

**ROLE OF INSTITUTIONS IN HUMAN  
WELL-BEING: A PANEL ANALYSIS OF  
SOUTH ASIAN COUNTRIES**

**BY**

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**NATIONAL UNIVERSITY OF MODERN LANGUAGES**

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# **Role of Institutions in Human Well-Being: A Panel Analysis of South Asian Countries**

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## THESIS AND DEFENSE APPROVAL FORM

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Candidate of **Master of Philosophy** at the National University of Modern Languages do hereby declare that the thesis **Role of Institutions in Human Well-Being: A Panel Analysis of South Asian Countries** submitted by me in partial fulfillment of MPhil degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

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*Aftab Ahmed*

## **DEDICATION**

I dedicate this effort, to my Parents Muhammad Riaz & Firdous Beagum, who told me to always keep my head up.

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## **ABSTRACT**

This thesis has tried to examine the impact of institutions on human well-being in the case of South Asian countries for 1996 to 2020. Pakistan, India, Sri Lanka, and Bangladesh have been selected for this purpose. This study has used human well-being as a dependent variable, whereas regulatory quality, economic freedom, voice and accountability, rule of law, income inequality, corruption, and unemployment rate are selected as independent variables. To investigate the stationarity of the selected indicators PP-Fisher Chi-square, Im, Pesaran and Shin, ADF - Fisher Chi-square, Levin, Lin & Chu  $t^*$ , and W-stat unit-roots have been used. This thesis has used a panel-ARDL for the long-run connection between the indicators of the model. The outcomes of the analysis display that governing excellence, rule of law and economic freedom are significantly encouraging human well-being. The rise in institutional quality creates more employment opportunities to raise income, education, and health status of a nation, this reveals that selected South Asian countries should promote institutional excellence to raise the standard in human well-being. Voice and accountability, and corruption have an inverse and significant influence on human well-being in South Asian economies. Income inequality has an inverse but insignificant influence on human well-being, whereas unemployment has a significantly positive influence on human well-being. It is recommended that to improve human well-being level of institutions must be improved in the case of South Asian countries.



# CHAPTER 01

## INTRODUCTION

### 1.1 INTRODUCTION

Human well-being is the center of all sciences (Barrows, 1923; Conklin, 1928; Maslow, 1971). Kant (1949) mentions that humans should be treated as an end in themselves, and not as means to something else. A society cannot be flourished, progress, and be happy if a larger part of its population is poor (Smith, 1784). Since, the last few years of the 20<sup>th</sup> century, the emergence of Development Economics has lightened up the issue of human well-being. Previously, “Millennium Development Goals (MDG’s)” and recently, “Sustainable Development Goals (SDG’s)” of “United Nations Development Program (UNDP)” and some other international organizations have demanded members nations to consider human well-being as the prime objective. Thus, the higher acquirement of human well-being has become the center of attention for governments, researchers, and academicians throughout the world. For this purpose, different agencies and organizations collect data on the acquirement of human well-being not only for individuals but also for families, regions, and nations. The 2030 Agenda for “Sustainable Development Goals” (SDG’s) also require new appraisal instruments for checking progress by the sustainability of the environment and merge it with the overall human well-being. Their main focus is to overcome the challenges of well-being at the time of crises and shocks and should provide prompt guidance to policymakers (United Nations Development Program, 2015).

Different researchers (Stipek et al., 1743; Alkire, 2010) have presented numerous definitions of human well-being but most of them (Srinivasan, 1994; Prados de la Escosura, 2015) are agreed that human well-being is the combination of education, health, and income. Gasper (2007) mentions that it is impossible to define, observe and measure human well-being in a single definition but better health and education with sufficient availability of the physical resource can

be considered human well-being. Different studies pointed out that objective, subjective and rational aspects should be kept in mind while explaining human well-being (Schleicher et al., 2017; Boarini et al., 2014). Objective factors comprise of material requirements of an individual's life, frequently addressed by abundance markers of neediness (McGregor & Sumner, 2010). Subjective factors i.e. worried about self-assessment of individual conditions, including satisfaction with the living standard and quality of life (Papadopoulos et al., 2012). Whereas rational factors are related to the capabilities and opportunities available to the person (Sen, 1990).

Gaspar (2007) had linked human well-being with basic needs, personal security, freedom of choice, property rights, and poverty reduction. Different studies have presented around 100 indicators related to civil society, health, national stability and sustainability, education, poverty, human rights, natural environment, shelter, family well-being, political participation, income and wealth, employment, economic participation, personal well-being for the representation of overall human well-being (de Leon & Boris, 2010). These indicators are also the face of the overall economic development of the nation. McGillivray (2007) mentions that human well-being is a multi-dimensional phenomenon, still, several indicators need to include for its measurement (Clark, 2002; Easterlin, 2002; Amartya & Fitoussi, 2012). Thus, to study the indicators and determinants of human well-being has become a debatable issue among economists and policymakers. It has been found that less care has been carried to study the involvement of institutions in determining the standards of human well-being.

From a few decades, institutions have become part and parcel of the overall economic growth of the nations (Aoki et al., 2001). Coase (1960), Williamson (1975), North (1990) point out that good governance play vital part in the process of economic-development in general and human well-being in specific. There is a very solid association among forming political, economic,

and social motivators and reducing transaction costs, unreliability, and advancing the long-term level of economic growth (Audi et al., 2016). Institutions decide the level of cost of exchange in the production process (Williamson, 1975). Thus, the quality of institution ensures ease and smooth relations of human and lessen the costs related to uncertainty during the process of exchange and production.

Basically, institutions are those constraints that are devised by humans to shape the interaction among people. There are some executive powers to impose these constraints with proper limitations. These limitations comprise of informal and formal constraints or rules, their strength can provide enforcing characteristics. The basic aim behind these limitations is to executive power and decrease the de jure part and position of an individual, who tries to consider themselves superior to law. North (1991, 1990) links these institutional constraints with economic performance, the quality of institutions ensures the individuals, entrepreneurs establish economic systems. Institutions by law protect how specific amount of money to make investment into human or physical along with innovative technological events. These events are helpful to speed up the adoption of innovative technology and establish roots for research and development. But such ventures are uncertain by nature and their disruptive characters make them challenging for formal and informal power holders politically and economically. Hence the quality of institutions provides protections who make the investment in human and physical capital, institutions also ensure that challengers and incumbents receive equal legal protection.

Institutions are not a simple concept to define and explain in a single word, different researchers have provided different interpretations to explain it (Nabli & Nugent, 1989). North (1990) points out that institutions are merely limitations, which control the action and relations among individuals and groups. Institutions are comprised of those constraints which are devised

by human-being that structure by subsequent the socio-political, and economic relations of the nation, there are both formal as we informal institutions. While explaining the concept of institutions for formal nature comprises of rules, laws and constitutions but informal institutions are ethnicities, agreements, codes of conduct and customs, etc. Further, North (1991) mentions that informal institutions are the segment of our culture while formal institutions are those developed by the government and state. Thus, institutions can build human relations in a particular way, the formal institutions affect the cost one pays for his/her certain actions. Moreover, institutions have a vital role in minimizing the transaction cost and this process leads to the long-run economic growth specific and human well-being in general (North, 2018).

Presently, no one can ignore the contribution of institutions for human well-being specifically (Platteau, 2015). As both formal (legal rights, constitutions and constitutional rights, and informal institutions are ethnicities, agreements, codes related to different conducts and customs, etc.) and informal (culture, social norms, religious, etc.) institutions provide the roots to human well-being. Different studies have highlighted different determinants of human well-being (Hafner and Mayer-Foulkes, 2013; Adeyemi et al., 2006; Georgiadis and Binder, 2011). But there is hardly any study that tries to link human well-being with the institution in the case of South-Asian-countries. Present work is novel and is a healthy contribution towards respective literature.

## **1.2 RATIONALE OF THE STUDY**

The issue of low level of human well-being has attained massive popularity in the literature of social and management sciences since last few years. To improve level of human well-being is not only necessary for social & economic goals but also humans themselves. An individual and aggregate targets can be achieved with better human well-being (Clark, 2002; Gürlük, 2009). UNDP “Sustainable Development Goals 2030”, e.g., “gender equality, decent work and educational quality, health facilities with better health standards and wellbeing, with zero hunger,

lowest poverty, economic growth, clean water and sanitation, clean climate and justice, peace, and durable institutions are directly and indirectly related to human well-being (UNDP, 2015). So, human well-being cannot be ignored for achieving targeted socioeconomic development (Frey & Stutzer, 2002). Different studies have linked human well-being with formal and informal institutions (De Soysa and Jutting, 2006; Parlevliet, 2007; Casson et al., 2010). The basic determination of this thesis is to observe the contribution of the institution on human well-being in the case of particular South Asian nations” (Pakistan, Bangladesh, Sri Lanka, India). But still, South Asian nations have been ignored, thus, it is a dire need to fill the gap in this field.

### **1.3 SIGNIFICANCE OF STUDY**

Empirical and theoretical literature highlights the necessity of human well-being in the procedure of higher economic-growth (Rains et al., 2000; Ranis, 2004; Ghosh, 2006). Different studies (Anand and Sen, 2000; Tridico, 2007; Fukuda-Parr and Kumar, 2009; Rode, 2013; Wicher, 2014; Eggoh et al., 2015; Teixeira and Queirós, 2016) had provided different measures of human well-being, we have opted for human development index of UNDP as a proxy of human well-being standards. There are numerous studies (Asteriou and Agiomirgianakis, 2001; Sow, 2014; Spruk and Kešeljević, 2016) that have linked different socioeconomic factors to human well-being. A large body of knowledge (Ahsan and Oberoi, 2003; Kumssa and Mbeche, 2004; Pranab, 2005; Vollmer and Ziegler, 2009; Casson et al., 2010; Acemoglu and Johnson, 2015; Balcerzak and Pietrzak, 2016) has highlighted the importance of institutions in the procedure of economic progress. But there is still a gap to link institutions with human well-being in the case of South-Asian nations. So, this study opens new avenues and ventures of research. This thesis is going to evaluate the effect of institutions on human well-being in the case of selected South Asian nations. This thesis will help the policymakers to improve human well-being to achieve higher economic growth in South Asian countries.



## **1.4 STATEMENT OF PROBLEM**

From the days of Adam Smith, economic growth has remained an ultimate objective of all economies. Human well-being is used as one of the crucial and elementary features of economic growth (Arabi and Abdalla, 2013; Gyimah-Brempong et al., 2006; Qureshi, 2009; Gürlük, 2009; Eggoh et al., 2015; Teixeira and Queirós, 2016). The concept of human well-being is multidimensional, as it comprises of income, health, education, social network, self-satisfaction, optimism, and positive engagement (Shah and Yasmeen, 2018). A sufficient amount of literature is available in economics that examines the relationship between determinants of human well-being (Asteriou and Agiomirgianakis, 2001; Sow, 2014). According to Acemoglu et al., (2005) economic growth is determined by institutions. In addition, Helliwell & Huang (2008), Wicher (2014), and Mauro (1995) also point out that institutions decide the level of aggregate and individual development. In this study political stability, government effectiveness, and absenteeism of fierceness, rule of laws, regulatory quality, control of corruption, and accountability and voices have been selected as institutions. Previous studies may have come to different conclusions because they used different measures for institutions, this nature of the exercise is scarcely conducted in case of South Asian countries. So, keeping all these aspects in mind, this thesis seeks to investigate and evaluate the contribution of institutions in deciding the level of human well-being in South Asian countries.

## **1.5 OBJECTIVES OF THE THESIS**

Following the problem statement, the core purpose of this thesis is to examine the influence of institutions on human well-being in the case of selected South Asian nations. This thesis has tried to attain the subsequent objectives:

- To explore the effect of economic freedom on human well-being in South Asia

- To study the effect of voice and accountability on human well-being in South Asia
- To explore the effect of political stability and absence of violence on human well-being in South Asia
- To study the effect of government effectiveness on human well-being in South Asia
- To study the effect of regulatory quality on human well-being in South Asia
- To examine the effect of rule of law on human well-being in South Asia
- To analyze the effect of control of corruption on human well-being in South Asia

## **1.6 RESEARCH QUESTIONS**

Based on objectives, this thesis is going to answer the underneath questions:

- What is the impact of economic freedom on human well-being in South Asia?
- What is the impact of voice and accountability on human well-being in South Asia?
- What is the impact of political stability and the absence of violence on human well-being in South Asia?
- What is the impact of government effectiveness on human well-being in South Asia?
- What is the impact of regulatory quality on human well-being in South Asia?
- What is the impact of rule of law on human well-being in South Asia?
- What is the impact of control of corruption on human well-being in South Asia?

## **1.7 RESEARCH HYPOTHESIS**

Based on objectives and research questions, this thesis is going to the tested following hypothesis:

$H_{0A}$ : Economic freedom does not impact human well-being in South Asia

$H_{1A}$ : Economic freedom does impact human well-being in South Asia

H<sub>0B</sub>: Voice and accountability do not impact human well-being in South Asia

H<sub>1B</sub>: Voice and accountability do impact human well-being in South Asia

H<sub>0C</sub>: Political stability and absence of violence do not impact human well-being in South Asia

H<sub>1C</sub>: Political stability and absence of violence do impact human well-being in South Asia

H<sub>0D</sub>: Government effectiveness does not impact human well-being in South Asia

H<sub>1D</sub>: Government effectiveness does impact on human well-being in South Asia

H<sub>0E</sub>: Regulatory quality does not impact human well-being in South Asia

H<sub>1E</sub>: Regulatory quality does impact on human well-being in South Asia

H<sub>0F</sub>: Rule of law does not impact human well-being in South Asia

H<sub>1F</sub>: Rule of law does impact on human well-being in South Asia

H<sub>0G</sub>: Control of corruption does not impact human well-being in South Asia

H<sub>1G</sub>: Control of corruption does impact on human well-being in South Asia

## **1.8 STRUCTURE OF THE THESIS**

The chapter provides the introduction of the topic. Chapter two is comprised of a detailed literature review. Theoretical framework and econometric methodology have been given in chapter three. Results and discussions have been presented in chapter four. Conclusions and policy suggestions have been given in chapter five.

## **CHAPTER 02**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This section of study is comprised of literature review. An extensive amount of literature is available that studies the elements of human well-being, but, here in this section most appropriate and current have been chosen as a literature review. Different authors define human well-being differently in literature. But most of them are agree that human well-being refers to the expansion in people's choices, increasing abilities, and functioning (UNDP, 1990). Moreover, human well-being is a multidimensional phenomenon. Since, the last 30 years' institutional economics has got much importance to explain aggregate development in general and individual development in specific (Pranab, 2005). The relations between institutions and aggregate development are theoretically and empirically linked to Coase (1960), Williamson (1975), and North (1990). Formal and informal laws with regulations and rules for foremost economic activities are impacted by infrastructure, religions, ethnolinguistic fractionalization, political freedoms, legal regulations and tax laws. The literature section has been divided into literature on income inequality and human wellbeing, literature on institutions and human wellbeing and concluding remarks

#### **2.2 INCOME INEQUALITY AND HUMAN WELLBEING**

Inequality of income is also linked to higher dropout rates from schools, lesser government budget on education, and lower rates of literacy (Heckman, 2011). Moreover, inequality of income creates the influence of the elite in society. This ruling elite has done like the spread of education at the mass level because they fear educated people demand redistribution of income and their political rights. Thus, the educational budget for the masses would remain lower (Acemoglu & Robinson, 2000). Hence, it is easily resolved that the human well-being of the societies and regions is harmfully affected by unequal distribution of economic resources (Easterly, 2001). Many

developed societies have lesser ethnic diversity, either they have better infrastructure health, education, strong democracy roots, social modernization, safest ethnic groups, zero civil war, better stable political environment with better economic policies. Inequality of income has a negative association with human well-being. Rich people not only have a higher standard of living than poor people but they also have a long and healthy life. Because, the poor are less liquidity to accumulate higher human well-being; a high level of inequality means a larger part of the masses will be liquidit constraint and there is the lesser accumulation of human well-being (Galor & Zeira, 1993).

### **2.3 INSTITUTIONS AND HUMAN WELLBEING**

The literature on institutional economics mainly focused that well-being has largely concentrated by institutions, generally formal and informal laws with regulations and rules for foremost economic activities are impacted by infrastructure, religions, ethnolinguistic fractionalization, political freedoms, legal regulations and tax laws. The idea behind the linkage between economic performance and institution's standard is not the new one. But since the early 1990s, the literature related to institutional quality and economic development got much importance among the policymakers and economists. Pedersen and Rendtorff (2010), Olson et al., (2000), and North (1990) provide theoretical and empirical roots for examining this relationship. Developed societies have lesser ethnic diversity, they have better infrastructure health, education, strong democracy roots, social modernization, safest ethnic groups, zero civil war, better stable political environment with better economic policies. Tamilina and Tamilina (2014) point out that most literature finds that formal institutions had played a dynamic contribution in determining the level of economic growth.

Institutions consist of values, norms, morals, attitudes, codes of conduct, habits, contracts, and traditions. The relevant transmission network is made distinction among the informal institutions which can impact economic development at individual and aggregated level, moreover the behavior of the society too. Previous literature related to informal institutions and their impact on economic-development is linked to the work of Max Weber's where he claims too (Weber, 2002). This work is originally published in early 1900's. Weber reveal that the advent of capitalized economy was mainly interrelated to the trust and beliefs, which results the behavioral changes of the whole population in the long run. By Follow this statement, the selected work is considered only as means for achieving higher ends, but we have to make clear aim about the will of God. Mostly, the masses supposed that God's selected everyone to enjoy every pleasure of life. Thus, everyone can try to attain and accomplish a higher standard of living to have faith in that everyone has equal chance to get everything. In some other cultures, where substantial values perform no contribution related to the will of God, the masses lack the accordant motivations to work-hard and to participate and invest. Hence, Weber claims that a higher part of Protestant people were economically strong and successful than their counterpart. As a results, values, codes, attitudes and moral beliefs from religious can impact development of civilization. Weber's proposition originates a new ideas and way of life to support capitalization.

Clark (2014) provided the determinants of human well-being, with the help of three broad approaches i.e., material well-being, orientation, and utility. This study explained how human well-being is not only harder to define but it is also harder to measure and for many years, different economists and social scientists have tried to measure its multidimensional features. This study shed some light that how after 1970 concern about the monetary approach of human well-being gave rise to the basic need approach (BNA) which was focused on the minimum level of basic

needs, then quickly after this shift this approach from material aspects to the opportunity and choices, the approach of human rights has a history of prominent approach. The prior attempt for understanding the multidimensional nature of human well-being a composite measure of Physical Quality of Life Index measured by Morris and Liser and later on this composite indicator was blotted out by “Human Development Index (HDI)” which has been issued every year for many nations since 1990 in the report of Human Development. The study also explained how Human Development Index developed over the years and how changes have been made to this index. The study also mentioned and discussed the reinterpretation of the utility approach which includes more openly trying to catch the achievement of actual desires. The author relates human well-being with some ecological factors and with different concepts of sustainable development. The outcomes proposed that the inclusion of sustainable standard in measuring human well-being, is also helpful to reduce the poverty.

McGregor & Pouw (2016) examined several basic ideas that how human well-being passed different stages in Economics. Authors had formulated human well-being with the help of three dimensions’ material, relational and subjective. No single dimension is enough for explaining human well-being. In this study, the pluralist perspective is advocated and emphasized, plurality means they argued that one can’t limit what should be included in human well-being. Authors mention about the biggest provocation that economists face is the problem of aggregation while economic planning and model designing that how from the microeconomic case to the macroeconomic outcome. The authors also explained how institutional economists like North (1990) and Coase (1992,1998) had tried to fill the gap but they also ignore the non-market institutions. The study proposed that the economy should be defined and characterized as an instituted process of resource distribution. The study further explained that putting human well-

being at the focal point of financial aspects empowers individuals to think about more completely what monetary cycles approach. This study encouraged policymakers to think about the well-being of society rather than aggregate economic growth.

Pontarollo et al., (2020) investigated the factor affecting the subjective well-being of humans in developing nations. The paper had tried to explain how to get rid of social inequalities through well-being by making it the center of attention in the policy. The analysis shows that a good living structure could be used to attain these aims, especially through the essence of social harmony. This study has used ordinary least squares and ordered logit for empirical analysis. The results showed that personal income, standard housing, health-related insurances, literacy rate, and social commitments and relations can improve well-being. They also found that some basic needs that are still pending need to be fulfilled to enhance the well-being, institutional structure, the system of distribution, and inclusion policies are needed. The authors emphasized the crucial role of institutional trust and this trust can be enhanced by the development of national and local institutions.

Stiglitz (2009) had explained the indicators of economic and social evolution. The outcomes of the paper showed that human well-being have an imperative contribution in deciding the level of socio-economic progress of a state. The study showed that non-economic progress is based on multiple factors. The study focused on multidimensional factors for the measurements of aggregate and individual levels of well-being. This broad-ranging view of well-being has gained importance instead of that only based on the GDP growth.

Mazumdar (1999) attempted to compare the advancement made in indicators of value of life and also shed light upon the quality of life (PQLI) index for measuring human well-being. The study had used data for the period of 1960-1990. The author further analyzed the relationships



between well-being and achievements in the expression of per capita real gross domestic product and GDP per capita to human well-being". So, it is now very common that there is a range of socioeconomic variables for measuring human well-being. The author explained that the Physical Quality of Life Index established by Morris in 1979 is the most often used index used to quantify the quality of life of countries. PQLI is an unweighted average of consisted of three main variables include overall life expectancy, adult education level and infant death rate. The author concluded that the improvements made in the last decades in the quality of life.

Shah and Yasmeen (2018) explained that the well-being of societies and individuals is a crucial and compelling area of economics and other social sciences but this field got importance and reputation after the glorious work of Easterlin (1974,2002). It was observed that even though showing good numbers in Per Capita Income and Gross National Product (GNP) many economies showed less satisfaction happiness and development. The study also explains how after the famous work of Douglas North (1990,1991) institutional economics got importance. The current study inspected the importance of institutions on economic growth. Here is a mixture of both institutional economics and economics of happiness by focusing on these two approaches study develops a theoretical framework and makes a model that shows a link between institutions' well-being and other socioeconomic variables. The study mainly checked the contribution and importance of informal institutions in dependent variable. The study used data from the Economic Survey 2017. The author used descriptive analysis first and then the order logit model is used for the regression analysis. The study concluded that strong formal institutions are essential for the betterment of individuals and societies and trust in informal institution also play important role in the development because when someone has good positive relations and association with the family friends and neighbors then individuals will also get non-monetary benefits. They found through a

study that Informal institutions strongly impact on growth and development of an economy regardless of formal institutions. It was observed that countries with weak formal but strong informal institutions were able and achieved a high level of growth and development.

Casson et al., (2010) argued about the special issue that the excellence of institutions in the state will disturb the development procedure and this development will affect institutional quality this issue covers the area of foundations together formal and informal, and as the outcome of this, the growth and sustainability of institutions also in this paper macro-level institutions which include growth-related institutions conflict management institutions and sustaining institutions were discussed. One of the key outcomes of this present paper is that through this study they made clear about the formal and informal institutions through the collection of literature”. The study had introduced the assessment of the previous studies on the key character of institutions that how informal institutions affect formal institutions and how both contribute to economic development and institutional transformation.

Acemoglu and Johnson (2015) reveal that “institutions” are important for economic outcomes as emphasized by Douglas North but there is less research in this field so this paper is a stepping stone in this direction and authors in this paper evaluated the rank of institutions related to the rights of property and constricting property right institutional capacities are the institutions which try to protect the individuals against taking away property from the owner of the property and contracting institutions which made people and private citizens enable to contract with one another. The study made use of external disturbance in both kinds of institutions. The study estimated the larger influence of property rights institutions on recent and most present economic results. Countries that made a bigger number of limitations on public representatives and upper class and extra shielding contrary to the expropriation by these authoritative clusters will be able

to have much higher income per capita. The institutions related to property rights have put different limitations on the role and power of the government, in this study, they proxied different institutions to check the legal control of the individual and government. Moreover, by using these measures and instrumental variables study found that institutions related to property rights have a greater effect in the long-run economic growth, financial development and investment but contractual agreements only need for the financial mediator.

Kumssa and Mbeche (2004) examined the institutional arrangements role in the human well-being of Africa. It had been observed that institutional arrangements have a greater role in the East Asian countries and explain that how through the friendly environment for the development programs and projects ensure the sustainable development for the projects but in the African countries due to the weaker institution's ineffective government less enforcement of rule of law, corruption, political interference become the hurdle in the well-being process. The study argued that one of the vital hurdles to the well-being is not the deficiency of saving and technology but also the lack of responsive administration system and institutions, because the government by its spending policies are playing a vital role not only in activating and allocation of capitals but also in the redistribution cost raise. This study suggested that as institutions play an imperative part in plummeting poverty, reducing uncertainties, and achieving sustainable development, so African nations should launch operative and receptive institutions to provide security and stable economic conditions the country study also suggested that African countries should also start political reforms that can and establish transparent governance and sustainable development. The author emphasized that without proper institutions it is difficult to attain sustainable well-being and good governance.

Balcerzak & Pietrzak (2016) examined the problem of the influence of excellence of institutions and systems in the connection with the use of knowledge-based economy (KBE) on human well-being for developed nations. In this study, assessment was completed for 24 European nations for the duration of the year 2004 – 2010”. To measure institutions quantitatively author use data from the Fraser Institute as the testing variable for institutional quality 29 variables having four aspects of institutional quality were qualified (1) formal regulations impacting private enterprise, (2) efficiency of the juridical arrangement which keeps the lower level of operational costs and supports the smoothness of market instrument,(3) pressure of the competition and labor market effectiveness and (4) institutions of financial markets as the catalyst of development with high growth potential. This study applied the TOPSIS method to get the institutional measure. In this study “Human development index (HDI)” was used because of two reasons (1) in the case of HDI well-being was defined many borders (2) because of the availability and simplicity of the index and also it commonly uses international benchmark. The estimation was done for the relation of human development and institutions with the dynamic panel. Their econometric results showed the positive connection of institutional quality on human well-being in the reference to the knowledge-economy for rich and developed nations.

Pranab (2005) purposed to focus on institutional economics research in the development of institutions that protect every single person’s property rights. in this paper author tried to enhance the quantitated literature on the impact of institutional quality that protection to property rights to attain required economic development across the nations by bringing in the state antiquity indicators which is different from the extensively used state colonial-settler death rate as a main variable which was, later on, found not satisfactory in some cases. Study Ialso look into some additional features of institution’s quality the other determination of this paper was to discover and

suggest some different instrumental variables instead of property rights institutions. Then study showed that for some non-income indicators related to social category of the development, for this purpose an index based on democratic accountability and participatory rights have been used as explanatory variables than just the property rights institutions. In this study author also looks into some historical institutional variables that have historically had a larger influence on the path of development and patterns of development too. The author discussed some qualitative historical analysis that how in some countries how primary stages of industrialization has a stepping stone in this process of development but in the states where the institutional quality was low and was unable to escalation the political pressure and rent seeking enforcement. The author mentioned in this study that the failure of institutions is the fundamental distributive conflict in societies.

Vo et al., (2020) explored the link between an inclusive financial structure and financial market steadiness by using bank-level data. This study had used financial stability as an explained variable while the explanatory variables are bank size, K index, operational revenue, return on assets, market power, loan provision, GDP per capita, GDP growth, financial inclusion, infrastructure, an index for economic freedom, and index for financial development. This paper also used GDP per capita and GDP growth. The data for these indicators are taken from different sources like the Global Findex Database and World Bank from 2008 to 2017 for the 3071 Asian region banks. In Generalized method of moments (GMM) the study uses different scenarios for model-2 GMM excludes growth of GDP, model-3 GMM excludes per capita GDP, and model-4 GMM dummy as the financial crisis of 2009. In GMM model2 the study excluded the growth of GDP due to the issue of multicollinearity to per capita GDP. In model3 the study is excluding the per capita GDP due to the multicollinearity issue growth of GDP. While in model4 the research paper uses financial crises (2008) as a dummy variable. By using GMM the study reveals that in

model-1, 2, and 3 financial inclusion contributes directly to stability in the Asian nations. In the banking sector financial inclusion contribute inversely to stability in the Asia. According to Hansen's test model<sup>4</sup> are not robust. All different situations of this article mention that in the Asian region inclusive financial structure adds directly and significantly to the stable macroeconomic conditions over the period from 2008 to 2017.

Matekenya et al., (2020) studied the influence of an inclusive financial system on human well-being of Saharan nations. This study had used human development index while the independent variable is financial inclusion, population as percentage having access to basic drinking water services, percentage population internet users, percentage expenditures as public health, unemployment rate, foreign direct investment and level of institution's quality as the independent variable". Data of selected indicators have been opted by various sources. Like for the financial inclusion data has been attained from IMF financial -access-survey and for the human development index data has been attained from UN. While for the remaining control variables data has been collected from world banks. This paper had used a panel data approach for the period of 2004 to 2017. There was an encouraging link between an inclusive financial system and human development by using the Generalized Method of Moments.

Barnor et al., (2021) checked the main contribution of an inclusive financial system on human well-being in frontline republics. This paper had used financial inclusion and human well-being as the explained variable while the explanatory variables are internet penetration, mobile penetration, telephone penetration, telecommunication, income level, education, health, market size/ rural economy, employment status, financial services costs, rule of law, proximity, (Branch location), infrastructure, natural resources, foreign direct investment and corruption level. Data was used for these variables while the data is collected from standards and poor's (S & P) from

2005 to 2014. This research paper was based on panel data. By using a generalized method of movement the study reveals that for the ramp-up of financial inclusion in the banking industry human development is a facilitator. The study also found that the primary reason for a lower inclusive financial system is lower human well-being.

Samarah and Talalweh (2021) investigated the role of an inclusive financial system on financial growth and human well-being for Islamic countries. This study had used financial inclusion as the regressand. Whereas the regressors are variable human well-being along with economic growth. The data collection source is World Bank and International Monetary Fund while the data collection period is 2016 for 28 Islamic countries. This paper used the least square regression model to estimate the influence of an inclusive financial system on human well-being and economic growth. The least square method is utilized for empirical purpose, the study reveals that the consequence of financial inclusion on human well-being is substantial. The empirical result of this article also indicates that financial inclusion's influence on economic growth is direct and substantial. The outcomes of this paper also show that banks also played an important role which is expected.

Shah (2016) investigated the overall country's factors of the human well-being. The core purpose of the paper was to discover the major elements affecting well-being like health, wealth, and education. This study used human well-being as a dependent variable while the independent variable is education, life expectancy overall, and per capita income. Empirical material for these indicators has been opted from the HDI report. The consequences of this paper reveal that in regression analysis P - value and T - value is significant at 95% confidence at 95% confidence level. The findings of this study show the coefficient of R - squared 0.9613 and the value of Adjusted R- squared 0.9571 its means R-squared more goodness of fit.

Qasim and Chaudhary (2015) had examined the cross-district analysis among the aspects of human development disparities in Punjab, Pakistan. This study used the human development index by excluded income in its measurement as well as income based human development index as explained variables. While the independent variables are population density, industrialization, remittances, and infrastructure. This study utilized cross-sectional data for 34 districts of Punjab for 2010-11. Data for human development index by excluded income in its measurement as well as income based human development index is collected from Qasim and Chaudhary (2014) and data for the independent variables have been taken from different sources like Punjab development statistics (2012), MICS (2011), and United Nations development program. The outcomes of the study reveal that industrialization, transfers, and social infrastructure have a encouraging and significant influence on the non-income HDI as well as income based human development index. While population density has a encouraging influence on the Human development index but has an insignificant connection with the non- income human development index.

Tridico (2007) aimed to explain their association of human well-being and economic growth, either they were parallel during the changeover period for a market-based-economy in former Soviet Union nations. They tried to answer the question in their study that economic growth is not always working side by side with human development. In the paper author used the OLS model and the Granger Causality method was utilized to confirm the findings. Analysis suggested that macroeconomic stabilization is compulsory but not a adequate state for economic growth, moreover, this study observed from the case of the former Soviet Republic where growth increases dramatically that there are fewer proves so far that economic growth reduce poverty. In the case of Poland too where the growth increased in the mid of 1990's but overall poverty did not fall. In comparison to this, the same case happens in Hungary the results showed that human development



with the tonic of policies related to institutional progress has a reasonable environment to impact economic growth. The author concluded that human development which may be defined as increasing people's choices is only possible through the proper policies related to institutional progress that can improve people's abilities and give them opportunities for good health, education, jobs. Through analysis, the study found that transition behave differently for different countries and found different results in term of growth and development and these are the institutions that are the main reason behind this disparity. Better institutions and institutional frameworks give greater chances for development and cause economic growth.

Kuri and Laha (2011) investigated the link of an inclusive financial structure and the status of human well-being. This study used the index of financial inclusion as an explained variable while the independent variable is the human development index. Empirics for these indicators have been opted by the national summary data page NSDP for the major cities of India during 1993-94 and 2004-05. By using Pearson's coefficient and spearman's rho test/method the study reveals that in 31 states of India only three states (Delhi, Goa, and Chandigarh) are high index financial inclusion states. Whereas 10 additional states met the standards for medium-sized inclusion of financial system, but all of the remaining states have a low financial inclusion. This paper also shows a comparative study to inspect the relation of human well-being and financial inclusion. The standard of inclusive financial structure has been found to follow the major corresponding design as human well-being based on modified pattern and ranking. The empirical consequences propose that the status of human development is directly correlated to an inclusive financial system, in the sense that the highest levels of human development are also explained with equal levels of financial inclusion.

Ahsan and Oberoi (2003) examined the importance of institution to combat poverty and inequality to get well-being. They took institutions as formal rules designed by the constitutions and political authorities both and also the informal rules such as social capital called civilization. Their study shed light on the importance of institutions, as prior reasoning for combating poverty, inequality, and attaining human development. The study is conducted for Latin American and the Caribbean region (LAC). Quality of institutions is measured via the composite variable which was taken as Institutional Capital (IC). within the variable institutional capacity (IC) or lack of violence seems to give a more accurate estimate in every case. The study found less evidence from the literature about the border measure of institutional capacity more specifically in the issue of poverty and inequality study found that institutions measured by the rule of law play a crucial role. The empirical study proved that the quantitative role of institutions dominates that of income variables. The policymaker's study suggested that focus should be on both informal and formal institutions e.g. social capital and also the center of attention should be the mutual interaction of market as well as non-market institutions in attaining well-being and reducing poverty.

Vollmer and Ziegler (2009) examined the link of institutions in the stages of overall well-being which is the major field of interest nowadays authors concentrated on institutions related to political structure and the impact of these institutions on the non-income magnitudes and proportions of human development. Opposite to the earlier studies which made focus on property rights author stress the redistributive effects of public goods in democracy. Authors first elaborated through theoretical research that why democracies compare to monocratic political structures do well for the delivery of the public good. The study explained the effect of democracy on human development was evaluated both descriptively and analytically. By stretching the literature author not only discover the stimulation democracy raises the standard of human development but also

theoretically and empirically explains those conditions which are important in enhancing the process of democracy for human development. The author performed stationary panel scrutiny for the period of 1970 to 2003. The model showed a positive connection and confirmed that living in democracies positively affects human development. In the end, the author concluded that firstly democracies are good for human development and its effect are free to form economic development and secondly positive impact on democracies on human development looks independent from the circumstances. Further study found that the impact of democracies is far beyond just economic development.

Spruk and Kešeljević (2016) conducted a study for 138 countries and investigated the connection between institution's quality well-being based on subjectivity through the difference in economic freedom they used Veenhoven's happiness dataset results of their studies showed that better economic freedom and institutions with limited government, property rights are expressively more prospective to attain subjective well-being. The authors explained that the variation of well-being cross different-economies in the combination form of economic autonomy is evaluated by Heritage Foundation. The data suggested the endogeneity among the selected indicators and economic freedom and to support the significance of the cross-nation happiness differences and it's also showed robustness for added control variables. The clearness of the estimated connection between happiness and the level and size of economic freedom was also observed through the panel data method. Studies reveal that although high economic freedom is connected with a high level of happiness but also suggested the negative effect of economic freedom over time because the rise in economic freedom can cast adverse effects on happiness across nations. Furthermore, their study had explained that high economic freedom is linked to depressing well-being because of control of the state.

Hamzah et al., (2012) explored the quality of human well-being and its difficulties in the case of Indonesia. This study used human development quality as an explained variable while the independent variable is economic growth, income distribution, per capita income, population growth, poor population in numbers, local government exp. on education, exp. on environment by local government, local government exp. health, local government exp. housing and public facilities. This study also has some dummy variables which are Local Autonomy Policy and Law No.20/2003 national educational system. This study used the quantitative method and secondary data. Data has been taken for the years 1993 to 2009 from different sources like the ministry of finance and other literature. By using panel regression methods the outcomes reveal that six variables had an important influence on the human development standards in the overall twenty-six provinces of Indonesia. Empirical findings of this study also show a substantial and adverse influence on the human development standards. Another variable is income per capita which has an important and encouraging influence on the human well-being standards. While growth in population has a inverse and substantial influence on the human well-being standards. The outcomes also show that the unemployment growth rate negatively affects the human development standards. The connection between the human development standards and government funds spent on education is positive and significant.

Sagar and Najam (1997) investigated the human well-being standards. This paper used human well-being as a dependent variable while the independent variable is sustainability and equity. Data for these indicators have been opted from the UN development program for the period (1997) for the fifty-three countries. Kassouri and Altıntas (2020) investigated the relationship between human well-being between economic footprint in the Middle East and North Africa nations famously known as MENA. A trade-off? This paper utilized the human development

standards and per capita environmental footprint in global hectares as dependent variables. While the independent variable is the financial development index, index of globalization, rents earned from oil, index for socioeconomic environments, percent of the urban population, and environmental degradation. Data for these indicators have been taken from diverse bases for the period from 1990 to 2016 for thirteen countries. Empirical findings of this paper confirmed that both test DH-group and DH-panel have strongly rejected the null-hypothesis of no co-integration for a significance level of 1 percent. The findings of this paper revealed that EF had a positive and significant connection with the human development standards, globalization, urbanization, oil rents, bio capacity, and financial development. The outcomes also show that there was a adverse and substantial correlation between EF and economic institutions. Furthermore, the human well-being was recognized as positive and significantly associated with all other explanatory variables except bio capacity. Nevertheless, the relationship between the regressors recommends some collinearity problems among explanatory variables. The outcomes from the unit root test show that the human development index, FD, OIL, GL, Urbanization, and BIO have unit root issues at  $I(0)$  except for EF. But at the first difference, that data has not issue of unit root. All the indicators become stationary at first difference.

Fatah et al., (2012) discovered the connection of human well-being standards, economic freedom, and political freedom of developing countries particularly Malaysia, Indonesia, and China. This paper used the yearly progress of real GDP as a explained variable while the regressor variables are life expectancy, fertility, foreign direct investment, trade openness, political freedom, and civil liberties. Data for these factors have opted from world development indicators from the period of 1980 - 2005. By utilizing a least-square quantifiable technique the outcome of this study reveal that foreign direct investment, life expectancy, political freedom, and openness have an

encouraging and significant influence on growth of Malaysia, Indonesia, and China. The findings of this paper also show the relationship between civil liberty and fertility rate to economic growth is positive. But the impact of these was insignificant on developing countries. Furthermore, the most important factor which helps in the growth of china is foreign direct investment, as well as civil liberties. Whereas the factor of better openness and high fertility is to significantly affect Indonesia's GDP. On opposite side, Malaysia performed well in both civil liberty and party-political freedom.

Alijanzadeh et al., (2016) inspected the connection between the human well-being standards and toddler fatality rate across global. This paper used human well-being as the explained variable. Whereas the explanatory variable is the infant mortality rate. Data for these variables had opted from the human development database (2010) and the world health organization database (2010). The data period used in this paper is from 2000 to 2010. By using the Pearson correlation test the outcomes of this study reveal that the correlation of income per capita, education, and life expectancy with mortality rate of infant is negative. While the correlation of the infant mortality rate with the human development standards is also negative. The empirical result shows that the infant mortality rate is affected by per capita income, but not as far as life expectancy and education because of an inferior connection amid the human well-being standards and per capita. Furthermore, for perceived healthcare inequities human well-being standards are one of the best representatives of society.

Islam (2010) investigated the relationship between the human well-being standards and GDP per capita. This study used human well-being standards as the explained variable. Whereas the autonomous variable is per capita gross domestic product. Data for these factors have been opted from the human development report (2015) for 173 counties". By using regression analysis

the outcomes of this paper had shown that the coefficient of the gross domestic product is statistically significant for all the selected seventy-three countries across the world. The findings of this study also display that the human well-being standards are utmost subtle to per capita gross domestic product in the lower human well-being regions.

Khodabakhshi (2011) inspected the association between human well-being standards and gross domestic index in the case of India. This study had used gross domestic product or income as the regressend variable. While the regressor variables utilized in this paper are health, education, and long life. Data for these indicators have been opted from the United Nations development program for the period from 1980 to 2010. The outcomes of this study show that per capita gross domestic product contribute importantly in the evolution of the Indian national economy. Moreover, some indicators of the human well-being had a low effect as well as ineffective such as life expectancy.

Asongu (2011) investigated the economic factors of human well-being in developing nations. This paper had used the human well-being as the explained variable. While the regressor variable is a gross domestic product. The adjustment based on inequality to quantify human well-being standards was used for the human development index which covers the features of human well-being likewise income, long life, and education. Furthermore, gross domestic product per capita was used for GDP. This paper also uses some instrumental variables like inflation, trade, gross domestic growth, etc. data for these variables had been taken from the monetary progress and structure database and the World Bank website for thirty-eight African countries. The collection period of the data for these countries is from 1996 - 2008. By using the two-stage LS estimation system the outcomes of this paper reveal that the connection between human well-being standards and financial size is encouraging. Whereas the association between human well-being

standards and allocation efficiency is helpful. The policy implication of this was that financial allocation efficiency did not support as a driver of human well-being.

Bedir (2015) inspected the connection amid human well-being standards and emissions of carbon gas in OECD nations, famously known as OECD. This study had used human well-being standards as the explained variable. While the independent is co2 emissions. Data for these variables had been taken from World Bank for 33 member republics of OECD for the period 1992 - 2011. By utilizing the panel data and causality test of Granger. The estimated empirical result shows that there is no causality exist amid the human development standards and CO2 emissions in Australia, Canada, Austria, Switzerland, etc. Furthermore, there is a need to diminish carbon emissions that do not impact harmfully their constitution and the best possible way is to increase the usage level of energy.

Filippidis and Katrakilidis (2015) explored the association between human well-being standards and institutions in under developing nations. This study used banking sector development as the explained variable. While the regressor variable were the human well-being, inflation, trade openness, financial openness, social institutions, economic and political institutions. Data for the dependent variable has been opted from the World Bank website. While for the independent factors data has been taken from different sources such as world economic freedom, and international country risk guide database, etc. The data collection period from 1985 to 2008 is used by this study for fifty-two developing countries. By using a generalized method of movement the findings of this study reveal that low and middle lower-income nations have significant political institutions. The outcome shows that the connection between human well-being and institution is significant in the banking sector. "For the policy implication, the study suggests for the developing economies that government must impose less restricting governing



policies on the activities of the market. Furthermore developing nations must need to promote their financial system.

Lamb et al., (2013) evaluated the evolution of carbon emissions and human well-being standards. This paper utilized human development as the explained variable. While the regressand variable is density of population, population growth, gross domestic product, urbanization, and export. Data for these factors have been taken from the United Nations development program. By using multiple regression the outcome of this study expose a optimistic and substantial connection between income and carbon gas emissions. The coefficient value of the climate variable is strongly negative and significant. Results of this study revealed that the correlation amid GD and carbon emission is constructive. Furthermore, the influence of population growth is strongly adverse to carbon emissions.

Biggeri and Mauro (2018) investigated the inclusion of both freedom and environment under the dimensions of the human sustainable development index. This study used different types of variables such as human development index, freedom, and environment. Data for these factors had been taken from the World Bank website for the period 2005 - 2013. By using cross-sectional data for fifty countries the outcome shows that there is perfect sustainability between the dimensions and there is no heterogeneity exist. The findings of this study had shown the low score of geometric mean produced by “ESHDI and SHDI. Moreover, all indexes show the same result between the selected cross countries with small heterogeneity levels. The result of this study shows that ESHDI produces tougher changes in ranking.

Zaman et al., (2012) inspected the association amid human development and financial indicators. This study used human capital as the explained variable. While the explanatory variable is gross domestic product per capita, liabilities in bank deposit, M2, credit to the private sector,

and market capitalization. Data for these factors had been taken from WDI from 1975 - 2010. The outcome of the Granger causality test displays that the influence of financial indicators on human capital is statistically substantial except for market capitalization. The findings revealed that for the increasing of human well-being and financial development indicator is an important driver. Some policy implications for future research is that in the future Pakistan must need to increase human capital which makes it easier for Pakistan to meet target human development.

Helmy (2014) explored the influence on human well-being by financial inclusion and the progress of financial development in the case of BRICS. This paper used human well-being as the explained variable. While the explanatory variable is life expectancy overall, aggregate level of education, and per capita income. Data for these variables had been taken from two different sources likewise the UNDP and World Bank for the period from 2000 to 2018. By utilizing ordinary least squares the discoveries of his study revealed that the correlation between life expectancy and financial inclusion is insignificant. While at one percent level the relationship between education index and financial inclusion is significant. The verdicts of this study display that the connection between income per capita and financial inclusion is statistically substantial. The empirical result also displays that the correlation between aggregated domestic level of savings and human development is statistically significant.

Wu et al., (2013) inspected the influence of the human well-being standards from the super-efficiency model; ranking on rational development. This study used human well-being as a regressand factor while the regressor factors are standard of living, education, and life expectancy at birth. Data for these variables have been taken from "OECD" and World Bank. The data period for the selected nineteen OECD countries is 2009. By using the super-efficiency model the outcome of this paper reveal that there is nearly 75% of countries have a different result in the

human development index rankings. Furthermore, there is approximately 70% of sample base republics overused their resources per capita labor comparative to their remaining outputs or the human development index.

Arisman (2018) investigated the features of that effect of the human development standards in Asian nations. This study utilized the human development standards as a explained variable while the explanatory variables are the inflation rate, unemployment, population, and income per capita. “Data for these variables had been taken from the World Bank and UNDP. This paper used a panel data regression procedure with the fixed-effect analysis. By utilizing the fixed-effect analysis the output of this study reveals that growth of population and per capita income have a significant impact on the human development standards in Asian nations. The outcomes show that there is a constructive linking between the human development standards and per capita income. While the other explanatory variables such as unemployment rate and inflation have no influence on the human development standards in Asian nations. The outcomes show that the F test shows that all the explanatory variables likewise per capita income growth rate, rate of unemployment, population, and rate of inflation influence the human well-being standards. For future research, some policy endorsement is that the population must be controlled and must need to increase its budget for health and education.

Maharda and Aulia (2020) explored the association of human well-being standards and government exp. in the case of Indonesia. The explained variable used by this study is the human well-being. While the explanatory factors are labor force, gross domestic product per capita, household expenditures on health and education exp., government exp. on education, and government expenditure on health. Data for these variables had been taken from the Ministry of Finance, Directorate-General-of-Fiscal-Balance, Central-Bureau-of-Statistics, and Indonesia

Database for Policy-and-Economic-Research developed and take cared by the World Bank. The period used by this study is from 2010 – to 2018. By using panel data and ordinary least squares the outcomes of this study reveal that there is a constructive and substantial connection amid government exp. on education and health and human development standards. The outcome also showed that economic growth had a substantial and encouraging influence over the human development standards. Furthermore, the effect of unemployment and population growth is adverse. The findings of this study reveal that health expenditure negatively affects human development.

Eren et al., (2014) demonstrated the reasons that affect the level of human development by using different models of regression. This paper used the human development standards as the explained variable. While the explanatory variables are aggregate life expectancy, gross domestic product per capita, urban population, mean year of school, adult literacy rate, expected year of schooling, student teacher ratio, total national parliament seats (% of female), and labor participation rate (male and female). Data for these variables had been taken from United Nations Development Program. By using the regression model for eighty-four countries the outcomes of this study reveal that gross domestic product, labor participation rate, schooling years, and life expectancy at birth has a significant influence on the human development level. Using all three models probit, logit and Tobit, have the most significant impact of expected years of schooling on human development. Nations must focus on all the factors of human development and make a strategy for their policies, especially in the education sector.

Sangaji (2016) studied the aspects of the human well-being standards in the case of Buddhist nations. This paper used the human well-being as the explained variable. While the explanatory factors are inflation, life expectancy, fertility rate, and gross domestic product per

capita. Data for these variables had been taken from the human development report and the website of the world development indicator for 2010 to 2014 for eight Buddhist countries. By using the random-effects model the outcomes of this model revealed that life expectancy at birth and gross domestic product have an encouraging and significant influence on human development standards. Moreover, inflation and fertility levels harm the human development index. Some policy implications for future research. The use of foreign resources must be deliberated sensibly to the high development. Each country must increase its resources for high development. For the life expectancy at birth, governments must need to increase health programs for the entire community, especially for the poor.

Binder and Georgiadis (2010) explored the factors of human well-being standards perceptions from satellite state panel model. This study used human well-being standards as the explained variable. But the explanatory variables are government consumption, physical capital investment, imports and exports, and gross domestic product. Data for these variables had been taken from Gray Molina and Purser's (2010) data set for the period 1970 to 2005 for eighty-four countries. By using panel data and Barro regression model for eighty-four countries the outcomes of this paper reveal that economic development which affected by macroeconomic policies with lesser break than proposed by conservative econometric contexts, however the impact of human development index with longer delay and over all less strongly than gross domestic product. The outcome had also shown that the impact of government consumption on the gross domestic product is positive. Furthermore, long-run gross domestic product is affected negatively by high institutional quality.

Binder and Georgiadis (2011) explored the factors of human well-being and Seizing the character of organizations. This study used human well-being as the explained factors. While the

explanatory factors are government consumption, imports, exports, and investment in physical capital. The data for these indicators had been taken from different sources such as United Nations Development Program. This study utilized the panel data for eighty-seven countries from 1970 to 2005. By using regression the outcome of this article reveal that the effect of government consumption on the human well-being standards is statistically & economically zero, but its effect on the gross domestic product is negative.

Khan et al., (2019) explored the factors of the human well-being standards in the case of Pakistan, an empirical scrutiny. This paper used human development as the explained variable. While the explanatory variables are information, communication, technology, economic growth, trade, and urbanization. Data for these variables had been taken World Bank database for the period from 1990 - 2014. Different methodologies had been used in this paper. By using the autoregressive distributed lag and error correction model the outcomes of this article reveal that there is a significant and direct correlation between economic growth and human well-being. The value of the residuals correction value is inverse and significant in the Granger causality test, which shows the long-run causality among the variables. This paper used the unit-root test for the inspection the stationarity in the data. The outcomes of the unit-root test show that all the particular variables are not stationary at the first level but become stationary at the first difference. The outcomes of the long and short-run estimations show that the coefficient value of information, communication, and technology had a substantial and encouraging influence on the human well-being standards. The outcomes also had shown that the correlation between gross domestic product and human well-being is positive and significant. Moreover, the relationship between trade and the human well-being standards was negative and substantial. For future research need some policy implications that the government must need to look over their “policies.

Garip and Tunahan (2019) inspected the connection between financial growth, FDI, foreign trade, and well-being. This study used human well-being as the explained variable. While the explanatory variables were a foreign direct investment, corruption, and international trade (Import and export). Data for these variables had been taken from the UNDP 2015. The outcomes of this study revealed that the effect of corruption is positive for lower and middle income economies. Furthermore, the effect of foreign direct investment for lower and middle-income economies is positive when the corruption was low. The findings also revealed that the impact of gross domestic profit / export on higher-income developing countries is significant.

Sofilda et al., (2015) demonstrated the factor scrutiny of the human development standards for the low and high standards in the case of Indonesia. The explained variable utilized by this paper is the human development index. While the explanatory indicators are health budget, unemployment rate, population growth, economic growth, dependency ratio, education budget, expenditure growth per capita, and housing and public facilities budget. Data for these variables had been taken from the UNDP. The study used panel data types for thirty-three states of Indonesia for the period from 2004 to 2013. Multiple regression analysis was used for the analysis. By utilizing the fixed-effect analysis test the outcome displays that the effect of the allocation of housing and public facilities budget, education budget, economic growth, and the unemployment rate is significant on the human development index. Moreover, there was an insignificant effect of growth of population, ratio of dependent population, expenditure per capita, and budget allocated for health on the human development standards". The empirical scrutiny of this paper shows that the relationship of dependency ratio and population growth is positive with the human development index. Some policy implications highlighted by this paper are that government must need to bring improvement its infrastructure for community services in education, health, etc.

Furthermore, this is very important for the nation's government to make its full attention to the economic growth problem.

Yasmeen et al., (2011) examined the opportunities and challenges of human well-being standards in Pakistan. This study used human well-being standards as the explained variable. While the explanatory variables are poverty. Data for these variables had been opted from the the reports of human well-being for the period 2001 to 2007. The findings of this paper revealed that the revenue circulation of Pakistan denotes an unequal image wherever it provides birth to class inequality, poverty, and poor human development. One of the policy implications in this paper was that human development is provided for educators, government bureaucrats, and industry frontrunners.

Sahoo and Sethi (2021) inspected the affiliation between remittances and human well-being standards in the case of some Saharan economies. This study used human development standards as the explained variable. While the regressor variables were gross domestic product, government expenditure, financial development, human capital, consumer price index, foreign direct investment, life expectancy, and remittances. Data for these variables had been taken from WDI for the period from 1990 - 2018. By using ordinary least squares the discoveries of this paper expose that there was an encouraging and substantial effect of remittances on the human well-being in the sub-Saharan region. Correspondingly, the outcomes also show the encouraging and substantial influence of economic growth, inflation, human capital, government exp. on the human well-being standards in the region. By using Granger causality augmented by Dumitrescu–Hurlin, the outcome had shown that there is one directional causal relation between human well-being and remittances. Furthermore, the connection between inflation and human well-being standards is bi-



directional. The paper also suggested some recommendations for future research that for promoting education, income and health must develop public policies.

Ferrara and Nisticò (2019) conducted a study for Italy and analyze the link between multidimensional development disparities and the quality of institutions through the measure of voice and accountability, effectiveness of the governmental working, administrative quality, and rule of law. Authors first use the Theil index and found that multidimensional well-being is something more than the GDP distributed between the center South and North of Italy. In their study, they used a regional panel from 2004 to 2012 and found that institution's quality is significant in effecting county-wise multi-dimensional differences. The decomposition of the Theil index had featured checked contrasts between well-being & GDP, as far as both the between and inside parts of the inequality indices, affirming that well-being isn't just an issue of GDP elements and significantly more might be gained from non-useful circles, particularly in regards to the nature, element, and development of regional disparities. In addition, clarifying imbalances in the well-being standards are considerably additional composite than explaining the useful separation in Italian quality of life and its sub-indices are moving conflictingly and the effects in the different regions are different for the public expenditures, institutional qualities, and local externalities.

Nanda and Kaur (2016) inspected the connection between inclusive financial system and human development standards. The paper had taken 68 countries from 2004 to 2012. This study uses inclusive financial system as a dependent variable while, banking services availability, use of banking services, penetration of banking sector, as independent variables. Data for these variables had been taken from International Monetary Fund. This study used Pearson's correlation coefficient for the empirical scrutiny. The discoveries suggest that there was a strong and substantial connection between an inclusive financial system and human development standards.

The country's level of income and human development standards seem to exhibit one-way movement with index financial inclusion. Those countries which report high levels of inclusion were identified with high incomes and a high level of social-economic development, in other cases, countries with low financial inclusion (except a few). Human well-being aims to compute the social-economic development level in addition to the gross domestic product index for a country, index for education and overall life expectancy, and financial inclusion.

Blando (2013) examined the linkage of the inclusiveness in financial system and human well-being. This study had used financial inclusion as an explained variable while the independent variable is human development standards. The data for these variables has been taken from World Bank's 2011 for the twenty countries. This study used SANDY and Pearson's coefficient of correlation method for the empirical analysis. All twenty countries are organized into four groups: Africa, Asia, Europe, and the OECD. The study reveals that the OECD group has the highest financial inclusion but Mexico was different, which has the lowest inclusion degree. Due to regulations, the European group had the highest financial inclusion level. The result of the Asia group is mixed, Singapore at the top while Bangladesh and India have low financial inclusion levels. While the lowest group in Africa with low financial inclusion and low development levels.

Raichoudhury (2016) studied the relation between the inclusive financial system and the standards of human well-being across countries. This study used financial inclusion as an explained variable while the explanatory variable is human development standards. Data for these indicators are taken from the financial access survey database of the IMF. For the making of the index of the inclusive financial system, the study is using a multidimensional method which is alike to the UNDP approach for human development standards approach and gender-related development index (GDI). The discoveries of the study suggested that financial inclusion and

human development standards are absolutely correlated, which means that the country which has a high financial inclusion level also has a high human development level. Like the countries Spain, Japan, Italy, and South Korea, which have the high rank of inclusive financial systems and human development standards. Whereas the countries like Afghanistan, the Central African Republic, Congo Democratic Republic, and Guinea have a lowest index of financial inclusion and also a lower standard for human well-being. The paper recognized that from research that there is an encouraging and strong connection between financial inclusion and standards for human well-being.

Sarma and Pais (2011) inspected the connection between inclusive financial systems and human well-being standards. This study used inclusive financial system as a dependent variable while the independent variable is human well-being standards. The data for these indicators were taken from the IMF and WDI. This paper used cross country analysis of different 49 countries. By using the regression equation, the study reveals that every country's gross domestic product has a vital indicator in explaining the level of an inclusive financial structure. The findings of this paper are that the non-performing assets (NPA, s) are related negatively with inclusive financial structure, Capital asset ratio is also associated adversely with financial inclusion. The empirical outcomes of this research display that it would be the boosting of economically inclusive societies, the study requires attempts to reduce income inequality, increase literacy levels and improve the physical level and communication infrastructure.

Arora (2010) demonstrated the measuring of financial access. The study used World Bank (2007) data to examine the level of access to financial system in rich and poor nations. The contribution of the paper is dual: firstly, it generally subsidizes to the works on financial access. Second, the study offers a new proposition among other indicators of economic growth. This study

compares the different social-economic variables with a new index incorporating financial access. The country's level of income and human well-being standards seem to exhibit one-way movement with index financial inclusion. Those countries which report high levels of inclusion were identified with high incomes and a high level of social-economic development, in other cases, countries with low financial inclusion. The outcomes of the paper show that the ranks of Belgium are high in terms of financial access among all the developed countries. In developing countries, Hungary ranks are high in terms of financial access to follow by Croatia and Bulgaria. In the region of South Asia, financial access has a poor and very low index such as Pakistan, Nepal, and Bangladesh. Costs are too high in the case of Nepal.

Wicher (2014) attempted to explore and evaluate the link between institutions and sustainability. He uses life satisfaction and happiness as an indicator of happiness and well-being in the study. This study found that institutions and sustainability are positively associated study used the Random effect model and pooled OLS regression in this study. The author further added that there is space available for the betterment for quantifying both institutions and sustainability and describe that “the results in this study are groundwork and afterward fixed effects procedure would be run to try a causal connection between sustainability and institutions.

Rode (2013) empirically investigated those good institutions in the form of economic freedom and democracy are linked to the well-being based on subjectivity. In this study, the author tried to tackle both the problems using accumulated cross-nation data set. The cross-nation data set was taken from the world value survey. This study used the OLS method and instrumental variables to empirically examine the result for cross-nation analysis. Outcome affirms the earlier findings that democracy and & economic freedom is important to determine the satisfaction of life in lower-income countries but in comparison to this, only the relative performance of the legal and

security structure and property rights are very significant in determining the satisfaction of living in the higher-income countries. The result of the studies showed that casual channels form economic freedom to the standards of human well-being but could not eliminate the long-run influence of well-being on economic freedom with the help of societal capital.

Aziz and Ahmad (2018) explored the part of the effectiveness of institutions on economic growth for low middle income and higher income nations. The study had measured the institutions with the help of armed conflicts, level of corruption, and democracy. The estimated outcomes show that selected variables harm the economic growth of selected nations. The study found that human capital, total labor force, and capital had an encouraging and noteworthy influence on the economic growth of selected nations.

Khattab et al., (2019) studied the association between institutional standards and economic performance in Morocco from 2000 to 2012. Institutional solidarity, credit policy, political institutions, internal conflicts, public support for innovation, and the role of informal work are selected variables for quantifying of institution quality. The projected outcomes display that selected variables have a substantial influence on economic growth in Morocco over the selected period.

## **2.4 CONCLUDING REMARKS**

The extensive review of literature enables us to under that human development remains a topic of discussion among researchers and policymakers. Different studies (Anand and Sen, 2000; Tridico, 2007; Fukuda-Parr and Kumar, 2009; Rode, 2013; Wicher, 2014; Eggoh et al., 2015; Teixeira and Queirós, 2016) had provided different measures of human development, we have opted for human development index of UNDP as a proxy of human development standards. There are numerous studies (Asteriou and Agiomirgianakis, 2001; Sow, 2014; Spruk and Kešeljević,

2016) that have linked different socioeconomic factors to human development. A large body of knowledge (Ahsan and Oberoi, 2003; Kumssa and Mbeche, 2004; Pranab, 2005; Vollmer and Ziegler, 2009; Casson et al., 2010; Acemoglu and Johnson, 2015; Balcerzak and Pietrzak, 2016) has highlighted the importance of institutions in the procedure of economic progress. But there is still a gap to link institutions with human development in the case of South-Asian nations. So, this study opens new avenues and ventures of research.

## **CHAPTER 03**

# **THEORETICAL FRAMEWORK AND ECONOMETRIC METHODOLOGY**

After understanding and reviewing the available literature, the study considered the issue in focus and finding what missed in literature and highlight the importance of our related variables. In this chapter, we are providing the theoretical basis of the model selection and the most suitable econometric methodology for the empirical analysis. This chapter enables us to explain an empirical setting to estimate the hypothesis and move on to review dynamics of the problem.

### **3.1 THEORETICAL FRAMEWORK**

A theoretical basis offers the foundations that in what way a certain theory evolves and contributes to the prevailing literature from contemporary studies. The foremost purpose of a theory is to develop a model that defines the concerns of a person and society as well. Typically, a model characterizes the actual condition of different components in the existence of various exceptions and abstractions. Those exemptions rest on the aims for which the model has been developed. The basic aim behind the development of different models is to predictions based on empirical analysis. It is prediction ability, collected information, closeness to reality, and ease of assumptions and generalization that would choose the strength of the model (Nagel, 1963; Friedman, 1946). After reviewing the extensive amount of literature, it is easy to develop the theoretical framework.

Generally, per capita GDP and aggregate GDP have been utilized as a representation of the economic development and well-being of the nation. Nevertheless, GDP per capita and GDP per capita have been criticized by different researchers (Hicks and Streeten, 1979; Ram, 1982; Scarnicci et al., 2019) due to some shortcomings as well-being criteria. Human beings should be the real end of all development policies and actions. Development must be related to the

improvement in the capabilities of the people. It has a narrow scope as a measure of development and human wellbeing by hindering some socioeconomic conditions of a civilization. Level of income has an influential role to decide the standard of the life of the masses but it would not consider a straightforward measurement of well-being. The well-being is straight associated to the people and people are the real end of all development activities and policies (Anand, 1994; Streeten, 1994; Anand and Sen, 2000). According to Nussbaum and Sen, (2019), and Sen (2005), well-being is wider than economic growth. Well-being is an end of development policies and activities but economic growth is attached only with the betterment of per capita GDP and it is unable to explain the distribution pattern of GDP among the members of the nation. Probably, a country has great expansion in GDP per capita and GDP per capita growth but has less human well-being due to unequal distribution of income. As a result, the poor section of that country may get little benefits of GDP per capita and GDP per capita growth. These studies show that GDP is the sole source to attain well-being but it does not work an end for the human to all growth activities. Well-being is considered a very wide notion. It relates to what people can do and be". Literature mentioned that the main difference is required between ends for humans and means for humans. The well-being emphasizes the betterment of the lives of humans. The process of well-being is likely to link with the eradication of all ills of the society e.g. child mortality, under-nutrition, and hunger in general.

Subsequently, many alternative methods and measurements have been proposed by different authors and institutions. The very first time, ILO (1977) had proposed the basic-needs-approach for this purpose. This method recommended different factors which are mainly linked to the basic needs e.g., food, shelter, clothing, water, and sanitation as a measurement of economic development. Morris (1979) introduced the concept of physical quality of life index as a



measurement of human well-being. The measurement of this index provided the degree of development for a nation with existed index and inclusion of literacy, life expectancy, and infant mortality. This index is based on two vital dimensions of human life e.g., health and education. Nonetheless, this measure had ignored another dimension of human life e.g., income, this dimension has a vital role in human life to decide the standard of living. UNDP (1990) had proposed the idea of the Human development index as a measure of human well-being in its very first human development report. Human development index is developed with the help of all three vital dimensions of human life e.g., decent living, health, and knowledge. It indicates that human well-being as the criterion for a better and more holistic approach as compared to GDP growth or GDP per capita.

The idea of human well-being in economics and social sciences is not new. There are several studies empirical and theoretical studies that discuss the measurement and determinants of human well-being. Smith (1776) mentions that it is an efficient labor force that decides the level of economic growth of a nation. The government must provide better education and health to raise the efficiency of the labor force. After Adam Smith, there are many classical economists which give special importance to human well-being (Grampp, 1948; Black, 1953; Tu, 1969; Robbins, 1978). Although, classical economists have started to check the role of rule of law, public policy, and the institutions in economic progress they ignore their impact on human well-being. During the 20<sup>th</sup> century when neo-classical economics emerged in the literature of economics, and the period of economic growth models have started, the emphasis has been given to the part of human and physical capital in the process of economic growth (Mincer, 1984; Pablo-Romero and Gómez-Calero, 2013; Ogujiuba and Adeniyi, 2005; Gong and Wang, 2012; Li et al., 2015). Neoclassical

economists highlighted the complex relationship between cultural, and political values for the advancement of human well-being (Konstantinov, 1982).

Although the role of institutions got attention from Coase (1960), Williamson (1975), North (1990), its roots are attached to Marx (1945). Marx (1945) mentioned that in capitalist economies, institutions are unable to pave roots in labor development. Marx (1945) further said that institutions set the route of the socio-economic system of any nation, including the state, society's qualities, and culture. The general public's political association is most important among them. The emergence of international organizations strengthens the link of sustainable development, good governance, and institutions. Coase (1960) explained that institutions impact the transactions cost directly and labor efficiency indirectly. Williamson (1975) pointed out that institutions are important because they decide the cost of exchange and production process. These are institutions that ensure ease and smooth relations of labor and lessen the cost linked with unpredictability and uncertainty in the process of exchange and production. But the discussion on the institutional role in human well-being has been started in the late 20<sup>th</sup> century. When the Noble laureate North (1990) mentioned that institutions had an influence on economic development in general and on human well-being in particular.

Muro & Tridico (2014) mentioned that institutional economics provide two types of information, first compose rules which provide safety to enterprises and consumers respectively to satisfy and maximize their utilization. This approach highlight that institutions create harmony among different parts of the society and contribute to social welfare. The second, “new Institutional Economics (NIE) stresses intensification and marginal scrutiny, but with the consideration to operational costs, info issues, and constrained reasonableness. According to North (1990) institutions embody the mode through which the numerous economic ideologies face the

market failures. The most prominent function of institutions is to reduce uncertainty to determine a smooth background of social relations. The theory of institutions, social and economic progress presented by North (1990), in the measurement of the legal framework, political as well as economic arrangements, and administration. An extensive amount of literature links institution and their performance to income and gross domestic product (GDP) (Kumssa and Mbeche, 2004; Lafourcade et al., 2005; Pranab, 2005; Vollmer and Ziegler, 2009; Casson et al., 2010; Acemoglu and Johnson, 2015; Scholl and Schermuly, 2020). However, the role of institutions in health, education, social relationship, life satisfaction, and happiness have been ignored.

Different stages of subjective well-being over the nations are closely related to the institution's structure of the society. In societies that have strong political and economic institutions, there is a higher level of income distribution and political coherence. This facilitates citizens and gives them open access to the markets, businesses, and education. In contrast, in societies with extractive institutions, citizens suffer due to the power of elites (Robinson and Acemoglu, 2012). Available empirical literature confirms that rule of law and political stability contribute an imperative part to raise the level of human satisfaction (Bjørnskov et al., 2008).

Presently, social sciences and economics have started putting attention to the link between cultural and formal institutions (Seyoum, 2009; Li and Zahra, 2012; Holmes et al., 2013; Fuentelsaz, et al., 2020). For this purpose, different measures of subjective and objective life satisfaction have been used. These studies also include various measures to check the quality of institutions the most common measures are rule of law, property rights, and political constraints e.g., (Norton, 2003; Helliwell & Huang, 2008; Wicher, 2014; Mauro, 1995; Spruk & Kešeljević, 2016). The association between institutional quality and subjective well-being is derived from Veenhoven's happiness index (2008). Barro (1995), Aghion and Alesina (2004), and Acemoglu et

al., (2005) mention that formal and informal institutions have an indirect and direct influence on economic performance. Following, the discussed theoretical and empirical literature, the functional form of our model becomes as:

$$HWB_{it}=f(VA_{it}, EF_{it}, GINI_{it}, RL_{it}, RQ_{it}, CC_{it}, UN_{it}) \quad (3.1)$$

where,

HWB= human well-being

VA= voice and accountability

EF= economic freedom

GINI= income inequality

RL= rule of law

CC= level of corruption

RQ= regulatory quality

UN= unemployment rate

i= selected South Asian countries (Pakistan, India, Sri Lanaka, Bangladesh)

t= selected time period (1996 to 2020)

For estimating the coefficients, econometric model can be written as:

$$HWB_{it}= \alpha + \beta_1 EF_{it} + \beta_2 VA_{it} + \beta_3 RL_{it} + \beta_4 GINI_{it} + \beta_5 RQ_{it} + \beta_6 CC_{it} + \beta_7 UN_{it} + \varepsilon_{it} \quad (3.2)$$

where, notations in equation 3.2 have been explained except following:

$\alpha$ = intercept coefficient

$\beta_{i's}$ = slope coefficient

$\varepsilon$ = error term (supposed to be white noise)

### 3.1 DATA SOURCES

This thesis is founded on secondary data for 1996 to 2020, and the data of designated factors have been collected from WDI, International Labor Organization databases, Heritage Foundation databases, United Nation Development Program (UNDP) databases, and Freedom house databases. The descriptions of the variables and individual data sources have been given in Table 3.1.

**TABLE 3.1: DESCRIPTIONS OF THE VARIABLES**

Variables	ABV	MEASURED BY	SOURCE
Dependent Variable			
Human well-being	HWB	Since 1993, UNDP has been measuring the human development index (HDI), this index is based or uses income, education, and health for its measurement. This study is using human development index as proxy for human well-being. The value of index lies between 0 and 1.0, with 1.0 being the highest.	UNDP
Explanatory Variables			
Economic Freedom	EF	Different degrees and standards have been used by different countries to formulate economic independence e.g., regulatory effectiveness, rule of said laws, the roles and limits of government intervention, and level of operations of open markets. The index of economic freedom can be quantified with the help of 12 indicators among them some are qualitative and some are quantitative. But there are its 4 pillars or broad categories. All of 12 indicators of the index have been score from 0 to 100. Where 0 is no economic freedom and 100 means highest economic freedom.	Heritage Foundation
Voice and Accountability	VA	Accountability and voices present the norms, procedures, methods, instrument, practices, values and institution which sustenance equality and parity among the peoples of a nation before the law. It also safeguards a nonarbitrary system of	Heritage Foundation

		govt which also control or stope all arbitrary usage of authority. While arbitrariness is comprised of all those powers which have totalitarianism, authoritarianism, absolutism, and despotism. Voice and accountability index (-2.5 weak; 2.5 strong)	
Rule of Law	RL	Rule of law has been measured with the help of simple mean score of nations based on protection to corruption, individual independence and protection to property rights. Scores range from 0 to 1, with 1 indicating the strongest adherence to the rule of law.	Heritage Foundation
Gini Coefficient	GINI	Gini explains the amount of income distributed to all individuals in a country. The estimated value of Gini lies between 0 and 100. Here 100 presents the highest level of income inequality and 0 presents the no inequality mean equal distribution of income.	World Bank
Regulatory Quality	RQ	Regulatory effectiveness can be measured with the help of simple mean score of nations based on monetary independence, labor independence and business independence. Regulatory quality index (-2.5 weak; 2.5 strong)	Heritage Foundation
Control of Corruption (from -2.5to2.5)	CC	Composite index has been constructed to capture perceptions for using the public power to gain someone private benefits i.e., trivial and impressive procedures of corruption. It also includes the country elites and their private interests with the help of perceptions.	Freedom House
Unemployment rate (%)	UN	It is that part of labor force which is without work but they are willing and available for work.	International Labor Organization

## **3.2 ECONOMETRIC METHODOLOGY**

Applying econometric tools to economic models has remained a topic of discussion among economists and econometricians. Presently, this makes applied econometrics a more important part of experimental examination. This segment of the thesis is comprised of econometric procedures used for empirical analysis. This study has covered the period from 1996 to 2020 in the case of some chosen countries from South Asia i.e., Pakistan, India, Sri Lanka, Bangladesh. For advanced empirical purposes, first, we have to explore the unit root or stationarity of the selected indicators. Panel unit roots have been applied to meet this purpose. With the support of panel unit root tests outcome, we have applied the panel autoregressive distributed lag procedure to inspect the long-run connection amongst the indicators, panel-residual-correction procedures has been applied for the short-run link of elements and variables of the model.

### **3.2.1 PANEL UNIT ROOT**

The stationarity of the variables has been an issue to analysis the exact level of integration among the variables of the model. Non-stationarity does not allow error term to be white noise. Moreover, mean revision does not happen in the existence of unit root issues in the series. The study is going to use a panel dataset, panel unit root tests have been applied for unit root checking. Based on current literature, panel unit root tests adjust the variance and difference in mean of the error over the period and across the sections. Since we have taken data from 1996 to 2020, it is somehow considered a large period. In applied econometrics literature, numerous tests are available to examine the panel unit root issue. The most famous among them are Maddala and Wu (1999), Im, Pesaran and Shin (2003); Levin, Lin, and Chu (2002), and Hadri's (2000).

This study has used Levin, Lin & Chu  $t^*$ , ADF - Fisher Chi-square, Im, Pesaran and Shin W-stat, and PP Fisher Chi-square unit root tests for the inspection stationarity of the variables. Levin et

al., (2002) have offered a unit root test for panel data series, there are some unique properties of this test. LLC unit root test has also used homogeneity of the panel as compared to other tests. The methodology of LLC unit root test is like the methodology of ADF. The methodology follows as:

$$\Delta y_{i,t} = \gamma_{0i} + \rho y_{i,t-1} + \sum_{j=1}^{p_i} \gamma_{ji} \Delta y_{i,t-j} + u_{i,t} \quad (3.3)$$

“ $\gamma_{0i}$  is the constant parameter in the eq. (3.3), this have exceptional properties for the cross-sectional units and  $\rho$  is same for all the coefficients of autoregressive, however,  $\gamma_i$  presents the selected order of lags for the model,  $u_{i,t}$  is the disturbance term, it is normally considered to be autonomous for all of the selected across of panel units. This eq. (3.3) is based on the Autoregressive Moving Average (ARMA) stationary procedure for respective cross-sections, then eq. can be presented as:

$$u_{i,t} = \sum_{j=0}^{\infty} \gamma_{ji} \Delta y_{i,t-j} + \varepsilon_{i,t} \quad (3.4)$$

Based on eq. (3.4), null and alternative hypotheses would be tested as:

$$H_0: \rho_i = \rho = 0$$

$$H_a: \rho_i = \rho < 0 \text{ for all } i$$

t-test can be utilized for LLC model, where  $\rho$  is supposed to be fixed for the across and units, by following, the null and alternative hypothesis.

$$t_p = \frac{\hat{\rho}}{SE(\hat{\rho})} \quad (3.5)$$

Throughout this process, it has been assumed that the error series is following all properties of white-noise error. Moreover, the panel eq. for regression has  $t_p$  test statistics, it shows the convergence of all selected standard normally distributed series, for example,  $N$  and  $T \rightarrow \infty$



$\sqrt{\frac{N}{T}} \rightarrow 0$ . On the opposite sideways, if some units of section are not independent of each other,

then the residual of selected series would be corrected, as this raises the chances of auto-correlation. Because of such conditions LLC test assumes an alternative test statistic:

$$t_p = \frac{t_p - NT S_N \sigma(p) u_m^*}{\sigma_m^*} \quad (3.6)$$

where  $u_m^*$  and  $\sigma_m^*$  are supposed to be augmented the residual series, and its standard deviation, the coefficients of these estimates can be calculated with the support of Monte Carlo Simulation, our unit test LLC (2002) also followed this value.

Im et al., (2003) had introduced another panel stationary test, under such conditions when the panel data has heterogeneity. This method has followed the procedures of ADF unit root, but this method had used modest mean of all series, the main eq. of this test can be written as:

$$\Delta y_{i,t} = \bar{w}_i + p y_{i,t-1} + \sum_{i=1}^{p_i} \gamma_{1i} \Delta y_{i,t-j} + v_{i,t} \quad (3.7)$$

The IPS test permits the unit root process when we have heterogeneity in  $v_i$  values, then IPS unit root test eq. would be written as:

$$\bar{t}_T = \frac{1}{N} \sum_{i=1}^N t_{1,i}(p_i) \quad (3.8)$$

where  $t_{i,t}$  is the test statistic for ADF, lag order can be presented by  $p_i$ . The main procedures for the analysis would be followed as:

$$A_T = \frac{\sqrt{N(T)}[\bar{t}_T - E(t_T)]}{\sqrt{Var(t_T)}} \quad (3.9)$$

### 3.2.2 PANEL CO-INTEGRATION

In the end when stationarity of the data has been established and each of the series are integrated equal order either level or first difference so on, then subsequent phase is to observe whether all of the selected series can be combined together in a sole series, but for it, non-stationarity is also compulsory condition, which is identified as co-integration. Co-integrated series follows the identical course for the long run equilibrium, this kind of integration methods have been developed and announced by Granger (1981) and further prolonged and augmented by Engle and Granger (1987). To control the issues emerged in traditional methods, different scholars present the concept of panel co-integration, that makes the pools of both cross-sectional and time series data, when the connection amid the non-stationary variables I(1). Additional cointegration tests for panel data such as Westerlund (2007). Nevertheless, this test becomes invalid for our data set, as Westerlund by himself confirmed that this test provides biased outcomes when the sample size is less than 100. Thus, following the weakness of traditional methods this study has applied panel ARDL. The test is can have following procedures:

Panel-v-statistic:

$$Z_v = \left( \sum_{i=1}^N \sum_{t=1}^T \hat{L}_{11i} \hat{\ell}_{i,t-1}^2 \right)^{-1} \quad (3.10)$$

The panel t statistic:

$$Z_p = \left( \sum_{i=1}^N \sum_{t=1}^T \hat{L}_{11i} \hat{\ell}_{i,t-1}^2 \right)^{-1} \sum_{i=1}^N \sum_{t=1}^T \hat{L}_{11i} \begin{pmatrix} \hat{\ell}_{i,t-1} \\ \Delta \hat{\ell}_{i,t} \\ \hat{\lambda}_i \end{pmatrix} \quad (3.11)$$

3 The panel t statistic (Non-parametric):

$$Z_i \equiv \left( \hat{\sigma}_{N,T}^2 \sum_{i=1}^N \sum_{t=1}^T \hat{L}_{11i} \hat{\ell}_{i,t-1}^2 \right)^{-1/2} \sum_{i=1}^N \sum_{t=1}^T \hat{L}_{11i} \begin{pmatrix} \hat{\ell}_{i,t-1} & \hat{\Delta} \hat{\ell}_{i,t} & \hat{\lambda}_i \end{pmatrix} \quad (3.12)$$

The panel t statistic (parametric):

$$Z_t^* \equiv \left( S_{N,T}^{*2} \sum_{i=1}^N \sum_{t=1}^T \hat{L}_{11i} \hat{\ell}_{i,t-1}^{*2} \right)^{-1/2} \sum_{i=1}^N \sum_{t=1}^T \hat{L}_{11i} \begin{pmatrix} \hat{\ell}_{i,t-1}^* & \hat{\Delta} \hat{\ell}_{i,t}^* \end{pmatrix} \quad (3.13)$$

The group t statistic (parametric):

$$\hat{Z}_P \equiv TN^{-1/2} \sum_{i=1}^N \left( \sum_{t=1}^T \hat{\ell}_{i,t-1}^2 \right)^{-1} \sum_{t=1}^T \begin{pmatrix} \hat{\ell}_{i,t-1} & \hat{\Delta} \hat{\ell}_{i,t} & \hat{\lambda}_i \end{pmatrix} \quad (3.14)$$

The group t statistic (non-parametric):

$$\hat{Z}_t \equiv N^{-1/2} \sum_{i=1}^N \left( \hat{\sigma}_i^2 \sum_{t=1}^T \hat{\ell}_{i,t-1}^2 \right)^{-1/2} \sum_{t=1}^T \begin{pmatrix} \hat{\ell}_{i,t-1} & \hat{\Delta} \hat{\ell}_{i,t} & \hat{\lambda}_i \end{pmatrix} \quad (3.15)$$

The group t statistic (parametric):

$$\hat{Z}_t^* \equiv N^{-1/2} \sum_{i=1}^N \left( \sum_{t=1}^T S_i^{*2} \hat{\ell}_{i,t-1}^2 \right)^{-1/2} \sum_{t=1}^T \begin{pmatrix} \hat{\ell}_{i,t-1}^* & \hat{\Delta} \hat{\ell}_{i,t}^* \end{pmatrix} \quad (3.16)$$

where  $\hat{\lambda}_i$  presents a steady estimator, which is based on long-run variance.

$$L = \frac{1}{T} \sum_{t=1}^T \hat{\eta}_{i,t}^2 + \frac{2}{T} \sum_{s=1}^{ki} \left(1 - \frac{S}{K_1 + 1}\right) \sum_{i,t} \hat{\eta}_{i,t-s} \hat{\eta}_{i,t} \sigma_i^2 = S_i + 2\hat{\lambda}_i \hat{S}_i = \frac{1}{T} \sum_{t=1}^T \eta_{it}^2 \quad (3.17)$$

$$\sigma_{N,T}^2 = \frac{1}{N} \sum_{t=1}^N L \sigma_i^2 S_i = \frac{1}{t} \sum_{t=1}^T \eta_{i,t}^2 S_i^2$$

And the residuals  $\hat{\eta}_{i,t}$ , and  $\hat{\eta}_{i,t}^*$  and  $\hat{\eta}_{i,t}$  are measured with the help of following regression:

$$\hat{\ell}_{i,t} = \hat{\gamma}_{i,t-1} \hat{\ell}_{i,t-1} + \hat{\eta}_{i,t} \hat{\ell}_{i,t}^* \hat{\gamma}_{i,t-1} + \sum_{k=1}^{ki} \hat{\gamma}_{i,t-k} \hat{\ell}_{i,t-k} + \hat{\eta}_{i,t} \hat{\gamma}_{i,t} = \sum_{m=1}^N \hat{b}_{m,t} x_{m,t} + \hat{\eta}_{i,t} \quad (3.18)$$

Hence, the null hypothesis of not co-integration would be accepted when residuals are non-stationary. But, when the errors are stationary, there exists co-integration. To analyze ARDL regression for the panel dataset, the pooled mean group (PMG) method has been utilized. This method is recommended by Pesaran et al., (1997, 1999), it combines together the pooling and the averaging of coefficients. This technique enables the constants, short-run estimates, and residual variances to vary independently crossways different sets. Along with this, PMG estimator constraints based on likelihood procedure make the long-run estimates identical for all selected groups. Because of this estimates become consistent even in the presence of homogeneity restriction. As we have a small sample size, in this situation PGM estimator is lesser sensitive to all types of outliers and the issue of serial autocorrelation. Furthermore, this method is solving the issue of endogenous regressors with the help of appropriate lag order for explanatory and explained variables.

The panel ECM procedure can be applied to check the short-term relationship of the variables for different panels. Primarily, it has provided a baseline for all selected samples. It also

gives a general platform to study the connection between the standards of human well-being and institutions.

## **CHAPTER 04**

### **RESULTS AND DISCUSSIONS**

This thesis has studied the effect of institutions on human well-being in the case of selected South Asian countries for 1996 to 2020. Human well-being standards have been presented with the help of the human development index. Economic freedom, voice, and accountability, rule of

law, regulatory quality, corruption have been used as a measure of institutions. Human well-being is taken as the explained variable, whereas economic freedom, voice, and accountability, rule of law, regulatory quality, corruption, income inequality, and unemployment have been opted as explanatory variables. This section of the study presents results and discussion, the results are distributed into the descriptive statistic, correlation matrix, unit root test, VAR lag selection criteria, long-run result of ARDL, short-run results of ARDL, and diagnostic tests.

#### **4.1: DESCRIPTIVE STATISTICS**

The intertemporal properties of the data of the selected variables have been checked with the help of descriptive statistics. All indicators of the model have been analyzed with support of “mean, median, maximum, minimum, standard deviation, Skewness, Kurtosis, and Jarque-Bera. The descriptive statistic also helps to test the normality of the data. Table 4.1 shows that the mean value of human well-being is (0.576920), with median (0.551000), maximum value (0.782000), the minimum value (0.426000), and standard deviation (0.104848). The values of Skewness and Kurtosis are (0.551925) and (2.118578), which explain that human well-being is normally distributed. The mean value of economic freedom is (54.95100), with a median (54.95000), maximum value (66.00000), the minimum value (44.20000), and standard deviation (4.262368). The values of Skewness and Kurtosis are (0.310736) and (3.317747) respectively, which explain that economic freedom is normally distributed. The mean value of the voice of accountability is (0.545183), the median value (0.500000), maximum value (0.833333), the minimum value (0.000000), and the standard deviation is (0.211113). The value of Skewness and Kurtosis are (-0.347435), (2.797162) respectively. The mean value of rule of law is (0.521233), the median value (0.500000), the maximum value (0.750000), the minimum value (0.166667), and the standard deviation (0.130251). The value of Skewness and Kurtosis of rule of law (-0.224744), (2.540116)

respectively. The mean value of income inequality is (33.92132), the median value (33.97000), the maximum value (49.10000), the minimum value (23.80000), and the standard deviation value (4.038145). The values of Skewness and Kurtosis of income inequality are (0.152949), (4.044682) respectively. The mean value of regulatory quality is (0.545464), the median value (0.568182), the maximum value (0.772727), the minimum value (0.181818), and the standard deviation value (0.122912). The mean value of corruption is (0.397083), the median value (0.416667), maximum value (0.666667), the minimum value (0.166667) and standard deviation (0.102483). The values of Skewness and Kurtosis of corruption are (0.457017), (3.710590) respectively. The mean value of the unemployment rate is (4.400800), the median value (4.335000), the maximum value (11.35000), the minimum value (0.400000), and the standard deviation (2.316318). The values of Skewness and Kurtosis of the unemployment rate are (0.189707), (3.383696) correspondingly.

The overall results of table 4.1 disclose that human well-being, economic freedom, income inequality, corruption, and unemployment rate are positively skewed, whereas, voice and accountability, rule of law, and regulatory quality are inversely skewed. But on the other side, all of our variables have positive Kurtosis. The values of Skewness and Kurtosis reveal that all the variables are normally distributed. The projected values of the Jarque-Bera specify that all the variables have zero mean and finite covariance, this also approves that all variables are normally distributed.

**TABLE: 4.1 DESCRIPTIVE STATISTIC**

	HWB	EF	VA	RL	GINI	RQ	CC	UN
Mean	0.576920	54.95100	0.545183	0.521233	33.92132	0.545464	0.397083	4.400800
Median	0.551000	54.95000	0.500000	0.500000	33.97000	0.568182	0.416667	4.335000
Maximum	0.782000	66.00000	0.833333	0.750000	49.10000	0.772727	0.666667	11.35000
Minimum	0.426000	44.20000	0.000000	0.166667	23.80000	0.181818	0.166667	0.400000

Std. Dev.	0.104848	4.262368	0.211113	0.130251	4.038145	0.122912	0.102483	2.316318
Skewness	0.551925	0.310736	-0.347435	-0.224744	0.152949	-0.742399	0.457017	0.189707
Kurtosis	2.118578	3.317747	2.797162	2.540116	4.044682	3.163154	3.710590	3.383696
Jarque-Bera	8.314125	2.029956	2.183285	1.723052	4.937227	9.296853	5.584984	1.213242
Sum	57.69200	5495.100	54.51833	52.12333	3392.132	54.54636	39.70833	440.0800
Sum Sq. Dev.	1.088319	1798.610	4.412294	1.679570	1614.355	1.495621	1.039774	531.1675
Observations	100	100	100	100	100	100	100	100

## 4.2: CORRELATION MATRIX

The results of the correlation between the variables have been offered in Table 4.2. The estimated coefficient displays that economic freedom has a positive and significant connection with human well-being. The value of the coefficient displays that human well-being has a positive but insignificant correlation with voice and accountability in the case of selected South Asians. The projected value shows that human well-being has a positive and insignificant correlation with rule of law. The estimated coefficients show that income inequality, regulatory quality, corruption, and unemployment rate, respectively, have positive and significant correlation to human well-being in the case of selected South Asian nations. The results show that voice and accountability have a negative and significant correlation with economic freedom. Rule of law and income inequality respectively positive and negative but insignificant connection with economic freedom. The outcomes display that economic freedom has a positive and significant connection with regulatory quality, corruption, and unemployment rate in the case of South Asian nations. The coefficients of rule of law, income inequality, regulatory quality, corruption, and unemployment rate, respectively, have a positive and significant correlation with voice and accountability in the case of selected countries. The results explain that income inequality and corruption have negative and positive, respectively, but insignificant correlations with rule of law over the selected period. The coefficients of regulatory quality and unemployment rate respectively have a positive and



significant correlation with rule of law in the case of selected South Asian countries. Regulatory quality and unemployment rate have a positive and significant correlation with income inequality whereas corruption has a positive but insignificant correlation with income inequality over the selected period and selected countries. The estimates show that corruption and the unemployment rate have a encouraging and substantial connection with regulatory quality. The results also explain that there positive and substantial connection amid corruption and the unemployment rate.

The overall results of pairwise correlation show that human well-being as a dependent variable has a positive and significant correlation with most of the explanatory variables except voice and accountability and rule of law. The results of the correlation matrix display that maximum number of the nominated variables have a significant connection with everyone, but this correlational relationship is not so high which creates the issue of multicollinearity. Thus, there is no problem of multicollinearity among the chosen regressors.

**TABLE 4.2: CORRELATION MATRIX**

Variables	HWB	EF	VA	RL	GINI	RQ	CC	UN
HD	1							
EF	0.626535***	1						
VA	0.149055	-0.179259*	1					
RL	0.021851	0.081456	0.544302***	1				

GINI	0.284789***	-0.156851	0.327132***	-0.049478	1			
RQ	0.484253***	0.291773***	0.472356***	0.287998***	0.264439***	1		
CC	0.373524***	0.376436***	0.278994***	0.142030	0.118705	0.165436*	1	
UN	0.542612***	0.346285***	0.592049***	0.221444**	0.210738**	0.462461***	0.642434***	1
Note: The asterisks ***, ** and * denote the significant at 1%, 5% and 10% levels, respectively.								

### 4.3: UNIT ROOT TESTS OUTCOMES

Being the panel data, this study has used LLC\*, ADF - FC, IPS, and PP-FC unit root tests for inspecting the problem of stationarity in the data. The results show that have been shown in Table 4.3. The appraised outcomes of Levin, Lin & Chu t\* display that human well-being is stationary I(0) but not stationary with the outcomes of IPS, ADF - FC, and PP - FC unit root tests. The outcomes of ADF - FC and PP - FC test show that economic freedom is stationary at a level whereas it is not stationary I(0) in the case of LLC \* and IPS unit root tests. Voice and accountability, are stationary at the level by utilizing IPS and ADF - FC unit root tests but it is not stationary ate level by utilizing LLC \* and PP - FC unit root tests. The outcomes of LLC \* display that rule of law is not stationary at the level but it is stationary at the level in the case of IPS, ADF - FC, and PP - FC unit root tests. The outcomes of Levin, Lin & Chu t\*, IPS, ADF - FC and PP - FC unit root tests display that income inequality is stationary I(0). The outcomes of LLC\* display that regulatory quality is not stationary I(0) but it is stationary I(0) in the case of IPS, ADF - FC and PP - FC unit root tests. The outcomes of Levin, Lin & Chu t\*, IPS, ADF - FC and PP - FC unit root tests display that corruption is stationary I(0).

**TABLE: 4.3 PANEL UNIT ROOT TEST**

AT LEVEL I(0)				
Variables	Levin-Lin-Chu t *	Im-Pesaran-Shin-W-stat	ADF-Fisher-Chi-square	PP-Fisher-Chi-square
HWB	-1.75602**	1.13036	7.56204	11.1733
EF	-1.08522	-1.14040	14.6459*	17.6568
VA	-1.28054	-1.54424*	14.8591*	9.08995
RL	-0.38243	-1.43872*	15.8816**	18.3178**

GINI	-1.36072***	-3.56053***	28.0889***	46.9800
RQ	-1.00864	-2.02760**	17.6813**	15.6805
CC	-1.97921**	-1.90780**	17.7344**	9.19808
UN	-0.07841	0.04877	10.5110	10.2786
AT FIRST DIFFERENCE I(1)				
dHD	----	-2.67378***	21.8173***	40.0983***
dEF	-5.13752***	-6.14896***	----	135.058***
dVA	-6.57905***	----	----	46.1403***
dRL	-4.84634***	----	----	----
dGINI	----	----	----	197.993***
dRQ	-6.22748***	----	----	60.9429***
dCC	----	----	----	19.4262***
dUN	-6.33437***	-6.03005***	49.8117***	51.8199***
Note: The asterisks ***, ** and * denote the significant at 1%, 5% and 10% levels, respectively.				

The outcomes of Levin, Lin & Chu  $t^*$ , IPS, ADF – FC and PP - FC unit root tests display that the unemployment rate is not stationary I(0). The appraised outcomes of LLC \*, ADF - FC, IPS and PP-FC unit root tests indicate that corruption, human well-being, economic freedom, rule of law, income inequality, regulatory quality, unemployment rate, voice and accountability, all are the stationary first difference. This displays that our model has mixed integration order for all the variables, this situation suits to apply panel ARDL co-integration approach.

#### 4.4: VAR LAG ORDER SELECTION CRITERIA

By keeping in view, the amount of observational data and the all of indicators of the model, lag order could be designated. The outcomes of lag order choice methods have been reported in Table 4.4; a maximum of 1 lag is permitted to Vector Auto-Regressive procedure. The outcomes display that altogether criteria permit optimum lag distance is 1. Consequently, with the help of sequentially modified LR test statistic, FPE (Final prediction error), SC (Schwarz information criterion), and HQ (Hannan-Quinn information criterion) lag length 1, is utilized for all indicators of our model.

**TABLE 4.4: VAR LAG ORDER SELECTION CRITERIA**

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-6.801305	NA	3.28e-09	0.328602	0.531171	0.410033
1	688.8278	1258.757*	6.77e-16*	-15.06733*	-13.44678*	-14.41588*
2	726.6099	62.07056	9.05e-16	-14.80024	-11.76171	-13.57878
3	750.3276	35.01189	1.76e-15	-14.19828	-9.741779	-12.40680
4	794.0065	57.19858	2.25e-15	-14.07158	-8.197110	-11.71010
* indicates lag order selected by the criterion;LR: sequential modified LR test statistic (each test at 5% level);FPE: Final prediction error;AIC: Akaike information criterion;SC: Schwarz information criterion;HQ: Hannan-Quinn information criterion						

#### 4.5: LONG RUN OUTCOMES

This study is going to examine the influence of institutions on human well-being in South Asian nations for the period of 1996 to 2020. Following the outcomes, the unit root test, panel ARDL has been utilized for the long-run coefficients, the projected long-run outcomes have been presented in Table 4.5. Economic freedom enables individuals to choose best regarding their interests and benefits (Miller et al., 2006). There is a number of papers that inspect the connection between economic freedom and the well-being of the poor (Heckelman, 2000; Gwartney and Lawson, 2010; Holmes and Stubbe, 2015). Our estimated coefficient of economic freedom displays that there is a positive and substantial influence on human well-being. The output of ARDL reveal that a 1 percentage growth in economic freedom brings 0.4256 percent increase in human well-being, and this association is significant at a 5-percentage level of significance. It is economic freedom that enables an individual to control his/her property and labor in society. In developing nations, the individuals have less resources to maintain their living standards and for better schooling and healthiness facilities to raise the level of human well-being (Ul Haq, 1995; Anand and Sen, 2000; Welzel et al., 2003).

Institutions have ability to decide the level of cost of exchange in the production process (Williamson, 1975). Thus, the quality of institution ensures ease and smooth relations of human

and lessen the costs related to uncertainty during the process of exchange and production. The coefficient displays that a 1 percent rise in voice and accountability brings -19.4602 percent reduction in human well-being and this connection is substantial at 1 percent. A rise in voices has a depressing impact on income, health, and education (Oliff et al., 2012; Karanikolos et al., 2013; Orza et al., 2015). Thus, to raise the level of human well-being, fewer voices, and higher accountability should be encouraged (Zhou and George, 2001).

Institutions are also those constraints which are devised by humans to shape the interaction among people. There are some executive powers to impose these constraints with proper limitations (Orza et al., 2015). The estimated outcomes show that voice and accountability have a negative and significant influence on human well-being. The estimated outcomes display that rule of law has a positive and substantial effect on human well-being. The results explain that a 1 percent increase in rule of law raises human well-being by 24.8986 percent and it is significant at 1 percent. Rule of law provides safety and equality to each individual which provides roots to enough resources, better education, and improved health conditions (Peerenboom, 2003; Tamanaha, 2004; Grindle, 2007).

Income inequality is directly interconnected with some other social and political indicators. In societies where income or wealth is highly concentrated at high levels, a large proportion of the population lives at or near abject poverty, with lesser access to education, food, and medical facilities (Kawachi and Kennedy, 1999). Inequality has inverse influence on educational standards and growth of developing nations (Killewald et al., 2017; Deininger & Squire, 1998). Inequality can reduce human well-being standards and enhance the inequalities in human well-being standards among other counties (Killewald et al., 2017). The estimates display that income inequality has an inverse and insignificant influence on human well-being. It is a theoretically

approved fact that less inequality is attached to higher income, better education, and improved health conditions (Wilkinson and Pickett, 2009; Kawachi and Kennedy, 1999; Pickett and Wilkinson, 2015). But in the case of selected South Asian countries, this relationship is insignificant and cannot contribute for raising human well-being.

The literature on institutional economics mainly focused that well-being has largely concentrated by institutions, generally formal and informal rules and regulations set by the governing body of an economy to decide the pattern of economic activities, such like taxation laws, legal guidelines, political independences, fractionalization of different religions and ethnolinguistic groups, and infrastructure (Castro, 2014) and their contribution in economic growth. The estimated outcomes show that regulatory quality has a positive and significant influence on human well-being. The outcomes display that a 1 percent rise in regulatory quality brings 29.8010 percent rise in human well-being in the case of chosen South Asian nations. Regulatory quality provides the information that how governments formulate and implement different policies (De Francesco et al., 2012; Castro, 2014). These are government policies that decide the employment pattern, health and education facilities for raising the level of human well-being (Bronfenbrenner, 1986; Klugman, 1994).

The estimated results show that level of corruption has a negative and significant influence on human well-being. The outcomes display that a 1 percent rise in corruption brings -32.4929 percent reduction in human well-being in South Asian nations. The developing nations are badly caught in the evil of corruption (Bourguignon, 2001; Bernstein, 2005; Wraith and Simpkins, 2010; Pustu et al., 2019). The rising corruption reduces the portion of government and individual budget for generating new employment opportunities, and fewer development expenditures in the form of

health and education expenditures (Mauro, 1996; Gupta et al., 2001; Lewis, 2006). This further lowers the level of human well-being in developing countries such as South Asian nations.

The estimated outcomes display that unemployment has an encouraging and significant influence on human well-being in the selected countries. The outcomes reveal that a 1 percent growth in the unemployment rate brings 2.3055 percent rise in human well-being. Theoretically, there must be an inverse connection amid the unemployment rate and income, health, and education level (Brenner and Mooney, 1983; Ettner, 1996; Altindag, 2012). However, in the case of selected South Asian countries, it may be impossible, because these countries have the highest population growth at the same time a rise in income, education, and health conditions. Thus, there is less chance of an inverse relationship between the unemployment rate and human well-being in the case of selected South Asian nations.

The overall long-run results show that institutions contribute significantly in deciding the level of human well-being standards. The results show that rule of law, economic freedom, regulatory quality have an encouraging and significant influence on human well-being in the case of selected South Asian nations. Whereas voice and accountability and corruption are depressing human well-being in the selected economies for the period. The results of present study follow the results found in the studies of (Ul Haq, 1995; Blunt, 1995; Anand and Sen, 2000; Welzel et al., 2003; Goetz and Jenkins, 2005; Goetz and Jenkins, 2005; Ndikumana, 2006; Lewis, 2006; Oliff et al., 2012; Karanikolos et al., 2013; Orza et al., 2015).

Based on estimated results, we can reject the null hypothesis i.e. economic freedom does not have an influence on human well-being, and accept an alternative that economic freedom does impact human well-being in the case of selected South Asian nations.

The null hypothesis, i.e. voice and accountability do not impact human well-being has been rejected. As voice and accountability do have a substantial influence on human well-being. There is an inverse relationship between voice and accountability and human well-being.

The null hypothesis, i.e. rule of law does not impact human well-being. The null hypothesis of rule of law does not impact human well-being has been rejected and the alternative hypothesis is accepted. This reveals that rule of law has a significant influence on human well-being in the case of selected Asian nations.

The null hypothesis, i.e. income inequality does not impact human well-being. This null hypothesis has been accepted and alternative has been rejected, this reveals that income inequality does not have a significant influence on human well-being in the case of selected South Asian nations.

The null hypothesis, i.e. regulatory quality does not impact human well-being. The null hypothesis is rejected. This means that regulatory quality has a substantial impact on human well-being in the case of selected South Asian nations.

The null hypothesis of corruption has no impact on human well-being. The null hypothesis is rejected as corruption has a significant impact on human well-being. Moreover, there is an inverse relationship between corruption and human well-being.

The estimates show that the unemployment rate has a significant impact on human well-being, and, there exists an encouraging connection between the unemployment rate and human well-being over the selected period in the case of South Asian nations.

**TABLE 4.5: LONG RUN COEFFICIENTS OF ARDL APPROACH**

Dependent Variable: HWB
Sample: 1996- 2020
Model selection method: Akaike info criterion (AIC)



Dynamic regressors(2lags,automatic):EF VA RL GINI RQ CC UN				
Variables	Coefficient	Std. Error	t-Statistic	Prob.*
EF	0.004256	0.001587	2.682294	0.0119
VA	-0.194602	0.053791	-3.617713	0.0011
RL	0.248986	0.058376	4.265242	0.0002
GINI	-0.000380	0.001116	-0.340413	0.7360
RQ	0.298010	0.033953	8.777049	0.0000
CC	-0.324929	0.025668	-12.65879	0.0000
UN	0.023055	0.003127	7.372054	0.0000

#### 4.6: SHORT RUN OUTCOMES

After examining the long-run coefficients for the model, now by utilizing residual correction method, the short-run connection of the indicators would be inspected. The short-run estimates of present research are displayed in Table 4.6. The output of analysis explains that during the short run most of the selected explanatory variables have an insignificant and inverse connection with the explained variable as compared to the long run. The value of ECT is theoretically correct, with negative and significant values. This reveals that short deviations in the human well-being of the selected countries need twenty-three years and five months for the complete convergence. It also illustrates that 4 percent short-run deviations in human well-being are corrected very next year in the case of selected South Asian nations.

**TABLE 4.6: SHORT-RUN-COEFFICIENTS**

Dependent Variable: HWB
Sample: 1996-2020

Model-Selection-Method: Akaike-info-criterion-(AIC)				
Variables	Coefficient	Std. Error	t-Statistic	Prob.*
D(EF(-1))	-0.000339	0.000248	-1.367065	0.1821
D(VA(-1))	0.009640	0.007079	1.361690	0.1838
D(RL(-1))	-0.016894	0.013984	-1.208085	0.2368
D(GINI(-1))	-0.000396	0.000294	-1.348678	0.1879
D(RQ(-1))	-0.015098	0.006488	-2.327084	0.0271
D(CC(-1))	0.025971	0.009779	2.655759	0.0127
D(UN(-1))	-0.000219	0.001101	-0.198958	0.8437
C	0.014674	0.002743	5.350331	0.0000
ECT	-0.042409	0.019037	-2.227649	0.0338
“Mean dependent var:0.006685, S.D. dependent var:0.003060, S.E. of regression:0.001263, Akaike info criterion:-9.943982, Sum squared resid:4.63E-05, Schwarz criterion:-8.094311, Log-likelihood:568.1991, Hannan-Quinn criter.: -9.195387”				
“Note: p-values and any subsequent tests do not account for model selection.”				

#### 4.7: DIAGNOSTICS TESTS OUTCOMES

The diagnostics tests have been conducted to review the authenticity of the model for the selected indicators. The outcomes of diagnostics tests have been given in Table 4.7. In the outcomes of VAR residual heteroskedasticity, we can accept the null hypothesis, i.e. there is homoscedasticity, and alternative hypothesis i.e. there is heteroscedasticity. Thus, there is no issue of heteroscedasticity. Serial correlation has been checked with the help LM test, the outcomes reveal that serial correlation is not present in the model.

**TABLE 4.7: DIAGNOSTICS TESTS**

	Estimated Value	Prob.
Heteroskedasticity	867.3116	0.1202
Serial Correaltion LM test	49.48742	0.4537

## **CHAPTER 05**

### **CONCLUSIONS AND POLICY SUGGESTIONS**

This chapter is comprised of conclusions drawn based on estimated outcomes and discussions, and some policy implications and recommendations are drawn from results and discussions. The foremost goal of the present research is to check the influence of institutions on human well-being in the case of South Asian countries for 1996 to 2020. Pakistan, India, Sri Lanka, and Bangladesh have been selected for this purpose.

#### **5.1 CONCLUSIONS**

Following the objectives of this thesis; this study uses human well-being as an explained variable, whereas economic freedom, rule of law, income inequality, regulatory quality, corruption, unemployment rate and voice and accountability are selected as explanatory variables. For measuring human well-being standards, the human development index of UNDP has been used. To evaluate the stationarity of the variables LLC, ADF-FC, IPS, WPPFC unit-roots have been utilized. This study utilizes a panel autoregressive distribution lag co-integration method for the long-run connection among the indicators of the model and the VECM has been applied for short-run dynamics of the model. The outcomes of the unit root tests specify that few variables of the model are stationary at I (0) and other are stationary at I (1). Thus, the outcomes of unit root tests show that the model has mixed integrational order for selected variables. This condition also supports to apply panel autoregressive distributed lag model. The outcomes explain that economic freedom, rule of law, regulatory quality have a positive and significant influence on human well-being standards. The rise in institutional quality creates more employment opportunities to raise income, education, and health status of a nation, this reveals that selected South Asian countries should promote institution's quality to raise the status of human well-being. Voice and accountability, and corruption have an inverse and substantial influence on human well-being in

the case of selected South Asian nations. Unequal income has an inverse but insignificant influence on human well-being, whereas unemployment has a positive and significant influence on human well-being. Their short-run outcomes show that convergence is taking place from the short-run towards the long-run over the period in the case of selected South Asian countries.

## **5.2 POLICY SUGGESTIONS**

Based on estimated results there some policy suggestions are drawn for improving the level of human well-being in the case of South Asian nations.

- The results find the positive and significant influence of economic freedom on human well-being in South Asian nations. This shows that selected countries should promote economic freedom, as the raising status in economic freedom encourages more business and economic activities which further raise the level of income, education, and health. Thus, economic freedom promotes human well-being in South Asian economies.
- Voice and accountability has a negative and significant influence on human well-being. This displays that a rise in voice and lesser accountability depresses human well-being, thus for higher human well-being less voice and higher accountability should be promoted.
- Rule of law is raising the level of human well-being, as rule of law enables a person to get a higher income, with better education and health. Thus, to raise human well-being, rule of law should be promoted.
- Regulatory quality can be improved to achieve a better status of human well-being in South Asian nations.
- Corruption displays an inverse and significant influence on human well-being. Empirical evidences show that in developing nations corruption has eaten up most developmental expenditures, which depresses the aggregate and household health and education exp.

Thus, it is suggested by improving the level of institutions, human well-being should be enhanced in the case of South Asian nations.

### **5.3 LIMITATIONS**

There are a few limitations of the study, by removing these limitations, further research can be done. There is limited data available in the case of selected countries, so by increasing the data set better results can be achieved. Only 4 South Asian countries have been selected, but on the other hand by an increasing number of developing countries more suitable results can be achieved. This thesis can be extended as a comparative analysis of developed and developing nations as well. This thesis has not covered all the determinants of human wellbeing following data constraints and to avoid from some econometric issues. These determinants of human wellbeing have extensively highlighted in literature e.g. Assets, Needs, Market Condition, thus, by using these determinants some other studies can be conducted.

## REFERENCES

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Chapter 6 Institutions as a Fundamental Cause of Long-Run Growth. In *Handbook of Economic Growth* (Vol. 1, Issue SUPPL. PART A, pp. 385–472). Elsevier.
- Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Institutions as a fundamental cause of long-run growth. *Handbook of economic growth*, 1, 385-472.
- Acemoglu, D., Ozdaglar, A., & Tahbaz-Salehi, A. (2015). Systemic risk and stability in financial networks. *American Economic Review*, 105(2), 564-608.
- Adeyemi, S. L., Ijaiya, G. T., Ijaiya, M. A., & Kolawole, S. D. (2006). Determinants of human development in Sub-Saharan Africa.
- Aghion, P., Alesina, A., & Trebbi, F. (2004). Endogenous political institutions. *The Quarterly Journal of Economics*, 119(2), 565-611.
- Ahsan, S., & Oberoi, J. (2003). Inequality, Well-being and Institutions in Latin America and the Caribbean. *CEsifo Working Paper Series*.
- Aidt, T., Nikolaev, B., & Bennett, D. L. (2016). *Munich Personal RePEc Archive Institutions Well-being Institutions & Well-Being*.
- Alijanzadeh, M., Asefzadeh, S., & MOOSANIAYE, Z. S. A. (2016). Correlation between human development index and infant mortality rate worldwide.
- Alkire, S. (2010). Human development: Definitions, critiques, and related concepts.
- Altindag, D. T. (2012). Crime and unemployment: Evidence from Europe. *International review of Law and Economics*, 32(1), 145-157.
- Amartya & Fitoussi, J. S. J. & Sen. (2012). On the Report by the Commission on the Measurement of Economic Performance and Social Progress.

- Anand, S., & Chhikara, K. S. (2013). A theoretical and quantitative analysis of financial inclusion and economic growth. *Management and Labour Studies*, 38(1-2), 103-133.
- Anand, S., & Sen, A. (2000). Human development and economic sustainability. *World development*, 28(12), 2029-2049.
- Anand, S., & Sen, A. (2000). The income component of the human development index. *Journal of human development*, 1(1), 83-106.
- Aoki, M., Oaki, M., Greif, A., & Milgrom, P. (2001). *Toward a comparative institutional analysis*.
- Arabi, K. A. M., & Abdalla, S. Z. S. (2013). The impact of human capital on economic growth: Empirical evidence from Sudan. *Research in World Economy*, 4(2), 43.
- Arisman, A. (2018). Determinant of human development index in ASEAN countries. *Signifikan: Jurnal Ilmu Ekonomi*, 7(1), 113-122.
- Arora, R. U. (2010). Measuring financial access. *Griffith Business School Discussion Papers Economics*, 1(7).
- Asongu, S. (2011). Financial determinants of human development in developing countries. *African Governance and Development Institute WP/11/012*.
- Asteriou, D., & Agiomirgianakis, G. M. (2001). Human capital and economic growth: time series evidence from Greece. *Journal of Policy Modeling*, 23(5), 481-489.
- Audi, M., and Bibi, C., (2019). Financial Inclusion, Economic Growth and Human Well-Being Nexus: Empirics from Pakistan, India, China, Sri-Lanka, Bangladesh and Malaysia. *Ideas.Repec.Org*.
- Aziz, N., & Ahmad, A. H. (2018). Institutions and Economic Growth: Does Income Level Matter?
- Bagli, S., & Adhikary, M. (2013). Financial inclusion and human development: a cross-section study in India. *The Indian Economic Journal*, 61(3), 390-406.

- Balcerzak, A. P., & Pietrzak, M. B. (2016). Quality of institutions for knowledge-based economy within new institutional economics framework. Multiple criteria decision analysis for European countries in the years 2000-2013. *Economics & Sociology*, 9(4), 66.
- Barro, R. J. (1995). Inflation and economic growth.
- Barrows, H. H. (1923). Geography as human ecology. *Annals of the association of American Geographers*, 13(1), 1-14.
- Bedir, S., & Yilmaz, V. M. (2016). CO 2 emissions and human development in OECD countries: Granger causality analysis with a panel data approach. *Eurasian Economic Review*, 6(1), 97-110.
- Bernstein, R. J. (2005). *The abuse of evil: The corruption of politics and religion since 9/11* (Vol. 19). Polity.
- Biggeri, M., & Mauro, V. (2018). Towards a more 'sustainable' human development index: Integrating the environment and freedom. *Ecological indicators*, 91, 220-231.
- Binder, M., & Georgiadis, G. (2010). Determinants of human development: Insights from state-dependent panel models. *UNDP-HDRO Occasional Papers*, (2010/24).
- Binder, M., & Georgiadis, G. (2010). Determinants of human development: Insights from state-dependent panel models. *UNDP-HDRO Occasional Papers*, (2010/24).
- Bjørnskov, C., Dreher, A., & Fischer, J. A. V. (2008). Cross-country determinants of life satisfaction: Exploring different determinants across groups in society. *Social Choice and Welfare*, 30(1), 119–173.
- Black, R. C. (1953). The classical economists and the Irish problem. *Oxford Economic Papers*, 5(1), 26-40.



- Blunt, P. (1995). Cultural relativism, 'good' governance and sustainable human development. *Public Administration and Development*, 15(1), 1-9.
- Boarini, R., Kolev, A., & McGregor, A. (2014). *Measuring well-being and progress in countries at different stages of development: Towards a more universal conceptual framework*. OECD Development Centre Centre De Développement Documents De Travail.
- Bourguignon, F. (2001). Crime as a social cost of poverty and inequality: a review focusing on developing countries. *World Bank Discussion Papers*, 171-192.
- Brenner, M. H., & Mooney, A. (1983). Unemployment and health in the context of economic change. *Social Science & Medicine*, 17(16), 1125-1138.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental psychology*, 22(6), 723.
- Casson, M. C., Della Giusta, M., & Kambhampati, U. S. (2010). Formal and informal institutions and development. *World Development*, 38(2), 137-141.
- Castro, C. M. D. (2014). Some aspects of implementing regulatory impact analysis in Brazil. *Revista de Administração Pública*, 48, 323-342.
- Clark, D. A. (2003). Concepts and perceptions of human well-being: Some evidence from South Africa. *Oxford Development Studies*, 31(2), 173-196.
- Clark, D. A. (2014). Defining and measuring human well-being. In *Global Environmental Change* (pp. 833-855). Springer, Dordrecht.
- Coase, R. H. (1960). The Problem of Social Cost. *Classic Papers in Natural Resource Economics*, 87-137.
- Conklin, E. G. (1928). Biology and human life. *Science*, 68(1768), 463-469.

- Datta, S. K., & Singh, K. (2019). Variation and determinants of financial inclusion and their association with human development: A cross-country analysis. *IIMB Management Review*, 31(4), 336-349.
- De Francesco, F., Radaelli, C. M., & Troeger, V. E. (2012). Implementing regulatory innovations in Europe: the case of impact assessment. *Journal of European Public Policy*, 19(4), 491-511.
- de Leon, E., & Boris, E. T. (2010). *The State of Society: Measuring Economic Success and Human Well-Being*. 1–94.
- De Soysa, I., & Jütting, J. (2006). Informal Institutions and Development—What do we know and what can we do?. In *International Seminar on Informal Institutions and Development*. Paris: OECD Development Center.
- Deininger, K., & Squire, L. (1998). New ways of looking at old issues: inequality and growth. *Journal of development economics*, 57(2), 259-287.
- Easterlin, R. (2002). *Happiness in economics*.
- Easterly, W. R. (n.d.). *Globalization, Inequality, and Development: The Big Picture*. economics, P. M.-T. quarterly journal of, & 1995, U. (n.d.). Corruption and growth.
- Eggoh, J., Houeninvo, H., & Sossou, G. A. (2015). Education, health and economic growth in African countries. *Journal of Economic Development*, 40(1), 93.
- Engle, R. F., & Granger, C. W. (1987). Co-integration and error correction: representation, estimation, and testing. *Econometrica: journal of the Econometric Society*, 251-276.
- Eren, M., Çelik, A. K., & Kubat, A. (2014). Determinants of the levels of development based on the Human Development Index: A comparison of regression models for limited dependent variables. *Rev. Eur. Stud.*, 6, 10.

- Ettner, S. L. (1996). New evidence on the relationship between income and health. *Journal of health economics*, 15(1), 67-85.
- Fatah, F. A., Othman, N., & Abdullah, S. (2012). Economic growth, political freedom and human development: China, Indonesia and Malaysia. *International Journal of Business and Social Science*, 3(1).
- Férez Blando, S. C. (2013). Linking financial inclusion and development.
- Ferrara, A. R., & Nisticò, R. (2019). Does Institutional Quality Matter for Multidimensional Well-Being Inequalities? Insights from Italy. In *Social Indicators Research* (Vol. 145, Issue 3). Springer Netherlands.
- Filippidis, I., & Katrakilidis, C. (2015). Finance, institutions and human development: Evidence from developing countries. *Economic research-Ekonomska istraživanja*, 28(1), 1018-1033.
- Frey, B. S., & Stutzer, A. (2002). What Can Economists Learn from Happiness Research? *Journal of Economic Literature*, 40(2), 402–435.
- Friedman, M. (1946). Lange on price flexibility and employment: A methodological criticism. *The American Economic Review*, 36(4), 613-631.
- Fuentelsaz, L., Garrido, E., & Maicas, J. P. (2020). The effect of informal and formal institutions on foreign market entry selection and performance. *Journal of International Management*, 26(2), 100735.
- Fukuda-Parr, S., & Kumar, A. K. (2009). *Handbook of human development: Concepts, measures, and policies*. Oxford University Press.
- Gasper, D. (2007). Human Well-being: Concepts and Conceptualizations. *Human Well-Being*, 23–64.

- Gasper, D. (2007). Human well-being: concepts and conceptualizations. In *Human well-being* (pp. 23-64). Palgrave Macmillan, London.
- Georgiadis, G., & Binder, M. (2011). Determinants of human development: Capturing the role of institutions.
- Gezikol, B., Ergüzel, O. S., & Tunahan, H. (2019). A Literature Review on the Determinants of Human Development. *Available at SSRN 3373520*.
- Ghosh, M. (2006). Economic growth and human development in Indian states. *Economic and Political Weekly*, 3321-3329.
- Goetz, A. M., & Jenkins, R. (2005). Accountability Failures and Human Development. In *Reinventing Accountability* (pp. 45-76). Palgrave Macmillan, London.
- Gong, L., Li, H., & Wang, D. (2012). Health investment, physical capital accumulation, and economic growth. *China Economic Review*, 23(4), 1104-1119.
- Grampp, W. D. (1948). On the politics of the Classical Economists. *The Quarterly Journal of Economics*, 714-747.
- Granger, C. W. (1981). Some properties of time series data and their use in econometric model specification. *Journal of econometrics*, 16(1), 121-130.
- Grindle, M. S. (2007). Good enough governance revisited. *Development policy review*, 25(5), 533-574.
- Gupta, S., Davoodi, H., & Tiongson, E. (2001). *Corruption and the provision of health care and education services* (pp. 123-153). Routledge.
- Gürlük, S. (2009). Economic growth, industrial pollution and human development in the Mediterranean Region. *Ecological Economics*, 68(8-9), 2327-2335.

- Gwartney, J., Lawson, R., & Hall, J. (2010). Economic Freedom of the World 2012. *Annual Report. Fraser Institute.*[2012] URL: [http://www.freetheworld.com/datasets\\_efw.html](http://www.freetheworld.com/datasets_efw.html).
- Gyimah-Brempong, K., Paddison, O., & Mitiku, W. (2006). Higher education and economic growth in Africa. *The Journal of Development Studies*, 42(3), 509-529.
- Hadri, K. (2000). Testing for stationarity in heterogeneous panel data. *The Econometrics Journal*, 3(2), 148-161.
- Hafner, K. A., & Mayer-Foulkes, D. (2013). Fertility, economic growth, and human development causal determinants of the developed lifestyle. *Journal of Macroeconomics*, 38, 107-120.
- Hamzah, M., Risqiani, R., & Sofilda, E. (2012). Human Development Quality and Its Problems in Indonesia. *OIDA International Journal of Sustainable Development*, 5(7), 29-36.
- Heckelman, J. C. (2000). Economic freedom and economic growth: A short-run causal investigation. *Journal of Applied Economics*, 3(1), 71-91.
- Helliwell, J. F., & Huang, H. (2008). How's Your Government? International Evidence Linking Good Government and Well-Being. *British Journal of Political Science*, 38(4), 595–619.
- Helmy, A. (2024). The Mutual Interdependence between Financial Inclusion and Human Development and Their Effects on Economic Development: Comparative Study between Egypt and The BRICS Countries. *Arab Journal of Administration*, 44(2).
- Hickel, J. (2020). The sustainable development index: Measuring the ecological efficiency of human development in the anthropocene. *Ecological Economics*, 167, 106331.

- Holmes Jr, R. M., Miller, T., Hitt, M. A., & Salmador, M. P. (2013). The interrelationships among informal institutions, formal institutions, and inward foreign direct investment. *Journal of Management*, 39(2), 531-566.
- Holmes, J., & Stubbe, M. (2015). *Power and politeness in the workplace: A sociolinguistic analysis of talk at work*. Routledge.
- Im, K. S., Pesaran, M. H., & Shin, Y. (2003). Testing for unit roots in heterogeneous panels. *Journal of econometrics*, 115(1), 53-74.
- Islam, S. (1995). The human development index and per capita GDP. *Applied Economics Letters*, 2(5), 166-167.
- Kant, I. (1949). The philosophy of Kant: Immanuel Kant's moral and political writings.
- Karanikolos, M., Mladovsky, P., Cylus, J., Thomson, S., Basu, S., Stuckler, D., ... & McKee, M. (2013). Financial crisis, austerity, and health in Europe. *The Lancet*, 381(9874), 1323-1331.
- Kassouri, Y., & Altıntaş, H. (2020). Human well-being versus ecological footprint in MENA countries: A trade-off?. *Journal of environmental management*, 263, 110405.
- Kawachi, I., & Kennedy, B. P. (1999). Income inequality and health: pathways and mechanisms. *Health services research*, 34(1 Pt 2), 215.
- Khan, N. H., Ju, Y., & Hassan, S. T. (2019). Investigating the determinants of human development index in Pakistan: an empirical analysis. *Environmental Science and Pollution Research*, 26(19), 19294-19304.
- Khattab, Y. E., Bettah, M., & Moudine, C. Institutional Quality and Economic Development: Focus on the Moroccan Case.

- Khodabakhshi, A. (2011). Relationship between GDP and human development indices in India. In *Society of Interdisciplinary Business Research (SIBR) 2011 Conference on Interdisciplinary Business Research*.
- Killewald, A., Pfeffer, F. T., & Schachner, J. N. (2017). Wealth inequality and accumulation. *Annual review of sociology*, 43, 379-404.
- Klugman, J. (1994). Decentralisation: A survey of literature from a human development perspective. *UNDP Human Development Report Office*.
- Konstantinov, F. V. (Fedor V. (1982). *The Fundamentals of Marxist-Leninist philosophy*. 480.
- Kumssa, A., & Mbeche, I. M. (2004). The role of institutions in the development process of African countries. *International Journal of Social Economics*, 31(9), 840–854.
- Kuri, P. K., & Laha, A. (2011). Financial inclusion and human development in India: an inter-state analysis. *Indian Journal of Human Development*, 5(1), 61-77.
- Lafourcade, A. L., Isern, J., Mwangi, P., & Brown, M. (2005). Overview of the outreach and financial performance of microfinance institutions in Africa. *Microfinance Information eXchange, Washington, DC*. [http://www.mixmarket.org/medialibrary/mixmarket/Africa\\_Data\\_Study.pdf](http://www.mixmarket.org/medialibrary/mixmarket/Africa_Data_Study.pdf).
- Lamb, W. F., Steinberger, J. K., Bows-Larkin, A., Peters, G. P., Roberts, J. T., & Wood, F. R. (2014). Transitions in pathways of human development and carbon emissions. *Environmental Research Letters*, 9(1), 014011.
- Levin, A., Lin, C. F., & Chu, C. S. J. (2002). Unit root tests in panel data: asymptotic and finite-sample properties. *Journal of econometrics*, 108(1), 1-24.
- Lewis, M. (2006). Governance and corruption in public health care systems. *Center for Global Development working paper*, (78).

- Li, Y., & Zahra, S. A. (2012). Formal institutions, culture, and venture capital activity: A cross-country analysis. *Journal of Business Venturing*, 27(1), 95-111.
- Li, Y., Wang, X., Westlund, H., & Liu, Y. (2015). Physical Capital, Human Capital, and Social Capital: The Changing Roles in China's Economic Growth. *Growth and change*, 46(1), 133-149.
- Maddala, G. S., & Wu, S. (1999). A comparative study of unit root tests with panel data and a new simple test. *Oxford Bulletin of Economics and statistics*, 61(S1), 631-652.
- Maharda, J. B., & Aulia, B. Z. (2020). Government Expenditure and Human Development in Indonesia. *Jambura Equilibrium Journal*, 2(2).
- Mandira, S., & Jesim, P. (2008). Financial Inclusion and Development: A Cross Country Analysis. *Indian Council for Research on International Economic Relations*, 1-28.
- Marx, K. (1945). *Capital: A critique of political economy*. Vol. II.
- Maslow, A. H. (1971). *The farther reaches of human nature* (Vol. 1971). New York: Viking Press.
- Matekenya, W., Moyo, C., & Jeke, L. (2020). Financial inclusion and human development: Evidence from Sub-Saharan Africa. *Development Southern Africa*, 1-18.
- Mauro, M. P. (1996). *The Effects of Corruption on Growth, Investment, and Government Expenditure*. International Monetary Fund.
- Mazumdar, K. (1999). Measuring the Well-Beings of the Developing. *Social Indicators Research*, 47, 1-60.
- McGillivray, M. (2007). Human Well-being: Issues, Concepts and Measures. In *Human Well-Being* (pp. 1-22). Palgrave Macmillan UK.



- McGregor, A., & Sumner, A. (2010). *Beyond Business as Usual: What Might 3-D Wellbeing Contribute to MDG Momentum?*
- McGregor, J. A., & Pouw, N. (2016). Towards an economics of well-being. *Cambridge Journal of Economics*, 41(4), bew044.
- Miller, T., & Kim, A. B. (2013). Defining economic freedom. *Miller AT, Holmes KR, Feulner EJ (Eds)*, 87-94.
- Mincer, J. (1984). Human capital and economic growth. *Economics of education review*, 3(3), 195-205.
- Muro, P. De, & Tridico, P. (2014). *The role of institutions for human development The role of institutions for human development. January 2008.*
- Nabli, M. K., & Nugent, J. B. (1989). The New Institutional Economics and Its Applicability to Development. *World Development*, 17(9), 1333–1347.
- Nagel, E. (1963). Assumptions in economic theory. *The American Economic Review*, 53(2), 211-219.
- Nanda, K., & Kaur, M. (2016). Financial inclusion and human development: a cross country analysis. *Management and Labour Studies*, 41(2), 127-153.
- Ndikumana, L. (2006). Corruption and pro-poor growth outcomes: Evidence and lessons for African countries. *PERI Working Papers*, 90.
- North, D. (1990). *Institutions, institutional change and economic performance.*
- North, D. C. (1991). Institutions. *Journal of economic perspectives*, 5(1), 97-112.
- North, D. C. (2018). Institutional change: a framework of analysis. In *Social Rules* (pp. 189-201). Routledge.

- Norton, S. W. (2003). Economic Institutions and Human Well-Being: A Cross-National Analysis. *Economic Institutions and Human Well-Being: A Cross-National Analysis*, 29(1), 23–40.
- Ofori-Mensah Ababio, J., Attah-Botchwey, E., Osei-Assibey, E., & Barnor, C. (2021). Financial inclusion and human development in frontier countries. *International Journal of Finance & Economics*, 26(1), 42-59.
- Ogujiuba, K. K., & Adeniyi, A. O. (2005). Economic growth and human capital development: The case of Nigeria. *Macroeconomics*, 508023.
- Oliff, P., Mai, C., & Palacios, V. (2012). States continue to feel recession's impact.
- Olson, M., Sarna, N., & Swamy, A. V. (2000). Governance and growth: A simple hypothesis explaining cross-country differences in productivity growth. *Public choice*, 102(3), 341-364.
- Omar, M. A., & Inaba, K. (2020). Does financial inclusion reduce poverty and income inequality in developing countries? A panel data analysis. *Journal of Economic Structures*, 9, 1-25.
- Orza, L., Bewley, S., Logie, C. H., Crone, E. T., Moroz, S., Strachan, S., ... & Welbourn, A. (2015). How does living with HIV impact on women's mental health? Voices from a global survey. *Journal of the International AIDS Society*, 18, 20289.
- Pablo-Romero, M. D. P., & Gómez-Calero, M. D. L. P. (2013). A translog production function for the Spanish provinces: Impact of the human and physical capital in economic growth. *Economic Modelling*, 32, 77-87.
- Papadopoulos, N. A., Staffler, V., Mirceva, V., Henrich, G., Papadopoulos, O. N., Kovacs, L., ... & Biemer, E. (2012). Does abdominoplasty have a positive influence on quality of life,

self-esteem, and emotional stability?. *Plastic and reconstructive surgery*, 129(6), 957e-962e.

Parlevliet, J. (2007). Defining (Informal) Institutions. *Informal Institutions: How Social Norms Help or Hinder Development*. Paris.

Pedersen, J. S., & Rendtorff, J. D. (2010). Balancing values and economic efficiency in the public sector! What can public welfare service institutions learn from private service firms?. *Society and Business Review*.

Peerenboom, R. (Ed.). (2003). *Asian discourses of rule of law*. Routledge.

Pesaran, M. H., Shin, Y., & Smith, R. P. (1997). Pooled estimation of long-run relationships in dynamic heterogeneous panels.

Pesaran, M. H., Shin, Y., & Smith, R. P. (1999). Pooled mean group estimation of dynamic heterogeneous panels. *Journal of the American statistical Association*, 94(446), 621-634.

Pickett, K. E., & Wilkinson, R. G. (2015). Income inequality and health: a causal review. *Social science & medicine*, 128, 316-326.

Platteau, J. P. (2015). *Institutions, social norms and economic development*. Routledge.

Pontarollo, N., Orellana, M., & Segovia, J. (2020). The Determinants of Subjective Well-Being in a Developing Country: The Ecuadorian Case. *Journal of Happiness Studies*, 21(8), 3007–3035.

Prados de la Escosura, L. (2015). World human development: 1870–2007. *Review of Income and Wealth*, 61(2), 220-247.

Pranab, B. (2005). Institutions matter, but which ones? *Economics of Transition*, 13(3), 2–48.

- Pustu, Y., Abdulai, A. M., & Yaslikaya, R. (2019). Political, Economic and Cultural Dimensions of Corruption: A Case of Developed and Developing Countries.
- Qasim, M., & Chaudhary, A. R. (2015). Determinants of human development disparities: a cross district analysis of Punjab, Pakistan. *The Pakistan Development Review*, 427-446.
- Qureshi, M. A. (2009). Human development, public expenditure and economic growth: a system dynamics approach. *International Journal of Social Economics*.
- Qureshi, S., & Xiong, J. (2018). Global financial inclusion and human development: The bitcoin effect. In *Proceedings Annual Workshop of the AIS Special Interest Group for ICT in Global Development. Paper (Vol. 8)*.
- Raichoudhury, A. (2016). Financial inclusion & human development: a cross country analysis. *Asian Journal of Business Research*, 6(1), 34-48.
- Ranis, G. (2004). Human development and economic growth. *Available at SSRN 551662*.
- Ranis, G., Stewart, F., & Ramirez, A. (2000). Economic growth and human development. *World development*, 28(2), 197-219.
- Robbins, L. (1978). The Classical Economists and Socialism: John Stuart Mill. In *The Theory of Economic Policy* (pp. 142-168). Palgrave Macmillan, London.
- Robinson, J. A., & Acemoglu, D. (2012). *Why nations fail: The origins of power, prosperity and poverty*. London: Profile.
- Rode, M. (2013). Do Good Institutions Make Citizens Happy, or Do Happy Citizens Build Better Institutions? *Journal of Happiness Studies*, 14(5), 1479–1505.
- Sagar, A. D., & Najam, A. (1998). The human development index: a critical review. *Ecological economics*, 25(3), 249-264.

- Sahoo, M., & Sethi, N. (2020). Does Remittance Inflow Promote Human Development In Sub-Saharan Africa? An Empirical Insight. *Global Economy Journal*, 20(04), 1-23.
- Sangaji, J. (2016). The Determinants of Human Development Index in Several Buddhist Countries. *Journal of Buddhist Education and Research*, 2(1), 48-60.
- Sarma, M. (2008). *Index of financial inclusion* (No. 215). Working paper.
- Sarma, M., & Pais, J. (2011). Financial inclusion and development. *Journal of international development*, 23(5), 613-628.
- Schleicher, J., Schaafsma, M., Burgess, N. D., Sandbrook, C., Danks, F., Cowie, C., & Vira, B. (2017). Poorer without It? The Neglected Role of the Natural Environment in Poverty and Wellbeing. *Wiley Online Library*, 26(1), 83–98.
- Scholl, W., & Schermuly, C. C. (2020). The impact of culture on corruption, gross domestic product, and human development. *Journal of business ethics*, 162(1), 171-189.
- Sen, A. (1990). Development as capability expansion. *The community development reader*, 41-58.
- Sethi, D., & Acharya, D. (2018). Financial inclusion and economic growth linkage: Some cross country evidence. *Journal of Financial Economic Policy*.
- Seyoum, B. (2009). Formal institutions and foreign direct investment. *Thunderbird International Business Review*, 51(2), 165-181.
- Shah, A., & Yasmeen, S. (2018). Wellbeing and Informal Institutions: An Empirical Analysis. *Kashmir Economic Review*, 27(1), 59–88.
- Shah, S. (2016). Determinants of human development index: A cross-country empirical analysis.
- Smith, A. (1784). *An inquiry into the nature and causes of the wealth of nations: in three volumes* (Vol. 3). Strahan.

- Sofilda, E., Hermiyanti, P., & Hamzah, M. (2015). Determinant Variable Analysis of Human Development Index in Indonesia (Case For High And Low Index at Period 2004-2013). *OIDA International Journal of Sustainable Development*, 8(09), 11-28.
- Sow, M. T. (2014). Using ANOVA to examine the relationship between safety & security and human development. *Journal of International Business and Economics*, 2(4), 101-106.
- Spruk, R., & Kešeljević, A. (2016). Institutional Origins of Subjective Well-Being: Estimating the Effects of Economic Freedom on National Happiness. *Journal of Happiness Studies*, 17(2), 659–712.
- Srinivasan, T. N. (1994). Human development: a new paradigm or reinvention of the wheel?. *The American Economic Review*, 84(2), 238-243.
- Stiglitz, J. E. (2009). The Current Economic Crisis and Lessons for Economic Theory. *Eastern Economic Journal*, 35(3), 281–296.
- Stipek, D. J., Recchia, S., & McClintie, S. (1743). 11 Sociocultural Influences on the Development. *Child Development*, 65(1723).
- Talalweh, M. A., & Samarah, W. A. (2021). The Effect of Financial Inclusion on Economic Growth and Human Development: A Case Study of the Islamic World. *TANMIYAT AL-RAFIDAIN*, 40(129), 185-202.
- Tamanaha, B. Z. (2004). *On the rule of law: History, politics, theory*. Cambridge University Press.
- Tamilina, L., & Tamilina, N. (2014). Heterogeneity in institutional effects on economic growth: Theory and empirical evidence.
- Teixeira, A. A., & Queirós, A. S. (2016). Economic growth, human capital and structural change: A dynamic panel data analysis. *Research policy*, 45(8), 1636-1648.

- Tridico, P. (2007). Institutions, human development and economic growth in transition economies. *European Journal of Development Research*, 19(4), 569–593.
- Tu, P. N. (1969). The classical economists and education. *Kyklos*, 22(4), 691-718.
- Ul Haq, M. (1995). *Reflections on human development*. oxford university Press.
- United Nations Development Program (2015). *Imbalances in paid and unpaid work. Chapter 4 Human Development Report 2015 Work for Human Development*.
- United Nations Development Program. (1990). *DEVELOPMENT REPORT 1990*.
- Van, M. H. (2017). Determinants of the Levels of Development based on the Human Development Index: Bayesian ordered probit model. *International Journal of Economics and Financial Issues*, 7(5), 425.
- Vanhoutte, B. (n.d.). *The Multidimensional Structure of Subjective Well-Being In Later Life. Springer*.
- Veenhoven, R. (2008). Healthy happiness: Effects of happiness on physical health and the consequences for preventive health care. *Journal of happiness studies*, 9(3), 449-469.
- Vo, D. H., Nguyen, N. T., & Van, L. T. H. (2020). Financial inclusion and stability in the Asian region using bank-level data. *Borsa Istanbul Review*.
- Vollmer, S., & Ziegler, M. (2009). Political Institutions and Human Development - Does Democracy Fulfil Its “Constructive” and “Instrumental” Role? In *Social Science Research Network Working Paper Series* (Issue January).
- Welzel, C., Inglehart, R., & Kligemann, H. D. (2003). The theory of human development: A cross-cultural analysis. *European Journal of Political Research*, 42(3), 341-379.
- Westerlund, J. (2007). Testing for error correction in panel data. *Oxford Bulletin of Economics and statistics*, 69(6), 709-748.

- Wicher, J. (2014). The relationship between Informal Institutions and a Sustainable Development- Evidence from a Panel Data Set. In *International Journal of Business and Management: Vol. II* (Issue 3).
- Wilkinson, R. G., & Pickett, K. E. (2009). Income inequality and social dysfunction. *Annual review of sociology*, 35, 493-511.
- Williamson, O. E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications: A Study in the Economics of Internal Organization*.
- Wraith, R., & Simpkins, E. (2010). *Corruption in developing countries*. Routledge.
- Yasmeen, G., Begum, R., & Mujtaba, B. G. (2011). Human development challenges and opportunities in Pakistan: defying income inequality and poverty. *Journal of Business Studies Quarterly*, 2(3), 1.
- Zaman, K., Izhar, Z., Khan, M. M., & Ahmad, M. (2012). RETRACTED: The relationship between financial indicators and human development in Pakistan.
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management journal*, 44(4), 682-696.