Impact of Economic Freedom on Economic Growth:
A Case Study of Asian Countries

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A Case Study of Asian Countries

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In the Name of Allah, the most

Beneficent, the most Merciful"

DEDICATION

I dedicate this self-effacing endeavor, the fruit of my thoughts and study to those, who taught me how to walk and survive in this world, who have been a source of inspiration for me, My

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Abstract

The phenomenon of economic growth has proved to be a necessary element in the prosperity of rich and poor economies. There are few factors involved in bringing the positive or negative results in the economic growth for different countries. Out of the various explanatory variables introduced in literature as factors of growth, yet this study highlights non-economic determinants of growth as this study is performed for analyzing the impact of economic freedom on economic growth for 42 Asian countries from 1995 to 2018. In order to examine impact on economic growth: overall score of economic and business freedoms, tax burdens, government integrity fiscal health, investment freedom, government spending, judicial effectiveness, property rights, labor freedom, monetary freedom, trade freedom, financial freedom, gross capital formation and employment to population ratio are taken as variables and used to carry out estimation of model. The descriptive analysis between economic freedom and economic growth is explained by Individual country analysis that shows the positive relationship between economic freedoms with economic growth. Panel data is used in this study by using some renowned techniques, such as fixed effect and random effect model. Thereafter, Hausman test is used to seek favorable results. According to Hausman test, fixed effect model is far dependable than that of random effect model by rejecting the null hypothesis. There is some issue of endogenity, therefore generalized method of moment (GMM) is used which is developed by Arellano and Bond in 1991. It shows the positive and statistically significant impact of economic freedom on economic growth of Asian countries. The proximate reason behind positive and significant impact is that the freedom to people in controlling their lives under less government influence on economic affairs which further help increase higher economic growth.

Key Words: Economic Freedom, Economic Growth, Gross Capital Formation, Employment to Population Ratio.

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List of Abbreviations

GDPPC	Gross Domestic Product per Capita
GCF	Gross Capital Formation
EMPI	Employment to population Ratio
OS	Overall Score
GS	Government Spending
PR	Property Rights
GI	Government Integrity
JE	Judicial Effectiveness
TB	Tax Burden
FH	Fiscal Health
BF	Business Freedom
LF	Labour Freedom
MF	Monetary Freedom
TF	Trade Freedom
IF	Investment Freedom
FF	Financial Freedom

Chapter 1

Introduction

Economic growth focuses in the main on a state's economic development. Thus all economies on the global economic arena are awaiting economic growth and its nutrition. It consists of human and physical resources, as well as technology (Rivera-Batiz, 1991). The economic growth is an essential element that contributes in raising the standards of living. It also enables us to provide basic facilities to population without reducing living standard. Normally our living standard is calculated through commodities and services' qualities which are accessible to us in order to make sure that growth is indistinguishable with a rise in general living standard. Economic Growth refers to a raise in the capacity of production of an economy which enables an economy to produce extra quantities of commodities and services(Palmer, 2012).'Traditionally nothing else could work better than growth to help societies to bring change in life of their inhabitants, including less privileged class (Rodrik, 2008). Keeping in view the historical examples of policy and development research, it is evident that growth of economy is sufficiently most proficient method to bring people out of poverty and help raise their living standards. However, explaining economic growth is an arduous task as a number of factors contribute in the development. As summarized by Tridico(2007), all the theoretical predictions that a single specific factor makes some country richer than others do not find reliable empirical verification.

In the recent past, the study of the growth mechanism as well as its determinants has been based on the neo classical school of economics, which stresses the supply factor and technological advancement being the most essential factors of growth. Previously, less acknowledgment was extended to non-economic factors as well as institutional variable of growth. Over the period of time, the researchers have conceded to this reality about the importance of non-economic determinants in economic growth. These non-economic determinants positively contributed in performance of capital and labor in any nation. In the contemporary era, it is globally accepted fact that capital and labor can achieve a lot in those nations where the development of non-economic determinants of economic growth is more visible, and are highly encouraging towards business. The researchers have now realized about supplementary investigation to gauge the role of these determinants in the economic development, particularly in the developing countries. Moreover, they facilitate the researchers, decision makers and governments to formulate feasible policy besides attaining a high growth rate with the similar amount of means and under a conducive environment.

One of many reasons behind a confined value of this topic is the arduousness to define as well as to measure the non-economic factors of growth. This particular study is aimed to carry out analysis considering only 42 Asian countries from 1995 to 2018, while laying focus on various parts of these determinants which include business, trade, labour and financial freedoms as well as fiscal health, government spending, so on and so forth. It is well-recognized that the list of factors comprising the non-economic factors of growth is far longer than that of factors that are prone to be utilized, however limitation of data incapacitates to achieve this. It is a perplexing procedure to measure these components. In the eyes of many researchers, this phenomenon is devoid of a single comprehensive index to capture all the measurements. The proxy that is used to measure this factor is believed to be sufficiently effective. Suppose if trade liberalization is a factor of freedom's index, which can be interlinked with an impressive growth as obtained by Asian Tiger countries for the period of 90s through export-promotion strategies. Under this strategy, these nations incentivized the industries (export-promotion industries) seeking speedy outcome of growth, income and employment. The achievements of these industries will eventually benefit the rest of the economic sector. This policy further lays stress on more trade liberalization policy. Therefore, the inclusion of this component highlights the non economic factors of growth, which are hard to attain by the conventional factors of growth such as supply of variable and technology. Thus, this study will be focused on non-economic factor, namely, economic freedom for Asian countries.

The Asian continent comprises different countries and region at different stages of development: what all Asian countries share in common is a wide direction of travel: putting limitations on the reach of government and enhancing economic freedom for masses. Over the last decades, Asian countries count as one of the raising economic powers. The expansions of Asian economies helped the countries retain their status as one of the best performing economies on the global economic chessboard. The average score of economic freedom in the world is 60.6, while 90.5 is the highest score in the freedom index that was tasked to Hong Kong in 1996. As a matter of fact, Hong Kong has been one of the economies with least restrictions during the entire period. On the other hand, North Korea in 2019 was with the lowest economic freedom score of 5.9. The performance of various Asian polities with regard to restricting the government size and enforcement of their writs is commendable(Roberts, 2019). Those who were closer to this classical liberal idea in the Asian region include Hong Kong and Singapore. Hong Kong is the country with most liberal and less democratic values, whereas this is not the case with Singapore. As a whole, both of these countries introduced norms to secure property rights and entrepreneurship opportunities, and wide open to the world.

They have prospered due to their free ports, ingenuousness to foreign capital as well as immigrant labor besides capable and well-trained and educated administration (Sally, 2013).

It is indeed a well-established fact that economic liberalization has a significant footprint in enhancement of growth. Hussain (2016) has found that the role of non-economic factors is increasing with every passing day. The concept of Adam Smith in "Wealth of Nations" is that pursuing self-interest by an individual is tantamount to pursuing the national interests. He pleads that free market is sufficiently efficient, and interference in the economy should not be done by the government. Over the period of time, the phenomenon of economic freedom has stolen the limelight in the eyes of researchers to explore its importance in economic growth. Economic freedom is explained in the words of Friedman (1962), that it is the absence of government restriction in an economy or it is a level in which individual is fearlessly striking agreements without any government restriction. The concept of economic freedom is defined as less government curbs on distribution, consumption and production of commodities and services without any restriction are essential for societal uplift(Beach,2006). Nonetheless, the concept of economic freedom lacks a commonly known definition, yet the term 'Free' refers to the free activities that can be performed without government interference. Moreover, this phenomenon refers to an individual' freedom aiming at protecting the property, which is legally acquired that can be used at his own choice (Gwartney , 2003).

Friedman(1962), propounds the concept of economic freedom and its proxies. It becomes hard to gauge these determinants, as a single proxy cannot comprehensively describe economic freedom. Heritage Foundation has contributed in developing the most known indicators of economic freedom. Economic freedom index developed by this foundation is prone to be used to calculate economic freedom. This index includes thirty-seven components of economic freedom that are further divided into five categories. Mainly, twelve components are used as proxies of economic freedom, which includes the size of government, rights of property as well as financial, fiscal, business, investment, labor, monetary and trade freedoms. Each component has been graded as scale of 0 to 100. In order to gain overall grades of economic freedom, the twelve components grades are weighted and averaged equally. A grade 100 represents higher level whereas grade 0 represents the lower level of freedom. The data published in an annual guide 2019 of Heritage Foundation about freedom can also be obtained from Fraser Institute and Economic Freedom of World Index.

Henry(2003) says the strong impacts of freedoms on physical capital take place by accumulating the capital. The capital accumulation helps increase volume of contribution for each worker through the policy of saving and investment. Resultantly, economic development

reaches at the acme with smooth speedy growth. Barro(2001), opines that, at a given level of output; high human capital stocks prepared with components such as education, health, capital and knowledge motivate the two way speedy growth. In first chunk, higher human capital accumulation keeps power to suck up competent hi-tech enlargement, while this channel is linked with the available pace of training. In the second chunk, an advanced human capital has adequate competency to optimally utilize the physical capital stock in the country.

As far as economic freedom's dimensions are concerned, performing it numerically is difficult. Measures are often expressed in numerical terms while drawing states' comparison. As regards the power of economic freedom, this occurs through comparisons made by multiple authorities. Moreover, idea about the accuracy of measurements may be taken from the proximity between index values created by institutions (Hanke,1997).

The freedom and growth of Asian countries are shown in tabular form hereunder.

TABLE 1

Name	index year	overall score	GDPPC	freedom category
Armenia	2018	68.7	4406.7064	moderately free
Azerbaijan	2018	64.3	5768.9924	moderately free
Bahrain	2018	67.7	21438.41	moderately free
Cyprus	2018	67.8	30926.452	moderately free
Bhutan	2018	61.8	3172.7739	moderately free
Indonesia	2018	64.2	4284.6525	moderately free
Jordan	2018	64.9	3266.747	moderately free
Kazakhstan	2018	69.1	11165.544	moderately free
Kuwait	2018	62.2	33112.13	moderately free
Kyrgyz Republic	2018	62.8	1087.2041	moderately free
Oman	2018	61	15796.773	moderately free
Philippines	2018	65	3021.9869	moderately free
Thailand	2018	67.1	6361.625	moderately free
Turkey	2018	65.4	15068.982	moderately free
Israel	2018	72.2	34745.767	mostly free
Japan	2018	72.3	48919.799	mostly free

Georgia	2018	76.2	4721.3029	mostly free
South Korea	2018	73.8	26761.94	mostly free
United Arab Emirates	2018	77.6	40782.444	mostly free
Qatar	2018	72.6	63260.558	mostly free
Malaysia	2018	74.5	12120.083	mostly free
Bangladesh	2018	55.1	1203.2163	mostly unfree
Burma	2018	53.9	1571.9072	mostly unfree
Cambodia	2018	58.7	1205.0409	mostly unfree
China	2018	57.8	7752.5595	mostly unfree
India	2018	54.5	2100.8008	mostly unfree
Laos	2018	53.6	1785.5768	mostly unfree
Lebanon	2018	53.2	6249.767	mostly unfree
Mongolia	2018	55.7	4210.0423	mostly unfree
Nepal	2018	54.1	817.44689	mostly unfree
Pakistan	2018	54.4	1197.8427	mostly unfree
Sri Lanka	2018	57.8	3936.4502	mostly unfree
Tajikistan	2018	58.3	1073.0218	mostly unfree
Uzbekistan	2018	51.5	2366.2852	mostly unfree
Vietnam	2018	53.1	1964.476	mostly unfree
Saudi Arabia	2018	59.6	20819.745	mostly unfree
Timor-Leste	2018	48.1	2759.5265	Repressed
Turkmenistan	2018	47.1	7647.9358	Repressed
Singapore	2018	88.8	58247.873	economically free
Hong Kong	2018	90.2	38781.785	economically free

Table 1 represents overall score of GDP per capita and economic freedom and that is based on 2018 economic freedom index for 42 Asian countries. It shows that the echelon of economic freedom and GDP per capita move side by side. Information as reflected in tables is

an evidence that freedom of economy plays pivotal role in achieving high-rated and long-run economic growth.

According to study of Heritage Foundation, the level of restrictions in Hong Kong and Singapore is far less than other countries that make them get higher benefit out of their policies. Moreover, Armenia, Azerbaijan, Bahrain, Cyprus, Bhutan, Indonesia, Jordan, Kazakhstan, Kuwait, Kyrgyz Republic, Oman, Philippines, Thailand and Turkey are moderately free. Israel, Japan, Georgia, South Korea, United Arab Emirates, Qatar and Malaysia are mostly free in economic freedom index. Timor-Leste and Turkmenistan is repressed countries in economic freedom index. Saudi Arabia, Vietnam, Uzbekistan, Tajikistan, Sri Lanka, Pakistan, Nepal, Mongolia, Lebanon, Laos, India, Bangladesh, Burma, Cambodia and China are mostly unfree countries.

This particular study empirically examines the impact of freedom of economy on growth for 42 Asian countries for the period of 1995-2018 through panel data analysis. It can be expected that the conclusion of this study would endorse this opinion that freedom has positive impacts on growth. Altunc (2013), finds the positive relationship between public spending and GDP at a certain point, and then it is negative because they suggest that the public spending share must be reduced because public sector is unable to allocate resources properly than that of private sector. Islam(2015), viewed the interrelation between corruption and growth in negative terms. The government's involvement in corrupt practices of all kinds will abate the GDP growth rate.

Table 2: Score and Economic Freedom Categories;

Freedom Category	Score
Economically Free	80
Mostly Free	70-80
Moderately Free	60-70
Mostly Unfree	below 60
Repressed	below 50

A grade 100 depicts higher while grade 0 shows lower rate of freedom.

1.1. Research Questions

Mixed evidence is available in literature to explain the interdependence of freedom and growth. Generally, studies have yielded positive interconnection between both. Dawson, (1998), Ali (1997), and Goldsmith(1997), found strong connection between freedom and growth. However, Lawson 1999, De Haan (2000), found negative interrelation between freedom and growth. While De Haan (1998), found mixed result. Other scholars found that

economic freedom contributes in raising living standards. In the context of above findings of literature this study will be a new induction in the literature by estimating this relationship for Asian countries economy.

In the light of above discussion following are the research questions;

1. What are interrelationship equations between freedom and growth in Asian countries?

2. What is the intensity of freedom index on growth of Asian countries?

1.2. Objectives

Followings are objectives;

1. To determine the effect of economic freedom on growth of Asian countries.

2. To use empirical approach to check whether other controlled variables have significant effect on growth of Asian countries.

1.3. Hypothesis

H o: Insignificant impacts of freedom on growth in Asian countries.

H i: Significant impacts of freedom on growth of Asian countries.

H o: Individual component of freedom has no impact on growth of Asian countries

H I: does individual component of freedom have impact on Asian countries' growth.

1.4. Delimitations

This study is aimed to performing analysis considering only 42 Asian countries from 1995 to 2018.In order to make equation linear, variables are utilized in logarithmic form, yet this particular study will focus on all components on the basis of their available data.

1.5. Scope of study

It primarily focuses on examining the impact of freedom on growth by counting the years from 1995 to 2018 for Asian countries. Since the focus is to find freedom impact and its components on growth and this study consider 42 Asian countries based on availability of data. The results of this study may be helpful to those who are entitled to have competence to chalk-out economic policies of government.

1.6. Research Gap

Since Adam Smith's era, economic analysts have focused on fundamental elements involved in economic progress which include liberty to supply resources, business competition, foreign trade, and security rights for property (North Douglass, 1973).

As it is clearly evident that economic freedom is essentially a significant element which enables an economy to flourish. This is not so that no focus has been laid on Asian countries in the past by the researchers. The only difference that covers this study is about focusing on 42 Asian countries while using all the components at once for the purpose of cultivating a broader view of the impact of economic freedom on economic growth. The data of 42 Asian countries has been analyzed on the basis of freedom categories which encompasses moderately free, mostly free and mostly unfree countries.

However the research work done by Cebula (2012), provided a source of inspiration to this research wherein this study will bridge this gap by using alternative data sources, techniques and variables while adding more years for Asian countries.

1.7. Problem Statement

The problem which needs to be identified is that "what are the components of economic freedom which largely contribute in enhancement of economic growth? Once indentified, this study will provide detailed overview of the components or factors that are necessarily be significant for Asian countries to enhance their growth rate. As economic freedom is the key determinant of growth and is required for every country to catch-up the developed ones. Therefore it is necessary for countries to take those factors under their consideration which can increase gross domestic growth rate. GDP growth rate remains low but it increases in later stages of development. The main reason behind the increase in GDP growth rate of developed countries is the betterment in their economic freedom index. Hence these results are very important for policy makers.

1.8. Organization of the Study

Chapter 2 provides a comprehensive analysis of interrelation between freedom and growth. Chapter 3 contains comprehensive introduction of growth theories. Chapter 4 covers the data and methodology to reach out desired outcomes. Chapter 5 focuses on data analysis results and estimations. Chapter 6 covers the conclusion of the study and policy recommendations.

Chapter 2

Literature Review

2.1. Introduction:

Economic growth sheds light on those variations that change the macroeconomic outlook, expressed not independently, but in close association with its components. A huge cache of both hypothetical and empirical assessments indicates to an immense variety of components of this procedure: investment, physical capital accumulation, human capital, geography, innovation legal institutions and political, macroeconomic conditions are supposed to play vital role in the nourishment of economy (Bassanini, 2002). Out of the various explanatory variables introduced in literature as factors of growth, yet this study highlights non-economic determinants of growth. In the recent past, there was an expanded examination in the academia with regard to non-economic factors of development rate. Administrators, analysts and policy makers of various nations believe that role of these factors is essential in development of a nation.

In this chapter we will analysis the literature concerning the hypothesis developed in first chapter. By reviewing this literature finally, we will identify variables and develop study model in next chapter.

2.2. Relationship between economic growth and economic freedom

This chapter of the study will present some evidence from literature on the relationship of study variables. Nalley (2005), reviewed the connection between political liberty, economic liberty and growth. They have collected figures from (OECD) states from 1970-2000. They have used different variables such as population, free trade, status (economic freedom) and taxes. GDP are used as dependent variable. These variables found statistically significant. By using OLS estimation technique they observed that economic freedom positively affects the GDP. Economic freedom ensures high level of GDP. Study further concludes that if country's trade is not free, for example imposition of taxes and other trade restriction then country will have low GDP.

Madan(2002), finds out the association among economic liberty and Socio-Economic Development. Welfare theories of international trade are used in the study. The study purposes to invention that life's quality can be better thorough increasing the economic freedom. The paper also examined how the quality of life can be effect by the rate of liberalization. The data of the study was collected from guide of economic freedom, Human Development guide and GINI Coefficient. The HF's Freedom guide studies 50 variables to size the economic freedom and to rate every state. The variables have 10 broad categories. Human Development Index is utilized to gauge the life's quality which was published by the UNDP. It is based on three categories which are Health, Educational attainment and Standard of living. The third measure study shows the GINI guide to find out the association among income inequality and economic

freedom. The sample consists of 31 counties which were selected randomly as the sample has high, middle and low-income states. The study concluded that the quality of life, Life expectancy, Education and Real GDP can be improved by increasing the economic freedom and income dissimilarity can be reduced by increasing economic freedom. Thus liberalization has the positive effect on social welfare. (Akin, Aytun, & Aktakas, 2014) analyzed association among economic growth and economic freedom for high OECD, high non-OECD, up mid, low mid and low income group.

Bengoa (2003), examined the influence of FDI and freedom on the growth based on 18 Latin American nations. The sources to obtain data for supposed GDP and real GDP are world table (1995), global development finance and world development indicator whereas data for GCF was obtained from IMF and international financial statistics, the data debt, openness literacy rate and inflation from WDI and global development finance, the data for primary school enrollment and black market premium is obtained from world development indicator and the data for economic freedom from Fraser institution. They have collected panel data from 1970 to 1999 for 18 Latin American countries. They estimated the model with fixed effect. They have found a strong connection between freedom and growth. FDI is positively interconnected to growth. They suggested that policy makers of these countries should encourage FDI (foreign direct investment) for enhancement of growth. High level of freedom is main precedence of policy maker as it is important for growth. Yet they also found that host country desires stability of economy, suitable human capital and opened markets seeking advantages from long-term capital pouring.

Tiwari (2011), observed the liberty effectiveness and FDI foreign aid on growth for 28 Asian countries. They have used pooled annual data from 1998 to 2007. The variable was GDP, population GCF, FDI (foreign direct investment), liberalization of labour, openness of trade, monetary, financial, fiscal, investment and business freedom as well as corruption liberalization. World Bank and Heritage Foundation have reliably been used for the collection of data for above mentioned variables. They estimated model by production function. They added FDI, financial assistance from abroad and economic liberty index in production function as if capital and labor increase it will lead to increase output. They found negative connections between freedom and FDI besides between freedom from corruption and growth. They have also found positive interrelation between financial freedom and gross capital formation. Life expectancy plays a very important role in economic growth while fertility does not.

Wulandari (2015), analyzed the interrelation between growth and freedom for Indonesia from 2004-2014. The variables of growth and freedom are used in the study to

estimate the said relationship. Central Bureau of Statistics and Heritage Foundation is utilized to gather data. Due to presence of endogenous variables on both sides Vector Autoregression (VAR) model is used. The study concludes that economic growth is positively affected by economic freedom. Economic liberty has positive influence on growth vice versa. Author further concludes that liberty is a very important factor to improve social and economic welfare in Indonesia where the economic growth is low.

Heckelman(2000), Found a fundamental bond between economic liberty and growth. He used the indicators of economic liberty which is established by the Heritage Foundation and the growth rates of individual countries. They developed that by using Granger Causality tests as an instrument, there exists interrelation between liberty and prosperity. They also claimed that liberty leads to prosperity. The liberty index of Heritage Foundation measures liberty constructed on groups of taxation policy of exchange, interference of government in economy, monetary policy, flow of capital and black market, foreign investment, finance, income and controls of prices, rights of property, and the regulation. The conclusion of study was very important, because they support the argument that more economic liberty contributes to greater prosperity.

Farzinvash(2013), examined the associations between economic freedom, economic security, capital formation and economic growth. They collected the data for 14 nations, as they were inspected as an essential data model, ordered and positioned among gatherings transition nations of worldwide and nations that are developing. Results of their examination reveals that the two group transition nations and nations that are developing, other than first quantitative factors, for example, economic development and interest fee, that can influence formation of capital in country, there were sure qualitative factors which assume a critical job there. in addition the main purpose of the study show that there are certain variations with respect to the sort of impacts brought about by the forgoing factors in procedure of formation of capital mainly two kinds of transition nations and nations that are developing in this examination. In the transition nations, security and stability of economy other than free interest and development have important and strong impact on accumulation of capital. While influence of economic security variable in developing economies, is greater and greater than opportunity, this means that existence and arrangement of security of economy has more prominent and progressively significant effect on development of capital comparative with liberty.

Garrett (2010), examined the influence of development and economic liberty on U.S state employment growth. They data is collected for three different time period for U.S state from 1980-1990, 1990-2000 and 2000-2005 and consider it separately. The variable used in

their study is size of government, taxation, economic freedom, labor market and GDP (gross domestic product). Descriptive statistics is used to measure model. They have found that high economic freedom leads to high employment. Normally 1% increase in economic freedom leads to increase employment by 1 to 4%. Interrelation between freedom and all three-time period and employment growth rate is positive, and there is 2 or 5% of change in employment growth rate in U.S and it is because of economic freedom. They have suggested that free labor and government size are important element of freedom of economy and plays essential role in increasing employment rate.

Cebula (2012), observed the link of economic liberty among OECD countries growth. Higher the degree of liberty leads to raise the level of growth of nation and higher level of economic activities. the variable used in their study are property right, liberalization of business, freedom from corruption, freedom to invest, monetary freedom, size of government, liberalization of trade, real GDP (gross domestic product), liberalization of labour, financial openness and fiscal liberty. They collected data for variables from heritage foundation and international monetary fund data was utilized to measure GDP and corruption, unemployment and interest rate from OECD (2000). They estimated the model by linear PLS and linear log PLS. they collected the panel data from 2002 to 2006 foe OECD countries. They have found a potent connection between freedom and GDPPC while financial freedom, fiscal freedom and labor freedom does not play important role in determine GDP per capita of these OECD nation.

Tanin(2017), examined whether liberty of economy lags or leads development of economy. They have collected data for Bangladesh from 1995 to 2015. They collected the data from world development indicator (WDI) and heritage foundation. They used different variables such as inflation and real interest rate as control variable, freedom as explanatory variable and annual growth rate of GDP was utilized as dependent variable. By using ARDL technique they observed that relationship between liberty of economy and development of economy is clear and strong. Thus liberty of economy is leader in economic growth of Bangladesh.

Vu (2010), observed the affiliation between liberty of economy on Vietnam and China's growth. They collected data for 103 nations from 2004 to 2008. The initial segment of this research is the progress procedure from an arranged economy to a free economy in both nations. The change procedure, which take place over more than two decades, permitting increasingly liberty of economy, and actualizing a few of a market liberty components, has supported the rate of development in both nations, and expanded significantly the life style of individuals in the these nations. Vietnam's amazing success of and China bring up the question of what

elements added to the two nation's high growth. The next step of the research was examines the link between economic liberty and growth, utilizing observational methodology. The experimental research provides proof to assist in the hypothesis of the direct connection among growth and economic freedom. From the regression model, they found that economic liberty had a positive impact on economic development, keeping everything else constant.

Razmi (2013), examined how economic liberalization impacts economic development. One of the basic highlights of worldwide exchange hypothesis is that free economies accomplish high rate of development than closed economies. They collected the panel data for the year 2000 to 2009. They tested the data, by utilizing panel estimations. They observed that the general list of liberalization is positively connected with development, further, the outcomes reveals, liberty of trade is strongly related and significant element of development. They locate that financial liberalization have impact on economic development. Besides, we deteriorate the index of economic freedom in five different classifications developing the index and saw that simply list of government size and list of access to sound cash is adversely connected with development. Hussain(2016), observed the influence of non-economic determinants of growth. They collected the data from the HF / WSJ the newly developed liberty index. The aggregate index of economic freedom demonstrates that how free and friendly a nation is to business. Conventional neo-classical theory of growth contains only three variables which are labor supply, resources and advancement in innovation, with little consideration to components of institution. The observation shows a proof dependent on two data set of panel. They gathered data for year 2013, 2014 and 2015 for 186 nations, showing institutional elements play an essential contribution in growth In second data set they collected 57 nations data form 2004-2014. They found a positive effect of liberty on growth and it will lead to raises growth.

Carlsson (2002), examined of the connection among liberty and GDP. They collected data for 74 countries for the year 1975 to 1995. They found, by using econometric technique that the liberty and growth is related positively. An individual element does not represent the economic condition and exceptionally accumulated index makes it difficult to conclude the policy. They examined what explicit kind of economic opportunity quantifies that is significant for growth. They found that results are deliberately examined since the problem with multi collinearity is the negative impacts of decomposition of liberty index. The outcomes show that economic liberty creates no difference to growth. This does not mean that expanding liberty, which are generally characterized, are useful for development because a portion of the recorded

classifications are unimportant and some have important impact on economic growth. Furthermore, a part of the notable elements have adverse effect.

Justesen, (2008), examined the influence of liberty on growth. They collected panel data for a number of countries for the year 1970 to 1999. They measured economic growth by GDPPC. They used different variables such as property rights, trade openness, regulation, investment, government size and monetary freedom. Furthermore, the paper examines various model detail issues, for example lag length determination and the significance of mediating factors. By applying Granger causality test they found that some indicator of (however not all) economic opportunity influence economic growth and investment. They found that, there is no strong proof that economic growth influences economic opportunity.

Andrea (2016), inspected the effect of economic liberalization on economic improvement of European nations. Non parametric technique and data examination strategy is utilized which permits to put a restriction on effectiveness of connection between liberty and growth. They evaluate to what extent the level of liberty accomplished in different nations is revealed in their level of growth, individually what was the possibility for improved "evaluation" of liberalization to build level of economy. The investigation stated that liberalization makes improve situation to expand development. The decay of wasteful aspects showed that there is a strong area for enhancing development in European progress economies by the addition of individual components of liberty.

Zaman(2011), observed the connection among economic liberty and pro-poor growth of economy. From 1995 to 2010 they collected data on the time series for Pakistan. They have used idea of pro-poor growth that was gotten from Kakwani and Son (2003) and Kakwani and Pernia (2000) work. By using OLS regression they found that the connection among economic opportunity components and pro-poor development is strong. Econometric investigation demonstrates a solid connection between economic opportunities, reduction in poverty and also contributes to reduce inequality of income. Outcomes uncover that greater opportunity of business and opportunity of trade, will leads to increases economic growth. This will at last diminish poverty in the nation.

2.3. Relationship between different components of economic freedom and economic growth:

Sokolovska, (2016), analyzed the association among trade freedom besides revenue from trade taxes. They have collected panel data for 104 countries from World Bank indicator (WBI) and estimated model by using a sampling method of econometric. They have observed that in developing countries free trade leads to low level of tax. Now emerging states tax system

are additional adjustable than established states. In underdeveloped countries taxes on trade are high. These countries generate revenue by implementing indirect tax such as trade taxes. This is main reason that these states cannot promote free trade by reducing taxes on trade.

Bhagwati(1999), analyzed the association among economic freedom besides development trendy Tokyo. Bhagwati argued economic freedom has two aspects that are international dimension of economic freedom besides international dimension of freedom unique among trade liberalization and free flow of capital. There are three aspects of economic freedom in an economy. The first one is property rights and second one is market against vide government interventions and third one is ability to get job in private or government sector. Bhagwati examined that property rights have direct effect on economic development. In this way they can allocate resources efficiently. Ability to earn income from both private and government sector and mainly outside of government sector leads to strong democracy. Inability to earn income can paralyze and it is also against of economic freedom. In this way economic freedom directly or indirectly effect economic growth. There are also international aspects of economic freedom that is trade openness, free flow of capital, FDI and free movement. Bhagwati argued that the concept of free trade is stronger than the Adam Smith's concept of trade and there is huge variety of consumption and production. Therefore, producers have to produce different variety of consumer goods to compete in market. Since 1950s and 1960s most developing countries are afraid of trade. Labor unions and NGO's thought that free trade have adverse effect on their real wage. According to international economist real wage was decline in 1980 in US. According to Bhagwati free trade decline real wage that leads to reduce unskilled labor in the country. It also reduces the bargaining power of unions. There is important correspondence between free trade and free capital flow. Mostly investors lose freedom to invest money where they want to invest because of efficiency lose. There was different financial crisis because of the free capital flow. For this reason, Bhagwati suggested that countries need two policy instruments to control free capital flow. First one is monitoring of the flow and second one is motivation to use Chilean type of tax on capital inflow. Bhagwati argued that Immigration is important. American revenues are the best talent from all around the world. The huge no of students is belonging to Japan and there are also no of students from other foreigner countries. American students are minority in the class. Reason behind is that US welcomes immigrants.

Githanga(2015), observed the influence of trade freedom on economic growth in Kenya. Kenya has free trade policy. Kenya has reduced tariff level and eliminated licensing and price control requirements in trade Republic (2005) of Kenya. The data have collected

from WDI (world development indicator). They have estimated the model by using OLS (ordinary least square) on time series data from 1975-2013. Free trade was measured by using trade intensity value (exports+ imports). According to researcher trade liberalization is reduction of restriction on exchange of good between nations. The reduction includes both tariff and non-tariff restriction. One of the examples of free trade is Japan. Japanese real income increases 65 percent during last two decades. Trade liberalization allows capital flow, flow of investment and also flow of labor from one nation to other nation through immigration. The effect of free trade on productivity is that the country started to produce those good in which it is good at manufacturing and offering them to other countries in which those countries are poor at manufacturing. In this way exchange is in the form of innovation. They used different variables to measure free trade K, HC (investment on education), L and GDP. GDP (gross domestic product) was dependent variable. The data for labor (employed + unemployed) was collected from National Bureau of statistics. They have found that explanatory variable has positive impact on GDP (gross domestic product) while free trade besides labor obligate negative effect on GDP of Kenya. In previous studies found that there is positive affiliation among trade openness besides development. Most of the studies done were across countries. But in this paper researcher studied only one country that was Kenya. The result was different from other studies. Kenya derived free trade that a positive relation will be seen. Researcher suggested that Kenya have to adopt more polices to ensure that they benefitted from free trade and this free trade leads to increase growth of economy.

Salimi (2014), analyzed the connection between trade liberalization, development besides income inequality. They have collected data for 30 countries from 2000-2011.The variables that used in their study are GNI index of income inequality, GDP (gross domestic product). They have found the association among GDP and free trade is positive while relationship between free trade and population growth not clear. They have also found that economic growth in developed countries is stable, because of strong economic infrastructure while economic growth in developing countries is not stable, because these countries have poor management, lack of politics and poor development strategies. They have found that free trade is slowly reduction of tariff rates and increase imports and exports rate, and as a result this will lead to increase economic growth. Free trade with higher economic growth also leads to reduce unequal distribution of income in culture. They have suggested that if we increase rule expenditure on education and health then it can advance distribution of income in society. If here are unequal distributions of income, then it will lead to slow down economic growth.

Altunc (2013), examined the association among ideal government size and growth of Bulgaria, Romania and Turkey. They have collected time series data for Turkey, Romania and Bulgaria from 1995-2011.Variables they have used in their study are public expenditure (to show the share of public sector), real GDP (used as control variable) and unemployment. They have collected data for these variables from statistical data warehouse and European central bank. The main reason of their examination is that whether "U" association among ideal government size and growth exists or not. In literature they have found that this association is linked with Army curve that is this association is positive up to confident point then it will become negative. This Army curve is offered by Richard Army. But according to Milton government plays a very important role in free market and economy. Government spending should not increase from 15% to 50% as its marginal contribution become negative if it's spending increases from 15% to 50%. While average government contribution, is positive in free economy. To test their hypothesis, they have used an econometric method that is ARDL approach. They have used time series data for their study and found that there the share of government spending should be 25%, 20% and 22% aimed at Turkey, Romania besides Bulgaria correspondingly. They have also found that at present the share of government spending is higher in these three countries and it should be reducing to above percentage. They suggested that the share of government should be reduced in these three countries as public sector is inefficient to allocate resources than private sector.

Islam(2015), examined variables that are used in their study are education, economic freedom and its components, corruption, real GDP, population and gross investment. They have collected data for real GDP, gross investment and population from IFS CD-ROM and data for education from Education Statistics global country data, World Bank and data for economic freedom and its components from EFW 2014 FI and the data for corruption is collected from Transparency International. They have collected panel facts for 25 countries since 2007 to 2012.They have used neo-classical aggregate production function to estimate their model. They are different works of economic freedom in which scope of government is important element to study corruption. Scope of government is consisting of taxes and taxes lead to abate growth, due to higher degree of corruption. But if taxes are collected by government to be used in productivity then the negative effect of taxes can be reduced. They have found that corruption reduced in the presence of economic freedom from 2007 to 2012. Asian countries progress faster than African countries. In neo-classical model countries growth depend upon saving (investment) and growth of labor force. Exogenous model plays a vital role through effecting human capital and physical capital. State exist to provide two things first

one is property right, rule of law and basic infrastructure and the second one is government sectors provide those good and services which cannot provide by private sectors such as police and national defense. They have used neo-classical aggregate production function to estimate their model. They have found that growth and economic liberty are positively related as well as it leads to reduce negative effect of corruption. They have also found economic liberty effect on corruption by separately considering economic liberty components, whose influence was contrary to what has been described above.

Fatah (2012), work on development, Political Freedom besides development in human in three countries in 2012. The study aims to analyze those components which leads to good performance of economic development in emerging countries in East Asia specially China, Indonesia besides Malaysia in 1980-2005. Training unable to explain all the variables which are important for the growth of economies but it was a good attempt to find out those elements which are more important for the growing economies. The dependent variables which are used in this study are yearly Growth of RGDPPC. They collected data from 1980-2005. The outcomes also suggest that the leading factors of china's growth are FDI and Civil Liberties and these are important factors to improve China's economic growth. High fertility and better honesty are significant factors create in Indonesia so they should focus on them while Malaysia could focus on both political freedom besides civil liberties.

Ertimi (2016), examined the influence of dishonesty on OIC countries growth. They collected penal data for 14 countries from 2003 to 2010. The variables which are used in their training are corruption, GDP, investment, inflation, government size, free trade and FDI Whereas they utilized GDP as dependent variable while further variables are used as independent variables. They have collected data from WB, UN seminar on exchange, economic progress and statistics, training center of Islamic countries for social and economic research for and from heritage foundation. They have used an econometric technique two stage least square, fixed estimator model and first difference model to estimate their model. They created the model on the foundation of endogenous growth model. They have used economic freedom guide to measure the corruption and they found that the affiliation between growth and corruption was negative. They have found that the lower the level of corruption leads to high level of economic growth. Generally, countries with lower economic growth have low level of corruption in 2003 to 2010.FDI (foreign direct investment) is positively associated to GDP besides it outcome GDP in two ways that is direct besides indirect way. Direct effect of FDI (foreign direct investment) is it increase physical stock and this will lead to increase GDP while indirect effect of FDI (foreign direct investment) is technical spill-over. Economic

development is associated positively with human capital. Human capital increase labor productivity and physical capital that encourage investment in economy and as a result this will lead to increase GDP. Population growth is negatively related with GDP as increase in population leads to decrease capita per worker. Inflation also has negative relationship with economic growth as it leads to less productivity which in result lowers the economic growth.

Kraay (2002), measured the policy suggestion is that lessening defilement will be profitable in nations where the administration is poor.

Ajide (2015), observed the direct influence of FDI besides economic liberty on growth. They examined the above influence for sub-Saharan Africa regimes. They also examined the performance of different sectors such as agriculture region, constructing region and service region in the sub-Saharan Africa regimes. The variables that used in their study are PCGDP (per capita gross domestic product), DI (domestic investment), FDI (as a proportion of GDP), Trade openness, M2GDP (development reflector by excessive supply of money on GDP). In second model the examined the examined the impact of economic freedom and FDI (foreign direct investment) on sectorial performance. The variable that are used in second model are sector output (industrial, agriculture, manufacturing and service sectors output) DI (domestic investment), M2GDP (financial development indicator by broad money supply over GDP) and economic freedom index. They have collected panel data from 1995 to 2010 for 19 sub-Saharan African countries. They have collected the data for variables from world development indicator and open data for African database of ADB. They estimated the model by panel data modeling approach for the analysis. They found that FDI have strong influence on growth in addition to it was captured by GDP per capita for sub-Saharan Africa regimes, when economic freedom is controlled while it has negative effect on sectors (industrial, agriculture and manufacturing sectors). They also observed that FDI have strong influence on service sector performance of this region.

Ioan(2009), find the outcome of government intervention on corruption. The author found that how corruption and political, administrative and economic factors are related. Mutasco includes 135 countries from all over the world in the model for the period 1996-2008. The countries which were included in the model have the different economic, political and administrative structures. The variables which are used in the study are corruption as dependent variable and political and administrative as well as economic determinants factors as independent variable. As it was a perplexing approach so the data was divided into three cross-section panel. “Freedom from corruption” index (FC) was quantified for the corruption which was developed by the Heritage Foundation. The “civil liberties” (L) factor, “Government

structure" (GS) factor and "social welfare" (HDI) factor also developed. The result of the study is that if the civil liberties are decreased the corruption will increase, the government structure is extended, the involvement of government in economy increase and the social welfare decreased. If the civil liberties are increased the corruption will reduce, the government structure is contracted, the involvement of government in economy decrease and the social welfare increase.

Bayar(2017), analyzed the influence of liberalization on growth in EU economies. Variables that are used in their study are GDP openness, financial openness and economic freedom. Gross domestic product (GDP) is utilized to measure growth of economy. Import plus export are used to measure openness. To measure financial openness Chin-Ito index was utilized. Overall score of freedom has been utilized to measure economic freedom. Dependent variable connotes to GDP whereas other variable is used as independent variables. They reliably approached Heritage Foundation for the collection of data for economic liberty, while they approached World Bank for collection of data for openness and GDP and the data for financial freedom from Chin and Ito index (2015). They estimated the model in three ways. Dependency of cross sectional was tested through LM test and then they tested the stationarity of time series data by using PANKPSS (panel Kwiatkowski Philips Schmitt and shin) test and they also tested the relationship between variables using the basher and westrlund (2009). Co-integration coefficient was estimated through panel augmented mean group. They observed a strong connection between growth and liberty in the economic realms while observed a negative interconnection between financial liberty and growth in the long run. This may further reveal that financial markets of these countries are not this developed that they can make a plausible contribution in enhancement of growth. They laid immense stress on the importance of improvement of quality of institution for less developed countries.

Shahbaz(2008), analyzed the long and short run interconnection between openness of capital account and growth. They have collected information for the period of 1971 to 2006 for Pakistan. The variable used in their study is CA (capital account openness), GDPPC and control variable, for instance, inflation, investment, secondary enrollment and MC (market capitalization is used to measure financial growth). They have collected the data of all variable from international financial statistics and economic survey of Pakistan. The ECM is applied to estimate short run model, whereas ARDL approach is utilized to measure long run model. As per their findings, capital openness may have little effect on growth of Pakistan and it is affected positively from prior effective economic policies. Capital account openness is not fruitful for Pakistan because of political instability, inflation and trade deficit. Pakistan has to

borrow in order to maintain its policy and gives rise to capital inflow. And in short run this relationship is found in U shaped. They have also found that inflation reduce growth while rise in investment leads to increase growth and investment in human capital development enhance sustained economic growth. They suggested some polices that Pakistan need to adopt. First one is in order to minimize risk on capital account openness, state have to pursue strong macroeconomics and trade policy. Before opening capital account Pakistan should need to emphasize their managerial infrastructure and financial infrastructure.

Khan (2007), observed the influence of trade liberty and financial political and interest rate on Pakistan's economic growth. The data was collected from 1961 to 2005. The variables used in their study are financial development (FD) in which banking and stock market are included, GDP (gross domestic product), openness (calculated on the basis of import and export of country) inflation. The data is collected for GDP (gross domestic product) from IFS-CD-ROM and the data for other variables from SBP and from financial sector growth indicator. ARDL approach was applied to estimate model for long term while diagnostic test statistics for short term. They have observed a positive connection between trade liberty and growth in short term and long term and it also showed the importance of trade liberalization in order to increase economic growth. They have also observed that the liberalization of finance has more effect on growth than the trade liberalization. They suggested that Pakistan should go more for free trade for enhancement of growth and administrative elite should pay more attention in creation of modern financial institution (stock market and banking system). As free trade, allows individuals to allocate their resources in productivity sectors and hence it will lead to increase efficiency and market for new products.

In a very interesting working paper "Economic Freedom, Culture and Growth" Williamson (2011), examined influence of customs and economic liberty on economic development. The argument of the paper is that customs and institutions of economy especially liberty of economy sufficiently contribute in progress of economy alone. Economic growth is a dependent variable while economic liberty and customs are utilized as independent variables that can effect economic growth independently. The control variables which are included in the study are initial real Gross Domestic Product (GDPPC), investment share of real Gross Domestic Product and the growth rate of population. World Values Surveys was utilized to collect data for measuring culture. To measure economic liberty EF of the World Index is utilized to gathered data. Data of GDPPC and investment as a proportion of GDP are collected from version 6.2 of Penn World Tables while data for growth of population is taken from WDI 2006. Panel analysis was implemented from 1970-2004 by using five-years averages. The OLS

estimation is provided and then Univariate and Bivariate regression is run. The result of the study shows that economic liberty has a considerable influence on growth of any economy when there is increase economic freedom the growth of any country also increases. Economic liberty is comparatively more essential for growth of economy than custom as culture has a very small effect on economic freedom. It can be possible that culture effect economic growth initially or indirectly rather than directly.

Abdul (2020), observed the connection between Pakistan's liberty and development. They collected the data for Pakistan from 1995 to 2017. Economic freedom is uses as a dependent variable. They used different independent variables such as ECOGRTH (economic growth), PG (Population Growth), PS (political security) and (EX) Export, GCF (Gross capital formation) and ELF (employed labour force). By utilizing ARDL (auto-regressive distributed lag) technique they investigated the long and short term affiliation between economic freedom and prosperity. They found that political insecurity negatively affects economic opportunity of Pakistan. While economic development and employed work force are emphatically identified with economic opportunity. As economic opportunity is the key part of economic growth, it must be engaged to increase economic opportunity of Pakistan.

Azman-Saini (2010), also examined universal relation among economic liberty, FDI and development. The study took advantage of a group of 85 nations. The observed outcomes which are based on the econometric technique that is GMM estimator expose that FDI alone has no direct or strong influence on growth of production. The influence of FDI is relying on the degree of economic liberty in the host nations. This indicates that the nations encouraging economic activities through more liberty, benefits from the involvement of Multi-national Corporations (MNCS).To date, observed studies on FDI growth relationship still largely continue restricted especially with regard to the influence of economic liberty on spillovers of FDI.

Khosrozadeh (2014), examined the influence of trade liberty and FDI on economic growth of Iranian. They have collected the time series data from 1994 to 2012. The variable they utilized in examination of above mentioned connection is GDP, labor, capital stock, technology, FDI (foreign direct investment). They used ARDL approach to estimate their model. They found that there is strong affiliation between FDI and growth while the connection between liberalization of trade and FDI is also strong as free trade leads to attracts FDI and thus FDI leads to increase productivity of production resources. They have also observed that there is strong affiliation between liberalization of trade and growth in long run and that effect is greater than the effect of FDI. They suggested that in order to attract FDI construct

competitive situation and transfer technology as FDI has direct influence on growth of economy by transferring technology and it will lead to increase productivity of country.

Majeed (2011), observed the affiliation between trade, economic liberty and corruption. Study was for cross-country evidence from 1984-2007. The work was for the area of trade-corruption linkages. The sample consists of 146 countries from 1984-2007. Moreover, panel data has been used in this study. Main variables of interest are trade and law. The variables which are used in the study are corruption as dependent variable and openness, (PCY) per capita real GDP, Government Expenditures, democracy and RL independent variables. Democracy and RL data was gathered from International Country's Risk Guide Index and the data for per capita real GDP is collected from IMF, WDI and IFS (International Financial Statistics database). The 2SLS estimation of techniques is used in the study. The other alternative econometric technique like random effects and system GMM is also used. The study finds out negative effect of government expenditures on corruption. The study reflects that corruption reduces due to economic freedom. It also concluded that openness reduces corruption. The study is in support threshold level of openness and complementary reforms. The analyses showed that combined effect of trade openness and high bureaucracy quality reduce the corruption.

Dawson(2003), investigated the causality connection among different kinds of institutions in particular, economic and political liberty and since a long term liberty. Current observational investigations of these connections are demonstrated to give a proof of relationship, yet not causation. They used different variables such as summary index, government size, and utilization of markets, other currency, and rights of property, foreign trade and finance internationally, the granger causality test was utilized to measure causality in the connection among various kind of political, economic liberty and economic progress. They collected data from 1970 to 2000. Granger causality estimation of opportunity versus development and freedom versus investment are led utilizing total proportions of opportunity just as fundamental segments of opportunity where possible. The outcomes recommend the parts of liberty in a causal sense are generally significant in encouraging development. The examination concluded with a causal investigation of alterations in the various components of liberty itself.

Hossain, (2016), investigated connection among the economic liberty, FDI and economic development. They investigated the above relationship by utilizing panel data for 79 developing nations from 1998 to 2014. The economic liberty data was collected from heritage foundation by thinking about degree monetary opportunity, as gave by the "Legacy

Foundation". they used different tests to estimate the above mentioned connection such as, pedroni residual co-coordination test, GLS FGLS, pooled OLS, RE, FE, poisson regression, panel unit root prais-winsten, GMM and GEE. As per the Ordinary Least Square and GMM the coefficient suggests that value of standard deviation increases in different factors of index of economic liberty such as business opportunity, exchange opportunity, administration size, investment opportunity, rights of property, opportunity from dishonesty, labor opportunity, monetary opportunity, financial opportunity, fiscal opportunity expands foreign direct investment focuses separately and for the financial indicators ,the coefficient shown that the value of standard deviation increases in per capita GDP growth and per capita GDP increases foreign direct investment. They utilizing the other econometrics technique such as RE, FE and summed up assessing condition generalized estimating equation technique investigates that liberty in the host nation is a strong components of foreign direct investment inflows in creating nations and furthermore the outcome recommends that FDI is decidedly connected the economic development in host nations.

In an interesting paper Shields(2009), examined the link among economic and political liberty and development. The study aims to find out how political freedom affects liberty of economy (open markets). Author was interested in observing the affiliation among democracy and liberty of economy, which includes developing and emerging nations. The theory behind this study was that economic freedom increases when democracy increases. The research uses economic liberty as dependent variable. Economic freedom means how many open markets are present in the country. The two indicators were selected for openness of trade which was mean tariff barriers and non-tariff barriers. The independent variable of the study was democracy or political liberty. Democratic equality includes civil liberation and human rights. Two control variables were also included in the study, RGDP and government's share of GDP. It was cross sectional analysis of variables for 2002 about 93 countries by using SPSS 17. The correlations were also run to check the relationship of variables. The outcome of study showed that every variable has a relationship. Social freedom has a clear connection political rights and with indicators of free-market and that was because of civil liberties include the human rights, the property rights and the right to do a private business or job without the involvement of government. It includes the freedom to do anything for your self-interest. So civil liberties should be increase if a country wants to increase its ranking in economic freedom.

(us Swaleheen (2007), added to the literature by studying the connection among corruption and prosperity through including effect of liberty. The panel of 60 countries is used for the study. The variable GDP is used, investment and corruption are used as endogenous

variables while economic freedom is used as explanatory variable and a set of control variables like primary and secondary enrollment rates, size of government and political stability is used in this study. Corruption is not observable directly so the CPI (index of Corruption Perception) was utilized as the estimation of corruption. To measure liberty of economy the study utilized the EFI (index of Economic Freedom) which is prepared by the HF. The political stability measure is obtained from the Polity IV data base. The data for all other variables was derived from the World Bank's database of World Development Indicators. It found that by keeping all the other things constant corruption reduces progress when economic liberty is poor. On the other hands corruption benefits development when economic liberty is strong, by offering a path through control of government. The study gave the suggestion that an anti-corruption campaign should be based on countries with high inequalities and low economic liberty.

South Hadley (2012), inspected the information and technique utilized in developing index of economic freedom of the Heritage Foundation. Historical advancement of list (1995 to 2012) and the patterns in the developments of its freedom classifications are investigated so as to evaluate the nature of the index as a total estimation of economic freedom. This examination looks at the consequence of the index in freedom research and its applications in growth writing. The index accumulation methodology is assessed utilizing principal investigation and determinants examination in order to decrease and sum up the huge number of factors include in list of index to a symmetrical develops which clarify however much of the variety in the data as could reasonably be expected. They applied Granger causality tests the index information and annual real GDP growth rates so as to explore the course of causality between liberty and development and recognize the freedom classes which add to growth and the ones which stop growth. The commitment of the study is twofold. They analyzed economic freedom and different factors of economic liberty which are used to measure liberty in comprehensive manner as single proxy cannot solely described economic freedom in detail. Second, it builds up that not all type of freedom contributes to economic growth. Specifically, they found that Fiscal liberty, Monetary Freedom and expenditure of government leads economic growth, while the remaining types are either not identified with economic growth or are together measured by a third factor, proposing that not all economic liberalization components can be collected into a synopsis in overall freedom index without altered the connection between prosperity and economic freedom.

Dkhili (2018), analyzed the influence of economic opportunity, FDI and in this manner increasing the degree of development of economy. They collected the data for GCC (Gulf Cooperation Council) nations. They used different independent variables such as EF (economic

liberty) FDI, OPEN (liberty of trade) GDSAV (gross domestic saving). RGDPG (real growth) was utilized as dependent variable. They collected the panel data from 1995-2017 for Qatar, Saudi Arabia, Kuwait, United Arab Emirates, and Oman. By using different econometric techniques such as unit root panel test the co-integration lastly the FMOLS regression and DOLS they studied to decide the job of liberty in boosting FDI and in this way growth in the subsequent steps. They found that more degrees of economic opportunity bolster higher paces of economic growth in a nation.

Mahmood(2009), Analyzed the influence of economic liberty and democracy on growth of Pakistan. Experimental examination this research estimated the records of degree of opportunity and democracy yearly. "Alliance for Restoration of Democracy in Asia" and "The Fraser Institute Canada" strategies were embraced for estimation of liberty and democracy respectively. They collected the data proxies of growth from SBP and FBSs administration report of Pakistan from 1970-2007. They built the 38 annual observations of data set. ARDL's latest econometric method was used to evaluate long-term and short-term linkages between focused factors. To examine the effect of democracy and liberty) on Pakistan's economy's growth, the number of regression was `regress. They found that in aggregate economic opportunity within the sight of weak foundation and in Pakistan uneducated people ruined the rate of growth. On other hand democracy roughly upgrades the pace of economic growth however separated from national income proxies of growth. They found that democracy demonstrated irrelevant contacts toward proxies of growth of financial, capital and fiscal markets. The most significant outcomes of exposure were that steady alone democratization is not at the heart of Pakistan's economic growth, yet is vital. Pakistan should therefore focus on democratization satiability, which will at last enhance liberty and growth.

Le Roux(2015), examined the connection between overall liberty and signal determinant of liberty on SADC growth. They collected the data for 13 SADC nations annually for the year 2000 to 2009. They collected the data of different variable from IMF, Fraser Institute IFS, EIU (Economists Economic Intelligence Unit) and WDI of the WB. They used different variables such as government consumption, government debt GFCF, imports and exports as a share of GDP, government size, protection of ownerships rights, foreign trade liberty, and regulation of credit regulation and GDP (Nominal GDP divided by population). They used GMM, panel data dynamics model to examine the focused connection. Gross fixed capital growth and economic openness are positive connected with growth however government consumption spending is an insignificant driver of growth in the SADC. They found that five components of economic freedom are significant and positively connected with

the above connection. They further found that causality among the elements of liberty of the individuals shows that there are linkages between some of these elements` Türedi(2013), they collected panel data from 1995 to 2010 for 12 countries in the Islamic world. They represented economic growth by GDPPC and liberty was represented through various indices, the IEF and the EFW that is published each year by the HF and the FI respectively. By using fixed effects panel data technique they examined the liberty influence growth. Based on two various indices of freedom, the result of econometric investigation indicate that liberty effects growth positively and it is important in terms of Islamic nations.

Al-Amarneh(2017), examined the impact degree of liberty on efficiency of investment anticipated by returns of market and instability. They collected the data for the MENA region for the year from 1996 to 2015. They collected the data for economic freedom from heritage foundation. They applied simple models and multivariate regression models to investigate the level of economic opportunity on investment efficiency. By using this econometric technique they found that the level of economic opportunity has slight affect on market return, and the performance of capital market improves when the government strategy is well-organized and framework of financial will reachable and work efficiently. The proof calls attention to that economic opportunity decline risk on returns of market, demonstrating that if the regulation of government in framework of financial and banking does not guarantee sincerity and integrity, at that point, productivity on the financial markets will decrease, financing expenses will increase and completion will be limited. The most important part of investment is risk and return. They found that financial opportunity promotes the risk return investment effectiveness in the MENA region.

Ay (2013), observed the connection among liberty and growth. They collected panel data for Turkey and Middle Eastern nations from 2004 to 2009. They collected the data from WDI (world development indicator) and heritage foundation. By using GC technique they examined the liberty impacts on growth. They found a negative connection between liberty and growth. It was distinguished in the sense of individual impacts that in terms of some Middle East Countries and Turkey, there was a strong connection.

Altman (2008), studied the impact of economic liberalization and related factors of GDPPC. Economic liberalization and related factors are essential for GDPPC is fundamentally assessed. Liberalization is vital for more significant levels of GDPPC and development. They collected data of freedom from Fraser institute. They used different elements of liberty such as government size, trade liberty, sound money and economic regulation. Legal and illegal corruption, public sector morals, and judicial effectiveness are used to measure corporate

governance. They found that progressively economic liberalization doesn't seem to yield more significant levels of GDP per capita. What's more, making sure about specific degrees of economic liberalization doesn't ensure more significant levels of GDP per capita. Protected ownership rights as well as sound money are seen asthe strong contributory variable, whereas moderate labour regulatory measures and large scale of administration are not seen as appalling to the economy

Ali, (2016), highlighted the impact of trade freedom, financial liberty and growth. They collected data for Pakistan. They collected the data for the year 1973 to 2014.they used different variables such as inflation rate, trade freedom, GFCF and financial freedom. The Economic growth is important determinant and it was utilized as dependent variable. GDP was utilized to measure growth. They studied the past and present condition of economic growth. By using OLS (employed Ordinary Least Square) they analyzed the impact of trade freedom, financial freedom and economic growth. They found that there is negative connection of trade liberalization, financial liberalization with gross domestic product (GDP). They also found that there is no significant connection of inflation rate to measure economic growth**.**

2.4. Conclusion

The phenomenon of economic growth has proved to be a necessary element in the prosperity of rich and poor economies. There are few factors involved in bringing the positive or negative results in the economic growth for different countries. The most important out of different factors is economic growth that indicates that how a country has made progress. Economic freedom's impacts are not confined to one nation but it also facilitates other countries to adopt the modern methods to enhance their economic volume. Over the past many years and future, the prediction of growth has had some significant consequences for many nations on the global economic arena. Economic growth can encourage the leaders of other nations to undertake new methods and evolve policies to mitigate the threats of recessions and inflation. It is to be ensured by any country that growth is managed to the best of their abilities. Hence, economic growth will remain to be the main objective for all countries.

Mostly countries chalk out comprehensive reforms policies which are expected to raise development through liberty. Data about the impacts of raised freedom on the personal satisfaction will assist them with settling on their choice and give important experiences on the drawn out social impacts of globalization. Such data also show the best pace for transition economies to liberalize it. Madan (2002), reveals that more economic freedom contributes to more development and growth opportunities.

The concept that economic freedom should be increased is supported by number of studies, in the context that development and changes come because of economic freedom which increases economic growth. A consistent increase has been witnessed from last few years. The significance of this bound, as mentioned above, further widens the scope of growth and freedom followed by opening of new avenues of development. Resultantly it paves way for sustainable growth for rich countries whereas creating more opportunities of development for countries which are on the way towards progress.

Chapter 3

Theoretical Framework,
Model and Variable description

3.1. Introduction of Economic Growth Theories

There is some growth theories connected with this study. Generally theories are classified into the classical g growth theories, new classical growth theories and modern growth theories

3.1.1. The Classical Growth Theories

Adam Smith, Robert Malthus and David Ricardo were amongst those who largely contributed in propounding the concepts in classical growth theories. They generally believed that each economy contains a balanced shape of GDP (gross domestic product) and any genre of variation due to diversity in economic outlook is likely to take the economy back to its regular arrangement. The idea of level of survival was promulgated by the classical economists who discovered that the element of changeability in GDP (gross domestic product) could be witnessed by gauging the level of survival. The rise in GDP (gross domestic product) results in flare-up of population that resultantly increases the demand, however, the increase in demand decreases the GDP (gross domestic product), which further reduces the population.

3.1.2. Adam Smith Growth Theory

As professed by Adam Smith in 1776 in his famous book titled Wealth of Nations, capital accumulation is the most essential component that helps achieve the level of growth and smooth sailing of economic wheel. Production functions, capital accumulation national resources, labour force and institutions are the salient points of Adam Smith's theory. He further noted that there are two impacts of capital accumulation; firstly, it encourages the technological advancement while secondly, it contributes in the enhancement of market due to the rise in earnings that is indeed a step towards economic development.

3.1.3. Robert Malthus Growth Theory

In 1798, political economist Thomas Robert Malthus wrote a book titled "An Essay on the Principles of Population", wherein he primarily professed that the population pace gets increased if the items of sustenance are increased, but a trap called 'Malthusian Trap' comes when populace increases ahead of reserves. He submitted that population increases with geometric rate, in the meanwhile the resources increase in arithmetic rate, resultantly, a stage comes where growth impedes due to the insufficient food supply.

3.1.4. David Ricardo Growth Theory

The contributions of David Recardo, a British economist, in the classical realm are termed as unprecedented and unparalleled in the classical theories. The standards of political economy and taxation are Ricardo's most highlighted contributions. He was amongst those who professed about the short-term economic gains. The Recardian Theory of growth primarily lays focus on few important factors that include; land, labour and capital (factors of production). In addition to this, although land is unchangeable yet its quality varies. Moreover, the growth level remains limited due to the shortage of land etc.

3.1.5. Neo Classical Theory

Two renowned economic theorists namely T.W Swan and Robert Solow, have contributions in professing about the Neo-Classical theory. The apparent contribution of both of them led to the formation of renowned model named "Solow-Swan Growth Model". It was primarily focused in the model that besides labour and capital, the technology is another factor involved in it. The theorists belonging to Neo-Classical theory stress on the technological capabilities and diminishing marginal returns to capital and labour. It further highlights that rise in capital results in diminishing returns, although it takes place on temporary basis. The rise in capital helps an economy sustain the growth rate. The technological advancement and inclusion of labour further, help to enhance level of production that is required to bring sustainable level of growth. A country having efficiency and capability to bring technological

changes can fix the ratio of labour as well as level of capital. According to Solow-Swan Growth Model, technological efficiency in all nations may result in same level of growth across the globe.

3.1.6. Harrod-Domar Growth Theory

This has earned another name as Razor Edge Model. Harrod maintains the opinion that accumulation of capital is the foremost factor that contains the ability to engender economic progress and open new avenues to generate income. This theory is the expanded form of theory of employment and income which provides a long-term theory of output. The rise in income generation increases the demand which further opens up new opportunities that are necessary to accomplish the requirements of commodities and services. The surplus in the capacity of producing goods encourages the level of employment and achieves slow growth in the long run economic development plans.

3.1.7. Slow-Swan Model

The credit for the development of this model in economic realms in 1950s goes to Robert-Solow and Trevor Swan whose primarily based their theory on lessening of returns to capital and labour as well as capital accumulation. In their opinion, a stage comes when economy confronts with slow pace because of retreating returns and technological deficiencies. Resultantly, it leads to the stage wherein capital and economic output for each worker remains stable. This model highlighted an essential level of conditional convergence that says that least developed and third world nations may get quicker growth having same investment rates, technology and savings. Generally, this model is categorized as Exogenous Model because it lacks the justification about this connotation that why nations should spend a diverse allocation of GDP in capital and how can the technology be improved in due course. At the same time, a pattern of growth is provided by this model by technology and capital accumulation. Later, the imperfections in this model were addressed in 1990s with the addition of some variables.

3.1.8. Endogenous Growth Theory

From 1980s to 1990s, Robert Lucas and Paul Romer revolutionized the growth theories, who laid stress on this point that Solow-Swan model that described the exogenous technological advancement does not sufficiently define the growth. Other than this, they resorted to present the new idea of technological endogeneity and mathematical explanation of technological progress. New ideas of human capital and workers' efficiency such as their talents, expertise and knowledge, that could be utilized for production improvement. Human capital and modernization are important factors that contribute in the enhancement of return rate. The Solow model remained under criticism in the treatises of Paul Romer because the rise

in labor output and capital do not remain constant in terms of diminishing returns, as it is likely to increase the returns, relatively it is somewhat twisting. (Barro, 1990; Ghalwash, 2014)

3.1.9. Solow Growth Model

This model was theorized by Robert Merton Solow in 1956 which professes which terms the model of economic growth as a function of capital and labour. He laid immense emphasis on the enhancement of economic development by introducing technological procedures through labour efficiency. This model envisages that the growth would remain positive and steadily reduces to minimum level. In addition to this, the level of higher pace of population growth as well as lesser savings equivalent to level of investment are coupled with the lesser growth rate and lowers living standards.

3.1.10. Cobb-Douglas Production Function

Paul Douglas and Charles Cobb, in 1928, projected the opinion that the result of goods production is the sum of invested labour and capital. Due to the element of technological advancement in it, this model is categorized as exogenous growth model. Element of advancement in technology largely has an impact on the output of capital and labour. It further depicts the relationship equations between the input (K, L) as well as the sum of productivity. The basic form of Cobb-Douglas Production Model is as under;

$$\mathbf{Y = A\ K^{a}L^{I-a}}$$

Explanation: Here A represents technology; K depicts the capital whereas L shows the Labour.

3.1.11. Unified Growth Theory

This theory was propounded by OdedGalor in order to justify the ramifications of endogenous growth theory, in which he stressed upon the pragmatic parameters of growth on single as well as global economic arena. Besides this, this theory is entirely contented with the practical guidelines as given under endogenous growth in the developing economies. This is the reason why it overlooked the factor that explains the qualitative pragmatic parameters in less developed, underdeveloped and developed economies. These theories are categorized as endogenous growth theories, which are reliable in the course of growth.

3.1.12. The Big Push

This hypothesis was conceived by Paul Rosenstein in 1943 who emphasized that massive investment is an indispensable factor that can pave way for economic growth in the underdeveloped economies. He further noted that small investments do not encourage the

enhancement of economic development in developing economies. This model actually projected the idea of growth, welfare and industrialization

3.2. Variable Description

The variable description' selection has bases on the selected variables as chosen from the previous literatures, which is aimed at discovering Economic freedom effects on growth in 42 Asian countries. This research selected theoretical and empirical variables which explain the connection between economic freedom and growth. Economic growth is used as a dependent variable calculated by GDP per capita, while economic freedom is used as independent variable which is based on the indexes that consist of different economic freedom components.

3.2.1. Independent Variable

The variable is explained as follow:-

3.2.2. Economic Freedom

In order to assure the opulence of a polity, economic freedom plays the role of a significant factor. Friedrich A. H., (1944) opines that this must be a code of conduct to make a society of free citizen "a policy of freedom for the individual is the only truly progressive policy". As defined by the Economic Freedom Index (2016), Economic freedom is the basic right of each individual that allows him/her to regulate his/her employment and assets. Individuals are independent to adopt the methods of their own choice to save their employment, produce goods, earn profit and make investments in a society with independent economic.

According to Miller(2017),"the absence of government coercion or constraint is not only the ultimate objective of economic freedom, but it also include the conception and safeguarding the common sense of freedom for all. Few government actions are indispensable for the inhabitants of a country to protect them as well as to encourage the peaceful development of a society. However, the policies of a government increase beyond the minimum compulsory point lead towards unavoidable loss for freedom".

Madan(2002), used the indicators of economic freedom by utilizing the economic freedom index for study. In the words of Wulandari(2015), a society neither ends up with equality nor freedom if it puts impartiality in the sense of impartiality of result ahead. The option of using power seeking equality will destroy the power used to introduce for good purposes, and consequently it will end up by those who use it to seek personal

3.2.3. Index of Economic Freedom

Different kinds of index are used to measure economic freedom to facilitate researchers,

such as economic freedom index, heritage foundation and Fraser institute. In simple words, economic freedom defies the relationship between government and individuals without government interference. The economic freedom is not only aimed at removing the government restrictions but it provides freedom to all. There are few necessary segments where the government interference is necessary such as defense, police etc. The increase in actions of government is directly proportional to the decrease in economic freedom of civil sector Friedman (1962). There are ten constituents of economic freedom index that are further categorized as under:

- **Government Spending/Size**: (Tax burden, Government Spending and fiscal health)
- **Rule of law:(** property rights, judicial effectiveness, and government integrity)
- **Market Openness**; (Financial Freedom, Investment Freedom, Trade Freedom)
- **Regulatory Efficiency**; (Business Freedom, Labor Freedom, Monetary Freedom)

The components used in Model is explained by different researchers are as under;

3.2.4. Government size

3.2.4.1.Tax Burden

The states inflict fiscal burdens upon economic and business activities by levying high taxes and borrowing restrictions. Governments that enable firms and individuals to retain and control a huge proportion of their resources and income for their own gain contribute largely in the maximization of economic freedom. Huge share of government in resources or income decreases the individual's economic reward and low incentives to enhance business activities. Hence, the aggressive taxation incapacitates the individuals and firms to pursue their objectives and resultantly lowers the volume of private sector activities (Miller, 2017).

3.2.4.2.Government Spending

All kinds of government expenditures as a GDP percentage are included in government spending (gross domestic product) that include consumption and transfer.

In terms of fiscal freedom and government spending, this is indeed an important problem in economic freedom. The government spending are categorized into two forms; firstly, government spending on infrastructure and human capital. Secondly, government spending on public goods in which individuals and society are mutually benefited. The higher level of government spending leads to the huge taxes and aggressive policies because the government finances all its spending by imposing tax that may often lead to decrease productivity and inefficiency, and increase public debt, which may increase burden of tax on the generations to come (Miller, 2017).

The government spending in terms of generating revenues by levying heavy taxes both direct and indirect, are main issues in economic freedom. Majority of government expenditures on public goods are efficiently delivered by government and then by private sectors. Government actions lead towards market failure is as it abates the efficiency and lowers production(Friedman, 1962).

3.2.4.3 Fiscal Health

The fiscal health as well as the principle of limited government largely reflects from the fiscal budget announced by a government. A budget explicitly depicts the field where the government is likely to interfere in economic activity as well as the level of that interference by reducing priorities and allocation of resources. However, the budget depicts the commitment or lack of a government for potent financial organization of wealth that is necessary for a vibrant economic development and dangerous to the progression in the economic freedom. The enlargement of deficits and ascending graph of debt erode the overall fiscal health of a country as both of them are the outcomes of poor management of budget by a government. The variations from fiscal positions frequently create disturbance in macroeconomic strength, encourage the economic chaos, and eventually impede the economic freedom

3.2.5. Rule of law

3.2.5.1 Property Rights

The capacity of person to protect private property through the fulfillment legal obligations that are usually, a policy established for the protection of property rights.

The capacity to store private property is central force for workers as well as the investors. The smooth business activities take place if private property of an individual has legal protection. Resultantly, will boost the morale of a citizen to invest in the projects in order to earn profit and evolve new plans having confidence that the state norms and strict laws will help him protect the income and profit. In this regard, potent judicial system and an effective law and order mechanism are necessary to encourage the investors and real estate sector to work efficiently (Miller, 2017).

The capacity of an individual to purchase, transfer and sell property without government restrictions (Friedman, 1962)

3.2.5.2 Judicial Effectiveness

An effective judicature and potent judicial order in a country protects the citizen's rights against encroachers of the law, such as corrupt elements in the executive and bureaucracy, powerful groups and mafias. Being an important factor of the rule of law, effective judicial

system needs an efficient response mechanism to make sure that the legal orders are complied with in true letter and spirit, followed by strict punishments to those who challenge the writ of the state.

Plenty of evidences are available all over the world that an effective judicial system is a significant element that empowers an individual, ends discrimination and enhance market competition. An institutional assurance to safeguarding and making judicial productivity more efficient is essential in an unending and protracted struggle for the improvement of living standards and pursuance of tranquility(Miller, 2017).

3.2.5.3 Government Integrity

Corrupt practices of all kinds regarded in a country may reflect conventional relations in other countries of social and cultural diversities. For instance, kickbacks, commissions and informal payments to service providers or government officials may be considered as typical ways of compensations in lieu of seeking concessions.

The amounts of the government meddling in economic activities and the predominance of corruption have close relationship. The social menaces such as bribery and graft encouragingly take place due to aggressive and unnecessary parameters set by the government. Moreover, restrictions by the government in one place create informal markets in another area. For instance, a government may incentivize bribery and encourage illegal dealings through regulatory red tape and high transaction costs that further compromise the transparency by imposing multiple impediments to conducting business and enhance economic activities.

3.2.6. Market Openness

3.2.6.1. Financial Freedom

The expansion of financial opportunities and business promotions are encouraged by a free banking environment. The competition between different firms and businessmen provides more efficient financial instruments. Keeping under consideration that banking sector helps boost the capital flow in a nation so there is a pressing need to lay more focus on banking sectors because it ensures honesty and promotes disclosure of asset, liabilities and risk (Miller, 2017).

The interference of government in financial sector and efficiency of banking system is measured through financial freedom(Hussain, 2016).

There are different methods being adopted by different countries to make the money more protected, which are either judicious administration or evolving ultra-modern techniques and strategies. It is indispensable to strengthen an unbiased judicial system to ensure the

protection of financial sector (Friedman, 1962).

3.2.6.2. Investment Freedom

An open economy does not inflict any embargoes on the smooth flow of investment and capital. The firms and individual uninterruptedly and fearlessly conduct their business activities across borders without any clampdown(Hussain, 2016).

Free and open investment created maximum business chances and inducement for the expansion of economic activities and greater productivity. An individual' ability to enhance the business activities followed by the enhancement of economic growth increases with less government restrictions. The efficient allocation of resources gets disturbed due to the restrictions on free flow of capital both nationally and internationally, which further leads to reduce productivity. In addition to this, the restrictions on international flow of capital put limitations on both inflow and outflow of capital, which contributes in shrinking of market and decreasing opportunities of growth (Miller, 2017).

The output of free flow of capital will increase where it is needed. The restrictions on the free flow of capital from one place to another, leads to lower level of business activities and economic growth(Friedman, 1962).

3.2.6.3. Trade Freedom

This primarily professes about the nonexistence of tariff and non-tariff restrictions that directly affect the imports as well as exports of country uninterrupted(Hussain, 2016).

Trade freedom means an uninterrupted flow of goods and services from one nation to another, and it reflects an individual' capacity to expand business activities freely in the international market. The phenomenon of trade constraints means tariff and non-tariff such as tariff increases the prices of goods, which a local buyer pays for foreign imports. Consequently, this leads to decrease the incentive of local producer(Miller, 2017).

3.2.7. Regulatory Efficiency

3.2.7.1. Business Freedom

It is a capacity of person to commence, expand and close the business activities without any restriction from the government (Hussain & Haque, 2016)Business freedom can be defined as a liberty in taking decisions to strike a business deal, start projects, open and close the business without any meddling from the respective government. The proximate and immediate restrictions that an individual face before starting a project are the tax burdens and terminations of rules. The increase in production cost makes it difficult for an individual or firm to carry out transactions and get maximum benefit, i.e. the registration of business, obtaining the license

and inflexible (Miller, 2017).

It is sole discretion of an individual to take a business initiative, operate freely and close at his own wish and desire without any government restriction. If the strict rules have to be followed by an individual before starting business then the economic activities will slow down (Friedman, 1962).

3.2.7.2. Labour Freedom

It is a kind of freedom wherein legal organizations with mandate of regulation of labor market are gauged to determine the labor mobility.

Few of the key elements of labor freedom are the capabilities of individual' to hunt for employment. This is same as the decision of a businessman to hire and fire labor without any government restrictions. Therefore, in many countries, particularly developed countries, labor unions play essential contribution in protecting the rights of labour class (Miller, 2017).

The desire of labour to work as much as they can is the key element of economic freedom. It also includes the decision of a businessman to hire or fire labor without any restriction of state. This signifies the sustainable economic growth and increasing productivity (Friedman, 1962).

3.2.7.3. Monetary Freedom

It is the stability of price with a calculation of price controls as both inflation and price control disfigure the activities of market.

Monetary freedom plays a pivotal role in price stability and in price controlling. Businessmen, consumers and common people want a stable currency. The monetary policy of a state significantly influences the value of currency of any nation. The monetary policy helps control the inflation and stabilizes the prices and reserves wealth of nation (Miller, 2017).
Monetary freedom means a stable currency and market price. Free people want stable and reliable currency for medium of exchange, store of value and unit of account. The government monetary policy controls the nature of currency of a nation (Friedman, 1962).

3.3. GDP Per Capita

Since economic growth is being utilized as dependent variable that is taken as GDP Per Capita. It gauges the overall output of a country on the basis of division of people in country (Lequiller, 2009). Growth is the proximate factor that reflects the economic nourishment by producing commodities and services. The ascending wave in economic development reflects the increasing productivity capacity, progress in literacy ratio, enhancement in capital reserves and improving essential things that are required to increase the living standards of life who may be able to enjoy the facilities as required for a better life.

3.4. Gross Capital Formation

This phenomenon defines the addition of fixed asset in an economy as well as complete change in the echelons of accounts. Besides this, fixed asset comprises plant, land, equipment and machinery, construction of railway road, hospital, offices, school industries and commercial buildings. Whereas, the inventories comprise goods' stock, running projects and final products.

3.5. Employment-to-Population

This is simply defined as the quantity of people attached with working class in a country. The high ratio depicts that a big chunk of population in a country is employed, whereas the low ratio depicts that a big chunk of population has no direct contribution in business activities due to being both unemployed or having no direct link with the labour force. (ILOSTAT)

The working-age population comprises the people beyond legal working age, but as far as statistics are concerned, it comprises all those beyond the verge of defined minimum age. In order to evolve a comparison, the working age population is frequently defined as all those who are aged 15 and older, but this phenomenon varies in different countries on the basis of traditions, norms and laws. Nonetheless, this age communicates explicitly to social values for education and eligibility to work in countries of different origins, yet it is generally justified and acceptable to make younger workers part of it as working age starts earlier is some countries, particularly developing ones. Under such circumstances, few countries inflict minor official restrictions and make younger workers part in their measurements. Likewise, few countries follow the high bounds for eligibility that ranges from 65 to 70 years, which is not frequently inflicted.

3.6.Model specification

3.6.1. Conceptual Framework

This research examined economic freedom impacts on growth of 42 Asian countries. The aim of research is to analyze the connection between economic freedom and growth, that is positive and significant, and it implies enhancing economic freedom helps increase the growth of economy. Solow-Sawan (1956) model is utilized in this research, wherein the total production of a county is reflected in the economic growth; L is labor, K is capital and A is level of technology. Solow found that the change in the combination of capital and the labor is insufficient to describe economic growth. This assumption based study professes that the spill-over of the level of knowledge that is obtained through economic freedom that may affect

productivity of factors of production with the passage of time. Thus, through the inclusion of new variables, a new model emerges having characteristics of an endogenous model. This model K is represented by GCF (gross capital formation) and L is represented by employment to population ratio that has explicit impact on economic growth. The proximate reason behind inclusion of these variables is because they will be used in the application part of this study. In addition, innumerable economists have used these variables in their studies. The model which is use in this study is espoused from the study of (Altman, 2008)and (Nalley, 2005).

3.6.2. Model

By using data for 42 Asian countries, a random effect model, fixed effect and GMM are used to find whether the economic freedom index has any impact on growth of Asian countries, as explained by per capita GDP. With the rise in freedom, it is expected in this study that there will be a raise in the GDPPC. The curbs on economic freedom are termed as abatement in the GDP per capita in view of the fact that adequate resources are not allocated in these countries seeking the best possible return use as well as the consumers are unable to purchase goods and services with least possible cost. It has also been empirically elucidated that the rise in the government subsidies resultantly abates the level of GDPPC. Hence, the development of this model is aimed at investigating that economics freedom increases the level of GDPPC of countries in the Asian region.

The economic freedom's effect on GDP growth has been investigated in empirical way by using following model and in order to select the variables, existing literature has been used (Dawson 1998),

The basic Solow model can be explained as;

$Y=f(L,K)$…….(1)

Above mentioned Solow model equation shows the association between labor, capital and output. The general form of the Cob-Douglas production function is following

$Y = AK^{\alpha}L^{\beta}$…….(2)

The above Solow model is basic Cob-Douglas production function where total production of the country is genuinely reflected in output. L is labor, K is capital and A is technology. Output is function of A and it is acquired through the inclusion of new variable. In this study, modified model will be utilized to examine economic freedom impacts on growth. Seeking desired outcome, the model is further generalized with the addition of economic freedom.

$A = f(EF)$

Here A is function of EF. Whereas, EF stands for economic freedom which is used as independent variable that has explicit impacts on output. This variable has also been used by (Gartner, 2006)

$$Y = AK_{i,t}^{\alpha} L_{I,t}^{\beta} EF_{i,t}^{\gamma} \ldots\ldots\ldots\ldots (3)$$

Here output has been measured by GDP per capita and it is function of capital, labour and economic freedom.

$$GDPPC = AK_{i,t}^{\alpha} L_{i,t}^{\beta} EF_{i,t}^{\gamma} \ldots\ldots\ldots\ldots (4)$$

Now taking log on both sides of equation 4

$$\ln GDPPC_{i,t} = \text{Ln}\ (AK_{i,t}^{\alpha} L_{I,t}^{\beta} EF_{I,t}^{\gamma})$$

After arithmetic simplification we got

$$\ln GDPPC_{i,t} = \ln A + \alpha \ln L_{i,t} + \beta \ln K_{i,t} + \gamma \ln EF_{i,t} + \mu_{i,t} \ldots\ldots\ldots\ldots\ldots\ldots (5)$$

Now this study is converting the general model into desired variable. GDP per capita is function of economic freedom, employment to population ratio and gross capital formation and these variables are also used by (Akin, 2014).

$$\ln GDPPC_{i,t} = \beta_i + \beta_1 \ln Pop_{i,t} + \beta_2 \ln GCF_{i,t} + \beta_3 \ln EF_{i,t} + \mu_{i,t} \ldots\ldots\ldots\ldots\ldots\ldots (6)$$

In order to seek the effect of economic freedom on GDPPC we have added the different components of economic freedom in equation 6 as reflected hereunder.

$$\ln GDPPC_{i,t} = \beta_i + \beta_1 \ln Pop_{I,t} + \beta_2 \ln GCF_{I,t} + \beta_3 \ln EF_{i,t} + \beta_4 \ln IF_{i,t} + \beta_5 \ln FF_{i,t} + \beta_6 \ln FH_{i,t} + \beta_7 \ln GI_{i,t} + \beta_8 \ln BF_{i,t} + \beta_9 \ln MF_{i,t} + \beta_{10} \ln GS_{i,t} + \beta_{11} \ln TB_{i,t} + \beta_{12} \ln JE_{i,t} + \beta_{13} \ln TF_{i,t} + \beta_{14} \ln PR_{i,t} + \beta_{15} \ln LF_{i,t} + \theta_i + V_t + \mu_{i,t} \ldots\ldots\ldots\ldots\ldots\ldots (7)$$

Herein, V_t is unobservable time effect, $\mu_{i,t}$ is error, β_i is fixed country effect, θ_i is cross sectional specific dimension, "i" refers to country, and whereas "t" is symbol of time. "ln" represents logarithmic transformation of all the variables.

In the equation (7) economic growth is measured by GDP per capita, L is measured by employment to population ratio, K is measured by GCF (gross capital formation). EF is economic freedom index which is consist of different components such as investment freedom, fiscal health financial freedom, government integrity, business freedom, tax burden, monetary freedom, government size, judicial effectiveness, trade freedom, property rights and labor freedom. These variables are selected to check economic freedom's impact on growth in the Asian region.

Chapter 4

Data and Methodology

4.1. Introduction:

Based on the data and methodology, this chunk of study investigates economic freedom impacts on economic growth for 42 Asian countries. Main idea behind the selection of variables is that what impact these variables have on economic growth. In order to seek this idea, the most significant step is the collection of data on respective countries. The reliable and concrete sources are selected seeking feasible results. In this study, cross sectional data has been collected for 42 Asian countries from 1995 to 2018. Specification of the model is the next step after the collection of data through mathematical and theoretical sources. The selection of suitable procedures, methodology and the composition of variables to carry out analysis, is most significant and defining process. In order to observe the impact of economic freedom on the Asian countries' economic growth, data and methodology describe the source of data and model specification.

4.2. Source of Data

Different sources are used to collect secondary panel data for Asian countries for observing the effect of freedom on Asian countries' growth on economic arena. In this study, GDPPC will be utilized as dependent variable, while economic freedom is being considered as an independent variable. Moreover, various proxies of economic freedom will be used in this study that primarily include freedom to do business, fiscal health, tax burden, judicial effectiveness, government integrity, investment freedom, property rights, government spending, labor freedom, financial freedom, trade freedom and monetary freedom. The data for economic freedom and its components is collected from Heritage foundation. In addition, the data for employment to population ratio, per capita GDP and gross capital formation is collected from world development indicator of World Bank that covers period from 1995 to 2018 for 42 Asian countries. I have resorted to collect panel data for this study. The reason behind the limited time period for the study, 1995 to 2018, is the limitation of data for few variables.

4.3. Selection of the Countries

This study has selected 42 Asian countries for analyzing economic freedom impacts on growth. The reason behind the selection of 42 Asian countries is that no comprehensive study has been done on these countries by utilizing all the components of economic freedom.

4.4. Time space

The panel data sought in this study belongs to42 Asian countries from 1995 to 2018 aiming at finding out the economic freedom impacts on growth. The proximate reason behind limited data range is that the freshly computed dataset range in available till 2018 so far. Moreover, another reason is that the research is aimed to gauge the economic freedom impacts on growth in contemporary era. The availability of the data for 42 Asian countries is another important task that has done successfully.

4.5. Econometric Statistics

While confronting with panel data, it is essential to ensure the unbiased behavior of all variables towards measurement. Panel data proves to be helpful when it is intended to find the dependence of dependent variable on explanatory variables that are unobservable yet interlinked with observed explanatory variable. If unobserved variables are constant, the estimators of panel data allow for estimations of impacts of observed explanatory variable. The cross sectional effects are very strong in panel data; this is the reason why it is important to ignore such changing. Random and fixed effects have been used for discovering that what amount of values changes because of variations. Fixed effect and random effects estimators are most frequently used estimators. Hausman test is aimed at gauging that how parameter estimators change between fixed and random effect.

4.6. Panel Data Estimation Model

4.6.1. Panel Data

This phenomenon is recognized as longitudinal or cross sectional time-series data. It helps observe behavior of different things, such as companies, individuals, states, countries etc, in different times. It further permits the influence on the variables that are difficult to measure and observe that relate to culture and traditions, or difference in business norms in different firms as well as the variables, which changes with the passage of time but not different individuals. Besides this, the panel data helps add variables on diverse stages of analysis that may be suitable for multi-staged or hierarchical modeling. Few of the flaws in it are related to collection of data problems (sampling, design, and coverage), no response in case of micro

panels or inter-dependence of economies in case of macro panel that is correlation between countries. Panel data is a combination of two things, as under;

4.6.2. Cross-Sectional Data: The procedure to gather information about various individuals or firms for single but not multiple times is known as Cross Sectional data.

4.6.3. Time Series Data: It is defined as a procedure which is aimed to collect information about one individual or firm at multiple times. Thus, panel data is mixture of cross-sectional as well as time series that leads assembling of information about multiple individuals and firms in diverse times. Moreover, if each unit of cross section contains similar observation of series of time in panel data then it will be called as a balanced panel. If all countries carry the record of data about all years, it will be called highly balanced while if a country does not carry data of one year, it is called as unbalanced data.

To estimate and analyze the panel data, these models are categorized as under;

4.6.4. Random Effect Model

Effect model has two types, which includes random effect model and the fix effect model. When unobserved variables are not found in the model then random effect model is used. Secondly, it is used to model when the unobserved variable has no connection with the independent variables. In simple worlds, when the unobserved variables are not interlinked with the independent variables then we pursue the random effect model to get to know about the problem of biasness in the model. Random effect model provides an unbiased estimation and yield small standard errors.

4.6.5. Fixed Effect Model

It is the second type of effects model that has reverse impact on the model than that of the random effect model. It exists when the unobserved variables are established in the model, and unobserved variables have connections with the independent variables. In this model, the variables which are hard to observe are interlinked with the independent variable of model. The impact of unobserved variables can be recognized as fixed. The impact of unobserved variables would be similar in second subject as it was in the first subject. This is the reason why it is also known as the biased model. The proximate reason behind it is that the fixed model makes the impacts of unobserved variables fixed with each subject in the model. Hence, it can be said that the effect will be recognized as fixed in the model.

4.6.6. Hausman Test.

The Hausman test allows choosing either a model with fixed effect or a model with random effect. In random effects, null hypothesis is termed as the best model, whereas in fixed effects, substitute hypothesis reflects the justified model. This test is used to identify whether

there is any existence of any connection between model regression and model error terms. However, the null hypothesis shows nonexistence of any connection between both. It is essential to understand the predicator variables are endogenous or not, before taking the best decision of regression method. This is the sole reasons of the evolution of Hausman Test. The rejection of null hypothesis takes place when p-value is less than 0.05. The value of $p<0.05$ has been taken as proof that two models are sufficiently different at the level of significance to reject the null hypothesis, which is in favor of the model of fixed effects.

For parameters of panel data regression model, an example of Hausman carries out comparison of two different estimators. Particularly, it is recognized that both, random effects and the fixed effect panel estimators, are stable on basis of hypothesis that the model is properly specified and the assumption of random effect is that the repressors are independent of individual effects estimators. The difference between fixed effect and random effect estimators would tend to be little. On the other hand, if assumption of the random effect gets failed yet the model is otherwise appropriately presented, then the estimators of fixed effects remain constant, but the estimator of random effect will not remain constant. Hence, the difference between random effects and fixed effects may relatively be large.

4.6.7. GMM (Generalized Method of Movement)

This method is especially designed for the case where time series are less than the number of observation. Independent variables are weakly endogenous that they are interlinked with the error term. It contains a dynamic variable (lagged value of dependent variable). There are unobservable individual fixed effect and autocorrelation, and hetorscedasticity is only observed within the variables but not between them.

When the problem of endogenity in the model occurs, the econometric model of this study is used. Engonenity problem takes place when incorporated explanatory variables are interlinked with the model error term. Ordinary least square (OLS) estimates will give biased results in the presence of endogenity issue in model. The technique of GMM estimation prevents model from the problem of serial association and hetroscedasticity. Instrumental variable technique is used in GMM to tackle endogeneity problem, which is used in regression to solve the bias problems of simultaneity between independent, error term and with dependent. The technique of GMM estimation is an advanced technique compared to the instrumental method, which provides reliable and equitable values of estimation despite the presence of hetroscedasticity problem in the model. For panel data, we always search for endogenous and hetroscedastic issues. In addition, the technique of GMM estimation gives dependable parameters by examining the objective function that contains the moment restriction. GMMis

indeed a better procedure than Two Stage Least Square (TSLS), Three Stage Least Square (3SLS) and Generalized Least Square (GLS).

4.6.8. Conclusion

In order to study economic freedom's impact on economic growth of 42 countries in Asia, this chapter presents detailed information about source of data, countries selection, time space, model and methodology. The data is collected from 1995 to 2018. In this particular study, GDPPC is being utilized as dependent variable, while freedom is being considered as an independent variable. Moreover, various proxies of economic freedom will be used in this study that primarily include business freedom, fiscal health, tax burden, judicial effectiveness, government spending and integrity, property rights, investment, monetary, trade, financial and labour freedoms etc. Employment to pop ratio and GCF are also used as independent variable. The growth are discussed which are linked with this study. Moreover, the model is developed on basis of specified variable to analyze economic freedom's impact on economic growth of 42 Asian countries. Econometric techniques are used to analyze the above link such as descriptive statistics, matrix of correlation. These techniques are used to examine the correlation between variables. To examine the individual effect and endogenity of regression random effect model and fixed effect model is applied. For the identification of model feasibility with hausman technique is applied.

Chapter 5

Data Analysis, Result and estimation

5.1. Introduction

Econometrics techniques are required to determine economic freedom's impact on economic growth. In this section this investigation has examined, yield results and data through desired econometric method. Ultimate outcomes are described by executing experimental investigation on the economic freedom and growth.

Table 5.2

5.2. Descriptive Statistics

Variable	Obs	Mean	Std.Dev.	Min	Max
OS	930	59.945	12.078	15.6	90.5
PR	932	45.662	23.43	5	98.4
GI	936	38.767	21.907	4	94
JE	84	47.083	20.489	5	91.5
TB	931	80.48	14.626	10	99.9
GS	934	74.069	18.957	0	98.7
FH	81	71.08	31.701	3.8	100
BF	936	64.796	16.162	20	100
LF	572	65.3	16.116	20	100
MF	918	73.074	12.726	0	94.3
TF	926	70.463	14.236	13.2	95
IF	917	46.494	21.175	0	90
FF	930	45.86	20.074	10	90
Empl	1007	59.357	12.257	33.34	87.42
GCF	960	26.886	8.862	2.076	67.911
lnGDPPC	997	8.409	1.447	5.49	11.152

Table displays the statistics of the variables which are used in model to find economic freedom's impact on GDPPC. The descriptive statistics highlight the importance of variables as well as it explains whether the variables are normally distributed or not. Economic growth has been used as dependent variable which is measured through GDP per capita. The mean value of lnGDP per capita is 8.409 with standard deviation 1.447 which shows plenty of

number are more closer to the mean value whereas the variation is small in economic growth; a minimum of 5.49 and a maximum of 11.152.

The index of economic freedom is utilized as independent variable has a mean value of 59.945. The scale which is assigned to measure economic freedom is from 0 to 100. A grade 100 represents the higher level whereas grade 0 represents the lower level of economic freedom. The standard deviation is 12.078 which show the variation in GDP per capita with a minimum of 5 and a maximum of 98.4, it mean when economic freedom value is closer to 98.4 then it will leads to increase economic growth. The mean value of trade freedom is 70.463 with standard deviation 14.236; with a minimum of 5 and a maximum of 95. The estimated connection between trade freedom and growth remains positive. Enhancement in trade freedom helps increase the economic growth. The mean value of trade freedom in the Asian countries is around 70.463 per cent. This shows that the Asian countries are relatively free, and accrue the advantages connected with more significant levels of trade.

The mean value of property rights is 45.662 with a minimum of 4 and a maximum of 94, and the value of standard deviations shows that dispersion of 23.43 is present in it. The mean value of government integrity is 38.767 with a minimum of 4 and a maximum of 94, and standard deviations value depicts that dispersal of 21.907 is present in it. The mean value of judicial effectiveness is 47.083 with a minimum of 5 and a maximum of 91.5, and the value of standard deviations shows that dispersion of 20.489 is present in it. The mean value of tax burden is 80.48 with a minimum of 10 and a maximum of 99.9, and the standard deviations value shows that dispersal of 14.626 is present in it. The mean value of gross capital formation is 26.886 with a minimum of 2.076 and a maximum of 67.911, and the value of standard deviations shows that dispersion of 8.862 is present in it. The fiscal health has a mean value 71.08 of with a minimum of 3.8 and a maximum of 100, and the value of standard deviations shows that dispersion of 31.701 is present in it. Descriptive statistics for the trade, investment, financial, business, and freedom, government spending, labor and monetary freedom and employment to population ratio are also explained in the table as shown above.

Table 2

5.3. Correlation Test

The table of correlation matrix shows connection of coefficient between the variables. Each random variable is interlinked with another one that helps to carry out analysis whether which of the pair is interlinked. The range of Coefficients of correlation is from +1 to -1. Hence, positive range depicts the positive connection between all variables whereas -1 shows negative connection between variables.

5.4. Matrix of Correlations

Var.	GCF	EMPL	FF	IF	TF	MF	LF	BF	FH	GS	TB	JE	GI	PR	OS
GCF	1.00														
Empl	0.38	1.00													
FF	-0.37	0.06	1.00												
IF	-0.53	-0.21	0.84	1.00											
TF	-0.43	0.10	0.76	0.69	1.00										
MF	-0.42	-0.06	0.67	0.69	0.73	1.00									
LF	-0.10	0.19	0.44	0.39	0.43	0.23	1.00								
BF	-0.17	-0.10	0.51	0.44	0.49	0.36	0.56	1.00							
FH	0.11	0.29	0.03	-0.02	0.02	-0.21	0.10	0.04	1.00						
GS	0.06	-0.04	-0.11	-0.14	-0.22	-0.07	-0.02	-0.10	0.20	1.00					
TB	0.08	0.31	0.22	-0.02	0.14	-0.10	0.30	0.10	0.05	-0.14	1.00				
JE	-0.16	0.11	0.56	0.43	0.59	0.53	0.41	0.63	0.08	-0.15	0.05	1.00			
GI	-0.15	0.08	0.64	0.53	0.65	0.58	0.54	0.70	0.01	-0.13	0.11	0.86	1.00		
PR	-0.17	0.14	0.68	0.56	0.63	0.61	0.50	0.70	0.09	-0.17	0.11	0.86	0.86	1.00	
OS	-0.27	0.13	0.81	0.71	0.74	0.59	0.64	0.72	0.34	0.05	0.20	0.79	0.84	0.86	1.00

Table shows the correlation of the different variables that are utilized in the empirical part of the study. The two most significant variables are economic freedom and GDPPC (gross domestic product per capita) which have a correlation coefficient of -0.267. This suggests that these two factors are negatively connected with each other. This implies that if economic freedom in a nation is higher than it will consequently have the less GDP per capita. Moreover the fiscal health, government spending, tax burden and gross capital formation have a correlation coefficient that is 0.110, 0.058, 0.077 and 1.000 respectively. This suggests that these variables are positively connected with GDPPC. Whereas, the financial, investment, trade, monetary, labor and business freedom have a correlation coefficient that are -0.374, -0.528, -0.429, -0.416 -0.100 and -0.172 respectively. This implies that these variables are negatively connected with GDP per capita. Government integrity, judicial effectiveness and property rights have a correlation coefficient -0.147, -0.159 and -0.170 respectively. The study finds a same correlation with these three kinds of freedom and GDPPC. So, the connection between these three variables and GDP per capita is also negative.

Table 3

5.5. Multicollinearity Test

Variance inflation factor

Variables	VIF	1/VIF
PR	7.352	.136
FF	6.438	.155
GI	6.432	.155
IF	6.331	.158
JE	5.728	.175
TF	4.282	.234
MF	4.026	.248
BF	2.772	.361
LF	2.092	.478
Empl	2.049	.488
GCF	1.812	.552
TB	1.507	.664
FH	1.477	.677
GS	1.309	.764
Mean VIF	3.829	.

In order to check the potency of co-relationship among independent variables, multicolinearty is tested. There was no serious multicolinearty issues found in VIF (variance

inflation factor) for all variables as their values are below the upper bound 10 as shown in the table.

5.6. Heteroskedasticity Test:

Breusch-Pagan/Cook-Wesiberg test forheteroskedasticity

Ho: Constant variance

Variable: fitted values of lnGDPPC

chi2(1)= 0.02

prob>chi2=0.8765

Heteroscedasticity is also viewed as through the Breusch-Pagan test to test whether the variance of error is cause by the independent variables. The value of chi2 (1) is 0.02 and the probability is 0.8765 which means that it is greater than the 0.05%, so we will reject the H1. There is no issue of heteroscedasticity when fitted for GDPPC (gross domestic product per capita).

5.7. Normality Test

Skewness/Kurtosis tests for Normality

------ joint ------

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj_chi2(2)	Prob>chi2
myfileresi~l	69	0.650	0.498	0.680	0.712

The probability of skewness is 0.650 which means that skewness is usually distributed asymptotically. Similarly, Pr(kutosis) suggests that kutosis is usually distributed asymptotically, too. Lastly, chi(2) is 0.712 which is greater than 0.5 indicating a 5 percent significance. Residual thus displays normal distribution according to the skewness test for normality.

5.8. Omitted Variable Test

Ramsey RESET test using powers of the fitted value of lnGDPPC

Ho: model has no omitted variables

F(3, 50) = 10.26

Prob>F =0.0000

In this study, H0 is rejected that means this model has missing variable due to the presence of endogeneity in it, and this problem of endogeneity will get solved once the advance technology is used that is GMM.

5.9. Results of Fixed Effect Model

Fixed model makes the effects of unobserved variables fixed with each other subject in the model. Hence it can be said that the effect will be recognized as fixed in the model because the unobserved variables are interlinked with the independent variable of the mode

5.9.Estimation results of Fixed Effect Model

	Model 1	Model 2	Model 3	Model 4	Model5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Variables	lnGDPPC	lnGDPPC	lnGDPPC	LnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC
GCF	0.00764***	0.0103***	0.0109***	0.00379***	0.00797***	0.0108***	0.00391**	0.0104***	0.00311**	0.00892***	0.00742***	0.0113***	0.0102***
	-0.0014	-0.0016	-0.0016	-0.0013	-0.0015	-0.0016	-0.0019	-0.0016	-0.0014	-0.0015	-0.0014	-0.0017	-0.0016
Empl	-0.0133***	-0.0034	0.0015	0.0119	-0.0118***	-0.0026	0.0028	-0.0055	0.0030	-0.0036	-0.00766**	-0.0051	-0.0115***
	-0.0037	-0.0043	-0.0042	-0.0135	-0.0038	-0.0042	-0.0159	-0.0041	-0.0038	-0.0039	-0.0035	-0.0044	-0.0044
OS	0.0346***												
	-0.0019												
PR		-0.00347***											
		-0.0009											
GI			0.00897***										
			-0.0011										
JE				0.00381***									
				-0.0011									
TB					0.0168***								
					-0.0010								
GS						-0.00381***							
						-0.0010							
FH							-0.0002						

							-0.0005						
BF								0.00992***					
								-0.0010					
LF									0.0012				
									-0.0009				
MF										0.00819***			
										-0.0009			
TF											0.0162**		
											-0.0008		
IF												0.0007	
												-0.0009	
FF													0.00566***
													-0.0012
Constant	6.988***	8.586***	7.767***	7.841***	7.627***	8.645***	8.600***	7.902***	8.289***	7.889***	7.620***	8.468***	8.640***
	-0.230	-0.251	-0.256	-0.831	-0.226	-0.253	-0.972	-0.246	-0.236	-0.240	-0.211	-0.255	-0.250
Observations	891.00	893.00	897.00	75.00	892.00	895.00	72.00	897.00	556.00	883.00	887.00	879.00	891.00
R-squared	0.31	0.06	0.12	0.39	0.28	0.06	0.13	0.14	0.02	0.13	0.36	0.05	0.08
Number of ID country	42.00	42.00	42.00	40.00	42.00	42.00	39.00	42.00	42.00	42.00	42.00	42.00	42.00

Standard error in parentheses

***p<0.001, ** p<0.05, * p<0.1

Connection of monetary freedom with dependent variables shows positive and significant at probability 1%. Increase of one unit in monetary freedom leads to 0.00819% increase in GDP per capita. Monetary freedom is most significant variable of freedom that affects growth. It encompasses evolution of stability of price and level of price control. The prices automatically get stabilized in the ideal free markets with no direct interfering of state entities in this regard. The inflation and government interference in price controlling mechanism abates the market activities. The independence of central bank and free capital movement has direct impacts on growth, and independent central bank is necessary for the stability of price. Therefore, the free movement of capital is important element that largely contributes in the smooth flow of FDI Heritage foundation (2018).

Relationship of trade freedom with dependent variables shows positive and significant at probability 1%. An increase in trade freedom by one unit results in an increase of 0.0162 per cent in GDPPC. Abatement in foreign trade embargoes smoothen the exchange of services and goods with other countries. This phenomenon would enlarge the demand that would motivate more investment and production, followed by increasing the economic growth.

The relationship of labour freedom with dependent variables shows positive and insignificant. A rise of one unit of labour freedom results in an increase of 0.00121 per cent in GDP per capita. The free markets encourage the productive employment of labour, which increases the efficiency and productivity that will contribute to raise economic growth (Erdal, 2004)

Relationship of fiscal health with dependent variables shows negative and insignificant at probability 1%. One unit increase in fiscal health lead to 0.000188% decrease in GDP per capita. Through the reduction in government subsidies, consumption, spending and transfers, the fiscal health can be improved. The excessive non-productive expenditure would create fiscal deficit. This deficit would be repaid and consequently it would have negative impacts on economic growth. The decrease in government interference would decrease regulations and intervention in financial services, and the allocation of capital. Thus, it would compel the capital market to allocate its credit more efficiently. Henceforth, the reduction of government involvement and government consumption would help increase the investment activities that would largely contribute in boosting the business activities (Le Roux, 2015).

The relationship of government integrity with dependent variables shows positive and significant at probability at 1%. A rise in the reputation of government by one unit contributed to

an increase in GDP per capita of 0.00897 per cent. Keeping under consideration the irreparable losses being inflicted upon government integrity due to the menace of corruption in the developing countries, it is indispensable to encourage the evolution of accountability institutions followed by across the board accountability mechanisms aiming at incapacitating the corrupt practices of all kinds. Mechanism for transparency and the system of integrity can be developed to assess and implement good governance. It is important to ensure that elected officials and political office holders are accountable and transparent with regard to their decisions and actions while conducting their duties in public agencies (Matsiliza, 2017)

The relationship of tax burden with dependent variables shows positive and significant at probability at 1%. An increase in the tax burden per unit results in an increase of 0.0168 per cent in GDP per capita. The savings and growth increase with the decrease in tax burden because the private sector's efficiency to use the resources more productively is far better than that of public sector. If the government consumption is productive then the largest size of the government may enhance the economic development as well as the private investment growth (Sineviciene, 2015).

The relationship of financial freedom with dependent variables shows positive and significant at probability at 1%. One unit increase in financial freedom lead to 0.00566% increase in GDP per capita. Liberalization of finance has positive effects on economic progress through proficient allocation of resources, improvement in risk sharing, smooth access to foreign capital and the contribution of solidity of economy as well as through the progress of financial zone (Garita, 2009).

The relationship of employment to population ratio with dependent variables shows negative and significant at probability at 1%. One unit increase in employment to population ratio lead to 0.0133% decrease in GDPPC .High population growth rate mounts pressure on inadequate natural resources, reduces the capital formation, both private and public and diverts the enhancement in capital resources in order to maintain instead of increase the per worker stock. In the developing economies, a large chunk of their population is attached with the working class, yet a little segment of it contributes in productive activities. Resultantly, the rise in rate of unemployment and joblessness decreases the investment, both industrial and human capital investment (Atanda, 2012).

The relationship of investment freedom with dependent variables shows positive and insignificant. An economy having intentions to carry forward the plans to increase the economic

growth must encourage the element of liberalization in making investment with least government restrictions. Generally, the investors drag feet to make investments if there are strong regulations as well as the influence of regulatory bodies on price control mechanism. The flexible policies for capital flow from across the borders helps increasing the FDI flow in an economy(Beheshtitabar, 2008).

The relationship of business freedom with dependent variables shows positive and significant at probability at 1%. Hence, putting restrictions on business activities through tough rules, bureaucratic intervention, corruption and licensing impediments would result in less business activities. It is important to establish a candid business environment with least state interference in order to allow a country to witness higher growth rates (Roberts, 2019)).

The relationship of judicial effectiveness with dependent variables shows positive and significant at probability at 1%. A strong and potent judiciary is necessary for an economy for the protection of citizen's rights against the pressure groups, mafia and government interference. A transparent judicial mechanism is the foremost prerequisite for a country, particularly in developing category (Abdul, 2020)

The relationship of government size with dependent variables shows negative and significant at probability at 1%. The government spending decreases the savings and economic growth by restoration of taxes. The increasing government spending and levying more taxes cause severe impacts on the economic development. Hence, there is a need to abate the government interference and give free hand to the market in order to seek economic (Barro, 1990).

The relationship of property rights with dependent variables shows negative and significant at probability at 1%. As the property rights protection is a basic component, the confidence about the legal property rights protection, judicial sovereignty, unbiased courts as well as the lawfully enforceable agreements would result in high GDP growth (Le Roux, 2015).

5.10. Results of Random Effect Model

Random effect model is used when unobserved variables are not interlinked with the independent variables then we pursue the random effect model to get to know about the problem of biasness in the model. Random effect model provides an unbiased estimation andyield small standarderrors.

5.10Estimation results of random effect model

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Variables	lnGDPPC	lnGDPPC	lnGDPPC	LnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	LnGDPPC
GCF	0.00750***	0.0102***	0.0107***	0.00355**	0.00790***	0.0107***	0.00387**	0.0102***	0.00298**	0.00877***	0.00731***	0.0112***	0.0101***
	-0.00142	-0.00168	-0.00162	-0.00161	-0.00145	-0.00162	-0.00189	-0.00157	-0.00143	-0.00154	-0.00137	-0.00167	-0.00164
Empl	-0.0126***	-0.00255	0.00261	0.0187*	-0.0112***	-0.00179	0.0132	-0.00448	0.00348	-0.00303	-0.00688**	-0.00435	-0.0106**
	-0.00356	-0.00414	-0.00397	-0.0103	-0.00367	-0.00412	-0.0114	-0.00392	-0.00374	-0.00381	-0.00343	-0.00423	-0.00427
OS	0.0352***												
	-0.00191												
PR		-0.00259***											
		-0.00096											
GI			0.0104***										
			-0.0010										
JE				0.00509***									
				-0.00139									
TB					0.0168***								
					-0.00103								
GS						-0.00403***							
						-0.0010							
FH							-0.0001						

							-0.0004						
BF								0.0104***					
								-0.0010					
LF									0.00139				
									-0.00089				
MF										0.00837***			
										-0.00093			
TF											0.0164***		
											-0.00080		
IF												0.00099	
												-0.00092	
FF													0.00597***
													-0.00115
Constant	6.925***	8.447***	7.617***	7.331***	7.561***	8.567***	7.904***	7.783***	8.220***	7.803***	7.524***	8.361***	8.540***
Observations	-0.284 891	-0.289 893	-0.274 897	-0.65 75	-0.311 892	-0.319 895	-0.72 72	-0.289 897	-0.299 556	-0.298 883	-0.27 887	-0.314 879	-0.31 891
Number of IDcountry	42	42	42	40	42	42	39	42	42	42	42	42	42

Standard errors in parentheses

***p<0.01,**p<0.05, *p<0.1

The relationship of gross capital formation with dependent variables shows positive and significant at probability 1%. Increase of one unit in gross capital formation contributes to rise in GDP per capita of 0.00750%. The GCF (gross capital formation) helps create the technical advancement that further helps materialize the large scale of production in economies. Moreover, it raises the specialization followed by its progression in terms of providing tools, equipment and machinery for an increasing labor force. Thus, the accumulated capital eventually facilitates to acquire new factories accompanying the ultra-sophisticated equipments and machinery, as well as the productive capital goods, and opens up new avenues for health and education sectors. The GCF depicts the positive impacts of physical capital on growth(Shuaib, 2015).

The relationship of monetary freedom with dependent variables shows positive and significant at probability 1%. An increase in monetary freedom by one unit results in an increase in GDP per capita of 0.00837 per cent. The stable currency is the essence of monetary freedom that ensures the stability in the market, while it influences the decision of foreign investor before initiating a project in the country. Besides this, it also compels the local businessmen to invest in their native country instead of foreign lands. These elements increase the economic growth (Levina, 2011).

The relationship of trade freedom with dependent variables shows positive and significant at probability 1%. An increase of one unit of trade freedom results in an increase in GDP per capita of 0.0164 per cent. Trade openness is an important variable to sustain the economic growth in the globalized world. The theories of endogenous growth provide the theoretical foundation of the affiliation between the economic growth and trade openness. Despite these ideas, trade openness is likely to have an effect on growth via capital accumulation and knowledge spillover (Hye, 2015).

The relationship of labour freedom with dependent variables shows positive and insignificant. A rise of one unit of labour freedom results in an increase of 0.00139 per cent in GDP per capita. The improvement in the quality of labour market mounts positive impacts on the economic growth. A county with more labor freedom attracts the high skilled labour that helps decreasing the unemployment rate, which results in the economic growth(Wu, 2011).

The relationship of fiscal health with dependent variables shows negative and insignificant. One unit increase in fiscal health lead to 0.000179 per cent decline in GDPPC. The fiscal debt affects economic growth adversely. The government has to pay heavy interest on debt servicing,

and for this reason the government has to levy more taxes. The increase in taxes further put burden on the economy. The taxes that are often levied to finance the debt alter the behavior and reduce disposable income. It also reduces the savings which otherwise would be channelized into investment (Musgrave, 1973).

The relationship of government integrity with dependent variables shows positive and significant at probability at 1%. One unit increase in government integrity contributes to 0.0104 % raise in GDPPC. The elements of good governance that include abatement of corruption, stable property rights and democratic values are intimately interlinked with the GDP per capita. Moreover, good governance ensures the ability of check and balance as well as structural reforms in the institutions by the state, which helps improve the cooperation, ensures efficient public service and transparent accountability of political office-bearers. The enforcement of good-governance encourages the economic progress and growth. For instance, the government of Pakistan has announced a new plan for the construction industry that has provided an opportunity to the investors to make investment without any fear of heavy taxations as well as being held accountable about the capital invested in the industry of construction. Moreover, the national accountability bureau has been restricted to carry out inquiries against business community. Such decisions by the government of a country encourage the huge investment in the business activities that largely contribute in running the economic wheel of the country without any impediment (Mira, 2017).

The relationship of tax burden with dependent variables shows positive and significant at probability at 1%. One unit increase in tax burden contributes to 0.0168% raise in GDPPC. Tax competition is the best possible idea for the organization of tax system, and it helps an individual increase his wealth in a society. It has positive impacts on economic development of individual countries' through effective allocations of resources, ascending capability of government actions and public spending. The positive growth of tax competition `is largely linked with the effective utilization of public resources and abating the non-productive activities. The idea of tax competition embraces that the government should levy less taxes aiming at attracting the ample numbers of citizens (Tiebout, 1956).

The relationship of financial freedom with dependent variables shows positive and significant at probability at 1%. An increase in financial freedom by one unit leads to an increase in GDP per capita of 0.00597 per cent. An economy can take an advantage of financial freedom

through sufficiently available financial infrastructure. Furthermore, it lays positive impacts on economic development and demonstrates that how the government strictly regulates the financial sector, and what kind of intervention has to be faced by the financial institutions. As soon as the financial freedom increases, it shows the independent and smooth running of financial sector without any interference from the government that ensures the rise in economic growth (Radzeviča, 2018).

The relationship of employment to population ratio with dependent variables shows negative and significant at probability at 1%. One unit increase in employment to population ratio lead to 0.0126% decrease in GDP per capita. The unemployment among highly qualified youth is the largest issue being faced by the Asian economies. Due to the increasing pace in population ratio as well as the mass exodus of educated youth from rural to urban areas has increased the difficulties for youth as well as the economies to find and provide employment respectively that further cause resentment and discontentment amongst the youth that remains unable to feed themselves as well as their families. Besides this, in the developing and underdeveloped economies in Asian region, the highly qualified and skilled youth fails to get a job that can polish its abilities as well as fails an economy to get benefit from those skills. Hence, the youth gets indulged in finding lower level jobs that increases the level of frustration and desperation in the society. This phenomenon has an explicit impact on the growth of economy because of the non-involvement of youth which is largely underutilized (Imran, 2014)

The relationship of investment freedom with dependent variables shows positive and insignificant. Both domestic and foreign constraints on the movement of capital hinder the effective distribution of resources and minimize growth, distorting economic decision-making. Restrictions on cross-border investment will restrict competition from both inflows and outflows.

The relationship of business freedom with dependent variables shows positive and significant at probability at 1%. The conducive business environment is an indispensable element that encourages a country to develop a market, which eventually yields positive outcomes for the economic growth.

Relationship of judicial effectiveness with dependent variables shows positive and significant at probability at 1%. Bringing smoothness in procedures opens new avenues to increase judicial effectiveness. The undue hurdles in the hearing of cases and poor litigation process halt the activities in a country. Moreover, simple cases improve the effectiveness of a system by

encouraging the litigation to be done in a more swift and inexpensive way. These elements contribute in the improvement of effectiveness. (Botero, 2003)

Relationship of government size with dependent variables shows negative and significant at probability at 1%. The government size brings negative impacts on private investment, higher interest payment and tax burdens, as it is negatively connected to the growth rate of GDP. The increment in government size reduces the growth rate because it requires more spending. The rise in taxes decreases the economic activities (Zareen, 2015). The relationship of property rights with dependent variables shows negative and significant at probability at 1%. Human capital effectiveness and investment rates have negative effects when the property rights are not secured. A secured property rights decreases the burden of courts, which results in the rise in economic growth (B. Z. Khan, 2013)

5.11. Hausman Test

The next phase after application of REM and FEM is the specification about the choice of models on the given situation and outcomes. In this regard, Hausman Test is suitable method for selection of model which seems to be more efficient and result oriented.

H0: REM model is more appropriate

H1: FEM model is more appropriate

Test Summery	**Chi-sq.statistics**	**Df**	**Prob.**
Cross section random	35.92	5	0.0000

Justification:

The Hausman test allows choosing either a model with fixed effect or a model with random effect. In random effects, null hypothesis is termed as the best model, whereas in fixed effects, substitute hypothesis reflects the justified model. This test is used to identify whether there is any existence of any connection between an inaccurate term and decay in model. P-value is under0.05 that represents outcomes acceptthe alternative hypothesis and reject null hypothesis. Fixed effect seems to be feasible in this case.

5.12. GMM estimation results:

Endogenity issue takes place when incorporated explanatory variables are interlinked with model error term. If endogenity issue exists in model, ordinary least square (OLS) estimates will yield partial and conflicting results. In 1991, Arellano and bond developed the GMM (generalized method of movement) technique. This estimation technique prevents the serial association of hetroscedasticity and endogenity issues from the model.

5.12.Results of GMM Model:

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Variables	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	LnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	lnGDPPC	LnGDPPC	llnGDPPC	LnGDPPC
Employment to population	0.0392**	0.0385**	0.0326*	0.0568**	0.0854***	0.0731***	0.104***	0.0757***	0.0602**	0.0903***	0.0576***	0.0689***	0.0697***
S.E	(0.0238)	(0.0196)	(0.0186)	(0.0245)	(0.0281)	(0.0224)	(0.0324)	(0.0280)	(0.0284)	(0.0187)	(0.0168)	(0.0136)	(0.0197)
Gross capital Formation	0.0263**	0.0305**	0.0288**	0.0471***	0.0940***	0.0768***	0.0981***	0.0620**	0.0775***	0.0555**	0.0314**	0.0802***	0.0519**
S.E	(0.0028)	(0.0116)	(0.0119)	(0.0123)	(0.0301)	(0.0250)	(0.0290)	(0.0295)	(0.0217)	(0.0229)	(0.0121)	(0.0233)	(0.0223)
Overall freedom score	0.0788***												
S.E	(0.0147)												
Property rights		0.0595***											
S.E		(0.0067)											
Government integrity			0.0501***										
S.E			(0.0064)										
Judicial effectiveness				0.0579***									
S.E				(0.0079)									
Tax burden					-0.0100***								
S.E					(0.0019)								
Govt spending						0.0254**							
S.E						(0.0099)							

Fiscal health							-0.0609***						
S.E							(0.0065)						
Business freedom								0.0619***					
S.E								(0.0122)					
Labor freedom									0.0289**				
S.E									(0.0133)				
Monetary freedom										0.112***			
S.E										(0.0226)			
Trade freedom											0.103***		
S.E											(0.013)		
Investment freedom												0.0460***	
S.E												(0.0091)	
Financial freedom													0.0426***
S.E													(0.0120)
Constant	2.194	3.865***	5.357***	3.632***	7.249***	8.382***	5.725***	1.702	5.632***	-3.614	-1.778	2.459**	3.799***
	(1.37)	(1.24)	(0.98)	(1.37)	(1.89)	(1.41)	(1.54)	(1.86)	(1.39)	(2.36)	(1.22)	(1.12)	(1.22)
Summary													
Observations	34	34	34	34	34	34	33	34	34	34	34	34	34
R-squared	0.478	0.637	0.620	0.594		0.158		0.308	0.189	0.091	0.350	0.285	0.289

1. ***, **, * represent 1%, 5% and 10% level of significance
2. Number in parenthesesrepresent the standard error.
3. Number without parentheses represent the coefficient if the Economic Freedom and GDPPC

The relationship of gross capital formation freedom with dependent variables shows positive and significant at probability 5%. Increase of one unit in gross capital formation paves the way to 0.0263% enhancement in GDP per capita. GCF (gross capital formation) is being utilized as substitute to gauge effect of physical capital or investment on growth. The original sequence was converted into original record in order to lessen the variance. The investment, indeed, is a necessary element to standardize long term growth. It creates the progressive spillover by improving the technological advancement and infrastructure and it is likely to improve the progression by assembling the private investment (Pavelescu, 2008)

The relationship of monetary freedom with dependent variables shows positive and significant at probability 1%. Increase of one unit in monetary freedom eventually helps generate 0.112% increase in GDPPC. The power to purchase money decreases with the increase in inflation rate so that it could erode the public wealth. Excessive money supply's impact on level of growth has parallel impact on fiscal public holding. This is the reason why there are negative impacts of excessive money supply and high-inflation rate on the economic freedom. The money in flow can be used to for specification of amount of restrictions into connections in the good market. If the huge amount of money is in circulation then it will result into strong economic and business activities. The reliable and stable money with no high-inflation rate and no excessive money supply provides conducive atmosphere for economic growth (Erdal, 2004).

The relationship of trade freedom with dependent variables shows positive and significant at probability 1%. An increase in one unit of trade freedom results in increase of 0.103% in GDPPC. The findings as enshrined in this study endorse the previous findings that the trade freedom contributes in the raise of economic growth. More trade openers with less restriction will increase the GDP per capita. The trade openers also encourage the increase in foreign investment that further provides long-term economic growth(Akin, 2014).

The relationship of labour liberalization with dependent variables shows positive and significant at probability 5%. An increase of one unit in labour freedom increased the GDPPC to 0.0289%. A skilled labour contributes in improvement of growth. The labor liberalization would increase competition in the labour market that is directly linked with the high quality of labour force. Resultantly, it has positive effect on growth through improvement in efficiency and country output(Hye, 2017).

The relationship of fiscal health with dependent variables shows negative and significant at probability at 1%. One unit increase in fiscal health lead to 0.0609% decrease in GDP per capita. The higher fiscal debt highlights the element of faintness in a government. We take the principle of per capita interest and general compulsion on debt payment accompanied by the shares of these payments as a share of total disbursements. The high level of debt would impede the fiscal health of a country due to three reasons; firstly, the high deficit of debt would reflect the poor fiscal position. Secondly, the high debt payments would carry off the restricted resources from the service demanded by the natives in country. Thirdly, the element of elasticity does not exist in the debt servicing. The debt servicing within the decided time-period is pivotal that enhances the credit rating of the country (Deller, 2010)

The relationship of government integrity with dependent variables shows positive and significant at probability at 1%. One unit increase in government integrity increases the GDPSS to 0.0501%. The government's decisions and their effectiveness explicitly have positive effects on the GDP growth. This is an irrefutable fact that the scourge of corruption plagues the GDP growth that is harmful to the economic development. The menace of corruption leads to the failure of other elements of governance. Thus, the improvement in governance and delivery will eventually discourage the corruption of all kinds, which will enhance the rate of GDP growth. This means that good governance is something that requires attention for the smooth functioning of government, and the effectiveness of governance require cautiousness of those who are sitting on the policy-making positions. They need to devise potent strategies to contain the corruption from the polity. They further need to mull over chalking out comprehensive plans to evolve a legal system for the strict implementation of anti-corruption laws. Undoubtedly, strong accountability system leads to uprooting the corruption. Keeping in view the contemporary norms being followed in the developed countries, the efforts need to be made by the government to contain the corruption. In this regard, a vigilant monitoring system needs to design by the government (Awan, 2018).

The relationship of tax burden with dependent variables shows negative and significant at probability at 1%. An increase in one unit of tax burden may decrease the GDPPC to 0.0100%. The social spending goes high with the increase in people's savings. The increase in capital accumulation will increase the investment and enlarge the productivity. In order to attain this, the government must cut down the tax rates to an acceptable level. Under the prevailing era, the corporations and state owned enterprises (SOEs) usually run the businesses and production

inefficiently that further add up losses and deficits. Moreover, these companies (SOEs) have a little contribution to GDP and job creation which is far less than the private sector; whereas the investment level in them is far higher than privately owned firms. Hence, there is a pressing need of rejuvenating the state owned enterprises system, and encourage privately owned sectors in order to reduce the pressure on state budget as well as to reduction in tax burden on citizens. For that reason, the government needs to lessen the public spending in order to reduce tax burden(Liu, 2012).

The relationship of financial freedom with dependent variables shows positive and significant at probability at 1%. An increase of one unit in financial liberty may help increase the GDPPC to 0.0426%. More financial freedom is linked with the element of interference. The huge investment accompanied by the direct transfer of money eventually stimulates the economic growth. The freedom of finance has explicit effects on small and big firms, yet financial freedom contribute in the gains of small firms in countries. Since the banking crises are linked with a rapid reduction in economic development, thus the financial freedom diminishes the banking crisis possibility and thus increases the economic growth positively. Besides this, the financial freedom also ensures transparency and competence of financial sector (Akinsola, 2017).

The relationship of employment to population ratio with dependent variables shows positive and significant at probability at 5%. Increase of one unit in employment to population ratio lead to 0.0392% increase in GDPPC. The high employment rate encourages the high pace of economic growth. This factor in workers increases the productivity level, and enhances the valuable goods and services production. Resultantly, working class receives its share that enables it to buy commodities and services. The high level of employment reflects that extensive level of commodities and services may be produced that may have positive impact on economic growth. If an unemployed chunk gets job, it will spend on buying the goods and services that helps an economy increase the economic growth (Aliyu, 2019).

The relationship of investment freedom ratio with dependent variables shows positive and significant at probability 1%. An increase in investment freedom may help increase GDPPC to 0.0460%.The free economies attract the investors who resort to make huge investments that resultantly encourage the economic development. The less restrictions on movement of capital across the borders makes the access easy to international market, which increases the venture capital supply that can promote vast level of increase in improvement(Cagetti, 2006).

The relationship of business freedom with dependent variables shows positive and significant at probability at 1%. For a country to have aspirations to speed up the economic growth must offer the discretion to launch a project and operate and close it without any state intervention. The liberty to pursue business activities appears to be the most factors that helps increase the economic liberty. In few countries, the process of seeking business license is smooth, while in few countries, the loopholes in the administrative structure and unnecessary delays, impediments and corruption result in discouragement of business environment

The relationship of judicial effectiveness with dependent variables shows positive and significant at probability at 1%. The inhabitants of a community reserve the right to seek timely justice, and reinforcing business confidence, job creation as well as the economic growth. Providing good opportunities to businesspersons to protect their rights, facilitations in striking contracts, and recovering their debts is pivotal for firms, investments, innovations and transparent competitions. A strong justice system needs to have three important aspects that include; the quality of justice system, independence, as well as the effectiveness in the operational activities. The confidence in justice encourages establishing an environment of sureness and dependability that enables forward business planning and a booming private sector. It encourages the innovation, investment, business creation and transparent competition, which are the components of a high productivity economy, and then a long-term growth. (Commission, 2015)

The relationship of government size with dependent variables shows positive and significant at probability at 1%. In the words of Keynesian, the Government's large size is expected to boost growth. The high rate of government consumption is linked with the high levelsof demand for merchandise and services from the private and government that increases the production. Eventually, it generates the employment opportunities and investments. The authority to regulate and deal with negative externalities lies with the government. Moreover, it is the government that plays vital mediatory role between both the private and public sector to remove interest conflicts.

The relationship of property rights with dependent variables shows positive and significant at probability at 1%. An improved shape of security for property rights averts the misuse of resources, which eliminates market alteration and creates positive externalities; therefore it contributes positively to growth. In addition, the assured valuable rights of property decrease the chaos in the economic life and transaction cost. Moreover, it helps arranging the financial resources in economic development with the encouragement for entrepreneurs (Haydaroğlu, 2015).

Chapter 6

Conclusion

While concluding the debate, it is evident that the majority of independent variables are essentially associated with GDP per capita. In the contemporary era, the connection between the growth and freedom of an economy has appeared to be an important research topic in terms of theoretical as well as empirical literatures. Moving towards the crux of discussion about the studies conducted in this area, it is pertinent to highlight that economic freedom level is the basic element of growth. Keeping under consideration the important role of economic freedom in the achievement of sustainable growth, in this study, it is aimed to gauge that whether the freedom has an impact on growth on economy in few selected Asian countries with multiple levels. Whereas, the economic growth was described with the variable of GDP per capita, the economic freedom was identified by the IEF that is calculated by the Heritage Foundation and Fraser Institute. The impact of economic freedom on growth was gauged in 42 Asian countries through heritage foundation wherein the panel data covering the period from 1995 to 2018 was taken. The statistically significant and positive effect of economic freedom is shown by fixed effects model and random effect model estimation on Asian countries' economic growth. Moreover, it has theoretically proven that the freedom to people in controlling their lives under less government' influence on economic affairs leads to higher economic growth. Moreover, the, empirical results propose that higher economic freedom encourages the presence of foreign competitors that leads to create a healthy competition, fairness and transparency, effectiveness, technology transfer, globally accepted standards, and the quality labor force. These are the basic elements that contribute in higher economic development and growth.

There is a positive and significant relationship between the labour freedom and GDP per capita. The labor freedom helps enhance the experience, competition, and technology transfers that further leads to high quality of domestic labor force. Thus, the advancement in the quality of human resources may considerably increase the economic growth. Employment to population ratio, property rights, gross capital formation and government integrity has an important positive relationship with GDPPC. Business freedom has also a significant relationship with GDPPC. A higher degree of business freedom is important to establish a candid business environment with least state interference in order to allow a country to witness higher growth rates. Judicial effectiveness is positive and significant relationship with GDP per capita A strong and potent

judiciary is necessary for an economy for the protection of citizen's rights against the pressure groups, mafia and government interference. A transparent judicial mechanism is the foremost prerequisite for a country, particularly in developing category.

Tax burden has negative relationship with GDPPC. The increase in capital accumulation will increase the investment and enlarge the productivity. In order to attain this, the government must cut down the tax rates to an acceptable level. Investment freedom has positive connection with GDPPC. Restrictions on cross-border investment will restrict competition for both inflows and outflows. Fiscal health has negative and significant relationship with GDP per capita. The fiscal debt has a negative impact on the economic growth. The government has to pay heavy interest on debt servicing, and for this reason the government has to levy more taxes. Trade freedom has positive relationship with GDPPC. More business openers with less restriction will increase the GDP per capita. Monetary freedom is the most significant variable of economic freedom that affects the economic growth. It encompasses the evolution of stability of price and level of price control. The prices automatically get stabilized in the ideal free markets with no direct interfering of state entities in this regard.

Sequel to carrying out panel estimation of 42 Asian countries, in this study the estimation were carried out on the basis freedom countries categories which includes moderately free, mostly free and most unfree countries. The results of moderately free, mostly free and most unfree countries are attached at appendix while salient aspects are summarized as under.

The employment to population ratio shows positive and statistically significant relationship with GDP per capita for moderately free countries. There is a positive relationship among investment freedom, trade freedom, monetary freedom, financial freedom, property rights, government integrity, judicial effectiveness, and tax burden with GDP per capita. While there is negative relationship among business freedom, gross capital formation, government spending, fiscal health and labour freedom for moderately free countries.

The employment to population ratio shows positive and statistically significant relationship with GDP per capita for mostly free countries. There is a positive relationship among Government spending, trade freedom, tax burden, labour freedom, business freedom, government integrity, judicial effectiveness and property rights. While there is negative relationship among investment freedom, financial freedom, monetary freedom and gross capital formation for mostly free countries.

The gross capital formation shows positive and statistically significant relationship with GDP per capita for mostly unfree countries. There is a positive relationship among investment freedom, trade freedom, monetary freedom, financial freedom, business freedom, property rights, government integrity, judicial effectiveness, labour freedom and tax burden with GDP per capita. Whereas, there is negative relationship between governments spending, fiscal health and employment to population ratio with GDP per capita for mostly unfree countries.

6.1. Policy Recommendations

It is recommended that the non-economic factors should be considered by the policy makers and academia as important elements of economic growth. The designing, timing, coordination and implementation of policies and plans to improve the business environment should be done more carefully. The non-economic factors should be given a central role in an analysis instead of following the previous trends where it was placed on the side line. Without a conducive economic environment, a country cannot seek followed by sustaining the fast economic progress. Such policies and strategies can pave way for economic progress, only if they are successful and sustainable. These factors play vital role in enhancing the quality of life in developing polities for millions of poor people. It can be considered as an essential element to prevent hunger, poverty and undernourishment across the globe. A comprehensive strategy to tackle problems in multiple sectors be chalked out and enforces seeking desired outcomes. The investment in technology-oriented projects should be done aiming at enhancing the growth process. Besides this, a huge investment should be encouraged in capital formation in order to accelerate the economic freedom. It should be the foremost responsibility of the policy makers to mull over bringing effective rules to prevent the menace of corruption that is the fundamental reason of political chaos, which reduces country's freedom in the economic realms.

Excessive non-productive spending in the public sector contributes to national deficits that eventually have to be repaid, placing a burden on the economy and hampering growth. The taxes levied to fund this debt change behavior, decrease disposable income and, in the end, reduce savings. Consequently, the levying of low taxes provides a favorable atmosphere to fuel economic growth. The reduction in government interference would decrease financial service supervision and intervention in financial services, as well as the allocation of credit, thus encouraging capital markets to more effectively allocate credit. Similarly, reducing the state's role in its consumption and investment activities will lead corporations to become more involved in the economy.

A basic concept of economic freedom is the security of property rights. Therefore, greater clarity as regards the legal security of property rights, an autonomous judiciary, fair courts and contracts that are legally enforceable will lead to higher growth. A nation needs to maintain price stability, low inflation and less variability in the inflation rate in order to advance growth rates through monetary freedom. Decreasing control of the labour market applies to decreasing collective bargaining, removing regulations on recruiting and firing. By reducing company regulation, reducing the bureaucratic cost of starting a business, reducing administrative requirements and restrictions on licenses, more companies will be created, enabling a country to experience higher growth rates.

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Appendix

Mostly unfree countries

	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)	Model (9)	Model (10)	Model (11)	Model (12)	Model (13)
VARIABLES	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**
Empl	-0.0462***	-0.0261***	-0.0279***	-0.0129	-0.0312***	-0.0299***	-0.0188**	-0.0338***	-0.0395***	-0.0414***	-0.0346***	-0.0326***	-0.0424***
	(0.0163)	(0.00909)	(0.00916)	(0.0124)	(0.0102)	(0.00685)	(0.00735)	(0.00666)	(0.00323)	(0.00445)	(0.00526)	(0.00848)	(0.00486)
GCF	0.0152	-0.0120*	-0.0137**	-0.0134	-0.00156	-0.0115**	0.0133	-0.00625	0.00438	0.000575	0.0251***	-0.00101	0.00131
	(0.0179)	(0.00710)	(0.00635)	(0.0116)	(0.0121)	(0.00582)	(0.00976)	(0.0115)	(0.00503)	(0.0138)	(0.00764)	(0.0152)	(0.0116)
OS	0.127*												
	(0.0675)												
PR		0.0697***											
		(0.0123)											
GI			0.0649***										
			(0.0106)										
JE				0.0470***									
				(0.00760)									
TB					0.0575***								
					(0.0138)								
GS						-0.0410***							
						(0.0106)							
FH							-0.00506***						
							(0.000936)						
BF								0.0126***					
								(0.00430)					
LF									0.0360***				
									(0.0115)				
MF										0.00935			
										(0.0134)			
TF											0.0728***		
											(0.00748)		
IF												0.000857	
												(0.00650)	
FF													0.00466*
													(0.00273)
Constant	3.159	6.826***	8.250***	7.263***	4.850***	13.25***	8.773***	9.500***	8.133***	9.788***	3.709***	9.835***	10.29***
	(3.774)	(1.145)	(0.804)	(1.112)	(1.464)	(0.881)	(0.790)	(0.701)	(0.728)	(1.364)	(0.519)	(0.966)	(0.414)
Observations	12	12	12	12	12	12	11	12	12	12	12	12	12
R-squared	0.428	0.470	0.400	0.511	0.286	0.649	0.220	0.277	0.386	0.220	0.480	0.210	0.230

1. ***, **, * represent 1%, 5% and 10% level of significance.
2. Number in parentheses represent the standard error.
3. Number whit out parentheses represent the coefficient of the variables.

GMM estimation of moderately free countries

	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)	Model (9)	Model (10)	Model (11)	Model (12)	Model (13)
VARIABLES	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**
Empl	0.0713***	0.0510***	0.0700***	0.0556***	0.0646***	0.0581***	0.0654***	0.0713***	0.0814***	0.0757***	0.0580***	0.0946***	0.0741***
	(0.0173)	(0.0108)	(0.0126)	(0.00989)	(0.0143)	(0.0133)	(0.0122)	(0.00535)	(0.00961)	(0.0148)	(0.00855)	(0.0183)	(0.00992)
GCF	-0.113***	-0.0379	-0.0728***	-0.00798	-0.103***	-0.0712**	-0.0799***	-0.138***	-0.132***	-0.107***	-0.0758***	-0.0909**	-0.117***
	(0.0357)	(0.0240)	(0.0225)	(0.0184)	(0.0304)	(0.0289)	(0.0303)	(0.0203)	(0.0161)	(0.0311)	(0.0198)	(0.0363)	(0.0197)
OS	-0.000971												
	(0.0549)												
PR		0.0818***											
		(0.00847)											
GI			0.0639***										
			(0.0118)										
JE				0.0648***									
				(0.00784)									
TB					0.00132								
					(0.0210)								
GS						-0.0116**							
						(0.00576)							
FH							-0.00677*						
							(0.00351)						

BF								-0.0357**					
								(0.0141)					
LF									-0.0320**				
									(0.0137)				
MF										0.0347*			
										(0.0191)			
TF											0.0968***		
											(0.0318)		
IF												0.0569***	
												(0.0166)	
FF													0.0399***
													(0.00752)
Constant	7.693**	2.317***	3.864***	2.706***	7.608***	8.071***	7.471***	10.62***	9.483***	4.467***	-0.426	2.059	5.138***
	(3.769)	(0.503)	(0.526)	(0.797)	(2.092)	(0.501)	(0.224)	(1.289)	(0.830)	(1.686)	(2.673)	(1.792)	(0.551)
Observations	13	13	13	13	13	13	13	13	13	13	13	13	13
R-squared	0.280	0.600	0.396	0.729	0.312	0.396	0.327	0.279	0.351	0.321	0.430	0.473	0.339

1. ***, **, * represent 1%, 5% and 10% level of significance.
2. Number in parentheses represent the standard error.
3. Number whit out parentheses represent the coefficient of the variables.

GMM estimation of mostly free countries

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
VARIABLES	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**	**lnGDPPC**
Empl	0.0901***	0.0454***	0.0143	0.00456	0.121***	0.0410***	0.0774***	0.0258*	0.0866***	0.103***	0.0420***	0.0791**	0.0572***
	(0.00386)	(0.00347)	(0.0168)	(0.00503)	(0.0121)	(0.00576)	(0.0216)	(0.0141)	(0.00683)	(0.00505)	(0.0162)	(0.0307)	(0.00956)
GCF	-0.0812***	0.0363***	0.0272**	0.0979***	-0.00855**	-0.0142*	-0.00331	-0.00716	-0.0740***	0.0684***	-0.0226	-0.0342	-0.00859
	(0.0155)	(0.00242)	(0.0138)	(0.00792)	(0.00347)	(0.00796)	(0.0143)	(0.0119)	(0.00848)	(0.00381)	(0.0183)	(0.0257)	(0.0142)
OS	-0.336***												
	(0.0476)												
PR		0.0984***											
		(0.00743)											
GI			0.0302*										
			(0.0156)										
JE				0.0659***									
				(0.00703)									
TB					-0.0781***								
					(0.0140)								
GS						-0.0445***							
						(0.00847)							
FH							-0.0341***						
							(0.0114						

							)						
BF								-0.0504**					
								(0.0251)					
LF									-0.0834***				
									(0.0113)				
MF										0.308***			
										(0.00677)			
TF											-0.236***		
											(0.0540)		
IF												0.0354**	
												(0.0180)	
FF													0.0560***
													(0.0136)
Constant	31.15***	-1.383***	6.622***	2.553***	8.719***	10.76***	7.851***	12.71***	12.13***	-23.94***	27.97***	3.557	3.036**
	(3.930)	(0.338)	(1.010)	(0.520)	(0.629)	(0.863)	(0.745)	(2.291)	(0.572)	(0.864)	(5.258)	(2.573)	(1.278)
Observations	7	7	7	7	7	7	7	7	7	7	7	7	7
R-squared	0.756	0.664	0.331	0.511	0.839	0.715	0.565	0.424	0.228	0.664	0.792	0.276	0.468