IMPACT OF FDI AND INSTITUTIONS ON EXPORT PERFORMANCE OF PAKISTAN

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CERTIFICATE

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Declaration

I Waleed Zulfiqar hereby state that my M.Phil thesis titled **Impact of FDI and Institutions on Export Performance of Pakistan** is my own work and has not been submitted previously by me for taking any degree from this University Pakistan Institute of Development Economics Islamabad or anywhere else in the country/world.

At any time if my statement is found to be incorrect even after my Graduation the university has the right to withdraw my M.Phil degree.

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Waleed Zulfiqar

Dedication

To my loving parents without whom this was not possible

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Abstract:

Institutions of any country has key role in attracting foreign direct investment and increasing export performance from country. The purpose of this study is to investigate role of foreign direct investment and institutions in expansion of export performance of Pakistan. Study utilize time series data of Pakistan from 1984 to 2019 and source of data for study is World Development Indicators and ICRG. By using ARDL Bound test co-integration method study found that there is significant and positive role of both foreign direct investment and Institution of Pakistan in proliferating the export performance of country. Foreign direct investment inflow in country results in technology spillover in Pakistan and also transfer of advance knowledge and skills of production. This advance technology and production knowledge boost both productive capacity and volume which give country enough production to increase exports. Institutions are found to have key role in creating business environment for foreign investors as better institutions are perform the role of regulatory authority for foreign direct investment in term of expending exports. Moreover study found that institutions also have direct impact on international trade activity of the country. Unfortunately institutional conditions in Pakistan is not according to world's standards which is the reason of low FDI volume and less export performance. Study suggest to take necessary measures to improve institutional quality of country and also to make Board of investment (BOI) department more effective in attracting foreign investors.

Key Words: Foreign Direct Investment, Institutions and Export Performance

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LIST OF ABBREVIATIONS

BOI	Board of Investment
FDI	Foreign Direct Investment
IQ	Institutions Quality
MNE	Multinational Enterprises
ASEAN	Association of South East Asian Nations
NEP	New Economic Policy
ARDL	Auto Regressive Distributive Lag
VECM	Vector Error Correction Model
CEFTA	Central European Free Trade Agreement

Chapter No 01

Introduction

Over the past few decades countries all around the world are inclined with plains to create export friendly environment in country (AbuAl-Foul & Soliman. 2008). No matter the degree of economic development that a country has achieved it always aligned with the policies that attract foreign investment in the country because foreign investment open path for new technology, new skills and employment opportunity especially in developing countries (Selimi et al., 2016). Foreign capital for any country is very important for starting production and improving living standards of peoples. Investment from abroad is inevitable for developing countries because it plays role in promoting growth enhancing activities in developing countries (Jawaid et al., 2016). Developing countries do not have enough resources to run their production process in effective manner hence investment from abroad in the form of portfolio investment, FDI and exports receipts are big source of income for developing nations. Multinational enterprises are the major source of foreign investment for underdeveloped nation and it is also massive source of trade flow in these countries (Majeed & Ahmad. 2007). Foreign investors can start producing in such a populated country and earn the profit domestically as well as by exporting because exchange rate in developing countries is often favoring to increase exports (Dincer & Kandil. 2011).

Foreign direct investment inflow in any country boost exports of any host country because of their high productivity through advance technology and skills. They increase production capacity of host country and export expended production from host country. Institutions of host nation has major role to increase performance of FDI in increasing exports. Institutional quality of country

provide favorable atmosphere for these foreign investors to start their business and increase production. Foreign investors before investing in any country check institutional condition of country (Masron and Abdullah, 2010).

Foreign investors face lot of challenges while starting business in host country. At first they have to get permission from the government regarding starting business. If regulatory authority of country is efficient and rule of law is present in country they may find it easier and start business. In other words institutions are often involve in production activity of foreign investors. Presence of corruption in govt institutes increase cost of production of foreign investors as they have to face these institutes in different stages while taking permission or while check and balancing activities of govt departments Foreign investors have to pay heavy bribes to get their work done as early as possible which increase cost of production and as a result reduce production capacity of these investors. Moreover foreign direct investment attract toward the country with low rate of corruption as mention by (Mathur & Sing, 2011).

For country like Pakistan political stability is another massive factor in term of attracting foreign direct investment and facilitating this investment to boost exports from country. Unfortunately since independence Pakistan did not witness to much political stability which affect the FDI pattern in Pakistan. Pakistan face two major political regime democratic and autocratic (Both military and Civil) (Seyoum, 2011). In both these regime FDI behave differently toward exports of Pakistan. This instability result in reduction of FDI inflow in Pakistan.

Foreign investment and export performance are considered as complementary for each other as determinants of both FDI and exports are same. Developing countries face difficulties while entering in international markets with their production but with the help of foreign investors these countries have to access to foreign markets (Cardoso & Dornbusch, 1989). But impact of foreign

investment on exports of host country cannot rightfully showed without including institutions of host country because better institutions (like: control of corruption, effective government, rule of law, stable political setup, regulatory quality and voice & accountability) help creating suitable conditions that help FDI to increase export from hosting country.

Institutions comprises of many domestic institutes like political stability, control of corruption, law and order, bureaucracy quality and democratic accountability. These are key factors and backbone of economy of any country. Institution provide appropriate environment for production activity. In all process of production by foreign direct investment starting from getting approval of doing business to exporting final products from host country institutions involve in all stages (Samina et al., 2019). With presence of strong political structure investors may find difficulty in getting approval of business. Similarly in bringing advance technology with in country investors have to face many public offices so control of corruption is involve in this section. For security of heavy investment law and order institutions is important etc.

Investors from abroad often in form of multinational enterprises enter in any host nation just to earn higher benefits from low wage rate of developing countries and depreciated currencies and all other conditions most suitable for exporting. These MNCs have all resources like global business contacts, advance technology and efficient marketing skills which developing countries needed to expand their exports (Mai, 2019). MNCs build productive units in host countries and if these corporations are facilitated by efficient institutions like better regulatory authority which enable Investors to quickly have permission of doing business and all other documental work related to their business. Presence of rule of law and political stability give sense of security to these investors regarding their investment and lack of corruption in government offices save their capital which could have gone in term of bribes etc. So all these institutions are relevant in

production process. Availability of these efficient institutions help boost performance of FDI in increasing exports and vice versa for poor institutional condition.

Trade can contribute in overall growth and economic development of a country in many ways for example exports can increase income of country and as a result boost GDP of country. Relationships built because of international trade results in generating foreign direct investment in that country and also transfer advance technology and skills or production in country. Output of any country varies with the difference in geographical structure of regions in country. For instance climate difference inside countries impact on agriculture of country and jobs sector also depend on climate as if climate favor agriculture of a country that results in jobs abundance in this sector. This also have greater impact on nature of exports from the country. Labor abundance in any country may result in exports of services more than exports of goods. Exports form most of developing countries based on consumable goods and other foods material as Africa and Latin America's exports mainly depend on agriculture product whereas developed nation relay on exports of industrial produced goods which yield higher benefit in international trade (Ojeaga et al., 2014)

Foreign direct investment is also major source of technological transfer inside host countries mainly developing countries from technologically developed countries. Previous literature support the argument that as compared to other sources technology and skills that transfer from foreign direct investment transfer to local industries and workers more easily and conveniently as mention by (Saggi, 2002) and (Rodriguez-Clare, 1996). It also support that transfer of this technology help boosting exports performance of domestic industries like automobile, textile, electric appliance and motor bicycles etc in developing country like Pakistan (Lall & Shujiro, 1994), (Ernst et al., 1998) and (UNCTAD, 2002).

Foreign firm not just help in expending production activity in host country but also give chance for developing country to introduce their product in world market using their personal good will and approach. Moreover these linkage of foreign investors serve in great deals for less developed country especially in the context of Pakistan. Where international linkage are not enough for development of industries and exports. Technology spillover in Pakistan because of FDI inflow in textile and surgical instrument industry has enhance increase exports of country by great deal further linkage in international market by these foreign investors also help in smoothing international trade and balancing terms of trade (Falk & Hake, 2008). Productive technology and knowledge is transferred to country like Pakistan when manufacturing workers from developing countries are sent to industrial developed countries for better training or by organizing training sessions for workers in host countries by foreign enterprises. This technological knowledge is then transmit to domestic industries.

FDI despite of all technological spillover and knowledge about production process in host country need favorable institutional environment for working smoothly and for expending exports. Institutional quality like law and order, political stability, corruption and regulatory authority are very important in production process especially for foreign firms because for investing in host country foreign investor have to inclined with business policies of government of host country. In most of developing countries (Pakistan in this case) institutional quality is not favorable for investment from abroad (Jadhav, 2012). In business world time is key and decision about business matter demand efficiency but if regulatory authority of country is not working properly it can waist precious time of investors which result in loss for business owners and increase in cost of production because of corruption is also major concern for multinational enterprises..

Pakistan is influential destination for foreign investors to invest because it provide favorable conditions to these investor to grow and get higher benefits. In start FDI in Pakistan was kept low but in decade of 1980's liberalization policies were introduced by government of Pakistan which lead to increment in foreign direct investment but consistent political instability was big reason of low FDI in next decade. (Serfraz, 2015). Government of Pakistan always took necessary steps to attract foreign investors as government gave relaxation in taxes and tariffs. This relaxation result in increment of FDI up to $10.93 billion in time period 1995-96 to 2005-06 (Serfraz, 2015). Pakistan government also provide legal protection to international investors like in the form of Foreign private investment Act 1996 and protection of economic reform act 1992 both of these rule strictly observe and remove all hurdles in way of foreign investment. These step also pays of as country receive $570 million in oil and gas exploration in 2012 and infrastructure sector receive 11% of GDP whereas IT sector receive $12 billion (Dar et al., 2016).

Foreign direct investment can help Pakistan export in great deal if export led growth policies are develop and used. Majority of multinational firms are oriented toward exports and use host countries as platform for export (Majeed & Ahmad, 2007). Multinational firms use this favorable conditions and increase exports of host countries[1]. Decision of investing by these MNCs in any country depend on many factors like size of firm, management and administration system of host country, transportation and labor cost and institution and political stability of host country (Nihal et al., 2019). According to (North, 1990). Institutions act as rules that are created by human for limitations and these limitations defines human interaction with each other. These "rule" applied in FDI and export relation also. Foreign investment that aim to enhance exports depends on level

[1] Export of host country raise by FDI because exchange rate in host countries are often depreciated as compare to their home countries and export from host countries become favorable for them.

of institutions of countries. Good institutions of host country play vital role in ensuring contract, lowering transaction cost, enhancing productivity, protecting property rights and provide level playing field for foreign investors (Jawaid et al., 2016).

Developing country especially form Pakistan often have shortage in capital stock which reflects in their import-export and saving-investment gaps, which shows to fulfill investment needs of developing countries their saving and foreign exchange are not enough (Majeed & Ahmad, 2007). Majority of Asian countries also face same problem and to fulfill these gaps these countries need constant FDI and Export growth. Since conditions and performance of institutions is different in countries across Asia and its impact in hosting FDI and in result boosting exports of countries are different. Countries with relatively stable institutes result in better result of FDI inflow in term of export expansion and it is beneficial for both host country and foreign investor and vice versa in case of weak institutions.

1.2 Research Gap

Foreign direct investment inflow in any country boost production of host country by transferring technology from technological advance countries to developing countries. Increase production opens gates for countries exports and enhances its export volume. This strong role of FDI in increase export performance is heavily discuss in literature but none of study discuss it by including institutional quality of host country as it is extremely important factor that can impact the relationship of FDI and export performance. This study will introduce institutions and will check what impact better institutions will make in FDI and export relationship and how FDI will behave for export expansion if country has good quality institutes and what if institutions are not good.

1.3 Research Problem

Foreign direct investment is very important for increasing exports of host countries. Foreign investors bring advance technology and high entrepreneurial skills and training scheme for workers of the host country. Which in turn lead to enhancing of production capacity of host nation. Whether or not FDI inflow of any country lead to promote exports of any country it depend on institutions of host nation. For starting any production unit inside the host country investors have to take permission form government if regulatory authority of any country is not efficient it may waist time and resources of business men which will discourage production process moreover corruption in all govt sectors office increase production cost of foreign investors. Law and order of host country also provide sense of security to foreign investors about their investment. So institutional quality (like control of corruption, government efficiency, rule of law, regulatory quality, and government stability and vice & accountability) of host country play vital role in making business environment favorable. And in institutionally favorable business environment foreign producer, produce with their full efficiency and export expended production to earn higher benefit. Without considering Institutions one can't tell exact effect of FDI on export performance because institutions are the key determinants of both export and foreign investment in host country.

1.4 Research Question

The study will address following question.

- What is the impact of foreign direct investment and Institutional quality on export performance of Pakistan?

1.5 Research Objective

The objectives of study will be.

- To check out the effect of foreign direct investment and Institutional quality on export performance of Pakistan.

1.6 Significance of Study

Pakistan is an attractive country for foreign investors as it is placed geo-strategically at the crossroad of Asia. Because of this great geographical positioning country's business activity is expected to be very high but volume of foreign investment in Pakistan is very low because of many reasons. This investment from abroad is governed and facilitate by Pakistan government department name as Board of investment (BOI). The prime duty of BOI is to attract and provide all possible facilities to foreign investors. They often take necessary measures to enhance FDI volume in country. This study will provide Board of investment important policy recommendations and information about importance of institutional quality in improving FDI performance in term of increasing productions transfer of technology and improvement of skills and improving export performance. The study will be conducted for the purpose that it will help Board of Investment in making policies regarding attraction of investors and provision of best possible business environment.

1.7 Plan of Study

First chapter of study include introduction of study impact of FDI and institutions on export performance of Pakistan. Rest of thesis is comprise in this way. Second chapter of study include detail literature review of number of studies on FDI, institutions and exports. Third chapter involve methodology along with description of variables and estimation technique to be employ. Fourth section is consist of results of estimation and detail discussion of results. Last chapter include conclusion and policy recommendation for future work on this issue. After this references are given.

Chapter no 2

Literature Review

2.1 Introduction

As institutions quality is one of the major determinant of FDI and it affect export of country by increasing FDI. The massive set of literature is available on this issue. This chapter is divided in five section in first section literature related to institutional quality and FDI is given, in second section of chapter consist literature on FDI and export performance, 3rd section consist literature on I.Q and exports, 4th section include concluding remarks and last section consist of empirical review of the study.

2.2 Institutional Quality and FDI:

Institutional quality play vital role in attracting foreign direct investment in any country. Lack of corruption, quick judicial system and political stability attract foreign investors. More over presence of low wage labor and availability of raw material attract MNE's to invest in countries. Foreign investors are often reluctant to invest in country where business activities are slow, where corruption is there in government institutes because in order to take permission of doing business in any such type of country becomes costly for them. But some researcher may disagree as (Omodero, 2019) explore the positive impact made by corruption on foreign direct investment inflow inside Nigeria. The study use data between time periods 1996 to 2017. The result of study shows that corruption plays role in increasing FDI inflow in Nigeria. However, study does not encourage increasing corruption in order to increase FDI inflow because it will impact negatively on our youth about social norms. The study is suggesting to keep rate of inflation at equilibrium level and exchange rate at its stable point. These efforts could be fruitful in attracting foreign direct

investment inflow in Nigeria. The study presented the strange relationship of corruption and foreign direct investment but also suggested to keep it down because it may have many adverse effects on countries economy.

Anyhow institutions of any country and foreign investment has very strong relation as (Nihal et al., 2019) study explores the relationship between FDI and institutional stability in Canada. For this purpose, use data of 33 observations from 1981 to 2014 and find out that there is empirical causal relation between FDI and institutional stability and the stable institutes of Canada help attract FDI. The study check relationship of institutions and FDI for Canada and found this relation to be positive. Study shows that institutions are important factor for attracting FDI inflow strengthening the idea of current study.

There is possibility that this relation between FDI and institutions may vary because of existing condition of countries. It has different impact for both developing and developed countries. (Sabir et al., 2019) check the relationship between institutions and FDI in developed and developing countries. The panel data of 59 developing and 89 developed countries of 1996 to 2016 is used in study and find out that institutional stability affect more in developed country in attracting FDI as compare to developing country. This study divided the countries in different income group and analysis the quality if institutions to judge their impact of FDI.

Efficient institutions provide favorable conditions for foreign investors in which they can gain benefits as (Omar, 2017) investigate the relation between FDI and Institutional quality in 16 Arabian countries. For this study use data of these countries for the time period of 1984-2012. By using Blundell-Bond GMM estimation technique study found that institutional quality play significant and positive impact in Attracting FDI in Arabian Countries. Study well explain impact of

As different countries have their own difference in performance and nature of institutes like political ground, Efficiency in government may differ etc. such difference also matter among foreign investors as (Eren & Jimenez, 2014) examined the impact made by institutional differences on inward foreign direct investment toward Turkey from OECD countries. Study use data of Turkish foreign direct investment between 2002 and 2010 and by using gravity model study found that FDI inflow is higher when investment come from countries having little difference in corruption level with Turkey and investment is lower when it come from countries with larger difference in corruption level with Turkey. The main idea of this study was that foreign firm can attain major benefit from host country in which institutional condition is same.

Political stability of any country is very important and investors often consider it while investing in any country as (Jadhav, 2012) study tries to find role played by economic as well as political factor in enhancing foreign direct investment in BRICS countries. Using Levin,Lin & chut test on panel data of years 2000-2009, study find out that economic determinant like trade openness and market size play batter role in attracting FDI as compare to political and institutional determinants of FDI. Study also shows interdependence of these institutions and there performance depend on each other. Now a days countries do realize the importance of their domestic institutions in order to attract investment from abroad as (Masron & Abdullah, 2010) investigates impact made by institutional quality on foreign direct investment inflow in ASEAN countries. Panel data 8 member countries of ASEAN from 1996 to 2008 is used and found that institutional quality play very little role in FDI in ASEAN countries.

Institutional quality can be considered as additional cost in business and improving IQ could work as attraction for FDI inflow in ASEAN countries. Study reveal the significant role of domestic institutions in attracting foreign investment within region.

Its better reality that apart from economical problem for developing nation's problem of week institutional performance is also a big problem for such countries. It directly affects their FDI inflow pattern. (Kurul & Yalta, 2017) check the importance of institutes in attracting FDI. They investigate the impact made by institutional quality on FDI inflow. Study use data of 113 under developing countries for time period between 2002 and 2012 and find out that not all the institutions impact on FDI with same intensity as government effectiveness, corruption control authorities, accountability and voice and political stability are the factors that can result in attracting FDI in country whereas absence of these measure can bring drastic impact on developing countries. Governments of developing countries can provide foreign investors favorable atmosphere for investing by making their institution more effective

Bringing FDI country and attracting foreign investors is not easy job. It requires combine efforts of all institutions of country. (Asiedu & Lien, 2011) To attract FDI in country every institute of country can play its role especially government can play big role in this regard. One study investigates the relation between democracy, FDI and natural resources. Panel data of 112 developing countries between 1982 and 2007 are tested and study found that democracy plays significant role in affecting FDI according to importance of natural resources.

Democracy plays positive role in attraction of FDI when share natural resource in export of country is low and it deteriorate FDI when natural resources are dominant in exports. Countries with proper check and balance in all departments can bring their institutional performance up to world standers. Any difference from international stander result in deteriorating FDI as (Cezar & Escobarb, 2012) checked effect of Institutional distance on foreign direct investment. Study analyze impact by using data of Inward and outward FDI of 31 OECD countries between the time period of 2004-2009. The study found that with the increase in institutional distance Inward FDI

flow (name as intensive margins) and volume of investment that firm decide to invest abroad decline. The study very well explain that firm with developed country background adopt institutional distance quickly as compare to under develop background firm.

Since stability of institutions are different around the world. In relatively high income countries institutions are strong and stable which provide strong base to attract FDI and as a result increase exports of country. (Fedderke & Romm, 2006) Decision of foreign investors to invest in any country depends on firm size, administration and management system, labor and transportation cost and political and institutional stability in host country.

2.3 FDI and Export Performance:

Foreign direct investment made great impact on export performance of any country as one major motive of investing in any country is to export from that country because in developing countries labor are often cheap and raw material is also available in abundance and in low cost. MNE's from developed countries exchange rate. (Jawaid et al., 2016) define FDI as kind of investment that help host country to produce goods and services that was previously produced by host country's producer. Here aggregate exports and FDI are substitute of each other such investment is called horizontal FDI. And vertical FDI is investment which directly helps host countries to supply their products in international markets. Here aggregate exports and FDI are expected as complementary. Study divide FDI into two groups according to nature of its relation with export of host country. (Selimi.et al., 2016) explore empirically the relationship between foreign direct investment and export in Balkan countries. The study uses data of western Balkan nations between time periods 1996-2013. The study found that effects of FDI on export is higher in case of Slovenia, Bulgaria and in Macedonia. Whereas this impact is lower or even negative in

case of Albania and Serbia. Study shows importance of not only volume of FDI but also the structure.

Foreign direct investment and export of host countries are considered as complementary for each other but according to some researchers it behaves differently in different period of time. (Jawaid et al., 2016) study investigate the influence made by FDI on export performance in Pakistan. Study utilize time series data of from 1974 to 2012. By applying the technique of variance decomposition study found bidirectional causal relation between foreign direct investment and export performance of Pakistan. In short run there is positive association between FDI and export performance but model shows negative relation between 1983 and 1987 and also between 2001 and 2006. The study shows different relationships of FDI and exports of Pakistan in different time however study stresses on having stable political structure which can have better impact in this regard.

How foreign direct investment will effect on exports of any country depends on policies of government. It is favoring for investors then. They will raise the exports of host countries vice versa. **(**Karuna & Goswami, 2012) in their study find out relation between FDI and exports in India. NEP (New Economic Policy) devised by India to remove all kinds of deregulation in industrial sector, financial and public sectors. The study focus on efficiency of NEP by using annual data of twenty years (1991-2010). By using vector error correction model study find out that bidirectional causality exists between export growth and FDI. When there is increment in FDI inflow in country it results in increasing export of the country and vise verse. New economic policies that India had adopted in 1991 were proved ineffective in improving export growth of country. NEP liberalized FDI inflow in some extent and FDI increase in this regime but this

increment was not enough as compare to other competing countries. As institutional quality help in FDI inflow which is key determinant of export increasing.

FDI work as growth engine of entire economy it starts production process within country which result in increasing exports and economic growth. (Iqbal et al., 2010) explores the causality existing between FDI, trade and economic growth. The study uses quarterly time series data of Pakistan between 1988 and 2005. Using VAR model study found that there exists a bidirectional causal relationship of FDI, Trade with economic growth. Further that foreign direct investment and trade play significant role in enhancing economic growth. Study very well highlighted the need of foreign investment in less developed area like Balochistan of Pakistan as it can bring this part of the country to equal of other parts of country.

Foreign investment affect international trade activity differently in different countries according to nature of economy as (Klasra, 2009) in his paper investigate that weather export led growth hypothesis and growth driven hypothesis is proven true in countries like Turkey and Pakistan or not. For this purpose the study use annual time series data from 1975-2004.The result shows that there exists bi-directional relationship between exports and trade openness in Pakistan and FDI and exports in case of Turkey. In Turkey FDI and exports are proven complementary.

Foreign investment works like engine in production sector of any country. Increment in production of host country opens gate for exporters. Further transfer of technology and skills in developing countries by multinational enterprises impact greatly in different sectors by improving skills of worker and increase indirectly production capacity of country. (AbuAl-Foul & Soliman, 2008) investigate the impact of both stock and inward FDI flow on manufacturing exports in four north and middle African region countries. Study use panel data between 1975 and 2003 and found

that FDI activity play positive role in expending both manufacturing and merchandise exports of MENA countries. Study claim to have positive impact of FDI on merchandised exports but also mentioned that FDI in this sector is less which create confusion about the strength of relationship in presence of large FDI volume.

Along with inward follow of foreign direct investment impact on exports outward FDI also have significant relation with exports of any country. Countries with abundant resources have to make choice whether they wanna serve international market with flow of exports or with FDI. As one study suggest. (Lee et al,. 2007) in their paper explore relationship between outward foreign direct investment and exports of Korea toward china. Study use data of Korean exports and FDI with china and study apply Granger non causality test and found that exports of Korean manufacturing industry has affected its FDI pattern in china. Further author had divided manufacturing industry as labor intensive and capital intensive and found that capital intensive industries in china absorb more foreign investment and also capital intensive industries share bigger portion of exports.

Division of industries of countries into capital and labor intensive gives better idea about behavior of FDI in these industries. Outward FDI give international firm a chance to use their productive knowledge and technology in countries which are relatively less develop and in which production can bring lot of benefits. As mention in study (Mullen & Williams, 2011) explore relationship between inward and outward foreign direct investment on exports of Canada to OECD countries. The study use data of 18 years from 1989 to 2007 and by applying gravity model study found that in case of inward FDI, export is positively related with foreign direct investment. Whereas outward FDI is adversely related to exports or in other words these two are complementary to each other. In overall effect of FDI and exports the relation is inconclusive.

Study in detail discuss the trade relationship and role of foreign direct investment in this relationship and positive relationship of FDI and export relationship strengthen the idea of introducing institutions in this relation which will perform by current study.

Decision of bringing foreign investment inside the country and facilitating them with productive atmosphere and institutional conditions by host country's government are important. Because foreign investment can be proved as game changer for relatively less develop countries. Many study prove significance of FDI in boosting exports. (Fukunishi, 2010) The study explore the spillover impact of foreign investment on exports of garments industry in Africa. Using data of 19 years and by applying logit Probit methodology The study found that FDI impact positively in expending exports garment industry in African countries.

If we talk about the effects of FDI on exports then we can see it not just help boosting volume of exports of host countries but also upgrade export quality because developing countries with their little resources can't afford to produce good of high quality and in larger quantity (Zhang, 2014) the study investigate the impact of foreign direct investment on export competitiveness of china by making index with two dimensions of exports which are export capacity and export up gradation. For this purpose study use data 21 manufacturing sectors of thirty one region over the time period 2005-2011. By using fixed effect method study found that foreign direct investment is key determinant of exports success in China and absorptive capacity of China enhance performance of FDI. The finding of study also shows that FDI enhance dimension of exports capacity more than exports up gradation in China. The study shows that FDI in any country inclined toward sector which is more relevant to their home country like Western firm in China are more inclined toward high tech industries and developing countries toward low tech involving industries.

With advancement in telecommunications world is now stretch and become a global village. Now countries cannot just relay on their own resources to fulfill there need so international trade has become the need of hour for every nation. Development in one country now have impact on other country and same goes for recession. Because of enhancing international trade now trade cycle in one country affect whole world. So in case of foreign direct investment same pattern applied excess resources in one country shows spillover effect in other countries in term of FDI and also as exports of final produced goods. (Ouyang, 2009) Investigate the regional spillover effect of Coastal FDI and Coastal Exports in China. Study uses data between 1983 and 2007. By applying 2 SLS fix effect method study found that there is negative spillover impact in inland economies by coastal exports whereas positive spillover effect of coastal FDI.

Although huge research finding has shown the positive and causal relationship of FDI and exports but some study suggest that FDI only affect different sectors of host countries and have no impact on overall exports performance of host country as shown in study (Domician, 2008) examine the impact of sectorial investment on exports ordinary least square and error correction method on small data of Tanzania from 1994 to 2007 study find that overall foreign direct investment and exports is negatively related or have weak relationship. The study show channel of trickle-down impact of FDI in different sectors of Tanzania.

More over effects of FDI on exports also varies with goods and services exports. In case of goods exports the effect is different than services exports (Martín, 2010) examine the relationship between outward foreign investment and exports of Spain. For this purpose study use quarterly data of Spain from 1993 to 2008. By applying vector error correction model (VECM) and multivariate co-integration method study found that there is positive long run relationship between exports and outward FDI for both goods and services whereas in short run for services the

relationship is not significant. The result shows that there is positive long run causality exist between outward FDI and exports which is stronger in case of goods and weaker in case of services exports.

In making decision about participating in foreign market with FDI or exports policy maker first observe the market condition and their resources. The requirement for participating in international market is that they must have industries in which they have comparative advantage because in modern day countries are more inclined toward specialization in few good which they can produce more efficiently at lower cost instead of manufacturing everything and wasting their productive resources. (Noguera & Pecchenino, 2011) in this study examine whether or not firms serve international market. For this purpose study tested Ricardian model of trade and investment. Finding of paper shows that firm participate in both local and foreign markets in comparative advantage industries and that firm's export in foreign markets in which these firms are more efficient and firm decide to serve as foreign investment in foreign market in which these firms are less efficient.

In case of Pakistan the relationship between FDI (which this study also address) previous study show different impacts as (Khalil et al., 2013) examine the impact of direct foreign investment on overall exports FDI relationship for Pakistan. Using time series data of 39 years from 1971 to 2009 and applying ARDL co-integration method study found that there is long run relationship of FDI with overall exports of Pakistan. However world income is found insignificant in case of short run. The study stress on long run policy making considering long run positive association of FDI and exports in Pakistan because in long run foreign investors can find enough time to settle in perform their role in production process.

Above studies shows both negative and positive impacts of FDI on exports but there is also literature that claim the impact of exports on foreign direct investment (both inward and outward flow) because when export of any country is in abundance then it may generate higher profits which can attract foreign investors in investing and taking benefits from host country's exports relations with foreign markets and productive infrastructure in domestic setup. (Falk & Hake, 2008) Study investigate the relationship between exports and outward FDI for seven European Union countries (Which are Germany, France, Australia, Netherland, Italy, Sweden and United Kingdom). By applying Holtz and Eakins causality test on Panel data between 1973 and 2004. Study found that there exist unidirectional causality between exports and outward foreign direct investment. Whereas there is no causality in opposite direction.

We can conclude with the argument based on above literature that foreign investment in host country do have effect (no matter positive or negative) but it does alter productive capacity and exports of host country.

2.4 Institutional quality and Export Performance:

Institutional quality is also important determinant of export performance. If institutions of any country are efficient and well performing it increase the productivity of country which results in boosting export of country. Efficient institution of any country reduce risk of defection of contracts, increase interpersonal exchange and allow more complex and improve methods of organizing trade and production. (North, 1991) Institutional quality plays its part in international trade activity both directly and indirectly. Directly it raises exports and indirectly it attracts foreign direct investment in their country which in result raise the production of host country and increase its export performance. (Bankolea et al., 2014) emphasize on the role played by telecommunication infrastructure and institutional quality on trade efficiency in Africa. The study uses multiple step

models (SEM, DEA and MARS) on data of 28 African countries and find out that institutional quality plays vital role in intensifying trade efficiency in Africa. Strictly enforcement of rule of law, eradication of corruption, strong accountability and stability in political sector is very important for improving efficiency of Trade. The study also shows that improving telecommunication infrastructure can improve efficiency of institutions which result in furtherance in trade.

How institutions will effect on different firms depends on their Policies toward exporting. In other words, Institutions Quality of any country effect in micro level or firm level exporting as (Soderlund & Tingvall, 2014) explore the impact made by institutional quality on firm level export in Swedish firms. For this purpose, study use data of 3144 firms having more than 50 employees in time period between 1997 and 2005. The study found that Swedish firms are sensitive with institutional quality of partner countries. Institutional variables like rule of law and property rights and business regulations in partner countries is determinant of export decision by Swedish firms. International trade brings development in any country. It improves production skills of any country and also brings change and improvement in infrastructure.

(Hochman et al., 2011) investigate the impact made by trade on institutional quality and infrastructure investment. The study finds out that trade enhance the investment on infrastructure which help domestic firm to increase its efficiency and become competent in international market. The study also finds out that trade has adverse effect on institutional quality and can bring extreme cronyism as government give unnecessary tax relief.

The relationship between economic institutions and trade flow is always in discussion by researchers as (Nicolini & Paccagnini, 2011) in their study explore causal relationship between trade and institutions. By applying Granger causality test on data of 197 countries and 243 partner

countries in time period between 1976 and 2004 study found that there exist no causal relationship between trade and institutions nor in opposite direction if we remove cross sectional heterogeneity which produce different results by applying proper tests. In previous studies cross sectional heterogeneity was not removed which shows thus shows causal relationships between institutions and trade. Trade follow in country bring prosperity and development. One of sign of this development is extension and advancement of cities or in other words urbanization process accelerates with trade follows as in study conducted by (Candau & Gbandi, 2019) Examine the impact of institutions and trade on urbanization of country. The study use data biggest city by population from 1962 to 2010 and found that trade factor doesn't show any significant impact on urbanization but political institutions like bad governance has negative impact. Study shows that past colonial bad political setup and bad governance reduce the population growth of cities.

Economic institutions like government stability, rule of law etc work as facilitators for foreign investment which using favorable condition expend production of country and increase export performance. (Schonerwald et al., 2020) Studied relationship between geography, International Trade and Institutions in BRICS (Brazil, Russia, India and China) countries. Using panel data of 15 years from 1995 to 2015 and applying Hausman-Taylor method study found out that geography and international trade have greater impact on economic growth but according to result of BRICS nation's institutions have no impact on GDP growth of these nations. Study also showed that research related to institution mainly focus on European countries and neglecting economic conditions of emerging economies.

In modern world trade become more important as it give opportunity to utilize resources at their optimum level and export this expended production which is more than their need. To facilitate international trade and for conducting trade smoothly countries engage themselves in

international trade agreements as in one study (Klimczak & Trivić, 2018) explore the impact of CEFTA 2006 (Central European Free Trade Agreement) agreements on intra-regional trade and impacts of institutions on trade. By using pooled data of CEFTA countries for fifteen years from 2000 to 2014. Study uses augmented gravity model and found that CEFTA agreements have highly significant and positive impact in intraregional trade one of the reason for this result is that CEFTA agreement involve removal of tariff. Another finding of study is that institutional factors work as facilitator for intra-regional trade. Study suggest that institutions like government stability, rule of law etc has positive impact for importers countries and negative impact for exporter countries. Along with domestic institutions, international institutions also foster international trade flows (Ojeaga et al., 2014) Study relationship between trade and institutions (both domestic and international). Applying general method of moment estimator (GMM) technique on 31 year data of seven region (European Union, Sub Saharan Africa, Latin America, North America, Australia, South East Asia, North Africa and Middle East) from 1980 to 2010. The study found that Institutions help in promoting trade from region.

More specifically domestic institutions work as protectionist by boosting regional trade markets but could not reduce tariff. Whereas international institutions reduce tariff across region and facilitating access to regional markets of regions. In another study (Stinnett, 2005) examine the relationship between international cooperation and international institutions. For this purpose study use of 57 agreement between 1957 and 2003. Study found that international institutions play vital role in settlement and enforcement of international agreements of cooperation. The study well explain the role played by institution. International institutions facilitate the excess of international trade and with the help of these institutes enforcement of international trade agreements are possible.

With introduction of comparative cost trade theory nations specialize in production of goods which they can produce with relatively low cost but this specialization can be alter by improving institutions of country as in study (Arshavskiy et al., 2019) Explore impact made by institutions and human capital on comparative cost between service exports and goods exports. Using data between 2000 and 2018 time period they found that with decline in institutional quality there is increase in comparative cost in ICT services exports as compare to ICT goods exports. Study explain that exports of complex goods more depend on provision of efficient institutions as compare to exports of complex service In another study (Doyle & Zarzoso, 2011) In this study investigate the relationship of trade openness and productivity of country. For this study used panel data of countries for 20 years from 1980 to 2000 and found that with increment in trade openness there is significant increase in productivity of country. The study found that country with relatively weaker institutional standers benefit more from international trade openness.

2.5 Concluding Remarks:

Foreign direct investment in any country is extremely inevitable because it directly affects countries production sector because foreign investors while establishing business setup in host countries bring new and advance technology with them and advance skills for their labor and employees. FDI in any country best perform when business environment of any country will be suitable for them when institutions of country that are possibly related with foreign investors will be efficient. When institution quality (like political stability, corruption control and rule of law etc) will be up to world standers then FDI help in enhancement of production of country and as result export performance of country will enhance. No literature has yet discuss the role of institutions in FDI and export relationship although there separate impact is explained. Present study will discuss combine impact of FDI and institutions on exports of Pakistan.

Chapter no 3

Data and Methodology

3.1 Introduction

In this section of chapter we discuss the framework of study (both theoretically and empirically) in which we will discuss the determinant of both foreign direct investment and export performance by introducing institutions [2] variable in Pakistan. The main objective behind this study is to check the Importance of institutions while checking impact made by FDI on export performance. Multinational enterprises all around the world invest in countries other than their home countries to earn benefits and higher profits. Their decision about the investing in other country affect with greater deal by institutional quality. Institutional quality is key determinant in both FDI and export of any country. The evidence related the importance of institutions in attracting FDI are (Aziz, 2017) and (Seyoum. 2014) and as for expending exports are checked by (Wu et al. 2014) and (Soderlund & Tingvall, 2014). Apart from institutions there are other variable that act as determinant for FDI and exports. There are many factors that determine the profit of foreign firms. Economic factors that affect profits of MNC's in host countries are policies of trade and investment, inflation rate, external debt and physical infrastructure (Majeed & Ahmad, 2007)

3.2 Empirical Framework:

Past studies check impact of FDI and Export performance. Like (Selimi et al, (2016) check relation FDI and export performance by using least square dummy variable regression technique

[2] Institutions variable is index of five variables which are control of corruption, Government Stability, Law and Order, Bureaucracy Quality and Democratic accountability.

(LSDV) and panel regression estimation. (Ibrahimova, 2010) (AbuAl-Foul & Soliman, 2008) Use fixed effect estimation for checking effect of FDI stock on manufacturing and merchandise export and found positive effect. (Majeed & Ahmad, 2007) Uses three stage least square method in fixed effect and random effect model to find out impact of FDI on exports of developing countries. This study also found positive impact on exports. Same as FDI and export performance different researchers check the impact of institutional quality on export performance (Cezar & Escobar, 2012) use two stage gravity model to find out relation between institutional distance and FDI and finding was institutional distance and both FDI stock and FDI flow is negative. Institutional quality also has greater impact on export performance as it is important determinant of exports. (LiPuma et al., 2013) Use Heckman selection model and probit model because of involvement of dummy variable (in firm ownership). Present study aims to find the impact of foreign direct investment and institutional quality on export performance of Pakistan for this purpose Auto regressive and distributed lag (ARDL) model will be used.

3.3 Theoretical Framework

Comparative cost theory of international trade proposed by David Ricardo advanced the concept of specialization in international trade and pointed that countries specialize in the good which it can produced in lower cost. In 1930 a Japanese scholars Kaname Akamatsu present the theory of flying geese model. According to this theory countries trade start in three steps in 1st step country start importing foreign goods then in 2nd step country start producing import substitute inside the country using foreign investment and in 3rd step country export the excessive production (Kasahara, 2004). Flying geese model best explain the relationship between foreign direct investment and export of home country. Foreign investors in order to reduce cost of production bring investment in countries with relatively low labor cost. Foreign investors bring advance

technology and skills of production which result in production of host country and exports (Sultan, 2013). Foreign direct investment in the form of multinational enterprises increase exports of host countries by taking advantage of cheaper labor and their productive prices and bring production of developing country in world standards, it also help to remove foreign exchange currency issues faced by host countries against developed nation (Ridal, 1991) and (L, 1993). Flying geese paradigm stress on division of labor. The major factor that involve in production and exports in both comparative cost and flying geese theories is cost of production. In host country FDI increase production by creating new work placing and enhancing work force of host country and by their advance foreign technology and higher competition level and increase exports because of their well established reputation and good will in international market as mention by (Ibrahimova. 2010). Institutional quality play vital role in facilitating FDI in order to enhance exports of host countries as mention by (Aziz, 2017). As efficient institutes reduce transaction cost, ensure and protect property rights, enforce law and order and these factors have great impact in providing suitable conditions and favorable atmosphere for foreign investors as mentioned by (Dunning. 1973) and (Well et al. 2010). Together with attracting foreign investment institutional quality help host country to increase its exports. Institutional quality help expending exports of country by increasing productivity of FDI on exporting industries by giving tax reliefs, providing proper law and order situations etc (Joseph et al. 2011). Flying Geese paradigm works in three steps involving Imports of goods then producing in home country and exporting of expended products. In second stage of FG model when country try to create import substitution foreign investors steps in the country with their investment and they expend the production of host country and in third stage enhance exports of country. (Ozawa, 2016) When foreign investors bring investment in host country then there ability to enhance production and exports of country depends on institutional

atmosphere of country. If host country provide suitable business conditions and sense of security to investors regarding their investment only that way foreign investors feel beneficial to start production in host country.

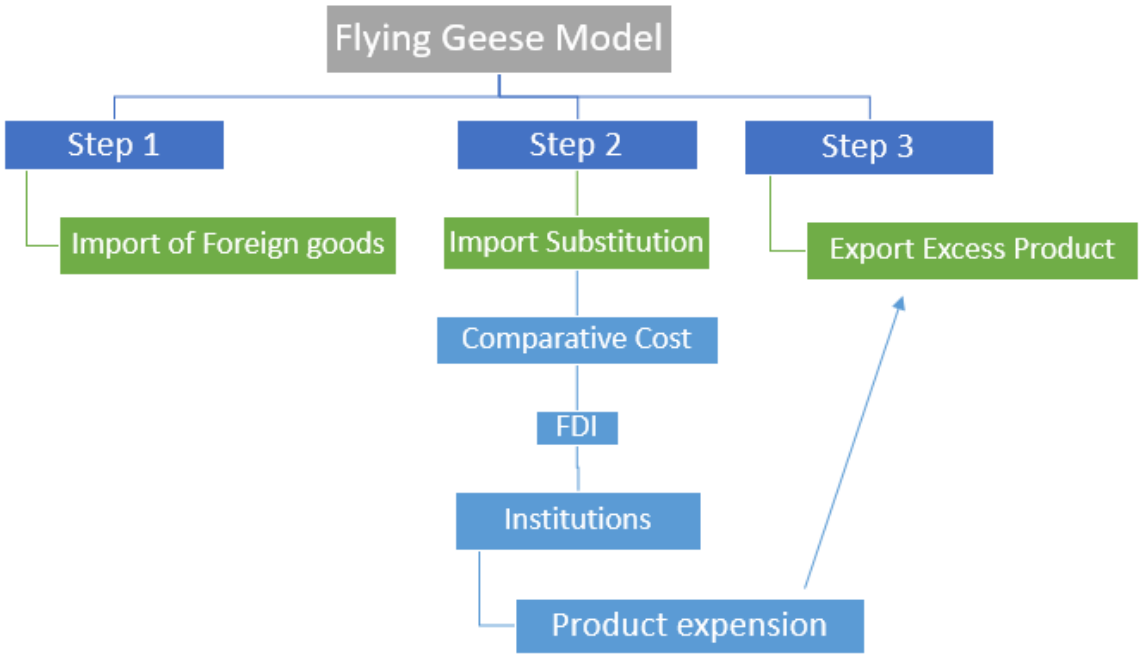

Fig 3.1: Flowchart of Flying Geese Model

In 1st step of above flowchart flying geese model of multinational enterprises and comparative cost theory it is shown that at first people start using foreign imported goods and create trend of using imported goods and in 2nd step of flowchart import substitutions are create which is made in lower cost for this purpose foreign investor bring their investment in host country and country specialize in good which it can produce in lower cost. Here model is extended by adding institutions as performance of FDI in expanding production is heavily depend on institutional

atmosphere that is available to these foreign investors which result in increasing of products. In 3rd step excess good made inside country is exported to other countries.

3.4 Econometric Model of Study

Final Model now became:

$$Exp_t = \alpha_0 + \beta_1 FDI_t + \beta_2 Inst_t + \beta_3 GDP_t + \beta 4 RER_t + \beta_5 NSAV_t + \beta_6 IVA_t + \beta_7 ITR_t + \mu_t \quad (3.1)$$

Here α_0 is intercept (β_1,β_2,β_3,β_4,β_5, β_6,) are parameters and (μ) is error term. *Exp* stand for export performance, *FDI* stand for foreign direct investment and *Inst* stand for institutions[3], *GDP* stand for Gross domestic production which is used as level of production, *RER* stand for real effective exchange rate, *NSAV* stand for net national saving, *IVA* stand for industrial value addition and *ITR* is interactive term of FDI and institutions. Here 't' is time period of study.

3.5 Variables Description of Model

***Exports*:**

Exports of Pakistan will be used as dependent variable. Since with increment of international trade every country prefers balance trade relation with their partner country. In order to have balance or surplus trade countries often tries to adopt export expansion policies. Every country tries to enhance their exports at their maximum capacity because of globalization and expansion of international trade home countries can utilize their excess production by exporting it to

[3] Institutions variable is index of five variables which are control of corruption, Government Stability, Law and Order, Bureaucracy Quality and Democratic accountability.

international market. In current study we will use exports of goods and services in log and data will be USA dollars.

Foreign Direct Investment:

Foreign direct investment is used as independent variable. Foreign direct investment especially in exporting industries have a great impact on exports. The rationale behind using FDI (net inflow) as determinant of exports is that it has direct role to play in expansion of product with in country. FDI inflow in country enhance inevitable capital for production and also bring advance technology and production knowledge which is necessary for expending production capacity and exports from host country as mentioned in studies like (Jawaid et al, 2016), **(**Selimi et al., 2016) and (Goswami & Saika, 2012) and many other studies provided evidence for FDI as a determinant of exports of host countries. Expected relationship between FDI and exports is positive.

Institutions:

Institutions will be used as explanatory variable for export performance. This variable is index of six variables which are control of corruption, effective government, rule of law, stable political setup, regulatory quality and voice & accountability. Number of past studies uses these indicators to represent institutional quality as evidence some studies are (Sabir et al., 2019), (Kurul & Yalta, 2017), (Masron & Abdullah, 2010), (Quere et al., 2005) and (Daude & Stein, 2004). In this study institutions are used as performance booster for FDI in term of expanding exports because Institutions work as facilitator factors for foreign direct investment. Index value of variable institutions will range between 0 and 10. The data is taken in difference form with respect to the time.

Other Determinants of Exports:

With increment of international trade every country prefers balance trade relation with their partner country. In order to have balance or surplus trade countries often tries to adopt export expansion policies. Exports of any country also based on certain factors which are as follows.

Level of production:

Production level of country directly affect level of exports as more the production is more will be exports of country. Gross domestic production (GDP) is used as indicator for level of production. Expected relationship of GDP and exports is expected positive. The data of GDP for Pakistan is taken in log form in US dollars.

Exchange Rate:

Exchange rate also have great importance in exports as when currency of any country is depreciated its exports become cheap and demand of this cheap exports increase. So expected relation of exchange rate with exports is negative. Real effective exchange rate is sued in this study.

Gross National Savings:

Saving of any country increase domestic investment as people save from their incomes in order to invest and increase their income. This investment then increase production volume and create opportunity for their country to increase exports. So expected relationship between saving and exports is positive. Net National Saving is used as explanatory variable.

Industrial Value Addition:

Industrial value addition means increase in value when raw production of country turn into final product with the help of industries. When any country exports raw material it get very low

return on its product but when this raw product turn into the industrial produced good its value increase by many time. More over demand of industrially produced good is more than raw material. Higher the demand higher will be the volume of exports so expected relationship between industrial value addition and exports is positive.

3.6 Data and Source of data of Study:

In this study time series data of foreign direct investment net inflow. The data of FDI is measure in annual total volume in current US dollars. Exports variable data is total value of goods and services provided by Pakistan to the rest of the world in constant local currency. The data of real effective exchange rate index is measured in growth rate holding value of 2010 as constant. The data of GDP variable is measured in total value of annual production of goods and service in constant local currency. Gross national saving data represent total gross saving in constant local currency and the industrial value addition variable represent total increase in value of goods by industrial sector in local constant currency. The time period of study will be from 1984 to 2019.

3.6.1 Institutional Quality Data:

The source of this data is International Country Risk Guide (ICRG) website. Whereas for institutions variable index the data of control of corruption, government stability, law and order, bureaucracy quality and democratic accountability in country will be used to make index by using principal component analysis method. Principal component analysis (PCA) is method of reducing different dimensions of any data set, increasing predicting power of data and minimizing the risk of information loss (Cadima & Jolliffe, 2016) For making index we used Stata and by applying PCA we witness 85% weight of Government stability, corruption and law and order whereas rest of portion is provided by bureaucracy quality and democratic accountability. The data of these

variables is available in International Country Risk Guide. The time period of study will be from 1984 to 2019.

3.7 Estimation Technique for Study

In order to check impact of institutional quality and foreign direct investment on export performance with including few control variables like GDP, Industrial value addition, net national saving and real effective exchange rate using time series data. In order to do this we will check descriptive statistics of data.

3.7.1 Descriptive Statistics

Descriptive analysis explain the basic feature of data. It explain the nature of data. It categorize and describe basic information related data (McCue, 2007). One benefit of checking descriptive analysis that in this way we can simplify and manage large data by in organize summaries (Sharma, 2019). In descriptive analysis we find mean or average, median of series, stander deviation, minimum and maximum value of FDI, exports, insititutions, industrial value addition, GDP, gross saving and real effective exchange rate, skewness of distribution and also result of Jarque-Bera test of normality of data. All of these measure can give better understanding of nature of data of model we are about to deal with. Since data of all above mention variables is time series so before going for model building we check stationarity of data and to check stationarity we will use unit root method. The propose of checking stationarity in time series data is that all statistical properties of stationary series is constant over time and stationary series as compare to non-stationary is easy to predict as one can predict about future behavior of data by simply observing past behavior of data (Nau, n.d.).

3.7.2 Unit Root Test

To check whether data is stationary or not we will use unit root test for our variable of model.. Unit root method of stationarity is most commonly used. In unit root test different tests can be applied to check data stationarity like Augmented DIcky-Fuller Test, Philips-Perron test, KPSS test and Zivot –Andrews test etc but this study will use most commonly used technique which is Augmented Dicky-Fuller (ADF) test. To check unit root for our variables we will first observe trend and drift in data by checking graph. For this purpose statistical software like (Oxmatrics and EViews will be used). Trend in data shows specific behavior and movement of data while drift in data occurs when predictive power of variable in model change with time in unexpected ways. Drift in data cause problem because it reduce the accuracy of forecasting power. Since in model of this study all variables have nonzero mean it means that while selecting unit root for every variable separately we will add constant term. The regression model of unit root for every variable is:

(Without trend and by adding constant term)

$$\Delta xt = \alpha + \beta xt - 1 + \mu t \quad (3.2)$$

And if in any variable of data has trend then regression model will be:

(*With trend and constant term*)

$$\Delta xt = \alpha + \beta xt - 1 + €t + \mathrm{x}t \quad (3.3)$$

Here x is the variable in which unit root is tested, β coefficient of variable, α is intercept term μ is error term and € is trend in data. Here t is current time and t-1 is previous year.

In unit root data is first check for stationarity on level. Level means unchanged form of data after downloading from any source. If calculated value of adf statistics by using any software like EViews or Ox-matrics came less than 5% or 1% level of significance then we do not reject our null hypothesis of unit root which is that "The data has unit root". But if in any case at level null hypothesis is rejected then we check stationarity on 1st difference for that variable. In first difference we again compare adf value with 1% or 5% level of significance. If data is stationary at level then we will say series is I(0) and if data is stationary at 1st difference we will say that series is I(1). If all variables of model are I(0) then we can proceed for Johanson co-integration testing but if its mixture of I(1) and I(0) then ARDL bound test co-integration is most suitable technique. If there are at least two I(1) series then we can apply co-integration.

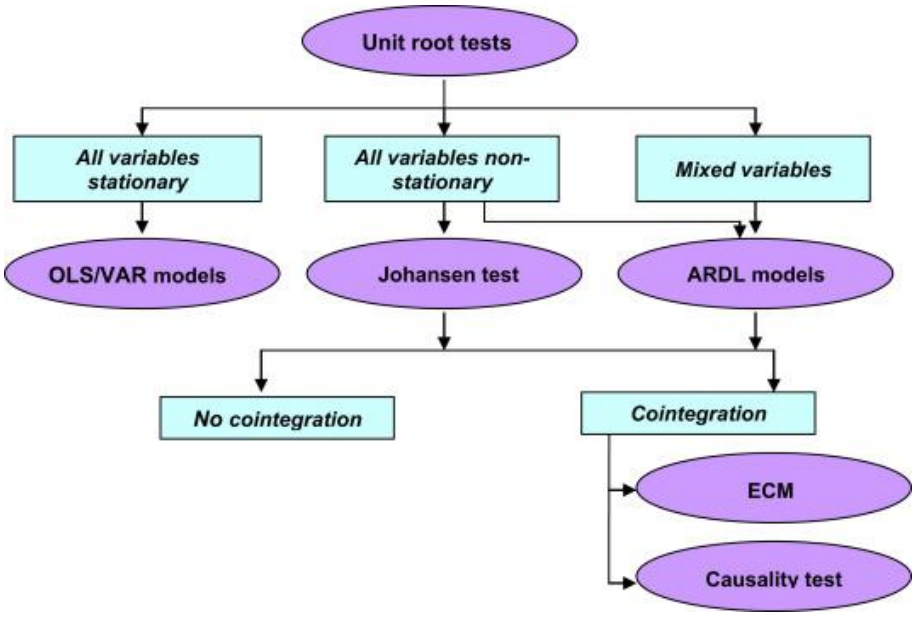

Fig 3.2: Method Selection for Time Series Data after checking Unit root

Figure 3.2 represents the method selection procedure for time series data. When we are done taking unit root for every variable if all variable came I(0) or data is stationary at level then we shell use Ordinary least Square or Vector Autoregressive (VAR) model. If all variables of model

are stationary at 1st difference or I(1) then we can go for Johansen co-integration test. We can also use ARDL model if all variables are I(1). If there are mixture of both I(0) and I(1) variables then we will use Auto regressive Distributive Lag (ARDL) method. In both Johansen test and ARDL model we check whether or not there is co-integration in the model. In case of co-integration we check Error correction method apply causality test depending on nature of relationship between dependent and independent variables.

3.7.3 Optimal Lag of Model

Selection of optimal lag length in model is very important for making correct functional form of our model because selecting optimal lag reduce risk of residual correlation of model. Especially in ARDL and vector auto regressive (VAR) model determination of optimal lag and checking parameter stability is important (Yang, 2002). Some popular and commonly used critarian to check optimal lag are Akaike information criterion (1969), Hannan and Quinn information criterion (1979) and Schwarz information criterion (1978).

3.7.4 ARDL Bounds Testing

After selecting optimal lag we will proceed for Bound test to check whether there exist long run relationship between exports and FDI, GDP, IVA and saving variables of our model or not. Bound test is based on F- statistics and it is tested against null hypothesis that there is no long run relationship between exports and FDI, institutions and other explanatory variables. In bound test there are two sets of critical values for each level of significance.. In order to check long run relationship F- statistics value is compared with both upper and lower bounds at 1%, 5% or 10% level of significance. If F statistics value is higher than upper bound at any level of significance then it means there is co-integration exist between variables of model but if computed F test value is lower than lower critical bound values in any level of significance then we will conclude that

there exist no long run relationship between variables. If F statistics falls between upper and lower critical bound values than these results will be inconclusive and more information regarding integration order for underlying variables of model is require before making any final conclusion (Pesaran et al., 2001). One important thing to note here is that one should compare F statistics with both upper and lower critical bounds in same level of significance. Comparing F test value with different level of significant may result in wrong judgment of long run relationship.

If bounds test show presence of co integration in data of our model then we will proceed and check shot run and long run relationships of data by using ARDL model. Short run ARDL model of this study will become

$$\Delta \ln Exp = \alpha + \beta_1 \Delta lnFDI_t + \beta_2 \Delta DINS_t + \beta_3 \Delta lnGDP_t + \beta_4 \Delta lnGSAv_t + \beta_5 \Delta lnRER_t + \beta_6 \Delta lnIVA_t + \beta_7 \Delta ITR_t + \beta_8 \Delta lnFDI_{t-1} + \beta_9 \Delta DINS_{t-1} + \beta_{10} \Delta lnGDP_{t-1} + \beta_{11} \Delta lnGSAv_{t-1} + \beta_{12} \Delta lnRER_{t-1} + \beta_{13} \Delta lnIVA_{t-1} + \beta_{14} \Delta lnEXP_{t-1} + \beta_{15} \Delta ITR_{t-1} + \mu t - 1 + \mu \quad (4)$$

Here

β1, β2, β3……. β13 = coefficient of variables

α = Intercept term

Δ = Change

EXP = Exports

FDI = Foreign Direct Investment

GDP = Gross Domestic Production

RER = Real Effective Exchange Rate

GSAV = Gross National Saving

IVA = Industrial Value Addition

INS = Institutions Quality

ITR = Interative term of FDI and Institution quality

t = Current time

t-1 = Previous time period

ln = Natural Log

D = difference of variable

μ_{t-1} = This equation of long run or ECM equation..

μ = Error term

Whereas for the Long run relationship ARDL equation is

$$\ln EXP_t = \alpha + \beta_1 \ln FDI_{t-1} + \beta_2 DINS_{t-1} + \beta_3 \ln GDP_{t-1} + \beta_4 \ln NSAV_{t-1} + \beta_5 \ln RER_{t-1} + \beta_6 \ln IVA_{t-1} + \beta_7 \ln EXP_{t-1} + \beta_8 \ln ITR_{t-1} + \mu \quad (5)$$

Here

$\beta 1, \beta 2, \beta 3 \ldots\ldots \beta 13$ = coefficient of variables

α = Intercept term

EXP = Exports

FDI = Foreign Direct Investment

GDP = Gross Domestic Production

RER = Real Effective Exchange Rate

GSAV = Gross National Saving

IVA = Industrial Value Addition

INS = Institutions Quality

ITR = Interative term of FDI and Institution quality

t = Current time

t-1 = Previous time period

ln = Natural Log

D = difference of variable

μ = Error term

In above model we use lag of 1 year and this model will be run using statistical software and estimates will show the strength and direction of long run and short run relationship of variables with dependent variable “exports”.

3.7.5 Error Correction Model

In short run estimates of our model we derive error correction model. ECM is short run dynamics which restore variables to its long term relationship from its disequilibrium position. In other words it shows the speed of adjustment with which a variable return toward long run relationship. In order to have correct Error Correct Term ECT must lies between 0 and -2 and its

probability value must be significance as mention by (Samargandi et.,al 2015). ECT restore variable to long run relationship without changing long run information of model (Shrestha & Bhatta, 2018).

In our model we can express relationship between exports and independent variables (like FDI institutions, GDP, saving, IVA and real effactive exchange rate) in the presence of error correction model is express as following equation:

$$dY_t = \alpha_t + \beta_1 dX_t - \pi u\hat{}t{-}1 + \mu_t \tag{3.6}$$

Where *Y* is dependent variable which is Exports in our model β is coefficient and X represent all independent variable, π represent adjustment effect.

3.7.6 Diagnostic Tests

In order to ensure correct functional form it's always wise and necessary to check diagnostic test. Following are some important diagnostic tests.

3.7.6.1 Serial Correlation Test

Serial correlation (Auto correlation) error occurs in time series data when error term of different time period is correlated with each other. For example If error term in year 2001 is correlated with its lag year which is 2000 value then we can say this is autocorrelation problem. The most important test to detect auto correlation problem is Durban Watson test. However we also use Breusch-Godfrey LM Test for Serial Correlation to detect problem of auto correlation/ serial correlation problem. Null hypothesis for serial correlation problem is that there is no problem of serial correlation. If Breusch Godfrey test value is significant then we will reject this null hypothesis and this will mean that the model has problem of serial correlation and vice versa.

3.7.6.2 Heteroskedasticity Test

We will check heteroskedasticity problem for our model. Heteroskedasticity problem in time series data arises when error term of model is not constant. Its opposite is homosekedasticity which means that error term is constant and it is the assumption of linear regression. The null hypothesis for heteroskedasticity problem is that there is no problem of heteroskedasticity in model. Breusch-Pagan-Godfrey test is used to detect hetero problem in data. If its value is statistically significant at 5% level of significance then we will reject null hypothesis and it means there is problem of heteroskedasticity in data.

3.7.6.3 Normality Test

Normality test is used to check whether data is normally distributed or not. From normally distribution we means data have zero mean and constant variance. In this study Jarque-Bera test is used to check normality of data. The null hypothesis for normality test is that the data is normal. If probability value of test is statistically significant at 1%, 5% or 10% level of significance then we can reject null hypothesis and conclude that the data is not normally distributed.

3.7.6.4 Structural Stability Test:

At the end we will check structural stability of our model using CUSUM and CUSUMSQ tests. Cumulative sum control charts test presented by E.S Page is normally used to detect change in data. In CUSUM and CUSUMSQ graphs we have critical bounds lines for both upper and lower bounds at 5% level of significance and if plotted line remain in between these critical bounds in both CUSUM test graph then we again check data for Cumulative sum control charts of sum of square and if its plotted graph remain in between critical bound line then we conclude that the model is statistically stable and vice versa.

Chapter No 4

Result and Discussion

4.1 Results

Before moving for statistical estimation of model study first discuss about detail statistical analysis of data used for this study. Time series data for export (dependent variable), foreign direct investment, gross domestic production, institutional quality index, net national saving, real effective exchange rate and industrial value addition is used for country Pakistan. Complete data set is of 36 years between 1984 and 2019. First of all detail descriptive statistics are given in table 4.1

Table 4. 1: Descriptive Statistics of model

	LEXPORTS	LFDI	DINS	LIVA	LRER	LSAV	LGDP	LITR
Mean	23.29	20.41	0.031	23.67	4.75	23.77	25.27	21.60
Median	23.14	20.46	0.000	23.38	4.72	23.64	25.11	21.87
Maximum	24.17	22.44	1.06	24.75	5.36	24.88	26.47	23.74
Minimum	21.91	17.83	-1.14	22.56	4.56	22.74	24.16	18.68
Std. Dev.	0.70	1.16	0.46	0.72	0.19	0.71	0.76	1.35
Skewness	-0.27	-0.18	0.02	0.12	1.68	0.23	0.13	-0.41
Kurtosis	1.90	2.26	3.28	1.63	5.67	1.54	0.16	2.14
Jarque-Bera	2.23	1.035	0.122	2.87	27.77	3.49	2.92	2.13
Probability	0.3277	0.5958	0.9407	0.2377	0.000001	0.1741	0.2320	0.34460

Descriptive statistics give complete information about data of all variables that will be used in model It include mean, median, maximum and minimum values, stander deviation, skewness and Jarque-Bera test of normality and its probability value. Table shows value of exports having mean

23.29 whereas its median 23.14 and its maximum value is 24.17 and minimum value is 21.91. Stander deviation of export series is 0.7, value of Jarque Bera test of normality for export is 2.23 which is insignificant so data of export is normal because its probability value is 0.32 which is greater than 5% level of significance. FDI data have mean value 20.41 whereas its median is 20.46. FDI series has maximum value 22.44 and its minimum value is 17.83 its stander deviation is 1.16 and Jarque Bera normality test value of FDI series is 1.03 and it is statistically insignificant so FDI data is normal. Institution data has mean value 0.031 and its median is 0.00 having maximum value 1.06 and minimum value -1.14. its stander deviation is 0.46 and Jarque Bera normality test value of INS data is 0.12 and it is insignificant at 5% level of significance so data of INS is also normal. Next variable is industrial value addition (IVA) it has mean value 23.67 and median is 23.68 and its maximum value is 24.75 and minimum value is 22.56. This series has stander deviation value 0.72 and value of Jarque Bera normality test is 2.87 and this series is also statistically insignificant so data of IVA is normal. Real effective exchange rate (RER) has mean value 4.75 and its median is 4.72, Maximum value of RER is 5.36 whereas its minimum value is 4.56. Stander deviation of RER series is 0.19 and value of Jarque Bera normality test is 27.77 which is statistically insignificant at 5% level of significance so RER series is not normal. Gross national saving (GSAV) series has mean value 23.77 and median 23.64 its maximum value is 24.88 and minimum value is 22.74. Its stander deviation value is 0.71 and value of Jarque Bera normality test is 3.49 which is statistically significant at 5% level of insignificance so NSAV series is normal. Last series is GDP mean value of GDP is 25.27 and median 25.11 and maximum value is 26.47 and minimum value of GDP is 24.16 and stander deviation is 0.76 and Jarque-Bera normality test result is 2.92 which is statistically insignificant at 5% level of insignificance so GDP series is also normal.

After checking descriptive statistics we will check the stationary of all variable of model because in order to avoid spurious result we may find whether data is having some kind of trend and drift or not and to deal with data accordingly. Even selection of testing procedure for long run relationship between dependent and independent based on these results. Most important way to check the stationary in data is by unit root testing and most commonly used technique to check unit root is Augmented Dickey-Fuller test. Table 4.2 shows Augmented Dickey-Fuller test results.

Table 4. 2: Unit Root Test Results

S. No	Variables	Test Statistics (At 5% level of significance)	Augmented Dickey-Fuller test statistic (At Level)	Augmented Dickey-Fuller test statistic (At 1st Difference)
01	EXPORTS	-2.96*	0.2120	0.0002**
02	FDI	-1.95*	0.0181*	--
03	INS	-2.951*	0.0000**	--
04	GDP	-2.963*	0.1883	0.0141*
05	GSAV	-2.951*	0.1787	0.0000**
06	RER	-2.94*	0.0003**	--
07	IVA	-2.951*	0.0535	0.0019**
08	ITR	-2.94	0.2490	0.0000**

** and * show significance level at 1% and 5% levels respectively

Table 4.2 indicates unit root result of all variable of model by applying Augmented Dicky-Fuller test it indicates that Institutions (INS), foreign direct investment (FDI) and real effective exchange rate (RER) are significant at level it mean both these variables are unit root in level.

Whereas exports, Gross saving (GSAV), Industrial value addition (IVA) and gross domestic production (GDP) and interactive term of FDI and institutions (ITR) are insignificant at level it mean these variables are not stationary at level so in order to make them stationary we will check their unit root in 1st difference and at 1st difference these variable become stationary. Since in this model three variables are I(0) and four are I(1). When model contain mixture of I(0) and I variables then we apply bound test co-integration.

Before applying bound test we first check optimum lags in model because it is important to use optimal lag in order to make correct functional form as (Lutkepohl, 1993) mentioned that if we select lag length higher then optimal lag then it will increase mean square forecast of data and selecting lag length less than optimal result in generate auto-correlation problem. (S & PA, 1993) Mention in their study that variance decomposition and impulse response function will be inconsistent when selected lag length is different from optimum lag of model. (Castro et al. 2007) Also witness the importance of selecting correct lag length while calculating VAR model. Table 4.3 shows the optimum lag length of this study.

Table 4. 3: Optimum Lag Results

Lag	LogL	LR	FPE	AIC	SC	HQ
0	118.08	NA	1.11	-7.66	-7.33	-7.56
1	313.79	283.44	4.97	-17.78	-15.14	-16.95
2	373.99	58.12	4.49	-18.55	-13.60	-17.00
3	504.84	63.17	1.95	-24.19	-16.93	-21.92
4	4140.33	0.000000	NA	-271.54	-261.97*	-268.54*

In above different criterions are shown in which LR[4] sequential modified LR test statistics is, AIC is Akaike information criterion, FPE is final prediction error, Hannan-Quinn information criterion and SIC is Schwarz information criterion. But most commonly used criterion is Akaike information criterion (AIC) and Schwarz information criterion (SIC). In our model according to both AIC and SIC criterion optimum lag is 4^{th}.

After checking for optimum lag we can check bound test now which will test if there is long run relation between variables are not. Bound test based on F statistics using null hypothesis as there is no co-integration. In Bound test approach we compare F statistics value with both upper and lower bound values at 1%, 5% and 10% level of significance with null hypothesis as There is no co-integration if F-statistics value fall below lower bound then we accept there is no correlation but if F statistics fall above upper bound value in same significance level then we will reject null hypothesis of having no co-integration and if calculated value fall in between upper and lower bound value then the model will be inconclusive (Belloumi, 2010). Table 4.4 shows result of bound test for this study.

Table 4. 4: Bound Test Co-integration statistics

Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	8.59	10%	2.08	3
K	5	5%	2.39	3.38
		2.5%	2.7	3.73
		1%	3.06	4.15

[4] AIC = Akaike information criterion, FPE = Final Prediction Error, HQ = Hannan-Quinn information criterion, SIC = Schwarz information criterion

Table 4.4 shows bound co-integration value for model of this study. F statistics is 8.59 we will compare this value with upper and lower bounds at 1% and 5%. F statistics value of our model is higher than upper bound at all significance level so we will reject null hypothesis that there is no co integration. So in our model long run relationship exist. In other words variables of study are correlated with dependent variable. Whereas K shows number of equations that are tested by using ordinary least square.

Since co integration exist in our model so we can check long run and short relationship of variables and will check what kind of relationship exist between dependent and independent variables of model[5]. Table 4.5 shows short run relationship of model

Table 4. 5: Short run results of models

Variable	Coefficient	Prob.
C	4.91	0.0002*
LEXP(-1)*	-0.44	0.0000*
LFDI**	0.12	0.0328*
DINS**	0.02	0.0061*
LRER**	-0.42	0.0031*
LSAV**	0.26	0.0004*
LITR**	0.062	0.0349*
ECT	-0.49	0.0000*

* shows significance at 1%,5% and 10% level of significance.

Table 4.7 shows short run relationship between dependent and independent variable of our model. The result shows that Foreign Investment (LFDI) has significant and positive relationship

[5] First study run estimation of model by including IVA and GDP but the results are insignificant so we run model again by simply removing these two variables. Result of estimation is added in Appendix A. See Appendix A

at 5% significance level with exports. Result shows that in short run if FDI increase by 1 percent then this will cause 0.12 percent increase in exports, Institutions (INS) result shows Positive and significant relationship of difference of institutional quality between two year and exports at 1% level of significance. The result shows that if difference in institutional quality between two year raise by 1 unit then it will result in 0.02 percent increase in exports. Interactive term of FDI and institutions (ITR) shows positive and significant result which means that on a given level if institution quality index increase by 1 unit it will increase impact of FDI on exports by 0.177 percent (0.06+0.117=0.177). Gross saving (GSAV) result shows that it is positively and significantly related with exports at 1% level of significance. Result employs that if there is 1 percent increase in gross national saving it will result in 0.26 percent increase in exports. Real effective exchange rate result shows that RER variable is in negative and significant relationship at 1% level of significance with exports. The result suggest that if we increase 1 percent in real effective exchange rate this will result in 0.42 percent decline in exports. Whereas 1st difference result of Institutions show significance relationship with exports. Error correction term (ECT) shows speed of adjustment. The pre-request condition for ECM is that its coefficient value must be negative and it must lies between 0 to -2 and it must be significant (Fidrmuc et al., 2015) and (Smyth & Narayan, 2006). The coefficient value of Error correction term (ECT) of this model is -0.49 and it is significant at 1% level of significance. Such high significance again confirm the existence of long run relationship in variables. The speed of adjustment from disequilibrium of last year to equilibrium in current year is about 49%.

After short run result we test long run relationship table 4.9 shows long run estimates of model.

Table 4. 6: Long run Relationship Estimates

Using ARDL (1, 1, 0, 0, 0)

Dependent Variable is lnexports

Variable	Coefficient	Prob
LFDI	0.26	0.0187
LGSAV	0.60	0.0000
LRER	-0.96	0.0005
DINS	0.04	0.0087
LITR	0.14	0.0251
C	11.19	0.0000

Table 4.9 shows long run relationship estimates in this model FDI, Ins, GSAV and RER are used whereas GDP and IVA is excluded from the model because of insignificance. The results shows that there exist positive and significant relationship at 1% level of significance between FDI and exports. Coefficient of FDI shows that if there is 1 percent increase in foreign direct investment inflow this will cause 0.26 percent increase in export of Pakistan. Institutions variable (INS) shows positive and significant relationship of difference of institutional quality between two years with exports in long run. Coefficients suggest that if difference in Institution quality increase by 1 unit this will result in 0.04 percent increase in exports. Interactive term of FDI and institution also shows positive and significant relationship which means that if on a given level if institution quality is higher than it will increase impact of FDI on export performance by 0.18 percent (0.14+0.04=0.18). Gross national saving however shows positive and significant relationship at 1% significance level with exports. It employs that if there is 1 percent increase in national saving in long run it will cause 0.60 percent increase in exports performance of Pakistan. Real effective exchange rate (RER) shows negative and significant relationship at 1% level of significance with

exports. Which employs that if real effective exchange rate of country increase by 1 percent then it will result in decline of 0.96 percent in exports.

Now study will check whether there is problem of multi-collinearity problem existing or not for this purpose study will use varience inflation factor to check multi- collinearity issue. At first in the presence of GDP and IVA variables value of VIF[6] value is more than 10 indicating the problem of multicollinearity issue but after removing these variables from model. Model is again checked for possible multi-collinearity Following are results of VIF test.

Table 4.7: Varience Inflation Factor estimates of Multi-collinearity

Variable	VIF	1/VIF
rer	1.44	0.693738
fdi	1.38	0.725586
sav	1.24	0.840908
ins	1.24	0.806166

Result shows that after exclusion of GDP and IVA all values are less than 10 representing no severe multi collinearity issue.

Result of ARDL estimation shows that there exist both short and long run relationship between Institutions, FDI and Exports for Pakistan. Result of this study are also inclined with past studies like ((Stinnett, 2005), (Candau & Gbandi, 2019), (Tingvall & Derlund. 2013)**, (**Hochman et al., 2011)**,** (Bankole et al., 2015)**, (**Ahmad, 2010), (Mullen & Williams, 2011), (Fukunishi, 2010), (Zhang. 2016) and many other studies also shows same results.

[6] VIF = Variance inflation factor

After testing for short run and long run relationships we test whether there exist any problem in model. Table 4.10 represent Diagnostic tests results

Table 4. 7: The Results of Diagnostic Test

Diagnostic Tests	F-Statistics	p- value
A: Serial Correlation	0.05	0.97
B: Heteroskedasticity Test	0.21	0.96

A: Breusch-Godfrey Serial Correlation LM Test

B: Breusch-Pagan-Godfrey

Table 4.10 shows the results of diagnostic test In serial correlation test by applying Breusch-Godfrey Serial Correlation test F statistic result is 0.0508 which statistically insignificant so we will not reject our null hypothesis which is that there is no serial correlation. So there is no problem of serial correlation. For checking Heteroskedasticity problem by applying Breusch Pagan Godfrey test F statistics result is 0.2104 which is statistically insignificant so study will accept our null hypothesis that there is no heteroskedasticity problem in model.

After checking diagnostics of model we will check stability in our ARDL model which is based on error correction using cumulative sum of recursive residual (CUSUM) and cumulative sum of square of recursive residual (CUSUMSQ) tests of stability. Following are CUSUM and CUSUMSQ graphs in Fig 4.1 and fig 4.2 since calculated plot is in between critical bond at 5 percent significance level. So we conclude that the model is structurally stable.

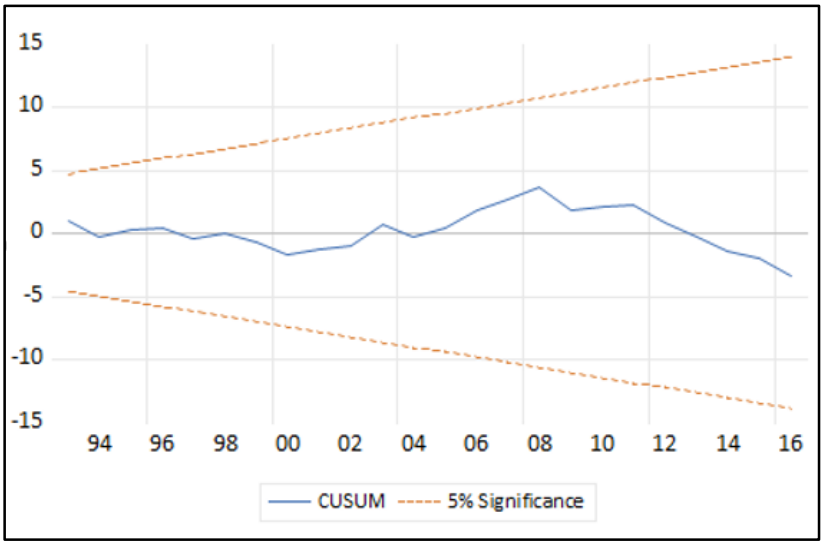

Fig 4.1: Cumulative Sum (CUSUM) test

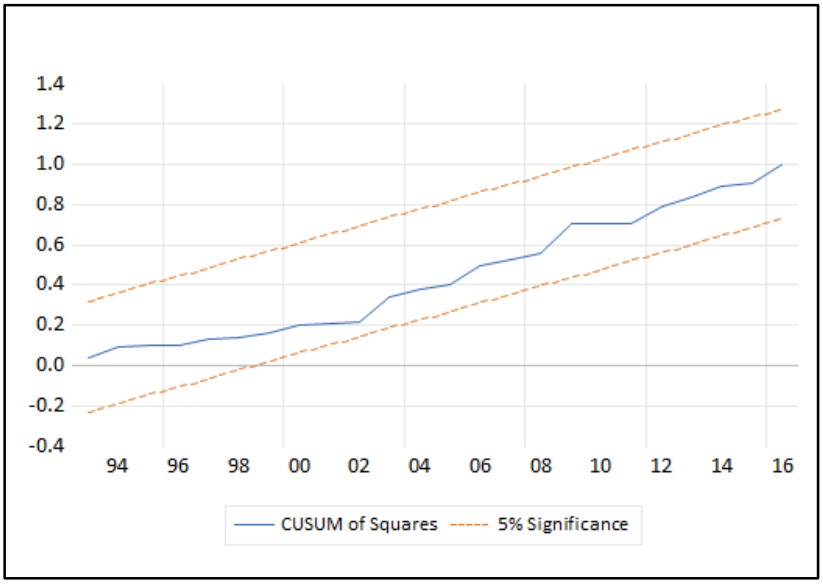

Fig 4.2: Cumulative sum of Squares (CUSUMSQ) test

Fig 1 and Fig 2 shows CUSUM and CUSUMSQ test respectively to check stability of coefficient of variables. Since in both diagram CUSUM and CUSUMSQ plot remain in between 5% critical bounds so we can accept the null hypothesis which is there is long run relationship and

stability in model. If in any case plotted line cross 5% critical bound it mean model is not stable which not the case with model of current study is. So we can conclude that model is stable as its plotted graph stay between critical bound lines at 5%. Result are inclined with studies (Thao & Hua, 2016) and (Naseer & Mangla, 2012).

4.2 Discussion:

Study test relationship of Institutions and FDI with export (Dependent variable) in the presence of few control variable like GDP, Industrial value addition, gross national saving and real effective exchange rate. All of these variable were expected to have significant relationship with exports both in short run and long run. Results of the model suggests that GDP and industrial value addition are not significantly related with exports both in short as well as in long run. So by eliminating these two variables model is again tested and found that all of dependent variables are significant with exports in both short run and long run relationship with exports. If we discuss separate impact of each variable with exports we found that foreign direct investment is significant in both short and long run. This is because for increasing production capital is required in abundance and foreign direct investment is resulting in boosting production capacity and production quality because of their advance production technology. FDI directly results in enhancement of production and this excess production is exported to rest of the world which generate foreign reserves for country. Foreign direct investment inflow generate both advance technology spillover in host country (which is Pakistan in our case) and also all important knowledge and skills of production. This technology and skills bought by multinational organization based in advanced countries bring change in production technique and production volume of country. These foreign firms and organizations often conduct on job training for its employees and also by conducting different workshops they transfer technology and knowledge in intra-industry cooperation. Which result in

overall expansion of production and exports. FDI results in not only expending volume of production but also quality of goods which increase demand of host country's product and reputation of country in international market enhance which is also key factor for export expension. Another variable of model is national saving it is also significant in both short and long run. Saving of any country promote domestic investment because peoples save from their daily spending just to invest and gain profit from their investment. This investment process result in increasing production capacity and hence increase export volume of country. Moreover private saving enable domestic producers to purchase new technology it also help domestic industries to expend production and the increase exports volume of country. Similarly another variable is real exchange rate it also shows significant relationship with exports the reason behind it is that whenever exchange rate of any country increase it make exports of any country cheap. Cheaper exports create high demand in international markets. Thus increase demand of product encourage domestic producers to produce more and increase exports.

Now let us discuss the main focus variable which is institutions[7] and it shows positive and significant relationship with exports in both short and long run for Pakistan confirming the previous literature and expected result of this study. Domestic institutions play major in all business or production activity. Better the quality of institutions in country more will foreign investors attract in investing in country because they will find their investment to be safe and fruitful in the presence of strong and better institutions. If there is good institutes like strong accountability system, proper system of law and order and most importantly stable political structure country will be able to offer foreign investors many facilities along with good business

[7] Institutions variable is index of five variable which are control of corruption, effective government, Rule of law, Stable political setup, better regulatory quality and voice & accountability in country.

environment. In the presence of good institutions all business works that require permission for government undergoes easily saving time and cost for foreign firms. If they don't have to pay heavy bribes or waist their precious resources in any public office they can produce well in low cost and with better efficiency which increase production and cheap exports for host country. If the government is stable and low and order condition around the country is better investors may find their future secure this will definitely increase their confidence. Result of interactive term of FDI and Institutions also shows positive result which mean that the combine impact of FDI and Institution is positive and in other word institution quality help improving performance of FDI in increasing exports volume of Pakistan. Previous literature on institution and exports also confirm the results of this study. Previous studies like (Stinnett, 2005), (Candau & Gbandi, 2019), (Soderlund & Tingvall, 2014)**, (**Hochman et al. 2011)**,** (Bankolea et al. 2014)**,** (Nicolini & Paccagnini, 2011), (Schonerwald et al. 2020) and (Ojeaga et al, 2014) shows positive impact of institutions on expending exports of country.

Positive relationship between FDI and exports is also confirm by past literature. Studies like (Iqbal et al, 2010), (Mullen & Williams. 2011), (Fukunishi, 2010), (Zhang. 2016), (Jawaid et al. 2016), (Salimi.et al, 2016) and (AbuAL-Foul & Soliman, 2008) shows positive and significant relationship of inward foreign direct investment.

Other control variable like national saving impact positively in boosting exports because it has direct relation with domestic investment with increase productivity in country. Also real effactive exchange rate is proved as negatively relate with exports of country. As when country depriciate its currency or when real effactive exchangerate of country decline it results in reduction of prices of exports in international market and thus increase demand for exports of Paksitan's product. Surprisengly two variables which are gross domestic product and industrial value Addition shows

insiginifcant relationships with exports. It was expected that GDP of country will positively relate with exports of the country because as valume of production increase it give better chance for country to boost its exports and same goes for IVA as domestic raw production from different sectors goes through industries it covert them in industrially produced good which has higher demand in international market as compare to raw material.

Chapter No 05

Conclusion and Policy Recommendation

5.1 Conclusion:

The present study explore relationship between foreign direct investment, institutions and exports. The objectives of the study which were to find out impact of FDI and institutions on export performance is well accomplished as shown in results in chapter 4. Study use data between 1984 and 2019 for country Pakistan and by applying ARDL Bound test approach study found that both FDI and institutions impact significantly and positively in boosting export performance of Pakistan. These result are consistent with past studies on institutions and exports and also with studies on FDI and exports. The present study added in existing literature by showing combine impact of institutions and FDI on exports of Pakistan. Results of the study shows that institutions have great importance in expending exports of Pakistan by facilitating foreign investors with suitable business environment.

Without considering institutions one cannot find exact role of FDI in expending exports. Multinational companies all around the world are always looking for the country where they can invest and earn higher profit because of their cheap labor and raw material especially in developing countries and also developing countries love to attract foreign investment inflow in their country. In order to get benefit from this foreign direct investment for both investors and host country Institutions has key role because with effective institutes foreign investors can start and conduct their business activities efficiently and with low cost which result in increasing production and exports of country which is Pakistan in our case. Results of this study shows that in future in order to increase exports of Pakistan most effective strategy is to improve institutions of country and

also to attract foreign investors to invest in Pakistan because the way production all around the world is increasing Investing in more than one country becomes trend now and in future it will keep on increasing.

This study can help government of Pakistan to recognize the importance of institution in increasing export with the help of foreign direct investment as multinational companies from all around the world took advantage of good institutional condition by investing in many industries in Pakistan but unfortunately institutions of Pakistan are not according to needs of foreign investment. In government sector there is slow process of giving permission or licenses of starting business to foreign investors. Moreover high level of corruption, lack of stability in government, absence of accountability and low bureaucratic quality is big reason of discourage of exports of Pakistan.

5.1 Policy Recommendation

The result of this study have shown the importance of FDI and institutions in export performance but present condition of institutions of Pakistan is not encouraging for international investors. Unfortunately very little efforts are made to attract foreign investors to invest in Pakistan. Moreover institutional condition also lack attention of government. Very little attention is given to improve efficiency of institutes of country by government. The present quality of institutes do not provide appropriate environment for foreign investors. Thus institutions are unable to play their desired role in improving performance of FDI in expending exports of Pakistan. Study in light of results suggest few recommendations for policy makers.

- Government of Pakistan should encourage peoples to increase their saving. More will be the saving more will be the domestic investment.

- Government should to take necessary steps to attract foreign investors to invest in Pakistan for this purpose government can offer them tax relief etc.
- In order to increase foreign investment in country government should focus on Pakistani peoples living in other countries. Government should launch a campaign for encouraging those Pakistani peoples to bring their investment in Pakistan instead if investing in other country.
- Institutional condition of Pakistan need to be improved. In order to control corruption in Government offices strict accountability should start by government and efficiency of Anticorruption department should increase. Government should made separate department that can check business proposal of foreign investors and issue them licenses of doing business in Pakistan without wasting precious time of investors.
- Political infrastructure of Pakistan is big reason of lowering of FDI in Pakistan. Inconsistency of government discourage foreign investors. Strong and stable government is inevitable for improving export performance of country. For this purpose educated and economically educated leader should be promoted and patience for the sake of country's economic prosperity should be adopted by all political leaders.

If above mentioned policies are implemented lot of changes in FDI, Institutional condition and Export Performance of country is possible.

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Appendix A

In this section of research two tables are added. At first study run the model by including industrial value addition (IVA) and Gross domestic Production (GDP) but by adding these two variable in model result become insignificant so run model again by removing these variables from the model.

Table 4.5

Short run Relationship Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LFDI)	0.009598	0.045538	0.210765	0.8350
D(LINS)	-0.072159	0.097561	-0.739631	0.4673
D(LIVA)	0.803565	0.614026	-1.308682	0.2041
D(LNSAV)	0.225410	0.098093	2.297925	0.0314*
D(LRER)	-0.893499	0.289923	-3.081854	0.0055**
D(LGDP)	0.430409	0.594653	0.723799	0.4768

Table shows short run relationship of model and last column of table shows majority of variables as insignificant. This is because of addition of IVA and GDP.

Table 4.6

Long Run Relationship Statistics

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LFDI	0.167167	0.062656	2.668011	0.0140*
LINS	-0.111999	0.161551	-0.693275	0.4954
LIVA	1.247223	1.009355	-1.235664	0.2296
LNSAV	0.609326	0.210025	2.901209	0.0083**
LRER	-1.386811	0.372448	-3.723499	0.0012**

LGDP	0.668043	0.947906	0.704757	0.4884
C	31.42717	10.00270	3.141870	0.0047**

** and * shows significance at 1% and 5% level of significance respectively

Long run relationship shown in Table 4.6 is shows majority of variable as insignificant. So study removed these variable from model and estimated model again.