INTRODUCTION

In the process of economic development, international trade is considered as a most important driver of global growth as well as prosperity. Economic theorists recognized the fact that the central process of economic growth not only depends upon the accumulation of material resources but also depends upon foreign trade (Keesing, 1967). Foreign trade supports domestic production, efficiency, international competitiveness and specialization, which leads to high global production and growth of gross domestic product (GDP). Therefore, trade has been an important mainspring of economic growth for countries at different stages of development.

Role of foreign trade in the economic development is widely acknowledged in the economics literature. The classical and neo-classical economists generally highlighted the role of international trade in economic development starting with Adam Smith, Ricardo and Marshal classical regarded trade as “an engine of growth”. Structuralists on the other hand highlighted the negative impact of international trade on under developed countries due to deterioration of terms of trade and asymmetrical affects of technological progress for the ‘center’ and ‘periphery’ (Yotopoulos and Nugent, 1976). The economists such as Prebisch, Mydral, Singer, Emmunnel, Nurkse and others have suggested an inward-oriented approach for economic development, where trade plays limited role. On the other hand, economists such as Bhagwati, Kruger, Chenery, Bela Balssa etc. have robustly recommended the export-led growth for economic development (Manjappa and Hedge, 1998).

During post World War II period many Latin American and Asian countries experimented with inward looking protestant policies. However such policies failed and from 1960s onwards many developing countries started shifting towards export oriented and free trade policies. The developments in economic theory such as models of endogenous economic growth further highlighted the role of international trade in economic growth. The modern economic theory thus has assigned a decisive role to international trade in economic development.
There are two types of gains from trade; static gains from trade and dynamic gains from trade. The static gains accumulate from international specialization as per comparative advantage. Dynamic gains from trade result from the impact of trade on production possibilities at large. Static gains mainly result from the adequate division of labour. Trade facilitates each country to specialize in the production of those things that they can produce at a lower cost. “The benefits of trade measures by traditional trade theory are not in terms of foreign exchange earned but in terms of increase in the value of output and real income from domestic resources that trade permits” (Thirlwall, 2003). Gains from trade are determined by the different factors such as differences in the cost ratios (i.e. comparative cost ratios), level of income, terms of trade (TOT), productivity efficiency of resources, nature of commodities exported to other countries, technical efficiency of the resources and size of the market. Many developing countries like East Asian economies and China have made tremendous progress due to dynamic trade sector. International trade has made significant contribution towards income growth, increased opportunities of employment and poverty reduction in a large number of developing countries. The share of developing economies in world has increased manifold. Many of these countries now export manufactured goods as well as high technology goods. From being producers and exporters of primary commodities the developing countries are now major consumer of these goods. South-South trade is another important dimension of changing international trade in favor of developing world. Apart from merchandise trade, trade in service has also significantly grown which has benefited a large number of developing countries which specialize in services exports. Trade openness also promotes price stabilization and productivity gains due to increase competition, specialization and scale economies. The gains from trade are best realized when free trade policies are also accompanied by other policies promoting infrastructure and industrial development as well as human resource development (Sun & Heshmati, 2010 and Afonso, 2001).

The millennium development goals also included trade (goal 8) as a mechanism for promoting global partnership and development. Thus international trade is seen as an ‘enabler’ for achieving various developmental goals including poverty reduction and conclusive as well as sustainable development. Growth is
essential for most of the under developed countries so as to solve the problems of poverty, hunger and unemployment. It is well known that trade provides additional income generating opportunities, stabilizing prices to promotes the growth of organized sector which is socially more inclusive. Trade reduces cost of production, improves quality and increases consumer’s choice by providing a variety of goods and services. Trade leads to better access to new technology and essential goods and services like medicine and vaccines. Trade also enhances the diffusion of more environment friendly technologies. However the linkage between trade, economic growth and poverty reduction is not straight forward. The efficiency of this linkage depends upon the size and composition of exports sector. The millennium development goals have highlighted the importance of “an open, rule based, predictable, non discriminatory, trading and financial system. They have also stressed the provision of enhanced market access to exports from LDCs via tariff free and quota free market access opportunities” (UNCTAD, 2014).

The new growth theory given by economists like Romar and Lucas further highlighted the role of international trade in economic development. The growth prospects of less developed countries, apart from other things, also depend upon the pattern and growth of their international trade. International trade helps in technological adoption and adoption and promotes growth of human capital which plays a vital role in the process of economic development (Afonso, 2001).

A large number of empirical studies have investigated the role of exports in economic growth or the export-led growth hypothesis using time-series as well as cross-section data. But, these studies have given mixed results, as some of the studies support export led growth hypothesis, while some of the studies do not support this hypothesis. The studies on developing countries conducted by Tyler (1981), Kavoussi (1984), Gonclaves & Richtering (1986), Jung & Marshall (1985), find positive association between export growth and economic growth. In the context of Pakistan, Rana (1985), Khan & Saqib (1993), Khan et.al. (1995), Sihna (1999) and Ullah et. al. (2009) find uni-directional causality between economic growth and exports i.e. export led growth. In case of India, studies conducted by Nandi (1991), Bhat (1995), Yaghmaian and Ghorashi (1995), Wheatley (1997), Chandra (2003), Shirazi & Manap (2004), Burney (1996), Konya & Singh (2006),

An important issue associated with export sector particularly in developing countries is the instability of export earnings due to fluctuations in either prices or volume of exports or both. It is broadly stressed that export instability has detrimental effects on the growth prospects of developing countries. Such countries have to evolve supportive policies so as to mitigate the adverse implications of instability of export earnings. Exports instability is usually defined as “uncertainty about the export earnings of a country”. Export earning instability is considered as an important source of macroeconomic uncertainty in developing countries (Ghose and Ostry, 1994). Export earning instability also causes uncertainties in planning and can have negative impact on essential development projects. Most of the studies in the literature pointed out that the problem of export instability is more in less developed countries (LDCs) as compared to the developed ones. It is generally believed that fluctuations in LDC’s export earnings generate domestic instability with a consequent welfare loss (Massell, 1970).

In economic literature, it is very difficult to find just one clear definition in the context of export instability. UN Secretariat (1952) defined “Export instability index as the absolute difference in the value of exports from year to year expressing differences as a percentage of larger of the two annual values”. Coppock (1962) explained that though instability includes all fluctuations in a variable but all fluctuations may not be causing problems in the economy. Coppock (1977) stressed that instability is not residual but in fact something more than normal. In general instability is defined as deviation from trend values. Hirschman (1958) was of the view that instability should be defined as excessive volatility as it may cause serious problems for economic systems. Massell (1970) distinguished between income stability and income certainty and opined that despite fluctuations it is certainty of income which is important. Theobod and Lawson (1976) were of the opinion that it is the negative instability which is more relevant as it decreases income and creates problems in the economic system. Mathematically, “Export instability can be
expressed as the difference between actual value of export and estimated value of export” (Devkota, 2004). “Export instability is an average of the unexpected or unpredictable changes in export revenue over a given period of time” (Glezakos, 1973). Export instability is usually measured as the short-term or yearly fluctuations of export proceeds around the growth trend of exports. Thus, in measuring instability, the variation net of the growth trend of exports is considered. To construct an export instability index, it is necessary first to eliminate the trend. Otherwise, a country whose exports are growing rapidly even at constant rate will score high on instability scale (Naya, 1973 and Massell, 1970).

Export instability of any country may create economic volatility in the same country as well as other countries of the world because of globalization. Export instability in developing countries has always been a major issue in the literature. Rather developing countries identify export instability as an important obstacle to development. The impact of export instability on economic growth (whether positive or negative) has been an important topic of debate during past years. Several studies have been conducted about the causes and consequences of export instability and have come out with divergent results. The impact of export instability on economic growth has emerged as an important development policy challenge for various countries.

Traditional economic theory highlights negative macroeconomic implications of export instability. The dominant view regarding impact of export instability is that excessive demand fluctuations adversely affect investment decisions as well as efficiency of capital. When export income is also an important source of tax revenue then export fluctuations also affect government revenues and public investment in infrastructure. Thus, export fluctuations increase uncertainty in an economy. These export fluctuations have negative impact on the decisions made by private investors and hence on the efficiency of capital. When export instability has an adverse impact on the growth of an economy, then there is a need to build up exchange reserves to smooth out export earnings instability in short run period. Liberalization of trade as well as exchange rate policies may have to be involved in reducing export earnings instability in long run period. There is also a need to increase the diversification of exports by reducing export dependence on few
commodities (Brempong, 1991). The problem of export earnings instability is more serious for primary products exporting developing countries as both demand and supply of such commodities is inelastic and unstable (Savvides, 1984).

Hock (1977) highlighted three most important causes of fluctuations in export earnings of developing countries. These countries specialize in production and export of primary products. Their exports include limited range of products for limited number of markets. Thus the structure of exports and high product and market concentration of exports of developing countries are responsible for export earnings instability. Dawe (1996) analysed that export instability affects economic growth via two channels; it can affects growth by adversely affecting investment. It can also influence growth through its impact on rate of return on investment. Export instability causes price confusion and reduces the rate of return in investment.

According to the traditional theory, the problem of export instability is more in less developed countries. In general, these countries are exporting a limited range of primary products (i.e. non-manufactured products). The prices of these primary products are unstable and unpredictable because of various factors such as poor elasticity of demand and supply than manufactured products. Moreover, developed countries are also concerned to remove the problem of instability in the context of volume and prices of exports and hence export earnings instability because these fluctuations also create disturbances in the supply of intermediate products and demand for exports from developed countries (Hanom, 2009).

Another view is based on Friedman’s permanent income hypothesis which states that a transitory rise in income due to fluctuations in export income from trend will leave consumption unchanged and raise saving, investment and hence growth. On the positive side, it is stressed that the countries respond to export instability by reducing consumption. If consumption reduction is repeated over a period of time, it will increase savings and therefore, the rate of investment.

Export earnings are also an essential source of foreign exchange earnings. These foreign exchange earnings are crucial for import of capital goods from other countries. But fluctuations in export earnings damage the capacity to import essential goods. In the private sector, fluctuations in the export earnings of a specific
commodity (in which they are specialized) will reduce business income as well as labour income. Private investment slows down due to increase in the degree of risk of investment in volatile export sector. This ultimately creates the problem in capital accumulation and hence investment (Askari & Weil, 1974; Aggarwal, 1982 and Devkota, 2004).

The impact of export earnings instability on the economic growth of developing countries has also been an important area of research during last two decades. The association between export instability and economic growth has been discussed in the economic literature and has mixed results. Some of the studies show negative relationship between export instability and economic growth, while some studies find positive relationship between export earnings instability and economic growth. Still there are some of the studies that show no association between them. The studies conducted by Macbeen and Maizels (1968), Kenen and Voivodas (1972), Ozler and Harrigan (1988), Brempong (1991), Fosu (1992), Bhat and Veerarraju (1995), Dawe (1996), Sinha (2007) and Baker and Subramanian (2010) have found negative relationship between export instability and economic growth. Whereas the studies conducted by Yotopoulos and Nugent (1976) and Sinha (1999) have found positive relationship between Export Instability and Economic Growth. There are some studies which show no relationship between Export Instability and Economic Growth i.e. Moran (1983), Lim (1974) and Chaudhary and Qaisrani (2002).

Export instability is caused by various factors depending upon the nature of economy it’s economic and trade structure. A large number of empirical studies have investigated the various causes of export instability in developed and developing countries. Stern (1969), Love (1986), Silesi (2003), Massell (1963), found positive relationship between export instability and commodity concentration. Thus according to them commodity concentration is a major cause of export earning instability. There are some studies which also examined the causes of export instability included share of primary products in total exports and geographical concentration variables in addition to commodity concentration as major causes of instability (Massell (1963), Sautar (1977), Paudyal (1988), Love (1983) and Hamid (2010)). There are still more studies available in the literature which explained other
sources of export earnings instability including share of raw material, petroleum export earning instability for oil producing countries, quantity fluctuations, agricultural GDP fluctuations, non agricultural GDP fluctuations (i.e. Aslam (1985), Tariq and Najeeb (1995), Asheghaian and Saidi (1999) and Hanom (2009)). Devcota (2004) considered some other causes of export instability in the context of Nepal. These causes are lack of product specialization, supply side instability in agricultural product, inefficient tax administration, long open boarder with India, and policy problems like quotas and subsidies, Nepal–India trade and transit treaty and lack of exportable quality.

The studies conducted by Massell, 1970; Knudsen and Parnes, 1975 and Sheehey, 1977 have shown a weak positive association between commodity concentration and export instability. Tegene (1990) conducted a study in which he tries to give possible justification in favor of negative relationship between export earnings instability and commodity concentration. According to Tegene, it is not always necessary that commodity concentration leads to export instability. “The contribution of the major export category to instability of export earnings depends on the relative instability of the major commodity and on the correlation between the year-to-year fluctuations about their trends of the major export commodity and other export items constituting the total export”. In some of the countries, sources of export instability include policies adopted by the countries that give preference to the domestic production, change in exchange rates and political instability. Some studies highlight other factors such as bilateral and multilateral trade agreements which can also cause export earnings instability (Altman, 1980).

The concept of concentration has two broad contexts. One of them is commodity concentration and another one is geographical/market concentration. Commodity concentration relates to the exports of few commodities to other countries while geographical concentration is indicates the export of commodities to limited number of foreign markets. A country whose exports comprise of only one commodity and that country exports to only one trading country is called a perfectly concentrated export portfolio. On the contrary, a country whose exports consist of a large number of commodities and that country exports these products to a large
number of trading countries is said to have lower export concentration ratio or more diversified exports sector.

In most of the developing countries, export earnings are concentrated on a few primary products and even these commodities are exported to a limited number of markets. While in some of these countries, only one or two commodities or products constitute the bulk of export earnings. These limited exports make extremely unstable international economic environment. Export concentration is considered as a significant obstacle to the sustainable economic growth of developing countries. The concept of concentration clearly shows the deficiency of diversification, which suggests that sharp changes in the price of exported commodities (one or two commodities in this case), could lead to major changes in total export earnings. On the other side, if these countries diversify their exports instead of concentrating on small number of commodities, then a rise in price of some products could be balanced through a fall in the price of other commodities. This ultimately indicates that export diversification leads to stability in export earnings, which provides the basis for stable growth of a country (Bilquees & Mukhtar, 2011 and Asheghian & Saidi, 1999). On the contrary, dependence on limited number of commodities for exports may slow down well performed economic planning, decline the ability to import required goods and also contribute to shortage of investment by risk adverse producers.

As per the study conducted by Dogruel and Tekce (2010) “Diversification of exports is expected to contribute to the output growth of developing countries through several channels, such as decreasing export instability by reducing the dependence on a limited number of commodities that are subject to fluctuations in prices and volumes, creating spillover effects and increasing productivity growth, making countries less vulnerable to sector-specific adverse shocks and making it easier to channel positive terms-of-trade shocks into growth”.

Exports concentration creates economic as well as political risks, while export diversification aims at removing these risks. According to Samen (2010), “Diversification of exports also expands growth via technological upgrading with the help of scientific as well as technical training and through learning by doing
process, substitution of positive price trends commodities with the commodities of
decreasing price trends and even by providing forward and backward linkages within
output of some activities which become input of other activities. Thus diversification
leads to expansion of markets, externalities and economies of scale”

Export diversification has two dimensions, one of them is horizontal
diversification of exports and another one is vertical diversification of exports.
“Horizontal diversification takes place within the same sector (primary, secondary or
tertiary) and entails adjustment in the country’s export mix by adding new products
on existing export baskets within the same sector, with the hope to mitigate adverse
economic (to counter international price instability or decline) and political
risks.” The existence of the number of export sectors will reduce the dependency on
a few sectors. This will ultimately lead to export-oriented growth in the economy.
“Vertical diversification into processing of domestic manufactured goods entails a
shift from the primary to the secondary or tertiary sector. It entails contriving further
uses for existing products by means of increased value added activities such as
processing, marketing or other services. Vertical diversification can expand market
opportunities for raw material and help in enhancing growth and stability as
processed goods generally has greater price stability than raw commodities”. One
more dimension regarding export diversification prevailing in the literature, is called
as diagonal diversification. Diagonal diversification involves a shift of imported
inputs into the secondary and tertiary sector (i.e. use of imported goods or services
to produce manufacturing commodities or products for exports). These kinds of
diversifications have positive impact on economic development of a country. The
requirements of these kinds of diversification could vary considerably on the basis
of technological, marketing and managerial skills. Moreover, vertical diversification
involves more advanced know-how (technological), skills and initial capital as
compared to horizontal diversification (Samen, 2010).

“Export diversification concept may seem to be contradicting with the
thought of comparative advantage which recommends that the more a country
becomes open and involved in international trade, the more specialized it becomes.
Because countries specializing in commodities where they have comparative
advantage may achieve better resource allocation efficiency, some economists argue
that better international competitiveness would require more specialization in exports rather than better diversification” (Samen, 2010). According to the trade theory, generally, only more specialized countries are involved in international markets for trading. Simultaneously, specialization in a narrow range of exports can possibly lead to increase export income instability. Thus, the production of variety of commodities and hence, trade of these commodities to the different trading partners can potentially stabilize the economic performance of a country. However, this stability might be achieved through specialization (Ali, Alwang and Siegel, 1991). Ghose and Ostry (1994) however found that diversification of exports has not much contributed to reduce the problem of export instability. “Export diversification is only a long-term solution to achieve the goal of self-reliance and it may not be desirable, if such diversification runs counter to the country's comparative advantage”.

Market diversification of exports or expansion of new markets is considered as an important mechanism because of this, developing countries becomes more integrated in the world trading system (Shepherd, 2008). In the context of market diversification of exports, there are two broad relationships; i.e. impact of export market diversification on economic growth and the impact of market diversification on export instability (Joo La, 2011). As regard the impact of export market diversification on export growth the study by Evenett and Venables (2002) shows that in developing countries, export growth is dependent on exports of commodities to new markets/ partners. Another study conducted by Shepherd (2008) shows that increase in the trade growth of developing countries is due to the growing trading relationships with new trading partners. In the impact of export market diversification on export instability, Soutar (1977) finds that geographic/ market concentration is a significant variable to explain export instability. However Massell (1964) failed to find a significant positive association between export fluctuations and geographic concentration.

India has experienced adverse foreign trade balance for most of the years during post independence period. The 1991 crisis highlighted the importance of trade but despite significant economic reforms during 1990’s, the pace of reform process could not be carried on at the same rate during last decade. The economic
reforms paid off in terms of robust performance of Indian economy especially during 2003-04 to 2011-12 but high growth of this period was also accompanied by high inflation rate.

Traditionally India has been an important exporter of agricultural and allied products especially tea, coffee, spices, other raw materials, textiles and jute products. During post independence period the structure of India’s exports sector has significantly changed and at present India exports comprise of mainly manufactured goods.

India’s merchandise trade has significantly grown over time as its share in world exports has increased from 0.7 per cent in 2000 to 1.7 per cent in 2013. Similarly India’s share in world imports has also increased from 0.8 percent in 2000 to 2.5 per cent in 2013. India at present is the 19th largest exporter and 12th largest importer in the world. Trade GDP ratio has increased from around 21.7 per cent in 2000-01 to 45.5 per cent in 2012-13. But throughout the post independence period and even during post reform period exports growth has lacked behind the import growth resulting in adverse trade balance for most of the years.

The developed world crisis of 2008 and Euro Zone crisis led global slowdown and adversely affected India’s export growth during last five years, so much so that export growth rate became negative in 2009-10 and 2012-13 (Economic Survey, 2012-13).

Slow growth of exports and fluctuations in export income pose serious challenge to economic planners in India. Comprehensive studies on various aspects of export instability are rather lacking in India but the existing literature does highlight negative implications of export instability for India’s growth and investment.

India has suffered export income instability during 1970s as well as 1980s nontraditional exports fluctuated more in comparison with traditional exports. Instability of export earnings is caused by price fluctuations as well as volume fluctuations. In case of traditional exports price fluctuations were higher while in case of nontraditional exports volume fluctuation contributed more to export
instability (Kaur, 1996). Kaushik and Klien (2008) study shows that though export instability adversely affects short run stability of income but in the long run it is having positive impact on income and investment growth in India. However Bilquees and Mukhtar (2011) stressed adverse impact of export instability on India’s economic growth and recommended diversification of export sector as a solution.

Thus there is a need for detailed study on measurement, sources and impact of export instability in Indian context. Most of the existing studies are aggregative there are very few studies which have analysed in detail geographical or market export instability. There is a need to study export instability, structure of exports, product and market diversification of exports sector so as to analyses extent, causes and consequences of export instability in India.

**Objectives of Study:**

The present study entitled as “Sources of Instability, Diversification of Exports and Economic Growth in India” has the following objectives:

1) To study the pattern of growth and structure of India’s exports during the study period (commodity-wise as well as destination-wise)

2) To analyse the category-wise and sub category-wise instability of India’s exports

3) To measure commodity concentration of India’s exports

4) To analyse the instability of exports to major markets *i.e.* geographical instability

5) To measure geographical concentration of India’s exports

6) To analyse the causes/sources of export instability

7) To examine the association between export instability and economic growth.

**Plan of Study:**

This study consists of twelve chapters. Chapter I deal with introduction of the study. Chapter II presents a detailed review of literature related to the study
topic. Chapter III is consists of the description of data sources and various analytical tools/techniques used for analysis. Chapter IV studies the growth pattern and structural changes of India’s total exports and its categories/ sub categories. Chapter V analyses the commodity concentration/diversification of India’s exports. Chapter VI studies the direction of India’s exports. Chapter VII analyses the geographical concentration/diversification of India’s exports. Chapter VIII examined the export instability of India’s exports, category wise and sub-category wise. Chapter IX deals with geographical export instability analysis. Chapter X studies the various sources of export instability in India. Chapter XI examined the relationship, if any between export instability and economic growth with the help of causality analysis. Chapter XII consists of summaries the findings of the study and brings out the conclusions and policy implications.