAR model was used to analyse the data. The result proved the existence of co-movement between financial development on investment and per capita income in the long run.

Awad, M.A; Harb, N; (2005) focused to study the linkages between financial development and economic growth in the Middle East. Variables such as real GDP, real Government spending, real M1 and ratio of private credit to monetary base were used in the study. The data was analysed by using panel co-integration, FMOLS regression, Multivariate Johansen co-integration test and Granger Causality test. The result showed that in the long run, financial development and economic growth may be related. In the short run the evidence of linkages between financial development and economic growth showed that causality affects run from economic growth to financial development.

Khan, M.A; et al (2005) examined the relationship between financial development and economic growth in Pakistan. The study period was 23 years (1971-
He also examined the structural stability of finance growth relationship in the presence of financial sector reforms. The variables used for the study were financial depth, logarithm of real GDP measured as a ratio of GDP to consumer price index, share of investment proxy by the gross fixed capital formation to nominal GDP and real deposit rate. The data is analysed using Auto Regressive Distributed Lag (ARDL) method. The result showed a stable long run relationship between economic growth and financial depth.

Huang,Y; (2005) investigated the existence and the direction of causality between private investment and financial development on a panel dataset of 43 developing countries for a period of 28 years (1970-1998). Here, he has taken two modern quantitative methods Bayesian Model Averaging (BMA) and General to specific approach. Researcher considered a wider assessment of economic, political and geographic variables and constructed a composite index for financial development. The researcher reached to a conclusion that institutions, policy, geography as a whole being important for financial development and also have significant implications for developing financial markets. The significant effects of the structural factors which are relatively time invariant means that any effort of the Government to improve institution quality, more open trade, sound macroeconomic policies and geographic infrastructure can stimulate financial development in the long run.

Khaled,A.Z; et al (2006) examined financial development and economic growth in MENA countries for a period of 12 years (1989-2001). For the study researcher has taken data from eleven Arab countries. The variables used in the study were liquid liabilities, bank credit, credit allocated to private sector to total domestic credit, credit to private enterprises divided by GDP and growth rate of real per capita
GDP. The data were analysed using regression model. The result showed there is no significant relationship between financial development indicators and growth rate GDP in Arab countries.

Rathinam, F.X; (2007) made an attempt to re-examine the financial development and economic growth puzzle in India, by focusing the determinants of financial sector growth such as legal and institutional developments and financial regulation. Study used variable such as M2 over nominal GDP, private credit to make an overall index of financial development by applying principal component analysis. The data were analysed with in a multivariate VAR framework, Granger causality test and Vector Error Correction Model. The empirical test showed that legal and institutional developments and financial regulation cause financial sector growth. The result also showed that legal, institutional developments positively effect financial sector growth in the long run and financial regulation has a negative impact.

Mihalca, G; (2007) investigated the relationship between financial development and economic growth in Romania. The researcher made the study by taking data for 11 years (1995-2006). This period was selected by considering the stable condition of economy. The variable considered for the study was the ratio of domestic credit of banking institutions to nominal GDP and per capita real GDP. The analysis was done by different stages. In the first stage correlation between financial development and economic growth was calculated. The result showed a negative strong relationship between financial development and economic growth. In the second stage the researcher used Cobb-Douglas equations to find out the correlation coefficient. The result showed that there is no relationship between financial development and economic growth.
Ketteni, E; et al (2007) tried to study how financial development influences economic growth. The study used a general non parametric frame work and allows all three determinants of economic growth such as per capita income, human capital and financial development to be treated nonlinearly and provides specification tests for choosing amongst the alternative models. The result showed that both parametric and nonparametric estimation confirms a strong, significant, positive and linear relationship between financial development and economic growth.

Ferda Halicioglu (2007) made an attempt to find out the validity of the demand pulling and supply leading hypotheses. For this study the researcher has taken data for a period of 37 years (1968-2005). The variables considered for the study were the ratio of broad money stock to nominal national income and the ratio of bank deposit liabilities to nominal national income. The econometric model used for the study is ARDL approach of Pesaran and Granger Causality test. The result showed a unidirectional causation from financial development to economic growth.

Yachao, S; (2007) investigated the relationship between financial development and economic growth for Hubei province. The variables used for the study were index of deposit, index of loan and retail price index. The study was done by taking 7 years data (1999-2006). The econometric models such as Co-integration and Granger causality test were used to analyse the variables. The result showed that financial development improves economic growth.

Katircioglu, S.T; et al (2007) made an attempt to investigate the possible co-integration and the direction of causality between financial development, international trade and economic growth in India. The study was done by taking data for a period of 39 years (1965-2004). The main variables used in the study were real gross
domestic product, ratio of broad money to nominal GDP, ratio of domestic credit to nominal GDP, real exports of goods and services and real imports of goods and services. Co-integration test was used to find out the long term relationship and Granger Causality was used to find out the direction of causality between financial development, trade and growth. The result showed that the ‘supply leading and the demand following hypothesis’ cannot be conditional for the Indian economy. The result also showed that there was a long run equilibrium relationship between financial development, international trade and real income growth. Unidirectional causality run from real income growth to international trade growth.

Khan, M.A; (2008) focused a study to find out the relationship between financial development and economic growth in Pakistan. Researcher has taken data for a period of 44 years (1961-2005). The variables used in the study were real output, ratio of private sector credit to GDP, real deposit rate and the share of investment to GDP. To find out the long run relationship between real GDP, financial development, real deposit rate and share of investment to GDP, researcher used bound testing approach to co-integration. The study revealed that in the long run financial development and investment showed a positive impact on economic growth. Real deposit rate positively correlated to real income. Researcher concluded that the economic growth is positively and significantly affected by the changes in financial development.

Adamopoulos, A;(2008) focused on a study to examine the long run relationship between economic growth and financial development of Ireland. The study has two objectives - to apply Granger Causality test based on a Vector error correction model in order to examine the causal relationship between the examined variables taking in to Johansen Co integration analysis and to examine the effect of
stock and credit market development on economic growth taking into account the positive effect of industrial production. The main variables used in the study were GDP, general stock market index, domestic bank credits to private sector and industrial production index. The results of the Granger causality test indicated that there is a bidirectional causal relationship between economic growth and credit market.

Singh, T.; (2008) investigated the relationship between financial development and economic growth in India for a period of 44 years (1951-52 to 1995-96), and it measures financial development in terms of financial ratios that is financial interrelations ratio and new issue ratio and economic growth in terms of per capita real gross domestic product. For analysis co-integration is used. The empirical result shows that the financial development and economic growth are characterized by the presence of long run equilibrium relationship. Finally the study concluded that, liberalization and development of financial sector helped in achieving high economic growth in India.

Odhiambo, N.M; (2008) focused in a study to find out the dynamic causal relationship between financial development and economic growth. Here researcher used data for a period of 36 years (1969-2005). Researcher used variables such as financial depth and per capita income. The variable were analysed by using tri-variate causality frame work and found out causality between financial development, savings and economic growth. The result showed there is unidirectional causality run from economic growth to financial depth.

Bader, S.A; Qarn, A.S.Q; (2008) examined the causal relationship between financial development and economic growth in Egypt. The study was conducted by
taking data for a period of 41 years (1960-2001). The variables used for the study were ratio of money stock to nominal GDP, M2 minus currency to GDP, ratio of bank credit to the private sector to nominal GDP, ratio of credit issued to non financial private firms to total domestic credit as proxy for financial development and real GDP per capita. The data were analysed by using Granger causality, Co-integration and Error Correction Model. The tests revealed that bi-directional granger causality between economic growth and financial development in Egypt by using all the financial development proxies.

Thahir,M; (2008) attempted to find out the relationship between economic growth and financial development. For this study researcher has taken 23 years (1973-2006) data. The variables such as real per capita GDP, ratio of domestic credit to GDP, total capital formation to GDP, weighted average savings interest minus current GDP deflator were used. The data were analysed by using Vector Error Correction Model (VECM) and Multivariate Co-integrating testing procedure. Result showed that there is no causality between economic growth and financial development in long run but in short run financial development causes economic growth.

Seetanah,B; et al(2008) made an attempt to find out the link between financial development and economic growth in Island economies. The variable such as the country’s investment divided by its GDP, total of export and import divided by GDP, employment level, secondary enrolment ratio, liquid liabilities to the country’s GDP, value of credits by financial intermediaries to the private sector divided by GDP were used. Data for a period of 22 years (1980-2002) were used for analysis. Dynamic panel data regression and GMM methodology was used to analyse the data. The result showed a significant positive relationship between financial development and economic growth.
Dushku, E; (2008) focused on a study to find out the causal relationship between financial development and economic growth by taking data for a period of 11 years (1996-2007). To study the impact of financial development to economic growth, they have taken five different indicators such as M2 as a percentage of GDP, domestic credit as percentage of GDP, private credit as a percentage of GDP, deposit as percentage of GDP, private credit to total domestic credit. The Granger causality test and the Vector Error Correction Model were used for analysis. The result showed that there is a bi-directional causality between all financial indicators and economic growth.

Wei, W; Fuzhong, C; (2008) investigated the relationship between financial development and economic growth in the Yandtze river delta. For this purpose they have chosen panel data model. The study was done by taking data for a period of 12 years (1994-2006). By considering the past literature they have used variables such as growth of regional economy, financial interrelations ratio, financial efficiency, development of stock market and development of insurance market. Fixed effect model was used to analyse the variable. The empirical result showed that the effect of financial development of insurance market to economic growth varied in different stages.

Shahnoushi, N et al (2008) focused to study the relationship between the financial development and economic growth in Iran. The study period was 43 years (1961-2004). The variables used for the study is natural logarithm of the real GDP, natural logarithm of granted credit of banks to private sector and real interest rate. The data were analysed using Johansen’s Co-integration, Vector error correction model. The result showed that economic growth in Iran had a positive effect on financial development and no effect on GDP.
Dawson.P.J (2008) focused on a study to re-examine the relationship between financial development and economic growth using annual panel data of 44 developing countries. The period of the study was taken from 1974-2001. The variables used for the study were total population, M3 as a proportion of GDP, Depth. The tools used for analysis were panel unit root tests and Wald test. The empirical result showed that there is a significant relationship between financial development and economic growth.

Seetanah, B; (2008) investigated the relationship between financial development and economic growth in Mauritius by using the ARDL model. The study was done by taking 52 years (1952-2004) data. Researcher has chosen liquid liabilities to the country’s GDP, value of credits by financial intermediaries to the private sector divided by GDP, the country’s investment divided by its GDP, total of export and imports divided GDP and secondary enrolment ratio were used in this study. The result showed that both financial development proxies have a positive significant effect on economic growth in the short and long run.

Rioja, F; (2008) tried to evaluate the role of financial system in increasing the economic growth and the income inequality in Latin America and Caribbean (LAC). For this purpose researcher has taken the data such as the average income of every quintile from the poorest Q1 to the richest Q5, variable interest is the Gini coefficient, private credit variable. Dynamic panel estimation method is used to analyze the variable. Finally the researcher reached to a conclusion that larger financial systems have been found to increase growth and reduce poverty in large world samples. The positive findings of the paper are financial development have succeeded in raising the income of individuals in the middle income ranges (Q2-Q4).
Bader, S.A; Qarn, A.S.A; (2008) investigated the causal relationship between financial development and economic growth for six middle east and north African countries. Variables used in the study were the ratio of money stock, the ratio of M2 minus currency to GDP, the ratio of bank credit to the private sector to nominal GDP, the ratio of credit issued to non financial private firms to total domestic credit and real GDP per capita. Vector Auto regression is used to find out the causality between financial development and economic growth. The results confirmed that the finance leads to growth in five out of six countries. No causality is found in case of Israel.

Oura, H; (2008) evaluated the efficiency of different segments of India’s financial system using firm level data on corporate financing patterns and gave suggestions for the further upgradation of India’s financial system. The data used for the study ranges from 1994 to 2006, and regression model was used for the analysis. The variables used in the study were share of external funds on total funds for firm, share of debt, foreign debt, equity over debt and inherent external fiancée demand. The researcher examined whether Indian firms are increasingly relying on external funds and facing financing constraints in some segments of the financial system with an influence on firm growth. The paper has provided evidences for the existence of inefficiency in Indian financial sector, which negatively affects growth differentials of finance intensive industries from other industries.. There are signs of inefficiency in India’s financial system particularly in the debt financing mechanisms. T

Yay, G; Oktayer, A; (2009) investigated the relationship between financial development and economic growth for developed and developing countries. The study was done by taking 21 years (1975-2006) data. Twenty one developing and sixteen developed countries were selected for the study. The variables namely stock market value traded, Government expenditure, trade openness, inflation rate, bank
credit, average years of schooling and black market exchange premium were used for the study. Generalized method of moments technique was used to analyse the data. The result of developing economies indicated that both stock market and banks positively influence the economic growth where as in developed economies; only stock markets positively influence economic growth.

Amanulla, S; et al (2009) made a study to prove the long term relationship between financial development and economic growth in Indian states. For this purpose researcher has taken 14 states and divided into 2 parts that is backward state (Bimaaru) and developed states. The variables such as per capita net state domestic product and per capita credit were used for the study. The study was done for a period of 21 years (1981-2002). Researcher used Pedroni panel co-integration test to prove the long term relationship between financial development and economic growth. Ultimately the researcher reached the conclusion that all the Indian states does not matter whether developed or BIMMARU state, show a growth both in credit and output individually during this period. One state’s credit-output relationship is not only influenced by one’s own effort across the time period but also influenced by other states credit-output.

Vazakidis, A; Adamopoulos, A; (2009) made an attempt to find out the causal relationship between financial development and economic growth in Greece. The researcher conducted study for a period of 29 years (1978-2007). The researcher used a multivariate model to find out the relationship. Economic growth is measured by the rate of change of bank credits to private sector as a percentage of GDP, the general stock market index and industrial production index. The researcher analysed the data by using Johansen’s co-integration, Vector Error Correction Model and Granger causality test. The result showed that economic growth causes stock market
development and industrial production index and industrial production index causes credit market development.

Kargbo, S.M; Adamu, P.A; (2009) made a study in Sierra Leone to find out the relationship between financial development and economic growth over a period of 38 years (1970-2008). To avoid the problem with single financial development indicator they have constructed financial development index for that country. Banking deposit liabilities to GDP, ratio of private sector credit to GDP, ratio private credit to total credit were used for index construction. ARDL was applied to estimate the long and short run relationship. The result showed that there exist a positive effect on economic growth via financial development index, real interest rate and investment.

Sunde, T; (2009) conducted a study in Namibian economy to analyse the relationship between financial sector development and economic growth. Financial institutions variables used in this study were lending rates, ratio of liquid assets to GDP, and the ratio of private credit to GDP. For the purpose of measuring economic growth researcher used level of real GDP per capita and the ratio of investment to GDP. The data were analysed by using Johansen Co-integration test and Granger causality test. The result showed that causality between financial development and economic growth is bi-directional.

Vuranok, S; (2009) made an attempt to find out the causal relationship between financial development and economic growth in Turkey. The study was done for a period of 17 years (1991-2008). The variables taken for the study were per capita real income, M2, M2Y and money supply to GDP. The variables were analysed by using economic tools such as Johansen co-integration test and Granger Causality test. The result showed that there is no long term relationship between financial
development and economic growth. Granger causality test cannot estimate the direction of causality correctly.

Rufael, Y.W; (2009) re-examines the causal relationship between financial development and economic growth in Kenya. Here the researcher has taken data for a period of 39 years (1966-2005). The variables were analysed by using Toda and Yamamoto Granger non-causality test. The result showed that in three out of 4 proxies of financial development support bi-directional granger causality. In this study the robustness check was done by using leveraged bootstrap simulation technique. All other cases except liquid liabilities to economic growth confirmed that there was a bidirectional causality run from financial development to economic growth.

Esso, L.J; (2010) tried to re-examine the co-integrating and causal relationship between financial development and economic growth in Economic Community of West African States (ECOWAS) countries. The variables used for the study were gross domestic product per capita and credit to private sector as a percentage of GDP. The tools used for the analysis are Zivot and Andrews unit root test and Vector Auto Regression. The result showed that there is a long run relationship between financial development and economic growth in five countries namely Cape Verde, Cote D’Ivoire, Ghana, Guinea and Liberia. The result also showed that GDP Per capita significantly causes financial development in Cape Verde, Cote D’Ivoire and Sierra Leone.

Kar, M; et al(2010) investigated the direction of causality between financial development and economic growth in the Middle East and North African countries. The method applied here is the recently proposed panel causality testing approach.
The empirical results showed that the direction of causality between financial development and economic growth is sensitive to the measurement of financial development in the MENA countries. The researcher found that financial sector and real sector are interrelated to each other in most cases. Economic policies focused only on the development of financial sector but not in economic development.

Leitao, N.C.; (2010) tried to find out the link between financial development and economic growth. For the study, he has taken European Union countries and BRIC countries. Researcher has taken data for a period of 26 years (1980-2006). The researcher applies a static panel data and a dynamic panel data model (GMM-SYS). Variable used in this study were growth rate of real GDP per capita, international trade, productivity and macroeconomic stability. Finally researcher reached a conclusion that financial development stimulates the productivity and industrial trade.

Jude, E.C.; (2010) focused on a study to find out the financial development and growth in 71 developed and developing countries over a period of 44 years (1960-2004). The variables used in the study were commercial central bank ratio, Inflation rate and the ratio of Government expenditure to GDP, the sum of exports and imports and population growth rate. The data was analysed by using panel smooth regression approach. The study found that the relationship between financial development and economic growth was nonlinear. Further research can be done by including more financial development indicators.

Pradhan, R.P.; (2010) examined the causal relation between financial development, economic growth and poverty reduction. The study was conducted in India by taking 57 years (1951-2008) data. Variables such as broad money supply to GDP, per capita GDP and people below poverty line were used. The data were analysed by using co-integration and causality test. The test result proved that
economic growth is a factor for financial development and financial development & economic growth has a major contribution to poverty reduction in the Indian economy. The policy implication of the study was economic growth can be taken as the policy variable to accelerate financial development and both could be used as the policy variable for poverty reduction.

Antonios, A; (2010) investigated the relationship between financial development and economic growth for 15 European Union member states. The study was conducted for a period of 42 years (1965-2007). The variables included in the study were gross domestic product, general stock market index, domestic bank credits to private sector, interest rate, consumer price index and industrial production index. The data was analysed using regression model. The result showed that the stock and credit market development related to the development of industrial production have a positive direct effect on economic growth for 4 countries such as Austria, Belgium, Ireland and Luxemburg. At the same time bank market development has a greater effect on economic growth for Sweden and UK while stock market development has a greater effect on economic growth for the remaining 9 countries.

Yong, L; weiping, L; (2010) conducted a study to analyse the relationship between regional financial development and regional economic growth. The study is done in Suzhou city in China by taking variable such as private investment divided by aggregate investment, aggregate loan divided by GDP and also constructed an index for financial development by applying principal component analysis. To find out the long run relationship and causation they have applied co-integration test and causality test. The result showed that financial development and the economic growth still remains at the supply leading stage.
Muhammad, S.D; Umer, M; (2010) conducted a study to find whether any co-integration exists between financial development and economic growth in Pakistan and also tried to evaluate the causality between financial development and economic growth. Researcher conducted the study for a period of 35 years (1973-2008). They have taken logarithm of real GDP as a proxy for economic growth and logarithm of broad money and logarithm of domestic Credit as proxy for financial development. Auto Regressive Distributed Lag was used to find out the Co-integration. The result showed that there is a long run relationship between broad money supply growth and economic growth. But the researcher failed to find any constant relationship between domestic credit provided by banking sector and economic growth in Pakistan.

Bangake, C; Eggoh, J. C; (2011) reassessed the causal relationship between financial development and economic growth by using panel method. They have taken data from 71 developed and developing countries over a period of 44 years. Variables such as ratio of liquid liabilities to GDP, the ratio of deposit money bank assets to GDP, ratio of private domestic product per capita, Government expenditures as ratio to GDP, exports and imports divided by GDP were used. The data were analysed by using panel co-integration and causality test. The result showed that economic growth, financial development indicators and control variables were co-integrated. The economy was divided in to low, middle and high income countries via this it showed a market difference between country groups. It also showed a strong bi-directional causality between financial development and economic growth in the long run but in the short run there is no such relationship except in high income countries.

Misati, R. N; Nyamongo, E. M; (2011) focused on a study to find out the relationship between financial sector development and private investment in sub-Saharan Africa. For this study they used panel data of 18 countries in Africa. The data
for a period of 13 years (1991-2004) were used. The variables such as the index of the economic freedom, corruption perception index, economic freedom of the world index, checks and balance index, private investment, GDP growth rates etc were used. The data were analysed by using extended simple accelerator model. The result showed that negative relationship between interest rate on deposits and private investment and a positive relationship between both the credit to the private sector and a positive turnover ratio and private investment.

Jalil, A; Feridun, M; (2011) conducted a study to find out the effect of financial sector development on economic growth in Pakistan. Researcher has used 33 years data. The variables were analysed by using the recent ARDL model. Researcher have used principal component analysis for constructing the financial development index for Pakistan. The index was constructed by using the variables such as liquid liabilities, ratio of credit to private sector to nominal GDP, ratio of commercial bank assets to the sum of commercial bank and central bank assets. GDP was used as proxy for economic growth. The empirical result showed the presence of a positive and significant relationship between financial development and economic growth in Pakistan.

Johannes, T. A; et al (2011) examined the relationship between financial development and economic growth in Cameroon by taking data for a period of 25(1970-2005) years. Variable such as GDP per capita, size of the financial sector, bank credit allocated to private enterprises by the financial sector investment rate, the size of the Government, openness of the economy were used. The study applied Johansen co-integration test and causality test to analyse the data. The result showed that financial development has a positive significant effect on economic growth in the
long run. The causality test revealed that in the short run there is no causality relationship between financial development and economic growth.

Rachdi, H; Mbarek, H.B; (2011) examined causality between financial development and economic growth in a panel data. The study was based on a sample of 10 countries, 6 from OECD region and 4 from the MENA region. The study was done by taking 16 years (1990-2006) data. The variables used in the study were real per capita GDP, private credit by deposit money banks, ratio of liquid liabilities to GDP, consumer price index, ratio of Government consumption to GDP. The data were analysed by using co-integration test, Generalised Method of Movements (GMM) system approach and Granger causality test. The panel data co-integration result revealed that long term relationship between financial development and economic growth in the ten countries not only that GMM system approach showed that financial development and real GDP per capita are positively related. The error correction model showed the causality is bi-directional for the OECD countries and unidirectional for MENA countries that is economic growth leads financial development.

Eng, Y.K; Habibullah, M.S; (2011) re-examined the causality issue in financial development and economic growth. The study was done by using an unbalanced panel with 8 years (1990-1998) annual data. Variables used in the study were real gross domestic product and the ratio of domestic credit to GDP and analysis is done by using GMM panel estimates. The result showed that there exists evidence supporting the demand following as well as non causal relation between the economic growth and the financial deepening.
Anwar,S; Sun,A; (2011) examined the inter relationship among economic growth, stock of foreign investment and stock of domestic capital in Malaysia. The variables such as GDP, real domestic capital stock, stock of foreign investment, stock of foreign capital, number of workers employed, total factor productivity were used in their study. The data were taken for 37 years (1970-2007) and data were analysed with simultaneous equations Generalised method of moments. The result showed that the level of financial development in Malaysia significantly affects its stock of domestic capital which contributes to economic growth.

II.3. Studies Related to Banking Sector and Financial Development

Some researchers made an attempt to find out whether financial development has any relationship with banking sector controls or banking efficiency. The study was conducted in Sub-Saharan Africa, Northern Cyprus, and India. The empirical studies show that banking sector controls or banking efficiency has significant effect on financial development.

Levine,R; (1993) analyzed whether any country’s level of financial development played an important role in determining the rate of economic growth and analyzed whether the liberalizing restrictions have helped the foreign banks to enter and function in a country particularly the bolster financial development. The researcher used two measures of financial development namely the ratio of liquid liabilities of the financial system divided by GDP and the ratio of deposit bank domestic credit divided by deposit bank domestic credit plus central bank domestic credit so as to ensure the relative importance of specific financial intermediaries. The period taken for the study is 1960-1989, during that time, the only decomposition is between the central bank and deposit banks; so by considering ratio of deposit bank to domestic credit divided by deposit bank domestic credit plus central bank domestic credit.
credit is not adequate. Finally the researcher arrived to a conclusion that, a developing country’s level of financial development is important for its future rate of economic growth.

**Demetriades, P.O;** (1996) concentrated in evaluating the effect of various types of banking sector controls on the process of financial deepening. Researcher has taken data from India. Here the researcher measured banking sector control directly by collecting information from various types of interest rate controls, reserve and liquidity requirements and directed credit programs. The econometric tools such as unrestricted error correction method, co-integration and weak exogeneity were used for analysis. The results showed that banking sector controls as a whole had a negative influence on financial development in India. Researcher suggested that financial deepening can be achieved by altering banks behavior particularly by changing banks willingness to attract deposits by various strategies. Here the researcher paid little attention to examine the effect of repressionist policies in endogenous growth models with imperfectly competitive banks.

**Unalmis, D;** (2002) made an attempt to find the direction of causality between financial development and economic growth in Turkey. The previous studies revealed that there exists a long run relationship between financial development and economic growth. The researcher made this study by taking the data from 1970-2001. Variables used for the study were domestic credit as a ratio of GNP (LDCG), private credit as a ratio of GNP (LPCG), Private credit as a share of domestic credit (LPCDC), broad money supply as a ratio of GNP (CM2YG), total deposit as a ratio of GNP (LTLDG) as financial development proxies and change in per capita GNP at constant price (DLPCI) as proxy for economic growth. The researcher used VAR, VECM and Granger Causality tests to analyse the data. Researcher analysed the data by using
Granger Causality by two different conditions, they were non stationary and co integrated variables, non stationary and non co integrated variables. In this LPCG, LDCG, LM2YG were non stationary and non co integrated variables. The results showed that except private credit as a share of domestic credit (LPCDC) all other variables financial development causes economic growth in both short run and long run. Besides that there exist a bidirectional relationship between financial development and economic growth.

**Moustain, A; Fatima; (2004)** tried to find out the causality issue between financial development and economic growth for a period of 30 years (1970-2000). The indicators used for the study were liquid liabilities, domestic credit provided by the banking sector as a percentage of GDP (BCR), domestic credit to the private sector to GDP (PRIV) as proxy for financial development and GDP as a proxy for economic growth. Johansen Co integration test were used for analysing the data. The study revealed that short run irregular relationship occurs between financial development and economic growth and it failed to find or establish any stable long term relationship between finance and growth. The study was successful in providing evidence which support the argument stating that higher level of financial development is directly proportional to higher levels of consumption.

**Guryay, E; (2007)** investigated a study in Northern Cyprus to find out the causality between financial development and economic growth. The study period ranges from 1986-2004 and used the important financial development indicators such as the ratio of deposits to GDP and loan to GDP. The data were analysed by using Ganger Causality test. The result showed that there is a minor causality between economic growth and financial development that is annual growth rate of real GDP has causal relationship between the ratios of loan to GDP, and domestic investments.
to GDP. The direction of causality exists between economic growth to financial development not vice versa.

**Burcu et al** (2009) investigated the long run relationship between financial development and economic growth in emerging countries by using panel data of 10 countries during the period of 1968-2007. Here the researcher used the liquid liabilities of the financial system, Bank credit, Private sector credit, Gross domestic product, Gross fixed capital, General Government final consumption expenditure as share of GDP, Volume of Trade as variables of study. The data was analysed by panel unit root tests, Panel co-integration and Fully Modified Ordinary Least Squares (FMOLS) methods. For analysing the long run relationship financial development and economic growth researcher adopted Pedroni Panel Co-integration test. For finding the co-integration the researcher also used panel Fully Modified Ordinary Least square (FMOLS) method. The results showed that the null hypothesis of no co-integration is strongly rejected which shows the existence of a long run relationship between economic growth and financial development.

**Kablan, S**; (2010) tried to find out answers for mainly two questions such as how efficient banks are in Sub-Saharan Africa (SSA) and what determines their degree of efficiency?. What other factors may explain the low level of financial development in SSA? Researcher used stochastic frontier analysis to assess banking efficiency and its determinants. The environmental factors that explain efficiency are information technology, client tastes and regulation. Banks tried to influence environmental factors through lobbying activities, marketing efforts, research and development. Here the researcher has taken variables such as ratio of private loans to GDP, GDP per capita and share of rural population to evaluate the banking efficiency. For evaluating the financial development in SSA macro economic variables, political variables
Generalised method of movements (GMM) model is applied for analysis. The result of GMM and stochastic frontier analysis showed that generally, the banks in SSA countries are cost efficient. The efficiency score measures how efficient SSA banks are in the combination of labour, physical capital and financial capital to produce on optimal combination of collected deposits, loans and investment in securities under price constraints. The financial development in SSA was adversely affected by inflation and somewhat by concentration. The presence of foreign banks leads to a phenomenon of cream skimming to a decline in credit to the private sector.

II.4. Studies Related to Determinants of Financial Development

The researcher has reviewed studies on the determinants of financial development and found that institutional, policy and geographical variables do have influence on the financial development. Institutional variables includes common law legal origin dummy, civil Law legal origin dummy, aggregate of share holders right; policy variables include economic volatility, trade openness, output and inflation volatility; Geographical variables include REGAP (Asia & Pacific), REGMENA, REGWENA, REGSSA, REGLAC etc; and other variables include Initial income, Initial population, Ethnic polarization index and the like. From this literature, the researcher is able to identify the factors determining financial development.

Herger, N; et al (2007) tried to concentrate the main determinants of financial development such as culture, institutions or trade. Researcher also tried to explain the vast differences in the size of capital markets across countries by drawing together theories emphasizing cultural values, dysfunctional institutions or impediments to trade as obstacles to financial development. Here the researcher conducted an
integrated test on the ability of cultural beliefs and values, institutional quality, and trade to explain cross country differences in financial development. The researcher concluded the study by leaving domestic markets open to foreign trade and competition. Cultural factors such as religion or ethnic diversity affect the quality of greedy institutions there by exhibiting an indirect effect on financial development.

Koubi, V; (2008) investigated whether political institutions pertaining the Government quality matter for financial markets growth. Researcher has taken banking and stock market development variable by using standard indicators in financial development determinants namely the quality depth of banking system and the liquidity of the stock market. Regression model was used for analysis. Finally the researcher arrived to a conclusion that financial development is negatively related to Government quality and which is particularly true for banking development.

Erzen, S; (2008) evaluated the determinants of financial development and private sector credit for a panel of 85 developing and industrial countries using annual data from 1980-2006. The researcher evaluated the impact of commercial banking system credits to public sector on private sector credits. The study revealed that if the debt management is stable then this behaviour of banks in developing countries facilitates financial intermediation. A Government debt market with low macroeconomic volatility and sufficient volume of debt supports a private bond market as it brings a basic financial infrastructure including law, institutions, products, services, repo and derivatives market and plays a role as an informational benchmark.

Chinn, M.D; et al (2008) examined the factors affecting financial development. Researcher conducted a panel data analysis encompassing 108 countries
and data of 20 years (1980-2000). The variables used in the study were private credit from deposit money banks to the private sector, stock market capitalization, total value of stocks traded, stock market turnover, capital openness index etc. Regression model is used for the analysis. The result suggested that financial openness does contribute to equity market development.

Lu, S.F; Yao, Y; (2009) conducted a study to find out the effectiveness of law, financial development and economic growth in financially repressed economy like China. Data for a period of ten years (1991-2001) were taken for the study. Four financial development indicators such as financial depth, bank competition, share of credit, share of private investment and effectiveness of legal system were used and analysed by using regression equation. The result showed that the improvement in the law alone in a repressed economy does not lead to overall financial development.

Dogbey, J; (2010) concentrated to examine whether financial development is communicable using spatial econometrics analysis. For the study the researcher had taken three measures of financial development as a percentage of financial development namely domestic credit to the private sector, private credit by the banking sector and stock market total value traded. Independent variables used in this study include initial GDP per capita, the lagged level of financial development, spatial weight matrices and regional or continent dummies. The data for the analysis is taken for a period of 15 years (1985-2000). This study used spatial econometric methods to examine the spread of financial development; a Spatial Auto Regressive model (SAR) and Spatial Error Model (SEM) were also used. The study found lagged levels of financial development to account significantly and positively for the level of financial development, but negatively for the changes of financial development. It also found out that bureaucratic quality is important for financial development.
II.5. Studies Related to Financial Development Index and Economic Growth

Since individual indicators give different results, an attempt was made to have one measure and index. For India, Malaysia, Pakistan and Turkey the researchers have already constructed some index with different indicators. There is no worldwide accepted indicator for financial development index. World Economic Forum started to construct FDI for 55 countries from 2008 and India is one among those countries.

Aug, J.B; (2005) focused to examine the role of saving, investment, trade openness and real interest rate in determining the finance growth nexus in the small, developing economy of Malaysia for a period from 1960-2001. Researcher applied principal component analysis to measure the depth of financial development by the construction of financial development index. The analysis is done by using co-integration using the Johansen approach. The result showed that economic growth causes financial development in the long run.

Khan; (2006) examined the impact of trade and financial liberalisation on economic growth in Pakistan. Researcher has taken annual observations over a period from 1961-2005. ARDL method was applied for the analysis. The study revealed a positive and significant impact of financial sector development index (FSDI) and ratio of discount rate and trade openness on real GDP. However in the short run FSDI exerted statistically insignificant negative association with economic growth.

Hye, Q.M.A; (2011) made a study to develop financial development index for India. For long run robustness Auto Regressive Distributed Lag model (ARDL) and Rolling window regression method is used. Researcher used variables such as GDP, Financial development index and real interest rate, labour force and gross fixed capital formation. The results of the study revealed that financial development index
and real interest rate negatively determine the economic growth in India. But capital and labour on the growth theory positively determine economic growth in the long run.

II.6. Studies Related to Stock Market and Financial Development

There are studies carried out in India, Malaysia and Ohio State University related to financial development and economic growth; they all are giving different results. In the case of India, stock market is not associated with economic growth. But in Malaysia, stock market development has a significant positive impact on economic growth. It is found by the researcher that there is no consistent relationship between stock market and financial development.

Arestis, P; (2001) investigated the long run relationship between stock market velocity, stock market development, banking system development and level of output and also examined the causality between output and banking system development, output and stock market development. Researcher carried out empirical investigation in a Vector Auto Regression (VAR) model. The empirical analysis showed that stock markets are able to contribute for long term output growth and their influence is relatively low when compared to the banking system.

Lazar, D; (2005) examined whether the financial system is relevant or irrelevant in a country’s growth. For this researcher has taken 21 years data (1981-2001) from BSE along with the primary data from foreign institutional investors and real per capita GDP. Time series growth regression study is the mode of analysis. From their study it is suggested that, stock market development in India is not associated with economic growth over a study period of 21 years.
Deb, S. G.; (2008) tried to find out whether there exists any relationship in the development of financial sector on economic growths, and if it exists what would be the nature and direction of the causal relationship. Researcher has taken 11 years quarterly data for the study (1996:Q4-2007Q1). Here BSE sensitive index is taken as the proxy for the Indian stock market. The three vital indicators for stock market development variables included in the study are real market capitalization ratio, real value traded ratio and stock market velocity. Real GDP growth rate is the proxy for economic development. The study has taken econometric methods like Granger causality test and Toda Yamamoto approach for the analysis. The empirical result showed a bi-directional causality between real GDP growth rate and real market capitalization ratio.

II.7. Studies Related to Trade Liberalization and Economic Growth

As far as world economy is concerned, reforms have made changes in entire world. Here, the researcher reviewed some studies which are related to trade liberalization and economic growth. Studies done in India, Pakistan & Malaysia showed that trade liberalization has helped to have economic growth in the countries.

Gupta, D; Sathye, M; (2004) tried to find whether India reached a stage of financial development when full capital account convertibility was introduced. Capital account convertibility is the freedom to convert local financial assets in to foreign financial assets and vice versa at market determined rate of exchange. The study has considered the data from 1951-1970. Main variables used for the study are financial ratio, financial inter relation ratio, new issue ratio. The researcher compared the compound annual growth rate of the two period and the results showed that there enters a decreasing trend of annual growth rate in these years after nationalization.
Choong, C.K; et al (2005) made an attempt to find out the relationship between financial development, economic growth and the role of stock market. The researcher conducted the study for a period of 22 (1978-2000) years. Variable included in the study were per capita nominal GDP for economic growth, size and liquidity level of stock market. The number of observation was only 23, so for finding the long run relationship the researcher used the new and emerging econometric tool-ARDL bound test. The result showed that financial development indicators as well as the discount rate have a strong and positive significant impact on economic growth in the long run. Openness ratio has less influence on economic growth. The Granger Causality was also applied to find out the direction of causality. The result showed a short run Causality between the variables, where as stock market was viewed as a leading sector that cause economic growth.

Chao, C; (2006) focused on a study how the development of financial intermediation influences China’s economic growth. The data for a period of 14 years (1999-1985) were taken for the analysis. The data were analysed by using GMM estimator method. The result showed that financial intermediation gives a positive causal and economically greater impact on China’s economic growth. The researcher suggested that there is an urgent need for china to improve its efficiency of financial intermediation.

Baltagi, B.H; et al (2007) the main objectives of the study is to check whether the simultaneous opening of trade and capital accounts promotes financial development and to analyze whether the economic institutions have a positive influence on financial development and finally to check the influence of trade and financial openness. The variables used for the study were liquid liabilities, private credit, domestic credit, number of companies listed, ratio of total trade to GDP,
corruption, rule of law, bureaucratic quantity, Government repudiation of contracts and risk of expropriation. Dynamic GMM estimation is used for analysis and the data ranges from 1980-2003 was taken in to consideration. It is widely accepted that financial development constitutes a potential mechanism for long run growth.

**Law,S;H;** (2007) examined the trade openness and capital account openness which influence financial development in Malaysia. The first measure of financial development indicator contains three banking sector development indicators namely liquid liabilities, private sector credits and domestic credit provided by banking sector. The second measure of financial development consists of two stock market development indicators namely stock market capitalization and number of companies listed. Stock market capitalization is the value of listed company’s shares on domestic exchanges and fluctuates with stock market price fluctuations. The data is collected for 27 annual observations from 1978-2004. The researcher reached to a conclusion that trade openness offers greater scope for advancing financial development than capital account openness. Improving institutional infrastructure, such as rule of law as well as economic development will encourage the development of the financial system.

**Tressel,T; Detragiache,E;** (2008) tried to find whether the policies over the past decades and liberalised banking systems around the world have resulted in deeper credit markets by considering ratio of bank credit to private sector to GDP as proxy for financial development and an index of domestic banking reforms for a set of 91 countries in five areas (credit controls and reserve requirement, interest rate controls, entry barriers, state ownership and banking supervision) as an explanatory variable. General dynamic auto regressive lag model was applied for analysing the data. The study was done by taking data for a period of 32 years (1973-2005). The result
showed that the key binding institutional dimension seems to have an extent at which political institutions protect citizens from expropriation from the state of powerful elites.

**Ang, J.B; (2008)** made an attempt to find out the various mechanisms which links the financial development and economic growth in Malaysia. For linking the mechanisms they have found out private saving, private investment, foreign direct investment and aggregate output. The data for a period of 43 years (1960-2003) were taken for the study. Auto regressive distributed lag method was used to analyse the data. The result showed that private investment and private saving links helps financial development to leads higher economic growth in Malaysia. The result also agreed that financial policies such as interest rate controls, high reserve requirements and directed credit programs helped Malaysia’s financial development positively.

**Yang, Y.Y; Yi, M.H; (2008)** examined the causal relationship between financial development and economic growth in Korea. The study was done for a period of 31 years (1971-2002). Ratio of gross fixed investment to GDP, ratio of Government consumption to GDP, ratio of export plus import to GDP were used as the variables for the study. The data were analysed by using regression equation and super exogenity test. The empirical result showed that financial development control that is interest causes the economic growth, but there is no reverse relationship.

**Kar, M; (2008)** made an attempt to study trade liberalisation, financial development and its joint impact on long term growth. The study period covered from 1963-2005. The variables used to analyse co- integration is the log of per capita real income(LPRV), the log of gross fixed capital formation as a proxy for capital stock(LK), the log of secondary School enrolment rate(LSEC), trade liberalisation
index, financial development index and economic liberalisation index. The analysis is done by considering trade liberalisation index and economic growth, financial development index and economic growth, joint impact of trade liberalisation index and financial development index that economic liberalisation index and economic growth. The result showed that trade liberalisation and financial development positively contributes to economic growth. The joint impact of trade liberalisation and financial development in terms of economic liberalisation index on economic growth is also significant.

Law, S.H; (2009) conducted a study to examine the impact of trade openness and capital flows on financial development in developing countries using a dynamic panel GMM estimation technique. The three banking sector development indicator samples are collected from 40 developing countries from 1980-2003. The empirical results by applying dynamic panel GMM techniques suggested that trade openness and capital flows are statistically significant determinants of banking sectors development in developing countries. The evidence suggested that neither finance size nor finance activity, which represents the overall financial market development, seem to respond positively to both trade and capital account openness.

Demir, F; Dahi, O.S; (2009) investigated the effects of financial development in the pattern of specialisation of South-South trade and South –North trade. The researcher has taken the data for a period of 27 years (1978-2005) from 28 developing countries. Ratio of real private credit by deposit money banks & other financial intermediaries to real GDP (CR), liquid liabilities to GDP, aggregate index for creditor index were taken as proxy for trade. Augmented system GMM estimator by Arellano& Bover(1995) was used for analysis. The study revealed that financial
development has stronger positive effect on Southern trade whereas it fails to find out any major effect of financial development on South-North trade.

Federici,D; Caprioli,F; (2009) checked the existence and strength of credit channel and balance sheet effect in countries characterized by an intermediate level of financial development. The researcher has taken 39 countries for the study. Researcher used VAR and impulse response method to analyse the data. The empirical result showed that financial development is an important variable for the existence of a credit effect, not only that it also given evidence that financially developed countries is able to avoid currency crises.

Lee,C.C; Chang,C.P;(2009) made a study to find out the relationship between foreign direct investment, financial development and economic growth in 37 countries during a period of 32 years(1970-2002). Panel unit root, Pedroni’s panel co integration test, likely hood based co-integration test were used in this study to find out the long run relationship. The panel co integration result showed a strong long run relationship among foreign direct investment, liquid liabilities and domestic credit provided by banking sector has a larger effect on economic growth than foreign direct investment. The causality test showed evidence of short run relationship is weak and the long run relationship among variables is clear. There is a bidirectional causal relationship between foreign direct investment and the financial development indicators in the long run and there is a complementary relationship among all the variables.

Yucel,F;(2009) made a study to analyse the causality relationship between financial development, trade openness and economic growth for the Turkish economy. The researcher has taken data for a period of 18(1989-2007) years. Ratio of
sum of exports and imports to GDP as a proxy for trade openness, ratio of M2Y to GDP as proxy for financial development and GDP as a proxy for economic growth were taken as the variables for the study. Johansen’s Maximum likelihood co integration was used for knowing the level of integration and Vector Error Correction Model for checking the causality between financial development, trade openness and economic growth. The result showed trade openness has positive effect on growth whereas financial development has negative effect on growth.

Disbudak, C; (2010) examined the relationship between the credit market development and economic growth for Turkey. Researcher conducted the study for a period of 47 (1961-2008) years. Researcher used the ratio of private Credit to nominal GDP (BCR) as, real GDP growth (GDPGR) for economic performance. Consumer Price Index (CPI) was added to control the possible effects of other growth determining factors. ARDL bound testing approach was used to analyse the data. Zivot Andrews Unit root test was also applied to check the stationarity. Finally the study concluded that bank credit may play a very important role in financing the process of economic growth.

Atif, R. M; et al (2010) focused on a study in trade liberalisation, financial development and economic growth in Pakistan. The researchers study period was 1980-2009. For the purpose of the study researcher has taken GDP as a proxy for economic growth, import and export as a proxy for trade liberalisation and broad money as a percentage of GDP as a proxy for financial development. The data were analysed by using ARDL bound testing approach. The result showed that a long and short run relationship between economic growth, trade openness and financial development. In case of causality, trade openness and financial development causes economic growth.
Khan, R.E.A.; Hye, Q.M.A.; (2010) examined the relationship between financial sector reforms and household savings in Pakistan. Duration of the study was twenty years (1988-2008). The variables included in the study were household savings, financial liberalisation index, real deposit rate, per capita income dependency ratio, agriculture sector GDP and remittance. To find out the long run relationship, ARDL test was applied. The result showed that in the long run financial liberalisation index and deposit rate create a negative impact on the household savings. Similarly in the short run also the financial liberalisation index and dependency ratio negatively affect the household savings, but the agriculture sector GDP positively affect the household savings.

II.8. Research Gap

- There is no standardized financial development index in India.
- There are only few studies made in the area of financial development in India.
- It is found that most of the studies have considered only one or two proxy variables for financial development and those variables are used to assess the relationship between financial development and economic growth.
- It is rare to find out studies related to the effect of financial development on economic growth during the pre and post liberalization period.
- All analysis in previous studies done only with conventional or traditional methods or models such as regression.