Chapter 2

Review of literature

The literature review is a critical discussion and summary of statistical literature that is general and specialized relevance to the particular area and topic of the research problem in statistics. So, in order to assure its familiarity, the researcher have to build upon the accumulated and recorded knowledge of the past it is focused and directed towards specific purpose and it is also selective(Krishnaswami,O.R).

➢ Literature review provide a solid background for a research paper's investigation

➢ It also gives the direction to the researchers to carry out the study on the right path

➢ The gaps in the study also found by considering the available literature which gives the direction to set the objectives of the study.

Many theoretical and empirical Studies have been under-taken to assess "Export instability and Economic growth in India". Prominent among them are:

Studies from Asian Countries

Rashid and Ullah(2012) analyzed the hypothesis that export instability affects the economic growth for SAARC region countries(Pakistan, India, Sri Lanka and Nepal) by using neoclassical aggregate production with export and export instability as the additional variables. The study utilized the time series data from IFS over the period of 1972 to 2009 for India and Pakistan on the basis of 2005 base year. The variables included in the study are GDP, export, export instability andinvestment. Furthermore, the study preferred the average of the square of the ratio of actual export earnings to trend value method to measure the export instability index. To check the stationarity of all variables Unit root and Augmented Ducky fuller(ADF) test was used that showed all variables were integrated of some order and stationary at first difference and Johansoncointegration technique was used to examine the short-run and long run relationship between economic variables.Thus, the study concluded that export instability had negative and significant effect on economic growth for all selected SAARC region countries. The study gave

some recommendations that they should diversify their exports horizontally and liberalize their foreign exchange markets and capital accounts to control the instability in exports.

Tehseenand Syed(2012) investigated the effect of terms of trade and its volatility on economic growth in India by using the annual time series data from the period 1980 to 2010. The study used the production function framework to examine the impact of terms of trade and its volatility on Economic growth. Moreover the study utilized data viz.labour force (L), capital stock (K) and total factor productivity. Annual time series data obtained from World Bank Official Database. The study used Augmented Dicky Fuller (ADF) and Phillip person (PP) unit root tests to check the stationarity.The results of the tests showed that all variables are stationary at first difference this implies that the series if variables may exhibit a long run relationship. Furthermore, Johanson and Jeuselinscointegration method employed to determine the long run relationship. The results showed that the labour force(L) and capital(K) are having expected positive sign and are highly significant .Apart from this; the results confirm the significant positive relationship between terms of trade and economic growth in India but the negative and significant impact of volatility of terms of trade on economic growth.

Ramli (2011) examined the source of instability in export earnings of Malaysian palm oil. The study stressed to determine the sources of instability of the export earnings and examined the relationship between the export earnings and the sources affecting them. The study used annual data spanning from 1995 to 2009 and GARCH method to measure exports instability. The study explored that palm oil export earnings was really instable. The study highlighted the key determinants of the instability are prices of crude palm oil (CPO) and soybean oil, exchange rate, palm oil export volume and production and gross domestic products of Malaysia's major trading parterners.These keys determinants were linked in a multivariate regression model with the export earnings. Results showed that the most significant factors are prices of crude palm oil and soya bean .Thus price of palm oil had played a major role in causing the instability of the Malaysia palm oil export earnings. To stabilize the earnings, one need to stabilize first the price of palm oil in the market which is exposed to the vagaries of market forces of supply and demand.

Bilquees and Makhtar (2011) examined the causal relationship between export instability, terms of trade instability and economic growth for India over the period 1960 to 2008. The study utilized the annual time series data;Johansen cointegration and vector error correction model wereapplied to the annual data for the variables like real GDP, real investment, and export instability and income terms of trade instability. The study demonstrates that there exists a long run relationship between economic growth, realinvestment, and exportinstability and income terms of trade instability in India.Stationarity of data was tested using the DF-GLS Unit root test which depicted that all the variables were non-stationary at level. Moreover 1 percent increases in real investment brought about a 1.189 percent increase in economic growth in India. Export instability wassignificantly and negatively relatedto economic growth such as 1 unit increase in export instability brought about a 1.219 percent decrease in economic growth and 1 unit increase in terms of trade instability brought a 1.547 percent decrease in the economic growth in India .Furthermore, Vector error correction model was applied to determine the short run and long run relationship among the variables. The result found that both in the short run and long run the Granger Causal was unidirectional from export instability and income terms of trade instability, Investment and economic growth. Thestudy recommended that there is a need to build up foreign exchange in India and products should be diversifying, in which it has a comparativeadvantage.

Bakar and Subramaniam (2011) examined the relationship between export instability and economic growth in Malaysia using time series analysis technique that address the problem of non stationarity .The study highlighted the export performance of manufactured goods and major primary commodities. The table showed that the total exports in 2008 of manufactured goods were RM 495,337 million compared to RM 477,456 million in 2007.Meanwhile the total exports of major primary commodities was RM 142.679 in 2008 and RM 101,890.20 in 2007. The variables in this study are gross domestic products, Total employment, Total exports etc. A set of time series data for all variables are collected from the International Finance Statistics(IFS), for various years. The Augmented Dicky Fuller (ADF) and residual based tests are used to test for stationarity of all variables and cointegrationrespectively. Findings from this study showed that in Malaysia's case, all variables involved are non-stationary in levels but cointegrated.The export instability has deleterious effects on Malaysia's economic growth. Instability in export earnings can cause economic reprisals, which will affect the economic performance of the country.

Thebalance of payment positions will be jeopardized, unemployment levels would increase and individual's income level may decrease.

GholamrezaandFarshidet(2010) attempted to examine the long run relationship between interaction of export instability and trade openness in the growth of twenty two East Asia and Pacific countries over the period of 1990 to 2006.The variables included in the study are GDP, EXP, INS and POP. The study utilized Breitung unit root test and Kao residual cointegration test to investigate the long run relationship among all variables. The estimation coefficient showed that export instability that was peroxide by absolute value of the deviation of export from its five year moving average interacted by trade openness had a significant and low negative effect on growth of this set of East Asia and Pacific countries. Moreover, if 1 percent increases in export instability leaded to approximately 0.001 percent decrease in economic growth of thesecountries. On the other hand the labour force variable was positive and significant statistical effected on economic growth of selected countries .The one percentage increase in labour force leaded to 0.22 percent increase in GDP of these countries. The coefficient of gross fixed capital showed that a one percent increase in it leaded to 0.22 percent increase in GDP of these countries. Thus the result showed that the impact of export instability on economic growth was negative. Therefore, export instability was harmful for economic growth of these set of countries.

Barumand and Bigdeli (2009)have assessed the relationship between export instability investment and economic growth in Iran. The study utilized time series data from 1971 to 2004. The study analyzed and evaluated the capital accumulation and economic growth vs. the change of this index. Moreover, the neoclassical growth model adopted in this study. The study used the section functions in order to assess the dynamic relation among variables.In the other words, the economic and investment growth vs. the shocks were inflicted by instability in exports. The outcome of these functions application showed that there were not many reactions to be considered significant regarding growth vs. shocks caused by instability. Johansson test was applied, which showed that both the economic growth and investment diminished in the long term due to instable exports. In general, the major finding in this study is that in the long run term, the negative effect of export instability has influenced the economic growth while in the short run the influence has been very minor.

Gaskari and Taghavi (2011) explored the causal relationship between export instability and economic from 1981 to 2006 with seven member countries of OPEC. The study used the variables like GDP (Gross domestic products) GXP (Government expenditure) INV (Total investment) POP (Lab our force) FDI (Foreign direct investment) OI (export instability index). The study adopted pool unit root test to know whether all variables are stationary and non stationary. The result of unit root test revealed that the entire variables are stationary and to prove this the study used Fisher, Levin, and Chan test. The study also estimated the modal by panel data analysis and adopted pooled EGLS (Cross section SUR) method which highlighted that the government expenditure and oil export instability have an inverse relationship between Economic Growth. On the other side, investment, population, foreign direct investment and oil export revenue growth rate have a direct relationship with economic growth. The elasticity shows that 1 percent increase in government expenditure growth makes 11 per cent increases in economic growth rate. Moreover each 1 percent increase in oil export instability can reduce 1.57 percent per cent of economic growth rate. In this way foreign direct investment growth rate is quite insignificant. In these countries FDI is not high enough. So its effect was not important in the present study. However, other hand variables with positive selection have strong and significant relation with economic growth. However, the most important variable in the present study is export revenue instability (OI), related to petroleum products which has a destructive affect on economic growth .The fluctuation in oil sector revenue places the economy and the country in an uncertainty situation.

Harnom (2008) examined the relationship between export earnings instability and its potential sources for Yemen during period 1990 to 2007. The study used linear multiple regression model to investigate sources of export earnings instability. Theannual data have been collected mainly from various statistical publications and reports Issued by government agencies in Yemen. Furthermore, the study utilized Index of export instability,coefficient of commodity concentration, coefficient of geographic or market concentration, the ratio of primary export earnings to total export earnings, the level of domestic price to investigate the causes or resources of export earnings instability. Thecoefficient of commodity concentration measured by using an adjusted formula of the Gini-Hirschman coefficient of commodity concentration and Coefficientof geographic or market concentration measured by using the Gini- Hirchman coefficient of Geographic concentration. The study reported that the positive and significant

effect of commodity concentration on export earnings instability in Yemen. On the other hand the relationship between geographic concentration and export earnings instability was negative and insignificant in Yemen. The study gave some concluding remarks that Yemenhadexperience of continuous decline in oil production over a period of time and it need to urgent diversify their export commodities.

Kaushik and Klein (2008) explored the dynamic relationship between exports instability,imports,terms of trade and economic growth with the help of Johansen cointegration and multivariate error correction model. The model estimated for India for the 1957 to 2005 period.The researcher discussed two different views whether export instability depressed economic growth or not in the both short run as well as in the long run period.The first view emphasized the negative impact of export instability on economic growth. On the other hand, second view argued that export instability did not inhibit the process of growth rather it may encourage the economic growth .This view was based on transitory rise in income due to deviations of export revenues from their trend consumption unchanged and saving will rise which is believed to raise the level of investment and rate of economic growth. The study employed the square of deviations between the observed and estimated values of export earnings to measure export instability. Thestationarity of the series has been investigated by employing the unit root test and Johansen and error correction models applied to analysis causal relationship between economic growth and export instability in the long run .The empirical result suggested that there was a positive and statistically significant long run relationship between export instability ,export ,import ,term of trade and economic growth .Secondly, the stationary behavior was taken into account ,the empirical results showed that export instability adversely effected the short run stability and positively long run growth of income and estimates were statistically significant.

Kulwinderand Singla(2007) examined the pattern of growth and Instability of India's export for the period of 1991-2006. The study mainly devoted to statistical verification of the pattern of growth and instability of India's export during the post-reform and post-WTO period. They defined the problem that the violent and sudden fluctuations in export prices, quantum and total value of exports, created instability in exports .In this studies the export instability index estimated as the Standard deviation of the observed from the estimated exponential trend. The

indicators of export value, price and volume have been utilized from the data taken from Commodity trade Statistics, United Nations for the period 1991 to 2006.The researcher had taken thirty selected commodities, which constitute more than 85 percent share of India's export and selected markets constitute more than 80 percent of India's exports on an average during the study periods. Empirical results showed that growth of India's export during post-reform period remained to be as high as 12.79 percent that was well above the growth of exports of majority of developed and developing countries. The scene of instability side also found to be satisfactory as instability of overall export earnings was recorded as low as of 1.40 percent per annum.The study highlighted that the selected thirty commodities, accepted the commodities namely fish,fruits,tea and mate, feed-stuff for animals, woven cotton fabrics all the other commodities registered high rate of growth. Onthe other hand, iron ore,petroleumproducts,and other primary forms of iron and copper all other commodities experienced low instability during the study period. The study stressed that India's export instability was mainly due to supply variations.

Sarada and Ravisankar (2006) investigated commodity concentration and geographical spead of seafood exports and significant factors that affect the instability in the seafood exports from India. The main objective of the study was to develop concentration measure such as commodity concentration coefficient for Indian seafood exports. An empirical analysis of Indian Seafood export instability function,co integrated and error correction model had been used in the study. In the seafood exports instability in export found to be co integrated with instability in commodity concentration,geographicalconcentration, fisheries, non fisheries and shrimp production. The long run estimates suggested that all the variables had positive affect except instability in commodity concentration .The estimation coefficient value of the error correction term suggested that the system corrects its previous period's disequilibrium by 54.6 percent.

Aslam and Naveed (2003) analyzed the hypothesis that instability associated with capital formation is affecting economic growth or fluctuations in export earnings are bottleneck to economic growth. Moreover the study explored the impact of foreign exchange instability on economic growth because foreign exchange reserve plays an important determinant of capital formation and GDP growth and fluctuations in foreign exchange receipts generate obstacles to development and economic planning.Therefore, foreign exchange reserves have stronger effects on its economic growth. The study used variables like growth rate of labour and capital and

export,exportinstability,capitalinstability,foreign exchange reserve instability and economic growth. Estimation has been done by using multiple regressions. The empirical evidence indicates showed that fluctuations in capital stocks have a significant impact on the growth performance in case of Pakistan ,India and Bangladeshbecause in these countries, with the passage of time capital was mobile .therefore, fluctuation in capital stock have greater magnitude than fluctuations in export earnings. However, India has larger foreign exchange reserve than other South Asian countriestherefore,foreign exchange reserve created a significant effect on the economic growth of India. Thus, the study gave concluding remarks that India must focus on stabilizing foreign reserves. Similarly, Sri Lanka may also concentrate on trade instability and for other South Asian countries, It is important that they pay attention to stability in capital formation rather than trade.

Chaudary and Quisrani(2002) focused to investigate the role of trade instability, investment, and economic growth in Pakistan. The study hypothesized the uncertainty associated with export earnings detrimental to investment and it was pernicious to economic growth of developing countries .The variables included in the study were rate of growth of output ,growth rate of import capacity ,instability of importing power of exports and rate of increase or decrease in foreign exchange reserve. The estimation has been done by using OLS technique in this study. The results of the study found that excessive reserves of foreign exchange and import capacity enhanced capital formation in Pakistan.Instabilityassociated with export proceeds found insignificant, which did not affectgrowth.Besides, the reserves of foreign exchange and import capacity contributed to the level of output in Pakistan. The study also examined that export instability did not affect import of capital goods and domestic investment in Pakistan.Moreover, the study depicted that the international reserves were important which effected different economic activities. Therefore, effects must be directed to maintain significant level of reserves. On the other hand, import instability and foreign exchange reserve were very important for sustained economic growth.Therefore,commercial policies must be focused on the stability and availability of essential imports and to maintain adequate foreign exchange reserves.

Nekhili (2001)investigated the causal association between the volatilities in export growth and the share of exports in economic growth in Turkey. The researcher discussed that if firms are risk-averse they will unambiguously lower their investment rate in exporting sector but may

prefer to partly increase their investment rate in non-exporting sectors of the economy. However, this switching effect of export instability on investment behavior altered the sect oral composite of overall investment in favor of non tradablesectors, this is likely to affected the growth of total factor productivity and through that the growth rate of output negatively. The study utilized methods viz. the nature of causality (in Granger sense) between volatility of growth of export earnings and growth rate of GDP.The data are quarterly adjusted and cover the period from 1986-87 to 2004-05. The major findings of the study which used the unit root tests,estimation of a volatility model for each case based on conditional heteroscedasticity and the Granger causality tests have shown that there was no evidence of causal effect of export instability (either in the form of volatility of export growth or in the volatility of the share of export growth in GDP). There was no causal effect running from output growth to respective unanticipated volatilities and the combined anticipated and unanticipated volatilities of export growth and the share of exports in GDP.Furthermore,estimation of volatility model for both measure of export instability showed that it is the (one period) lagged GDP growth rate that has statistically significant effected on anticipated volatilities of export growth and the share of exports in GDP.

Sinha (1999) explored the causal relationship between export instability, investment and economic growth in nine Asian countries viz. India, Japan, South Korea, Malaysia, Myanmar, Pakistan, Philippines, Sri Lanka and Thailand and utilized the annual data from international financial statistics of the monetary fund. The study used the variables LRGDP(log of real GDP), LREXP(log of real exports of goods and services), LRDMREX(log of the absolute value of the deviation of export from its five year moving average), LRGFCF(log of real gross fixed capital formation, LPOP (log of population). Unit root test used to check out the stationarity of all the variables. Moreoverco integration trace test was employed to explore the causal relationship among all the variables. The result revealed that in case of Japan, Malaysia, Philippines and Sri Lanka, found a negative relationship between export instability and economic growth but in case of India result was mixed while in SouthKorea, Myanmar,Pakistan and Thailand, he found a positive relationshipbetween variables.

Lin and Ping .Ho (1975)investigated the export instabilities and employment fluctuations in HongKong manufacturing industries. The study is shown that Hong Kong has stable, yet fast expanding export earnings and employment growth during the past couple of decades. The

overall period chosen for analyzed was 1959 to 1973, which further split into two sub periods,viz. 1959 to 1966 and 1966 to 1973 for inter-temporal comparison .In terms of the variability indices it was found not only that export earnings and employment are highly stable, but also there was a stable positive relationship in their variations. Despite the fact of stable relationship between export earnings and employment variations at both the aggregate and industry level, the variations was larger at the industry level. Based on multiple regression analyzed the two most inherently possible explanations for fluctuations in export earnings viz. commodity and geographic concentration was found to miss the mark. The results highlighted that the only statistically significant variable was geographic concentration which, however has a sign contrary to what is expected, whereas commodity concentration has found to have an expected sign, but failed to be statistically significant. Moreover as much as HongKong derived export earnings almost exclusively from light manufactures which are both income and price elastic. Its overall export receipts become much more stable than other countries especially the primary producing LDC's.

Studies from African Countries

Gebremedhin (2012) investigated that the effect of export volatility on GDP for Ethiopia. The study has been used the thirty years' time series data from the period of 1981 to 2011.The main objective of the study was to test the volatility of exports has significant impact or not on the long run Ethiopia economic growth. Therefore, the study utilized variables viz. gross domestic product, export of goods and services,stock of capital and population growth. To measured export volatility the study preferred five year moving average method and to estimate the relationship the long run effects of export volatility the study used OLS method. Augment DF test used to testing stationary and Engle and Granger CO-integration tests applied to demine the long run relationship between variables viz.GDP,the volume of total export ,capital stock. The results revealed thatall the variables were non-stationary at level.However, they were stationary at level. The estimation results of export instability(XI), labor(L), and total export of goods and services were statically significant at 1 percent, 5 percent and 10 percent level that means they had significant effect on the long run economic growth of Ethiopia. The stock of capital has the negatively affected the country economic growth.

Bakare (2011) examined the relationship between oil exporting and the agriculture export performance in Nigeria. Thus the overall objective of the study was to assess empirically the oil boom the major determinants of agriculture export instability in Nigeria.The variables included in the study were agriculture export instability ,trade openness ,oil price stocks,nominal exchange rate,exportprices,climate conditions etc.Intrying to achieve this objective,ordinary least square multiple regression method was adopted for the data analysis.Some statistical tools were employed to demine the statistical significant relationship between variables. The analysis started with the test of stationarity and co-integrated of Nigeria's time series data. The empirical study found that the data were stationary and cointegrated .The multiple regression results showed a significant but negative relationship between oil export and the agriculture export performance in Nigeria. Thus support the need for government to diversify the oil sector and encourage agriculture through incentives to farmers, mechanization and positive policy measures.

Fosu (2010) has argued that for economics that are heavily dependent on imports for productive investment, such as those of Sub Saharan Africa (SSA), a stable flow in imports may be a critical factor in promoting production efficiency and growth. The study examined the role of import instability (MI), export instability(EI), and investment or capital instability in the growth process. The current study used data between 1968 to 1986 period for thirty three Sub Saharan Africa countries. The cross country analysis based on the Augmented production function .The study analysis that import instability has been deleterious to GDP growth.Furthermore, import instability has been the most potent compared with other two instability factors. The study suggests that a stable inflow of imports must be accorded increased importance in order to help promote growth in SSA. Moreover, the provision of adequate levels and appropriate forms of external finance to assist in import stabilization, as well as the domestic holding of larger foreign exchange reserves would appear to be important policy measures in support of future growth in Sub Saharan Africa Countries.

Godwin (2000) explored the association between earnings fluctuations and capital formation in Nigeria. The researcher distributed three phase of time 1971-78, 1979-85, and 1986-1995 to measure real export earnings. The study explored that the real export earnings rose from 362 Million in 1973 to 585 Million in 1974. Further he noted that the terms of trade index during this period rose from 21 in 1973 to 51 Million in 1974. The study used the standard normalization

combined with moving approach. Data on export earnings, saving and gross domestic product derive from the international monetary fund, while series on public and private investment were obtained from the international finance corporation publication. The variables included in the study were capital stock(K), expected output (Q), Saving (S), and interest rate(R).The study used cointegration test which showed the long run relationship betweenvariables. The results indicated that there was a negative relationship between interest rate and capital stock while positive relationship effect of saving and output on the capital stock on the long run.Thus, the results interpreted that output;saving and export earnings fluctuations affected private and public capital stock in Nigeria. The impact of saving on private capital stock was significant in the long run .Moreover, parsimonious model adopted to determine the short run relationship between variables over the same period which presented results of the short-run, that the expected output, Saving and export earnings fluctuations effected investment. Specifically expected output has a significantly positive impact on investment while the impact of saving was insignificantly.

Stacey and Shapouri (1989) examined the factors effecting export growth and instability and their impact on countries economic growth. The study included data for seventeen African countries for the years 1964-65 to 1985-86, including Algeria,Cameroon,Cote d'Ivoire, Egypt, Ethiopia, Kenya, Madagascar, Mali, Morocco, Nigeria, Senegal, Sudan, Tanzania, Togo, Zaire, Zambia and Zimbabwe etc. The study highlighted that export earnings of all commodities increased an average of 3.2 percentages annually between 1964-65 to 1979-80. The period between 1980-1986 has shown that real export of average growth of less than one percent per year. While real growth was shown the average population growth rate was 3 percent per year in nine countries since 1980, with Tanzania experienced the largest decline of almost 10 percent per year. In addition of this the performance of the components of export earnings, volume and price, was not always uniform because of different supply and demand conditions influenced each component and the log of the supply-price response. Coefficient of variance method used to measure the export instability in this study. Estimated linear equations based on cross country data and income export equation estimated the average growth year of 1965-80 to 1980-86.Moreover, export instability represented by the coefficient of variation and an index of shortfalls showed a negative and statistically significant impact on economic performance of the countries. In conclusion, the empirical evidence presented supports the earlier arguments the export performance, especially frequent shortfalls in export growth that has a devastating impact

on a country economic performance. This implies that in order to achieve steady economic growth, the behavior of factor affecting stabilization and growth of the export sector must be clearly understood in order to evaluate policy options.

Cross Countries Analysis

Afxentiou and Serletis (**2000)** analyzed the causal relationship between export growth and export growth volatility, import growth on the growth of GNP. The study covered all the fifty countries over the period 1970 to 1993 namely fifteen countries from Sub-Saharan Africa, three from South Asia, Six from East Asia and the pacific, nineteen from Latin America and Caribbean and Seven from the Middle East and North Africa. Thestationarity of the data was tested using unit root tests and Granger causality. The result showed that anticipated export growth volatility was found to be associated with GNP growth in only the case of Indonesia at the five percent level; unanticipated export growth volatility was found to be causally related to GNP growth in the single case of South Africa at the ten percent level; whereas for anticipated and anticipated export growth volatility causality was marginally more evident in six cases (South Africa, Zimbabwe,Indonesia,Argentina and EI Salvador) mainly at the ten percent level. From the entire sample only Indonesia appeared to exhibit reliable causality from export growth to GNP growth and in both countries it is likely that their dependence on oil exports produced the obtained outcome .Anticipated import growth volatility was found at the five percent level to lead to GDP growth in a Granger Sense in Indonesia, whereas at the ten percent level anticipated and non anticipated import growth volatility was leading to growth again in Pakistan in a granger sense, but also in South Africa, Tanzania and Venezuela.

Ghoshand Ostry (1994) emphasized the effect of export instability on the external balance in sixty developing countries, covering Africa, Asia, and the Middle East and Latin America over a twenty-five year period. The study mainly emphasized the effect of export instability on saving behavior, though the precautionary saving motive. The study explained that increase in export instability raises the precautionary demand for saving and the external balance of developing countries. Theorydictated that smoother consumption streams and hence higher welfare can be achieved if agents increase their saving when they perceive that variability of their export receipts will increase. Thus the study empirically tests whether this precautionary saving motive

was present in developing countries that have uncertain export earnings. The study found that in general the precautionary motive has significantly influenced saving behavior and the external balance of developing countries quantitatively, its importance has varied across the sample, according for about fourteen percent of average imports for fuel exporters and about three and half percent of average imports for exports of nonfuel primary commodities. Finally,the instability to maintain consumption above a subsistence level, generalized liquidity constraints and lack of access to international capital markets may also adversely affect the model performance in some of the poorer countries in the sample. Agents there will not find it feasible to maintain precautionary balances when they perceive that the uncertainty of their export earnings has increased.

Rangarajan and Sundarajan(1976) Investigated the impact of export fluctuations on income – a cross countries Analysis. They defined that exports might affect aggregate demand through their effects on money supply,tradesurplus,capital inflow etc.Therefore the study consisted of an import function, a consumption function and investment function. The study included thirteen countries in which eleven developing countries and two countries were developed. The data on GDP in current currency units as well as in real term were obtained from National Income Accounts.Estimation has been done by using ordinary least square method .The study found that the long run multipliers relating to both income and investment were generally larger for developing countries. The study highlighted that the impact of instability in exports on income growth rate note in the same direction in all countries .But in case of five countries (Australia,Brazil,Ghana,India, and Philippines) there was declined in growth rate when there an increased in instability in exports.

Benton(1970) examined instability in the value of exports and a set of variables that help characterized a countries economic structure. For each of 55 countries an index of the instability of merchandise export receipts in constructed employing data for 1950 to 1966. The study utilized regression analysis to explain inters country difference in export instability in term of nine structural variables. The study used variables viz. C commodity concentrationindex,G (Geographic concentrationindex,RF the food ratio, Z the export market share coefficient,D(domestic-consumption ratio,X value of the merchandise exports(per capital income).The study explored that long term growth has been a major objective of LDC policy,

short run fluctuation also appeared to receive considerable weight in the determination of policy choices. The study revealed that some variables affected export instability were difficult to quantify. These variables differed among countries, making it hard to apply the results to the problem of a particular country. In case of least developing countries LDC's have high values of C and D and low value of X. The one Mitigating factor is the LDC's dependence on food exports which, as we have seen tend to be more stable. Food producers also tend to be more highly concentrated and the coefficient of correlation between RF and C is .43.Finally.it was interested to note the quantitative implications of individually altering each of the explanatory variables from the LDC's mean value of the DC's mean.LDC's tend to experience greater instability because of their greater product concentration but less instability as a result of their heavier dependence upon foods.

Conclusion:

In the early sixties and seventies, many development economists and policy makers have been concerned about the negative effect that instability in real export receipts may have on the growth of the developing countries. If we talk about pervious literature, then we discovered the two following different schools of thought have emerged.

> ➤ The first view emphasizes the negative impact of export instability on economic growth. In the above review of literature, most of the research papersemphasize the negative impact of export instability on economic growth (i.e. Rashid and Ullah, A.Ramli, Tehseen, Bakar.N, Gholamreza z etc.).The most likely empirical results suggested that export instability had a negative and significant effect on economic growth.

> ➤ The second view argues that export instability may encourage growth. These arguments with risk adverse individuals, uncertainty aboutfuture income will have a positive impact on saving by increasing the precautionary demand for savings. This in turn will ultimately lead to higher investment and higher growth. Some researcher provided support for a positive link (i.e. K.K Kaushik,Ghosh R and D.Ostry, Mcbean, Knudsen andparnes etc.). However, most of the studies adopted various methods to

measure export instability in cross countries. Therefore, it also gives a contradictory result on relationship of export instability and economic growth and fixed investment.