ÉCOLE DOCTORALE SCIENCES ÉCONOMIQUES, JURIDIQUES, POLITIQUES ET DE GESTION
Université Clermont Auvergne

Ecole Doctorale des Sciences Economiques, Juridiques, Politiques et de gestion
Centre d'Etudes et de Recherche sur le Développement International (CERDI)

Université Clermont Auvergne, CNRS, IRD, CERDI, F-63000 Clermont-Ferrand, France

THREE ESSAYS ON INSTITUTIONS, ECONOMIC GROWTH, AND FOREIGN DIRECT INVESTMENT

Thèse présentée et soutenue publiquement le Décembre 15, 2022
pour l'obtention du titre de Docteur en Sciences Economiques
par

Badi UDDIN

Sous la direction de
Pr. Patrick PLANE et de Marie-Ange VÉGANZONÈS-VAROUDAKIS

Membres du Jury

Dr. Ahmet Faruk AYSAN	Professeur, Hamad Bin Khalifa University, Qatar	Rapporteur
Dr. Mohamed CHAFFAI	Professeur, Université de Sfax, Tunisie	Rapporteur
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L’université Clermont Auvergne n’entend donner aucune approbation ni improbation aux opinions émises dans cette thèse. Ces opinions doivent être considérées comme propres à leur auteur.

To My Beloved Balochistan.

To My Father and Mother.

To my Brother Shams uddin.

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Abstract

Most of the research suggests a positive relationship between institutions and economic growth. However, institutions have varying effects on economic growth across countries. The positive impact of institutions is influenced by many variables, including how an individual views them and the social norms and laws that apply to their community. Institutions with comparable traits occasionally have varying effects on people, regions, and countries. According to many development experts, developed and emerging nations differ in their development levels because the latter group's institutions are weaker due to internal and external reasons. Regarding external variables, foreign direct investment (FDI) flows to developing nations have increased (overall) steadily over the past few decades. Beyond its immediate economic effects on the host countries, this spike in FDI inflows has other ramifications, particularly for the institutional framework. The costs of conducting business are decreased by institutions that support economic growth. Such costs are associated with transactions such as searching for information, negotiating, making decisions, and police and enforcement expenses. They increase trust by offering policing and judicial systems to adhere to common laws and regulations to the investors, which minimize transaction costs by providing common legal frameworks (e.g., contracts and contract enforcement, business conventions, and rules). In light of the above significance of the institutions, this thesis investigates how foreign parties might assist in the development of institutions in developing countries through the use of FDI. Thus, this thesis examines institutional transformation and its potential to attract FDI in developing countries via three chapters and the use of appropriate statistical and economic methodologies. Each chapter examines a different aspect of institutions, primarily for economic growth (chapter 2), with particular emphasis on governance and FDI for South Asia (Chapter 3) and the role of institutions in attracting FDI inflows for Pakistan (Chapter 4). Chapter 2 investigates how the quality of institutions determines economic growth in developed and developing countries. The empirical results

support the positive relationship between governance quality and real GDP per capita. We constructed a global governance indicator in a principal component analysis framework to achieve these results. Based on our selected estimator, we found a clear pattern of the beneficial impact of "good governance" on growth. Chapter 3 analyses the influence of institutional quality on FDI inflows by using panel data from South Asian economies. The study's findings show that FDI and institutional quality have a significant positive relationship, meaning foreign investors do consider institutional quality a sufficient sign in South Asian economies. Chapter 4 discusses the role of institutional quality in FDI inflows in Pakistan. As discussed in the literature, Pakistan's economy witnessed a continuous surge in FDI until 2008 but experienced a consistent downward trend afterward. The main factors behind the slump in FDI inflows are global financial slowdown, economic and political instability, and terrorism attacks. The result suggests that FDI is attracted toward Pakistan if there are strong institutions. The ECM term shows the speed of convergence towards an equilibrium of almost 78% in our analysis. The study points out how policymakers can attract foreign direct investors to Pakistan.

Keywords: Institutions; FDI; Economic Growth; Developing Countries

JEL CODES: F21; E02; F43; O13

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Chapter 1 General Introduction

In 400 BC, Kautilya (supposedly the chief minister of the king of India) emphasized the value of justice, ethics, and anti-autocratic tendencies in his Arthastra (treatise on governance) in which he describes the role of the king in effectively guiding society through safe governance (Kaufmann and Kraay, 2007). According to North (1990), institutions are the basic rules of a society or, to be more precise, "the man-made restrictions that influence human interaction." These rules can take the form of formal institutions, such as laws and regulations, informal institutions embedded in culture, as described by Tabellini (2005), or social capital[1].

In recent decades, researchers and policymakers have focused on the link between institutions and the economic performance of countries. According to North and Thomas (1973), differences in the quality of institutions are responsible for differences in growth and development, in addition to economic factors such as capital accumulation or innovation. Due to disparities in their institutions, North and South Korea, for example, despite some similarities, have very different economic outcomes (Acemoglu et al., 2006). In particular, institutions are crucial because they influence the behavior of economic actors (Sabir and Zahid 2012). For example, in countries where property rights are secure and well protected, agents are encouraged to invest, which stimulates growth. In the opposite case, growth and investment progress less.

The goal of economic development has brought governance to the forefront over the past three decades. The World Bank, which first used the concept of "good governance" in 1989, emphasizes the need to develop impartial institutions that can protect property rights and promote trade, investment, and innovation (Zhuang et al., 2014). The importance of governance is also recognized due to its inclusion in the post-2015 Sustainable Development

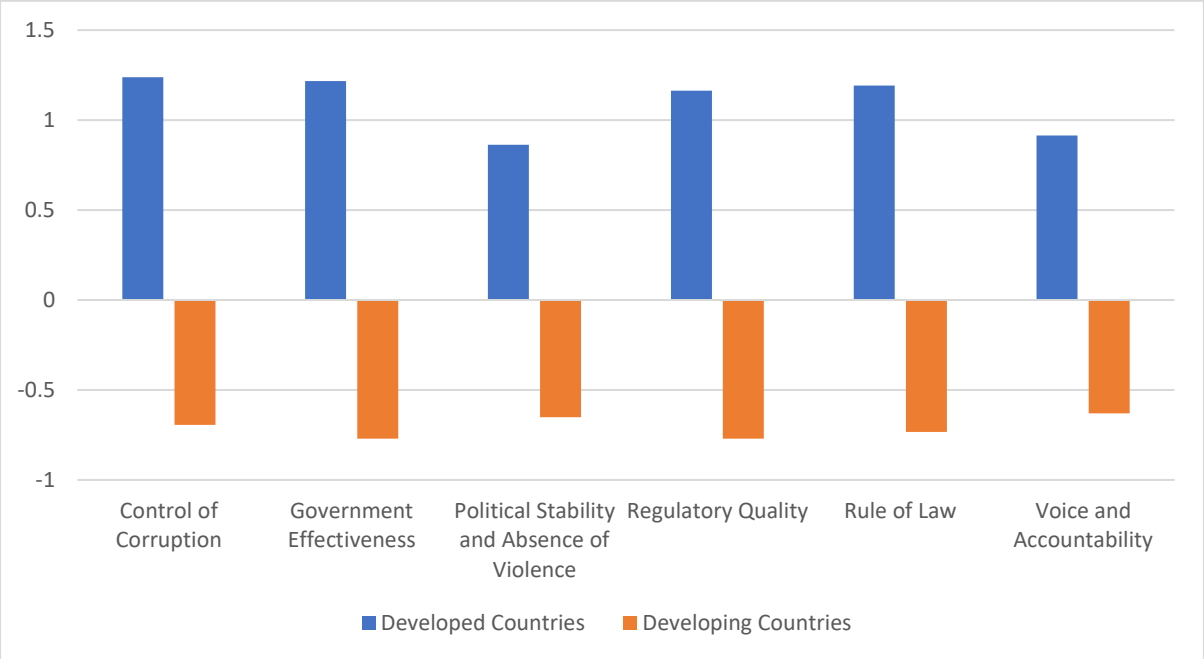
[1] see Putnam et al. (1993)

Goals. Effective development management is considered by the Asian Development Bank (ADB, 1997) as the essence of governance. Good governance is also defined by the United States Agency for International Development (USAID, 2002) as a complex system of interactions among structures, traditions, roles, and procedures that uphold the ideals of accountability, transparency, and participation. According to former United Nations Secretary-General Kofi Annan (United Nations, 1998), "good governance is probably the most essential element in reducing poverty and sustaining development".

The concept of governance is broad and includes many distinct components. According to Kaufmann et al (2010), governance is a set of traditions and institutions that can be used to exercise power for the benefit of all that the authors divide into three categories: (i) the political dimension, which concerns the methods used to select, monitor, and remove those in positions of power, (ii) the economic dimension, which concerns the government's ability to manage its resources efficiently and pursue sound policies, and (iii) the social dimension of institutional respect, which concerns the respect that citizens and the state have for institutions. Each of these three dimensions - political, economic, and social - was then divided into two categories to define six pillars of governance (i) political stability, the absence of violence or terrorism, and (ii) voice and accountability for the political component, (ii) government effectiveness and (iv) regulatory quality for the economic dimension (v) control of corruption and (vi) rule of law for the social component (Kaufmann et al. 2010). These governance axes affect a variety of key institutions essential for economic success, such as property rights, impartial contract enforcement, a narrow knowledge gap, and stable macroeconomic conditions (Rodrik and Subramanian, 2003).

Voice and accountability assess the perceived involvement of a nation's citizens in political decision-making, their freedom of association and expression, and the presence of free media. Political stability and freedom from terrorism capture perceptions of the likelihood of government destabilization through violent or illegal means, including political terrorism and

bloodshed. Government effectiveness measures the quality of the delivery of civil and public services, their independence from political pressures, the quality of policy and procedure development and implementation, and the credibility of the government in meeting its commitment to these objectives. Regulatory quality incorporates views on the ability of the government to create and implement sound rules and policies that enable and encourage private sector growth. Rule of law describes how citizens of a nation perceive their level of trust and acceptance of societal norms, the effectiveness of law enforcement, police, courts, property rights, and the likelihood of crime and violence. Controlling corruption includes both petty and grand corruption and incorporates perceptions of the extent to which official authority is used to acquire private benefits.



Source: World Governance Indicators (WGI)

Figure 1.1 Institutional Variable Averages (1996-2020) in Developed and Developing Countries

Figure 1.1 compares the institutional variable averages in developed and developing countries. The six institutional indicators have been taken from 1996-2020 with each indicator ranging from +2.5(best institutions) and -2.5 (worst institutions). The graph

highlights the major differences between developed and developing countries. The average quality of institutions is better in developed countries than in developing ones in all six indicators. Thus, in the literature, the economic growth of a nation can be determined by two factors, both of which are influenced by governance. First, better governance results in institutions that increase the production and exploitation of human and natural resources and attract resources for their development. This process produces more economic growth according to the models of Solow and the new growth theories. Second, better governance improves institutions through a set of laws that support growth, in line with the concept of social infrastructure. Improved institutions and government policies thus create a more favorable climate for increased investment in physical and human capital, which promotes growth.

In the thesis, we focus on governance issues and the impact of institutions on the economic performance of developing countries in terms of growth and the attractiveness of foreign investors.

1.1 Governance and Growth

A highly unbalanced distribution pattern can be observed in the distribution of income around the world. For example, in 2015, North America's GDP per capita was at least 34 times that of South Asia and sub-Saharan Africa (World Bank, 2016b). In addition, some countries in the world have grown rapidly over time, while others have not. Compared to 1968 figures, the average nominal GDP of East Asian and Pacific nations increased 3711 times in 2015. But nations in Sub-Saharan Africa only experienced an 868-fold increase throughout this period (World Bank, 2016b). These figures demonstrate the disparity in growth across the world.

There are two main schools of thought on growth, the first based on the "neoclassical" model of Solow (1956), the second on the theories of "endogenous growth" proposed by Lucas

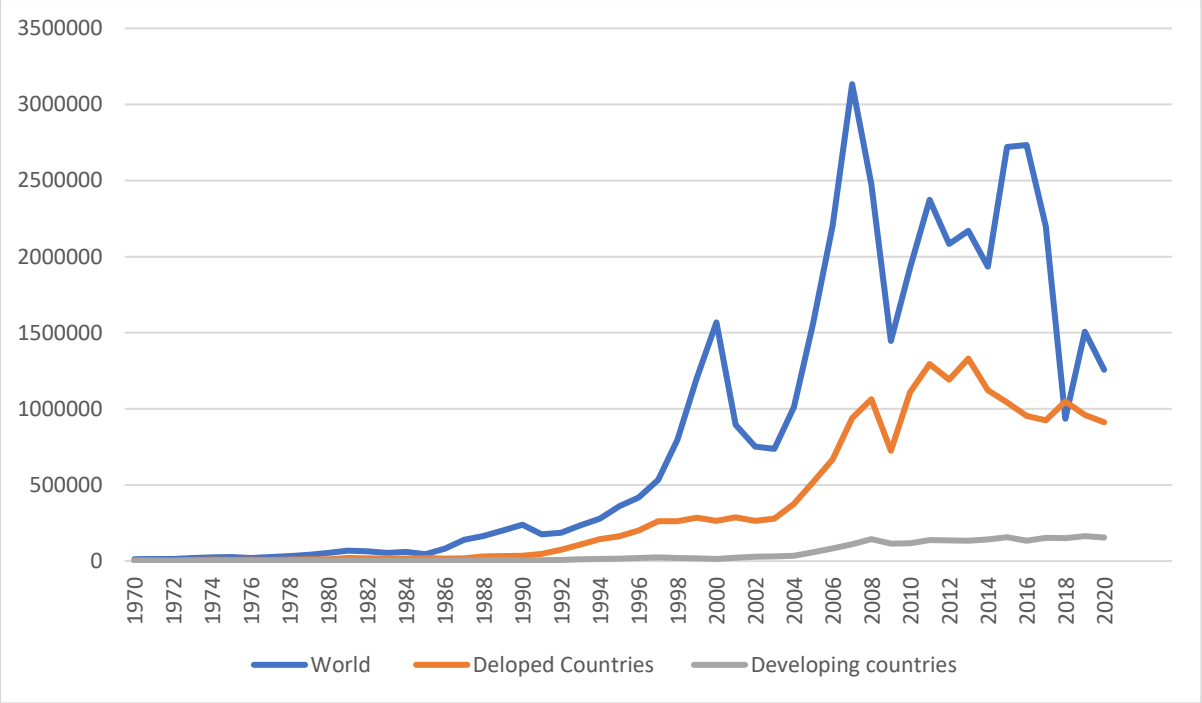
(1988) and Romer (1989). According to the first school, demographic expansion has an impact on economic growth, as does the accumulation of physical capital. The second school, which includes Mankiw et al (1992), argues that in addition to population growth and physical capital, technology or human capital are necessary components of economic growth. Moreover, according to vast literature, institutions play a crucial role in the process of development and economic progress of countries (Acemoglu et al., 2001, 2005; Dollar and Kraay, 2003; Hall and Jones, 1999; Rodrik et al., 2002) According to Rodrik et al. (2002), institutions have contributed more to economic growth than geography and trade. Poor macroeconomic policies result from weak and inadequate institutions. The lack of protection of property rights, for example, leads to lower investment in physical and human capital, which is detrimental to growth. Thus, the relationship between institutions and economic performance is presented as a most important issue and the literature shows that institutions are responsible for the development and economic progress of countries.

From an empirical point of view, much research that highlights the link between economic performance and governance examines this relationship through the Word Governance Indicators (WGI or KKZ indicators), Easterly and Levine (2003) highlight the favorable impact of the aggregate WGI governance indicator on per capita income. Rigobon and Rodrik (2005) and find that the rule of law has a significant effect on economic growth. They show that in democracies the quality of regulation has a positive impact on trade and economic growth. The study by Jalilian et al. (2006) indicates that GDP per capita in developing countries is positively affected by the regulatory quality and government efficiency. Mar'a-Teresa et al, (2012) highlight the positive effects on the growth of four of the WGI indicators (voice and accountability, government effectiveness, rule of law, and control of corruption). Arusha (2009) indicates the effectiveness of government on economic development. For Huynh and Jacho-Cha'vez (2009), political stability, effective governance, and law enforcement contribute to economic growth. On the other hand, while Gani (2011) shows the

favorable effect of political stability and government effectiveness on economic growth, this relationship is reversed in the case of voice and accountability, corruption management, regulatory quality, and rule of law (although less significantly for the latter two variables), for a panel of developing countries. Finally, Fayissa and Nsiah (2013) show that 39 sub-Saharan African nations differ on good governance. They also conclude that the influence of governance on economic growth depends on countries' income levels.

1.2 Foreign Direct Investment and Institutions

The last twenty-five years have seen an increase in foreign direct investment (FDI) in developing countries. The end of the Cold War in 1990 led to the rapid integration of these countries into the global economy, along with a slowdown or even drying up of international aid flows (Essers, 2013). Development assistance to Sub-Saharan Africa declined from $17 billion in 1990 to $10 billion in 2003 (Asiedu, 2006). South Asia's aid has grown less rapidly than in the past ($4.2 billion in 1985 and $5.9 billion in 2001, World Bank, 2010). The decline in aid flows, as well as the lack of local funds, has prompted developing countries to turn to foreign investors (Figure 1.2). Some of them have played on the abundance of natural resources. This is the case of Nigeria and Angola which, despite unstable political and economic conditions, are two of the most attractive countries in sub-Saharan Africa because of their rich subsoil, especially in the oil, which seems to have compensated for their institutional instability (Asiedu & Lien, 2011).



Source: World Development Indicators (WDI)

Figure 1.2 Trends in FDI Inflows, USD in Millions

The neoclassical growth model explains differences in per capita income by differences in capital accumulation due to differences in savings rates (Solow 1956). However, developing countries are characterized by low per capita income, high poverty and unemployment rates, high population growth, low foreign exchange reserves, and low savings and investment rates. Low savings and investment rates have a negative effect on growth. Foreign direct investment (FDI) thus helps to bridge the gap between the domestic savings and investment rate that is required for a more satisfactory level of development (Sabir and Khan 2018). For their part, endogenous growth theories emphasize that FDI is a key determinant of development through technology transfers from developed to developing countries (Chenaf-Nicet and Rougier 2016). FDI also contributes, directly and indirectly, to reducing unemployment and increasing productivity by improving the capabilities and knowledge of workers in the host country (Lipsey, 2001).

From the 1990s, competition intensified between developed and developing countries to attract FDI flows through tailored tax reduction and subsidy strategies. Many developing countries also implemented financial sector modernization, structural adjustment, and economic association programs (Asamoah et al., 2016). These strategies have enabled FDI to grow in countries in the Association of South Asian Regional Corporations (SAARC), the Association of Southeast Asian Nations (ASEAN), Sub-Saharan Africa, and Central Asia. These countries have benefited from access to new technologies, improved administrative capacity, increased investment, increased exports, greater efficiency, and improved economic growth.

Nevertheless, the quality of institutions remains an important factor in investors' choice of the host country (North and Thomas, 1973; Sabir and Zahid, 2012). By increasing production costs, inadequate institutions can be likened to a tax that hinders investment. Investors are reluctant to invest in countries where corruption, nepotism, and red tape are high as this environment increases the cost of doing business (Mengistu and Adhikary 2011). A well-defined regulatory framework and consistency of rules governing activities are also fundamental for investors, especially foreign ones. Similarly, a legitimate political organization that eradicates corruption and makes the administration accountable provides investors with the freedom of action conducive to doing business (Campisi, 2016). Political instability, too, can interfere with countries' economic, financial, and business practices and disrupt foreign investors (Shah, 2015). Investors may expect democratic regimes to protect them from such instability and the arbitrariness of authoritarian regimes (Li & Liu, 2005).

However, among the components that contribute to the economic growth process, trade and foreign direct investment (FDI) are considered the most important for a country's development (Li and Liu, 2005). Due to their financial constraints, developing countries try to attract FDI, even though their long-term development still relies on foreign aid. Foreign aid and FDI are thus two primary sources of capital for developing countries. Foreign aid is

mainly in the form of official development assistance (ODA) from developed countries to promote the economic and social welfare of people in developing countries. Aid is not only a source of development finance for emerging and low-income countries that fail to attract FDI. Aid can also act as an incentive by increasing the attractiveness of FDI for the country receiving the aid (Reiter et al., 2010). By providing access to capital and innovation, aid can indeed increase the marginal efficiency of capital and create favorable conditions for private investment and FDI.

Thus, since savings and investment deficits are considered major obstacles to economic growth in developing countries, foreign capital inflows constitute an important source for bridging this gap (Emiola &Fagbohun, 2021), particularly through FDI and remittances from nationals working abroad. The link between FDI and growth has been the subject of intense debate in both theoretical and empirical literature. According to the exogenous growth theory, FDI influences growth by bringing about technological improvements in the host country. Endogenous growth theories argue that FDI affects growth through positive spillover effects on physical and human capital and gross domestic product (Raza, 2015).

The global financial crisis of 2008-2009 broke the upward trend in GDP in advanced and developing countries. This highlighted the weakness of the latter and affected economic activity in developed countries. Financial crises reveal gaps in the quality of institutions that are less apparent in good times. Following the 1997 Asian financial crisis, many countries recognized governance gaps and attempted to change their institutional arrangements to attract FDI.

Dunning is one of the most prominent authors who have worked on FDI. Dunning (1993) describes several types of FDI. The first is called market-seeking FDI, whose purpose is to serve local markets. It is also called horizontal FDI. Tariff jumping or export substitution FDI is a variant of this type of FDI. Since the rationale for horizontal FDI is to serve the local

market more easily, the size and development of the local market play an important role in the decision to invest. Barriers to obtaining local markets, such as import taxes and transport costs, also provide incentives for this type of FDI. The second type of FDI is called vertical or resource-seeking FDI when firms look abroad for assets that are not available in their home countries, such as natural resources, unrefined components, or cheap labor. Unlike horizontal FDI, vertical FDI is export-oriented. It also involves the relocation of parts of the production chain to the host country. The availability of low-cost labor is also one of the drivers of export-oriented FDI. Normally, FDI in assets, such as oil and gas, is attracted to countries with abundant natural resource endowments.

1.3 Foreign Direct Investment in Pakistan

The importance of host country institutions for foreign investors has received relative attention, even though the economic determinants of FDI flows to developing countries have been widely studied. In the 1990s, most studies of the impact of political, economic, and institutional variables on FDI flows focused on cross-country differences. For example, institutional uncertainty and private investment were shown to be negatively correlated (Brunetti and Weder, 1998), intellectual property protection and FDI were positively correlated (Lee and Mansfield, 1996) and corruption had a negative impact on FDI flows (Wei, 2000). However, the results of these cross-sectional studies may represent other unmeasured variables, which would vary across countries but not over time, despite efforts to separate them from other influences. Therefore, the findings of these studies may not apply to variations in political, economic, and institutional variables over time.

The biases associated with these effects may underestimate or overestimate the relationships involved. It is therefore important to complement cross-sectional studies with time series estimates. Singh and Jun (1995) made the first attempt using panel data. They regressed FDI inflows on an aggregate indicator of political risk and several control factors. The political

risk index is statistically significant for their sample of 31 developing countries and the coefficient suggests that countries with higher political risk attract less FDI. Gastanaga et al (1998) also examined the relationship between several institutional factors and foreign investment inflows. They find that better contract enforcement, lower levels of corruption, and reduced risk of nationalization are all associated with higher FDI inflows. However, they acknowledge that their results are not always reliable, presumably due to the relatively small sample size of 22 developing countries.

Several studies have also considered the link between democratic rights and FDI. Harms and Ursprung (2002) conclude that countries that respect democracy are more likely to attract multinational enterprises. Li and Resnick (2003), however, suggest that reverse causality is likely at play. They point out that democratic rights mainly promote the protection of property rights, which in turn increases foreign investment. Apart from this indirect effect, they find that democracy can lead to lower FDI. However, although these studies use pooled time series analysis, not all of them take into account the potential endogeneity of independent variables. Moreover, they often focus their analysis on very specific indicators, such as democratic rights, leaving out a wider range of other institutional variables. It is these limitations that we have attempted to address in our study of the determinants of FDI in the case of Pakistan.

Since its inception, Pakistan has been a third-world country facing many challenges. Domestic finance and investment are insufficient to achieve the desired economic growth. By enabling the modernization of industry and production methods and developing managerial skills, FDI is, therefore, necessary to achieve this growth. Despite this, Pakistan is making little effort to attract more FDI and instead relies on financing from friendly nations, commercial borrowing from foreign banks, or loans from the International Monetary Fund (IMF).

FDI inflows to Pakistan have dropped from $2.598 billion in 2020 to $1.847 billion in 2021. This decline is in the context of a global decline in FDI flows. In 20 years, global flows have declined by 35% to $1 trillion in 2021. Nevertheless, despite this decline, FDI flows to Asia have continued to grow recently, rising from $516 billion in 2019 to $535 billion in 2020, with China and India attracting the largest flows. Thus, in the most recent fiscal year, Pakistan has not been able to take advantage of the Asian orientation of FDI flows.

Nevertheless, the country can hardly expect to improve its balance of payments or stimulate the growth of its industries and services with less than 2 billion dollars of FDI per year. However, due to recent political changes in neighboring Afghanistan and threats to regional political stability following the Taliban takeover of Kabul, foreign investment could be permanently affected, and flows could continue to dry up. Other structural factors also contribute to this situation, such as the lack of regulations encouraging investment, poor policy implementation procedures, and a reluctant attitude of public institutions when dealing with international investors. In our dissertation work, we focus on three important variables: a) the military in politics, b) religious tensions, and c) judicial activism. Below we explain how these three factors make it difficult to attract foreign investors to Pakistan.

1.3.1. Religious Tensions

In Pakistan, religious organizations have considerable influence over specific groups of people whom they can mobilize to achieve their goals, often in extremely violent ways. The use of religion in Pakistani politics is not new, but its impact on the economy is growing. The Islamization of the country began in the 1980s, after the Soviet invasion of Afghanistan. However, in the last 10 to 15 years, attacks and protests against foreign embassies and boycotts of products from certain countries have become very common. An example of this is the recent protests against France, which forced the Pakistani government to cut diplomatic ties with that country and led to the general public boycotting French products.

Religious extremism is one of the major security problems in Pakistan, just as growing radicalization and the use of violence are having a major impact on the country's economy. This situation discourages foreign investors from investing in a country where religious extremist organizations rule.

1.3.2. Law and Order/Judiciary

Pakistan is among the lowest-ranked countries in terms of respect for the rule of law, ranking 130^{e} out of 139 countries surveyed in the World Justice Project's Rule of Law Index 2021 report[2]. With a score of 0.39, with scores ranging from 0 to 1 (1 being the highest level of respect for the law), Pakistan is ranked second to last in South Asia. Only Afghanistan scored lower than Pakistan, and Nepal, Sri Lanka, India, and Bangladesh all surpassed Pakistan in the rule of law category.

The study shows Pakistan's poor performance in the areas of fundamental rights, law and order, security, and enforcement. Pakistan is the second to last country in the region in these categories. Out of a total of six nations, Pakistan ranks fourth in the categories of the criminal justice system, civil justice, transparency of government, and limitations on government power. Pakistan is one of the three least safe countries in the world in terms of law and order, ranking 137^{e} out of a total of 139 countries. Pakistan also ranks 124th, 123rd, 126^{th,} and 123rd in terms of civil justice, regulatory enforcement, fundamental rights, and corruption respectively.

In 2013, the Supreme Court of Pakistan declared the Reko Diq agreement entered into on July 23, 1993, void and contrary to the laws of the land. The ruling comes after the federal government had decided to lease the Reko Diq gold and copper mines in Balochistan's Chagai district to the Tethyan Copper Company (TCC), a Canadian-Chilean consortium of

[2] World Justice Project | Advancing the rule of law worldwide

Barrick Gold and Antofagasta Minerals. Reko Diq is located in the Tethyan Copperbelt, known to host the fifth largest gold and copper deposits in the world.

The Supreme Court's decision is costing the country $6 billion as the International Centre for Settlement of Investment Disputes (ICSID) announced the award of $5.976 billion to Pakistan in the Reko Diq case. The country is already facing a $900 million penalty from ICSID in the Karkey Turkish company's power lease project case, previously terminated on the Supreme Court's orders as well. Thus, the rulings in the ensuing years have confused policymakers and worried international investors.

1.3.3. Military in Politics

Pakistan is a security-oriented state where everything can be seen through a security prism. In an interview, former U.S. Secretary of State Hillary Clinton, when asked about the "deep state," said it was a term coined by political scientists to describe certain countries, such as Pakistan, where the military and intelligence agencies run the country.

"You can be elected but if they don't like you, or if you upset them, you're out. You can be charged, arrested, deported, murdered, or executed," Clinton told the anchor.

Since independence, Pakistan has always been ruled by the military. Whenever a government has been democratically elected, the military has deliberately thrown the country into chaos to weaken the new government in place. A recent example was in 2017 when religious groups supported by the military shut down the capital for 20 days to protest against the so-called blasphemous speeches of the parliament. The circumstances of Pakistan's early years likely play an important role in explaining the military's influence in domestic affairs. However, to function as a state governed by the rule of law, Pakistan must see the removal of the military from power.

6.4 Value Added of the Thesis

This thesis makes several contributions to the literature on the role of institutions in growth and foreign direct investment (FDI). Chapter 2 of the thesis firstly explores how the quality of institutions affects economic growth in a large sample of developed and developing countries. Gani (2011) and various other studies have already focused on the issue of governance and economic growth in developing countries. In particular, the results of these studies have shown that political stability and government effectiveness do have a positive impact on this growth. Our work extends these results to a larger panel of countries than in previous studies, including developed countries. Another contribution of our work is the development of a composite governance indicator based on principal component analysis (PCA) of WGI indicators, including protection of property rights, quality of contract enforcement, and strength of the rule of law. This indicator provides a broader measure of the political, economic, and legal institutions of the countries studied than the specific indicators usually used. Our empirical study also uses the most recent political, economic, and institutional data, The impact of institutions on growth is further explored in this chapter in terms of heterogeneity. The impact of institutions on growth is also explored in this chapter in terms of heterogeneity, as we test whether the identified effect differs between our developed and developing countries, using a fixed-effects GMM model derived from Nadeem et al. (2021).

Chapter 3 of the thesis assesses the influence of institutional quality on foreign direct investment (FDI) flows of South Asian economies. Some studies such as Mengistu and Adhikary (2011), and Anyanwu (2017) have examined the influence of institutions, as well as different measures of conflict, on FDI flows of different countries and regions. Nevertheless, no study to our knowledge focuses on the specificity of South Asian countries. Another contribution of our work can also be seen in the elaboration of a composite governance

indicator using the principal component analysis (PCA) method already used in the previous chapter.

To boost their competitiveness, many countries have undertaken to improve their institutions as a factor for investment and development. It is this issue that we address in the context of Pakistan in Chapter 4 of the thesis. To our knowledge, this is the first in-depth empirical study of the relationship between FDI and governance in this country. For the institutional quality index, we again use principal component analysis (PCA), for the aggregation of our three specific variables, which allows us, unlike other studies, to consider more institutional factors in assessing our relationships.

Chapter 2 -

Nexus between Governance and Economic Growth:

A Panel Data Analysis

Numerous research studies and organizations have recently emphasized the need for effective governance. To increase a nation's competitiveness and improve the quality of life for its citizens, good governance is essential. Therefore, one of the critical areas of research in development is the relationship between governance and economic growth. This study attempts to quantify the role of governance in economic growth with a panel data approach. We employ a system generalized method of moments (GMM) using data from 124 countries categorized into developed and developing countries covering 20 years (1996-2015). The empirical results support the positive relationship between governance quality and real GDP per capita. We constructed a global governance indicator in a principal component analysis framework to achieve these results. Based on this estimator, we found a clear pattern of the beneficial impact of "good governance" on growth by involving GMM-System estimation. The findings of this study appear to show the significance of governance indices for improving the economies of developing countries.

Key Words: Governance, GDP per capita; Panel GMM

JEL CODES : E02 ; F43 ; C07

2.1 Introduction

In earlier decades, researchers have searched for essential economic growth variables. It is observed that most countries have different economic growth trends because of changes in productivity and institutional performance in particular. This study explores the nexus between governance and economic growth. Literature enlightens institutions as "a set of rules and regulations, procedures and ethical & moral behavioral norms, shaped to restrict the actions of individuals to maximize the utility of principals" (North, 1981, pp. 201-202). Historically, the discussion about the effectiveness of governance goes back to at least 400 B.C. Philosopher and advisor of Indian king Kautilya[3] Elaborated in his Indian political treatise called *Arthashastra* that for a fluid and functional society, the king has to embark on and promotes justice and ethics along with a democratic approach by efficiently securing the wealth of the state's people. He further mentioned in the treatise that economic governance is related to political governance (economic governance is the end, whereas political governance is the means), which means governance can be strengthened by both political power and material wealth[4]. Founder of economics, Adam Smith (1775), mentioned during his lecture at Glasgow that governance is a fundamental element of economic growth. He added:

"Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism than peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things."[5].

For the last three decades, governance has been the main agenda of economic development. In 1989, the World Bank used the concept of "Good Governance" for the first time. Since

[3] Kautilya, also famous as Chanakya, was one of India's most famous all-time political economists. According to him, the main force behind the functioning of any political indulgence is economic activity. Being a political thinker, he was the pioneer in visualizing the concept of a 'Nation' for the first time in human history.

[4] http://anujamisra.blogspot.fr/2010/01/kautilyas-arthashastra.html

[5] Adam Smith on the need for "peace, easy taxes, and a tolerable administration of justice (1775). In his lecture, Smith briefly explains what he thought the government should do to boost economic development.

then, a new stream of economics literature has emerged, also known as institutional economics. This highlight strengthening neutral and unbiased institutions that can secure property rights, encouraging the extension of market exchange, investment, and innovation (Zhuang et al., 2014). After the inclusion of governance in post-2015 sustainable development goals[6], the vast significance of governance is widely accepted.

2.1.1 The Concept of Governance

Governance is a widespread concept defined by many scholars, researchers, and policymakers. However, no satisfactory and precise definition of governance has been reported. Kaufmann et al. (2010) state that even though the concept of governance is debated mainly between policymakers and scholars, there is still no strong consensus around a single definition of governance or institutional quality. Ordinarily, how an organization is governed is known as governance. It has different types: economic governance, corporate governance, international governance, national governance, regional governance, and local governance (Dixit, 2009). Governance also tells us the behavior and performance of the government. Governance is mentioned as the different procedures, including social, cultural, historical, and political determinants. A country with a level of good governance is known for the presence of a proper set of institutions (Soriano et al., 2012). Many studies highlighted that good institution are the basis of good governance. Therefore, it directs toward the view that governance issues are the same as institutions.

The working definition of what constitutes good governance has changed over the years. Governance is divided into three main categories: economic, political, and administrative. Economic governance is known as the decision-making process governing a country's economic activities and links with other nations. The establishment of the policies is called political governance, and the administrative governance's job is to implement the policies. In recent decades, governance has gained tremendous significance among policymakers,

[6] https://www.oecd.org/gov/sustainable-development-goals-and-public-governance.htm

politicians, academicians, and international donor agencies like World Bank and IMF. Each of them has developed its definition of governance.

World Bank (1992) refers to governance as a manner in which institutions and public officials attain and exercise power to form public policy and provide public goods & services. One of the outcomes of poor governance is corruption which involves the misuse of public office for self-gain. The Asian Development Bank (1997) considers the soul of governance to be effective development management. The major scopes of governance are management of the public sector, accountability, transparency, information, and the legal framework for development. On the other hand, the United States Agency for International Development (USAID, 2002) defines good governance as a complex system of interaction among structures, traditions, functions, and processes characterized by accountability, transparency, and participation values. U.N. Secretary-General (former) Kofi Annan has pointed out that "good governance is perhaps the single most important factor in eradicating poverty and promoting development" (United Nations, 1998).

According to United Nations Development Program (UNDP, 1997), management and control of the matters of a country at every level with the help of administrative, economic, and political authority is governance because all the institutions are considered responsible for performing their prescribed activities to fulfill the needs of the ordinary person. The Commission of the European Communities (2003) refers to governance as the process, rules, and behavior through which funds are managed, interests are expressed, and societal supremacy works out. Furthermore, the International Monetary Fund (1997) gave more importance to the economic side of governance and focused on enhancing the quality of resources available to the public and making the activities of private zones more efficient. This aim can only be achieved by developing and maintaining a clear and steady economic regulatory system (Sarieddine *et al*., 2010).

All these governance explanations lead us to a single definition of governance, used throughout this study, given by Kaufmann & Kraay, covering all the ingredients of governance. They describe governance as "an authority working out through institutions and customs in a state." This comprehensive definition of governance consists of three parts as[7]

(1) A procedure through which regimes are elected, examined, and substituted; this includes.

- Voice and Accountability
- Stability and lack of violence

(2) Potential of regimes to originate and put into action the prescribed policies effectively,

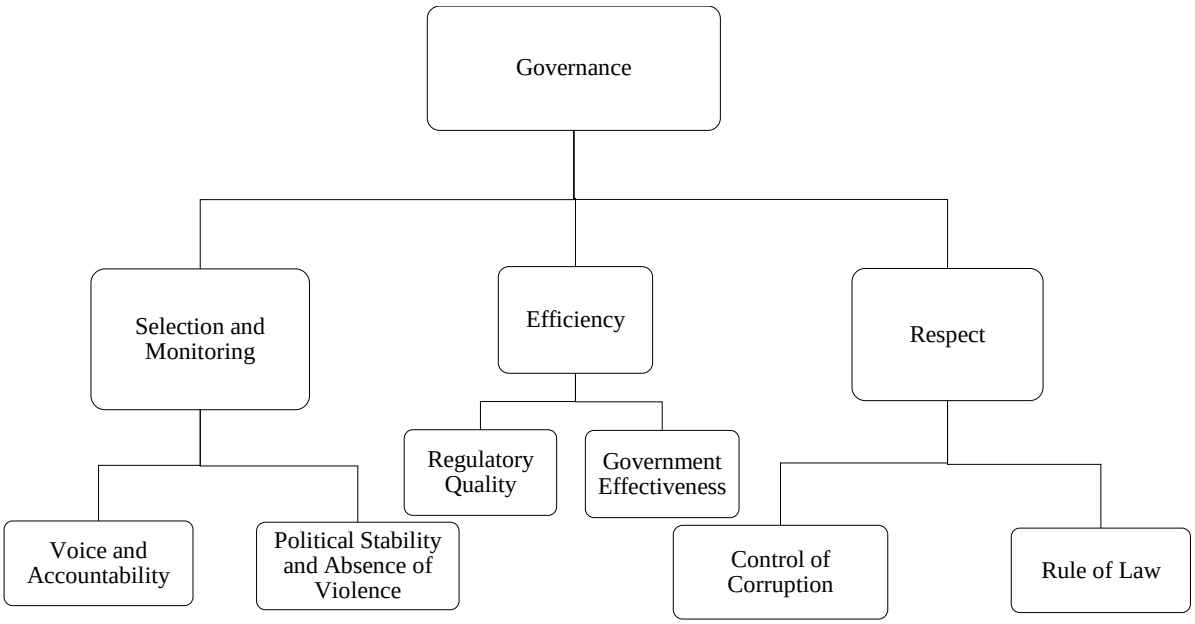
- Regulatory framework
- Government effectiveness

(3) To have a social and economic interface between civilians and the state so that they should have respect for institutions,

- Control of corruption
- Rule of law

The above components of governance can easily be understood with the figure below:

[7] See, for example, Mastruzzi *et al*. 2010



Source: Authors' own conclusions

Figure 2.1 Components of Good Governance

2.1.2 Objectives of the Study

The association between governance and GDP per capita is generally found to be positive, with a high degree of correlation. Similar findings are reported in more rigorous and complex studies on this issue, notably in Kaufmann and Kraay (2002). There is, however, some debate about the direction of causality. Kaufmann and Kraay (2002) show that per capita income and governance quality are strongly correlated across countries. According to them, a substantial positive causal effect runs from better governance to higher per capita income. Moreover, a weak and even negative causal effect is running in the opposite direction of per capita income to governance. Therefore, there are some contradictory signals that we can observe in the literature on the effect of good governance on economic growth, with some authors favoring the positive connection strongly, namely Kaufmann and Kraay (2002) and others, such as

Rodrik (2008) and Kurts and Schrank (2007) arguing that there is no evidence that such a connection exists.

On the other hand, both potential causality directions between governance quality and economic performance support the prior theoretical and empirical literature. Looking first at the effect of governance on economic growth, there are several potential channels through which causality may operate. Professionalization of the bureaucracy provides bureaucrats with predictable, merit-based career paths within the civil service. Thus, creating stability and longer time horizons encourages investment in public infrastructure with long-term payoffs rather than present consumption (Rauch, 1995). The bureaucratic coherence attained through systematic, rule-based decision-making should also increase the effectiveness of major infrastructure projects that involve collaboration between different government agencies (Evans & Rauch, 1999). A stable and trusted bureaucracy can promote long-term investment by private businesses by reducing the perceived risk associated with changing government policies and bureaucratic turnover (Evans & Rauch, 1999). Bureaucratic professionalization reduces opportunities for corruption, encouraging productive investment (Dahlström et al., 2012). From an institutional and policy perspective, laws and regulations that—together with their effective enforcement by an impartial system of governance—support investment and innovation and provide an environment conducive to economic growth (North, 1990).

Contrary to the former, this study seeks to provide a comprehensive governance index and estimate its impact on economic growth. To investigate the impact of institutions on economic growth, we separated developed countries into high and upper-middle-income countries and developing countries into low and lower-middle-income countries. Our study offers three contributions to the literature. First, the results indicate that the effect of institutions on economic growth varies across countries. Secondly, improvement in the quality of governance causes a subsequent increase in the economic growth rate. Third, we construct an institutional quality index to study its impact on economic growth.

The remainder of the study proceeds as follows; Section 2 in this study is about the review of literature, Section 3 is about variable construction, data, and methodology, Section 4 presents the empirical results and discussion, and Section 5 is about the conclusion and policy implications of this study.

2.2 Review of Literature

This section presents a brief analysis of the existing literature on the governance and economic growth relationship. This relationship is a vast discussed area in the governance literature. Economic growth and progress are considered essential instruments to beat the problems of millions of people worldwide, especially those caught up in poverty.

Empirical studies reveal that developing countries face many economic, cultural, political, institutional, and geographical problems. All these factors are becoming a cause of sluggish growth. According to Easterly *et al*. (2006a), weak institutions and poor ability to implement improved policies are the basis of conflict, poor economic performance, and poverty. In developing countries, the democratically elected political regime is often unwilling to reorganize the policies. Despite this, it is clear that there is a significant relationship between political institutions, governance, social solidity, and economic growth (Awan & Mustafa, 2015).

2.2.1 Governance and its Dimensions

The most widely used definition of governance by Kaufmann et al. (2005) defines governance as 'the traditions and institutions through which the authority in a country is home. This takes into account the procedure of selecting, monitoring, and replacing the government (political dimension); the ability of the government to successfully implement comprehensive policies (economic dimension); and the respect by citizens and the state for the institutions that govern economic and social interactions among them (social dimension). The main criticism of this approach is that it can be overly focused on the public perception

of structures and political mechanisms. However, the above definition has been widely used in the empirical literature (Dima (cristae) et al. 2010).

To describe the different dimensions of quality of governance, we follow the structure described by the World Bank's Worldwide Governance Indicators (WGI). This data set provides proxies for different dimensions of quality of governance and has been computed according to the updated methodology of Kaufmann et al. (2010). These proxies relate to (a) the selection, monitoring, and replacement of the government, (b) the formulation and implementation of sound policies; and (c) the respect for institutions. Accordingly, these axes refer to the following variables: (i) government effectiveness; (ii) regulatory quality; (iii) the rule of law; (iv) voice and accountability; (v) political stability and the absence of violence/terrorism; and (vi) the control of corruption. Among these six variables, the first two reflect the quality of a country's policy. The following three variables describe the political and social framework. The last variable, control of corruption, comprised different political, social, and cultural phenomena. However, in the long run, the control of corruption is more closely linked to the effectiveness of public institutions; therefore, it can be regarded as an institutional variable with the quality of law enforcement.

Briefly explaining, the vast array of definitions of governance includes concepts related to (1) the extent to which governments are responsive to citizens by providing them with the core services and coordination mechanisms for efficient economic activities; and (2) the extent to which institutions and processes of government provide the incentives for this responsiveness (Keefer, 2004). The rule of law, transparency, effectiveness, efficiency, consensus orientation, accountability, and other related concepts signify what is thought to be "sound governance."

In light of these definitions, three main implications can be derived: (1) governance is a much broader concept than government, (2) the exercise of governance relies on the overall institutional framework, and (3) governance is a fundamental determinant of development.

The first implication implies that governance transcends the state by taking in the private sector and civil society. The partition of weights among these governance actors defines the country's distinctive governance structure. The state remains the leading governance actor in most developing countries, while its role should be optimally limited to providing the prerequisites for good order and efficient workable arrangements. Second, as defined by North (1990), institutions (i.e., humanly devised formal and informal constraints bounding the perfect neoclassical rationality of agents) do matter and underlie the optimal (i.e., efficient and effective) governance process; thus, the exercise of governance is a mere reflection of formal and informal rules. Third and last is a consensual agreement among economists and practitioners that sound governance is desirable to foster economic development. Withal, what remains somewhat obscure is whether sound governance belongs to the basic amenities of sustainable economic development (Kurtz & Schrank, 2007).

2.2.2 Empirical Literature Review

One of the leading studies in the literature on institutions and their effect on economic performance was written by Acemoglu et al. (2001). The paper shows that differences in economic performance among nations can be attributed to differences in institutions. Acemoglu et al. (2001) found that different colonization strategies have led to different types of institutions that remain today. Colonies with friendly climates and low mortality rates had higher European settlements, and accordingly, more vital institutions were built, which ultimately explains the differences between countries in terms of current performance.

Furthermore, Acemoglu et al. (2005b) conclude that differences in institutions explain differences between countries regarding income and economic development. Within the same lines, Acemoglu and Robinson (2008) show that differences in political institutions can explain differences in economic prosperity among nations. Their paper provides policy recommendations suggesting that reforming the institutions would help alleviate poverty.

Kaufmann and Kraay (2002)[8] investigated the causal relationship between governance and income per capita in Latin America and the Caribbean region. The study accounted for two different classifications of governance. One included the positive impact of good governance on per capita income, and the other showed the weak and negative outcome of per capita income on governance. The study used 175 countries and annual time series data from 2000 to 2001. The Ordinary Least Square method and Index of the Rule of Law have been used for econometric estimation. The study found two results; one is in line with the existing literature that good governance positively affects economic development, and the other shows that a higher income level leads to superior governance. Similarly, Kaufmann et al. (2004) suggested a strong positive correlation between growth and governance. However, the causality from growth to governance was weak and inversely directional.

Dima (cristae) et al. (2010) examined the new empirical evidence on linkages between governance and growth by taking data from 145 countries for the period 2002-2009. The study constructed a global indicator in a principal component analysis framework and tested these indicators' explanatory capacities. Employing GMM estimation, the study concluded with the result that improved public policies, low levels of corruption, the credibility of institutions, and more accountability support sustainable growth even in low-income countries.

Easterly et al. (2006c) argue that weak institutional quality and the incapability of implementing better policies result from social divisions. Social division, in turn, causes poor growth performance, poverty, and unrest in the country. Even good politicians in developing countries are reluctant to reform the policies. Social cohesion plays an essential role in implementing any reforms in the economy. Citizens should trust the government, for short-term losses will result in long-term rewards. The study reveals a solid and direct relationship between social cohesion, political institutions, and economic growth.

[8] Their study provided empirical proof for the nonexistence of a virtuous circle among governance and economic development in the Caribbean and Latin American countries.

Gani (2011) investigated the importance of governance in the economic growth of developing countries. To check the effect of different governance dimensions on growth, the study used panel data analysis for 84 developing economies (low-middle income economies) for 1996-2005. Regression specifications have been used for estimation, and the study's findings showed that political stability and government effectiveness positively impact growth. In contrast, voice and accountability, and corruption are negatively linked with growth. The regulatory quality and the rule of law are statistically insignificantly connected with growth.

Knack and Keefer (1997) suggest that while developing countries had advantages because of low-cost access to advanced technology, these potential advantages were squandered in countries with poor institutional frameworks. Developing countries are falling back rather than catching up, and their deficient institutions can explain this divergence. Using various indicators of institutional governance, including the rule of law and control of corruption, they found that institutions are powerful determinants of the ability of countries to benefit from the 'catch-up' effect.

Utilizing the data from 40 non-industrialized nations, Knack (2002) considered ICRG, initial gross domestic product per capita, average educational achievement, the log of inflation, the year-to-year variability of inflation, M2/GDP, and exports/GDP as significant variables. His empirical analysis shows good governance in total as a precondition for sustained and stable economic growth. Political organization and administrative quality of government was the most crucial element of governance in his study.

The threshold model by Gamber and Scott (2007) used panel data to analyze governance and economic growth in seventy-seven countries during 1961-94. The study estimated the pairs of regressions to address whether the quality of governance equally influences economic growth across countries with different levels of per capita income. The results affirmed that the quality of governance is more crucial for developing countries, whereas education and region are considered more important for the poorest and wealthiest countries.

In their cross-sectional investigation, Robinson and Acemoglu (2012) compare the cities adjacent to the Mexico-United States border. They conclude that the growth performance of cities is determined by the degree of incentive structures and the state-market relationship.

A cross-country and cross-regional regression have been used by Acemoglu et al. (2014), to investigate the correlation between institutions, economic development, and human capital. The study, while emphasizing historically determined differences in human capital and control for the impact of institutions, found that the effect of institutions on development, in the long run, is vigorous. On the other hand, the impact of the estimates of human capital has been diminished. The study reveals that in European colonists, there is no influence of early human capital endowments on institutional development. It has been suggested that for better institutional development path and economic development, there should be improved measures of sub-national institutions.

In economic growth in developing countries, the role of state regulation was explored during 1980-2000 in time series data (Jalilian et al., 2007). It comprises of cross-section regression of 117 counties and a panel regression of 96 counties. GDP per capita as an outcome and trade, inflation, gross capital formation, schooling, government expenditures, and governance indicators as potential predictors were assessed. Their results proposed that a high level of growth in low-income countries can be achieved through proper regulation. The estimated results based on two econometric techniques proposed that to get better results of regulation, the effectiveness, and efficiency of regulatory quality are significant.

Considering institutional instability's impact on growth, Berggren et al. (2012) used the principal component analysis and aggregated the 12 instituting components. The study uses the political risk index[9] from the international country risk guide (ICRG) and constructed the measures of institutional quality and instability. The study shows a significant effect of high-

[9] Political Risk Services (2005) publishes its international Country Risk Guide (ICRG), which contains different indicators of the quality of governance. However, the transparency of such index formation is very low, and such items' methodological value is doubtful. BADUN (2005)

quality institutions on growth by using a panel data analysis of 132 countries from 1984-2004. However, regarding institutional instability, the results showed a positive link in rich countries but a negative one in developing countries.

2.2.3 Literature on Different Developing Regions

Sarieddine *et al*. (2010) examined the sustainability of the cause-and-ef relationship between governance and economic growth of Middle Eastern and North African (MENA) countries. The analysis was conducted for twenty-three countries in the period 1996-2005. The generalized method of Moments has been used for econometric estimation. The results depicted that economic development has a weaker impact on governance, whereas the impact of governance on economic development is more substantial. The three governance indicators, i.e., voice and accountability, government effectiveness, and control of corruption, have an important impact on economic development.

Additionally, Emara and Jhonsa (2014) and Emara (2016) show that despite the low performance of most MENA countries on almost all the six measures of World Bank governance indicators, their estimated levels of per capita income are relatively higher than the rest of the countries in the sample. This study concludes that most of these countries have achieved a relatively high but fragile standard of living that is not based on sound governance.

Along the same lines, Han et al. (2014) analyzed the governance gap and its effect on economic growth. They suggested that improved governance correlates with increased growth and a higher level of income. Among many other results, the study shows that "*The Middle East and North African countries with a surplus in political stability, government effectiveness, and corruption control are observed to grow faster than those with a deficit in these indicators by as much as 2.5 percentage points annually*." The study implies that governance matters to economic growth in the MENA region.

The economic growth of Sub-Saharan Africa (SSA) was also investigated by accounting for the role of governance (Fuje, 2008). The study investigated the poor economic performance of SSA countries using a panel data analysis of 35 countries between 1996 and estimated the classical growth models using difference and system Generalized Methods of Moments (GMM). The study showed that different aspects of governance affect economic growth through different transmission channels, i.e., through an accumulation of factors of production. The results showed no relation between control of corruption and growth, technical efficiency and voice and accountability, political stability, and absence of violence. On the other hand, it has been found that regulatory quality and government effectiveness influenced technical efficiency, which shows that SSA "s economic performance, to some extent, is linked to ineffective institutional governance.

Similarly, Bouzid (2013) analyzed the effects of governance on economic growth in emerging economies, especially in Africa. The study used dynamic panel data analysis for nineteen countries from 1990-2005. For econometric estimation GMM system method has been used to check the country heterogeneity problem. The results concluded a positive correlation between governance and economic growth. It also confirmed the empirical studies that governance positively affects economic growth in the countries where good governance is in practice and vice versa where bad governance is practiced.

Similarly, Fayissa and Nsiah (2013) investigated the role of governance in the economic growth of sub-Saharan African countries. They used panel data for 28 sub-Saharan African economies from 1990-2004. Sub-Saharan African countries' governance impact check has been calculated through quantile regression and fixed-random effect models. Findings revealed a positive relationship between good governance and economic growth in respective countries. Besides, their GDP per capita also differs by conditional distribution.

Hall and Ahmad (2014) revisited the link between economic growth and institutions in developing countries, specifically East Asian, African, and Latin American regions. They

used panel data analysis for 69 developing economies from 1985 to 2008. The study used Generalized Methods of Moments (GMM) and pooled Ordinary Least Square (OLS), and the panel Fixed Effect method was used for robustness tests. System- GMM has been used to counter the country's heterogeneity problems. The findings showed that institutions affect economic growth positively. Security of property rights significantly impacts the economic growth of all developing countries, whereas efficient bureaucracy has not provided evidence for its strong impact on growth.

Pradhan and Sanyal (2011) conducted a study investigating the impact of governance on human development. The panel data analysis of India over the last two decades showed that past human development and good governance determine the present human development in India. It means that good governance is the primary policy variable through which any country can achieve a high level of economic growth and human development. The study also suggested that with the improved quality of institutions and better governance, a country can set its development process to a higher level of growth and human development. However, the absence of such qualities may affect the development process, such as human development and sustainable economic growth in the country.

2.2.4 Is there a Link between Governance and Growth?

One of the most discussed questions about governance is whether good governance benefits economic performance. There has and 2005 been several empirical studies, based on the WGIs that have examined the impact of governance on economic growth; most of which suggest that governance significantly impacts economic growth. For example, Kaufmann et al. (1999) 's study based on the WGIs finds that good governance benefits economic growth. Similarly, Subramanian et al. (2004) study, based on the WGIs, also finds that in democratic countries, regulatory quality has a positive effect on both trade and economic growth. Finally, Soriano et al. (2012), in their panel data analysis – while exploring the relationship between governance, entrepreneurship, and economic growth suggests that four indicators of WGIs

(voice and accountability, government effectiveness, the rule of law, and control of corruption) have positive impacts on economic growth.

The link between economic growth and governance has been questioned by Kurtz and Schrank (2007), who doubted whether such a connection exists and inquired if the data used to measure governance, as well as the methods used to estimate such a relationship, are good enough. Rodrik (2008) argues that many countries are growing rapidly despite poor governance. This renders suspect any general claim of the contrary, and governance is generally not a prerequisite for getting growth going. He also argued that, as a rule, broad governance reform is neither necessary nor sufficient for growth. Therefore, a broad governance agenda rarely deserves priority as part of a growth strategy, except in rare instances where "weak governance is specifically identified as a generic area of binding constraints."

The literature on the effect of good governance on economic growth, therefore, sends contradictory signals, with some authors, notably Kaufmann and Kraay (2002), arguing strongly in favor of the connection and others, such as Rodrik (2008) and Kurts and Schrank (2007) arguing that there is no evidence that such a connection exists. Rodrik (2008) argues that no strong econometric evidence relates standard governance criteria to growth.

2.2.5 Governance and Growth: Direction of Causation

It is debatable whether good governance practices lead to economic growth or whether economic growth leads to good governance. Despite this, several publications associate good governance with growth and the necessary institutions for this. A substantial body of literature considers good governance a precondition for growth (Kaufmann, 2005).

The direction of causation of economic growth and governance is also a matter of debate, with some authors arguing that growth comes first and governance and the accompanying institutions later (e.g., Durlauf et al., 2005; Glaeser et al., 2004). Similarly, Piątek et al. (2013) evaluated the causal relationship between political and economic freedom and

economic growth in transition countries. To check the causal relationship among variables, the Granger Causality test is applied. The findings concluded that in the case of transition countries, economic freedom affects growth positively, and political freedom is impartial to economic growth.

The issue of causality between governance and economic development is crucial and has many implications from an international agency perspective; resolving this issue would assist international organizations in their choices between prioritizing pro-growth or institutional policies.

2.2.6 Conclusion

Empirical work has been done in several countries to check the role of governance in influencing macroeconomic indicators. In recent years, despite disagreement on the concept of governance, it has been considered a precondition for the development and growth of economies. Many studies[10] argue that to achieve rapid economic growth, good governance plays an influential role with the help of better and more helpful provision of resources, including capital and labor. Governance efficiently addresses poverty and inequality and lessens the socioeconomic burden. It is considered an essential source of providing good health, infrastructure, better education, and many other civic services. All these services are provided by the state or the private sector and controlled by the public sector.

2.3. Model, Variables, and Methods

2.3.1 The Model

To investigate the effect of governance on economic growth, we estimated the following dynamic panel data model as used by Zhuang et al. 2014.

$$Y_{i,t} = \alpha_i + \lambda Y_{i,t-1} + \beta G_{i,t} + \gamma Z_{i,t} + \varepsilon_{it} \qquad (4.1)$$

[10] See, for example, Kaufmann et al. (2002) and Chaudhry et al. (2009)

Here, $Y_{i,t}$ stands for income per capita in logarithm, $G_{i,t}$ for the overall governance index, which we constructed by using principal component analysis of six governance indicators; i.e., control of corruption, government effectiveness, voice and accountability, the rule of law, political stability, and absence of violence and regulatory quality (see Annex 3), α_i denotes the unobserved time-invariant specific effects, and $Z_{i,t}$ the control variables: gross fixed capital formation in % of GDP (GFCF,), information communication technology (ICT) (see the aggregate indicator in Annex 3), trade openness as % of GDP (Trade,), domestic credit to the private sector as % of GDP (Credit), and the education index (H).

2.3.2 The Variables

The study used the GDP per capita at purchasing power parity (PPP) to measure economic growth in the constant 2011 international dollar. GDP per capita is obtained by dividing the country's GDP by its total population (Constanza et al., 2009; Vachris & Thomas, 1999), and the PPP is based on a country's price level of a fixed basket of goods and services. PPP recognizes each country's population and living costs (Ignatiuk, 2009; Vachris & Thomas, 1999). For comparison between countries, PPP uses exchange rates of market and goods and services basket among countries as the basis (Ignatiuk, 2009; Vachris & Thomas, 1999).

In the words of Wong et al. (2005)[11], "the most commonly used measure for economic growth is GDP per capita." Different studies, for example (Albassam, 2013; Harttgen, 2012; Van den Bergh, 2009; Wong et al., 2005), have used GDP per capita at purchasing power parity (PPP) for the measure of economic growth. In this study, we will follow these studies and use the GDP per capita at purchasing power parity to measure economic growth.

Governance is a broad concept. It has been defined differently by different authors and different organizations. In some definitions, four dimensions of governance are considered, whereas six dimensions are discussed in some definitions. Different governance characteristics have been dimensioned through numerous cross-country indices (Kaufmann,

[11] See, for example, Wong et al. (2005) p,346, note

1999a, 1999b). The primary role of these governance indicators is their utilization by academic scholars, international organizations, and policymakers to assess the country's affairs and evaluate to what extent governments apply good governance character, for example, public participation in the political process and fighting against corruption.

Kaufmann et al. (1999a) have adopted a methodology based on an unobserved components model. Combining the information from different sources, they defined a group of governance indicators through which the quality of good governance could be measured within the six ‘clusters.' These indicators are constructed on about 30 perception and opinion-based surveys of governance measures from think tanks, investment consulting firms, non-government organizations, and multilateral agencies. The six indicators are known as (i) control of corruption, (ii) government effectiveness, (iii) political stability and absence of violence, (iv) regulatory quality, (v)rule of law, and (vi) voice and accountability. These governance indicators are scaled to have a zero mean and unit standard deviation in each period and are run from about -2.5 (weak) to +2.5 (strong), with higher values referring to good governance.

The first among the six indicators is 'control of corruption, which measures the extent of use of public power exercises for illegal private gains. The second indicator, ' government effectiveness,' measures the quality of public service, bureaucracy, and government transparency. 'Political stability and absence of violence measure the extent of change in government through unconstitutional/violent means. The fourth indicator' regulatory quality (changed from regulatory burden), focuses on the policies and measures the effects of unfriendly-market policies. 'The rule of law includes the citizens' confidence in compliance with the laws and rules of society. The last indicator' voice and accountability, refer to various aspects of the political process, civil liberties, and political rights. Further details on the governance indicators are provided in the data Appendix 1.

We also used certain control variables that affect the linkage between governance and economic growth. We have considered gross fixed capital formation GFCF), information communication technology (ICT), Trade Openness (Trade), domestic credit to the private sector (Credit), and education (H).

Our ICT indicator (ICT), based on Mamun and Wickremasinghe (2014)[12], is processed from the principal component analysis (PCA) of three initial indicators from (i) fixed telephone subscriptions (per 100 people), (ii) mobile cellular subscriptions (per 100 people), and (iii) individuals using the Internet (% of the population) (see results of PCA in Annex 3). Our education index (H), which accounts for human capital, has been calculated by UNDP from the mean and expected years of schooling. For the trade openness (Trade) and gross fixed capital formation indicator, we followed Gani (2011) and calculated it from WDI. Following Omonga (2014) and Hussain (2015), we proxied financial depth by Domestic credit to the private sector, also calculated from WDI. This variable indicates that a country has fewer foreign liabilities, hence boosting economic growth. Financial depth helps growth mainly by improving the efficient allocation of resources.

To examine the impact of institutions on growth, we used the panel data of 124 countries categorized into 46 high-income, 35 upper-middle-income, 16 low-income, and 27 lower-middle-income countries for 20 years, 1996 -2015. We have included high-income and upper-middle-income countries in the category of developed countries, while low-income and lower-middle-income countries are in the category of developing countries. The countries and sample periods have been selected according to the data availability, the observation periods are entirely covered, and there are no cases of missing data.

[12] Dynamic linkages between diffusion of information communication technology and labor productivity in South Asia Mamun and Wickremasinghe (2014)

2.3.3 The Theoretical Framework

A substantial amount of earlier literature on the institutional impacts on growth and income used cross-sectional methods (i.e., Acemoglu et al. (2001), Knack and Keefer (1997), and Rodrik et al. (2004)). Since reverse causation is possible, institutions are assumed to be endogenous to growth and to tackle this problem, the Instrumental variable (IV) technique is widely used. In the earlier studies, numerous instrumental variables are used, for instance, ethnolinguistic fractionalization (Easterly et al., 2006), colonial origins that are the distance from the equator, population speaking English or another European language (Hall & Jones, 1999), and settler's mortality on the European colonial experiments (Acemoglu et al., 2001).

Nonetheless, every time a single cross-sectional estimation is overwhelmed by various shortcomings. In this method, country-specific growth aspects are often ignored, which could correlate with right-hand-side variables, causing omitted variable bias. Due to this, numerous estimation methods, for example, ordinary least squares, will not produce consistent results. In addition, this method only accounts for the long-run relationship among the concerned variables and does not take benefit of the time series variations in data which possibly could lead to an increase in the efficiency of the estimation. Endogenous institutions are hard to be instrumented as consistent instruments, which can be linked only with independent variables and not with the error term and are short of supply.

Using a few variables as instruments for institutions has raised many concerns. According to Glaeser et al. (2004), the instruments, settler's mortality, and indigenous population density in 1500 used by Acemoglu et al. (2001) are not valid since they are highly correlated with per capita income. In their view, when colonizers settled, they brought their know-how, not the institutions. Therefore, the impact of these instruments on economic growth could be through human capital channels.

The panel approach has been used by Islam (1995) to reduce the omitted variable bias. Fixed effect panel estimation is used that eliminates the time-invariant heterogeneity across

members of the panel. However, despite such an advantage, the approach could not control the time-varying country effects, and the presence of endogeneity may exist. Thereafter, generalized methods of moments (GMM) was utilized by Bond et al. (2001) to correct for omitted variable bias, unobserved country heterogeneity, and endogeneity problems in their growth estimation.

Keeping in mind institutional studies, we, however, are aware of quite a few studies that used dynamic panel difference GMM estimation (see, for instance, Dollar and Kraay (2003) and Law and Bany-Ariffin (2008)). Initially, to remove the time-invariant country effects, they took the first difference of all variables and afterward used the lagged level of endogenous explanatory variables for instruments. Lagged dependent variable that could be correlated with the error term, the dependent variable's higher-order lags are considered as an instrument for lagged (one) dependent variable.

Lately, an improved technique has been developed based on dynamic panel analysis GMM. The Generalised Method of Moments-system (GMM-SYS) combines estimation in difference with estimation in level. This improved technique can produce more effective estimators and can tackle the issues in first-difference estimation, for instance, inconsistent results and small sample bias. Our study will use this new method, and we will discuss this method in the next section.

2.3.4 The Generalized Method of Moment (GMM)

The GMM-system methodology was suggested by Blundell and Bond (1998, 2000), Arellano and Bover (1995), and Windmeijer (2005). This methodology is used because some estimators, like fixed and random effects, IV, or standard GMM, may lead to biased results. As the small sample of the panel can create a "downward bias of the calculated asymptotic standard errors" in the two-stage process (Baltagi, 2008, p. 154), we also took into account the "windmeijer correction" for the calculated standard errors. Also, Windmeijer (2005) observes that some of the downward bias that appears in small samples for standard errors is

because of different variations that occurred due to initial weight matrix estimation. For the correction of this bias, there is a possibility to estimate bias-corrected standard error estimates that consider the variation of the preliminary parameter estimates.

As an extension of the IV estimation technique, GMM accounts for biases in estimations that came from the correlation between the explanatory variable and the error term. GMM is more efficient than the IV in the presence of heteroskedasticity, while in the presence of correlation among explanatory variables and the assumption of heteroskedasticity, the GMM estimator is no worse asymptotically than the IV estimator (Baum, Schaffer, & Stillman, 2003). The GMM is helpful in the panel systems as it leads to efficient estimators via accounting for both serial correlation and heteroskedasticity. It solves the problem of clustering (Baum et al., 2003)[13].

There are many advantages of the GMM-SYS as compared to other dynamic or static panel estimation methods. Some of these advantages are,

a) In our study, we are analyzing 124 countries (N) over the period of 20 years (T), and the literature contains many arguments that indicate that the dynamic panel is specifically designed for a condition in which "T" is less than "N" so that to control for dynamic panel bias (Baltagi, 2008; Bond, 2002)

b) In dynamic panel models, the possible endogeneity problem can be addressed more easily than in static and OLS models. The reason is that in such models, all those variables from the regression can be used as valid instrumental variables that are not correlated with the error term (including lagged and differenced variables)

c) The dynamic panel model is capable of recognizing both short and long-run effects (Baltagi, 2008)

The reasons stated above support our decision to use the GMM-system estimator. However, on the other hand, we should remember that the consistency of GMM depends on the validity

[13] Observations on the same individuals in two different periods are correlated, but observations on two different individuals are not.

of the instruments. We have the same instruments for the regression in a different form, but we have to use the lagged values of corresponding variables as regression in levels are different. The appropriate use of such instruments is based on the assumption that no correlation exists between different values of the corresponding variables and country-specific effects.

If we estimate the equation (4.1) with OLS for pooled cross-country time series analysis with small "T" and large "N," it will more likely create biased coefficients, particularly if there is the endogeneity of some independent variable. To solve this, the above model is re-specified to remove the country-specific effects with the use of the first differences of the involved variable,

$$GDP_{i,t} = \alpha_i + \lambda GDP_{i,t-1} + \beta \Delta G_{i,t} + \gamma \Delta Z_{i,t} + \varepsilon_{it} \qquad (4.2)$$

For the second step, we will estimate the equation (4.2) by using the GMM-system method. With this method, equations (4.1) and (4.2) are estimated simultaneously, using lagged levels and lagged differences as instruments. Arellano and Bover (1995) and Bond (1998) justify the presence of lagged levels and differences. They showed that the lagged levels are a poor instrument for first-difference variables, especially when the variables are persistent, like in the case of governance indicators.

As suggested by Arellano and Bond (1991), Arellano and Bover (1995), and Blundell and Bond (1998), two specification tests are used to check the validity of moment conditions. To test the over-identifying restrictions, the Sargan test is calculated, which tests the overall validity of our instruments during the estimation process. To validate the Sargan test, we have to reject the null hypothesis that all the instruments as a group are exogenous. The second test needs the nonexistence of serial correlation in the error term of the difference equation, particularly at the second order (AR2)[14]. In the same way as in the Sargan test, we need to

[14] By construction, the differenced error term is probably serially correlated at the first order, even if the original error is not. While most studies that employ GMM dynamic estimation report the test for first-order serial correlation, some do not.

reject our null hypothesis that the error term is serially uncorrelated. In system estimation specification, we check that the regression residual (error term) of differences has a second-order serial correlation. In our system specification, the first order-serial correlation of different error terms is expected unless the error term in levels form follows a random walk. Differenced residual second-order serial correlation indicates that the error term in levels form is serially correlated with the moving average of order one, i.e., AR (1), and this situation will lead to the use of higher-order lags as instruments.

2.4. Empirical Results and Discussion

2.4.1 Empirical Results for Developed Countries

Table 2.1 reports the empirical results for high-income countries. In columns [1] and [2], we present the results of country-effects and common-time effect models respectively. The country-effects estimator highlights a positive and significant coefficient for the overall governance index. In contrast, the coefficients obtained from the time-effects estimator are low but close in magnitude to the within-group estimators. Both estimators ignore the possible endogeneity of the regressors. The sign of most of the coefficients is as expected, except for the Information Communication Technology (ICT) indicator, which shows a positive but insignificant coefficient. As we have already stated, these estimators do not correct for the likely endogeneity of our control variables and governance index. In column [3], we address the problem of endogeneity by applying the GMM-IV difference estimator to our model. This technique uses lagged levels of explanatory variables as instruments to address the problem of endogeneity. The result shows that the coefficient of the governance index is positive and significant. Also, the tests of over-identification restrictions (Sargan Test) and second-order correlation (AR-2) do not reveal any f misspecification.

The estimation results in column [3] may face the problem of weak instruments, as we have some persistent regressors such as gross fixed capital formation, human capital (education), information communication technology, trade, and domestic credit to the private sector,

among others. The solution to the problem of weak instruments is to use the SYS-GMM estimator, which combines the first-difference model with lagged levels of internal instruments and the original version in levels with lagged differences of internal instruments. Columns [4] and [5] of Table 5.1 reports two different implementations of the SYS-GMM estimator. In column [4], we present the results with internal instruments, which are lagged differences and lagged levels of our explanatory variables. To verify that invalid instruments do not drive our results regarding governance, we drop the internal instruments of the governance indicator in column [5] and replace them with external instruments provided by the quality of infrastructure. This is motivated by the results of Zergawu et al. (2020). They show that the marginal productivity of infrastructure capital, such as road networks and power production infrastructure in the economy, tends to be larger with better institutional quality. Thus, in some regression below, we drop all lags of the governance indicator from the set of instruments and replace them with current and lagged values of this quality of infrastructure variables SYS-GMM estimator with external instruments should help us to allay our concerns with potential endogeneity of governance indicators. For this reason, we are using it as our preferred estimator. In both estimators, i.e., SYS-GMM with internal instruments and external instruments, specification tests are in favour of system estimates if we see their statistical inference. The results in both column [4] and column [5] are in support of the argument that there is conditional convergence.

Table 2.1 High-Income Countries

Dependent Variable: GDP per capita at constant 2012
Sample of 46 countries, 1996-2015 (annual data)
External Instrument : Quality of Infrastructure

Variables/Method	Country-Effects (1)	Time-Effects (2)	GMM (Diff) (3)	GMM (SYS) With Internal Instruments (4)	GMM (SYS) With External Instruments (5)
L1.GDP per capita	-----	------	0.9538	0.9309	0.8105
			(0.037) ***	(0.031) ***	(0.075) ***
Gross Fixed Capital Formation	0.5464	0.5942	0.1533	0.1251	0.5851
	(0.230) ***	(0.251) **	(0.074) **	(0.088) *	(0.406) *
Information Communication Technology	0.0113	0.0397	0.0091	0.0154	0.0260
	(0.020)	(0.016) **	(0.003) **	(0.009) *	(0.015) *
Education Index	0.2168	0.1666	0.0739	0.0392	0.0545
	(0.077) ***	(0.082) **	0.025) ***	(0.020) *	(0.048) ***
Trade (% of GDP)	0.2449	0.2223	0.0088	0.0439	0.1070
	(0.068) ***	(0.072) ***	(0.025)	(0.018) **	(0.046) **
Domestic Credit to Private Sector	0.4848	0.3681	0.5284	0.0314	0.2367
	(0.112) ***	(0.261) *	(0.237) **	(0.073)	(0.134) *
Governance	0.5432	0.6320	0.3346	0.3347	0.4504
	(0.266) **	(0.221) ***	(0.111) ***	(0.096) ***	(0.111) ***
Constant	4.1213	5.5846	0.5708	0.2096	-0.5214
	(0.688) ***	(1.372) ***	(0.281) *	(0.300)	(0.365) *
R^2	0.6821	0.7050	---	---	---
No. of Observations	920	920	882	856	856
Significance Test (p-value)	----	----			
-Sargan Test	----	----	0.51	7.53	4.04
			(0.069)	(0.577)	(0.753)
-Second Order Correlation	----	----	-0.54	-1.51	-1.01
			(0.588)	(0.130)	(0.313)

Note: The coefficients are rounded to four decimals. Numbers in parenthesis are corrected standard errors. The SYS-GMM estimation results presented in columns [4] and [5] are for internal and external instruments, respectively. In column [4], we use lagged level and lagged difference of our explanatory variables as internal instruments. In column [5], for the governance instrument, we use actual, lagged levels, and lagged differences in the quality of infrastructure as our external instrument. *** denotes significance level with p<0.01, ** denotes significance level with p<0.05, and *denotes significance level with p<0.10.

In column [5] of Table 2.1, the result shows that the coefficient of the governance index is also positive and significant. Aggregating data might have some ecological fallacy, and if it is there, then it leads to false conclusions. However, focusing on the institutional determinants of economic growth' our study found that ecological fallacy did not pose any threat to our results because the aggregate and individual measures are highly correlated. Moreover, the

validity of using aggregate institutional measures was supported by many empirical studies (e.g., Hussain and Haque, 2016). Fischer (2010) argues that any aggregate measure is more robust to national differences in terms of economy and culture. In addition, we use both aggregation and dispersion techniques for institutional indices to avoid any misinterpretation. Our result shows that the governance index is significant at a 1% level, and a one percent change in the governance index would change the GDP per capita growth by 0.45 percentage points, and this effect is positive. All the control variables in column [5] are positive and significant. The coefficient of gross fixed capital formation and information communication technology are positive and statistically significant at 5%. The education index is positive and has a significance level of 1%. Trade coefficients are also positive and have a 5% level of significance. The coefficient of domestic credit to the private sector is also positive and significant at 10%.

Table 2.2 reports the empirical results for upper-middle-income countries. In column [5], all the control variables are significant and maintain their expected signs. The coefficient of gross fixed capital formation is positive and statistically significant at 10%. The coefficient of information communication technology is positive and statistically significant at 5%. The education index and trade coefficients are positive and have a 1% level of significance. The coefficient of domestic credit to the private sector is also positive and significant at 5%. The result shows that the governance index in upper-middle-income countries is positive and significant at a 1% level, and a one percent change in the governance index would change the GDP per capita growth by 0.42 percentage points.

Table 2.2 Upper-Middle-Income Countries

Dependent Variable: GDP per capita at constant 2012
Sample of 35 countries, 1996-2015 (annual data)
External Instrument : Quality of Infrastructure

Variables/Method	Country-Effects (1)	Time-Effects (2)	GMM (Diff) (3)	GMM (SYS) With Internal Instruments (4)	GMM (SYS) With External Instruments (5)
L1.GDP per capita	-----	------	0.8531	0.8319	0.7817
			(0.139) ***	(0.137) ***	(0.179) ***
Gross Fixed Capital Formation	0.4361	0.3841	0.2537	0.2252	0.2880
	(0.139) ***	(0.151) **	(0.094) **	(0.180) *	(0.206) *
Information Communication Technology	0.1113	0.1398	0.1910	0.1114	0.2260
	(0.070) *	(0.006) ***	(0.132) *	(0.072) *	(0.095) **
Education Index	0.2144	0.1834	0.1338	0.0912	0.1595
	(0.081) ***	(0.072) **	(0.019) ***	(0.071)	(0.041) ***
Trade (% of GDP)	0.2618	0.2320	0.1878	0.1433	0.1775
	(0.073) ***	(0.062) ***	(0.025) ***	(0.058) **	(0.016) ***
Domestic Credit to Private Sector	0.4107	0.3511	0.2284	0.1717	0.2169
	(0.102) ***	(0.201) *	(0.237)	(0.093) **	(0.110) **
Governance	0.3432	0.3720	0.2346	0.3344	0.4284
	(0.176) **	(0.221) *	(0.191)	(0.206) *	(0.136) ***
Constant	2.1214	1.1847	0.3608	0.2963	-0.6214
	(0.678) ***	(0.372) ***	(0.251) *	(0.281)	(0.215) **
R^2	0.5227	0.8057	---	---	---
No. of Observations	700	700	632	653	648
Significance Test (p-value)	----	----			
-Sargan Test	----	----	0.57	4.73	5.04
			(0.079)	(0.279)	(0.851)
-Second Order Correlation	----	----	-0.64	-1.11	-1.21
			(0.617)	(0.111)	(0.214)

Note: The coefficients are rounded to four decimals. Numbers in parenthesis are corrected standard errors. The SYS-GMM estimation results presented in columns [4] and [5] are for internal and external instruments, respectively. In column [4], we use lagged level and lagged difference of our explanatory variables as internal instruments. In column [5], for governance instruments, we use actual, lagged levels and lagged differences in quality of infrastructure as our external instruments. *** denotes significance level with p<0.01, ** denotes significance level with p<0.05, and *denotes significance level with p<0.10.

It can be seen that the diagnostic tests in Table 2.2 lend support to the choice of instruments and specification of the model. The most important thing here is that the sign and statistical significance of the coefficients of our variables of interest, such as the governance index and their interaction, are consistent across the different estimates, as well as positive and significant.

2.4.2 Empirical Results for Developing Countries

Tables 2.3 and 2.4 reports the empirical results for lower-middle and low-income countries, respectively. As said before, we are using the results from SYS-GMM with an external instrument for our final interpretation. In this study, control variables represent other standard growth determinants besides governance. All of the control variables in column [5] of lower-middle-income countries are positive with different levels of significance (2.3). Gross fixed capital formation and trade openness are significant at a 10% level of significance. In contrast, information communication technology shows significance at 5%. The education and domestic credit to the private sector show a 1% level of significance. The result from the governance index shows a positive sign in lower-middle-income countries and has a significance level of 1%. If there is a one percent change in the governance index, the GDP per capita growth will be changed by 0.59 percentage points. The Sargan and autocorrelation tests support the quality of the models that have been estimated with the GMM-System procedure.

Table 2.3 Lower-Middle-Income Countries

Dependent Variable: GDP per capita at constant 2012
Sample of 27 countries, 1996-2015 (annual data)
External Instrument : Quality of Infrastructure

Variables/Method	**Country-Effects (1)**	**Time-Effects (2)**	**GMM (Diff) (3)**	**GMM (SYS) With Internal Instruments (4)**	**GMM (SYS) With External Instruments (5)**
L1.GDP per capita	-----	------	0.4713	0.4419	0.4184
			(0.260) **	(0.123) ***	(0.276) *
Gross Fixed Capital Formation	0.5178	0.4963	0.1502	0.1557	0.1592
	(0.142) ***	(0.325) *	(0.049) **	(0.073) *	(0.0504) *
Information Communication Technology	0.0171	0.0240	0.0641	0.0159	0.0120
	(0.017)	(0.021)	(0.025) **	(0.004) *	(0.003) **
Education Index	0.2560	0.2671	0.0920	0.0617	0.0683
	(0.018) ***	(0.019) ***	0.010) ***	(0.036) *	(0.012) ***
Trade (% of GDP)	0.3903	0.3763	0.0043	0.0272	0.0364
	(0.123) ***	(0.077) ***	(0.032)	(0.012) *	(0.020) *
Domestic Credit to Private Sector	0.2460	0.3590	0.2795	0.1219	0.1790
	(0.315)	(0.334)	(0.189) **	(0.080) *	(0.040) ***
Governance	0.6545	0.6091	0.5343	0.4640	0.5974
	(0.274) **	(0.201) ***	(0.176) ***	(0.153) **	(0.177) ***
Constant	4.1155	4.1067	0.1732	0.3804	0.995
	(0.678) ***	(0.614) ***	(0.057) *	(0.225) *	(0.328) ***
R^2	0.8496	0.8441	---	---	---
No. of Observations	540	540	476	481	481
Significance Test (p-value)	----	----			
-Sargan Test	----	----	0.258	3.96	2.816
			(0.043)	(0.160)	(0.136)
-Second Order Correlation	----	----	-0.49	-1.22	-1.30
			(0.323)	(0.2013)	(0.214)

Note: The coefficients are rounded to four decimals. Numbers in parenthesis are corrected standard errors. The SYS-GMM estimation results presented in columns [4] and [5] are for internal and external instruments, respectively. In column [4], we use lagged level and lagged difference of our explanatory variables as internal instruments. In column [5], for governance instruments. We use actual, lagged levels and lagged differences in the quality of infrastructure as our external instruments. *** denotes significance level with p<0.01, ** denotes significance level with p<0.05, and *denotes significance level with p<0.10.

Table 2.4 reports the GMM-System estimates of the model that incorporate the quality of governance indicators and macroeconomic control variables for low-income countries. All the indicators appear to be related to GDP per capita in a positive and statistically significant manner. However, all the control variables in column [5] have a different level of significance as compared to the lower-middle-income countries. Gross fixed capital formation is significant at 1%. Information communication technology and education index have a 10% level of significance. At the same time, trade openness and domestic credit to the private sector are significant at 5%. The governance index result shows a positive sign in lower-income countries and has a significance level of 1%. This implies that a one percent change in the governance index would change the GDP per capita growth by 0.51 percentage points. The Sargan and autocorrelation tests support the quality of the models that have been estimated with the GMM-System procedure.

Table 2.4 Low-Income Countries

Dependent Variable: GDP per capita at constant 2012
Sample of 16 countries, 1996-2015 (annual data)
External Instrument : Quality of Infrastructure

Variables/Method	Country-Effects (1)	Time-Effects (2)	GMM (Diff) (3)	GMM (SYS) With Internal Instruments (4)	GMM (SYS) With External Instruments (5)
L1.GDP per capita	-----	------	0.4973	0.4625	0.3364
			(0.082) ***	(0.076) ***	(0.055) ***
Gross Fixed Capital Formation	0.5468	0.5378	0.1768	0.1257	0.1739
	(0.392) *	(0.3765) *	(0.029) ***	(0.024) ***	(0.028) ***
Information Communication Technology	0.0169	0.0234	0.0593	0.0151	0.0128
	(0.005) **	(0.007) **	(0.019) **	(0.004) *	(0.004) *
Education Index	0.3951	0.3479	0.0604	0.0611	0.0619
	(0.065) ***	(0.157) **	(0.093)	(0.010) ***	(0.034) *
Trade (% of GDP)	0.2805	0.2861	0.0079	0.0261	0.0352
	(0.216) *	(0.177) *	(0.020)	(0.008) **	(0.011) **
Domestic Credit to Private Sector	0.1897	0.2174	0.2399	0.0234	0.2180
	(0.062) ***	(0.174) *	(0.197)	(0.077)	(0.072) **
Governance	0.6048	0.6067	0.4254	0.4007	0.5162
	(0.199) **	(0.200) ***	(0.301) *	(0.232) *	(0.170) ***
Constant	4.1095	4.1068	0.1694	0.3476	0.4876
	(0.671) ***	(0.609) ***	(0.056) **	(0.114) **	(0.290) *
R^2	0.8348	0.8814	---	---	---
No. of Observations	320	320	263	274	274
Significance Test (p-value)	----	----			
-Sargan Test	----	----	0.346	4.51	2.017
			(0.014)	(0.447)	(0.332)
-Second Order Correlation	----	----	-0.34	1.47	-1.19
			(0.211)	(0.485)	(0.392)

Note: The coefficients are rounded to four decimals. Numbers in parenthesis are corrected standard errors. The SYS-GMM estimation results presented in columns [4] and [5] are for internal and external instruments, respectively. In column [4], we use lagged level and lagged difference of our explanatory variables as internal instruments. In column [5], for governance instruments. We use actual, lagged levels and lagged differences in quality of infrastructure (why trade openness added? To be explained) as our external instruments. *** denotes significance level with p<0.01, ** denotes significance level with p<0.05, and *denotes significance level with p<0.10.

In summary, although we report the results of other specifications, the detailed discussion of the results is based on the system GMM estimates. The results, specifically from the system GMM estimation, support the analysis in assessing the effect of governance on economic growth for developed and developing countries throughout the study. Our results confirm the finding of Acemoglu et al. (2001, 2005b, 2008), Dima (cristae) et al. (2010) Gani. (2011),

Knack and Keefer (1997), Rodrik et al. (2004), Sarieddine et al. (2010), and Zhuang et al. (2014). The sign and the statistical significance of the coefficients of the governance indicator are in line with the results from previous studies.

One of the critical findings of our estimation is the difference in the magnitude of the governance coefficient in developed and developing countries. i-e, a one percent change in the governance index would change the GDP per capita growth by 0.45 and 0.42 percentage points in high-income and upper-middle-income countries, respectively. Whereas in lower-middle-income and low-income countries, it would change the GDP per capita growth by 0.59 and 0.51 percentage points, respectively. Our explanation for this difference is that the growth potential in developing countries is more than in developed countries. Therefore, an improvement in governance will have more of an impact on growth in developing countries. However, these results contradict Siddiqui & Ahmed (2020), who, in their study, show that when everything else remains the same, institutions would impact economic growth more in high-income countries as compared to developing countries. According to their study, in the long run, high-income countries' growth is comparatively more because of better institutions.

As for the empirical performance of system GMM estimation in this study, it is reasonably satisfactorily robust, particularly the estimation for the general sample (column 5). The test for second-order serial correlation in the residuals AR (2) shows that the null hypothesis of no second-order serial correlation is overwhelmingly rejected in all estimations. The test of the validity of the instruments (using the Sargan test of over-identifying restrictions) indicates that we fail to reject the null of appropriate instruments in all models. This suggests that all models have valid instrumentation.

For the control variables, we hypothesized that gross fixed capital formation (GFCF), information communication technology (ICT), domestic credit to the private sector (Credit), trade openness (Trade), and education (H) should have a positive effect on economic growth. The results support our expectations.

The coefficient of education is positive and statistically significant in all four income groups. This result is consistent with the concept that human capital positively affects economic growth (see, for instance, Barro & Lee, 1997; Mankiw et al., 1992). The positive and significant coefficient of our information communication technology (ICT) and gross fixed capital formation (GFCF) variable are consistent with the findings of Mamun et al. (2017). The magnitude of the ICT coefficient shows that this positive and significant effect is stronger in developed countries than in developing countries.

The coefficient of openness is positive and statistically significant in all the income groups. The effects of openness on economic growth represent one of the most controversial topics in the growth literature. The literature generally shows that openness positively impacts growth. However, Rodrik et al. (2002) found that once institutions are controlled, openness to trade is almost always insignificant. Furthermore, it can be argued that the positive effects of openness on economic growth are predominantly in the long run. However, in the short run, there can appear some negative external shocks (Dima (cristae) et al., 2010).

2.5. Conclusion and Policy Implications

2.5.1 Conclusion

The objective of the study was to find out the impact of quality of governance on real GDP per capita by controlling the effects of gross fixed capital formation, information communication technology, education, trade openness as a percentage of GDP, and domestic credit to the private sector in developed and developing countries. For this motive, we have used data of 124 countries from 1996-2015. We have categorized our sample of countries into developed and developing countries and then further subcategorized the developed countries into high and upper-middle-income countries and developing countries into lower-middle and low-income countries. We created the global indicator of governance using PCA and tested the explanatory capacities of that indicator on GDP per capita. To estimate the

relationship between the variables, the panel GMM system approach has been used to address the endogeneity problem in the governance index and other variables.

The outcome of the panel GMM shows that the governance index has a positive and significant impact on GDP per capita for all groups of countries. This result confirms the findings of several authors in the literature, i-e, Acemoglu et al. (2001, 2005b, 2008), Dima (cristae) et al. (2010) Gani. (2011), Knack and Keefer (1997), Rodrik et al. (2004), Sarieddine et al. (2010), and Zhuang et al. (2014). Our results show that the magnitude of our governance index is larger for developing countries than for developed countries. It means that governance plays a vital role in the long-run growth process of the countries, the developing ones in particular. This outcome suggests that there should be a focus on improving the quality of governance as it plays a vital role in enhancing the GDP growth of developing countries particularly. Our control variables, gross fixed capital formation, information communication technology, education, trade openness, and domestic credit to the private sector, positively and significantly impact GDP per capita in both developed and developing countries. However, the magnitudes of the coefficients are larger for developed countries than for developing countries.

2.5.2 Policy Implications

One of the main policy implications we can infer from our conclusions is that improving institutions is critical for attaining sustainable economic growth in developing countries. Such institutions cannot effectively operate without good governance. Such implication urges the policymakers who want to improve the performance of economic growth in their countries, to emphasize the quality of governance in their institutions, the so-called "quality of institutional governance." In particular, our study suggests that governments in developing countries can significantly promote GDP per capita by introducing appropriate institutional reforms and macroeconomic policies.

The present study recommends that low-income countries should opt for better institutional policies and structures. Bringing improvements in voice and accountability, the rule of law, and the regulatory environment, and reducing the levels of corruption. Once the quality of governance improves, it will attract more foreign investments, aid, and financial stability, which will enhance the overall long-term development and economic growth. Middle and high-income countries can improve their quality of governance by having more participation from citizens and government accountability. Better governance can not only promote human rights and protection of civil liberties but is highly correlated with development and, in turn, improves living standards. Many countries in recent times have improved their quality of governance, but there is still a lot to be done. Our study also suggests that institutions should not be ignored in any properly specified model of economic growth in future research. Therefore, future researchers in this field should model a well-specified "institutional production function" in which all the essential inputs are identified and accounted for. Furthermore, this should authorize them to explore interactions between the governance clusters and mention possible substitutability and complementarity patterns among pairs of these institutional indicators. Another possible extension could be to investigate which institutional governance characteristic is more important and relevant to which region of the world, especially which factors better explain the economic growth performance of developing countries. Our next step in this research will focus on South Asian (SAARC) countries and include more control variables in the model. By doing this, we hope that we will be able to get a better outcome on the relationship between governance and growth in the South Asian region.

2.6 Appendices of Chapter 2

2.6.1 Appendix 1

Table 2.A.1. 1 List of variables and their Sources

Variable	Definition	Source
GDP per capita	GDP per capita is based on purchasing power parity (PPP). PPP GDP is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for the depreciation of fabricated assets or depletion and degradation of natural resources. Data are in constant 2011 international dollars.	World Bank (WDI)
Trade (% of GDP)	Trade is the sum of exports and imports of goods and services measured as a share of the gross domestic product.	World Bank (WDI)
Fixed telephone subscriptions (per 100 people)	Fixed telephone subscriptions refer to the sum of an active number of analogue fixed telephone lines, voice-over-IP (VoIP) subscriptions, fixed wireless local loop (WLL) subscriptions, ISDN voice-channel equivalents, and fixed public payphones.	World Bank (WDI)
Mobile cellular subscriptions (per 100 people)	Mobile cellular telephone subscriptions are subscriptions to a public mobile telephone service that provides access to the PSTN using cellular technology. The indicator includes (and is split into) the number of post-paid subscriptions and the number of active prepaid accounts (i.e., that have been used during the last three months). The indicator applies to all mobile cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging, and telemetry services.	World Bank (WDI)

Individuals using the Internet (% of the population)	Internet users are individuals who have used the Internet (from any location) in the last 3 months. The Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital T.V., etc.	World Bank (WDI)
Education Index	The index has been Calculated using Mean Years of Schooling and Expected Years of Schooling.	UNDP
Gross fixed capital formation (% of GDP) ***GFCF***	Gross fixed capital formation (formerly gross domestic fixed investment) includes land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. According to the 1993 SNA, net acquisitions of valuables are also considered capital formation.	World Bank (WDI)
Domestic credit to the private sector by banks (% of GDP) ***DCTPS***	Domestic credit to the private sector by banks refers to financial resources provided to the private sector by other depository corporations (deposit-taking corporations except for central banks), such as through loans, purchases of nonequity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries, these claims include credit to public enterprises.	World Bank (WDI)
Voice and Accountability (V.A.)	This indicator of governance measures the level to which the citizens of the country can contribute in selecting their representatives/government, as well as freedom of expression and association and free media. Within this indicator, several other indicators measure different features of civil liberties, political processes, and rights.	World Bank (WGI)
Political Sability and Absence of Volence (P.S.)	This indicator measures the perceptions of the likelihood of political instability in which governments will be destabilized or overthrown by unconditional or violent means, including politically motivated violence and terrorism.	World Bank (WGI)

Government Effectiveness (G.E.)	This indicator captures the perceptions of the quality of public services, the quality of civil services, the quality of policy formulation and implementation, the degree of its independence from political pressure, and the credibility of the government's commitment to such policies.	World Bank (WGI)
Regulatory Quality (R.Q.)	This indicator captures the perceptions of the government's capability to formulate and implement sound policies and regulations that permit and promote private sector development.	World Bank (WGI)
Rule of Law (R.L.)	The rule of law measures the perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular, the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. It also requires complete protection of human rights, particularly those of minorities.	World Bank (WGI)
Control of Corruption (CC)	This indicator captures the perceptions of the degree to which public power is exercised for private gain, including petty and grand forms of corruption and the "capture" of the state by elites and private interests.	World Bank (WGI)

Table 2. A.1.1 Descriptive Statistics

High-Income Countries

Variable Name	Obs.	Mean	Std. Dev.	Min	Max
GDP per capita	920	10.396	0.4797	9.0566	11.5658
Gross fixed capital formation	920	22.6088	4.7117	10.4653	43.6198
Information & communication technology Index	920	-1.1729	1.3416	-2.5688	2.5977
Education	920	0.7784	0.1078	0.2475	0.9925
Trade as a percentage of GDP	920	98.528	54.0589	10.3489	410.1716
Domestic credit to private sector as a percentage of GDP	920	83.5099	43.3042	0.1858	312.1179
Governance Index	920	3.9019	2.1794	-5.5805	3.468

Table 2. A.1.2: Correlation Matrix

High-Income Countries

Variable Name	(1)	(2)	(3)	(4)	(5)	(6)
1) Control of Corruption	1.000					
2) Government Effectiveness	0.912	1.000				
3) Political Stability	0.633	0.635	1.000			
4) Regulatory Quality	0.808	0.877	0.576	1.000		
5) Rule of Law	0.929	0.928	0.643	0.863	1.000	
6) Voice and Accountability	0.651	0.726	0.539	0.718	0.703	1.000

Upper-Middle-Income Countries

Table 2. A.1.3 Descriptive Statistics

Variable Name	Obs.	Mean	Std. Dev.	Min	Max
GDP per capita	700	9.2889	0.4549	7.7564	10.2966
Gross fixed capital formation	700	24.5801	7.6502	5.3853	70.6601
Information & communication technology Index	700	8.3831	1.3968	-1.9874	4.0063
Education	700	0.6203	0.1033	0.2645	0.843
Trade as a percentage of GDP	700	78.4508	37.301	15.6356	220.4073
Domestic credit to private sector as a percentage of GDP	700	36.2724	30.4218	0.0008	166.5041
Governance Index	700	2.3649	2.0036	-5.9252	5.2282

Table 2. A.1.4: Correlation Matrix

Upper-Middle-Income Countries

Variable Name	(1)	(2)	(3)	(4)	(5)	(6)
1) Control of Corruption	1.000					
2) Government Effectiveness	0.796	1.000				
3) Political Stability	0.487	0.352	1.000			
4) Regulatory Quality	0.639	0.757	0.290	1.000		
5) Rule of Law	0.857	0.826	0.492	0.718	1.000	
6) Voice and Accountability	0.570	0.511	0.370	0.632	0.516	1.000

Table 2. A.1.5: Descriptive Statistics

Lower-Middle-Income Countries

Variable Name	Obs.	Mean	Std. Dev.	Min	Max
GDP per capita	540	8.2849	0.4709	7.1025	9.3424
Gross fixed capital formation	540	21.1468	6.7694	2.0004	48.4123
Information & communication technology Index	540	-6.1251	1.4511	-1.4011	5.7548
Education	540	0.4718	0.1376	0.1015	0.8239
Trade as a percentage of GDP	540	79.772	34.6376	17.8586	178.9938
Domestic credit to private sector as a percentage of GDP	540	29.3482	19.2255	1.3839	114.7235
Governance Index	540	-4.7511	2.0446	-4.8567	57,557

Table 2. A.1.6: Correlation Matrix

Lower-Middle-Income Countries

Variable Name	(1)	(2)	(3)	(4)	(5)	(6)
1) Control of Corruption	1.000					
2) Government Effectiveness	0.822	1.000				
3) Political Stability	0.539	0.456	1.000			
4) Regulatory Quality	0.707	0.769	0.477	1.000		
5) Rule of Law	0.841	0.838	0.511	0.756	1.000	
6) Voice and Accountability	0.503	0.541	0.376	0.671	0.567	1.000

Table 2. A.1.7: Descriptive Statistics

Low-Income Countries

Variable Name	Obs.	Mean	Std. Dev.	Min	Max
GDP per capita	320	7.1285	0.4524	6.1299	8.4071
Gross fixed capital formation	320	18.8086	8.7648	-2.4244	43.0513
Information & communication technology Index	320	2.9571	1.4159	-1.2233	6.1551
Education	320	0.2987	0.1058	0.0747	0.4815
Trade as a percentage of GDP	320	58.2098	18.0223	25.0419	125.0334
Domestic credit to private sector as a percentage of GDP	320	10.0991	6.6358	0.4104	37.5174
Governance Index	320	-2.5711	2.0689	-7.5527	3.5107

Table 2. A.1.8: Correlation Matrix

Low-Income Countries

Variable Name	(1)	(2)	(3)	(4)	(5)	(6)
1) Control of Corruption	1.000					
2) Government Effectiveness	0.695	1.000				
3) Political Stability	0.609	0.481	1.000			
4) Regulatory Quality	0.647	0.776	0.553	1.000		
5) Rule of Law	0.687	0.784	0.699	0.762	1.000	
6) Voice and Accountability	0.590	0.579	0.679	0.616	0.657	1.000

2.6.2 Appendix 2

Developed Countries

Table 2. A.2.1: List of Developed Countries

High-Income Countries				Upper-Middle-Income Countries			
1	Australia	24	Latvia	1	Albania	24	Malaysia
2	Austria	25	Lithuania	2	Algeria	25	Mexico
3	Bahamas	26	Luxembourg	3	Argentina	26	Namibia
4	Bahrain	27	Malta	4	Armenia	27	Paraguay
5	Belgium	28	Netherlands	5	Azerbaijan	28	Peru
6	Brunei	29	New Zealand	6	Belarus	29	Romania
7	Canada	30	Norway	7	Botswana	30	Russia
8	Chile	31	Oman	8	Brazil	31	Sri Lanka
9	Croatia	32	Panama	9	Bulgaria	32	Suriname
10	Cyprus	33	Poland	10	China	33	Thailand
11	Czech Republic	34	Portugal	11	Colombia	34	Turkey
12	Denmark	35	Saudi Arabia	12	Costa Rica	35	Venezuela
13	Estonia	36	Slovakia	13	Dominican Republic		
14	Finland	37	Slovenia	14	Ecuador		
15	France	38	South Korea	15	Gabon		
16	Germany	39	Spain	16	Guatemala		
17	Greece	40	Sweden	17	Guyana		
18	Hungary	41	Switzerland	18	Iran		
19	Iceland	42	Trinidad & Tobago	19	Jamaica		
20	Ireland	43	UAE	20	Jordan		
21	Italy	45	United States	21	Kazakhstan		
22	Japan	46	Uruguay	22	Lebanon		
23	Kuwait			23	Libya		

Developing Countries

Table 2. A.2.2 List of Developing Countries

Low-Income Countries		Lower-Middle-Income Countries			
1	Burkina Faso	1	Angola	17	Nicaragua
2	Congo, DR	2	Bangladesh	18	Nigeria
3	Ethiopia	3	Bolivia	19	Pakistan
4	The Gambia	4	Cameroon	20	Papua New Guinea
5	Guinea	5	Congo	21	Philippines
6	Guinea-Bissau	6	Cote d'Ivoire	22	Senegal
7	Madagascar	7	Egypt	23	Sudan
8	Malawi	8	El Salvador	24	Tunisia
9	Mali	9	Ghana	25	Ukraine
10	Mozambique	10	Honduras	26	Vietnam
11	Niger	11	India	27	Zimbabwe
12	Sierra Leone	12	Indonesia		
13	Tanzania	13	Kenya		
14	Togo	14	Moldova		
15	Uganda	15	Mongolia		
16	Yemen	16	Morocco		

2.6.3 Appendix 3

Aggregate Governance Indicator

Principal Components/ Correlation

Table 2. A.3.1: Principal Component Analysis

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	5.2687	4.9532	0.8781	0.8781
Comp2	0.3156	0.0806	0.0526	0.9307
Comp3	0.2349	0.1326	0.0392	0.9699
Comp4	0.1024	0.0610	0.0171	0.9869
Comp5	0.0414	0.0045	0.0069	0.9938
Comp6	0.0369		0.0062	1.000

Principal Components (eigenvectors)

Variable	Comp1	Comp2	Comp3	Comp4	Comp5	Comp6
CC	0.419	-0.117	-0.309	0.569	0.509	0.362
GE	0.423	-0.203	-0.257	-0.006	-0.777	0.330
PS	0.373	0.919	0.078	-0.062	-0.031	0.073
RQ	0.417	-0.217	-0.049	-0.791	0.364	0.139
RL	0.426	-0.076	-0.261	0.098	-0.027	-0.857
VA	0.390	-0.218	0.873	0.191	-0.034	-0.029

CC, GE, PS, RQ, RL, and VA are control of corruption, government effectiveness, regulatory quality, rule of law, and government accountability from WGI respectively (see Kaufmann et al, 2010).

Information Communication Technology Index

Principal Components/ Correlation

Table 2. A.3.2 Principal Component Analysis

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	2.21248	1.57403	0.7375	0.7375
Comp2	0.638455	0.48939	0.2128	0.9503
Comp3	0.149066		0.0497	1.0000

Principal Components (eigenvectors)

Variable	Comp1	Comp2	Comp3
Fixed Telephone Line	0.5105	0.8001	0.3151
Individuals using Internet	0.6400	-0.1088	-0.7606
Mobile Phones	0.5743	-0.5899	0.5676

Fixed Telephone lines and Mobile phones (per 100 people). Individuals using the Internet (percentage of population)

Chapter 3

Governance, Institutions and Foreign Direct Investment: An Empirical Analysis of South Asian Countries using Panel ARDL

Our analysis assesses the influence of institutional quality on foreign direct investment inflows by using panel data of South Asian economies for the period 1996-2019. The study uses the ARDL model to conduct long-run and short-run analyses. The study's findings show that FDI and institutional quality have a significant and positive relationship, meaning foreign investors consider institutional quality a sufficient sign in South Asian economies. The study uses the principal component analysis (PCA) methodology to generate an aggregate institutional quality index. The number of mobile phone users as a proxy for infrastructure and agriculture value-added has a positive effect on FDI. Inflation and the level of development proxied by GDP per capita are found negative and insignificant for attracting FDI inflows in the case of South Asian economies. Hence the study elaborates on the paths for policy analysts to attract FDI in South Asian economies because these economies are abundant in natural assets. The attraction of FDI towards South Asian economies will cause to enhance job creation and reduce inequality and poverty, which are the main issues in South Asian economies.

Key Words: Foreign direct investment, Institutional quality, Panel ARDL

JEL CODES : E02 ; F43 ; C07

3.1 Introduction

Global investment designs have changed drastically over the past three decades. The amount of trade and FDI expanded globally because of tendencies toward globalization, easing trade restrictions, and the liberalization of foreign exchange markets. Among the key drivers of the recent globalization of economic activity is the sharp increase in FDI flows, which indicates how well a country or region is integrating into the global economy. Likewise, changes have additionally happened in the connection between trade, investment, and regulations governing FDI (Bevan et al., 2004).

Since 1990, competition between developed and developing countries has enhanced due to their concern with attracting FDI inflows by offering to reduce taxes and facilitating subsidies. The role of FDI expanded in developing and other countries like Asia, Sub-Saharan African countries, and central Asian countries. These countries got advantages through FDI inflow by enhancing management skills, technological innovations, and capital accumulation. People got employment due to FDI inflow, higher productivity, and economic growth (Asamoah et al., 2016). During the 1990s, FDI in rising nations increased by 7% worldwide. The abrupt decrease in FDI toward the start of the 21st century was additionally felt by developing nations. However, with many modest measures in 2000 and 2003, the FDI towards developing nations diminished by 30%. For example, only half of the worldwide level, it continued its previous pace of development, nearly arriving at US$500 billion in 2007 (27% of the worldwide aggregate). The 2008 financial emergency addressed a little hiccup in FDI streams toward developing nations. FDI in this piece of the world recovered much speedier than in developed nations. After a decay of 20% from 2008 to 2009, investment continued expanding, arriving at US$760 billion in 2015 (43% of the worldwide aggregate (Ezcurra & Rodríguez, 2014).

The era of financial crises broke the GDP trends in developing and developed economies. These patterns featured the vulnerability of developing economies which were impacted

straightforwardly by the economic activities in the developed world (NGOC, 2020). However, the financial crisis uncovers the shortcomings of institutional quality that might have been ambiguous during the peak period. For example, in the eventual outcomes of the Asian financial crisis in 1997, many countries recognized the governance shortcomings. They attempted to rearrange the institutional policies to draw more attention to FDI. Foreign direct investment (FDI) is a crucial engine of globalization; it is considered a valuable impulse for productivity enhancement, job creation, and technological advancement. Accordingly, FDI speeds up economic growth, assuming an indispensable role in tax revenue, foreign exchange, and development - paused in developing and transitioning economies (Quazi, 2007).

In general, the FDI climate has undergone an enormous change in South Asia during the 1990s and more recently. With their liberalized way of dealing with FDI and consistent changes in further development of the FDI strategy system, it is sure that South Asia will turn into an attractive destination for investment Sahoo (2006). Accordingly, one can reason that there has been a positive change in policies concerning FDI with more coordinated actions toward two-sided economic deals and giving investment motivations to foreign financial investors in all South Asian countries. Speeding up the financial change process and making their economies politically stable and liberated from interior struggle would make South Asia an alluring entity for FDI. South Asian policymakers understand that promising endeavors for financial reforms in South Asia must include an updating technology, production size, and linkages to an increasingly coordinated globalized production framework primarily through the investment of Multinational Corporations (MNCs). South Asian countries enjoy many benefits to potential investors, including high and consistent economic development, single-digit inflation, huge domestic business sectors, a developing talented workforce, an expanding pioneering class, and continually working on financial frameworks, including

extending capital business sectors. On top of these benefits, South Asian countries have been planning approaches and offering motivations for foreign direct investment (Sahoo, 2006).

One of the economic issues of developing nations is that they do not have enough public reserve funds to back their investment. They are in incessant need of foreign capital in the form of both immediate and indirect investment. At first, they took credit from international business banks. However, during the 1980s, the drying up of business bank loans due to obligation emergencies insisted that numerous countries change their investment approaches. Thus FDI gave off the impression of being one of the most straightforward approaches to getting foreign capital without any dangers connected to debt. Hence, it became an appealing choice for bank credits as a wellspring of capital inflows (Demirhan & Masca, 2008).

Global FDI streams have gotten progressively more perplexing over the most recent forty years as numerous developing nations have been developing more quickly than richer ones. There has been a geographical shift in the objective/beginning of FDI inflows and outflows. For instance, the US FDI position has changed notably over the last forty years. In 1960 the US was the beginning of 49% of the world's FDI and host to simply 14%. However, by 2002 it was the beginning of just 22% yet must host 19% of FDI. FDI, an overall premise, flooded towards the end of the 1990s. However, it intruded during the worldwide slowdown somewhere between 2000 and 2002. Despite the breakdown of the resources, currency, and internet bubbles at the turn of the decades, FDI continues to remain the whole, positive, and remarkably stable over the many decades.

Specifically, the role that FDI plays in the host country’s economy relies upon the country’s explicit factors, as brought up by many creators. For instance, researchers contend that financial business sectors can assume a significant part in deciding the FDI inflow in the host country. A specific degree of financial advancement is required for the nation to take advantage of the measure of FDI inflow into the country. The advancement of domestic financial frameworks adds to activating saving, screening, and monitoring investment

projects, which leads to higher economic growth. Hence, FDI and the domestic money market are integral in expanding the pace of economic growth (Hermes & Lensink, 2003). FDI in non-industrial countries, in general, focuses essentially on regular assets. However, large numbers of these nations have now become hosts of FDI, including more sophisticated creation of goods and services. Developing countries are additionally turning into the wellspring of FDI into others, creating just as industrial nations. In 2014, emerging and transition economies represented 39% of worldwide FDI outflows from 12% in the mid-2000s (Doğru, 2012).

3.1.1 Institutions and Foreign Direct Investment

The institutions are categorized into formal and informal institutions. Formal institutions are constitutions, laws, and property rights, while informal institutions are sanctions, taboos, customs, and traditions. The institutions are the limitations that facilitate political, economic, and social outcomes (North, 1991). The presence of good institutions lessens the uncertainty and cost of doing business through their effect on production and exchange costs (Coyne & Sobel, 2010). It tends to develop factor productivity by stimulating investment. Moreover, FDI includes high sunk cost, social and political instability, environmental security, enforcement of property rights and effectiveness of the legal system have a proportional association with FDI inflows (Daniele & Marani, 2006).

As indicated by The New Institutionalist Approach, along with the standard imperatives of macroeconomics, a country's institutional system is the main factor determining its economic activities, and the nature of domestic establishments is critical clarification of cross-country differences in growth rates and GDP per capita. Powerful establishments lessen exchange, and production is costly to such an extent that gains from outsider investment are feasible. However, the discussion about the unfavorable impacts of less qualified establishments is that FDI inflows generally have been investigated in the cost of working together in the country. Less productive or less qualified laws and institutions bring about muddled administrative

systems, unwieldy administration, legitimate boundaries, and corruption, hindering more FDI inflows into the country (Dumludağ, 2009). Consequently, prevailing explicit and specific conduct standard rules of a game in society can make suitable motivating forces for good economic behavior (Doğru, 2012).

There are three valuable associations between FDI and institutions. First, North (1998) highlighted the practical significance of institutions in promoting investment and economic development. Second, with the robust growth in FDI inflows during the last decades, transitioning and developed nations paid attention to institutional rearrangement to attract FDI. Third, foreign investors become passionate about investing in institutional quality when they realize in which country they must invest. Buchanan et al. (2012) clarify that weak institutions behave like taxes, enhancing the vulnerability linked with FDI. Generally, strong institutions attract FDI, while weak institutions create hurdles to FDI (Ali et al., 2010).

Researchers have considered the connection between institutions and economic performance throughout the previous few decades. North (1990) underlined that economic factors such as capital accumulation, per capita income, and innovation are not the only factors that make contrasts in countries. Financial development and advancement; precise contrasts in institutional quality are additionally answerable for those distinctions. For instance, North Korea and South Korea have similar monetary characteristics yet vary in their financial results (for instance, South Korea has higher per capita GDP than North Korea) because of the distinctions in their institutions (Acemoglu et al., 2006). Economic institutions are significant because they shape the conduct of economic entertainers and stakeholders. In countries with certain ensured property rights, people are encouraged to make domestic and foreign investments that heat economic growth. Otherwise, if it is not done, the investment and growth lack the approaches (Sabir et al., 2019).

Poor institutions hinder the FDI and can behave like a tax, thus enhancing the cost of FDI. Investors are reluctant to put resources in countries with high corruption, nepotism, and

formality because these elements enhance the cost of doing business (Mengistu & Adhikary, 2011). A well-defined regulatory framework and the constancy of the rules governing activities are also fundamental for investors, especially foreign ones. Similarly, a legitimate and developed political organization that eradicates corruption and makes the administration accountable allows investors to benefit from freedom of action conducive to their activity (Campisi, 2016). Political instability can also interfere with prevailing economic, financial, and business practices and disrupt foreign investors (Shah, 2015). These investors can hope that democratic regimes protect them from authoritarian regimes' instability and arbitrariness (Li & Liu, 2005)

According to Bailey (2018), institutional issues such as democratic institutions, political stability, the rule of law, and corruption significantly impact FDI. In addition, he contends that institutional factors have a more significant impact on FDI attraction in developing nations than in industrialized nations and that institutional factors are more significant in developing nations in Asia than in North America and Europe. On the developing countries' side, if we discuss the example of Sub-Saharan Africa. Sub-Saharan Africa, in all, notwithstanding, has been to some degree cut off from worldwide FDI streams. Even though the streams towards the area have expanded in recent years, FDI has stayed small. There are various purposes behind the present circumstance. The absence of adequate infrastructure in numerous portions of the continent, the general shortfall of macroeconomic and political soundness, the powerless degree of human resources, and the continuous vulnerabilities influencing public legal systems address just a piece of the clarification (Rodríguez et al., 2017).

Good institutions, in general, encourage investment, which benefits development. Therefore, through good governance, which is a critical component of attracting foreign investment, the quality of institutions can draw FDI. Good governance was given more importance in the discussion of global development and academic study. Additionally, transparency is a unique

component with a solid connection to governance and foreign direct investment. Lack of transparency is associated with corruption, implying poor governance (Saidi et al. (2013).

Indeed, global corporations are constantly looking for opportunities to invest in places with favorable institutional environments and consistent policies. Therefore, this research aims to understand how governance indicators affect FDI inflows in South Asia. The author concentrates on the main objective of getting new ways to attract FDI to South Asian economies. The study's objective is to elaborate the segregated ideas in a specific way. The importance of institutions, their measures of quality of institutions, and how they attract other countries to inflow the FDI towards South Asian economies. These economies are on the list of developing countries. The aim of the study would be concerned to give a specific way for the analysts.

This study is an attempt to further contribute to the empirical literature. We use an extensive data set by choosing South Asian countries as these countries are considered developing countries, and the FDI is more attractive in these countries (Sahoo, 2006). Some of the earlier studies emphasized only one of the institutional factors (Rodríguez et al., 2017; NGOC, 2020). Sabir et al. (2019) used only two indices of institutions: political stability and corruption. The study uses principal component analysis (PCA) by including all six governance indicators and building an aggregate indicator of governance. That is why this study elaborates on the result more explicitly and is updated regarding methodology and data.

3.1.2 Research Questions

- Do institutions, as a primary determinant of FDI, considers equal importance for South Asian countries?
- What is the importance of institutions compared to other determinants of FDI in South Asian countries?

This study is limited to south Asian economies as the potential constraint lies in elaborating on all the countries, such as developed or developing economies. On an analysis level,

especially for PCA, the segmentation to a specific pre-defined category of countries, such as South Asia, will present a much more accurate picture, even though it will hamper the generalizability of global economies.

The rest of the chapter is organized in the following structure. Section 2 explicit the various pieces of literature about linking the institutional and FDI inflows results and their impacts through results. Section 3 sketches the methodological aspects, variable constructions, and a brief data description. Section 4 presents the results and main findings of the empirical analysis. The last section concludes with our main findings and policy recommendations.

3.2 Literature Review

The relationship between governance/institutional factors and FDI inflows remains debatable in empirical research for an extended period. The emergence of new institutional economics has encouraged academics to concentrate on institutional characteristics as significant determinants of FDI in developing nations. However, the empirical studies confined different aspects to link the governance/ institutions and FDI. Jun and Singh (1995, 1996) made one of the initial attempts to research the relationship between institutions and FDI in developing countries. In addition to typical macroeconomic factors like GDP per capita, GDP growth, and wage costs, the authors looked at the impact of political risk and business conditions on investment flow to 31 developing nations. The political risk index coefficient was found to be negative and statistically significant, indicating that developing nations with higher political risk do not draw as much foreign direct investment. It has also been demonstrated that operational business conditions are crucial for luring FDI inflow.

For instance, Kaufmann and Mastruzzi (2005) discuss governance matters for developing countries. They conclude that institutions have a substantial effect in attracting FDI, recommending that developing nations need profound institutional reforms in a broad set of laws and doing business strategies to work on the appeal of these nations regarding FDI. Dumludağ (2009) has noted that a better view of the nature of institutions has a generally

positive and economically huge impact on FDI. The work searched the connection between political, social, and economic institutions and FDI streams by applying panel data examination including 67 developing countries for 1984-2005. He likewise focuses on the underdeveloped general set of laws, political and economic instabilities, and undeniable degree of corruption are significant motivations to deflect FDI. Daniele and Marani (2006) additionally utilize the hypothesis based on the significant role of institutions in attracting FDI. Kostevc et al. (2007) inspect a theory to examine the hypothesis that "good institutions lead to more FDI inflows," as the same work by Benassy-Querre et al. (2007) for transition economies. The outcome supports ongoing studies on institutional quality's effect on the level of FDI in those economies.

The empirical work by Ren et al. (2012) investigates the institutional impact of FDI inflows on selected MENA, Middle East, and North African economies. The study uses the panel data and pool mean group (PMG) to capture the objectives of long-run and short-run association among the variables. The study proposed the various variables of institutions, such as internal conflicts, democratic accountability, bureaucratic quality, and the military in politics. The analyses concluded that MENA countries should adopt friendly FDI strategies to maintain the quality of institutions. Further, Subasat and Bellos (2013) inspected the effect of institutional elements of FDI for 18 Latin American nations from 1985 to 2008 by utilizing a board information gravity model. Their observational results recommended that poor governance upgrades FDI not only in transition nations but also effective in Latin America.

Kechagia and Metaxas (2020) provided empirical evidence investigating the link between institutional quality and FDI for the period 2002-2017 in the case of Turkey. The nation applied for institutional change programs and put significant attempts to draw attention to financial investors. The study took time-series analysis and the panel data for some specific regions of Turkey. The review infers that the redesigned nature of the considered institutional

indicator in Turkey, except for government viability, is positively associated with FDI inflows during the particular period.

In the literature, a few observational investigations utilize institutional factors as the non-economic elements of FDI determinants. The empirical investigations fluctuate the factors regarding the income level groups and locales. Notably, in recent years numerous researchers have examined the impact of institutional and macroeconomic factors on FDI inflows. The typical thought sorted out from these examinations is that institutional factors are significant determinants of FDI. Good institutions often increment the measure of FDI the host country gets. In other words, the absence of political and economic stability, unclear regulatory environment, and underdeveloped legal system deter more FDI inflows into the host country. (Bénassy-Quéré et al., 2007) Uncover their outcomes by investigating institutional quality in 52 host and source nations. Their study found that internal FDI is fundamentally affected by open proficiency, which incorporates tax framework effectiveness, effortlessness to make a business, straightforwardness, contract law, and the absence of security of property rights. Busse and Hefeker (2007) inspected the connection between political danger, establishments, and FDI inflows for a board of 83 emerging nations from 1984 to 2003. They showed that numerous sub-parts of political danger (government strength, nature of bureaucracy, the rule of law, democratic responsibility, corruption, ethnic strains, and inward and outside struggle) affect FDI inflows. Additionally, Gani (2007) examined the connection between good governance and FDI inflows for a group of 70 Asian and Latin American nations over the period 1996-2002.

Mengistu and Adhikary (2011) explored the impact of good governance on FDI inflows for 15 Asian nations from 1996-2007. Their outcomes showed that FDI inflows in Asian nations are fundamentally affected by the markers of good administration. Also, Anyanwu (2017) inspected the effect of good governance on internal FDI for 50 African nations. They tracked down three of the six indicators of good governance (voice and responsibility, government

viability, and law and order) that have a vast and positive relationship with FDI. The surviving measurements (political steadiness and nonappearance of violence, administrative quality, and corruption control) are inconsequential.

Kurul and Yalta (2017) recently dissected the impact of governance indicators on FDI between 2002-2012 in 113 countries using a dynamic panel approach. They concluded that voice and responsibility, government adequacy, and control of debasement have substantial positive effects on FDI inflows. On the contrary, Hossain and Rahman (2017) examined the connection between good governance and FDI inflows in 80 emerging nations from 1998 to 2014. Their exact outcomes uncover that all good governance indicators essentially and positively influence FDI inflows.

Carril et al. (2019) witnessed the impact of governance and democracy on FDI in oil-abundant countries covering the data set of 2003-2012. The study shows evidence that the rule of law, absence of corruption, political soundness, and democracy could help FDI join the broader perspective. The consequence could not preclude the "oil curse," implying that oil makers draw minimum new greenfield projects compared to economies without oil. In contrast, different investigations show that the presence of regular assets does not undermine the effect of institutions. Similarly, another empirical work was done by Su Dinh Thanh et al. (2019) to investigate how economic institutions and economic openness play a role in the emerging Vietnamese economy for the period 2005-2015 by using the method GMM. Their main target was to define the inward FDI influenced by institutional quality. They discussed the interesting outcome; economic institutions significantly affect the FDI with trade openness and economic growth. Peres et al. (2018) examined the institutional quality of FDI by classifying the developed and less developed nations. The only two indices, corruption and the rule of law were taken for institutional quality. They showed that institutional quality is positively associated with FDI in more developed nations, while institutional quality is affected insignificantly due to their weak structure system in the economy. The conclusion

strongly favored the significant governance indicator to draw attention to FDI. They inferred that the relevance of governance indicators is vital in drawing attention to FDI.

The breakdown of the effect of FDI on economic growth does not just reach out to FDI but also other factors such as economic development. For example, the country's financial improvement circumstance, the nation's greatness in retaining the beneficial outcomes of FDI, and other inner and outer elements studies by Beazer and Blake (2018). Their study found that internal FDI is a wellspring of economic growth for a country at a certain level of improvement. They recommended that a specific limit level of improvement was vital, assuming the host country needs to retain technology from a foreign country. Another work is examined by Yang et al. (2018), focusing on the market factors such as capital intensity and natural assets of host nations considering the specific Chinese OFDI, which could upset the riddle. They returned to the connection between the host nation's institutional quality and Chinese OFDI by utilizing broad information on outward Chinese interest in 132 economies from 2003 to 2012. The outcomes propose that the particular institutional risk, taking the example of Chinese OFDI, is a measurable ancient rarity yet not a true phenomenon. No matter what, Chinese multinationals are inclined to find their interests in nations with high institutional quality, less monetary turn of events, and more regular assets, aiming at higher returns and eruption to less expensive assets.

Another study by Feulefack & Ngassam (2020) analyzes the effect of oil-exporting countries between 1996 to 2017. The review shows that FDI to non-extractive exercises is profoundly tactful in preserving natural assets. The investigation also discovers that reliance on regular assets decides the organization of the resources. In this way, the enhancement in the level of reliance on natural assets neutralizes the adverse consequence of the quality of the institutions on extractive FDI and again preoccupy the beneficial outcomes of non-extractive FDI. Then, within the sights of bountiful assets, the nature of the assets is scattered. Those economies that are rich in assets do not require an institutional change to draw attention toward FDI in

the extractive area. However, enhancing their economies and empowering their institutions will draw attention to non-extractive FDI.

Caetano & Galego (2009) utilized a piece of board information that incorporates 17 MENA nations and 25 European nations to examine the effect of institutional factors on FDI. They found that investment opportunity has a positive and massive connection with FDI in the two locales. Additionally, the size of the public authority adversely influences the internal FDI. Caetano and Galego (2009) additionally tracked down that economic opportunity and the internal FDI are positively related in the MENA and EU nations. Another work on MENA by Meon and Sekkat (2004) examines the effect of the nature of establishments on manufactured export and FDI in MENA nations. Their outcomes show that a low degree of corruption and an undeniable degree of the organization contribute to its choice to invest abroad.

Moon (2015) showed how some autocratic countries attracted FDI more than others from 1970 to 2008. They got an insight that popular governments appreciate benefits over dictatorships with regards to drawing in FDI. However, there exist autocratic nations that draw generous measures of FDI. For instance, about half of the top 20 non-OECD nations have been nondemocratic during the most recent twenty years. Focusing on the job of commitment organizations by which nations can submit their security of unfamiliar resources. Moon (2015) contends that autocracy with long-time skylines can give more grounded establishments to ensure property rights, giving them more strength toward FDI. As host nations give sound organizations to secure foreign resources, they would have the option to draw more foreign investment.

Navina and Eichler (2016) determined 65 host countries for 1995-2009. They considered the FDI stocks, comprehending organizational and social elements. The outcomes uncover that institutional and social distance is essential and that FDI has an overwhelmingly regional aspect. The outcomes show that foreign financial investors like to put resources into nations with less diverse social orders than their own countries. Aibai et al. (2019) test the effect of

FDI on monetary advancement in a host country. Exact outcomes show that FDI is a more grounded driver of economic development for nations with better organizations. Besides, FDI not just increments monetary extending yet additionally upgrades monetary capacity.

Contrary to the above-discussed literature Busse and Groizard (2008) produce a guideline record for just the top 20% or 30% of controlled nations. Their study claimed that nations applying high guideline principles are, for the most part, less fruitful in attracting more FDI inflows. Therefore, they underlined that government, in any case, needs to foster the nature of regulations in the home country to profit with more foreign capital. Agbloyor et al. (2016) employed a two steps GMM to estimate the data for empirical work in Sub-Saharan Africa, excluding countries more developed in a financial market system. They did not find evidence to elaborate on the link between FDI and economic growth. They mentioned that FDI plays a significant role in boosting the institutions that are low in a financial market system. They also excluded those countries which are good in natural assets. They drew the main crux that nations have to consider their realities when adopting policies to get advantages from FDI and better economic growth.

While FDI has been studied extensively in other emerging nations, South Asia has received relatively little attention. The fundamental concern with South Asia is the paradox that, despite a considerable period of strong economic growth and being listed as one of the fastest developing areas in the world (World Bank, 2015), the region has mainly failed to draw FDI. When evaluating the region's economic performance, it is essential to consider how poorly it performed on primary World Bank governance metrics, which suggests institutional and political reasons for the region's low levels of FDI. This calls for reconsidering the regional FDI drivers under new institutional economics. Azam et al. (2012), which focuses on the influence of political risk and macroeconomic uncertainty, and Sahoo (2006, 2012), which focuses on infrastructure and reforms, are the only studies in South Asia to have incorporated institutional and political issues as potential determinants of FDI. In this essay, we add to the

body of knowledge on foreign direct investment by analyzing how well the economic, institutional, and political factors taken into account in earlier research account for the flow of FDI to South Asia.

3.3 Model, Variables, and Methods

3.3.1 The Model and Variables

Figure 3.1 visually displays the historical trends of foreign direct investment (FDI) in South Asian economies. This figure is based on foreign direct investment as a percentage of GDP. It reveals that all understudied economies have almost similar kinds of FDI share in GDP except the Maldives. The blue color line represents the FDI share in the GDP of Maldives and indicates that the country observed a sharp rise in the inflow of FDI after 2005 and touched the peak in 2019. The objective of our study is to examine how institutional quality and other understudied economic variables influence these trends of FDI inflows.

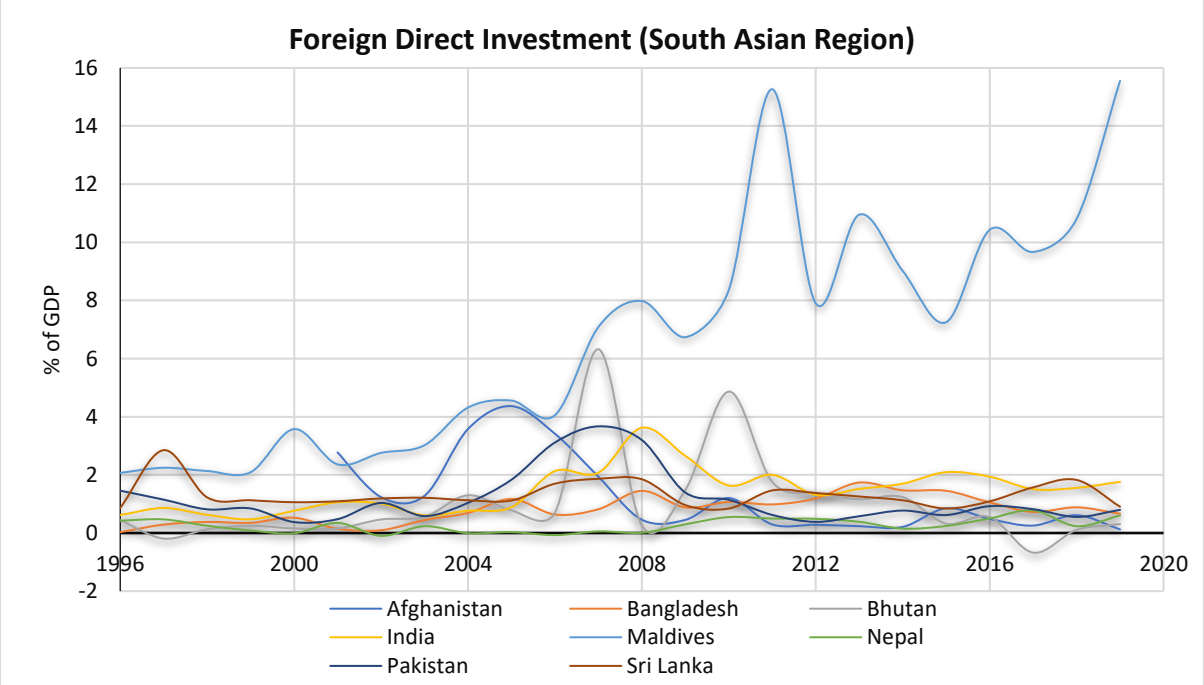


Figure 3.1 Historical Trends of FDI in South Asia

According to North's (1990) institutional theory and Dunning's eclectic paradigm theory, inward foreign direct investment (FDI) depends on market size, economic stability, and the quality of institutions of the country. These relationships can be described with the help of the following functional form:

$$\text{FDI} = f(\textit{Market Size, Macroeconomic Stability, Institutional Quality})$$

Where FDI represents a foreign direct investment, gross domestic product (GDP) is used as a proxy for the market size, which is recognized as an essential determinant of the FDI in the host country. Macroeconomic stability refers to the economic environment of the domestic economy that influences FDI and is proxied by inflation. Researchers propose different justifications for using inflation as a proxy for macroeconomic stability. For instance, a strand of literature (Buchanan et al., 2012; Sabir et al., 2019) postulates that inflation describes the internal economic environment and the capability of the central bank to manage the supply of money in the economy. Similarly, numerous scholars examine the linkages between institutional quality and FDI and conclude that weaker institutions negatively impact the inflow of FDI (Buchanan et al., 2012). Based on these studies, we use the following econometrical model to examine the impact of institutional quality on the inflow of FDI after controlling several macroeconomic variables:

$$Y_{it} = \alpha + \beta_i W_{it} + \gamma_i X_{it} + \delta_i Z_{it} + U_{it}$$

Where Y_{it} denotes the FDI inflow as a percentage of GDP, W_{it} represents the variable of interest, which is institutional quality, X_{it} is the market size proxied by GDP, and Z_{it} is a vector of control variables, including inflation rate, infrastructure, and value-added share of agriculture. Following Sabir et al. (2019), mobile phone subscribers per 100 people are used as a proxy of infrastructure. While U_{it} is the error term of the regression model.

It is generally understood that the development level of the host country is a crucial determinant of FDI inflow. The ability of the public to purchase goods and services depends on the level of dev in the economy, which leads to an upsurge in FDI. In this study, we use

GDP to capture the level of development in the host economy. To capture the efficiency-seeking FDI, we use infrastructure as a proxy. Following previous literature, infrastructure is proxied by mobile phone subscriptions per 100 people (Sabir et al., 2019). The reason behind the use of this proxy is because efficiency-seeking investment targets with relatively low communication and transport costs.

Following Kaufmann et al. (2007), a study in hand uses six indicators to describe the quality of institutions: governance effectiveness, voice and accountability, regulatory quality, rule of law, political stability, and corruption. According to Buchanan et al. (2012), governance effectiveness covers the civil service quality and the degree of its independence from political pressure. Saadatmand and Choquette (2012) highlight that voice and accountability ensure a risk-free climate for foreign and domestic investors. Similarly, Fazio & Talamo (2008) indicate that regulatory quality encourages the FDI inflows by presenting favorable policies for the market, for instance, free capital movement, price controls, and government interventions in case of monopolies. Moreover, the rule of law also boosts the FDI inflows because rules and laws help implement market-friendly FDI policies (Hoff & Stiglitz, 2005). Meier (2009) concluded that, due to high risks, the MNCs avoid investing in economies that have higher levels of political instability. That is why political stability is vital to an economy that helps attract new FDI opportunities. Lastly, we use corruption in describing the institutional quality because it covers a broad range of human actions and harms the FDI. Following (Buchanan et al. 2012; Globerman & Shapiro, 2002; Sabir et al. 2019), the principal component analysis (PCA) is used in this study to construct the index of institutional quality. This index infers that the institutions are more developed in those South Asian economies, which are comparatively developed.

The World Governance Indicators (WGI) is the primary data source of the institutional quality variables governance effectiveness, voice and accountability, regulatory quality, rule of law, political stability, and corruption. In contrast, other variables like FDI, the value-

added share of agriculture as a percentage of GDP, inflation rate, GDP, and mobile phone subscriptions per 100 people are retrieved from the World Development Indicators (WDI). This study covers the South Asian region from 1996 to 2019.

3.3.2 Autoregressive Distributed Lag (ARDL) Approach

Pesaran et al. (2001) developed a handy technique to explore the long-run and short-run relationships among the understudied variables known as Autoregressive Distributed Lag (ARDL) approach. This methodology has numerous benefits; for instance, it can be used if the variables under consideration have the same integration orders, i.e., all variables are stationary at the first difference, and also have different orders of integration, i.e., some are stationary at the first difference I (1) while others are stationary at the level I (0). Another distinctive feature of the study is that it is suitable if the researchers have a small sample size. The generalized form of the Panel ARDL method can be described with the help of the following equation:

$$Y_{it} = \sum_{j=1}^{p} \lambda_{ij} Y_{i,t-j} + \sum_{j=0}^{q} \delta_{ij}' X_{i,t-j} + \mu_i + \varepsilon_{it}$$

Where Y_{it} is, a dependent variable and X_{it} is the vector of explanatory variables. μ_i denotes the fixed effects. While ε_{it} is the error term of the regression model. The above equation can be re-parameterized as a vector error correction model:

$$\Delta Y_{it} = \theta_i ECT_{it} + \sum_{j=1}^{p-1} \lambda_{ij}^{*} \Delta Y_{i,t-j} + \sum_{j=0}^{q-1} \delta_{ij}^{*'} \Delta X_{i,t-j} + \mu_i + \varepsilon_{it}$$

Where $ECT_{it} = \phi_i Y_{i,t-1} - \beta_i' X_{i,t}$ and ECT parameter $describes$ the speed of adjustment. Statistically significant and negative error term shows that variables indicate a convergence to long-run equilibrium, while insignificant indicates the lack of long-run relationship. In this study, we also use the ARDL approach to identify the long-run and short-run determinants of

FDI in selected South Asian economies. The FDI model of equation 1 can be specified in ARDL terms as follow:

$$\Delta FDI_t = \alpha_0 + \beta_1 FDI_{t-1} + \beta_2 IQI_{t-1} + \beta_3 INF_{t-1} + \beta_4 MPS_{t-1} + \beta_5 Agri_{t-1} + \beta_6 lnGDP_{2_{t-1}} + \sum_{j}^{n} \varphi_j \Delta FDI_{t-j} + \sum_{k}^{n} \varphi_k \Delta IQI_{t-k} + \sum_{l}^{n} \varphi_l \Delta INF_{t-l} + \sum_{m}^{n} \varphi_m \Delta MPS_{t-m} + \sum_{o}^{n} \varphi_0 \Delta Agri_{t-0} + \sum_{p}^{n} \varphi_p \Delta lnGDP_{t-p} + \varepsilon_t$$

Where α_0 is the constant term and ε_t is the disturbance term of the model. While the FDI_t is the dependent variable of our model, which represents the foreign direct investment inflows, IQI_t is the institutional quality index, INF_t is the inflation rate, MPS_t is the mobile phone subscriptions per 100 people, and GDP_{2_t} is the Gross Domestic Product of the host economy. The remaining variables in equation 3 are generalized forms of these variables. The parameters with lag periods are the long-run estimates, and the parameters with difference operators are the short-run estimate of the model.

3.4 Results and Discussion

3.4.1 Main Results

First, we use PCA analysis to construct a composite index of institutions for South Asian economies (see Appendix 2). This institutional quality index ranges from -2.2473 to +1.7244, which implies that the institutions are comparatively more developed in the positive range values and weaker in the negative range values. The descriptive statistics, and correlation matrix are reported in Appendix 1. Descriptive statistics is a convenient method that helps to describe and summarize the basic features of the dataset. The descriptive statistics reports that, on average, the FDI contributes 19.45% to the GDP of the South Asian economies. Likewise, these economies' average inflation rate remained at 6.45% during the understudied period. On average, almost 15 people have mobile phone subscriptions per 100 people in

South Asian economies. At the same time, the value-added share of agriculture as a percentage of GDP stands at 19.26% on average from 1995 to 2019. The remaining variables are related to the institutional quality index.

For correlation matrix we apply the Pearson correlation coefficient to observe the direction and strength of the linear association between two variables. According to basic statistics, "correlation coefficient can range in value from −1 to +1. The larger the absolute coefficient, the stronger the relationship between the variables". Our correlation matrix summarizes the relationships among all variables, irrespective of their nature, i.e., dependent, or independent.

As mentioned earlier, the prime objective of the study is to examine the impact of institutional quality and other variables on the FDI inflows in South Asian economies. For this purpose, we retrieve panel data on understudied variables from different sources that cover the period from 1995 to 2019. To find the answers to our research questions, we apply Autoregressive Distributed Lag (ARDL) approach. The basis for applying the ARDL approach is checking the variables' stationarity. In other words, we need to check the stationarity of the variables to ensure that no variable is stationary at the second difference and that all variables show a mixture of zero or first order of integration in the stationarity check exercise. Table 3.1 reports the results of the Im-Pesaran-Shin (IPS) Panel Unit Root Test, where IPS is a test widely used by researchers to check the stationarity of panel data variables. The table reveals that the FDI flows, institutional quality index, and GDP variables are stationary at first, while the remaining variables are stationary at level. These results suggest that the panel ARDL is a suitable approach to examine the short-run and long-run determinants of FDI inflows because the variables are showing mixtures of integrations with no variables stationary at the second difference.

Table 3.1 Im-Pesaran-Shin (IPS) Panel Unit Root Test

Variable Name	P-Values		Decision
	At Level	**At 1st difference**	
FDI Inflows	0.2049	0.0000	I (1)
Institutional Quality Index	0.1159	0.0000	I (1)
Inflation Rate	0.0044	---	I (0)
Mobile Phone Subscriptions	0.0093	---	I (0)
Agriculture Value Added	0.0824	---	I (0)
Gross Domestic Product	1.0000	0.0004	I (1)

Table 3.2 provides the estimated coefficients of our baseline regression model where all variables are statistically significant at our desired level. We applied pooled mean group (PMG) or panel ARDL technique. The findings reveal that institutional quality has a statistically significant and positive impact on the FDI in South Asian economies. This result indicates that the FDI inflows have better prospects in South Asian economies with better institutional quality. Our result is consistent with Vadlamannati, (2008) and Mengistu and Adhikary (2011), who shows that FDI inflows in Asian countries are significantly influenced by the indicators of good governance. Our econometric results conclude that foreign investors do consider the quality of institutions as an adequate sign when deciding whether to invest capital in the South Asian region. The results indicate that a 1% increase in FDI causes to increase the institutional quality in South Asia by 74%. These findings are also consistent with the previous empirical studies (Buchan et al., 2012; Malik and Chowdhury, 2017; Sabir et al., 2019) confirming that institutional quality has a positive impact on all groups of countries.

Long-run panel ARDL results further reveal that the inflation rate has a statistically insignificant and negative impact on the FDI inflows. Moreover, these results are in line with

the existing literature (Ahnsy et al., 1998[15]; Malik and Chowdhury, 2017; Sabir et al., 2019, Younsi and Bechtini, 2019). Malik and Chowdhury (2017) mentioned that a high level of inflation (INF) in the host nation may cause FDI to decline since it raises production costs and creates uncertainty for potential investments.

Moreover, the study find that the number of mobile phone users have statistically significant and positively associated with FDI inflows. It infers that quick dissemination of information can achieve higher levels of FDI inflows which are in line with the findings proposed by (Campos & Kinoshita 2008; Sabir et al., 2019). We used the number of mobile phone users as a proxy of infrastructure in South Asia. Poor infrastructure in terms of weaker dissemination of information boosts transaction costs and restricts access to global and local markets, eventually blocking the FDI (Khadaroo & Seetanah, 2010). Additionally, the agriculture value-added as a percent of GDP has a statistically significant and positive impact on the FDI inflows. The value-added share of agriculture in GDP is a vital factor of investment in agriculture. It can help the host economy to boost its agricultural productivity by introducing the latest and innovative technologies (Tondl & Fornero, 2010). Furthermore, the level of development proxied by GDP is identified as negative and statistically insignificant. Buchan et al. (2012) report similar kinds of results for a large set of countries. They argued higher growth discourages FDI because operating costs (labor and physical capital) rise when living standards start to rise.

The lower segment of Table 3.2 presents the short-run results of our baseline model. All the coefficients are either statistically insignificant or show opposite signs of long-run estimates. We applied the Hausman test to select the appropriate estimation technique between MG estimation and PMG estimation. Based on the Hausman chi-square p-value, we accept the null hypothesis and conclude that the PMG technique is suitable for finding the estimated

[15] Ahnsy et al. (1998) investigated the relationship between exchange rate, inflation, and FDI For developing nations between 1970 and 1981, and discovered that high inflation rates have a negative impact on Foreign direct investment.

coefficients of our understudied variables. The most important thing to check in this table is the error correction term (ECT). A basic assumption of the ARDL technique is that this term should be negative and statistically significant. The ECT term of our estimates is statistically significant and negative, which validates the long-term equilibrium association among understudied variables. The ECT term coefficient is equal to -0.81, indicating that the convergence speed is about 81 percent returning to its equilibrium each year when disequilibrium happens.

Table 3.2 Panel ARDL Model (Pooled Mean Group)

Variable Name	Coefficient	S. E	P-Value
Long Run			
Institutional Quality Index	0.7480*	0.2117	0.060
Inflation Rate	0.0126	0.0198	0.525
Mobile Phone Subscriptions	0.4957***	0.0560	0.000
Agriculture Value Added	0.7793***	0.0349	0.005
Gross Domestic Product	-0.0003	0.0004	0.470
Short Run			
ECT	-0.8093***	0.1584	0.000
Δ Institutional Quality Index	-1.2264	1.1708	0.295
Δ Inflation Rate	-0.0113	0.5958	0.305
Δ Mobile Phone Subscriptions	0.6249	0.5317	0.240
Δ Agriculture Value Added	-0.0343	0.1397	0.806
Δ Gross Domestic Product	-0.0013	0.0021	0.541
Constant	8.6986***	1.5220	0.000
Test for Model Selection			
Hausman Test			
Chi-Square	8.04	---	---
Prob>chi2	0.1542	---	---
Observations	184	---	---

Table 3.3 provides the results of Panel ARDL for individual economies, also known as mean group (MG) ARDL. The long-run results remain the same as PMG in the MG estimation technique, which is why we do not report them in Table 3.3. However, the short-run results are reported. The ECT term of our estimates for all economies remains statistically significant and negative, which validates the long-term equilibrium association among understudied variables for individual economies. The coefficients of short-run results are reported as mixed and different signs for all countries.

Table 3.3 Panel ARDL Model for Individual Economies (Mean Group)

Variable Name	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
Short Run								
ECT	-1.4434***	-0.8578*	-1.3692***	-0.5652*	-1.4105***	-1.746***	-0.8000**	-1.3204***
	(0.3623)	(0.2300)	(0.3132)	(0.3044)	(0.4280)	(0.2852)	(0.2284)	(0.1983)
Institutional Quality Index	-2.2703*	0.2862	0.8301	0.0339	0.4999	-2.2872	-0.6214	0.3108
	(1.3157)	(1.2393)	(4.5642)	(0.7026)	(0.3886)	(5.2284)	(0.4189)	(0.3178)
Inflation Rate	0.0181	-0.1077*	-0.1132	-0.0021	0.0068	0.1234	0.0235	-0.0515**
	(0.0416)	(0.0845)	(0.1475)	(0.0553)	(0.273)	(0.4866)	(0.0216)	(0.0159)
Mobile Phone Subscriptions	-0.5439	0.1267	1.6524	0.1115	-0.0118	3.1779	0.5075	-3.4015*
	(0.7519)	(0.5861)	(2.7332)	(0.5118)	(0.1194)	(3.5795)	(0.3364)	(1.0602)
Agriculture Value Added	-0.1162*	0.7251	-0.2477	-0.1928	-0.0505	-0.2218	0.0189	0.1252**
	(0.0856)	(0.4963)	(1.2570)	(0.2741)	(0.1359)	(0.9741)	(0.1013)	(0.0575)
Gross Domestic Product	0.0052	-0.0241	0.0007	-0.0064	-0.0000	-0.0016	-0.0034	-0.0036
	(0.0129)	(0.0317)	(0.0145)	(0.0047)	(0.0015)	(0.0029)	(0.0045)	(0.0057)
Constant	20.3923**	21.8873	23.2932	0.5879	22.115**	29.9221	11.3864*	28.628***
	(9.3368)	(19.4403)	(35.2074)	(19.6361)	(7.3979)	(48.8886)	(5.8059)	(4.1261)
Test for Model Selection								
Hausman Test								
Chi-Square	8.04	---	---	---	---	---	---	---
Prob>chi2	0.1542	---	---	---	---	---	---	---
Observations	184	---	---	---	---	---	---	---

Note: Standard errors are in parenthesis. *** denotes significant at 1%, ** at 5%, and * at 10% level of significance.

3.4.2 Robustness Analysis

To check the robustness of our baseline results, we apply alternative econometrical techniques called the fixed-effect model and random-effect model. The purpose of checking the robustness of our previous findings is to analyze how results are changed if the methodology is changed. It is not necessary to check the stationary for the fixed and random effects model. Table 3.4 reports the coefficients of these estimations. We apply the Hausman test to decide between the fixed and random effect models. The Chi-square value of the test failed to reject the null hypothesis and claims that the random effect model is a more appropriate technique than the fixed effect model. For comparison purposes, we report the results of both. In the fixed-effect model, the institutional quality index, inflation rate, and GDP are insignificant. While in the random-effect model, the signs and significance of the institutional quality index, Mobile Phone Subscriptions, and agriculture value added are in line with our baseline results of the ARDL technique. To sum up, no matter which estimation technique is applied, the institutional quality index positively impacts the FDI inflows in South Asian economies. It infers that foreign investors do consider the quality of institutions as an adequate sign when deciding whether to invest capital in this region.

Table 3.4 Panel Static Models

Variable Name	Fixed Effect Model			Random Effect Model		
	Coefficient	**S. E**	**P-Value**	**Coefficient**	**S. E**	**P-Value**
Institutional Quality Index	-0.0212	0.2711	0.938	0.3836***	0.1383	0.006
Inflation Rate	-0.0341	0.0331	0.305	-0.0238	0.0343	0.487
Mobile Phone Subscriptions	0.3351**	0. 0663	0.000	0.4366***	0.0567	0.000
Agriculture Value Added	0.1774***	0.0466	0.000	0.0845***	0.0279	0.002
Gross Domestic Product	1.0741	0.7157	0.135	-0.3897	0.3009	0.195
Constant	3.5592	5.6092	0.527	14.432***	2.4608	0.000
Test for Model Selection						
Hausman Test Chi-Square	0.12	---	---	---	---	---
P-Value	0.9998	---	---	---	---	---
Observations	192	---	---	---	---	---

Note: As per the Hausman test, Random Effect Model is more appropriate for the understudied panel data.

3.5 Conclusion and Recommendations

This study investigates the relationship between FDI and institutional quality in South Asian economies. The data is taken from 1996-2019 using the methodology of ARDL. The study also conducted the Hausman test to decide between fixed effect and random effect. However, the model is appropriate for random effects. The principal component analysis is used for the institutional quality index. The result was determined for the long run and short run. It shows that institutional quality positively affects FDI and elaborates that the FDI inflows have better prospects in South Asian economies with better institutional quality. The results conclude that foreign investors do consider the quality of institutions as an adequate sign when deciding whether to invest capital in the South Asian region. The ECT term is negative, and significance that defines about 81% convergence speed can be towards the equilibrium

adjustment if any shock happens. However, the short run is mixed and has different signs for all countries.

The government of South Asian economies should enhance FDI by suggesting different policies for institutional reforms and stabilizing the macroeconomic policies. The finding provides a holistic study, and there can still be an outlook in the future for policymakers. A proper policy is required to ensure foreign investors invest in South Asian economies. Our result noted in the concluding remarks that one policy does not fit for all. Therefore, it is noteworthy that every country should adopt macroeconomic policies in terms of the context of the economy. There is a dire need for institutional reforms in South Asian economies to attract FDI inflows to these economies. FDI will cause to provide employment opportunities, reduce social conflicts, and diminish inequality and poverty, which is the main issue in these South Asian economies.

3.6 Appendices of Chapter 3:

3.6.1 Appendix 1

Table 3. A.9.1: List of Variables and their Sources

Variable Name	Description	Data Source
Agriculture Value Added	Agriculture value added as a percentage of GDP	World Development Indicators, 2022
Infrastructure	Mobile cellular subscriptions (per 100 people)	World Development Indicators, 2022
GDP Per Capita	GDP per capita is gross domestic product divided by midyear population. Data are in constant 2015 U.S. dollars.	World Development Indicators, 2022
Inflation	Annual percentage change in general prices	World Development Indicators, 2022
Foreign direct investment, net inflows	Foreign direct investment refers to direct investment equity flows in the reporting economy. Data are in current U.S. dollars.	World Development Indicators, 2022
Corruption	This indicator captures the perceptions of the degree to which public power is exercised for private gain, including petty and grand forms of corruption and the "capture" of the state by elites and private interests.	World Bank Governance Indicators (WGI)
Government Effectiveness	This indicator captures the perceptions of the quality of public services, the quality of civil services, the quality of policy formulation and implementation, the degree of its independence from political pressure, and the credibility of the government's commitment to such	World Bank Governance Indicators (WGI)

	policies.	
Political Stability	This indicator measures the perceptions of the likelihood of political instability in which governments will be destabilized or overthrown by unconditional or violent means, including politically motivated violence and terrorism.	World Bank Governance Indicators (WGI)
Regulatory Quality	This indicator captures the perceptions of the government's capability to formulate and implement sound policies and regulations that permit and promote private sector development.	World Bank Governance Indicators (WGI)
Rule of Law	The rule of law measures the perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular, the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence	World Bank Governance Indicators (WGI)
Voice and Accountability	This indicator of governance measures the level to which the citizens of the country can contribute in selecting their representatives/government, as well as freedom of expression and association and free media	World Bank Governance Indicators (WGI)

Table 3.A.1.2: Descriptive Statistics

Variable Name	Obs.	Mean	Std. Dev.	Min	Max
FDI Inflows	192	19.454	2.8739	12.043	31.59385
Institutional Quality Index	192	0.0000	2.03489	-5.0748	3.9227
Inflation Rate	192	6.4487	4.5409	-18.109	26.419
Mobile Phone Subscriptions	192	14.609	3.4986	2.9957	20.906
Agriculture Value Added	192	19.263	8.2971	5.1906	38.928
Gross Domestic Product	192	7.2645	0.8604	5.7678	9.2299
Corruption	192	-0.5219	0.7117	-1.6383	1.6468
Government Effectiveness	192	-0.4132	0.6355	-2.2317	0.9013
Political Stability	192	-0.9492	1.1469	-2.8100	1.2834
Regulatory Quality	192	-0.5816	0.5662	-2.1096	1.0267
Rule of Law	192	-0.4684	0.6355	-1.8966	0.6275
Voice and Accountability	192	-0.5316	0.5559	-2.0393	0.4766

Table 3.A.1.3 Correlation Matrix

Variable Name	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1) FDI Inflows	1.000											
2) Inflation Rate	0.029	1.000										
3) Mobile Phone Subscriptions	0.568	0.153	1.000									
4) Agriculture Value Added	0.004	0.125	-0.119	1.000								
5) Gross Domestic Product	-0.105	-0.134	-0.1242	0.008	1.000							
6) Institutional Quality Index	0.076	-0.232	-0.237	-0.326	0.3272	1.000						
7) Corruption	-0.150	-0.168	-0.305	-0.198	0.297	0.842	1.000					
8) Government Effectiveness	0.098	-0.221	-0.256	-0.284	0.177	0.953	0.803	1.000				
9) Political Stability	-0.248	-0.370	-0.475	-0.427	0.375	0.822	0.745	0.786	1.000			
10) Regulatory Quality	0.172	-0.211	-0.186	-0.292	0.262	0.775	0.419	0.743	0.527	1.000		
11) Rule of Law	0.144	-0.150	-0.146	-0.281	0.326	0.957	0.815	0.872	0.690	0.724	1.000	
12) Voice and Accountability	0.488	0.004	0.344	-0.115	0.1953	0.574	0.281	0.453	0.239	0.432	0.631	1.000

3.6.2 Appendix 2

Aggregate Governance Indicator

Principal Components/ Correlation

Table 3. A.10.1 Principal Component Analysis

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	4.141	3.230	0.690	0.690
Comp2	0.911	0.376	0.151	0.842
Comp3	0.534	0.268	0.089	0.931
Comp4	0.266	0.164	0.044	0.975
Comp5	0.103	0.058	0.017	0.993
Comp6	0.045		0.008	1.000

Principal Components (eigenvectors)

Variable	Comp1	Comp2	Comp3	Comp4	Comp5	Comp6
CC	0.414	-0.379	0.421	-0.435	0.154	0.544
GE	0.468	-0.096	-0.106	-0.075	-0.854	-0.159
PS	0.404	-0.409	0.005	0.793	0.201	-0.018
RQ	0.381	0.237	-0.790	-0.118	0.229	0.328
RL	0.471	0.119	0.123	-0.294	0.389	-0.715
VA	0.282	0.781	0.415	0.276	-0.055	0.245

CC, GE, PS, RQ, RL, and VA are control of corruption, government effectiveness, regulatory quality, rule of law, and government accountability from WGI respectively (see Kaufmann et al, 2010).

Chapter 4

The Impact of the Quality of Institutions on FDI: An Econometric Modelling of Time Series in Pakistan

Pakistan's economy witnessed a continuous surge in FDI until 2008. It, however, experienced a consistent downward trend afterward. The main factors behind the slump in FDI inflows are global financial slowdown, economic and political instability, and terrorism attacks. This study investigates the relationship between institutions and FDI in Pakistan. Principal Component Analysis (PCA) methodology is used to generate an aggregate institutional quality index. This study includes a few specific variables for the institutional index, like the military in politics, judiciary, and religious tensions. The Autoregressive Distributive Lag (ARDL) technique is used to conduct long-run and short-run analyses. The results conclude that FDI is attracted toward Pakistan if there are strong institutions. The study gives the path to policymakers for a comprehensive policy to attract FDI in Pakistan. It will be beneficial for Pakistan's economy. As foreign investors invest in Pakistan, it will positively impact the economy because it will raise employment and reduce inequality and poverty, which are the main issues in Pakistan.

Keywords: Foreign Direct Investment, Institutional Quality, ARDL

JEL CODES : E02 ; E22 ; C07

4.1 Introduction

As FDI has become a critical source of investment and capital development. Numerous countries have had a gold rush to improve and regulate their institutional conditions to strengthen their competitiveness. During 2000-12 alone, an average of 55 nations took on 1,082 institutional strategy changes to promote and work with a better environment for foreign investors. Moreover, toward the end of 2013, a sum of 9,175 bilateral investment settlements, including highlights for improving and adjusting institutional settings of host and home nations, were endorsed among 201 nations (Monitor, 2014).

The nature of institutions in deciding FDI has received much consideration in the last 10 years. Plenty of empirical investigations support the view that quality institutions attract FDI and robustly cause worldwide capital portability (Alfaro et al., 2007). It is observed that better institutions significantly enhance the inflow of FDI (Globerman & Shapiro, 2002), while the fall in the quality of institutions or the absence of institutional arrangements such as law and order, political stability, investors assurance, and public policies can badly influence the inflow of FDI. Wei (2000) contends that ineffectively regulated institutions or the complete absence of institutional governance appear to substitute for tax on foreign investors. Gastanaga et al. (1998) report that corruption, bureaucratic postponements, and more terrible rule of peace and law in developing economies deflect the inflow of much-required FDI in developing countries.

If we consider institutions a persistent structure of social order governing the behavior of a set of individuals, then the quality of institutions in Pakistan may not be very encouraging. Since its creation, Pakistan has experienced political instability, ethnic and religious tensions, deep-rooted corruption, worse law and order situations, and a lack of governance (Ali et al., 2009). The inflow of FDI into Pakistan is small and focused exclusively on a few regions, generally in the power area. In 1997, Pakistan represented 0.2% of world FDI and 18% of South Asian nations' FDI. Throughout the years, Pakistan has created itself as a potential

market for foreign investors with its liberal investment strategy, modest work, tax incentives, and significant profit from the investment, but its performance in attracting FDI has been lackluster (Khan & Kim,1999). Shahzad et al. (2016) argues that increasing terrorist activity causes uncertainty and instability in political and economic progress. Foreign investors are thus deterred from investing because they believe their investments and profits could suffer losses. However, being a developing economy, Pakistan needs foreign investors to come and make infrastructural interest in the nation (Nawaz et al., 2019).

4.1.1 Some Elements of FDI in Pakistan

Pakistan has achieved more noteworthy FDI flows during the recent twenty years, considering its market-oriented investment techniques and investment-empowering climate. Due to the limited investment methodologies, FDI flows were pitiful up to 1991. However, it continuously increased during post-advancement (Reham, 2020). FDI improved from $23 million in 1970 to $64 million in 1980. The subsequent period occurred during the late 1980s when the government removed restrictions on flows of capital, proprietorships, and the movement of remittances. The time after 1988 is related to privatization and progression processes, which helped speed up FDI inflows from $110 million in 1987 to $711 million in 1997 (Husain, 2010). These flows declined by $183 million during 2000. There was a significant rise in capital inflows starting around 2004 when FDI sums came to $5.4 billion during 2008, addressing a 443 % expansion in contrast with 2004, but simply 0.26 % more noteworthy than 2007. FDI flows had a diminishing pattern propensity after 2007. Subsequently, during 2009 FDI added up to $3.21 billion, introducing a 51.1% decline when contrasted with a 35.3% reduction in the earlier years. Pakistan has a great deal of potential for attracting FDI. Even though development in the FDI pattern for a few areas uncovers strategies achievement; FDI flows essentially slow back due to the deteriorating security conditions, institutions weakness, corruption, political instability, weaker administrative designs, and unstable global political connections (Gul, 2020)

The historical background of Pakistan is favorable to becoming a natural destination for FDI. For instance, Pakistan is the 6th most crowded country on the planet and placed in 41st position as far as extended GDP in 2018 announced by International Monetary Fund (IMF). KPMG (2017)[16] revealed that Pakistan has been fruitful in accomplishing a smoother growth rate of around 5% throughout the previous five years and has an enormous workforce (the 8th biggest on the planet) to support this upsurge in development. Gopal and colleagues (2018) contended that capital is streaming to countries with low labor costs and higher growth potential during globalization. With the accessibility of modest work and a higher development rate than developed countries, Pakistan should have successfully attracted the FDI. Besides, Monitor (2014) revealed that Pakistan has one of the most liberal foreign investment systems in South Asia, with a chance of 100% foreign equity investment in practically all areas and a fast-developing private area to support FDI. Notwithstanding, inward investment has not been pretty much as excellent as it might have been expected. For instance, Pakistan got only 0.063 percent of the overall FDI inflow in 2012, far less than other emerging markets like China (8.96%) and India (1.89%).

Pakistan is confronting massive difficulties nowadays: higher unemployment levels, breakdown of law-and-order conditions, massive corruption, bad governance, and insufficient framework. Consequently, foreign investors have yet to show their premium in putting resources into Pakistani business sectors. It is generally accepted that Pakistan might work on its economy through FDI by investing in developing the overall investment environment (Ayaz et al., 2013). In Pakistan, over 80% of FDI has been made in the industry, monetary, power, and manufacturing areas. Some of the investment has also been made in textile machines, petrochemicals, automobiles, and the construction/development of infrastructure sectors. Most of these investments have been made by the Gulf States, the United States of America, Great Britain, China, and the Netherlands (Bakari et al., 2018).

[16] KPMG, 2017. Investment in Pakistan. KPMG Taseer Hadi & Co (2017)

4.1.2 Historical Background of Institutions in Pakistan

Different economic and non-economic variables could impact FDI inflows. The non-economic determinants of FDI can be considered under the governance indicators (for example, administrative quality, political stability, law and order, and so forth). Since acquiring independence in 1947, Pakistan's institutional climate has remained powerless. The nation has experienced ongoing political instability, significant degrees of corruption, weak implementation of peace and order, and inadequate administration for an extended period (Shah et al., 2016). Even though beginning around 1988, the public authority started a progression of advancement projects to attract FDI, these have neglected to accomplish their targets (Atique et al., 2004). Contrary to the existing literature, we will only focus on three crucial institutional variables (military in politics, religious tensions, and extrajudicial activism proxied by the rule of law) and discuss how these variables discourage foreign investors.

Military in Politics

Pakistan is a security-driven state, and everything can be seen through a security prism. Unfortunately, since its independence, Pakistan was always ruled by military dictators. Besides the military rule, it was never welcomed whenever the democratic government got elected. In efforts to weaken the democratic government, the military regime always puts the country in chaos and uncertainty. Siddiqa (2007), a former researcher with Pakistan's navy forces, in her book,[17] estimated the military's net value at more than £10 billion. This is almost four times the amount of FDI that Pakistan attracted that year. The military's ability to maintain its financial stability only fuels its drive to maintain state dominance. The army's ability to suppress political opposition would be threatened if true democracy were implemented in Pakistan. Furthermore, the military community has a vested interest in seeing

[17] Military Inc: Inside Pakistan's Military Economy

political power continue since it leads to more favorable economic conditions[18]. A recent example can be taken from 2017 when to weaken the democratic government, the military-backed religious group[19] closed the capital city for 20 days in protest against the so-called blasphemous activity in the parliament[20]. The use of militant and non-militant groups by intelligence agencies (Haqqani, 2010)[21] has a less obvious but no less troubling dark side: the tremendous growth of the "black economy," fuelled by society's increasing criminalization. This dark side includes increased militancy, sectarian and ethnic extremism, and weapons proliferation. The main victims of this tendency are civil institutions, governance, and the rule of law (Nazar, 2011). The circumstances in Pakistan's early years of statehood directly impacted the military's influence in domestic affairs. To function as a normal state, Pakistan must have a deliberate military withdrawal from politics because circumstances have changed significantly over time (Haqqani, 2010).

Judiciary in Pakistan

Pakistan has the lowest ranking for upholding the rule of law, coming in at 130 out of 139 countries in the World Justice Project's Rule of Law Index report[22] (2021). Scores vary from 0 to 1, with 1 being the highest level of legal compliance. With a score of 0.39, Pakistan is in second last place in South Asia. Only Afghanistan is rated lower than Pakistan in the region. Nepal, Sri Lanka, India, and Bangladesh all outperformed Pakistan in the rule of law category. The study demonstrates Pakistan's poor performance in the areas of fundamental rights, law and order, security, and regulatory enforcement. Pakistan ranks second worst in the region in these categories. Out of a total of six regional nations evaluated, Pakistan ranks

[18] The military millionaires who control Pakistan Inc | The Spectator
[19] M. Ilyas Khan, "Why was Pakistani general giving money to protesters?", BBC, 29 November 2017.
[20] Abbas Nasir, "Happy augury but just", Dawn, 23 December 2017
[21] Haqqani (2010) argues that Because of its historical support for Islamist militants opposing Indian control in the disputed region of Jammu and Kashmir as well as the Taliban's efforts to establish a client state in Afghanistan, Pakistan has emerged as a significant hub for extreme Islamist ideologies and organizations.
[22] World Justice Project | Advancing the rule of law worldwide

fourth in the categories of the criminal justice system, civil justice, open government, and limitations on governmental power.

Judiciary frequently intervenes in economic concerns and plays for the public gallery to distract the masses from their lack of competitiveness and gain sympathy. In 2013 the Supreme court of Pakistan declared the *Reko Diq* agreement reached on July 23, 1993, void and in conflict with the country's laws. The decision comes against the federal government's decision to lease out gold and copper mines in *Reko Diq* in Balochistan's Chagai district to the Tethyan Copper Company (TCC) — a Canadian and Chilean consortium of Barrick Gold and Antofagasta Minerals (Youxing & Qureshi, 2020). TCC's feasibility study alone was already the largest single foreign direct investment in Pakistan's history[23]. *Reko Diq* sits over the famous Tethyan copper belt and is known to have the world's fifth-largest gold and copper deposits. However, that decision by the Supreme Court costs the country 6 billion dollars, as the International Centre for Settlement of Investment Disputes (ICSID) has announced a $5.976 billion award against Pakistan in the *Reko Diq* case. The country is already facing a $700 million ICSID penalty in the case of the Turkish company Karkey's rental power project contract. In addition, the annulment of the privatization of Pakistan Steel Mill in 2006 costs US$400 million. In both cases, agreements were terminated on the orders of the Supreme Court of Pakistan (Awan, 2014). These judgments have caused trouble for policymakers and concerns for international investors. The aftermath of these decisions involves expensive international arbitration and the postponement of important projects in the country, the cost of which has been paid by the poor nation of Pakistan.

Religious Extremism

In Pakistan, the issue of religious extremism has gotten more complicated. Religious organizations have considerable influence over specific groups of people that they can mobilize to further their goals, often in extremely violent ways. The use of religion in

[23] Gold war in Pakistan highlights investment risks | Reuters

Pakistan politics is not new, but its impact on the economy has been minimal compared to the last 10-15 years. According to a study conducted by Sardar (2006), from 2008 through 2019, losses to Pakistan's real GDP of up to $38 billion may have occurred because of grey-listing by Financial Action Task Force (FATF). The powerful influence of religious organizations in the country can be seen by the fact that Pakistan is still unable to complete the FATF's last action plan on the efficiency of counter-terrorism financing.

Haqqani (2010) argues that Pakistan is still governed by a civil-military oligarchy that sees itself as defining and also protecting the state's identity—primarily through a mix of religious and militarist nationalism. In contrast, both India and Bangladesh have developed into secular democracies centered on economic development. As a result, the use of religion to bring Pakistan's different ethnic and linguistic groups together took on more significance in western Pakistan, and its manifestations became more militant. The connection between the mosque and the military led to a gradual rise in the authority of religious organizations, both armed and unarmed. The Islamization of the country started in the 1980s after the Soviet invasion of Afghanistan. However, during the last 10-15 years, in the name of blasphemy, attacks and protests on foreign embassies and boycotting a particular country's products have become very common. We can take the recent example of protests against France[24] in April 2007 when the extremist religious organization[25] forced the government to cut diplomatic ties with France and the general public to boycott the products made in France.

According to Clarke (2011), religion has penetrated Pakistani politics, leading to extremism and sectarianism. In the political sphere, middle-class and lower-class voters support Islamist parties more than wealthy business people. The proliferation of Kalashnikovs and drug culture, ethnic and sectarian bloodshed, the creation of jihadist parties, and the growth of militancy are all attributed to General Zia's era (1977–1988). State laws were changed to accommodate Islamization, and new Shariah laws were put into effect.

[24] Islamist party Tehreek-e-Labbaik fuels anti-France violence in Pakistan (france24.com)
[25] Tehreek-e-Labbaik Pakistan

Extremism promotes further radicalization, which results in the use of violence and damages the economy of the country. The killings in the name of blasphemy are increasing daily, and now foreign citizens are also victims of this new era of violence. This situation discourages foreign investors from investing in a country where they fear religious extremists (Serfraz, 2017). In 2021 violent mob attacked and burned to death a Sri Lankan plant manager who was employed in Pakistan after accusing him of blasphemy[26]. The fight against extremism in Pakistan cannot be fought only with a gun. More psychological factor plays a more prominent role in the alarming security situation that Pakistan is currently facing. Because of the prevailing extremist mentality, many people do not entirely understand what is at stake, Paracha (2022)[27]. Even more concerning is the fact that many people who hold this mentality probably aren't even aware of how they might be part of encouraging extremism.

FDI is considered an essential instrument for developing countries. It is necessary to consider all possible reasons which are the main hurdles for Pakistan's economy. By keeping the view of the current economic situation and FDI situation through literature, this study will provide possible feedback and suggestions for policymakers and the government. The primary purpose of this study is thus to examine specific indicators for political risk and to identify the relative importance of these indicators for FDI inflows after controlling for some other relevant determinants of observed changes in FDI flows.

Quantitative data is gathered from secondary sources like World Development Indicators. This study describes the past and current performance of FDI inflows and the factors affecting them over 20 years. The data collected is used to test the statistical relationship between variables using statistical software to conduct the regression. The present study is an attempt to contribute to the existing literature to see the relationship between institutions and FDI because this study uses the institutional variables specifically, military in politics, law

[26] Extremist party supporters beat and burn Sri Lankan man in Pakistan's latest blasphemy killing (france24.com)
[27] Constantly Lost: The Identity Crisis And Meltdowns Of The Blocked Elite In Pakistan - The Friday Times - Naya Daur

and order law and order, religious tensions, and examines their impact on FDI inflows in Pakistan.

4.1.3 Research Questions

Based on the previous discussion, this study points out the following research question in Pakistan:

- What is the long-run and the short-run relation between institutions and FDI in Pakistan?
- What are the other determinants of FDI in the country?
- How can Pakistan improve its policy to attract more FDI?

The rest of the chapter is as follow: Section 4.2 introduces a short review of the literature on the determinants of FDI with a particular focus on Pakistan. Section 4.3 describes our model, data, and methodology. Section 4.4 presents the results of our estimations. Section 4.5 concludes with policy recommendations.

4.2 Review of the Literature

The literature review consists of existing body knowledge to explain the relationship between FDI and other determinants to find the literature gap in the case of Pakistan. The literature discusses governance with other perspectives, like economic growth and FDI, to explain the relationship.

4.2.1 Historical FDI Inflow and the Political Situation in Pakistan

FDI is needed to boost per capita income, living standards, GDP growth, and national development. Rauf and colleagues (2016) explored the determinants of FDI in Pakistan from 1970-2007. Four general gatherings of factors had been tried to decide their relationship with FDI, which comprised of cost-related factors (wage rate, foreign exchange rate, and interest

rate), factors improving the investment environment (liberalization and economy's openness), macroeconomic variables (output growth, human capital, market size, and infrastructure quality), the strategy of improvement in political strength, and aggregate risk rating along with structural shocks associated with 1988, Nuclear tests in 1999 and incident of 9-11, 2001. The outcomes proposed that the large-scale economic variables, cost-related factors, and total risk index factors are critical determinants in short-term analysis. The finding recommended a long-run relationship between FDI, macroeconomic variables, and openness.

Hussain (2009) conducted a thorough investigation into Pakistan's various political systems and claimed that Ayub Khan's administration (established in October 1958) is known as "The Golden Sixties". Khan's five-year economic planning plan had tremendous results, with Pakistan's yearly growth rate rising from 3 to 6%. The independence of East Pakistan, now known as Bangladesh, from Pakistan in 1971 was a setback for Khan's administration. As a result, more significant instabilities and liberalization initiatives could not receive the required attention. The nationalization policy adopted by the following administration, led by Zulfiqar Ali Bhutto, had a detrimental impact on liberalization measures.

Furthermore, Mohiuddin (2007) thoroughly analyzed Zia-ul- Haq's (1977–1988) administration. The author claims that Pakistan underwent Islamization and economic liberalization during this time, contributing to a greater than 6% annual growth rate. His administration supported policies that were advantageous to the business, such as privatizing government operations. However, Hussain (2009) argued that Zia's cooperation with the U.S. to remove the Soviet Union from Afghanistan resulted in significant U.S. military and economic aid to Pakistan. But Pakistan has paid the price of this short-term objective with the proliferation of Islamist groups, drug culture, ethnic and sectarian bloodshed, and the Kalashnikov and gun culture. State laws were changed to accommodate Islamization, and new Shariah laws were enacted.

Another study conducted by Jun et al. (2018) stated that the period from the mid-1980s onwards to the mid-2000 considered Structural Adjustment Programs (SAPs) and trade reforms under the supervision of the International Monetary Fund (IMF) and World Bank (W.B.). The reason for SAPs was to execute the system of open markets, and Pakistan cooperated and reduced trade boundaries like taxes and other quantitative limitations. These steps not only led to an increase in trade, but FDI inflows also increased. However, Zakaria (2011) proposed an empirical investigation to concentrate on the impacts of trade liberalization on products, imports, and exchange balance in Pakistan for the time 1981-82 and 2007-08 and tracked down that trade liberalization demolished the balance of trade in Pakistan since advancement strategies came about in higher imports as compared to export when contrasted with trades expanding installments instead of receipts.

Ali and fellows (2021) investigated the role of political instability on FDI in Pakistan from 1981 to 2018. The result is evidence that increases in output level would cause to increase in the FDI in Pakistan. A positive indication of political instability list shows a positive relationship with FDI in Pakistan. It is expected that the nation got a high level of inflow in the dictatorship regime, up to 3 percent of GDP, and later it starts to decline and drop to 0.31 percent.

Akbar and Ahsan (2015) concentrated on the pattern of FDI inflows in Pakistan from 2000-2013 and found that FDI inflows enhanced during 2000-2008 and fell during 2009-2013. Their arguments were reliable to the review done by Hussain (2009). The better performance was noted during 2000-2008 because of the liberalization approaches done by the military government of Gen. Pervaiz Musharraf. During that period, FDI inflows generally prompted improvement in Pakistan's economic indicators and made it the third quickest-developing economy after India and China. 2009-2013 has been portrayed by a persistent decrease in FDI in Pakistan. This downturn is mainly ascribed to political and economic instability as well as law and order circumstances in the country.

In the current time, many elements are viewed to be essential for financial investors to lay out their business in any condition. One of the most important is the political stability of the country they want to enter for business. This is the most highlighted figure in determining the flow of FDI in any country (Wheeler & Mody 1992). Studies observed that political risk is irrelevant in influencing the FDI inflows (Singh & Jun 1995). However, the concentration followed that political instability and abrupt government constitution changes make the FDI inflow less attractive in developing countries. Political stability is fundamental for the nation's smooth economic development. Lately, in Pakistan, since 2008, political stability has been declining. Therefore, as a result, foreign investments are declining in Pakistan (Tuman & Emmert 2004).

Iqbal and Lodhi (2014) described that Pakistan's economy has been confronting insecurity at the micro and macro levels, resulting in a fall in FDI inflows and a rapid increase in poverty, creating a high unemployment rate. Religious violence and extremism have deteriorated the circumstance, and its underlying foundations are associated with historical political approaches. The author highlighted that the demonstrations of violence had become a typical practice to achieve philosophical, religious, and political objectives. These activities incorporate terrorism explicitly collective and sectarian terrorism. In addition, after 9/11, religious sectarianism and extremism emerged most seriously in the country, prompting adverse consequences on worldwide relations bringing about low FDI inflows and a continuous decline in economic growth.

Latif and colleagues (2017) described the analysis to see the effect of political violence on FDI. This article explores the simultaneous association connection of FDI, thus called 'political' violence, in Pakistan's information and telecommunication. It looks over the violence phenomenon and shows how it disrupts the smooth flow of FDI, commerce, and trade. Pakistan's telecommunications are one of its economic sectors that attract enormous foreign direct investment. After 9/11, 2001, Pakistan has become a forefront state in the so-

called 'War on Terror, alongside NATO and the USA. This has resultantly upset Pakistan's smooth trading exercises. Specifically, the interest in imports has declined, drastically decreasing the country's FDI inflow. The review's consequences feature the reasons for the downfall in FDI in Pakistan and lead to strategy proposals for working on the country's economic self-improvement. The conclusion was retrieved from the previous literature analysis of data relevant to telecom. Finally, the review incorporates a few ideas for future examination to continuously work on Pakistan's economic and cultural conditions using the assets FDI gives.

Nasreen and Anwar (2019) found that political risk prevents FDI inflows in Pakistan both in the long-run and short-run periods. The outcome further demonstrates that GDP per capita and infrastructure are essential determinants of drawing in FDI flows in Pakistan. However, the high rate of inflation and precariousness of the exchange rate is viewed as adversely connected with FDI inflows in Pakistan. Akhtar (2000) found an insignificant impact of political instability on FDI inflow in Pakistan. Shahzad and Al-Swidi's (2013) presumed that political precariousness is one of the primary drivers influencing FDI inflows in Pakistan. Their observational outcomes demonstrated the insignificant but inverse association between FDI and political precariousness in Pakistan. The war against terrorism and political instability have a negative association, whereas electricity generation has a positive effect on FDI flow in Pakistan (Lodhi et al., 2013; Talat & Zeshan, 2013).

Henisz (2002) shows that multinationals are faced with a rising threat of capturing if political risk enhances in the host country. Their outcomes represent that the effect of political risk depends on the essential way of behaving of the multinational as a partner having vast communications with the government. In a similar line, Nordal (2001) thinks that political risk might comprise a considerable part of the country-level risk when foreign investors situate in emerging nations. Farazmand and Moradi (2014) concentrate on the effect of political risk on the FDI inflows for 31 non-industrial nations. Their outcomes stress that the

total file of the political risk is critical, and nations portrayed with a high political risk have decreased FDI.

Political stability is not excellent since it will adversely influence the country's economic growth and development by depleting physical and human resources. However, if the country's political condition is not thriving, foreign investors will not bring in any business activity until assured that the business environment is favorable for the investors. (Word Bank, 2011). World Bank (2011) Published a report about Pakistan that private investment is very low, and this is because of low political stability in Pakistan.

4.2.2 Institutional Quality and FDI in Pakistan

Multinational organizations (MNCs) take different economic and political factors while choosing where to contribute the anticipated returns to investment, how effectively they can leave the host country if the security of their property is undermined, infrastructure accessibility, market size, and development, and the host country’s macroeconomic security and the level of political risk. The Multilateral Investment Guarantee Agency (2012) recommends that in the medium term, investors are generally careful about political risk when making decisions about FDI requirements. Investors consider the lawful and administrative environment to be one of the most significant variables molding their investment passage choices (World Bank, 2020)[28].

Awan (2014) investigates the effect of judicial activism on FDI in Pakistan in their qualitative study. According to the author, Pakistan has experienced tremendous losses as a result of the aggressive use of judicial authority in matters related to privatization and investment. Foreign investors become discouraged when treaty obligations are broken, which reduces the flow of FDI into Pakistan. The author argued that the SCP could have spent its valuable time, insight, and energy on ordinary cases for a better distribution of justice in society if it had not been engaged in such commercial affairs. The SCP's meddling in economic issues has benefited

[28] 2019-20 Global Investment Competitiveness (GlC) Survey

society considerably less than it has cost it in terms of FDI, damaged foreign relations and credibility, and poor financial results. Similarly (Youxing & Qureshi, 2020) in their study[29] observed the Supreme Court's involvement in numerous foreign investment deals. The authors suggested that it is essential to update the state's judicial laws regarding FDI to pursue foreign direct investment in Pakistan. This would result in a steady investment project that would benefit both the foreign investor and the host nation (Pakistan).

Azam and colleagues (2019) explored the effects of terrorism, corruption, and market size by Gross domestic product (GDP) growth rate on inward FDI in Pakistan from 1973 to 2017. The empirical findings show that corruption and terrorism harm FDI while market size positively affects FDI inflows in Pakistan. The findings concluded that excellent control of corruption and a decrease in terrorism would attract FDI in Pakistan, which is beneficial to achieving macroeconomic stability in the country, such as increasing economic growth and employment generation, among others. Taking religious sectarianism as a catalyst for terrorism (Serfraz, 2017) investigates the effect of foreign direct investment inflows on economic growth in Pakistan from 1989-2016. Using the methods of the Johansen Cointegration and VECM model, this study examines an empirical relationship by assessing a two-way causality between FDI inflows and economic growth in Pakistan. The study concludes that because of the increase in FDI inflows growth rate also increases but sectarian terrorism act as an obstacle.

Busse and Hefeker (2007) analyzed the linkage between foreign direct investment, political risks, and institutions using data from developing countries including Pakistan. They comprehend the 12 indicators for political risk and institutions in their empirical analysis. The results confined that government stability, ethnic tensions, fundamental democratic rights, absence of internal conflicts, and ensuring law and order are significant determinants of foreign direct investment. Another Study was explored by Jan et al (2019) to analyze the

[29] Youxing, L., & Qureshi, M. F. (2020). Judicial Activism in Pakistan Is Challenging for Foreign Investor in the Context of China and Pakistan Economic Corridor

impacts of various determinants of governance on FDI in the case of Pakistan over the period 1996-2012. FDI is negative and statistically significant, which describes increases or decreases of other governance determinants that can cause the negative impact of FDI. However, other variables like R.Q. and inflation on FDI are insignificant, and there is no relationship between these variables on FDI. The study concluded that if there is any change, it will automatically change the FDI. Hence the study suggested that strong governance in Pakistan will attract the FDI, and in return, when FDI will boost in Pakistan country, it will generate employment and enhance economic growth, which is essential for Pakistan.

Ahmad et al (2018) resolve the issue of whether institutional quality influences sectoral FDI in Pakistan in the short and long run. The discoveries propose that institutional quality matters in attracting FDI in manufacturing and services in the long run. In contrast, institutional quality does not altogether affect FDI in the primary area. Besides, results show that the effect of institutional quality on these sectors isn't affected in the short run. The fundamental discoveries from this research are that, in the long run, institutional quality matters to attract significant FDI in Pakistan's manufacturing and services area. Henceforth, arrangements focused on strengthening the institutional quality ought to be the need for government.

Mir and Hussain (2018) inspected the military government's role in FDI inflows including other variables like GDP, exchange rate uncertainty, and inflation for the annual data of 1991-2013 in Pakistan. The OLS technique was used to validate the data of Pakistan. The result comprehended that inflation, exchange rate uncertainty, and GDP are significant determinants of FDI. At the same time, the military government has insignificant relation with FDI in Pakistan. Dar and fellows (2016) examined the justification for declining FDI in Pakistan through a qualitative strategy utilizing secondary sources. This exploration figured out that terrorism, political instability, and corruption are the core reasons discouraging foreign direct investors and interlinked effects on the overall business environment of

Pakistan. At the same time, it recognizes the robust solutions to fix the issues not only associated with the above three factors but also affect the other factors. Al-Khouri and Khalik (2013) contend that institutional quality and political steadiness alongside stable macroeconomic arrangements are fundamental in grabbing unfamiliar financial investors' eyes. Moreover, Kumar (2019) expressed that five regions regulate foreign direct investment, and the second most significant one after the monetary variables are the political factors.

Shah and fellows (2016) described Pakistan's sectoral FDI and institutional quality. The study tried to prove the evidence of short-run and long-run bidirectional causality between institutional quality and FDI in Pakistan's manufacturing and services sector. The results revealed that short-run bidirectional causality existed between institutional quality and manufacturing FDI while it has insignificant relation in the short run between institutional quality and FDI in primary and service sectors. The in-depth sectoral-level FDI analysis substantiates the presence of long-run bidirectional causality between institutional quality and FDI in services and manufacturing sectors, while no long-run causality is observed between institutional quality and FDI inflows in the primary sector. The results concluded that the long-run institutional quality is favorable because it attracts FDI, specifically in the manufacturing and services sector. It enhances the quality of institutions in Pakistan.

4.2.3 FDI and Economic Growth in Pakistan

Pakistan is generally a reputed investment region where British organizations have been overwhelmed for 200 years. In the 1970s, during the Zulfiqar Ali Bhutto regime, Pakistan began to have a nationalization process. However, after many years, it has been acknowledged to show the attitude toward privatization to compensate for the lost time globalization process. Pakistan's economy isn't sufficiently advanced to have a part in the globalization cycle to get advantages generally; subsequently, this economy is confronting challenges.

Shahbaz and Rehman (2010) explored the roles of foreign capital inflows and domestic financial sector development on economic growth in the case of Pakistan over the period 1971-2008. Using the ARDL technique, the empirical analysis comprehends that foreign capital inflows positively affect economic growth while financial sector development and public investment stimulate economic growth. Similarly, Tahir and colleagues (2015) analyzed the relationship between external determinants of economic growth in Pakistan between 1977 to 2013. The result concluded that external remittances, foreign direct investment, and imports are from a growth perspective. On the contrary, Saqib and fellows (2013) empirically tried the connection between FDI inflows and the financial development of Pakistan using time series information covering the time 1981-2010. Notwithstanding FDI inflows, four variables are additionally tried, incorporating debt, exchange rate, inflation, and domestic investment. Their discoveries show that there is a negative connection between FDI inflows and the economic growth of Pakistan. The same outcomes were achieved for different variables except domestic saving, which positively affects economic growth. The plausible justification for conflicting outcomes could be because of the benefits reclaimed by the effective financial planning country, which might be because of the restricted limit of the host country to retain new information and technology moved through FDI inflows.

Baek and Qian (2011) examine the eventual outcomes of the 9/11 incident on both emerging and advanced economies. According to them, the 9/11 attacks had extremely horrifying consequences for the worldwide economy. They expressed that these effects are more severe in emerging economies and that high political risk results in adverse consequences on FDI inflows. They mentioned three significant sorts of political risks that truly harm FDI inflows and the growth of emerging economies. (i) Nationalization of foreign assets bringing about a frequent breach of contracts leading to a threat to foreign investors. (ii) Unstable approaches associated with FDI. (iii) War, political violence, including terrorism harmful to foreign assets. Unluckily, Pakistan is going through a difficult time due to the factors which frustrate

the investment and development, particularly in the recent past, partisan psychological oppression and sectarian terrorism and violence have added fuel to the fire, and the nation is being divided into sects and killing each other in the name of religion.

Atique et al. (2004) led an observational concentrate by conducting information on Pakistan covering the time of 1970-2001 and presumed that the positive effect of FDI on the economic development of Pakistan enhanced under an export promotion (E.P.) framework when contrasted with the import substitution (I.S.) system. Another review was done by Gudaro et al. (2010) to examine the effect of FDI inflows on the development pace of Pakistan. Using a multiple regression model of Pakistan between 1981-2010, they concluded that an increase in FDI inflows leads to a higher development rate. Habib and Sarwar (2013) observed a long-run association between FDI and employment level in Pakistan. The study done by Awan and colleagues (2014) concludes that GDP growth rate, trade openness, per capita income, and foreign reserves are seen as huge and most influencing factors on FDI in Pakistan.

According to Ghazali (2010), FDI inflows unequivocally affect the financial activities of Pakistan, and they assume a huge part in expanding exports and the economic development rate of the country. The author led a detailed examination to test the causal connection between FDI inflows, domestic investment, and the economic development of Pakistan between 1981-2008. The Cointegration investigation uncovers that FDI leads to an expansion in domestic investment, which brings about a higher economic growth rate, and this connection runs two different ways. The outcomes propose that domestic investment funds should be encouraged in Pakistan as they lead to an expansion in both domestic and foreign investment, bringing about a higher economic growth rate.

Various literature has been studied to find the empirical gaps. The vast literature is available to see the effect of FDI from different perspectives, like FDI with economic growth and FDI with institutions. However, in the case of Pakistan, apart from a few qualitative studies (Haqqani, 2010; Nazar, 2011; Awan, 2014; Youxing & Qureshi, 2020), the updated empirical

literature is not available. If it is available, it discusses one dimension of governance (Serfraz, 2017). Therefore, the gap in the literature exists that the researcher noticed and based the study on this gap.

4.3 Model, Data and Econometrical Specification

4.3.1 The Model and Variables

The econometric model can be described in the following equation

$$lnFDI_t = \alpha + \beta IQ_t + \gamma Agri_t + \delta Infra_t + \partial LGDP_t + \tau Inf_t + \varepsilon_t \quad \text{---------- (1)}$$

Where FDI_t denotes foreign direct investment, IQ_t is institutional quality, $Agri_t$ is agriculture value added, $Infra_t$ is infrastructure, GDP_t is per capita income, and Inf_t is the Inflation rate in Pakistan.

Prior empirical studies use different proxies of FDI, and in line with other studies, we use FDI inflows as our dependent variable, which is the log of the net inflow of FDI in current U.S. dollars. We include the value-added share of agriculture in GDP as an explanatory variable because FDI is an important source of investment in agriculture and can enhance agricultural productivity by introducing new technology (Tondl and Fornero 2010). Good infrastructure can attract greater FDI because it reduces operational costs (Khadaroo and Seetanah 2010). We use infrastructure as a proxy of efficiency-seeking FDI. In line with other studies, we use mobile phone subscriptions per 100 people as a proxy of infrastructure. Theoretically, there is a positive relationship between infrastructure and inward FDI. It is widely believed that the host country's level of development is an important determinant of inward FDI. As the level of development increases, the population's ability to purchase goods and services increases, which motivates foreign investors to invest. GDP per capita captures the level of development (Azam et al. 2010; Sabir et al. 2019). We follow Sabir and Khan (2018); Mir and Hussain (2018): and Jan et al (2019) to use inflation as a proxy for macroeconomic instability and economic tension.

The data for institution variables are taken from International Country Risk Guide (ICRG) database. This study considers three political risk components, namely law and order (a proxy for Judicial effectiveness), Military in politics, and Religious Tensions to investigate the importance of institutional variables in affecting the inflow of FDI into Pakistan. These variables are measured using points. Each indicator is scaled either from, 0 to 6 points while the highest value indicates a better institution and less political risk. The detailed definition and explanation of the institution variables are as follow:

Law and Order The strength and objectivity of the legal system are taken into account when evaluating the "Law" factor, while the "Order" element evaluates popular observance of the law.

Military in Politics The military is not elected by anyone. Therefore, its involvement in politics, even at a peripheral level, is a diminution of democratic accountability. A military takeover or threat of a takeover may also represent a high risk if it is an indication that the government is unable to function effectively and that the country, therefore, has an uneasy environment for foreign businesses.

Religious Tensions Religious tensions may be caused by a single religious group's dominance of society and/or governance, which aims to replace civil law with religious law and exclude other religions from the political and/or social process; by this group's desire to dominate governance; by the suppression of religious freedom; or by the group's desire to express its own identity, distinct from that of the nation as a whole.

4.3.2 Autoregressive Distributed Lag (ARDL) Specifications

The Autoregressive Distributed Lag (ARDL) approach, developed by Pesaran et al. (2001), is considered a handy technique to explore the short-run and long-run linkages among any understudied variables. ARDL construction of this research can be presented with the help of the following equation:

$$\Delta Y = \alpha + \beta\, Y_{t-1} + \gamma\, Z_{t-1} + \sum_{i=1}^{k} \delta\ \Delta\, Y_{t-1} + \sum_{i=1}^{k} \theta\ \Delta\, Z_{t-1} + \varepsilon \text{ ---------- (2)}$$

Where Y demonstrates the dependent variables of the models, and Z represents the vector of the independent variables vector.

The ARDL Bounds cointegration method is applied to identify the short-run and long-run determinants of FDI. Considering equation 1, this technique is described below:

$$\Delta \ln FDI_t = \alpha_0 + \beta_1 \ln FDI_{t-1} + \beta_2 IQ_{t-1} + \beta_3 Agri_{t-1} + \beta_4 Infra_{t-1} + \beta_5 \ln GDP_{t-1} + \beta_6 Inf_{t-1} + \sum_{j}^{n} \varphi_j \Delta \ln FDI_{t-j} + \sum_{k}^{n} \varphi_k \Delta\, IQ_{t-k} + \sum_{l}^{n} \varphi_l \Delta\, Agri_{t-l} + \sum_{m}^{n} \varphi_m \Delta\, Infra_{t-l} + \sum_{o}^{n} \varphi_0 \Delta \ln GDP_{t-0} + \sum_{p}^{n} \varphi_p \Delta\, Inf_{2_{t-p}} + \varepsilon_t \quad ---------- (5)$$

Where α_0 is the constant term, and ε_t is the disturbance term of the model. The rest of the variables have already been explained in the model specification. The following hypothesis is tested via the F-statistics-based Wald test to determine the existence of a cointegration relationship.

$H_0 = \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = 0$ (No Cointegration exists)
$H_1 = \beta_1 = \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq 0$ (Cointegration exists)

The estimated value of the Wald test is compared with the critical values (CV) suggested by Pesaran et al. (2001). There are two bounds of the CV: lower bound and upper bound. If the calculated value of the test is greater than the upper bound, then we reject the null hypothesis that no cointegration exists. After establishing a long-run relationship through the bound test, the long-run parameters can be estimated by using the following equation:

$$\ln\ FDI_t = \alpha_0 + \sum_{j}^{n} \alpha_j \ln\ FDI_{t-j} + \sum_{k}^{n} \alpha_k\ IQ_{t-k} + \sum_{l}^{n} \alpha_l\ Agri_{t-l} + \sum_{m}^{n} \alpha_m\ Infra_{t-m} + \sum_{o}^{n} \alpha_o \ln\ GDP_{t-o} + + \sum_{p}^{n} \alpha_p\ Inf_{t-p} + \varepsilon_t \quad ---------- (6)$$

The next step is to evaluate the FDI model's short-run parameters, which can be done with the following equation based on the error correction model.

$$\Delta \ln FDI_t = \beta_0 + \sum_{j}^{n} \beta_j \Delta \ln FDI_{t-j} + \sum_{k}^{n} \beta_k \Delta IQ_{t-k} + \sum_{l}^{n} \beta_l \Delta Agri_{t-l} + \sum_{m}^{n} \beta_m \Delta Infra_{t-m} + \sum_{o}^{n} \beta_o \Delta \ln GDP_{t-o} + \sum_{p}^{n} \beta_p \Delta Inf_{2\,t-p} + \delta ECM_{t-1} + \varepsilon_t ----- (7)$$

Where ECM_{t-1} is the error correction term with the lagged period? It is used to check the speed of adjustment in long-run equilibrium after the shock in the short-run, given that the statistically significant value of δ falls between o and -1. The significance of this term verifies the existence of the long-run relationship.

4.4 Results and Discussion

This section reports the empirical results of our pre-defined economic model. Table 4.1 deals with the stationarity checking of all under-studied variables. Some variables like institutional quality, inflation rate, and agriculture value added are stationary at a level while the remaining variables are stationary at first difference. According to basic econometrics, the Autoregressive Distributed Lag (ARDL) approach is the most appropriate technique to find the long-run and short-run coefficients of the pre-determined model. This is why we applied the ARDL model in this study to examine the impact of institutional quality on FDI after controlling several explanatory variables.

Table 4.1 Stationarity Checking (ADF Test)

	P-Value at Level	P-Value at First Difference	Decision
Foreign Direct Investment	0.2097	0.0001	I (1)
Military in Politics	0.6087	0.0006	I (1)
Religious Tension	0.0076	---	I (0)
Law and Order	0.4737	0.0011	I (1)
Agriculture Value Added	0.0000	---	I (0)
Infrastructure	0.9231	0.00989	I (1)
GDP Per Capita	0.345	0.0023	I (1)
Inflation	0.0004	---	I (0)
Institutional Quality	0.0000	---	I (0)

Before ARDL estimation of the FDI-Institutional Quality model, we need to identify the optimal lag length for our model where optimal lag length selection is based on the two criterions "Akaike information criterion (AIC) and Schwarz information criterion (S.C.)." Table 4.2 reports the summary of different optimal lag length selection criteria. The optimal lag selection decision is based on "select lags with the lowest value between AIC and S.C.." The table mentions that both AIC and S.C. indicate that 4 lags are optimal to reduce residual correlation, so we used 4 lags during the ARDL estimation of the ARDL model[30].

[30] Following the E-Views user guide, we put 4 lags in the estimation of the ARDL model. The E-Views automatically choose the appropriate number of lags.

Table 4.2 Optimal Lag Length Selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-5.4883	NA	1.35E-06	0.676665	0.907953	0.752059
1	213.1204	352.5947	5.22E-12	-11.8142	-10.4265	-11.3619
2	261.1812	**62.01388***	1.35E-12	-13.302	-10.75784	-12.4727
3	286.141	24.15474	2.00E-12	-13.2994	-9.59881	-12.0931
4	332.7716	30.08425	**1.24e-12***	**-14.69494***	**-9.83789***	**-13.11167***

LogL, LR, FPE,AIC,SC, and HQ are log length, Likelihood ratio, Final prediction error, Akaike information criterion,Schwarz information criterion, and Hannan-Quinn information criterion.

The bounds test is applied to verify the existence of a long-term association between FDI and other explanatory variables. The null hypothesis of this test describes that "There is no long-term relationship among understudy variables of the FDI-Institutional Quality model." The decision condition is "If F-statistics is greater than the upper and lower bound critical values, then it means to reject the null hypothesis." Table 4.3 reports the ARDL Bounds test results for the FDI-Institutional Quality model. The F-statistics is 4.88, which is higher than the lower and upper bound C.V. of the test, so we reject the null hypothesis, which means a long-term relationship exists among the variables of the FDI-Institutional Quality model.

Table 4.3 Bounds Cointegration Test

Null Hypothesis: No long-run relationships exist		
Test Statistic	Value	k
F-statistic	4.88	5
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.26	3.35
5%	**2.62**	**3.79**
2.50%	2.96	4.18
1%	3.41	4.68

After verification of the presence of a co-integrating relationship among understudied variables with the Bounds test, the ARDL model is applied to find the short-term and long-term coefficients of the FDI-Institutional Quality model. Table 4.4 provides the long-term coefficients of the ARDL model, where FDI is the dependent variable while institutional quality is an independent variable. The control variables include agriculture value added, infrastructure, GDP per capita, and inflation. The institutional quality index variable is constructed with the help of principal component analysis, where military in politics, religious tension, and law and order variables are used in the construction process. The following flow chart provides a visual display of the construction process of the institutional quality index. The principal component analysis results are presented in this study's appendix section.

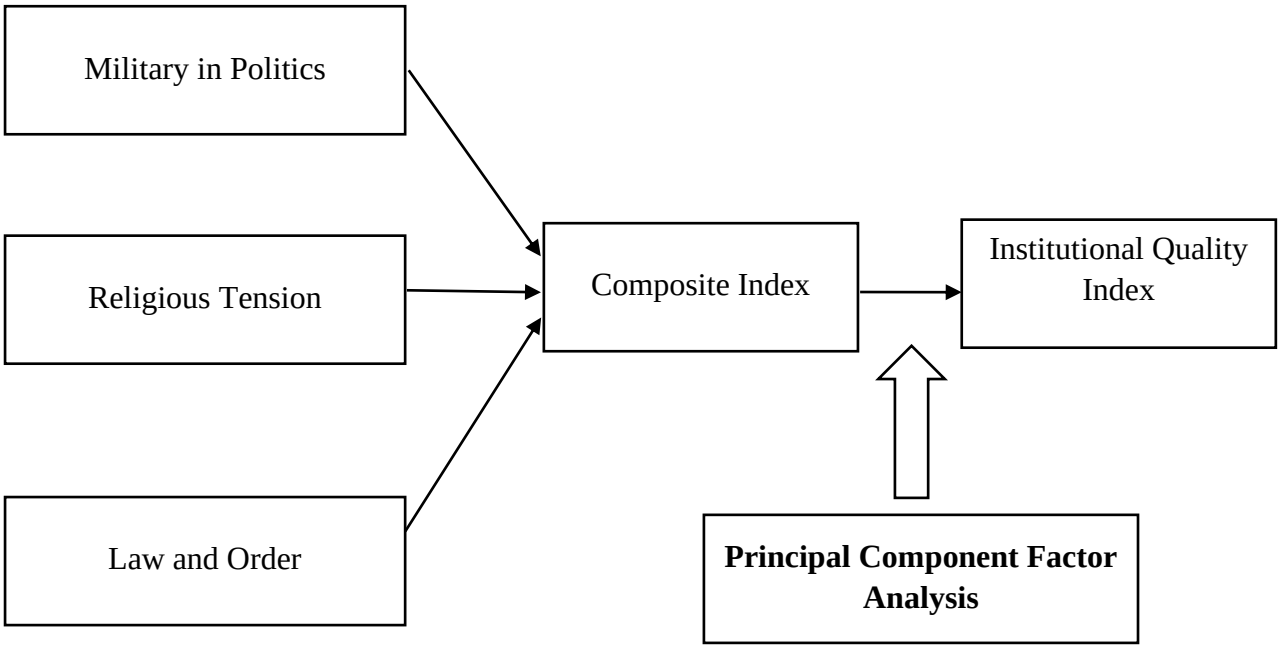


Figure 4.1 Construction of Institutional Quality Index

Table 4.4 reports that institutional quality has a statistically significant and positive impact on foreign direct investment. This suggests that the quality of institutions in terms of military involvement in politics, religious tension, and law and order plays a vital role in attracting

foreign direct investment in the domestic country. Quantitatively speaking, if the institutional quality of the domestic economy increases by one unit, then the inflow of foreign investment increases by 0.515 units. It implies that FDI is attracted to economies where institutions are solid. These findings are in line with the previous literature on the FDI-Institutional quality nexus; for instance, Sabir et al. (2019) reported similar results for developing economies, and Ali et al. (2010) for developed and developing economies. Moreover, other researchers (Masron & Nor, 2013; Gastanaga et al., 1998; Globerman & Shapiro, 2002) also reported similar findings where they concluded that different institutional quality measures significantly positively influence the inflows of foreign investment.

Regarding control variables, ARDL estimation revealed that the agriculture value-added and inflation variables have no statistically significant impacts on the FDI inflows. A plethora of empirical literature also postulates that the inflation rate has no impact on foreign investment inflows. For instance, Amoah et al. (2015) also found no significant linkage between inflation and FDI. Additionally, the infrastructure variable, proxied by the mobile cellular subscription, has a statistically significant and positive impact on the FDI inflows. It infers that access to technology through mobile cellular subscriptions encourages foreign investors to invest in the domestic economy. As Campos & Kinoshita (2008) mentioned, "poor infrastructure in the form of less dissemination of information increases transaction costs and restrains access to both local and global markets, ultimately impeding foreign investment." Our findings are also in line with the previous literature, as Soomro et al. (2022) for BRICS economies and Sapuan and Roly (2021) for ASEAN economies found similar results. Lastly, the ARDL results indicate that GDP per capita is a vital determinant of the FDI inflow as the coefficient is statistically significant and positive. One reason could be that foreign investors consider the development level an essential indicator when deciding whether to invest capital in developing economies like Pakistan.

Table 4.4 Long-Run Coefficients of the ARDL Model

Dependent Variable: Foreign Direct Investment				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**P-Value**
Institutional Quality$_t$	0.514844	0.114655	4.490393	0.0020
Agriculture$_t$	0.027973	0.023839	1.173389	0.2744
Infrastructure$_t$	0.028236	0.005658	4.990649	0.0011
GDP Per Capita$_t$	1.468102	0.283769	5.173573	0.0008
Inflation$_t$	-0.027384	0.018059	-1.516342	0.1679
Constant	-16.361495	6.879837	-2.378180	0.0447

Table 4.5 reports the short-term results of our estimated FDI-Institutional Quality model, also known as the error correction representation (ECM) of the ARDL model. The ECM results include two essential parts. The 1st part reports the model's short-run coefficients, while the 2nd part describes the ECM term. Table 4.6 reports that different variables at different lags have different impacts on the FDI inflows in Pakistan. Most of the short-run results are consistent with the long-run results presented in Table 4.4.

The most important thing to examine in this table is the second part, in which the last term is labeled as $\mathrm{ECM}_t\,(-1)$. The significance of this term verifies the presence of the long-run association. Our estimated model ECM term states that “about 78% of the disequilibrium is corrected within one year". This term is significant at the conventional level of significance, which further confirms the existence of a long-term relationship and the accurate estimation of the ARDL model.

Table 4.5 Error Correction Representation of the Selected ARDL Model

Dependent Variable: Foreign Direct Investment				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**P-Value**
$\mathbf{FDI_{t-1}}$	0.531233	0.130663	4.065679	0.0036
$\mathbf{IQ_t}$	0.323156	0.069647	4.639884	0.0017
$\mathbf{IQ_{t-1}}$	0.003608	0.110752	0.032578	0.9748
$\mathbf{IQ_{t-2}}$	0.006566	0.136847	0.047981	0.9629
$\mathbf{IQ_{t-3}}$	-0.208583	0.102949	-2.026079	0.0773
$\mathbf{Agriculture_t}$	0.029650	0.011497	2.578964	0.0327
$\mathbf{Infrastructure_t}$	0.087383	0.014522	6.017365	0.0003
$\mathbf{Infrastructure_{t-1}}$	-0.052194	0.022408	-2.329228	0.0482
$\mathbf{Infrastructure_{t-2}}$	-0.028310	0.015810	-1.790626	0.1111
$\mathbf{Infrastructure_{t-3}}$	0.065718	0.012725	5.164322	0.0009
$\mathbf{GDP\ Per\ Capita_t}$	1.240575	0.670946	1.848995	0.1016
$\mathbf{GDP\ Per\ Capita_{t-1}}$	-2.582552	0.940572	-2.745725	0.0252
$\mathbf{GDP\ Per\ Capita_{t-2}}$	2.561929	1.193367	2.146808	0.0641
$\mathbf{GDP\ Per\ Capita_{t-3}}$	-0.699835	0.646734	-1.082107	0.3107
$\mathbf{Inflation_t}$	-0.016323	0.006508	-2.508113	0.0365
$\mathbf{Inflation_{t-1}}$	0.011317	0.005246	2.157220	0.0631
$\mathbf{Inflation_{t-2}}$	0.018879	0.004923	3.834728	0.0050
$\mathbf{Inflation_{t-3}}$	-0.026577	0.010812	-2.458022	0.0394
$\mathbf{ECM_t\ (-1)}$	-0.777579	0.167033	-4.655245	0.0016

Scholars commonly use the CUSUM test to check the stability and structural breaks for the estimated ARDL model. In this study, both CUSUM and CUSUM squares tests are applied to examine the stability of our FDI-Institutional Quality model. The results of both tests are reported in the following figure 4.2 and figure 4.3, respectively. Both tests follow the rule of thumb, which asserts that "the blue line should be within the limits of red dotted lines where dotted lines are displaying the upper and lower bounds critical value of the estimated model to meet the stability condition with no structural break." As our estimated FDI-Institutional Quality model is fulfilling this rule of thumb condition of the CUSUM test, we can say that our model is stable and has no structural breaks.

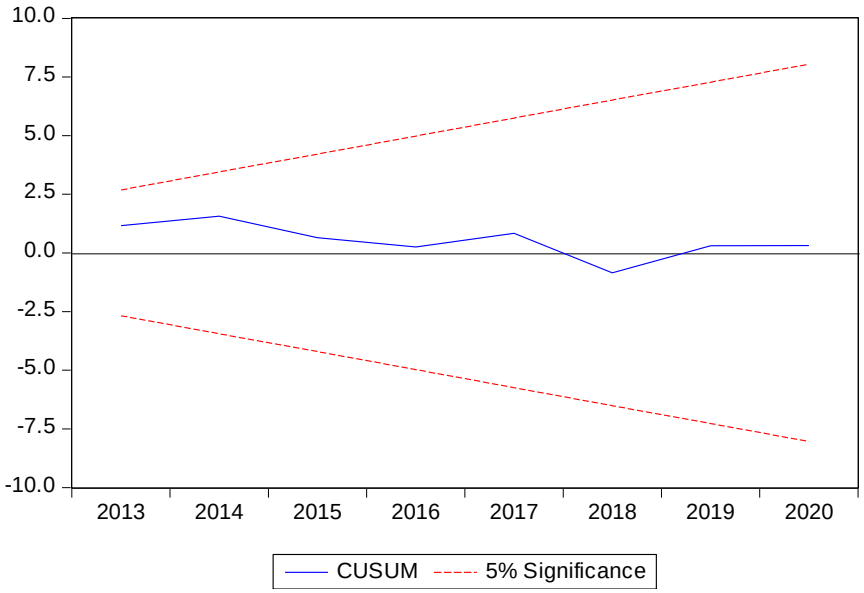


Figure 4.2 Plot of ARDL CUSUM Test of Stability

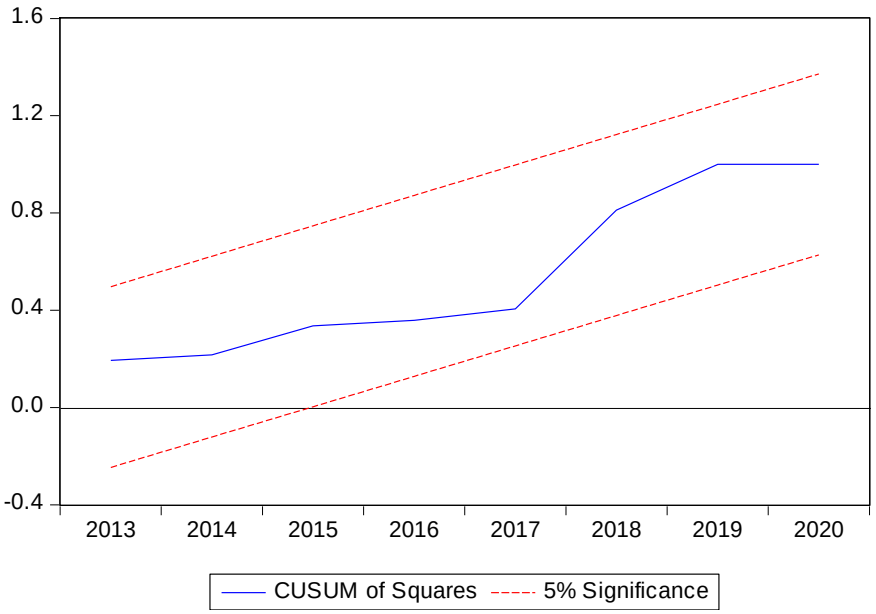


Figure 4.3 Plot of ARDL CUSUM of Squares Test of Stability

After estimating the FDI-Institutional Quality model, we run some diagnostic tests to evaluate the reliability of our results. Table 4.6 reports the results of these diagnostic tests. To check the Heteroskedasticity problem, we applied the Breusch Pagan Godfrey test. At the same time, the Breusch-Godfrey test is applied to check the problem of serial correlation. The p-values of both tests are larger than the 5% significance level, which means the null hypothesis of homoscedasticity and no serial correlation are accepted. It infers that the estimated model has no problem with Heteroskedasticity and serial correlation.

Table 4.6 Diagnostic Tests

Test Type	**Test Name**	**Significance**	**Decision**
Heteroskedasticity Test	Breusch Pagan Godfrey Test	P-Value= 0.7651	The null hypothesis is accepted, which means there is no problem with Heteroskedasticity.
Autocorrelation Test	Breusch Godfrey Test	P-Value= 0.7148	The null hypothesis is accepted, meaning there is no autocorrelation problem.

4.5 Conclusion and Policy Recommendations

There has been a global rush to improve and regulate institutional circumstances in many nations to boost their competitiveness since FDI has emerged as a significant source of investment and capital development. As is well known, the development of the global economy has been complemented by multinational companies (MNEs), characterized by centralized management, global activities, and vast new information. In the short and long term, FDI has a considerable positive impact on Pakistan's GDP growth. Based on the results of this study, the following advice is discretionary for the long-run economic profit of FDI in Pakistan.

The object of this study was to analyze the role of FDI in economic growth in Pakistan, and the result suggested that FDI is more attractive where institutions are stronger. The ECM term shows that 78 percent of the disequilibrium can be corrected within a year. The result of each variable is consistent with the literature. There are some policy recommendations after having the results.

Policymakers ought to give foreign investors a helpful and friendly environment to attract more FDI. The government of Pakistan ought to expand its output level and domestic investment to attract FDI. The government of Pakistan ought to diminish taxes and give opportunities to foreign investors through ease of carrying business with any hurdle. Based on this study, it is recommended that political laborers be interested in foreign investors to improve economic development and take the benefits of FDI.

Efficient institutional arrangements should be the priority for policymakers to ensure more FDI flows toward Pakistan's manufacturing and services sectors. Government can attract more foreign direct interest in the nation by working on the rule of the law-and-order circumstance of the country and by guaranteeing a more politically stable environment that is favorable for foreign companies to establish and maintain their business tasks in Pakistan.

4.6 Appendices of Chapter 4

Appendix 1

Table 4.A.1.1 List of Variables and their Sources

Variable Name	Description	Data Source
Agriculture Value Added	Agriculture value added as a percentage of GDP	World Development Indicators (WDI) 2022
Infrastructure	Mobile cellular subscriptions (per 100 people)	World Development Indicators, 2022
GDP Per Capita	Pakistan's economic output per person is calculated by dividing the GDP by its population.	World Development Indicators, 2022
Inflation	Percent change in annual general prices	Economic Surveys of Pakistan
Military in Politics	Index based ratings	International Country Risk Guide
Religious Tension	Index based ratings	International Country Risk Guide
Law and Order	Index based ratings	International Country Risk Guide

Table 4.A.1. 2 Correlation Matrix

Variable Name	(1)	(2)	(3)	(4)	(5)	(6)
(1) Foreign Direct Investment	1					
(2) Institutional Quality	0.3224	1				
(3) Agriculture Value Added	-0.1101	-0.0064	1			
(4) Infrastructure	0.7034	0.5508	-0.2269	1		
(5) GDP Per Capita	0.8603	0.4533	-0.2186	0.9179	1	
(6) Inflation	0.2951	0.1272	0.0347	0.1391	0.0711	1

Appendix 2

Institution Quality Index

Principal Components/ Correlation

Table 4. A.1.1 Principal Component Analysis

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	1.4949	0.4902	0.4983	0.4983
Comp2	1.0048	0.5045	0.3349	0.8332
Comp3	0.5003		0.1668	1.0000

Principal Components (eigenvectors)

Variable	Comp1	Comp2	Comp3
Military in Politics	0.6250	0.4694	-0.6237
Religious Tensions	-0.3271	0.8829	0.3368
Law and Order	0.7088	-0.0065	0.7054

CHAPTER 5

General Conclusion

5.1 Summary

Researchers and decision-makers have been interested in the connection between institutions and economic performance for the last few decades. After the inclusion of governance in post-2015 sustainable development goals, the vast significance of governance is widely accepted. Institution quality is recognized as an engine of economic growth in fostering effective labor division, more productive investment, and quicker implementation of social and economic programs. Good institutions, in general, encourage investment, which benefits development. Therefore, through strong governance, which is a vital component of attracting foreign investment, the quality of institutions can draw FDI. In the discussion of global development and academic study, the idea of good governance was given increased weight. This thesis investigated the institutions' role in economic growth, foreign direct investment, and other economic factors through theoretical and empirical studies.

The thesis consists of 3 main essays. The first study examined the impact of the quality of institutions on the economic growth of developed and developing countries. The 2nd study explains the influence of institutional quality on foreign direct investment inflows using panel data of South Asian economies. The last study explores the impact of specific institutions (Military in politics, Law and order, religious tensions) on foreign direct investment by taking the case study of Pakistan.

5.2 Main Results of the Thesis

In the second chapter of the thesis, we study the impact of institutional quality on real GDP per capita for a large sample of developed and developing countries, controlling for the

effects of gross fixed capital formation (GFCF), information and communication technology (ICT), education (H), trade openness as a percentage of GDP (Trade) and domestic credit to the private sector (Credit). We construct an overall governance indicator (Gov) using the principal component analysis (PCA) method and test the explanatory capacities of this indicator. In particular, we include in this indicator (i) control of corruption, (ii) government effectiveness, (iii) political stability and absence of violence, (iv) regulatory quality, (v) rule of law, and (vi) voice and accountability of the WDI database. We also construct an overall information and communication infrastructure (ICT) indicator using the same method that includes (i) fixed telephone subscriptions (per 100 people), (ii) mobile cellular subscriptions (per 100 people), and (iii) individuals using the Internet (% of the population). To estimate the relationship between the variables, the GMM panel estimator was used to address the issue of endogeneity of our governance indicator and the other variables.

Our results show that governance has a positive and significant impact on GDP per capita in all country groups. The magnitude of the estimated coefficient of the governance indicator is nevertheless higher for developing countries than for developed countries. These results show that, while governance does play an important role in the long-term growth process of countries, it is stronger in developing countries. Our results are also consistent with the literature, gross fixed capital formation (GFCF), information and communication technology (ICT), domestic credit to the private sector (Credit), trade openness (Trade), and education (H) have a positive effect on growth in all our country samples.

Using panel data from South Asian countries, Chapter 3 of the thesis assesses the impact of institutional quality on foreign direct investment (FDI) flows of countries in the region. In the thesis, we choose a composite governance indicator (Gov), constructed as before from principal component analysis (PCA) of various indicators from the WDI database so as t embrace more dimensions of governance than in previous studies. In particular, we include (i) control of corruption, (ii) government effectiveness, (iii) political stability and absence of

violence, (iv) regulatory quality and rule of law, and (vi) voice and accountability. Our results show a significant positive relationship between FDI and the quality of institutions, suggesting that foreign investors consider institutions as a key dimension in countries in the region. Our results also reveal that the number of mobile phones (Tel) as a proxy for information and communication infrastructure, and the value added of agriculture as a percentage of GDP (Agri) have a statistically significant and positive impact on FDI inflows in the South Asian region. On the other hand, the size of the market (Size), represented by GDP and the inflation rate (Infl) do not seem to be determinants in investors' decisions, as the coefficients of these variables are not significant.

Chapter 4 of the thesis extends the previous work by providing an empirical analysis of the link between FDI and institutions in the specific case of Pakistan. We use principal component analysis (PCA) to generate an aggregate indicator of institutional quality (Gov) that includes (i) the army's involvement in politics, (ii) the judiciary, and (iii) religious tensions from the ICRG database. We choose the ARDL (Autoregressive Distributive Lag) approach to distinguish between short-term and long-term dynamics. Our estimation results indicate that Pakistan would attract more FDI if its institutions were more satisfactory. Concerning the control variables, our estimates reveal that agricultural value added (Agri) and inflation (Infl) do not have a statistically significant impact on FDI inflows. However, our results show that the infrastructure variable, represented by mobile phone subscription (Tel) and GDP per capita (GDPpc) are key determinants of FDI inflows in Pakistan, with the coefficient of these variables being positive and statistically significant. The rate of convergence to equilibrium, which in our analysis is about 78%, is represented by the ECM term.

5.3 Suggestions and Policy Implications

One of the main implications of the results of our first research is that institution-building is essential to achieve sustained growth in developing countries. We also suggest that developing countries invest more in the education of their people, promote investment and information and communication technologies in their economies, increase financial development and reduce trade barriers to stimulate growth in their countries. Thus, by implementing appropriate political, economic, and institutional changes, governments in poor countries can hope to raise the living standards of their people. Our study suggests that low-income countries opt for appropriate institutions, including strengthening the rule of law, voice and accountability, political stability, government efficiency, and the regulatory environment, and reducing the level of corruption in the country. In addition, when governance improves, foreign aid and foreign investment, and capital increase, which in turn stimulates countries' long-term growth and development.

In line with the results of our second research, we suggest that governments in South Asian countries should encourage FDI through institutional reforms and appropriate macroeconomic policies. The empirical results of our work show that South Asian economies would benefit from improved infrastructure, information and communication technologies, in particular, reduced corruption and strengthened institutions such as the rule of law, political stability, government efficiency, and the regulatory environment.

Our fourth chapter shows that Pakistan suffers from social and political instability and an authoritarian regime that does not respect the law and agreements. Pakistan must learn to honor its contracts, adopt coherent policies and keep the military and the clerics out of business. Pakistan is a politically, socially, and economically fragile country that depends heavily on external funding. It cannot afford to support governments increasingly influenced by religious extremism that discourage foreign investment and undermine the rule of law. Democracy is the best way to limit the impact of Islamists in Pakistan. We propose that

demands for Islamisation by religious parties and radical groups be limited by the development of secular political parties and the strengthening of the country's civil society. We propose that the government should manage and develop the national economy by operating within the framework of political realities and global governance.

In this way, our research findings provide policymakers in developing countries, particularly in South Asia and Pakistan, with a roadmap for attracting more foreign investment to these countries.

5.4 Limitations and Future Recommendations

There are various avenues of research that could complement our thesis work. The recent pandemic of COVID-19, which started in 2019 and is still ongoing, could be used as a field to study how governance affects the volume and volatility of FDI during such a crisis. A pandemic of this magnitude reveals flaws in institutional infrastructures that might have gone unnoticed even in other types of crises, such as a credit or commodity price bubble. Researchers would, for example, be able to study whether institutional quality has affected the volume and volatility of FDI (and thus economic growth) when more data become available.

In addition, due to the unavailability of some data and time constraints, we have not considered the role of individual institutional variables that can significantly affect the behavior of foreign agents and investments. We believe that there are gaps in the research to study, for example, the role of religious extremism in the Pakistani economy, particularly in the development of the foreign direct investment.

Another line of research could also focus on the differences between Pakistan and Bangladesh in attracting foreign investors. Indeed, while both countries suffer from religious extremism, the pervasiveness of the military in government and business, and an ineffective judicial system, Bangladesh has historically attracted more FDI than Pakistan.

CHAPITRE 6

Résumé de la Thèse en Français :

En 400 avant J.-C., Kautilya (supposément ministre en chef du roi de l'Inde) soulignait la valeur de la justice, de l'éthique et des tendances anti-autocratiques dans son Arthastra (traité sur la gouvernance) dans lequel il décrit le rôle du roi pour guider efficacement la société par une gouvernance sûre (Kaufmann et Kraay, 2007). Selon North (1990)[31], les institutions sont les règles de base d'une société ou, pour être plus précis, "les restrictions établies par l'homme qui influencent l'interaction humaine." Ces règles peuvent prendre la forme d'institutions officielles, comme les lois et les règlements, d'institutions informelles intégrées à la culture, comme le décrit Tabellini (2005), ou le capital social (voir Putnam et al, 1993).

Depuis quelques décennies, les chercheurs et les décideurs s'intéressent au lien entre les institutions et la performance économique des pays. Selon North et Thomas (1973), les différences de qualité des institutions sont à l'origine des différences de croissance et de développement, en plus des facteurs économiques tels que l'accumulation de capital ou l'innovation. En raison des disparités dans leurs institutions, la Corée du Nord et la Corée du Sud par exemple ont, malgré certaines similitudes, des résultats économiques très différents (Acemoglu et al., 2006). Les institutions sont notamment cruciales car elles influencent le comportement des acteurs économiques (Sabir et Zahid 2012). Dans les pays par exemple où les droits de propriété sont sûrs et bien protégés, les agents sont encouragés à investir, ce qui

[31] *"Il suffit de comparer l'organisation de la production d'une économie du tiers monde à celle d'une économie industrielle avancée pour être impressionné par les conséquences de droits de propriété mal définis et/ou inefficaces. Non seulement le cadre institutionnel entraînera des coûts de transaction élevés dans le premier cas, mais l'insécurité des droits de propriété se traduira par l'utilisation de technologies qui emploient peu de capital et n'impliquent pas d'accords à long terme... De plus, des problèmes aussi banals que l'impossibilité d'obtenir des pièces de rechange ou une attente de deux ans pour faire installer un téléphone nécessiteront une organisation de la production différente de celle qu'exige un pays avancé. Un pot-de-vin suffisant pour obtenir une livraison rapide dans le dédale des contrôles à l'importation ou une installation rapide du téléphone peut exister, mais les coûts de transaction fictifs qui en résultent modifient considérablement les prix relatifs et, par conséquent, la technologie employée." (North 1990: 65)*

stimule la croissance. Dans le cas contraire, la croissance et les investissements progressent moins.

L'objectif de développement économique a placé la gouvernance au premier plan au cours des trois dernières décennies. La Banque mondiale, qui a utilisé le concept de "bonne gouvernance" pour la première fois en 1989, souligne la nécessité de développer des institutions impartiales, capables de protéger les droits de propriété et de promouvoir les échanges commerciaux, les investissements et l'innovation (Zhuang et al., 2014). L'importance de la gouvernance est également reconnue en raison de son inclusion dans les objectifs de développement durable post-2015. Une gestion efficace du développement est considérée par la Banque asiatique de développement (BAD, 1997) comme l'essence de la gouvernance. La bonne gouvernance est également définie par l'Agence des États-Unis pour le développement international (USAID, 2002) comme un système complexe d'interactions entre les structures, les traditions et les procédures qui défendent les idéaux de responsabilité, de transparence et de participation. Selon l'ancien Secrétaire général des Nations Unies, Kofi Annan (Nations Unies, 1998), "la bonne gouvernance est probablement l'élément le plus essentiel pour réduire la pauvreté et soutenir le développement".

La notion de gouvernance est large et comprend de nombreuses composantes distinctes. Selon Kaufmann et al (2010), la gouvernance est un ensemble de traditions et d'institutions qui peuvent être utilisées pour exercer le pouvoir au profit de tous que les auteurs divisent en trois catégories: (i) la dimension politique, qui concerne les méthodes utilisées pour choisir, surveiller et révoquer les personnes en position de pouvoir, (ii) la dimension économique, qui concerne la capacité du gouvernement à gérer efficacement les ressources du pays et à mener des politiques saines, et (iii) la dimension sociale de respect institutionnel, qui concerne le respect que les citoyens et l'État ont pour les institutions. Chacune de ces trois dimensions - politique, économique et sociale - a ensuite été divisée en deux catégories de façon à définir six piliers de la gouvernance (i) stabilité politique, absence de violence ou de terrorisme, et

(ii) voix et responsabilité pour la composante politique, (ii) efficacité du gouvernement et (iv) qualité de la réglementation pour la dimension économique (v) contrôle de la corruption et (vi) état de droit pour la composante sociale (Kaufmann et al. 2010). Ces axes de gouvernance affectent une variété d'institutions clés essentielles à la réussite économique, comme les droits de propriété ou l'exécution impartiale des contrats ainsi que la stabilité macroéconomique (Rodrik et Subramanian, 2003).

La voix et la responsabilité évaluent la perception de l'implication des citoyens dans les prises de décision politique, leur liberté d'association et d'expression, et la présence de médias libres. La stabilité politique et l'absence de terrorisme saisissent la perception de la probabilité de déstabilisation du gouvernement par des moyens violents ou illégaux, y compris le terrorisme. L'efficacité du gouvernement mesure la qualité des services publics, leur indépendance vis-à-vis des pressions politiques, la qualité des politiques, **et** leur application, et la crédibilité du gouvernement dans le respect de ses engagements. La qualité de la réglementation intègre les opinions sur la capacité du gouvernement à créer et à mettre en œuvre des règles et des politiques judicieuses qui encouragent la croissance du secteur privé. L'État de droit décrit la façon dont les citoyens perçoivent le niveau de confiance et l'acceptation des normes sociales, l'efficacité de l'application de la loi, de la police, et des tribunaux, le respect des droits de propriété et la probabilité de la criminalité et de la violence. Le contrôle de la corruption comprend les impressions sur la mesure dans laquelle l'autorité officielle est utilisée pour acquérir des avantages privés.

Pour résumer, dans la littérature, la croissance économique peut être déterminée par deux facteurs, tous deux influencés par la gouvernance. Premièrement, une meilleure gouvernance se traduit par des institutions qui accroissent l'exploitation de ressources humaines et naturelles et attirent des ressources pour leur développement. Cette procédure produit plus de croissance selon les modèles de Solow et les nouvelles théories de la croissance. Deuxièmement, une meilleure gouvernance améliore les institutions à travers un ensemble de

lois qui soutiennent la croissance, conformément au concept d'infrastructure sociale. L'amélioration des institutions et des politiques gouvernementales crée ainsi un climat plus favorable aux investissements en capital physique et humain, ce qui favorise la croissance.

Dans la thèse, nous nous intéressons aux questions de gouvernance et à l'impact des institutions sur les performances économiques des pays en développement d'un point de vue de la croissance et de l'attrait des investisseurs étrangers.

6.1 Gouvernance et Croissance

Un modèle de distribution très déséquilibré peut être observé dans la répartition des revenus dans le monde. En 2015, le PIB par habitant de l'Amérique du Nord était au moins 34 fois supérieur à celui de l'Asie du Sud et de l'Afrique subsaharienne (World Bank, 2016b). En outre, certains pays du monde ont connu une croissance rapide au fil du temps, tandis que d'autres n'ont pas connu cette croissance. Par rapport aux chiffres de 1968, le PIB nominal moyen des nations d'Asie de l'Est et du Pacifique a été multiplié par 3711 en 2015. Mais les nations d'Afrique subsaharienne n'ont connu qu'une multiplication par 868 tout au long de cette période (World Bank, 2016b). Ces chiffres démontrent la disparité de la croissance à travers le monde.

Il existe deux principales écoles de pensée sur la croissance, la première autour du modèle « néoclassique » de Solow (1956), la seconde autour des théories de la « croissance endogène » proposées par Lucas (1988) et Romer (1989). Selon la première école, l'expansion démographique a un impact sur la croissance économique, de même que l'accumulation de capital physique. La seconde, dont Mankiw et al. (1992) font partie, affirme qu'en plus de l'expansion démographique et du capital physique, la technologie ou le capital humain sont des composantes nécessaires de la croissance économique. En outre, selon une vaste littérature les institutions jouent un rôle crucial dans le processus de développement et de progrès économique des pays (Acemoglu et al., 2001, 2005 ; Dollar et

Kraay, 2003 ; Hall et Jones, 1999 ; Rodrik et al., 2002). Selon Rodrik et al (2002), les institutions ont davantage contribué à la croissance économique que la géographie et le commerce. De mauvaises politiques macroéconomiques résultent d'institutions faibles et inadéquates. Le manque de protection des droits de propriété par exemple entraîne une baisse des investissements en capital physique et, humain, ce qui nuit à la croissance. Ainsi, la relation entre les institutions et la performance économique est présentée comme une question des plus importantes et la littérature montre que les institutions sont responsables du développement et du progrès économiques des pays.

D'un point de vue empirique, de nombreuses recherches qui mettent en lumière le lien entre performance économique et gouvernance examinent cette relation à travers les Word Governance Indicators (WGI ou indicateurs KKZ). Easterly et Levine (2003) mettent en lumière l'impact favorable de l'indicateur WGI agrégé de gouvernance sur le revenu par habitant. Rigobon et Rodrik (2005) constatent que l'état de droit a un effet important sur la croissance économique. Ils montrent que dans les démocraties la qualité de la réglementation a un impact favorable sur le commerce et la croissance économique. L'étude de Jalilian et al (2006) indique que le PIB par habitant des pays en développement est positivement influencé par la qualité de la réglementation et l'efficacité du gouvernement. Mar'a-Teresa et al. (2012) mettent en évidence les effets favorables sur la croissance de quatre des indicateurs WGI (voix et responsabilité, efficacité du gouvernement, état de droit et contrôle de la corruption). Arusha (2009) indique l'efficacité du gouvernement sur le développement économique. Pour Huynh et Jacho-Cha'vez (2009), la stabilité politique, une gouvernance efficace et l'application de la loi contribuent à la croissance économique. En revanche, si Gani (2011) montre l'effet favorable de la stabilité politique et de l'efficacité du gouvernement sur la croissance économique, cette relation s'inverse dans le cas de la voix et la responsabilité, la gestion de la corruption, la qualité de la réglementation et l'État de droit (bien que moins significativement pour ces deux dernière variables), pour un panel de pays en développement.

Enfin, Fayissa et Nsiah (2013) montrent que 39 nations d'Afrique sub-saharienne diffèrent en raison de la bonne gouvernance. Ils tirent également la conclusion que l'influence de la gouvernance sur la croissance économique dépend des niveaux de revenu des pays.

6.2 Investissement Direct Étranger et Institutions

Les vingt-cinq dernières années ont été marquées par une augmentation des investissements directs étrangers (IDE) dans les pays en développement. La fin de la guerre froide en 1990 ~~a~~ entraîné une intégration rapide de ces pays à l'économie mondiale, en même temps qu'un ralentissement, voire un tarissement des flux d'aide internationale (Essers, 2013). L'aide au développement de l'Afrique sub-saharienne a diminué de 17 milliards de dollars en 1990 à 10 milliards de dollars en 2003 (Asiedu, 2006). Celle de l'Asie du Sud a, de son côté, progressé moins rapidement que par le passé (4,2 milliards de dollars en 1985 et de 5,9 milliards de dollars en 2001, Banque mondiale, 2010). Le déclin des flux d'aide, ainsi que le manque de fonds locaux, ont incité les pays en développement à se tourner vers les investisseurs étrangers. Certains d'entre eux ont joué sur l'abondance de ressources naturelles. C'est le cas du Nigéria et de l'Angola qui, malgré des conditions politiques et économiques instables, sont deux des pays d'Afrique sub-saharienne les plus attractifs du fait de la richesse de leur sous-sol, en pétrole notamment ce qui semble avoir compensé leur instabilité institutionnelle (Asiedu & Lien, 2011).

Le modèle de croissance néoclassique explique les différences de revenu par habitant par celles de l'accumulation du capital dues aux différences de taux d'épargne (Solow 1956). Or, les pays en développement se caractérisent par un faible revenu par habitant, un taux de pauvreté et de chômage élevé, une croissance démographique forte, ~~et~~ de faibles réserves de change et un taux d'épargne et d'investissement bas. Il est certain qu'un faible taux d'épargne et d'investissement a un effet négatif sur la croissance. L'investissement direct étranger (IDE) aide ainsi à combler l'écart entre le taux d'épargne et d'investissement domestique et celui

requis pour un niveau de développement plus satisfaisant (Sabir et Khan 2018). De leur côté, les théories de la croissance endogène mettent l'accent sur le fait que les IDE sont un déterminant clé du développement à travers les transferts de technologie des pays développées vers les pays en développement (Chenaf-Nicet et Rougier 2016). Les IDE contribuent aussi, directement et indirectement, à réduire le chômage et accroître la productivité en améliorant les capacités et les connaissances des travailleurs dans le pays d'accueil (Lipsey, 2001).

À partir des années 90, la concurrence s'est intensifiée entre les pays développés et les pays en développement pour attirer les flux d'IDE à travers des stratégies de réduction d'impôts et de subvention adaptées. De nombreux pays en développement ont également mis en place des programmes de modernisation de leur secteur financier, d'ajustement structurel et d'association économique (Asamoah et al., 2016). Ces stratégies ont permis aux IDE de se développer dans les pays de l'Association des sociétés régionales d'Asie du Sud (SAARC), l'Association des nations de l'Asie du Sud-Est (ANASE), d'Afrique subsaharienne et d'Asie centrale. Ces pays ont ainsi pu bénéficier d'un accès à de nouvelles technologies de meilleures capacités administratives, d'une augmentation des investissements, d'un accroissement des exportations, d'une plus grande efficacité et d'une meilleure croissance économique.

La qualité des institutions reste néanmoins un facteur d'importance dans le choix pour les investisseurs de leur pays d'accueil (North et Thomas, 1973 ; Sabir et Zahid, 2012). En augmentant les coûts de production, des institutions inadéquates peuvent être assimilées à une taxe qui entrave l'investissement. Les investisseurs hésitent à investir dans les pays où la corruption, le népotisme et les formalités sont importants car cet environnement augmente le coût des affaires (Mengistu et Adhikary 2011). Un cadre réglementaire bien défini et la constance des règles régissant les activités sont également fondamentales pour les investisseurs, étrangers notamment. De la même façon, une organisation politique légitime

qui éradique la corruption et rend l'administration responsable permet aux investisseurs de bénéficier d'une liberté d'action propice à leur activité (Campisi, 2016). L'instabilité politique peut, elle aussi, interférer avec les pratiques économiques, financières et commerciales des pays et perturber les investisseurs étrangers (Shah, 2015). ~~L~~es investisseurs peuvent espérer que les régimes démocratiques les protègent de cette instabilité et de l'arbitraire des régimes autoritaires (Li & Liu, 2005).

Or, dans les composantes qui contribuent au processus de croissance économique, le commerce et l'investissement direct étranger (IDE) sont considérés comme des plus importants pour le développement d'un pays (Li et Liu, 2005). En raison de leurs contraintes financières, les pays en développement essaient d'attirer les IDE, même si leur développement à long terme repose toujours sur l'aide étrangère. L'aide étrangère et les IDE sont donc deux sources primordiales de capitaux pour les pays en développement. L'aide étrangère prend principalement la forme d'une aide publique au développement (APD) accordée par les pays développés afin de promouvoir le bien-être économique et social des populations des pays en développement. L'aide ne représente pas seulement une source de financement du développement pour les pays émergents ou à faible revenu qui ne parviennent pas à attirer les IDE. L'aide peut également constituer un facteur incitatif en accroissant l'attrait des IDE pour le pays qui reçoit cette aide (Reiter et al., 2010). En permettant un accès au capital et à l'innovation, l'aide peut en effet augmenter l'efficacité marginale du capital et créer des conditions favorables à l'investissement privé et à l'IDE.

Ainsi, les déficits d'épargne et d'investissement étant considérés comme des obstacles majeurs à la croissance économique des pays en développement, les entrées de capitaux étrangers constituent une source importante pour combler cet écart (Emiola & Fagbohun, 2021) à travers notamment les IDE et les transferts de fonds des nationaux travaillant à l'étranger. Le lien entre les IDE et la croissance a fait l'objet d'intenses débats dans littérature, tant théorique qu'empirique. Selon la théorie de la croissance exogène, les IDE

influencent la croissance en apportant des améliorations technologiques dans le pays d'accueil. Les théories de la croissance endogène soutiennent de leur côté que les IDE affectent cette même croissance à travers des effets d'entraînement positifs pour le capital physique et humain et le produit intérieur brut (Raza, 2015).

La crise financière mondiale de 2008-2009 a brisé la tendance à la hausse du PIB dans les pays avancés et en développement. Cela a mis en évidence la faiblesse de ces derniers et affecté l'activité économique des pays développés. Les crises financières révèlent des lacunes dans la qualité des institutions qui apparaissent moins lors des périodes de prospérité. Suite à la crise financière asiatique de 1997, de nombreux pays ont notamment reconnu des lacunes en matière de gouvernance et tenté de modifier leurs dispositions institutionnelles pour attirer les IDE.

Dunning est l'un des auteurs les plus éminents qui a travaillé sur les IDE. Dunning (1993) décrit plusieurs types d'IDE. Le premier est appelé IDE de recherche de marché, dont le but est de servir les marchés locaux. Il est également appelé IDE horizontal. L'IED de saut tarifaire ou de substitution aux exportations est une variante de ce type d'IED. Puisque la justification de l'IDE horizontal est de servir plus facilement le marché local, la taille et le développement de ce marché jouent un rôle important dans la décision d’investir. Les obstacles à l'obtention de marchés locaux, comme les taxes à l’importation et les coûts de transport, incitent également à ce type d'IDE. Le deuxième type d'IDE est appelé IDE vertical ou de recherche de ressources lorsque les entreprises recherchent à l'étranger des actifs non accessibles dans leur pays d'origine, comme des ressources naturelles, des composants non raffinés ou une main-d'œuvre bon marché. Contrairement à l'IDE horizontal, l'IDE vertical est orienté vers l'exportation. Il implique aussi la relocalisation de parties de la chaîne de production dans le pays d'accueil. La disponibilité d'une main-d'œuvre à faible coût est également l'un des moteurs des IDE orientés vers l'exportation. Normalement, les IDE dans le

domaine des actifs, comme le pétrole et le gaz, sont attirés par les pays disposant de dotations en ressources naturelles abondantes.

6.3 Investissement Direct Étranger au Pakistan

Il est surprenant de constater que l'importance des institutions des pays d'accueil pour les investisseurs étrangers ait reçu une attention relative, même si les déterminants économiques des flux d'IDE vers les pays en développement ont été largement étudiés. Dans les années 1990, la majorité des études de l'impact des variables politiques, économiques et institutionnelles sur les flux d'IDE s'est concentrée sur les différences entre pays. Il a par exemple été montré que l'incertitude institutionnelle et l'investissement privé étaient négativement corrélés (Brunetti et Weder, 1998), que la protection de la propriété intellectuelle et l'IDE l'étaient positivement (Lee et Mansfield, 1996) et que la corruption avait un impact négatif sur les flux d'IDE (Wei, 2000). Or, les résultats de ces études transversales peuvent représenter d'autres variables non mesurées, qui varieraient entre pays mais pas dans le temps, malgré les efforts pour les séparer des autres influences. Par conséquent, les conclusions de ces études pourraient ne pas s'appliquer aux variations des variables politiques, économiques et institutionnelles dans le temps.

Les biais liés à ces effets peuvent sous-estimer ou surestimer les relations en présence. Il est donc important de compléter les études transversales par des estimations de séries chronologiques. Jun et Singh (1996) ont fait une première tentative en utilisant des données de panel. Ils ont régressé les entrées d'IDE sur un indicateur agrégé du risque politique et plusieurs facteurs de contrôle. L'indice de risque politique est statistiquement significatif pour leur échantillon de 31 pays en développement et le coefficient suggère que les pays présentant un risque politique plus élevé attirent moins d'IDE. Gastanaga et al., (1998) ont également examiné la relation entre plusieurs facteurs institutionnels et les entrées d'investissements étrangers. Ils mettent en évidence qu'un meilleur respect des contrats, un

niveau de corruption plus faible et un risque de nationalisation réduit sont tous liés à des entrées d'IDE plus importantes. Ils reconnaissent néanmoins que leurs résultats ne sont pas toujours fiables, du fait vraisemblablement de la taille relativement petite de leur l'échantillon de 22 pays en développement.

Plusieurs études ont également considéré le lien entre les droits démocratiques et les IDE. Harms et Ursprung (2002), concluent que les pays qui respectent la démocratie sont plus susceptibles d'attirer les entreprises multinationales. Li et Resnick (2003) estiment cependant que des liens de causalité inversée sont vraisemblablement en jeu. Ils mettent en évidence que les droits démocratiques favorisent surtout la protection des droits de propriété, qui à son tour accroit les investissements étrangers. En dehors de cet effet indirect, ils constatent que la démocratie peut entraîner une baisse des IDE. Néanmoins, bien que ces études aient recours à l'analyse de séries chronologiques groupées, elles ne prennent pas toutes en compte l'endogénéité potentielle des variables indépendantes. De plus, elles concentrent souvent leur analyse sur des indicateurs très spécifiques, tels que les droits démocratiques, laissant de côté un éventail plus large d'autres variables institutionnelles. Ce sont ces limites que nous avons tenté d’adresser dans notre étude des déterminants de l’IDE dans le cas du Pakistan.

Depuis sa création, le Pakistan est un pays du tiers-monde qui fait face à de nombreux défis. Les financements et les investissements domestiques sont insuffisants pour atteindre la croissance économique souhaitée. En permettant la modernisation de l'industrie et des méthodes de production et en développant les compétences managériales, les IDE sont donc nécessaires pour atteindre cette croissance. Malgré cela, le Pakistan fait peu d'efforts pour attirer davantage d'IDE et compte plutôt sur le financement de nations amies, sur des emprunts commerciaux auprès de banques étrangères ou sur des prêts auprès du Fonds monétaire international (FMI).

Les entrées d'IDE au Pakistan ont chuté de 2,598 milliards de dollars en 2020 à 1,847 milliard de dollars en 2021. Cette baisse s'inscrit dans le contexte d'un déclin mondial des flux d'IDE. En 20 ans, les flux mondiaux ont diminué de 35 % pour atteindre 1 000 milliards de dollars en 2021. Néanmoins, malgré cette baisse, les flux d'IDE en Asie ont continué à croitre récemment, passant de 516 milliards de dollars en 2019 à 535 milliards de dollars en 2020, la Chine et l'Inde attirant les flux les plus importants. Ainsi, au cours de l'exercice fiscal le plus récent, le Pakistan n'a pas été en mesure de tirer parti de l'orientation asiatique des flux d'IDE.

Néanmoins, le pays peut difficilement espérer améliorer sa balance des paiements ou stimuler la croissance de ses industries et ses services avec moins de 2 milliards de dollars d'IDE par an. Or, en raison des changements politiques récents dans le pays voisin, l'Afghanistan et des menaces sur la stabilité politique régionale suite à la prise de Kaboul par les Talibans, les investissements étrangers pourraient être durablement affectés et les flux continuer à se tarir. D'autres facteurs structurels contribuent également à cette situation, comme l'absence de réglementations encourageant l'investissement, des procédures de mise en œuvre des politiques déficientes et une attitude peu enthousiaste des institutions publiques lorsqu'elles traitent avec les investisseurs internationaux. Dans notre travail de thèse, nous nous intéressons plus particulièrement à trois variables d'importance : a) Les militaires en politique, b) les tensions religieuses et c) l'activisme judiciaire. Nous expliquons ci-dessous comment ces trois facteurs rendent difficile l'attraction des investisseurs étrangers au Pakistan.

6.3.1. Tensions Religieuses

Au Pakistan, les organisations religieuses ont une influence considérable sur des groupes spécifiques de personnes qu'elles peuvent mobiliser pour atteindre leurs objectifs, souvent de manière extrêmement violente. L'utilisation de la religion dans la politique pakistanaise n'est

pas nouvelle, mais son impact sur l'économie est croissant. L'islamisation du pays a commencé dans les années 1980, après l'invasion soviétique de l'Afghanistan. Or ces 10 à 15 dernières années, les attaques et les protestations contre les ambassades étrangères et le boycott des produits de certains pays sont devenus très courants. Nous citerons l'exemple des protestations récentes contre la France qui ont contraint le gouvernement pakistanais à couper les liens diplomatiques avec ce pays et entrainé le grand public à boycotter les produits français.

L'extrémisme religieux est l'un des principaux problèmes de sécurité au Pakistan, tout comme la radicalisation croissante et le recours à la violence nuisent grandement à l'économie du pays. Cette situation décourage les investisseurs étrangers d'investir dans un pays où les organisations religieuses extrémistes font la loi.

6.3.2. Ordre Public et Judiciaire

Le Pakistan figure parmi les pays les moins bien classées en matière de respect de l'État de droit, avec un classement à la 130^{e} place sur 139 pays étudiés dans le rapport Rule of Law Index 2021 du World Justice Project[32]. Avec un score de 0,39, les scores variant de 0 à 1 (1 correspondant au niveau le plus élevé de respect de la loi), le Pakistan, occupe l'avant-dernière place du classement en Asie du Sud. Seul l'Afghanistan est moins bien noté que le Pakistan et le Népal, le Sri Lanka, l'Inde et le Bangladesh ont tous dépassé le Pakistan dans la catégorie « État de droit ».

L'étude montre les mauvaises performances du Pakistan dans les domaines des droits fondamentaux, de l'ordre public, de la sécurité et de l'application de la réglementation. Le Pakistan est l'avant-dernier pays de la région dans ces catégories. Sur un total de six nations, le Pakistan se classe quatrième dans les catégories du système de justice pénale, de la justice civile, de la transparence du gouvernement et des limitations du pouvoir gouvernemental. Le

[32] World Justice Project | Advancing the rule of law worldwide

Pakistan est l'un des trois pays les moins sûrs du monde en termes d'ordre public, avec un classement à la 137e place sur un total de 139 pays. Le Pakistan se classe également 124e, 123e, 126e et 123e en termes respectivement de justice civile, d'application de la réglementation, de droits fondamentaux et de corruption.

En 2013, la Cour suprême du Pakistan a déclaré que l'accord Reko Diq conclu le 23 juillet 1993 était nul et contraire aux lois du pays. Cette décision intervient alors que le gouvernement fédéral avait décidé de louer les mines d'or et de cuivre de Reko Diq, dans le district de Chagai au Baloutchistan, à la Tethyan Copper Company (TCC), un consortium canadien et chilien composé de Barrick Gold et Antofagasta Minerals. Reko Diq se trouve dans la ceinture de cuivre de Tethyan, connue pour abriter les cinquièmes plus grands gisements d'or et de cuivre au monde.

Cette décision de la Cour suprême coûte 6 milliards de dollars au pays, le Centre international pour le règlement des différends relatifs aux investissements (CIRDI) ayant annoncé l'attribution de 5,976 milliards de dollars au Pakistan dans l'affaire Reko Diq. Le pays fait déjà face à une pénalité de 900 millions de dollars du CIRDI dans l'affaire du projet de location d'électricité de la société turque Karkey, précédemment résilié sur ordre de la Cour suprême également. Ainsi, les jugements rendus dans les années qui ont suivi ont semé le trouble chez les décideurs politiques et inquiété les investisseurs internationaux.

6.3.3. Militaires en Politique

Le Pakistan est un État axé sur la sécurité où tout peut être vu à travers un prisme sécuritaire. Dans une interview, l'ancienne secrétaire d'État américaine Hillary Clinton, interrogée sur l'« État profond », a répondu qu'il s'agissait d'un terme inventé par des politologues pour décrire certains pays, comme le Pakistan, où l'armée et les services de renseignement dirigent le pays.

« Vous pouvez être élu mais s'ils ne vous aiment pas, ou si vous les contrariez, vous êtes éliminé. Vous pouvez être accusé, arrêté, déporté, assassiné ou exécuté », a déclaré Clinton au présentateur.

Depuis son indépendance, le Pakistan a toujours été dirigé par des militaires. Chaque fois qu'un gouvernement a été démocratiquement élu, les militaires ont volontairement plongé le pays dans le chaos de façon à affaiblir le nouveau gouvernement en place. Un exemple récent est celui de 2017 où les groupes religieux soutenu par les militaires ont fermé la capitale pendant 20 jours pour protester contre les discours qualifiés de blasphématoires du parlement. Les circonstances des premières années d'existence du Pakistan jouent vraisemblablement un rôle important pour expliquer l'influence de l'armée dans les affaires intérieures. Or, pour fonctionner comme un État de droit, le Pakistan doit voir le retrait des militaires du pouvoir.

6.4 Valeur Ajoutée de la Thèse

Cette thèse apporte plusieurs contributions à la littérature sur le rôle des institutions dans la croissance et les investissements directs étrangers (IDE). Le chapitre 2 de la thèse tout d'abord explore comment la qualité des institutions affecte la croissance économique d'un large échantillon de pays développés et en développement. Gani (2011) et diverses autres études se sont déjà attachées à la question de la gouvernance et de la croissance économique des pays en développement. Les résultats de ces études ont notamment montré que la stabilité politique et l'efficacité du gouvernement ont bien un impact positif sur cette croissance. Notre travail étend ces résultats à un panel de pays plus important que dans les études précédentes, incluant en outre des pays développés. Un autre apport de notre travail a également résidé dans l'élaboration d'un indicateur composite de gouvernance à partir de l'analyse en composantes principales (ACP) d'indicateurs WGI, notamment la protection accordée aux droits de propriété, la qualité de l'exécution des contrats et la force de l'État de droit. Cet indicateur fournit une mesure plus large des institutions politiques, économiques et juridiques

des pays étudiés que les indicateurs spécifiques habituellement utilisés. Notre étude empirique utilise également des données politiques, économiques et institutionnelles les plus récentes, L'impact des institutions sur la croissance est en outre exploré dans ce chapitre en termes d'hétérogénéité. Il est en effet testé si l'effet mis en évidence diffère entre nos pays développés et en développement, en nous appuyant sur un modèle GMM à effets fixes dérivé de Nadeem et al. (2020).

Le chapitre 3 de la thèse évalue l'influence de la qualité des institutions sur les flux d'investissements directs étrangers (IDE) des économies d'Asie du Sud. Certaines études comme Mengistu et Moon (2015), Adhikary (2011) ou Anyanwu (2017) ont examiné l'influence des institutions, ainsi que de différentes mesures des conflits, sur les flux d'IDE de différents pays et régions. Néanmoins, aucune étude à notre connaissance ne se focalise sur la spécificité des pays d'Asie du Sud. Un autre apport de notre travail peut également être vu dans l'élaboration d'un indicateur composite de gouvernance selon la méthode de l'analyse en composantes principales (ACP) déjà utilisée dans le chapitre précédent.

Pour stimuler leur compétitivité, de nombreux pays ont entrepris d'améliorer leurs institutions comme facteur d'investissement et de développement. C'est cette question que nous abordons dans le cadre du Pakistan dans le chapitre 4 de la thèse. Il s'agit à notre connaissance de la première étude empirique approfondie de la relation entre les IDE et la gouvernance dans ce pays. Pour l'indice de qualité institutionnelle, nous utilisons cette fois encore l'analyse en composantes principales (ACP), pour l'agrégation de nos trois variables spécifiques, ce qui nous permet, contrairement à d'autres études, de prendre en considération davantage de facteurs institutionnels dans l'évaluation de nos relations.

6.5 Principaux Résultats de la Thèse

Dans le second chapitre de la thèse, nous étudions l'impact de la qualité des institutions sur le PIB réel par habitant d'un large échantillon de pays développés et en développement, en

contrôlant pour les effets de la formation brute de capital fixe (*FBCF*), des technologies de l'information et de la communication (*ICT*), de l'éducation (*H*), de l'ouverture commerciale en pourcentage du PIB (*Trade*) et du crédit intérieur au secteur privé (*Crédit*). Nous élaborons un indicateur global de gouvernance (*Gov*) en utilisant la méthode de l'analyse en composantes principales (ACP) et testons les capacités explicatives de cet indicateur. Nous incluons notamment dans cet indicateur (i) le contrôle de la corruption, (ii) l'efficacité du gouvernement, (iii) la stabilité politique et l'absence de violence, (iv) la qualité de la réglementation, (v) l'état de droit, et (vi) la voix et la responsabilité de la base de données WDI. Nous élaborons également un indicateur global d'infrastructures en information et communication (*ICT*) selon la même méthode qui inclut (i) les abonnements au téléphone fixe (pour 100 personnes), (ii) les abonnements au cellulaire mobile (pour 100 personnes), et (iii) les individus utilisant Internet (% de la population). Pour estimer la relation entre les variables, l'estimateur GMM en panel a été utilisé de façon à traiter la question de l'endogénéité de notre indicateur de gouvernance et des autres variables.

Nos résultats montrent que la gouvernance a un impact positif et significatif sur le PIB par habitant dans tous les groupes de pays. La magnitude du coefficient estimé de l'indicateur de gouvernance est néanmoins supérieure pour les pays en développement comparativement aux pays développés. Ces résultats montrent que, si la gouvernance joue bien un rôle important dans le processus de croissance à long terme des pays, celui-ci est plus fort dans les pays en développement. Nos résultats montrent également que, conformément aux résultats de la littérature, la formation brute de capital fixe (*FBCF*), les technologies de l'information et de la communication (*ICT*), le crédit intérieur au secteur privé (*Crédit*), l'ouverture commerciale (*Trade*) et l'éducation (*H*) ont un effet positif sur la croissance de tous nos échantillons de pays.

En utilisant des données de panel des pays d'Asie du Sud, le chapitre 3 de la thèse évalue l'impact de la qualité des institutions sur les flux d'investissements directs étrangers (IDE) des

pays de la région. Dans la thèse, nous choisissons un indicateur composite de gouvernance (*Gov*), élaboré comme précédemment à partir de l'analyse en composantes principales (ACP) de divers indicateurs de la base WDI de façon à embrasser davantage de dimensions de la gouvernance que dans les études antérieures. Nous incluons notamment, (i) le contrôle de la corruption, (ii) l'efficacité du gouvernement, (iii) la stabilité politique et l'absence de violence, (iv) la qualité de la réglementation et l'état de droit, et (vi) la voix et la responsabilité. Nos résultats mettent en évidence un lien positif significatif entre les IDE et la qualité des institutions, ce qui suggère que les investisseurs étrangers considèrent les institutions comme une dimension clé dans les pays de la région. Nos résultats révèlent aussi que le nombre de téléphones portables (*Tel*) comme proxy des infrastructures d'information et de communication, et la valeur ajoutée de l'agriculture en pourcentage du PIB (*Agri*) ont un impact statistiquement significatif et positif sur les entrées d'IDE dans la région de l'Asie du Sud. En revanche, la taille du marché (*Size*), représentée par le PIB et le taux d'inflation (*Infl*) ne semblent pas déterminants dans les décisions des investisseurs, les coefficients de ces variables n'étant pas significatifs.

Le chapitre 4 de la thèse prolonge le travail précédent en fournissant une analyse empirique du lien entre IDE et institutions dans le cas spécifique du Pakistan. Nous utilisons l'analyse en composantes principales (ACP) pour générer un indicateur agrégé de qualité des institutions (*Gov*) qui inclue (i) l'engagement de l'armée dans la politique, (ii) le système judiciaire et (iii) les tensions religieuses de la base de données ICRG. Nous choisissons l'approche ARDL (Autoregressive Distributive Lag) de façon à distinguer la dynamique de court terme de celle de long terme. Selon les résultats de nos estimations, le Pakistan attirerait davantage d'IDE si ses institutions étaient plus satisfaisantes. En ce qui concerne les variables de contrôle, nos estimations révèlent que la valeur ajoutée agricole (*Agri*) et de l'inflation (*Infl*) n'ont pas d'impact statistiquement significatif sur les entrées d'IDE. Nos résultats montrent néanmoins que la variable d'infrastructure, représentée par l'abonnement à la téléphonie mobile (*Tel*) et

le PIB par habitant (*PIBpc*) sont des déterminants essentiels de l'afflux d'IDE au Pakistan, le coefficient de ces variables étant positif et statistiquement significatif. Le taux de convergence vers l'équilibre, qui dans notre analyse est d'environ 78%, est représenté par le terme ECM.

6.6 Suggestions et Implications Politiques

L'une des principales implications des résultats de notre première recherche est que le renforcement des institutions est essentiel pour atteindre une croissance soutenue dans les pays en développement. Nous suggérons également que les pays en développement investissent davantage dans l'éducation de leur population, favorisent l'investissement et les technologies de l'information et de la communication de leur économie, accroissent le développement financier et réduisent leurs barrières commerciales de façon à stimuler la croissance dans leur pays. Ainsi, en mettant en œuvre des changements politiques, économiques et institutionnels appropriés, les gouvernements des pays pauvres peuvent espérer accroitre le niveau de vie de leurs populations. Notre étude suggère que les pays à faible revenu optent pour des institutions adaptées, en renforçant notamment l'état de droit, la voix et la responsabilité, la stabilité politique, l'efficacité du gouvernement et de l'environnement réglementaire et en réduisant le niveau de corruption dans le pays. En outre, lorsque la gouvernance s'améliore, l'aide étrangère et les investissements et capitaux étrangers augmentent, ce qui stimule d'une autre façon la croissance et le développement à long terme des pays.

Dans la lignée des résultats de notre seconde recherche, nous suggérons aux gouvernements des pays d'Asie du Sud d'encourager les IDE à travers des réformes institutionnelles et des politiques macroéconomiques adaptées. Les résultats empiriques de notre travail montrent que les économies d'Asie du Sud bénéficieraient d'une amélioration des infrastructures, des technologies de l'information et de la communication notamment, d'une réduction de la

corruption et du renforcement d'institutions telles que l'état de droit, la stabilité politique, l'efficacité du gouvernement et l'environnement réglementaire.

Notre quatrième chapitre montre que le Pakistan pâtit d'une instabilité sociale et politique et d'un régime autoritaire qui ne respecte pas la loi et les accords. Le Pakistan doit apprendre à honorer ses contrats, à adopter des politiques cohérentes et à laisser les militaires et les religieux en dehors des affaires. Le Pakistan est un pays politiquement, socialement et économiquement fragile qui dépend pour beaucoup des financements extérieurs. Il ne peut se permettre de cautionner des gouvernements de plus en plus influencés par les extrémismes religieux qui dissuadent les investissements étrangers et anéantissent l'état de droit. La démocratie est le meilleur moyen de limiter l'impact des islamistes au Pakistan. Nous proposons que les demandes d'islamisation formulées par les partis religieux et les groupes radicaux soient limitées par le développement de partis politiques laïques et le renforcement de la société civile du pays. Nous proposons que le gouvernement gère et développe l'économie nationale en opérant dans le cadre des réalités politiques et de la gouvernance mondiale.

De cette façon, les conclusions de nos recherches fournissent aux décideurs des pays en développement, d'Asie du Sud et du Pakistan notamment, une feuille de route pour attirer davantage d'investisseurs étrangers dans ces pays.

6.7 Limites et Recommandations Futures

Il existe différentes pistes de recherches qui pourraient compléter notre travail de thèse. La pandémie récente de COVID-19, débutée en 2019 et toujours en cours, pourrait servir de terrain pour étudier comment la gouvernance affecte le volume et la volatilité des IDE lors d'un tel type crise. Une pandémie de cette ampleur révèle des failles dans les infrastructures institutionnelles qui auraient pu passer inaperçues, même lors de crises d'un autre type, telles qu'une bulle du crédit ou du prix des matières premières. Les chercheurs seraient par

exemple en mesure d'étudier si la qualité institutionnelle a joué sur le volume et la volatilité des IDE (et donc la croissance économique) lorsque davantage de données seront accessibles.

De plus, en raison de l'indisponibilité de certaines données et du manque de temps, nous n'avons pas considéré le rôle des variables institutionnelles individuelles qui peuvent affecter de manière significative le comportement des agents et des investissements étrangers. Nous pensons qu'il existe des lacunes dans la recherche pour étudier par exemple le rôle de l'extrémisme religieux dans l'économie pakistanaise, en particulier pour le développement des investissements directs étrangers.

Un autre axe de recherche pourrait aussi s’attacher aux différences entre le Pakistan et le Bangladesh en matière d’attractivité des investisseurs étrangers. En effet, alors que ces pays sont tous deux victimes de l’extrémisme religieux, de l’omniprésence de l'armée dans le gouvernement et les affaires et de l'inefficacité du système judiciaire, le Bangladesh a, dans son histoire, attiré davantage d’IDE que le Pakistan.

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