The effect of institutional factors on inward FDI in Asian developing countries

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ผลกระทบของปัจจัยเชิงสถาบันต่อการลงทุนโดยตรงจากต่างประเทศในประเทศกำลังพัฒนาในเอเชีย

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ผลกระทบของปัจจัยเชิงสถาบันต่อการลงทุนโดยตรงจากต่างประเทศในประเทศกำลังพัฒนาในเอเชีย. (The effect of institutional factors on inward FDI in Asian developing countries)

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การวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาผลกระทบของปัจจัยเชิงสถาบันที่มีต่อการลงทุนโดยตรงจากต่างประเทศ โดยใช้ข้อมูลจากประเทศกำลังพัฒนาในเอเชียที่มีรายได้ระดับปานกลาง 23 ประเทศ ตั้งแต่ปี 1996 ถึงปี 2021 ผลการวิจัยพบว่า ปัจจัยเชิงสถาบัน เช่น การควบคุมการทุจริต ประสิทธิผลของรัฐบาล เสถียรภาพทางการเมือง คุณภาพด้านกฎระเบียบ และหลักนิติธรรม ตลอดจนปัจจัยทางเศรษฐกิจมหภาค เช่น ผลิตภัณฑ์มวลรวมภายในประเทศเบื้องต้น การเปิดกว้างทางการค้า อัตราเงินเฟ้อ และอัตราแลกเปลี่ยน ล้วนเป็นปัจจัยสำคัญที่ทำให้เงินลงทุนโดยตรงจากต่างประเทศไหลเข้ามาในประเทศเหล่านี้ แม้ว่าในภาพรวมผลกระทบเป็นแบบผสม แต่ประเทศที่มีรายได้ปานกลางระดับสูงที่มีคุณภาพของปัจจัยเชิงสถาบันในแต่ละด้านสูงกว่าสามารถดึงดูดเงินลงทุนจากต่างประเทศได้มากกว่า ในขณะที่ประเทศที่มีรายได้ปานกลางระดับต่ำจะเห็นผลตรงกันข้าม ในประเทศกำลังพัฒนาในเอเชีย การลงทุนโดยตรงจากต่างประเทศที่มากขึ้นมีความสัมพันธ์กับคุณภาพของสถาบันที่ลดลง ผลกระทบนี้ไม่เด่นชัดในประเทศที่มีผลิตภัณฑ์มวลรวมภายในประเทศเบื้องต้นสูงกว่า มีการเปิดกว้างทางการค้ามากกว่า และอัตราเงินเฟ้อสูงกว่า แม้ว่าสถาบันที่อ่อนแอจะดึงดูดเงินลงทุนจากต่างประเทศได้ แต่ประเทศกำลังพัฒนาในเอเชียไม่ควรพึ่งพาสิ่งนี้ในระยะยาว ควรเพิ่มคุณภาพของสถาบันเพื่อดึงดูดการลงทุนโดยตรงจากต่างประเทศในอนาคต

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This study aims to examine the effect of institutional factors on inward foreign direct investment (FDI), using data from 23 Asian developing countries in the middle-income group from 1996 to 2021. The findings show that institutional factors such as control of corruption, government effectiveness, political stability, regulatory quality, and the rule of law, as well as macroeconomic factors such as Gross Domestic Product (GDP), trade openness, inflation, and exchange rate, are important determinants of FDI inflows into these countries. Although the results are mixed overall, upper-middle-income countries with higher quality in each institutional aspect can attract more FDI, whereas lower-middle-income countries see the opposite effect. In Asian developing countries, higher FDI appears to be associated with lower institutional quality. This effect is less pronounced in countries with higher GDP, greater trade openness, and higher inflation. Even though weak institutions have attracted FDI, Asian developing countries should not rely on this in the long run. They should increase the quality of their institutions in order to attract FDI in the future.

Field of Study:	Applied Economics	Student's Signature .....
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Chapter 1

Introduction

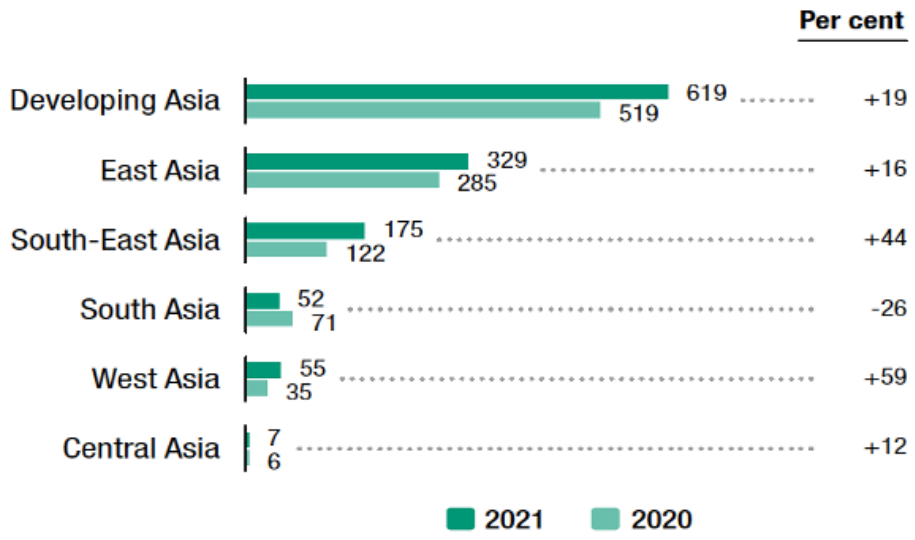
1.1 Significance of the Study

A commonly regarded strategy for a nation's economic progress is foreign direct investment (FDI). Indeed, compared to rich economies, its significance is greater in developing nations since they need more foreign capital to operate under domestic economic conditions (Mahembe & Odhiambo, 2014). FDI is a package that includes managerial abilities, physical capital, production methods, and company organizational procedures (Zhang, 2001). It creates financial and economic profit for both host and home countries with an increase in foreign exchange, capital expansion, technological support, and a competitive market environment (Assunção et al., 2011). It is possible that the rise of capital accumulation, exports, employment, capital management skills, better productivity, and economic growth support the FDI flows coming into developing countries (Sabir et al., 2019). Since FDI is an important provider of outside funding, many developing nations heavily rely on it (Gao, 2004).

The World Investment Report in 2022 described that global FDI flows improved from $1 trillion in 2020 to $1.58 trillion in 2021, a 64% rise over the amount in the first year of the COVID-19 pandemic. FDI flows recovered largely in all regions in 2021, with a significant increase in developing regions. The inflow of FDI to developing Asia rose by 19 percent and reached a new record of $619 billion in 2021, with the East and Southeast Asia regions as the major recipients. FDI inflows still be a crucial starting point for external financial flows for developing states and additional cross-border capital flows (UNCTAD, 2022).

Although there were continuous COVID-19 waves, FDI in Asian developing countries increased for three years to the highest value of $619 billion, marking the strength of the region. This group is the biggest global recipient of FDI, accounting for 40% of total FDI inflows. With FDI inflows rising 44% to $175 billion and rising in the majority of countries, Southeast Asia regained its position as a growth engine for developing Asia and the world. FDI in West Asia rose by 59% to $55 billion in 2021 from $35 billion in 2020, mostly due to a sharp increase in cross-border mergers and acquisitions. Due to the absence of significant M&A transactions reported in 2020, FDI in South Asia decreased by 26% to $52 billion. The amount going to Central Asia increased by 12% to $7 billion. Being the largest host country in the subregion, Kazakhstan saw a 14% fall in inflows to $3.2 billion, with drops in the transportation and extractive industries (UNCTAD, 2022).

Figure 1: FDI inflows in developing Asia by subregion, 2020-2021 (Billions of dollars)



Source: UNCTAD, FDI/MNE database (https://unctad.org/fdistatistics).

The inflow of FDI can motivate the economic expansion of the recipient country and reduce the gap between the domestic saving and investment requirements of the recipient country (Goyal, 2022). Most developing countries have the challenge of overcoming the underdevelopment trap, which means a low saving rate, a low per capita income growth rate, and a low investment rate. Since the inflow of foreign capital as a form of foreign capital can help reduce the barriers, developing countries are developing domestic factors to attract FDI inflows (Hayami & Godo, 2005).

There is considerable disagreement over the situation of a two-way causal relationship between institutions and income development. While the previous studies supported the idea that institutions can spur economic enlargement, they could not find proof for the reverse causality (Acemoglu, Simon, et al., 2005; Kaufmann & Kraay, 2007). However, theoretical research by Rodrik and Subramanian (2003) suggests that there can be a causal relationship between institutions and income improvement that runs in both directions. Good institutions are necessary for income growth, but better institutions will lead to faster income growth. Since foreign direct investment is a well-known factor in determining income development, there is increased attention on the relationship between institutions and the inflows of FDI (Rodrik & Subramanian, 2003).

The inward FDI relies on many factors. At first, foreign investors are willing to invest through FDI since they can have better management over the operations and assets of the firm. Later, the trend shifted, and they wanted to invest in a country with good infrastructure, economic stability, sufficient human capital, and liberalized markets to reap the profits from FDI (Sanchez-Robles & Bengoa-Calvo, 2003). The

development of production facilities and an increase in consumption levels in developing economies have attracted MNCs and improved foreign investments for market-seeking and efficiency-seeking projects in these economies. Developing countries have to make sure the infrastructure development and availability of human capital, together with the liberalization of economic policies and access to the market, attract overseas investments (Goyal, 2022).

When countries are well-regulated, they are able to get more advantages from FDI and have a good impact on economic growth. It is significant that institutional quality plays a role through the channel of foreign direct investments in relation to economic growth (Hayat, 2019b). Institutional quality was shown to be important for FDI in a theoretical discussion. Contract enforcement, adherence to laws and regulations, and investment security are three ways institutional quality is passed on to FDI. Macroeconomic policy, which includes monetary, fiscal, and trade liberalization policy effects, is converted to FDI through the cost of credit channel, tax channel, and credibility of the trade openness policy channel (Azam et al., 2011).

There are at least three arguments in favor of the idea that a necessary precondition for increasing FDI inflows is the level of domestic institutions. First, effective institutions improve productivity possibilities and might entice foreign capital. Secondly, a disadvantageous institutional climate can increase the cost of business operations. For instance, because it raises the cost of business operations, corruption can discourage foreign investment (Wei, 2000b). Third, as FDI entails significant sunk costs, it is susceptible to uncertainty, including uncertainty brought on by inefficient government operations. For example, poor contract implementation

may lead to more uncertain situations about potential profits and, as a result, harm investment (Tun et al., 2012).

FDI cannot deny the importance of institutions due to multiple reasons why quality matters to attract overseas investments. Institutional quality can improve property rights and the rule of law, which are crucial to becoming a country with better economic prospects that are pull factors for foreign investments (Acemoglu, Simon, et al., 2005; Rodrik et al., 2004). Inadequate institutional quality can be a barrier to the inflow of FDI, as it can be regarded as a threat to investment (Asiedu, 2002; Aziz & Mishra, 2016; Daniele & Marani, 2011; Du et al., 2008; Hayakawa et al., 2013; Kesternich & Schnitzer, 2010; Shah et al., 2016). Observable institutional factors like political situations and economic regulations can influence the formation of institutions and policies favorable for the international business market (Baltagi et al., 2008).

The importance of institutions in the shifting international business environment is becoming better understood as a result of rising global economic integration, which is partly attributable to enhanced global multinational production, particularly in developing countries (Dunning & Lundan, 2008; Jensen, 2008). Poor institutions can delay FDI operations and undertake a tax by increasing the cost of FDI (Buchanan et al., 2012). Foreign investors are reluctant to make investments in countries with weak institutions such as high corruption, nepotism, and red tape since the cost of doing business can be higher due to these factors (Mengistu & Adhikary, 2011). Thus, countries that want to attract foreign capital should be equipped with

attractive institutional environments regarding property rights, market efficiency, and political stability.

High-quality institutions support company cost reduction, which improves profitability. Markets with weaker institutions, however, impose additional time and resources to keep track. When property rights are poorly protected and contract enforcement is difficult, there is a large risk premium and slower economic activity. International investors are reluctant to make investments in such a dangerous and unfavorable climate. On the other hand, a risk-free economic situation is advantageous for the home country, and good institutions promote the effective use of FDI as well. Based on this, this paper will explore the connection between FDI and institution quality in developing Asian countries and how host country institutional factors can help boost the inflow of FDI with empirical analysis (North, 1990).

There is an increasing attraction to the linkage between institution quality and the inflow of FDI since FDI is regarded as one of the major determinants of economic growth. Institutions may affect the inflow of FDI through three potential channels. Firstly, the existence of good institutions can increase the factor of production and eventually motivate both foreign and domestic investments. Second, good institution quality tends to decrease the costs of investment-related transactions, like corruption-related costs. Lastly, as FDI generally insists on significant upfront costs by nature, good institutions such as effective governance and legal systems can provide better guarantees to multinational enterprises (Daniele & Marani, 2011).

1.2 Objective of the Study

To examine the effect of institutional factors on the FDI inflows in Asian developing countries. While measuring the relationship between inward FDI and institutional quality, macroeconomic factors will be considered in how the different host country characteristics can lead to different levels of FDI inflow.

1.3 Scope of the Study

The study analyzes the connection between the inflow of FDI and institutional factors of 23 middle-income Asian developing countries for the period between 1996 and 2021. Asian developing economies have a large market with significant potential, it is an attractive destination for inward FDI. Thus, it is crucial to explore the significant determinants of inward FDI to get benefit from foreign capital inflows in these countries. Asian developing countries are selected based on the FDI inflow by region from the World Investment Report 2022 of UNCTAD, including developing countries in East Asia, South Asia, South-East Asia, and West Asia.

The World Bank classifies a country as upper-middle-income if its GNI per capita is between $4,256 and $13,205. The criteria for GNI per capita in lower-middle-income countries are between $1,086 and $4,255. Middle-income groups from Asia's developing countries are covered in this study and classified into upper-middle-income and lower-middle-income groups for the analysis of sub-groups based on income level. In this study, upper-middle-income countries include China, Iraq, Jordan, Malaysia, Thailand, Maldives, Lebanon, and Turkiye. Lower-middle-income countries include Cambodia, Indonesia, Laos, Mongolia, Myanmar, Philippines,

Vietnam, Timor-Leste, Bangladesh, Bhutan, India, Iran, Pakistan, Nepal and Sri Lanka.

1.4 Contribution

The study contributes to the existing literature by examining the effects of institutional factors, as well as other important economic factors, on inflows of FDI in developing Asia economies. It adds to the previous literature by delivering a more regional analysis of the linkage between institutional factors and inflows of FDI. Specifically, it will test how different institutions and macroeconomic factors affect the inward FDI in developing Asian countries. Apart from a single-country study, there has been previous works of literature that oversee FDI in a panel framework. This study analyzes the data set of 44 Asian developing countries over the period between 1996 and 2021. Since FDI is looking for emerging and developing markets with high potential for growth, these countries are eventually beneficial for their markets. Governments from this region can know the strengths and weaknesses of their domestic factors. It can also help to analyze which country is ahead of others in terms of FDI inflow. Moreover, multinational enterprises can explore the potential good market if they want to do FDI in these countries.

1.5 Organization Structure

To find the effect of institutional factors on inward FDI in Asian developing countries over the period between 1996 and 2021, the paper is organized as follows. The first chapter introduces the significance of the study, the objective and scope, and its contribution. The second chapter provides a literature review including theoretical framework and empirical evidence. A conceptual framework, estimation models, and

data sources are presented in the third chapter. The fourth chapter reports the empirical results and the discussion. The conclusion and policy are presented in the last chapter.

Chapter 2

Literature Review

2.1 Theoretical Framework

Although it is largely confirmed that FDI has a beneficial impact on economic growth, a consensus has not been found among economists about the determinants of FDI. The literature on global business and economics has researched a lot about the elements of inward FDI in the last two decades and admitted the applicability of the host countries' institutions in terms of "the structures of instituted and integrated social rules that guide social connections" (Hodgson, 2006). Many works of literature have emphasized how institutional quality can influence the inflow of FDI (Bailey, 2018; Mondolo, 2019; Tokunaga & Iwasaki, 2017). Normally, foreign enterprises seek to adjust with domestic institutions to solve the "liability foreignness" and receive validity in the markets of the host countries (Dahan et al., 2006; Kostova & Zaheer, 1999). When a country relies on the advantages of inward FDI, it has to commit to gaining credibility and reputation globally with the larger international commercial sector by implementing policies to attract foreign investment (McKibbin & Martin, 1999; Tadesse & Kwok, 2006).

FDI has been one of the most crucial sources of external resource flows into developing states throughout the years as a meaningful source of capital inflow into the host countries (Saqib et al., 2013). It is also a major factor in economic expansion during a shortage of domestic savings (Ali & Hussain, 2017). FDI plays a critical role, particularly in developing countries, and is recognized as a dynamic influence on

economic growth and development. Foreign capital can help to lessen the difference between national savings and capital needs by improving market access, raising skill levels in the host countries, and providing good governance and technology transfer (Sahraoui et al., 2015).

2.1.1 Roles of Macroeconomic Factors

There are numerous studies that concentrate on the variables that impact the amount of foreign capital flowing into emerging economies. These studies focus on the economic, sociopolitical, and institutional aspects of FDI. Economic stability, market size, labor costs, and trade openness are among the variables identified by economic factors. The majority of the studies that explain FDI's drivers agree that market size is a significant determinant (Aw & Tang, 2009; Bhavan et al., 2010; E et al., 2016; Hailu, 2010; Krifa-Schneider & Matei, 2010; Leitão & Faustino, 2010; Mohamed & Sidiropoulos, 2010; Pattayat, 2016; Pravin, 2012; Sankaranarayanan & Bandekar, 2017). In addition, inflation is a signal of domestic economic friction and a country's ability to control the money supply and maintain a balanced budget (Buchanan et al., 2012; Schneider & Frey, 1985). According to some scholars, lower FDI results from greater inflation rates (Bruno & Easterly, 1996; Buchanan et al., 2012).

Dunning asserts that market size, natural resources, efficiency, and strategy of the countries can attract FDI (Dunning, 1992). The other author makes the case that MNCs have various goals when making investments abroad. Some businesses may search for sizable markets, while others may explore the presence of natural resources. To perform adeptly in the international market, other businesses, on the

other hand, may want to relocate their production site in order to lower their production costs (Athukorala, 2003).

Numerous studies have used real gross national product per capita or real gross domestic product per capita to estimate a country's market size or level of income. Real GDP is utilized as a stand-in for market size because it demonstrates a higher level of purchasing power, which allows for the possibility of better capital returns and, consequently, higher profits for businesses. Since FDI and trade volumes have a positive correlation, governments that want to capture a greater amount of FDI should also improve trade. Most of the studies found that trade openness and FDI in the host country have a positive interaction, but the role of openness in FDI depends on whether the investment is market- or export-oriented. In accordance with the "tariff jumping" idea, FDI (Market-Seeking) can get profit from a less open economy with trade restrictions. With the larger transaction costs connected with exporting caused by trade protection, foreign investors prefer to invest in countries with greater economic openness since they focus on exporting. Much of the FDI research applied the GDP share of trade as an indicator of trade openness (Bhavan et al., 2010; Leitão & Faustino, 2010).

According to Dunning’s electric OLI paradigm, national governments are keen to amend their policies or institutions to hold MNCs as their presence in the global economy is improving. This method holds that the likelihood that domestic governments will take such action is a beneficial function of the number of unique ownership-specific advantages that MNCs possess as well as their capacity to supplement or incorporate these assets with domestic assets and expertise. This

likelihood improves as a country's own location-specific assets attract foreign investors and as MNCs compete for the host nation's resources, competencies, or markets (Dunning, 2000; Verbeke, 2008).

In developing countries, FDI has been largely regarded as a key growth-promoting factor. FDI is one of the most crucial sources of external capital flows into developing countries throughout the years as a meaningful part of resource inflow into the host countries (Saqib et al., 2013). It is also a major factor in economic expansion during a shortage of domestic savings (Ali & Hussain, 2017). FDI plays a critical role, specifically in developing countries, and is acknowledged as a driving force of economic development and growth. Overseas capital can help to lessen the gap between national savings and capital needs by improving market access, raising skill levels in the host countries, and providing good governance and technology transfer (Sahraoui et al., 2015).

2.1.2 Roles of Institutional Factors

Previous literatures present mixed results on determinants of FDI. Some literature showed that political risk, infrastructure, investment environment, corruption, and regulatory framework in the recipient countries are insignificant determinants of FDI. Administrative efficiency and political risks are not significant in influencing FDI (Wheeler & Mody, 1992). However, political instability, uprisings, and legal amendments in government can obviously influence inward FDI (Root & Ahmed, 1979; Schneider & Frey, 1985). Some of the institutional factors that can influence inward FDI are bureaucracy, corruption, and ease of doing business. When the barriers to FDI inflows can be removed, an economy can develop its respective

absorptive capacity to maximize profit with growth effects (Gaurav, 2015). Some literatures find that the correlation between institutional quality and FDI inflow is significantly positive in Latin America and Asia (Gani, 2007a), the ASEAN region, and Central Asian countries (Ullah & Khan, 2017).

Different ways that institutions affect FDI have been described in the literature that already exists on the subject. The relevance of the interaction between FDI and institutions has expanded as a result of three key aspects. First, it emphasizes how institutions are critical for encouraging investment and economic growth (Li & Abiad, 2009; North, 1990). Second, developing and transitioning countries are interested in institutional reforms because of the considerable increase in foreign direct investment inflows during the past 20 years. Third, international investors are more concerned with institutional quality when deciding where to invest (Bevan et al., 2004), with bad institutions acting as taxes and increasing uncertainty (Buchanan et al., 2012). In general, weak institutions hinder while robust institutions attract it (Ali et al., 2008).

According to Daniele and Marani (2006), institutions can influence the inflow of FDI in three ways. First, the existence of strong institutions tends to raise factor productivity and attract encourages, both domestic and foreign. Second good institutions will reduce transaction costs associated with investments (costs associated with corruption). Finally, FDI is generally associated with considerable sunk costs. As a result, when there are good institutions (i.e., effective legal systems and proper enforcement of property rights), multinational firms will have higher security (Daniele & Marani, 2006).

Theoretical research has found that institutional quality and economic growth are correlated (Acemoglu, Johnson, et al., 2005; Khondoker et al., 2010; King & Levine, 1993; Knack & Keefer, 2006; Mauro, 1998; North, 1990). On the other hand, some studies emphasize the rule of law, the enforcement of property rights, the fight against corruption, voice, and accountability, and the efficiency of the government when looking at the role of institutional quality on FDI. According to these studies, FDI is negatively correlated with weak institutions (Bénassy-Quéré et al., 2007b; Buchanan et al., 2012).

Huang (2002) stated that weak institutional factors hinder local entrepreneurship resources, while good quality institutions can promote local enterprises (Huang, 2002). Partly FDI is decided by the strengths and weaknesses of local entrepreneurship in recipient countries. Thus, controlling governance and macroeconomic factors in a country is important to increase the climate of FDI inflows (Huang, 2002). The other author emphasized the association between FDI inflows and governance structure and found that good governance is more critical for developing and transitioning economies compared to other fields (Globerman & Shapiro, 2002). With the observations from Asia, the Caribbean, and Latin America regions, (Gani, 2007a) mentioned that control of corruption, rule of law, government effectiveness, regulatory quality, and political stability have all positive relationships with FDI. Countries with high regulation standards have more chances to get less benefit from FDI inflows. Thus, in the first place, the government has to improve the regulatory quality domestically before trying to benefit from the openness of foreign capital (Busse & Groizard, 2008).

The influence of institutional quality on FDI has received considerable attention in recent studies. The general consensus is that countries that have a good governance system can attract more foreign direct investment (Gani, 2007b; Globerman & Shapiro, 2002; la porta et al., 1998), whereas an environment of weak governance cannot secure the investments (Daniel & Steven, 2002). FDI inflows are significantly influenced by institutional factors such as corruption, political constraints, and the preservation of property rights (Jensen, 2003; Richards & Nwankwo, 2005; Wei, 2000a). The result shows that the rule of law and legal force are significant predictors of FDI inflows in 17 Latin American countries (Staats & Biglaiser, 2012).

The term "corruption" refers to a large range of human behaviors and describes the use of governmental authority for private benefit. It can be measured as a substitute for institutional quality. Theoretically, curbing corruption and FDI coming in have a good relationship. Political stability is a crucial component in ensuring an FDI influx. Since FDI is a long-term investment process, all potential threats deter FDI inflows. With the presence of considerable risk**,** MNCs consider FDI in situations of political instability and move to risk-free nations (Meier, 2006). On the other hand, the rule of law promotes FDI within the country**.** It reduces risk and discourages market-unfriendly practices. Rules and laws are collections of agreements that help nations implement their FDI policies and safeguard potential profits (Hoff & Stiglitz, 2005).

Regulatory quality increases inbound FDI by enacting a market-friendly climate like price limits, government interference, and free capital flow. It refers to

the government's ability to generate and implement sensible laws and regulations that foster economic growth (Fazio & Talamo, 2008). A country's population can enjoy numerous liberties, including freedom of expression, freedom of association, and free media, with a high degree of voice and accountability. These two factors have favorable relationships with FDI. Additionally, voters are able to reject corrupt regimes since they choose their own government. For both domestic and foreign investors, voice and accountability work together to create a risk-free environment (IADB, 2001; Saadatmand & Choquette, 2012). Government effectiveness measures the credibility of the public and civil service as well as how free it is from political influence (Buchanan et al., 2012).

Law and order become a significant problem for MNCs when courts refuse to uphold contracts and when the government politicizes court rulings (Drabek & Payne, 2002). Instability in law and order causes corruption (Acemoglu, Simon, et al., 2005; Dahlström & Johnson, 2007). Corruption is reportedly one of the most significant institutional problems that hinders FDI inflows, according to numerous investors (Asiedu & Villamil, 2000; Edgardo Campos et al., 1999; Gastanaga et al., 1998; Wei, 2000a). More corrupt nations typically attract less foreign direct investment. Lower corruption levels in the recipient nation have a positive correlation with investment coming in since recognized levels of corruption would be reduced (Cuervo-Cazurra, 2008; Wei, 2000a).

Institutional factors such as good governance and economic freedom act as the FDI determinants when MNCs decide to shift resources and search for a market for an efficiency-seeking (Nunnenkamp & Spatz, 2002). The endowment of natural

resources and low labor costs are traditional FDI determinants that are comparatively losing importance, while less traditional factors like economic freedom and good governance are gaining popularity (Addison & Heshmati, 2003; Becchetti & Hasan, 2005; Loree & Guisinger, 1995; Noorbakhsh et al., 2001). Property rights were more crucial in determining FDI and in particular, they indirectly influenced FDI through other institutional factors (Khondoker et al., 2010).

Political risk and stability often impact whether or not a country is worth investing in (Moosa, 2002; Verbeke et al., 2008). Political risk refers to political acts such as operational limits and instabilities that hinder them from performing specific tasks, as well as asset confiscation that disrupts enterprise activities or damages property or personal (Daniel & Steven, 2002). Concern about political risk, in particular, has a negative impact on MNCs' investment decisions in that country (Dunning, 1992; Dupasquier & Osakwe, 2006; Hailu, 2010). Ineffective institutions impede foreign investment, according to a large number of empirical studies (Asiedu, 2006; Asiedu & Villamil, 2000; Edgardo Campos et al., 1999; Gastanaga et al., 1998; Wei, 2000a).

Having good institutions can lead to higher productivity, which supports foreign investments. Many variables contribute to increased productivity, including the availability of financial institutions, a strong research and development system, a dynamic labor market, political stability, excellent governance, and low business restrictions. Productivity growth is linked to the rise of institutions (Hodgson & Stoelhorst, 2014; Nelson, 2008). Before making an investment abroad, multinational

enterprises consider ways to reduce transition costs to calculate the return-on-investment revenues.

Institutional quality is one of the most significant factors in promoting economic growth, according to previous literature. Institutions are created to lessen the uncertain situations surrounding human exchange and offer society a stable structure for interaction (North, 1990). In contrast to other countries in their sample, the authors discovered that developing economies have higher returns on effective governance (Globerman & Shapiro, 2002). Researchers and policymakers frequently hold the belief that the low quality of institutions in developing nations is the root of their economic woes; lower institutional quality is linked to lower investment, lower productivity growth, lower per capita income, and slower overall output expansion (Jude & Levieuge, 2014).

Poor and weak institutions can lead to greater uncertainty and production costs, whereas good institutions decrease production and transaction costs, increasing profitability and economic activity (Cuervo-Cazurra, 2008). The risk premium is a model of institutional quality since it relies on the safety of property rights, the enforceability of contracts, and the possibility that the other party will default (North, 1990).

Effective institutions are regarded as systems to reduce unnecessary transactions. In this setting, efficiency means the capability to make the lowest transaction costs, which mostly include logistic and operation costs, information about doing business, the costs of production, and monitoring risk. These costs may increase because of inefficient protection of property rights, extensive corruption, the lack of a

proper regulation system, weak incentive structures, and underdeveloped financial markets (Dunning, 2000). While Dollery & Wijeweera (2009) found no statistically significant influence of corruption on FDI, Habib & Zurawicki (2002) and other studies found negative effects of corruption on FDI, i.e., corruption reduces inbound FDI. Corruption and lax contract enforcement are common metrics for evaluating institutional quality (Dollery & Wijeweera, 2009; Habib & Zurawicki, 2002).

The authors stated that institutional factors play a significant role in determining FDI in the MENA region (Mohamed & Sidiropoulos, 2010). The other study found that corruption reduces the effective security of investors' intangible assets and lowers the likelihood that controversies between foreign and domestic partners will be concluded. Corruption influences the decision of a local partner, which in turn raises the value of using a local partner to navigate an administrative complex. This means that corruption can influence the decision of a local partner (Javorcik & Wei, 2009).

Many enterprises are not clear and often disregarded or neglected such costs before getting into a foreign market. These costs become more obvious when the business starts to operate on a day-to-day basis. Transaction costs are a major factor for firms when they observe a business situation and evaluate the performance of their subsidiaries to fit in fast-moving situations. As transaction costs reduce the ability of the business to operate, choose a suitable organizational structure, settle disputes, and diversify risks, these have a negative impact on the level of investment. By lowering transaction costs, there can be a commitment among enterprises as a way of showing

trust and a competitive business environment when the host country can promise to provide a developed and stable business condition (Tomassen & Benito, 2009).

2.2 Empirical Literature

In general, FDI flows into country with higher institution quality, but poor governance might reduce FDI. Poor institutional conditions can reduce FDI inflows through two mechanisms. Poor institutions might act as an informal tax, costing FDI. They can also increase business uncertainty for all forms of investments, including FDI (Daude & Stein, 2007).

2.2.1 Empirical Evidence of Institutional Factors in Developed and Developing Countries

1) Evidence from Developed Countries

According to the empirical findings, the quality of institutions has a considerable positive effect on economic growth. As a result, it is possible to conclude that increasing FDI-induced economic growth is boosted by higher institutional quality in the host country. Apart from high-income countries, where FDI inflows impeded economic growth, these conclusions are applicable to countries of all income levels. It also looks at specific institutional quality measures and finds that government efficacy, rule of law, and corruption control all have a significant and positive impact on economic growth, as well as boosting FDI-induced growth. Furthermore, it was determined that regulatory quality had a significant negative impact on the nation's economic growth. However, it was revealed that regulatory quality aided in the acceleration of FDI-induced economic growth (Hayat, 2019a).

2) Evidence from Developing Countries

Study from Tun et al. (2012) examined the effect of institutional factor on FDI in 77 developing countries from 1981 to 2005. The result showed that countries with more reliable institutional factors can attract more FDI since they have lower uncertainty and cost of doing business. Trade openness is also a significant factor since most FDI has an export-oriented nature and MNCs are willing to invest in countries with favorable trade-promotion policies.

Antonietti & Mondolo (2023) examined the effect of institution quality on inward FDI for 102 countries using a panel vector autoregression (VAR) approach. The findings show that good institutional quality is important for FDI attraction. Among the institutional factors, the rule of law, regulatory quality, and voice and accountability are the most influencing factors in both transition and developing countries. In the study by Peres et al. (2018a), control of corruption and the rule of law are used as institutional factors when analyzing the impact on FDI inflow in 41 developed countries and 69 developing countries between 2002 and 2012. In developing countries, the impact of institutional factors is insignificant because their institutional structures are weak.

The study from Meon and Sekkat (2007) used data from 96 countries to examine the relationship between FDIs and governance and found a good relationship between them. The impact of sound governance on US FDIs was examined by Globerman and Shapiro (2002), using the governance measures for 144 countries from 1994 to 1997. The findings showed that U.S. investors view the presence of a

good governance framework as one of the most crucial requirements for FDIs (Globerman & Shapiro, 2002).

The relationship between political risk, institutions, and FDI in 83 developing nations between 1984 and 2003 is examined in a study by Busse & Groizard (2008). It found that factors including stable governments diminished corruption and domestic strife, good law and order conditions, democracy, accountability, and lower bureaucratic mixing, had a positive impact on FDI. Political stability also has a positive effect on FDIs (Habib & Zurawicki, 2002; Wei, 2000b). There is evidence that political risk discourages FDIs in nations with a terrorism history (Shah & Faiz, 2015).

Better regulatory quality attracts inward FDI (Seim, 2009). Data from 45 developing nations in Africa, Asia, and Latin America were used by Bissoon (2012) to assess the effect of institutional quality on FDIs. The findings demonstrated that these countries' low levels of institutional corruption, solid regulatory laws, and political stability all serve to attract foreign direct investment. The other study analyzed 152 host economies and 34 source economies, which indicated that regulatory quality and government effectiveness are key factors influencing FDIs. Other factors, including peace and order, political stability, voice and accountability, and corruption had no appreciable effect on FDI (Daude & Stein, 2007).

Meon and Sekkat (2007) used two-stage least squares regressions for 96 countries between 1990 and 2000 and proved that voice and accountability can have a significant positive impact on the FDI to GDP ratio (Méon & Sekkat, 2007). The author stated that all governance indicators have a positive influence on the level of

inward FDI. He used OLS estimation for 45 developing countries in Asian, African, and Latin American regions over the period between 1996 and 2005 (Ourvashi, 2012). The other authors used multiple linear regressions, panel data analysis, and OLS methods for MENA countries between 1990-2010. He observed that government effectiveness has a significant positive effect on FDI inflows, while voice and accountability have a negative effect (Sedik & Seoudy, 2012).

Wernick et al. (2009) estimated how FDI flows into the 64 rising nations in relation to institutional quality. A positive environment is produced by high institutional quality, which is considered to be the key draw. When compared to those nations with weak governments, FDI inflows occurred (Wernick et al., 2009). Wei (2000) examined the data of 143 nations from 1995 to 1997. It showed that three primary institutional factors including criteria of regulation, legality, and legislative framework play important role in attracting FDI. Additionally, it has been shown that corruption has a negative impact on FDI inflows. They believed that strong institutional conditions in the host country would draw in more FDI and make it possible for new MNCs to establish themselves (Wei, 2000a).

3) Comparison among Different Income Groups

Sabir et al. (2019) used the data of low, lower-middle, upper-middle, and high-income countries over 1996–2016 and the GMM approach, in analyzing the effect of institutional quality on FDI inflows. The results support the concept that institutional quality positively affects FDI across all groups of income. Compared to developing nations, developed nations have larger effects for controlling corruption, government efficiency, political stability, regulatory quality, rule of law, and voice and

accountability for FDI inflows. Thus, it can be concluded that institutional quality is a more significant factor in developed nations than in developing. However, in industrialized countries, GDP per capita, agriculture value added as a percentage of GDP, and inflation have negative impact on FDI inflows, whereas in developing countries, GDP per capita, trade openness, agriculture value added as a percentage of GDP, and infrastructure have a positive and statistically significant impact. Infrastructure and trade openness as a percentage of GDP both favor FDI in developed nations

By measuring the institutional drivers of FDIs from 1985 to 2000, it is concluded that low levels of corruption, effective bureaucracies, active courts, access to information, and a developed banking sector are crucial for FDI inflows (Bénassy-Quéré et al., 2007b). The number of incoming FDIs could be ruined by severe corruption (Brada et al., 2023). In the study of how corruption levels in 59 developed and developing nations affect FDIs from Japan, it is found that Japanese FDI and corruption are adversely correlated (Voyer & Beamish, 2004). Similarly, the other scholar demonstrates that while political stability and regulatory quality have a positive significant impact on inbound FDI, corruption, a lack of effective administration, and the absence of the rule of law have a negative significant impact (Shah, 2017).

Elgin and Oztunali (2014) showed institutional quality to be a mitigating factor between economic progress and the size of a country's informal sector using several indicators of institutional quality for a sample of 141 nations over a 25-year period. They specifically draw the conclusion that in nations with low institutional

quality, higher GDP per capita is linked to a larger informal sector size (Elgin & Öztunali, 2014). The data from 87 countries over a five-year period, from 2004 to 2009 is used to study the effects of institutional quality, economic freedom, and entrepreneurship on foreign direct investment in emerging economies. However, the strength of the appeal varies according to a country's socioeconomic level: high, emergent, or low and its economic development (Herrera et al., 2013).

2.2.2 Empirical Evidence of Institutional Factors in Specific Regions

This empirical literature part specifically describes the previous literature which emphasizes on specific region or area. More regional analysis of the empirical evidence can be seen in this section.

In Masron & Nor (2013), institutional factors including the rule of law, corruption, and regulatory quality control, are crucial factors in influencing FDI in the ASEAN region between 2002 and 2010. From 1996 to 2008, (Tajul & Hussin, 2010) showed that strengthening institutional quality is essential for attracting FDI into the ASEAN region.

In the case of Central and Eastern European (CEE) countries from 1996-2009, Tintin (2013) tested the factors influencing FDI inflow. The result showed that institutional quality measured by state fragility, political rights, and economic freedoms have a particular impact on FDI inflows. Fukumi & Nishijima (2010) analyzed the average of three ICRG indexes including "Law and Order," "Bureaucratic Efficiency," and "Corruption" in 19 Latin American and Caribbean nations, to examine the relationship between FDI and institutional quality. They found

that FDI might raise institution quality and that better institutions draw more FDI to regions.

The effect of sound governance on FDI inflows is investigated using the global governance indicators (Kraay et al., 1999). Through the use of the random effects panel estimation technique, the findings demonstrate how favorably and profoundly inward FDI is impacted by political stability and regulatory quality. Contrarily, the presence of corruption deters foreign investors from funding projects in SAARC nations. Furthermore, traditional FDI site factors like market size and level of development still have a positive impact. The recipient country's trade openness and human capital, while equally vital, have little influence on FDI inflows while being equally crucial (Shah & Faiz, 2015).

The effect of institutional quality on FDI inflows from 16 Arab countries between 1984 and 2012 is investigated using the system GMM estimation. FDI inflows to Arab economies are positively and significantly impacted by the institutional quality factors of economic freedom, ease of doing business, and international country risk (ICRG) (Aziz, 2018). The author investigates the relationship between institutional quality and FDI inflows to Arab nations between 1990 and 2008. The findings demonstrate that improving government stability, lowering the danger of investment expropriation, and signing bilateral investment treaties all have a favorable impact on FDI inflows (Mina, 2012).

The study of the impact of institutional quality on FDI inflows in GCC nations found that FDI inflows are encouraged by political unrest and a lack of democracy (Gani & Al-Abri, 2013). Helmy (2013) looks at the factors that affect FDI inflows to

MENA nations following the changes brought about by the Arab Spring in 2010. Results indicate that investment freedom and security have a favorable impact on FDI, whereas the likelihood of confiscation and corruption have a negative impact since they create a hazardous business climate (Helmy, 2013).

Pravin (2012) used multiple regression and panel unit root tests to analyze the determinants of FDI in BRICS countries between 2000 to 2009 with the use of panel data. The study used potential institutional and political determinants of FDI with other important economic determinants for macroeconomic stability. The results show that GDP as a proxy of market size is significant in determining the FDI inflow in BRICS countries for market-seeking purposes. Moreover, the availability of natural resources, trade openness, voice and accountability, and the rule of law have a positive influence on the total inflow of FDI in this study (Pravin, 2012).

With the use of panel data analysis for Latin American countries between 1996 to 2008, the result showed that government effectiveness has a significant negative impact while political stability has a positive effect on the inflows of FDI. Meanwhile, other governance proxies show insignificant values (Amal et al., 2010). The authors examined 18 Latin American countries over the period between 1985 to 2004 with a panel data gravity model. They observed that all governance indicators and inward FDI have a negative significant relationship (Subasat & Bellos, 2011). According to Steven and Daniel's (2002) findings, both government effectiveness and voice and accountability can support to have positive FDI inflows (Daniel & Steven, 2002).

Mostly, foreign institutional investors favor investing in nations with robust and high-quality governance (Ferreira & Matos, 2008; Li et al., 2006). An inverse relationship is discovered between FDI inflows and indicators of institutional quality (voice, accountability, and rule of law) within the BRICS region (Pravin, 2012). Among other factors, corruption deters international companies from cooperating with local businesses, lowering FDI from abroad (Javorcik & Wei, 2009). The presence of the rule of law, high-quality regulations, efficient anti-corruption measures, and political stability all favorably affect FDI flow (Gani, 2007b). According to a number of empirical research, it is found that inadequate or ineffective institutions deter foreign investment (Asiedu, 2006; Asiedu & Villamil, 2000; Huang, 2002).

Goyal (2022) used the fixed effects panel estimation method to examine the determinants of inward FDI in the top five recipient countries of developing and emerging Asia between 2006 to 2016. The study examines the role of political, institutional, and economic factors as the determinants in attracting FDI. The finding indicates that economic variables are more important than political and institutional variables in deciding the inflow of FDI.

2.2.3 Empirical Evidence using the Interactive Terms

In this part, the empirical literature demonstrates about the use of interaction terms when considering the effect of institution and economic factors on the inflow of FDI.

Ahlquist (2006) found that FDI choices are influenced by the fiscal policy and political institutions of the recipient nation after analyzing data from 90 developing

nations from 1985 to 2002. Investors make investment decisions based on their perception of risk and the recipient country's government policy. They also consider the fact that the decision to invest in a portfolio versus attracting FDI has different factors that affect it. While political variables in the host country are more sensitive to FDI inflows than fiscal policy, both are equally important. In the model specification, an interaction term is incorporated to account for the combined impact of macroeconomic policy and institutional quality. Through the lens of macroeconomic policy, this term examines how institutional quality affects FDI (Ahlquist, 2006).

The previous research explored how institutional quality mediated the relationship between FDI and macroeconomic volatility from 1996 to 2011 in 40 countries in the Sub-Saharan African region. The author used the dynamic panel model estimation and GARCH models as the baseline model for analyzing volatility. Later, institutional indicators together with exchange rate volatility as a proxy of economic uncertainty were utilized as interactions with the GMM estimation method to measure the effect of institutions with unstable economic conditions. The findings of the interaction between macroeconomic uncertainty and institution factors show that it decreases the initial negative relationship with inward FDI by uncertain economic situations (Asamoah et al., 2016). For the indicators of instructional quality in using a composite measure, unweighted average of six institution factors from Worldwide Governance Indicators are employed by following previous scholars (Asiedu, 2006, 2013; Buchanan et al., 2012; Daude & Stein, 2007).

While examining how institutions mitigate on FDI with the adverse effect of natural resources, the average of institution quality is used as a proxy for institutional

quality to interact with natural resources by using GMM estimation (Asiedu, 2013). The other study for examining the effect of democracy on FDI of 112 developing countries for the time period between 1982-2007 used GMM estimator for analyzing the interaction between democracy and natural resources (Asiedu & Lien, 2011). Regarding the study of the elements of FDI inflows to Southeast Asia countries from the time period between 1991 to 2009, the author used panel data estimation. The study also included some economic factors, control of corruption as an institutional factor and the interaction variable between labor productivity and nominal wage to explore whether FDI is more interested in labor productivity or low nominal wages. The findings indicate that the interaction variable has a positive correlation with FDI inflow, meaning that higher wages with production are key determinants of FDI inflows into the region (Hoang, 2019).

With the study of the moderating effect of institution quality in FDI-led growth hypothesis in Nigeria with Autoregressive Distributed Lag (ARDL) over the period between 1984 to 2018, the findings demonstrate that the interactive effect of institutional factors with FDI inflow has a significant positive impact on economic growth. It indicates that institution indicators are critical absorptive capacity to maximize the growth effect of FDI in a country. For the indicators of institutional quality, seven indicators from the data sourced from the International Country Risk Guide (ICRG) are used (Dada & Abanikanda, 2022). To measure institutional quality, an average value is generated as an aggregate index of institution factors by following the previous literature (Ajide & Dada, 2023; Ayhan Kose et al., 2011). While observing the role of institutional quality in economic growth through the FDI channel for 104 countries with the GMM estimation technique, the interaction

between FDI inflow and institution quality is used as a dependent variable to investigate economic growth. For the index of institution factors, the average of six institution indicators from WGI is used for the analysis. The results indicate that coefficients of interaction terms are positively significant on GDP growth in middle-income and low-income countries (Hayat, 2019b).

2.2.4 Empirical Evidence with Significant Economic and Institutional Factors

Since both economic and governance measures are important in determining FDI, this part focuses on the empirical literature on critical economic and institutional factors.

By examining the factors influencing FDI inflows to Southeast Asian countries from 1991 to 2009, it was found that trade openness, market size, labor productivity, human capital, and quality of infrastructure are major indicators and have a positive influence on the inflows of FDI. In addition, the real interest rate, exchange rate, institutional quality, and political risks can also determine the incoming FDIs (Hoang, 2019). In the study of FDI into ASEAN and Latin America (MERCOSUR) from 1980 to 1998, Mamadou (2002) examined the elements that contributed to these flows. The author has discovered that market size and the currency rate have a big impact on FDI flows into the MERCOSUR. The exchange rate is the only factor affecting FDI into ASEAN, however. The analysis shows why ASEAN has a higher level of technical regional integration than MERCOSUR, and why foreign capital flows have a greater impact on this process in the ASEAN (Mamadou, 2002).

Macroeconomic policy is an important factor in affecting FDI inflows (Azam et al., 2011). Mottaleb (2008) analyzed data from 60 developing nations between 2003 and 2005, with a model examining how GDP, as a measurement of market size, and corruption affects FDI inflows. The other author found that a country with a larger market, measured from GDP per capita, can attract more FDI inflows (Din, 1994). The relationship between macroeconomic policy and FDI is equivocal and may either enhance or decrease FDI inflows. According to (Kumar, 2002; Loree & Guisinger, 1995; Taylor, 2000), there are relationships between exchange rate, inflation, and FDI in develop nations. A high inflation rate, which has a negative impact on FDI inflows, leads to an overvaluation of the exchange rate

Hailu (2010) studied the demand-side characteristics that were significant for FDI inflows in 45 African nations from 1980 to 2007. The study used the fixed effect least square dummy variable (LSDV) model for estimation and found that trade openness, market size, and infrastructure in the recipient country had a favorable impact on FDI inflows. The results of this study further illustrate the importance of political and natural resources for foreign direct investment. In addition, stable political conditions in the host nation help foreign investors in a number of ways, including by protecting their property rights and enabling them to expand their businesses, all of which are critical for the attractiveness of African countries to FDI (Hailu, 2010).

Tajul and Hussin (2010) investigated the effect of institutional quality on FDI flows into ASEAN from 1996 to 2008. Using the panel data models approach, they observed evidence that strengthening institutional quality is essential as an element of

future policy plans to draw fresh FDI flows into the region. Additionally, they discovered beneficial benefits of market size, human capital, and the opening of the economy for FDI flows into the ASEAN (Tajul & Hussin, 2010). Other macroeconomic variables including a lower inflation rate, a somewhat higher exchange rate, and effective government budget management are among the main elements that draw in more FDI. In addition to economic advantages, societal elements like solid infrastructure and telecommunications as well as non-economic issues like trade policy and transparency also entice more investors to the ASEAN (Hoang, 2019).

Using MENA countries as a sample, it is discovered that, in addition to a limited domestic market size, governance and institutions exhibit a favorable influence on FDI inward, indicating that institutions and legal reform are crucial elements to increase MENA's attractiveness to FDI (Daniele & Marani, 2006). The other study analyzed the impact of institutions on FDI inflow by controlling for GDP per capita in light of the likelihood of a strong association between institutions. GDP per capita results in an institution's influence on FDI being positive (Bénassy-Quéré et al., 2007b).

Benassy-Quéré (2007) discovered that the primary source of allure for FDI inflows is good institutions. They employed a 52-country data collection for the empirical investigation. Additionally, the author had control over the problem with institutions and market size. It is that bilateral FDI inflows were increased by strong institutional quality (Bénassy-Quéré et al., 2007b). The effect of institutional variables and macroeconomic policy determinants on FDI inflows over a 12-year period, from

1996 to 2007 are examined with panel data from seven South Asian nations. This study suggests that the attractiveness of FDI inflows is significantly influenced by high institutional quality. A bad macroeconomic policy environment has a disadvantaged effect on FDI. When combined, good institutional quality and bad macroeconomic policies have a negative impact on FDI. Furthermore, this analysis suggests that unreliable macroeconomic policy reduces institutional quality and has a harmful impact on FDI inflows. The ineffective macroeconomic policy may contribute to the credibility of trade liberalization policies (Azam et al., 2011).

The influencing factors that can determine FDI inflow are tested empirically to know the relationship between inward FDI and economic growth by using panel data from 60 low-income and lower-middle-income countries. The author observed that countries with larger GDPs can provide a good business environment with the support of required infrastructures such as the Internet which are crucial to attract FDI. Bonnie et al (2012) investigate the impact of institutional quality of FDI volatility and levels based on a panel data analysis of 164 countries over the period between 1996 to 2006. They stated that good institutional quality is important for FDI with positive and significant effects (Buchanan et al., 2012). The volatility of FDI is linked with lower economic growth, weak macroeconomic factors, and low institutional quality in the host country (Khondoker et al., 2010).

In case of Vietnam, there are three important factors. First, the level of FDI increased quickly together with the signing of trade agreements, especially after Vietnam joined the WTO in early 2007. Second, the quality of institutional development has not been found across provinces, providing a good opportunity to

research the impact of FDI on province-level institutional quality. Third, the country has a history of FDI, making it a suitable background for research on this topic. The author demonstrates using an instrumental variable (IV) method that provinces receiving higher distributed FDI amounts have institutions of higher quality (Dang, 2013).

To understand the direct and indirect effects of institutional quality on economic growth by boosting FDI-induced economic growth, a dataset of 104 countries is used with the Generalized Method of Moments (GMM) estimation method on dynamic panel data. Individual institutional quality measures are employed to control endogeneity issues and get reliable and consistent results. The results proved that higher institutional quality and FDI inflows both contribute to faster economic growth. However, only low and middle-income nations saw the FDI-led expansion. It was also discovered that these countries improved institutional quality was promoting FDI-driven economic growth. It indicated that FDI slowed economic growth in high-income countries (Hayat, 2019a).

The five South Asian nations were examined by using the panel co-integration technique to test the long-term relationship between economic factors and FDI inflows. Result showed that market size, trade openness, infrastructure index, and labor force growth rate were important elements (Sahoo et al., 2014).

The summary of the selected empirical evidence is presented in Table 1.

Table 1: Summary of Selected Empirical Evidence

Author	Objective	Scope	Model	Analysis	Results
Meon and Sekkat (2007)	Revisiting the relationship between governance and FDI	96 countries (1990-2000)	considers six aspects of governance indicators	two-stage least squares regressions	voice and accountability can have a positive impact on the FDI to GDP ratio significantly
Jajul and Hussin (2010)	Examine institutional quality determinants of FDI	8 members of ASEAN countries (1996 – 2008)	voice and accountability can have a positive impact on the FDI to GDP ratio significantly	Panel data estimation (FE, RE, OLS)	improving the institutional quality is also crucial as part of future policy strategy to further attract new FDI to inflows into the region
Muhammad et al. (2011)	Examine the role of institution and macro-economic policy factors on FDI	Seven South Asian countries (1996-2007)	For institutional quality measures, six indicators are used. Macroeconomic policy variables, monetary policy, fiscal policy and trade liberalization policy are used.	panel unit root test	good institutional quality plays a key role in attractiveness of FDI inflows. A poor macroeconomic policy situation produces negative impact on FDI.
Sedik & Seoudy (2012)	Explain the relationship between the risk of the country and its ability to	MENA countries between 1990-2010	ICRG index is used as a proxy for country risk	multiple linear regressions, panel data analysis,	government effectiveness has a significant positive effect on FDI inflows while

	attract FDI			and OLS	voice and accountability have a negative effect
Pravin (2012)	Analyze determinants of FDI	BRICS countries between 2000 to 2009	potential institutional and political determinants of FDI with other important economic determinants for macroeconomic stability	multiple regression and panel unit root tests	trade openness, voice and accountability, and the rule of law have a positive influence on the total inflow of FDI
Mihaela et al. (2018)	examines the impact of institutional quality on foreign direct investment	Developed vs developing countries, including 110 countries in the 11-year of 2002 to 2012	institutional quality by the sum of control of corruption and rule of law indicators	OLS, IV estimation	the results for the developing countries demonstrate that the institutional quality impact is insignificant because of the weak structure of institutions
Sabir et al. (2019)	Effect of institutional quality on FDI inflows	panel data for low, lower-middle, upper-middle, and high-income countries (1996–2016)	GMM	Difference between groups of nations	industrialized nations have larger coefficients for controlling corruption, government efficiency, political stability, regulatory quality, rule of law, and voice and accountability for FDI

					inflows
Goyal (2022)	examine the determinants of inward FDI	the top five recipient countries of developing and emerging Asia between 2006 to 2016	examines the role of political, institutional, and economic factors as the determinants in attracting FDI	Fixed effect	economic variables are more important than political and institutional variables in deciding the inflow of FDI

Chapter 3

Research Methodology

3.1 Conceptual Framework

To analyze the effect of institutional factors on inward FDI in Asian developing countries, the conceptual framework is developed based on the following concepts.

According to the "Eclectic or OLI paradigm theory" published by Dunning, FDI decisions about foreign investments depend on the factors listed below. The term "OLI" denotes ownership, location, and internationalization requirements as appropriate. He expands the definition of locational advantage by including institutional considerations in addition to economic factors. He stated that international investors favor places with reliable institutional and economic infrastructure. Therefore, judgments made by foreign investors are dependent on the rate of return based on reliable institutions and other macroeconomic factors (Dunning, 1992).

Recent economic literature has shown how an institutional approach has changed MNCs' categorical thinking on FDI in the host country. The institutional setting in which MNCs operate is extremely complicated and contradictory (Lu, 2002). North described that the institutional environment of the host nation contains norms and practices, processes, and procedures that are important to MNCs. The government is said to have a significant role in MNCs' success by providing stable

political and economic conditions, contract enforcement, a competent workforce, and reliable infrastructure at both the macro and micro levels (North, 1990).

Political influences and legitimate issues that can be classified as formal rules, taxation laws and rates, unofficial pressure groups, operational limits, and regulations can all be considered as country-level institutional forces (Brouthers & Brouthers, 2000; Goodrick & Salancik, 1996; Guler et al., 2002; Huang & Sternquist, 2007). When MNCs choose to establish subsidiaries abroad, the institutional relevance cannot be disregarded. It is clear that poor governance makes places less desirable for MNCs, which in turn causes FDI to decline (Mauro, 1998). Political institutions' influence on foreign investors' choice of host place has not been examined in previous studies on foreign direct investment from developing countries (Li & Resnick, 2003). The potential effects of robust and dynamic political institutions on FDI in developing nations are surprisingly understudied, despite the significant correlation between host institutions and the long-term characteristics of FDI (Kawai, 2009). Since profitability is influenced by the institutional strength of the host nation, countries with strong institutions can draw from foreign investors by providing high rates of return.

According to this, six institutional factors have been identified as the key factors that can positively influence the host country’s ability to attract more inward FDI. The details of these institutional factors are as follows:

Voice and accountability: They are accountable for creating a suitable investment climate that is free from future violations of the rights of international investors. Voice and accountability are the reflection of the freedoms that a country’s citizens can appreciate, such as freedom of association and expression and free media.

They are obliged to create a risk-free economic environment for local and overseas investors (IADB, 2001).

Political stability and absence of violence: They are crucial for ensuring FDI projects and MNCs' activities in the host economies (IADB, 2001). For a long-term investment, FDI is vulnerable to any kind of threat that can reduce the flow of future returns (Fazio & Talamo, 2008). Foreign investors are unwilling to and favor not to invest in high political risk countries (Meier, 2006). Political stability is used as a measure of how stable the government is. The likelihood of an early end to the current administration's tenure owing to political unrest is identified. Multinationals like democracies because they believe that they will encourage foreign investments and trade and have stable, pro-business policies. MNCs also expect less of a chance of expropriation from such states. Consequently, it is also anticipated that political stability will have a beneficial impact on FDI coming in (Shah & Faiz, 2015). Political stability shows the index of political risk and the investment environment. There is a notable positive correlation between political stability and inward FDI can be found (Schneider & Frey, 1985; Wei, 2000a).

Government effectiveness: It facilitates the activities overseas of investors by reducing complicated procedures and heavy bureaucracy, which take longer to complete (IADB, 2001; OECD, 2002). It expresses the quality of civil and public service. It shows the degree of independence can be obtained from political pressure (Buchanan et al., 2012). More efficient governments can make it easier for international corporations to operate. Foreign investors favor consistent government policies because they enable them to allocate funds appropriately without having to deal with frequent and unforeseen repetitions. A favorable correlation between FDIs

and government effectiveness is anticipated because a stable administration ensures the continuance of policies (Shah & Faiz, 2015).

Regulatory quality: The government's capacity to develop and carry out trustworthy and consistent regulatory policies is known as regulatory quality. These governmental rules contribute to the growth of both the public and private sectors and reveal the degree of investor friendliness in the market. As multinational corporations look for regions where the regulatory environment is friendly to markets, high regulatory quality is predicted to have a positive impact on overseas investments (Shah & Faiz, 2015). It stimulates the inflow of foreign investments by reducing unfriendly market policies such as government intervention, price control, and restrictions on capital movement (Fazio & Talamo, 2008). It improves inward FDI by implementing market-friendly policies such as free capital movement, price control, and government intervention (Fazio & Talamo, 2008). It reflects the government's potential to implement and regulate sound policies to foster economic growth.

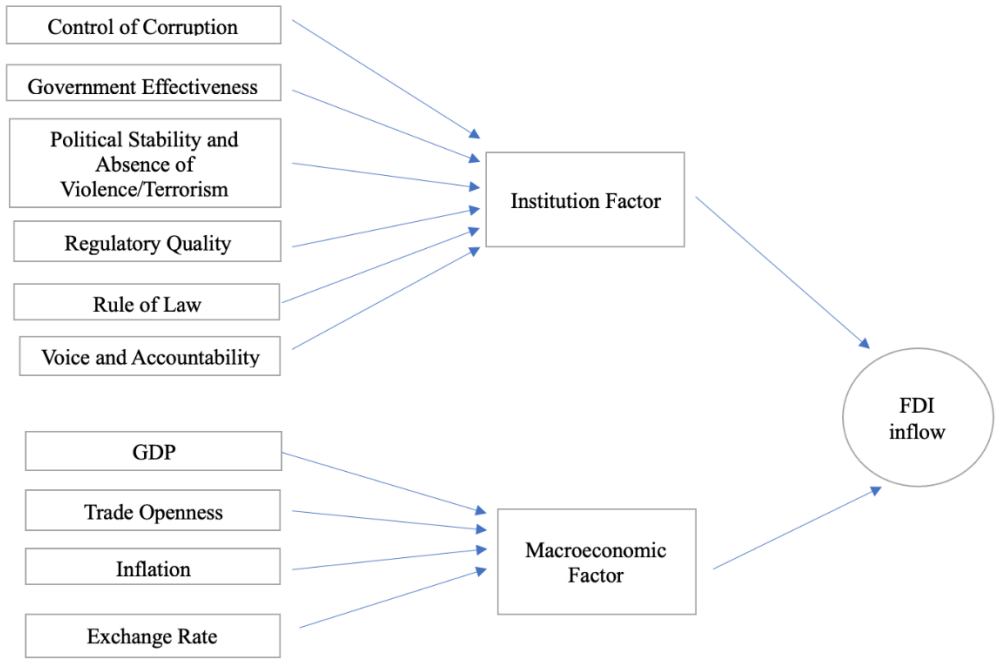
Rule of law: It encourages current decision-making to make the highest value of assets in the long-term as the rule of law plays a critical role in protecting future returns (Hoff & Stiglitz, 2005). It can reduce market-unfriendly economic policies and reduce uncertain risks.

Control of corruption: Corruption can be regarded as a type of taxation. It can change and reduce the types of FDI inflows (Dunning, 2000). In addition, some bureaucratic regulations are the result of extensive corruption. These are not aimed at protecting investors or correcting market disruptions. It can also cause inefficient long-term situations because of uncertainty, which leads to an unpredictable rate of return (Sabir & Khan, 2018). Corruption points out the misuse of public power for

individual profit and covers a wide range of human activities. Controlling corruption reveals how widespread it is in bureaucracy and their capacity to profit from it by abusing their power (Shah & Faiz, 2015). Theoretically, the relationship between inward FDI and control of corruption is positive.

Based on the previous theory and literature, the framework is constructed to understand the effect of institution and economic factors on inward FDI. Figure 2 shows the conceptual framework with detailed variable classification.

Figure 2: Conceptual Framework



Source: Author

3.2 Model Specification

Based on Dunning's eclectic paradigm theory and North's institutional theory, inward FDI depends on natural and human resources, market size, efficiency-seeking, and institutional quality of the host country. The model specification is as follows:

$$\boldsymbol{FDI_{it} = f(inst_{it}, macro_{it})} \quad (1)$$

where FDI is the dependent variable measured by net inflows of FDI in the natural logarithm form. inst represents six institution factors, and macro is macroeconomic factors. Subscripts i and t denote country and year (i = 1, 2, …, 23; t = 1, 2, ..., 25).

In specific terms, Eq1 is stated as

$$\boldsymbol{FDI_{it} = f\,(CCR_{it}, GOV_{it}, POL_{it}, REG_{it}, ROL_{it}, VAA_{it},\ lnGDP_{it}, lnOPEN_{it}, INFL_{it}, lnEXR_{it})} \quad (2)$$

Equation 2 describes the details of the institution and macroeconomic factors where CCR denotes control of corruption, GOV is government effectiveness, POL is political stability and absence of violence/terrorism, REG is regulatory quality, ROL is rule of law, VAA is voice and accountability, lnGDP is GDP in US dollar in natural log form, lnOPEN is trade openness in natural log form, INFL is inflation and lnEXR is the official exchange rate in natural log form. Among the four economic factors, GDP as a proxy for market size, trade openness, and exchange rate are taken into log form for empirical analysis based on the model of previous studies (Antonietti & Mondolo, 2023; Hoang, 2019; Pravin, 2012).

$$\boldsymbol{\ln(FDI_{it}) = \alpha + \beta inst_{it} + \gamma\, macro_{it} + \varepsilon_{it}} \quad (3)$$

In specific terms,

$$lnFDI_{it} = \beta_0 + \beta_1 lnGDP + \beta_2 lnOPEN + \beta_3 INFL + \beta_4 lnEXR + \beta_5 CCR + \beta_6 GOV + \beta_7 POL + \beta_8 REG + \beta_9 ROL + \beta_{10} VAA + \varepsilon_{it} \quad (4)$$

Since institutional quality indicators are highly correlated, it is not possible to include all indicators at once in a single equation (Buchanan et al., 2012; Daude & Stein, 2007; Globerman & Shapiro, 2002; Ullah & Khan, 2017). Therefore, six different institutional factors will be measured one at time separately with additional macroeconomic factors to understand the separate effects and avoid possible multicollinearity issue (Bénassy-Quéré et al., 2007b; Biswas, 2002; Busse & Hefeker, 2005).

In order to capture the effect of institutions and macroeconomic factors on FDI inflows, an interactive term is included in Model 5 (Azam et al., 2011). It will examine the effect of institutional quality on FDI via macro-economic policy channel.

$$\ln(FDI_{it}) = \alpha + \beta dummy\_Inst_{it} + \gamma\, macro_{it} + \pi\,(macro_{it} * Dummy\_Inst_{it}) + \varepsilon_{it} \quad (5)$$

In specific terms,

$$lnFDI_{it} = \beta_0 + \beta_1 lnGDP + \beta_2 lnOPEN + \beta_3 INFL + \beta_4 lnEXR + \beta_5 Dummy\_Inst + \beta_6 Dummy\_Inst * lnGDP + \beta_7 Dummy\_Inst * lnOPEN + \beta_8 Dummy\_Inst * INFL + \beta_9 Dummy\_Inst * lnEXR + \varepsilon_{it} \quad (6)$$

where Dummy_Inst*macro is the interactive term that plays a mediating role as the determinant of FDI.

Higher levels of institutional indicators describe strong institutions while lower levels of institutional indicators demonstrate weak institutions. From Eq. 3, the

initial expectations of the variables are as follows; β and γ are expected to positively affect FDI inflow if strong institutions are in place, while the reverse is expected for weak institutions. Regarding the interactive term (π), a negative sign suggests that a weak institutional and macroeconomic framework can reduce FDI inflow. However, a positive sign stipulates that strong institution coupled with favorable economic factors promotes FDI inflows. Nevertheless, an insignificant effect of the interactive term (π) shows that other economic factors do not play a moderating role in the relationship.

The institution variable in this model is regarded as a dummy variable written as dummy_inst. It is calculated by using a composite measure of institution indicators from the World Bank data source of WGI, which is the unweighted average of six institution factors (Asamoah et al., 2016; Asiedu, 2013; Buchanan et al., 2012; Daude & Stein, 2007; Globerman & Shapiro, 2002), and then convert to dummy variable. When the value is less than the average of the group, the dummy value is 0 and when the value is greater than the average of the group, it takes the value of 1. The positive value of dummy_inst variable means that if the institution variable is greater than average, it can enhance the inflow of FDI. The institutional dummy variable is combined with four macroeconomic factors to understand the combination effect of both institutional and economic factors.

Table 2: Explanation of the Variables

Explanatory variable	Indicators	Symbol	Expected sign	Data source
Dependent variable	Foreign direct investment inflow	FDI	NA	World Development Indicators
Institution factors (Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5)	Control of corruption: Estimates	CCR	+	Worldwide Governance Indicators
	Government effectiveness: Estimates	GOV	+	
	Political stability and absence of violence/terrorism: Estimates	POL	+	
	Regulatory quality: Estimates	REG	+	
	Rule of Law: Estimates	ROL	+	
	Voice and Accountability	VAA	+	
Macroeconomic factor as control variable	GDP (current US billion $)	GDP	+	World Development Indicators
	Trade openness (trade as % of GDP)	OPEN	+	
	Inflation, consumer price (annual %)	INFL	-	
	Official exchange rate (LCU per US$, period average)	EXR_L	+	

Source: Author

3.3 Data

The sample includes 23 developing countries in Asia (see Table 3 for the full list) over 25 years, from 1996 to 2021. For the analysis part, the data will be divided into (1) the overall sample group which is middle-income Asian developing countries and sub-income group including (2) the upper-middle-income countries and (3) the lower-middle-income countries.

Table 3: Classification of Countries based on Income Groups

Group	Countries
Upper-Middle Income	China, Iraq, Jordan, Malaysia, Thailand, Maldives, Lebanon, Turkiye
Lower-Middle Income	Cambodia, Indonesia, Laos, Mongolia, Myanmar, Philippines, Vietnam, Timor-Leste, Bangladesh, Bhutan, India, Iran, Pakistan, Nepal, Sri Lanka

Note. Income groups are classified based on the criteria of the World Bank

The descriptive statistics and the correlation of those variables are presented in Table 4 and 5. For FDI, when taking the natural log, 27 observations from FDI are dropped because the FDI value is zero or negative values.

Table 4: Descriptive Statistics

Variable	Observation	Mean	Std. Dev	Min	Max
CCR	526	-.5388095	.5636298	-1.672809	1.66271
GOV	526	-.3089794	.6106677	-2.088645	1.254254
POL	527	-.6644119	.9037805	-3.180352	1.284487
REG	526	-.4731959	.6145895	-2.348573	1.02667
ROL	529	-.4787576	.5765293	-1.838028	.6571801
VAA	529	-.6417202	.6652956	-2.233271	.5594718
FDI	586	1.06e+10	3.77e+10	-1.02e+10	3.34e+11
ln_FDI	559	20.79775	2.436968	13.719	26.53441
GDP	594	4.77e+11	1.72e+12	3.03e+08	1.77e+13
ln_GDP	594	24.6521	2.302782	19.53068	30.50459
OPEN	552	80.46632	41.98949	.0268885	220.4068
ln_OPEN	552	4.237349	.6325873	-3.616057	5.395475
Lag of ln_OPEN	530	4.23805	.6360873	-3.616057	5.395475
INFL	574	8.52705	13.89823	-16.11732	154.7561
EXR	596	2685.221	6036.816	.0814049	42000
ln_EXR	596	4.760891	3.099257	-2.50832	10.64542
inst	529	-.5199288	.509493	-1.899264	.6359437

Table 5: Correlation Matrix of the Variables

	CCR	GOV	POL	REG	ROL	VAA	ln_FDI
CCR	1.0000						
GOV	0.7665	1.0000					
POL	0.5476	0.4621	1.0000				
REG	0.5438	0.7896	0.3041	1.0000			
ROL	0.8349	0.8596	0.5099	0.7484	1.0000		
VAA	0.3799	0.3181	0.1184	0.4808	0.4875	1.0000	
ln_FDI	-0.0608	0.3138	-0.2110	0.3092	0.1353	-0.0754	1.0000
ln_GDP	-0.0871	0.2461	-0.3998	0.2012	0.0782	-0.0491	0.8617
ln_OPEN	0.2710	0.2945	0.4405	0.3335	0.2657	0.0718	-0.1102
INFL	-0.1492	-0.2366	-0.1861	-0.2312	-0.1763	-0.1036	-0.1181
ln_EXR	-0.4123	-0.3383	-0.0567	-0.3431	-0.3640	-0.2494	0.0151

	ln_GDP	ln_OPEN	INFL	ln_EXR
ln_GDP	1.0000			
ln_OPEN	-0.3301	1.0000		
INFL	-0.0496	-0.0367	1.0000	
ln_EXR	0.0165	-0.0275	0.0585	1.0000

3.3.1 Institutional Quality Measures

To measure the level of institutional quality, six indicators from the Worldwide Governance Indicators (WGI) are used. The data is available at the World Bank Group (https://databank.worldbank.org/source/worldwide-governance-indicators). These are largely accepted and frequently used indicators as a broad definition of governance. Kaufmann et al. (2011) refers to governance as the

traditions and frameworks where the power is exercised in a nation. This includes: (1) the mechanism by which governments are chosen, (2) the capability of the government to carry out effective policies in effective ways, and (3) the respect of citizens and the State for the institutions that oversees social and economic transaction levels.

The six composite indicators from the WGI are Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. The index covers over 200 countries since 1996. The six WGI indicators range approximately from -2.5 (the lowest quality) to +2.5 (the highest quality). The details of the six indicators are as follows:

- **Voice and accountability:** reflect point of view on the standard to which people can choose their own government, as well as on issues like freedom of speech, freedom of association, and access to the free press and media;
- **Political stability and absence of violence/terrorism:** relating to the risk that the government may be destabilized or overthrown through violent or unconstitutional means, including terrorism and politically related violence;
- **Government effectiveness:** collecting choices on the credibility of the government's adherence to such policies, the credibility of public services, the civil service's performance and the level of its independence from political stress, and the quality of policy formulation and implementation;

- **Regulatory quality:** regarding opinions of the government's ability to implement sensible rules and laws that support the development of the private sector and market-oriented strategies;
- **Rule of law:** reflects opinions on how much agents believe in and follow the laws of society, namely how well property rights are secured, how well contracts are implemented, how well the police and the courts work, and how likely it is that crimes and violent acts will form;
- **Control of corruption:** Public opinions of how much public power is used for personal benefit, including both minor and major instances of corruption, together with the "capture" of the State by elites and private interests.

The World Bank Group (2018) notes that the WGI compiles data from a broad range of understanding-based governance data sources, including the World Economic Forum's Global Competitiveness Report, the Institute for Management Development's World Competitiveness Yearbook, and the World Bank/EBRD Business Environment and Enterprise Performance surveys. It also measures a number of pertinent institutional types, including property rights, civil liberties, political freedom, press freedom, rule of law, and corruption.

Perspectives from a wide range of respondents are reflected in the WGI data sources. There are several surveys conducted by people or domestic businesses who have first-hand knowledge of the governing environment in the nation. Each individual variable has a new scale that runs from zero to one, where higher values correspond to better results. Because every one of the underlying sources employs a methodology that is very comparable from year to year, these individual indicators

can be utilized to compare countries over time. Additionally, they can be used to compare how various nations fare on each of the individual indicators; however, it should be noted that comparisons of this kind are equally prone to error margins.

For instance, a developing nation may obtain a score of 0.7 on a 0–1 scale from a single data source that only covers developing nations, while it may earn a lower score of 0.5 on the same 0–1 scale from a second data source that includes both developed and developing nations. Rather than indicating a significant difference in the two data sources' assessments of the same country, the score difference may simply be the result of different reference groups for comparator countries.

Data sources with higher correlations amongst themselves are given more weight by the UCM. Although this weighting increases the aggregate indicators' statistical precision, it usually has little impact on how nations rank relative to one another. The composite governance metrics produced by the UCM range from around -2.5 to 2.5 and are expressed in units of a standard normal distribution with a mean of zero and a standard deviation of one. Higher values indicate a stronger governance (Kaufmann et al., 2011).

3.3.2 Macroeconomic Factors

According to previous empirical results, market size and potential, measured by the level of GDP and GDP growth rate, can affect the FDI inflow significantly. Market growth has a particular effect on the exploitation of economies of scale and efficient use of resources (Nunnenkamp & Spatz, 2002; Wheeler & Mody, 1992). Market size proxied with GDP is an important determinant of FDI. Foreign investors can decide their destination based on the size of the market which can have the benefit

of sales in the host country. Many scholars proved the role of the domestic market condition. The economic situation of the host country can be determined based on the macroeconomic stability (Hattari et al., 2008; Khondoker et al., 2010; Rojid et al., 2009; Schneider & Frey, 1985; Tajul & Hussin, 2010; Wheeler & Mody, 1992). Real GDP has been used as a measurement of market size in some studies, mentioning that the higher purchasing power leads to higher returns of investment and as a result, attracting more investments. Thus, it is expected to be a positive relationship between market size and the FDI (Goyal, 2022). Countries with large GDPs, high growth rates, and business-friendly conditions are supporting factors to attract more FDI in successful ways (Khondoker et al., 2010).

The trade openness can represent the degree of long-term economic relationship of the host country in the global business environment. When there is trade openness, trade barriers for goods in the host country have steadily reduced. It is an advantage for overseas investors to have a comparative advantage in the host country to export back to the home country with increased exports to the rest of the world (Tajul & Hussin, 2010). Trade is regarded as one of the macroeconomic determinants of FDI. If a country has a trade surplus, it shows a healthy and dynamic economy with export potential as a crucial factor in attracting FDI (Apostu et al., 2022). Countries with more trade openness can attract more FDI, trade openness can have a positive relationship with FDI. In the previous literature, the share of trade in GDP has been utilized to measure trade openness (Aw & Tang, 2009; Leitão & Faustino, 2010).

The role of inflation and exchange rate on FDI inflow is important as a macroeconomic or policy variable in measuring the impact of institutional quality on the FDI (Asamoah et al., 2016; Barrell & Pain, 1996). One significant monetary policy tool that influences FDI is inflation targeting. In general, it is suggested that greater inflation will raise price uncertainty and make it harder for MNCs to predict the host country (Burdekin & Siklos, 2004). Inflation can reflect domestic economic tensions, the balance of payment, and the competence of the central bank and government to have control over money supply (Buchanan et al., 2012; Schneider & Frey, 1985). For a stable economy, uncertainty in the investment environment will be reduced and the country's confidence level will be improved. Inflation and FDI inflows have a significant negative correlation since high inflation limits FDI inflows (Schneider & Frey, 1985). Inflation reflects domestic economic constraints and the role of the central bank in controlling the balance of the budget and money supply (Buchanan et al., 2012). Thus, a high inflation rate can lower the inflow of FDI (Buchanan et al., 2012; Schneider & Frey, 1985).

An exchange rate reflects price competition. A higher exchange rate means the currency of the host economy depreciates against the foreign currency compared. It represents an enhancement in the competitiveness of exported goods. There is a significant positive relationship between exchange rates and FDI inflows in ASEAN countries. The exchange rate's coefficient is statistically significant in the positive for macroeconomic policy considerations. This indicates that FDI flows to the region may be attracted by host nation currencies that are valued less favorably than the U.S. dollar (Mamadou, 2002). The exchange rate plays a critical role in imports and exports in terms of trade and business transactions. It can influence FDI inflows by

attracting the value of the cost of domestic currency for acquiring an asset abroad. Currency exchange rate changes can directly impact the profit return of foreign assets and reduce investment conditions and international capital inflows.

3.4 Econometric Analysis

Panel data estimation has an advantage over cross-section and time-series when used for all obtainable evidence that cannot be measured in time-series or cross-section data (Baltagi & Kao, 2000). It engages an analysis of the dynamic behavior of parameters (Gujarati et al., 2012). It is widely used in the past and has the potential to grow widely in the future (Goyal, 2022). It uses polling of variables on a cross-section of companies, sectors, countries, regions, and so on over a period. It is utilized to control for the dynamic behavior of parameters and individual heterogeneity issues. It can ensure more suitable results with better degrees of freedom, efficiency, and variability.

There are many different types of panel analysis models. Among them, ordinary least squares (OLS) regression, fixed effects models, and random effects models are the most common ones. However, they can have the problem of autocorrelation and heteroskedasticity (Yaffee, 2003). OLS regression is commonly used as a baseline estimation in many FDI-related research. Although it is a useful benchmark, it can have an endogeneity problem and be biased by time-invariant differences between countries (Burns et al., 2017). The problem with using OLS estimates is that measurement and endogeneity problems can lead to inconsistent simple OLS estimates which makes it challenging to find meaningful conclusions about the causal effect (Mishra & Smyth, 2015).

Fixed effects regression (FE) is used to fix unobserved time-variant heterogeneity between countries (Burns et al., 2017). One of the benefits of using the fixed effects model is that it can solve the unobserved heterogeneity (Sheytanova, 2015). The random effect (RE) model measures panel data where interference variables have the potential to be interconnected between individuals and between time. It examines panel data where interference variables have the chance to be interconnected between period and individuals. It can also help to reduce heteroscedasticity (Zulfikar, 2018). Fixed effects will be used to address omitted variable bias and endogeneity issues while random effects will allow for unobserved heterogeneity which is randomly distributed across variables (Bénassy-Quéré et al., 2007a; Daude & Stein, 2007).

Instrumented Variables (IV) estimation method is used to form a better modeling result. Many authors applied IV estimation methods in their analysis since it is used to have better outcome results (Buchanan et al., 2012; Daude & Stein, 2007). The instrumental variable will be used to address inconsistent estimators missing data and endogeneity problems (Bénassy-Quéré et al., 2007a; Daude & Stein, 2007). To make sure that instrumental variables are strong and appropriate, the method for checking endogeneity is used while considering relevant instrument variables (Ampil, 2015).

To examine the effect of institutional factors on inward FDI in Asian developing countries, fixed effects, random effects, and instrument variable regression are used in this study. In this panel data analysis, the Hausman selection test is used to decide whether the fixed or random effects are more appropriate because it can test

the presence of endogeneity in the panel regression model. Since the fixed effect is consistent and efficient based on the assumption of the test, it will be used to analyze the regression results. The fixed effect technique for panel data is used to deal with two prevalent problems such as unobserved heterogeneity and autocorrelation. It can decrease bias by controlling for unobserved variables, including entity-fixed effects.

Chapter 4

Empirical Result

The empirical result and the discussion are presented in this chapter. This study investigates the impact of institutional factors on inward FDI in Asian developing countries by considering the overall case with the entire sample as well as the subgroups of lower-middle-income countries and upper-middle-income countries.

4.1 Result for All Sample Group

- **Using Fixed Effect Model**

Table 6 shows the results from the fixed effects model to analyze each institutional factor in separate equation. GDP and trade openness show a significant positive relationship at a 1% level, meaning that a larger amount of GDP and trade openness are attracting factors of FDI inflow. The result is consistent with previous literature that market size and trade openness have a positive effect on the FDI inflow (Amal et al., 2010; Bhavan et al., 2010; Hailu, 2010; Leitão & Faustino, 2010; Pravin, 2012). By holding other variables constant, a 1 unit increase in GDP and trade openness is associated with approximately 1.3 unit increase in FDI. Among the six institutional factors, control of corruption, government effectiveness, and rule of law have a negative sign while political stability, regulatory quality, and voice and accountability show a positive sign. However, institution indicators do not show significant results.

Table 6: Regression Result for All Samples with Each Institutional Factor, Using FE

VARIABLES	(1) ln_FDI	(2) ln_FDI	(3) ln_FDI	(4) ln_FDI	(5) ln_FDI	(6) ln_FDI
ln_GDP	1.299***	1.313***	1.293***	1.284***	1.301***	1.307***
	(0.127)	(0.113)	(0.122)	(0.125)	(0.124)	(0.131)
ln_OPEN	1.304***	1.309***	1.377***	1.280***	1.309***	1.318***
	(0.304)	(0.301)	(0.304)	(0.327)	(0.305)	(0.302)
INFL	-0.00503	-0.00556	-0.00430	-0.00354	-0.00524	-0.00484
	(0.00325)	(0.00367)	(0.00323)	(0.00405)	(0.00329)	(0.00324)
ln_EXR	-0.0679	-0.0722	-0.0646	-0.0945	-0.0697	-0.0762
	(0.159)	(0.158)	(0.167)	(0.170)	(0.160)	(0.171)
CCR	-0.0492					
	(0.342)					
GOV		-0.130				
		(0.322)				
POL			0.196			
			(0.142)			
REG				0.492		
				(0.427)		
ROL					-0.194	
					(0.351)	
VAA						0.136
						(0.321)
Constant	-16.64***	-17.01***	-16.66***	-15.82***	-16.77***	-16.75***
	(3.584)	(3.252)	(3.468)	(3.611)	(3.502)	(3.624)
Observations	448	448	448	448	448	448
R-squared	0.593	0.593	0.597	0.599	0.594	0.593
Number of countryid	23	23	23	23	23	23

Robust standard errors in parentheses

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

- **Using 2SLS**

Given that in the FDI determinant model, the trade openness might attract FDI and consequently, the FDI leads to further increase in trade openness. There was a

suspicion of endogeneity in the data. Therefore, the endogeneity test has done, and the result is as follows:

Ho: variables are exogenous
Durbin (score) chi2(1) = 313.559 (p = 0.0000)
Wu-Hausman F (1,437) = 1019.22 (p = 0.0000)

Since the results show that the p-value is less than 0.01, it indicates that there is an endogeneity problem. To solve this issue, instrument variable (IV) estimation is used for the later regressions. According to the previous literature, the IV method can present better estimates of the model (Bénassy-Quéré et al., 2007b; Daude & Stein, 2007; Mauro, 1998). For IV estimation with 2SLS, trade openness is used as an endogenous variable and the lag of trade openness is taken as an exogenous variable. By making an endogeneity test, the result shows that using trade openness as an instrumented variable is a good fit for the model.

The instrumental variables are used to solve potential endogeneity issues and get consistent answers to the coefficients. OPEN (trade openness), with an endogeneity issue, is estimated from the lag of trade openness. FDI is a dependent variable, and the rest are independent variables are included in the model.

Table 7: Regression Result for All Sample with Each Institutional Factor, Using 2SLS

VARIABLES	(1) ln_FDI	(2) ln_FDI	(3) ln_FDI	(4) ln_FDI	(5) ln_FDI	(6) ln_FDI
ln_OPEN	1.371***	1.435***	1.116***	1.049***	1.353***	1.263***
	(0.104)	(0.121)	(0.112)	(0.122)	(0.110)	(0.101)
ln_GDP	1.072***	1.115***	1.087***	1.024***	1.085***	1.070***
	(0.0233)	(0.0290)	(0.0239)	(0.0279)	(0.0246)	(0.0239)
INFL	-0.00892**	-0.00964**	-0.00540	-0.00609	-0.00855**	-0.00789*
	(0.00397)	(0.00405)	(0.00406)	(0.00402)	(0.00402)	(0.00404)
ln_EXR	0.000910	0.0125	0.0316**	0.0612***	0.0155	0.0314*
	(0.0172)	(0.0169)	(0.0152)	(0.0177)	(0.0172)	(0.0161)
CCR	-0.400***					
	(0.106)					
GOV		-0.314***				
		(0.118)				
POL			0.215***			
			(0.0685)			
REG				0.397***		
				(0.125)		
ROL					-0.236**	
					(0.110)	
VAA						-0.0159
						(0.0798)
Constant	-11.73***	-13.00***	-10.83***	-9.080***	-11.95***	-11.17***
	(0.884)	(1.124)	(0.886)	(1.111)	(0.956)	(0.889)
Observations	427	427	427	427	427	427
R-squared	0.840	0.838	0.838	0.838	0.837	0.835

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: instrumented variable: ln_OPEN

Table 7 shows the regression results of IV estimation using the two-stage least squares (2SLS) method with each institutional factor in a separate equation. GDP and trade openness demonstrate a positive relation with FDI inflow with a significant level at 1%. Inflation has a negative relationship with inward FDI, with significant results only in models with control of corruption, rule of law, and voice and accountability.

In contrast, the exchange rate has a positive effect on inward FDI, with significant results only in models with political stability, regulatory quality, and voice and accountability variables. The finding is consistent with that of (Goyal, 2022), which states that exchange rates move in the same direction as FDI inflow.

Regarding institution indicators, control of corruption, government effectiveness and rule of law have a negative relation while political stability, similar to the finding in (Shah, 2017), and regulations have a positive correlation with FDI inflow. Control of corruption can have a negative effect on FDI when the investors' home country has high corruption with weak enforcement of anticorruption measures. When they expand the market overseas, they internalize in the host countries where they can exploit the nature of corrupted environments. These kinds of investments encounter lower costs of business operations as opposed to other investments (Cuervo-Cazurra, 2006).

Table 8: Regression Result for All Sample with Dummy of Institutional Factor, Using 2SLS

VARIABLES	(1) ln_FDI
ln_OPEN	1.796***
	(0.129)
ln_GDP	1.106***
	(0.0252)
INFL	-0.00406
	(0.00356)
ln_EXR	0.0147
	(0.0158)
dummy_inst	-0.554***
	(0.125)
Constant	-14.19***
	(1.020)
Observations	478
R-squared	0.820

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Note: instrumented variable: ln_OPEN

Table 8 shows the IV estimation using the average value of institution factors as a dummy variable with macroeconomic factors. GDP and trade openness show a significant positive result at a 1% level. The institution quality has a negative relation with FDI inflow with a 1% significant level result. It means that the countries with institution quality greater than the average value can attract FDI 0.554 units lower than those with institution quality less than the average level. That can be because of diversity in institutional factors. As they are diverse, their effect can differ across different dimensions as specific separate institution factors can give a negative effect. As different foreign investments have different sensitivity to considering risk factors, it can also depend on the types of FDI. The inflation and exchange rate do not have an

effect on inward FDI, meaning that changes in these variables do not influence the changes in FDI.

Table 9: Regression Result for All Sample with Dummy of Institutional Factor and Interaction Terms, Using 2SLS

VARIABLES	(1) ln_FDI
ln_OPEN	1.402***
	(0.135)
ln_GDP	1.066***
	(0.0309)
INFL	-0.00905*
	(0.00466)
ln_EXR	0.0163
	(0.0191)
dummy_inst	-13.76***
	(3.460)
dummylnOPEN	1.916***
	(0.468)
dummylnGDP	0.163**
	(0.0709)
dummyINFL	0.0228***
	(0.00874)
dummylnEXR	0.148**
	(0.0575)
Constant	-11.50***
	(1.159)
Observations	478
R-squared	0.787

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Note: instrumented variable: ln_OPEN, dummylnOPEN

Table 9 shows the IV estimation when using the average of all institution factors as a dummy, macroeconomic factors, and interactive terms. GDP and trade openness show a significant positive relationship, while inflation has a significant negative effect. The institution factor has a negative and significant relationship at the 1% level. It means that the countries with institution quality greater than the average level can attract FDI 13.76 units lower than those with institution quality less than the

average level. Among countries with institutional quality greater than the average level, those with a higher degree of openness, GDP, inflation rate, and exchange rate can attract more FDI. This means that favorable economic conditions can act as a moderating factor when combined with institution quality for examining inward FDI.

4.2 Results for Upper-Middle Income Group

This section presents the results from the upper-middle income countries, composed of eight countries including China, Iraq, Jordan, Malaysia, Thailand, Maldives, Lebanon, and Turkey. The findings are as follows:

Table 10: Regression Result for Upper-Middle Income Group with Each Institutional Factor, Using 2SLS

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	ln_FDI	ln_FDI	ln_FDI	ln_FDI	ln_FDI	ln_FDI
ln_OPEN	-0.347	-0.600**	-0.287	-0.356	-0.302	-0.0331
	(0.222)	(0.255)	(0.207)	(0.217)	(0.230)	(0.201)
ln_GDP	0.779***	0.678***	0.794***	0.764***	0.789***	0.809***
	(0.0475)	(0.0602)	(0.0459)	(0.0483)	(0.0478)	(0.0492)
INFL	-0.0120***	-0.0112***	-0.0118***	-0.0141***	-0.0138***	-0.0145***
	(0.00414)	(0.00413)	(0.00408)	(0.00406)	(0.00413)	(0.00422)
ln_EXR	0.157**	0.0761*	0.0595	0.0613	0.0689	-0.0278
	(0.0658)	(0.0404)	(0.0370)	(0.0388)	(0.0491)	(0.0297)
CCR	1.104***					
	(0.356)					
GOV		0.748***				
		(0.211)				
POL			0.454***			
			(0.128)			
REG				0.677***		
				(0.205)		
ROL					0.553**	
					(0.230)	
VAA						-0.0177
						(0.156)
Constant	3.769*	7.325***	3.320*	4.140**	3.306	1.704
	(2.045)	(2.523)	(1.959)	(2.049)	(2.069)	(1.958)
Observations	139	139	139	139	139	139
R-squared	0.815	0.818	0.820	0.817	0.810	0.803

Standard errors in parentheses

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

Note: instrumented variable: ln_OPEN

Table 10 shows the estimations for the upper-middle income group, using each institutional factor. For macroeconomic factors, GDP has a positive result while inflation has a significant negative result at a 1% level when examining all institution indicators. High inflation reduces foreign investment as it can raise the cost of business operations (Asamoah et al., 2016). The exchange rate shows a positive

significant result while measuring with control of corruption and government effectiveness. It states that FDI inflows into the area could be encouraged by the host nation’s currency being valued less than the US dollar (Mamadou, 2002). For trade openness, it is negatively significant at a 5% level while examining government effectiveness only.

The institutional factors, except for voice and accountability, have a positive relationship with FDI inflow in the upper-middle income group. The result is compatible with the findings of previous papers that the credibility of host country institutions can guarantee the profits of foreign investors (Asamoah et al., 2016; Azam et al., 2011; Buchanan et al., 2012; Daude & Stein, 2007; Globerman & Shapiro, 2002; Jude & Levieuge, 2014; Sabir et al., 2019). Greater political stability or lower political risk in the country can largely promote FDI inflow into the country's (Hoang, 2019). Foreign investors take into consideration about stable political environment since it can threaten business operations (Shah, 2017).

Table 11: Regression Result for Upper-Middle Income Group with Dummy of Institutional Factor, Using 2SLS

	(1)
VARIABLES	ln_FDI
ln_OPEN	2.352***
	(0.557)
ln_GDP	1.172***
	(0.0939)
INFL	-0.00206
	(0.00643)
ln_EXR	-0.0977**
	(0.0439)
dummy_inst	-1.063***
	(0.314)
Constant	-18.04***
	(4.675)
Observations	155
R-squared	0.618

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Note: instrumented variable: ln_OPEN

Table 11 shows the IV estimation using the average value of institution factors as a dummy variable with macroeconomic factors in a single equation. GDP and trade openness show a significant positive result at a 1% level. For exchange rate, it is negatively related to FDI at a 1% level. It has a similar outcome to the findings of (Aziz, 2018). The institution factor is negatively related to FDI with a significant result at a 1% level. It describes that if the country has a stronger institution quality than the average value, it can reduce 1.063 units of FDI than a host nation with a weaker institution quality.

Table 12: Regression Result for Upper-Middle Income Group with Dummy of Institutional Factor and Interaction Terms, Using 2SLS

VARIABLES	(1) ln_FDI
ln_OPEN	0.0534
	(0.378)
ln_GDP	0.849***
	(0.0749)
INFL	-0.0144***
	(0.00552)
ln_EXR	-0.0114
	(0.0411)
dummy_inst	-21.43***
	(7.294)
dummyln_OPEN	2.322**
	(0.916)
dummylnGDP	0.419***
	(0.154)
dummyINFL	0.00362
	(0.0161)
dummylnEXR	-0.390***
	(0.114)
Constant	0.224
	(3.376)
Observations	155
R-squared	0.713

Standard errors in parentheses

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

Note: instrumented variable: ln_OPEN, dummylnOPEN

Table 12 shows the regression results of the IV estimate using the average of all institution factors as a dummy, macroeconomic factors, and interactive terms. GDP is positively related to FDI at a 1% level when inflation has a negative relationship. The institution factor has a negative result and is significant at a 1% level. It describes that the countries with institution quality greater than the average level can attract FDI 21.43 units lower than those with institution quality less than the average level. When the countries have institutional quality greater than the average level, together with a higher degree of openness and GDP can attract more FDI. When there is an

unfavorable exchange rate with institution quality, it can reduce FDI inflow. This means that favorable economic conditions can play a mediating role when combined with institutional factors for measuring the impact on FDI inflow.

4.3 Results for Lower-Middle Income Group

This section presents the results from the lower-middle income countries, composed of fifteen countries including Cambodia, Indonesia, Laos, Mongolia, Myanmar, Philippines, Vietnam, Timor-Leste, Bangladesh, Bhutan, India, Iran, Pakistan, Nepal, and Sri Lanka. The findings are as follows:

Table 13: Regression Result for Lower-Middle Income Group with Each Institutional Factor, Using 2SLS

VARIABLES	(1) ln_FDI	(2) ln_FDI	(3) ln_FDI	(4) ln_FDI	(5) ln_FDI	(6) ln_FDI
ln_OPEN	1.677***	1.809***	1.402***	1.427***	1.706***	1.480***
	(0.150)	(0.162)	(0.169)	(0.173)	(0.158)	(0.160)
ln_GDP	1.099***	1.184***	1.126***	1.084***	1.144***	1.095***
	(0.0336)	(0.0383)	(0.0374)	(0.0400)	(0.0359)	(0.0378)
INFL	-0.0121*	-0.0143*	-0.00914	-0.00933	-0.0134*	-0.0117
	(0.00730)	(0.00741)	(0.00785)	(0.00802)	(0.00747)	(0.00769)
ln_EXR	0.0197	0.0288	0.0416	0.0610**	0.0256	0.0675**
	(0.0250)	(0.0250)	(0.0261)	(0.0263)	(0.0257)	(0.0320)
CCR	-0.609***					
	(0.111)					
GOV		-0.642***				
		(0.138)				
POL			0.157			
			(0.0955)			
REG				0.180		
				(0.156)		
ROL					-0.514***	
					(0.129)	
VAA						0.0818
						(0.110)
Constant	-13.89***	-16.48***	-13.11***	-12.27***	-15.05***	-12.86***
	(1.256)	(1.461)	(1.308)	(1.550)	(1.368)	(1.389)
Observations	288	288	288	288	288	288
R-squared	0.850	0.846	0.835	0.834	0.843	0.834

Standard errors in parentheses

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

Note: instrumented variable: ln_OPEN,

Table 13 shows the IV estimation using each institutional factor and macroeconomic factor in a separate equation. Concerning economic factors, GDP and trade openness demonstrate a positive relation with FDI inflow with a significant level at 1%. It has a similar result to the finding of (Sabir et al., 2019) in which trade openness and FDI have a positive connection in lower-middle-income countries.

When measuring with control of corruption, rule of law, and government effectiveness, inflation has a negative result at a 10% level. That describes that high inflation can reduce FDI inflow. When analyzing regulatory quality and voice and accountability, the exchange rate has a significant positive relation with FDI. Regarding institution indicators, control of corruption, government effectiveness and rule of law have a significant negative relation with FDI inflow.

Table 14: Regression Result for Lower-Middle Income Group with Dummy of Institutional Factor, Using 2SLS

	(1)
VARIABLES	ln_FDI
ln_OPEN	1.572***
	(0.145)
ln_GDP	1.084***
	(0.0352)
INFL	-0.00267
	(0.00561)
ln_EXR	0.0478**
	(0.0242)
dummy_inst	-0.413***
	(0.152)
Constant	-12.93***
	(1.277)
Observations	323
R-squared	0.833

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Note: instrumented variable: ln_OPEN

Table 14 shows the IV estimation using the average value of institution factors as a dummy variable with macroeconomic factors in a single equation. GDP, trade openness and exchange rate show a significant positive result at 1% and 5% levels. The institution factor is negatively connected with FDI at a 1% level. It means that a

country with the stronger institution factor than the average index can attract FDI 0.413 units lesser than those with weaker institution quality.

Table 15: Regression Result for Lower-Middle Income Group with Dummy of Institutional Factor and Interaction Terms, Using 2SLS

VARIABLES	(1) ln_FDI
ln_OPEN	1.490***
	(0.152)
ln_GDP	1.062***
	(0.0368)
INFL	-0.0136*
	(0.00759)
ln_EXR	0.0436*
	(0.0252)
dummy_inst	-9.298**
	(3.978)
dummylnOPEN	0.721
	(0.441)
dummylnGDP	0.217**
	(0.108)
dummyINFL	0.0223**
	(0.0112)
dummylnEXR	0.113
	(0.0756)
Constant	-11.93***
	(1.326)
Observations	323
R-squared	0.840

Standard errors in parentheses

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

Note: instrumented variable: ln_OPEN, dummylnOPEN

As shown in Table 15, GDP, trade openness, and the exchange rate all have a significant positive relationship, whereas inflation has a significant negative effect. At a 5% significant level, the institution factor is negatively related to FDI. This means that among the lower-middle income countries in Asia, those with higher institution quality than the group average value can attract FDI 9.298 units less FDI than those with lower institution quality than the average value. Furthermore, among countries

with higher institutional quality than the average, those with a higher GDP and inflation rate can attract more FDI. This states that when analyzing inward FDI, a large GDP with a favorable inflation rate can act as a moderating factor when combined with institution quality.

Chapter 5

Conclusion and Policy Recommendation

5.1 Conclusion

The study examines the effect of institutional factors on inward FDI by analyzing data from 23 Asian developing countries between 1996 and 2021 using 2SLS estimation. The findings indicate that both the quality of institutions and the economic environment are important in determining FDI. In addition, the combination effect is critical in creating a strong business environment. Since institutional factors like control of corruption, government effectiveness, political stability, rule of law, and regulatory quality have a significant impact on FDI inflows, Asian developing countries should try to improve these indicators in order to attract more FDI.

In the overall sample group of 23 Asian developing countries, countries with lower institutional quality, as measured by corruption control, government effectiveness, and rule of law, tend to attract lower amounts of FDI. On the other hand, because FDI is a long-term investment, and unstable political conditions can be a source of risk for business operations, more inward FDI will flow to countries with political stability and stronger regulations. High regulatory quality can provide dependable regulations and frameworks. This can protect investors from unfair treatment and unexpected regulatory changes.

For upper-middle-income countries, except for voice and accountability, all institutional factors are important in attracting FDI. That is, if these countries have a higher quality for corruption control, government attractiveness, regulation, rule of law, and political stability, these are the influencing factors for investors' decisions. In

lower-middle-income countries, control of corruption, government effectiveness, and rule of law all have a negative relationship with FDI, similar to the results of the overall sample group.

When the combined effect of institution quality and economic factors in the overall sample group is considered, countries with higher GDP, trade openness, inflation, and exchange rate tend to attract more FDI than those with lower values. When considering the interaction with the institution quality, a large GDP is important as a mediator. The combination of GDP and trade openness with institution quality produces the same results for the upper-middle-income group as it does for the overall group. However, the combined impact of poor institution quality and the exchange rate can limit FDI inflows. For the lower-middle-income countries, a higher level of GDP, larger trade openness, and inflation play a moderating role in Asian developing countries when combined with the institution quality. However, the interaction with the exchange rate has a mixed signal depending on the different income levels.

When the overall institution quality is examined, the results show that countries, with institution quality lower than the average level, have more FDI. According to many of prior literature, improved institutional factors can attract FDI. However, the outcomes may differ depending on the country or region. The reason for this is that, depending on the type of FDI, such as resource-seeking or market-seeking rather than strategic-seeking, the country or region may not place a high value on institution quality. If they want to do exploitation, such as resource-seeking FDI, some investors may prefer to invest in countries with less stringent policies (Asiedu,

2006). As a result, the overall aspect of institutional factors can be regarded as nonspecific, and the direction can vary depending on the degree and scale of influencing institutional factors. The level of importance of combined institution factors in various countries can vary depending on the type of foreign investment coming in.

Table 16: Summary of Results from Different Sample Groups

Sample Groups	**IV estimation with 2SLS**		
	Each institution + macro factors	**Dummy institution + macro factors**	**Each institution + macro factors**
Overall sample (all middle-income countries)	(-) CCR, (-) GOV, (-) ROL, (+) POL, (+) REG	Overall sample (all middle-income countries)	(-) CCR, (-) GOV, (-) ROL, (+) POL, (+) REG
Upper-middle-income countries	(+) CCR, (+) GOV, (+) POL, (+) REG, (+) ROL	Upper-middle-income countries	(+) CCR, (+) GOV, (+) POL, (+) REG, (+) ROL
Lower-middle-income countries	(-) CCR, (-) GOV, (-) ROL	Lower-middle-income countries	(-) CCR, (-) GOV, (-) ROL

Source: Author

High GDP, large market size, favorable trade openness, exchange rate, and stable inflation all play a moderate role in attracting FDI to Asian developing countries. GDP and trade openness are found to have a stronger positive relationship with FDI than other economic factors. A stable economic environment is crucial when considering FDI inflow because economic factors have a significant impact in a variety of ways.

When looking at the determinants of FDI inflows in Asian developing countries, both governance and economic factors are important. Depending on the influencing factors in the countries, the combined result of these factors may differ. Because the level of the institution and economic factors differ from country to country, the positive or negative relationships differ in each income group. To create a favorable economic environment, policymakers should consider the development of strong institutional and economic factors that attract FDI. A country cannot be a desirable destination for FDI inflows if it lacks economic stability or good institutions. As a result, when attracting FDI into a country or region, policymakers must consider both factors.

5.2 Policy Recommendation

To attract more FDI, policymakers in middle-income Asian developing countries should improve key institutional and economic factors. The following are the key implications and recommendations for policymakers in Asian developing countries.

The findings of this paper show that the institution factor has a negative relationship and that lower-quality overall institutions tend to attract more FDI. However, these countries cannot use this reason to increase FDI inflows in the long run because investors may be concerned about risk mitigation about the host country's condition. To be a politically and economically favorable host country, they must prioritize institutional quality. By improving the various institutional factors, Asian developing countries can be a good destination for foreign investments in the long run, with a good quality institution as an attractive element.

Asian developing countries need to reduce political risk by establishing political systems that can promote political stability. To create a more stable region, the countries should reduce political risk by developing political systems. Control of corruption can be enhanced by building an effective and transparent legal framework. Corruption can also be reduced by building an effective and transparent legal system and promoting the rule of law. With better control of corruption, it can reduce transition and operation costs for international investments and create a favorable business environment.

A good rule of law can be achieved with the establishment of a judicial system. The judicial system for institutions and businesses must be binding, strong, and uniformly enforced. The quality of voice and accountability can be improved by implementing a governance system per institutional regulations in supporting transparent information about the government's decision-making processes (Aziz, 2018). All institutions, governments, and individuals are responsible for having binding laws that are equally enforced and independently adjudicated. When regulations are strong and effective, they can serve as a reliable guideline for new international businesses. Moreover, the government should be effective and accountable so that foreign investors can be confident that the country's economic situation and businesses are well protected by rules and regulations.

5.3 Limitations

Although the fixed effect model can be used as a baseline model, IV estimation with the 2SLS method is more reliable for institutional quality measures with the presence of endogeneity problem (Ampil, 2015). The limitation of the study

is the lack of availability of micro-level data in different countries for different types of FDI. The paper analyzed the FDI inflow in aggregate terms. The effect of institutional factors can differ between different modes of FDI. With the use of industry-level data, it can give more insights into different kinds of investments. The study uses secondary data from the World Bank Database of World Governance Indicators and World Development Indicators. Since some countries and years have missing data, the observation of the sub-groups becomes lower and the research encounters significant data availability restrictions for the research scope. As the amount of overall FDI inflows is used for analysis, the determinants of different FDI sectors cannot be determined. The lack of sectorial and country-specific determinants of FDI is another drawback of this study.

5.4 Suggestion for Further Study

Further studies in this area can be improved by addressing the unresolved issues. Further research can be better while focusing on specific FDI types or recipient countries or regions with updated periods. The other studies can also examine the effect of institutional factors while emphasizing specific institution quality. Furthermore, they should also focus on the detailed aspect of different host and home countries with diverse groups of FDI inflows to be able to find the linkage and long-term effect between institution quality and inward FDI.

REFERENCES

Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Chapter 6 Institutions as a Fundamental Cause of Long-Run Growth. In P. Aghion & S. N. Durlauf (Eds.), *Handbook of Economic Growth* (Vol. 1, pp. 385-472). Elsevier. https://doi.org/https://doi.org/10.1016/S1574-0684(05)01006-3

Acemoglu, D., Simon, J., & James, R. (2005). Institutions as a fundamental cause of long-run growth. *Handbook of Economic Growth*, *1A*, 386-472.

Addison, T., & Heshmati, A. (2003). The New Global Determinants of FDI Flows to Developing Countries: The Importance of ICT and Democratization. *Monetary Integration, Markets and Regulation: Research in Banking and Finance*, *4*. https://doi.org/10.1016/S1567-7915(04)04007-8

Ahlquist, J. (2006). Economic Policy, Institutions, and Capital Flows: Portfolio and Direct Investment Flows in Developing Countries. *International Studies Quarterly*, *50*, 681-704. https://doi.org/10.1111/j.1468-2478.2006.00420.x

Ajide, F. M., & Dada, J. T. (2023). Poverty, entrepreneurship, and economic growth in Africa. *Poverty & Public Policy*, *15*(2), 199-226. https://doi.org/https://doi.org/10.1002/pop4.368

Ali, F., Fiess, N., & MacDonald, R. (2008). Do Institutions Matter for Foreign Direct Investment? *Open Economies Review*, *21*. https://doi.org/10.1007/s11079-010-9170-4

Ali, N., & Hussain, H. (2017). Impact of foreign direct investment on the economic growth of Pakistan. *American Journal of Economics*, *7*(4), 163-170.

Amal, M., Raboch, H., & Tomio, B. T. (2010). Determinants of foreign direct investment in Latin America. *GCG: Journal of Globalization, Competitiveness and Governability*, *4*(3), 107-119.

Ampil, L. (2015). Determinants of FDI in the ASEAN: A Quantile, LSDV, 2SLS Approach.

Antonietti, R., & Mondolo, J. (2023). Inward FDI and the quality of domestic institutions: A cross-country panel VAR analysis. *Economic Systems*, *47*, 101078. https://doi.org/10.1016/j.ecosys.2023.101078

Apostu, S., Tiron Tudor, A., Socol, A., Ivan, R., Mihaescu, C., & Emilia, G. (2022). Determinants of Foreign Direct Investment in the Least Developed Countries: Static and Dynamic Panel Data Evidence. *ECONOMIC COMPUTATION AND ECONOMIC CYBERNETICS STUDIES AND RESEARCH*, *56*, 21-36. https://doi.org/10.24818/18423264/56.3.22.02

Asamoah, M. E., Adjasi, C. K. D., & Alhassan, A. L. (2016). Macroeconomic uncertainty, foreign direct investment and institutional quality: Evidence from Sub-Saharan Africa. *Economic Systems*, *40*(4), 612-621. https://doi.org/10.1016/j.ecosys.2016.02.010

Asiedu, E. (2002). On the determinants of foreign direct investment to developing countries: Is Africa different? . *World Development*, *30*(1), 163-170.

Asiedu, E. (2006). Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability. *The World Economy*, *29*(1), 63-77. https://doi.org/https://doi.org/10.1111/j.1467-9701.2006.00758.x

Asiedu, E. (2013). Foreign direct investment, natural resources and institutions.

International Growth Centre, *3*, 1-38.

Asiedu, E., & Lien, D. (2011). Democracy, foreign direct investment and natural resources. *Journal of International Economics*, *84*(1), 99-111. https://doi.org/https://doi.org/10.1016/j.jinteco.2010.12.001

Asiedu, E., & Villamil, A. (2000). Discount Factors and Thresholds: Foreign Investment When Enforcement is Imperfect. *Macroeconomic Dynamics*, *4*, 1-21. https://doi.org/10.1017/S1365100500014012

Assunção, S., Forte, R., & Teixeira, A. A. C. (2011). Location Determinants of FDI : a Literature.

Athukorala, W. (2003). The Impact of Foreign Direct Investment for Economic Growth: A Case Study in Sri Lanka. *1*.

Aw, Y., & Tang, T. C. (2009). The Determinants of Inward Foreign Direct Investment: the Case of Malaysia. *Monash University, Department of Economics, Monash Economics Working Papers*, *11*.

Ayhan Kose, M., Prasad, E. S., & Taylor, A. D. (2011). Thresholds in the process of international financial integration. *Journal of International Money and Finance*, *30*(1), 147-179. https://doi.org/https://doi.org/10.1016/j.jimonfin.2010.08.005

Azam, M., Khan, H., Hunjra, D. A. I., Ahmad, H., & Chani, M. I. (2011). Institutional, macro economic policy factors and foreign direct investment: South Asian countries case. *African journal of business management*, *5*, 4306-4313.

Aziz, O. G. (2018). Institutional quality and FDI inflows in Arab economies. *Finance Research Letters*, *25*, 111-123. https://doi.org/10.1016/j.frl.2017.10.026

Aziz, O. G., & Mishra, A. V. (2016). Determinants of FDI inflows to Arab economies. *The Journal of International Trade & Economic Development*, *25*(3), 325-356.

Bailey, N. (2018). Exploring the relationship between institutional factors and FDI attractiveness: A meta-analytic review. *International Business Review*, *27*(1), 139-148.

Baltagi, B., Demetriades, P., & Law, S. (2008). Financial Development and Openness: Evidence from Panel Data. *Journal of Development Economics*, *89*, 285-296. https://doi.org/10.2139/ssrn.1808903

Baltagi, B., & Kao, C. (2000). Nonstationary Panels, Cointegration in Panels and Dynamic Panels: A Survey. *Advances in Econometrics*, *15*. https://doi.org/10.1016/S0731-9053(00)15002-9

Barrell, R., & Pain, N. (1996). An Econometric Analysis of U.S. Foreign Direct Investment. *The Review of Economics and Statistics*, *78*(2), 200-207. https://doi.org/10.2307/2109921

Becchetti, L., & Hasan, I. (2005). The Effects of (within and with EU) Regional Integration: Impact on Real Effective Exchange Rate Volatility, Institutional Quality and Growth for MENA Countries.

Bénassy-Quéré, A., Coupet, M., & Mayer, T. (2007a). Institutional Determinants of Foreign Direct Investment. *The World Economy*, *30*(5), 764-782. https://doi.org/https://doi.org/10.1111/j.1467-9701.2007.01022.x

Bénassy-Quéré, A., Coupet, M., & Mayer, T. (2007b). Institutional Determinants of Foreign Direct Investment. *Wiley-Blackwell: World Economy*.

Bevan, A., Estrin, S., & Meyer, K. (2004). Foreign investment location and institutional development in transition economies. *International Business Review*, *13*(1), 43-64. https://doi.org/https://doi.org/10.1016/j.ibusrev.2003.05.005

Bhavan, T., Changsheng, X., & Zhong, C. (2010). Determinants and Growth Effect of FDI in South Asian Economies: Evidence from a Panel Data Analysis. *International Business Research*, *4*. https://doi.org/10.5539/ibr.v4n1p43

Biswas, R. (2002). Determinants of Foreign Direct Investment. *Review of Development Economics*, *6*(3), 492-504. https://doi.org/https://doi.org/10.1111/1467-9361.00169

Brada, J., Drabek, Z., & Pérez, M. F. (2023). The Effect of Home Country and Host Country Corruption on Foreign Direct Investment. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4428053

Brouthers, K., & Brouthers, L. (2000). Acquisition or greenfield start-up? Institutional, cultural and transaction cost influences. *Strategic Management Journal*, *21*, 89-97. https://doi.org/10.1002/(SICI)1097-0266(200001)21:1<89::AID-SMJ85>3.3.CO;2-#

Bruno, M., & Easterly, W. R. (1996). Inflation and Growth: In Search of a Stable Relationship. *Canadian Parliamentary Review*, *78*, 139-146.

Buchanan, B. G., Le, Q. V., & Rishi, M. (2012). Foreign direct investment and institutional quality: Some empirical evidence. *International Review of Financial Analysis*, *21*, 81-89. https://doi.org/10.1016/j.irfa.2011.10.001

Burdekin, R., & Siklos, P. (2004). Fears of Deflation and the Role of Monetary Policy: Some Lessons and an Overview. *Deflation: Current and Historical Prespectives*, 1-27. https://doi.org/10.1017/CBO9780511607004.002

Burns, D. K., Jones, A. P., Goryakin, Y., & Suhrcke, M. (2017). Is foreign direct investment good for health in low and middle income countries? An instrumental variable approach. *Social Science & Medicine*, *181*, 74-82. https://doi.org/https://doi.org/10.1016/j.socscimed.2017.03.054

Busse, M., & Groizard, J. L. (2008). Foreign Direct Investment, Regulations and Growth. *The World Economy*, *31*(7), 861-886. https://doi.org/https://doi.org/10.1111/j.1467-9701.2008.01106.x

Busse, M., & Hefeker, C. (2005). Political Risk, Institutions and Foreign Direct Investment. *European Journal of Political Economy*, *23*, 397-415. https://doi.org/10.1016/j.ejpoleco.2006.02.003

Cuervo-Cazurra, A. (2006). Who Cares About Corruption? *Journal of International Business Studies*, *37*, 807-822. https://doi.org/10.1057/palgrave.jibs.8400223

Cuervo-Cazurra, A. (2008). The effectiveness of laws against bribery abroad. *Journal of International Business Studies*, *39*(4), 634-651. https://doi.org/10.1057/palgrave.jibs.8400372

Dada, J. T., & Abanikanda, E. O. (2022). The moderating effect of institutions in foreign direct investment led growth hypothesis in Nigeria. *Economic Change and Restructuring*, *55*(2), 903-929. https://doi.org/10.1007/s10644-021-09332-w

Dahan, N., Doh, J., & Guay, T. (2006). The Role of Multinational Corporations in Transnational Institution Building: A Policy Network Perspective. *Human Relations - HUM RELAT*, *59*, 1571-1600. https://doi.org/10.1177/0018726706072854

Dahlström, T., & Johnson, A. (2007). Bureaucratic Corruption, MNEs and FDI.

Dang, D. A. (2013). How foreign direct investment promote institutional quality: Evidence from Vietnam. *Journal of Comparative Economics*, *41*(4), 1054-1072. https://doi.org/https://doi.org/10.1016/j.jce.2013.05.010

Daniel, S., & Steven, G. (2002). Global Foreign Direct Investment Flows: The Role of Governance Infrastructure. *World Development*, *30*(11), 1899-1919. https://doi.org/https://doi.org/10.1016/S0305-750X(02)00110-9

Daniele, V., & Marani, U. (2006). Do Institutions Matter for FDI? A Comparative Analysis for the MENA Countries. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.917581

Daniele, V., & Marani, U. (2011). Organized crime, the quality of local institutuions and FDI in Italy: A panel data analysis. *European Journal of Political Economy*, *27*(1), 132-142.

Daude, C., & Stein, E. (2007). The quality of institutions and foreign direct investment. *Economics & Politics*, *19*(3), 317-344. https://doi.org/https://doi.org/10.1111/j.1468-0343.2007.00318.x

Din, M.-u. (1994). Export processing zones and backward linkages. *Journal of Development Economics*, *43*(2), 369-385. https://doi.org/https://doi.org/10.1016/0304-3878(94)90014-0

Dollery, B., & Wijeweera, A. (2009). Host country corruption level and Foreign Direct Investments inflows. *International Journal of Trade and Global Markets*, *2*, 168-178. https://doi.org/10.1504/IJTGM.2009.025387

Drabek, Z., & Payne, W. (2002). The impact of transparency on foreign direct investments. *Journal of Economic Integration*, *17*, 377-395.

Du, J., Lu, Y., & Tao, Z. (2008). Economic institutions and FDI location choice: Evidence from US multinationals in China. *Journal of Comparative Economics*, *36*(3), 412-429.

Dunning, J. H. (1992). Explaining international production. *Journal of International Development*, *4*(6), 655-655. https://doi.org/https://doi.org/10.1002/jid.3380040608

Dunning, J. H. (2000). The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International Business Review*, *9*(2), 163-190.

Dunning, J. H., & Lundan, S. M. (2008). Institutions and the OLI paradigm of the multinational enterprise. *Asia Pacific Journal of Management*, *25*(4), 573-593. https://doi.org/10.1007/s10490-007-9074-z

Dupasquier, C., & Osakwe, P. N. (2006). Foreign direct investment in Africa: Performance, challenges, and responsibilities. *Journal of Asian Economics*, *17*(2), 241-260. https://doi.org/https://doi.org/10.1016/j.asieco.2005.07.002

E, A., Azali, M., Hassan, A., & Mohamed Nor, N. (2016). What Factors Determines the FDI Net Flows in Africa? GMM and PMG Techniques. *Journal of Global Economics*, *04*. https://doi.org/10.4172/2375-4389.1000170

Edgardo Campos, J., Lien, D., & Pradhan, S. (1999). The Impact of Corruption on Investment: Predictability Matters. *World Development*, *27*(6), 1059-1067. https://doi.org/https://doi.org/10.1016/S0305-750X(99)00040-6

Elgin, C., & Öztunali, O. (2014). Institutions, Informal Economy, and Economic Development. *Emerging Markets Finance and Trade*, *50*, 145-162. https://doi.org/10.2753/REE1540-496X500409

Fazio, G., & Talamo, G. (2008). How "attractive" is good governance for FDI? *International Finance Review*, *9*, 33-54. https://doi.org/10.1016/S1569-3767(08)09002-X

Ferreira, M. A., & Matos, P. (2008). The colors of investors' money: The role of

institutional investors around the world. *Journal of Financial Economics*, *88*(3), 499-533. https://doi.org/https://doi.org/10.1016/j.jfineco.2007.07.003

Gani, A. (2007a). Governance and foreign direct investment links: evidence from panel data estimations. *Applied Economics Letters*, *14*(10), 753-756. https://doi.org/10.1080/13504850600592598

Gani, A. (2007b). Governance and foreign direct investment links: Evidence from panel data estimations. *Applied Economics Letters*, *14*, 753-756. https://doi.org/10.1080/13504850600592598

Gani, A., & Al-Abri, A. S. (2013). Indicators of business environment, institutional quality and foreign direct investment in Gulf Cooperation Council (GCC) countries. *International Review of Applied Economics*, *27*(4), 515-530. https://doi.org/10.1080/02692171.2012.760066

Gao, T. (2004). FDI, openness and income. *Journal of International Trade & Economic Development*, *13*, 305-323. https://doi.org/10.1080/0963819042000240048

Gastanaga, V. M., Nugent, J. B., & Pashamova, B. (1998). Host country reforms and FDI inflows: How much difference do they make? *World Development*, *26*(7), 1299-1314. https://doi.org/https://doi.org/10.1016/S0305-750X(98)00049-7

Gaurav, A. (2015). Foreign Direct Investment and Economic Growth in BRICS Economies: A Panel Data Analysis. *Journal of Economics, Business and Management*, *3*(4), 421-424.

Globerman, S., & Shapiro, D. (2002). Global Foreign Direct Investment Flows: The Role of Governance Infrastructure. *World Development*, *30*(11), 1899-1919. https://doi.org/https://doi.org/10.1016/S0305-750X(02)00110-9

Goodrick, E., & Salancik, G. R. (1996). Organizational discretion in responding to institutional practices: Hospitals and cesarean births. *Administrative Science Quarterly*, *41*, 1-28.

Goyal, A. K. (2022). Economic, political and institutional determinants of foreign direct investment inflow in emerging and developing Asia. *International Journal of Intelligent Enterprise*, *9*(1), 59-77.

Guler, I., Guillén, M., & Macpherson, M. (2002). Global Competition, Institutions, and the Diffusion of Organizational Practices: The International Spread of ISO 9000 Quality Certificates. *Administrative Science Quarterly - ADMIN SCI QUART*, *47*, 207-232. https://doi.org/10.2307/3094804

Habib, M., & Zurawicki, L. (2002). Corruption and Foreign Direct Investment. *Journal of International Business Studies*, *33*(2), 291-307. https://doi.org/10.1057/palgrave.jibs.8491017

Hailu, Z. (2010). Impact of Foreign Direct Investment on Trade of African Countries. *International Journal of Economics and Finance*, *2*. https://doi.org/10.5539/ijef.v2n3p122

Hattari, R., Rajan, R., & Thangavelu, S. (2008). Understanding Intra-ASEAN FDI flows: Trends and determinants and the role of China and India.

Hayakawa, K., Kimura, F., & Lee, H.-H. (2013). How does country risk matter for foreign direct investment? . *The Developing Economics*, *51*(1), 60-78.

Hayami, Y., & Godo, Y. (2005). *Development Economics: From the Poverty to the Wealth of Nations*. Oxford University Press. https://doi.org/10.1093/0199272700.001.0001

Hayat, A. (2019a). Foreign direct investments, institutional quality, and economic

growth. *Journal of International Trade and Economic Development*, *28*. https://doi.org/10.1080/09638199.2018.1564064

Hayat, A. (2019b). Foreign direct investments, institutional quality, and economic growth. *Journal of International Trade and Economic Development*, *28*(5), 561-579. https://doi.org/10.1080/09638199.2018.1564064

Helmy, H. E. (2013). The impact of corruption on FDI: is MENA an exception? *International Review of Applied Economics*, *27*(4), 491-514. https://doi.org/10.1080/02692171.2012.752445

Herrera, H., Haar, J., & Benavides, J. (2013). Do Institutional Quality, Economic Freedom and Entrepreneurship Impact Foreign Direct Investment in Emerging Markets?

Hoang, H. (2019). *FOREIGN DIRECT INVESTMENT IN SOUTHEAST ASIA: DETERMINANTS AND SPATIAL DISTRIBUTION*.

Hodgson, G. M. (2006). What Are Institutions? *Journal of Economic Issues*, *40*(1), 1-25. https://doi.org/10.1080/00213624.2006.11506879

Hodgson, G. M., & Stoelhorst, J. W. (2014). Introduction to the special issue on the future of institutional and evolutionary economics. *Journal of Institutional Economics*, *10*(4), 513-540. https://doi.org/10.1017/S1744137414000393

Hoff, K., & Stiglitz, J. (2005). The Creation of the Rule of Law and the Legitimacy of Property Rights: The Political and Economic Consequences of a Corrupt Privatization.

Huang, Y. (2002). *Selling China: Foreign Direct Investment During the Reform Era*. https://doi.org/10.1017/CBO9780511815164

Huang, Y., & Sternquist, B. (2007). Retailers' foreign market entry decisions: An institutional perspective. *International Business Review*, *16*(5), 613-629. https://doi.org/https://doi.org/10.1016/j.ibusrev.2007.06.005

IADB, I.-A. D. B. (2001). *Competitiveness: The Business of Growth: Economic and Social Progress in Latin America*.

Javorcik, B. S., & Wei, S.-J. (2009). Corruption and cross-border investment in emerging markets: Firm-level evidence. *Journal of International Money and Finance*, *28*(4), 605-624. https://doi.org/https://doi.org/10.1016/j.jimonfin.2009.01.003

Jensen, N. (2008). Political Risk, Democratic Institutions, and Foreign Direct Investment. *The Journal of Politics*, *70*, 1040-1052. https://doi.org/10.1017/S0022381608081048

Jensen, N. M. (2003). Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment. *International Organization*, *57*, 587-616+i+v.

Jude, C., & Levieuge, G. (2014). Growth E ffect of FDI in Developing Economies: The Role of Institutional Quality. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2409656

Kaufmann, D., & Kraay, A. (2007). Governance Indicators: Where are We, Where Should We Be Going? *The World Bank Research Observer*, *23*. https://doi.org/10.1093/wbro/lkm012

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The Worldwide Governance Indicators: Methodology and Analytical Issues. *Hague Journal on the Rule of Law*, *3*(2), 220-246. https://doi.org/10.1017/S1876404511200046

Kawai, N. (2009). Location Strategies of Foreign Investors in China: Evidence from Japanese Manufacturing Multinationals. *Global Economic Review*, *38*, 117-141. https://doi.org/10.1080/12265080902891420

Kesternich, I., & Schnitzer, M. (2010). Who is afraid of political risk? Multinational firms and their choice of capital structure. *Journal of International Economics*, *82*(2), 208-218.

Khondoker, A., Mottaleb, K., & Kalirajan, K. (2010). Determinants of Foreign Direct Investment in Developing Countries: A Comparative Analysis. *Margin The Journal of Applied Economic Research*, *4*. https://doi.org/10.1177/097380101000400401

King, R. G., & Levine, R. (1993). Finance and Growth: Schumpeter Might Be Right*. *The Quarterly Journal of Economics*, *108*(3), 717-737. https://doi.org/10.2307/2118406

Knack, S., & Keefer, P. (2006). Institutions And Economic Performance: Cross-Country Tests Using Alternative Institutional Measures. *Economics & Politics*, *7*, 207-227. https://doi.org/10.1111/j.1468-0343.1995.tb00111.x

Kostova, T., & Zaheer, S. (1999). Organizational Legitimacy Under Conditions of Complexity: The Case of the Multinational Enterprise. *Academy of Management Review*, *24*, 64-81. https://doi.org/10.2307/259037

Kraay, A., Zoido-Lobaton, P., & Kaufmann, D. (1999). *Aggregating Governance Indicators*. https://doi.org/10.1596/1813-9450-2195

Krifa-Schneider, H., & Matei, I. (2010). Business Climate, Political Risk and FDI in Developing Countries: Evidence from Panel Data. *International Journal of Economics and Finance*, *2*. https://doi.org/10.5539/ijef.v2n5p54

Kumar, N. (2002). *Globalization and the Quality of Foreign Direct Investment*.

la porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and Finance. *Journal of Political Economy*, *106*, 1113-1155.

Leitão, N. C., & Faustino, H. C. (2010). Determinants of Foreign Direct Investment in Portugal. *THE JOURNAL OF APPLIED BUSINESS AND ECONOMICS*, *11*, 19-26.

Li, D., Moshirian, F., Pham, P. K., & Zein, J. (2006). When Financial Institutions Are Large Shareholders: The Role of Macro Corporate Governance Environments. *The Journal of Finance*, *61*(6), 2975-3007. https://doi.org/https://doi.org/10.1111/j.1540-6261.2006.01009.x

Li, Q., & Resnick, A. (2003). Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries. *International Organization*, *57*(1), 175-211. https://doi.org/10.1017/S0020818303571077

Li, W., & Abiad, V. (2009). Institutions, Institutional Change, and Economic Performance. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1416542

Loree, D. W., & Guisinger, S. E. (1995). Policy and Non-Policy Determinants of U.S. Equity Foreign Direct Investment. *Journal of International Business Studies*, *26*(2), 281-299. https://doi.org/10.1057/palgrave.jibs.8490174

Lu, J. (2002). Intra- and Inter-organizational Imitative Behavior: Institutional Influences on Japanese Firms' Entry Mode Choice. *Journal of International Business Studies*, *33*, 19-37. https://doi.org/10.1057/palgrave.jibs.8491003

Mahembe, E., & Odhiambo, N. (2014). Foreign direct investment and economic growth: A theoretical framework. *Journal of Governance and Regulation*, *3*(2), 63-68.

Mamadou, C. (2002). Les investissements directs étrangers et l'intégration régionale : les exemples de l'ASEAN et du MERCOSUR. *Revue Tiers Monde*, *43*, 47-69. https://doi.org/10.3406/tiers.2002.1567

Masron, T. A., & Nor, E. (2013). FDI in ASEAN8: Does institutional quality matter? *Applied Economics Letters - APPL ECON LETTERS*, *20*, 186-189. https://doi.org/10.1080/13504851.2012.687090

Mauro, P. (1998). Corruption and the composition of government expenditure. *Journal of Public Economics*, *69*(2), 263-279. https://doi.org/https://doi.org/10.1016/S0047-2727(98)00025-5

McKibbin, W., & Martin, W. (1999). The East Asian crisis : investigating causes and policy responses.

Meier, L. (2006). Factors driving U.S foreign direct investment. *USA: Washington University in ST. Louis, Center for Research in Economics & Strategy*, *4*(2).

Mengistu, A. A., & Adhikary, B. K. (2011). Does good governance matter for FDI inflows? Evidence from Asian economies. *Asia Pacific Business Review*, *17*(3), 281-299. https://doi.org/10.1080/13602381003755765

Méon, P.-G., & Sekkat, K. (2007). Revisiting the Relationship between Govenance and Foreign Direct Investment. *Brussels Economic Review – Cahiers Economiques De Bruxelles*, *50*(1).

Mina, W. M. (2012). The Institutional Reforms Debate and FDI Flows to the MENA Region: The "Best" Ensemble. *World Development*, *40*(9), 1798-1809. https://doi.org/https://doi.org/10.1016/j.worlddev.2012.04.026

Mishra, V., & Smyth, R. (2015). Estimating returns to schooling in urban China using conventional and heteroskedasticity-based instruments. *Economic Modelling*, *47*, 166-173. https://doi.org/https://doi.org/10.1016/j.econmod.2015.02.002

Mohamed, S., & Sidiropoulos, M. (2010). Another Look at the Determinants of Foreign Direct Investment in MENA Countries: An Empirical Investigation. *Journal of Economic Development*, *35*, 75-95. https://doi.org/10.35866/caujed.2010.35.2.005

Mondolo, J. (2019). How do informal institutions influence inward FDI? A systematic review. *Economia Politica*, *36*(1), 167-204. https://doi.org/10.1007/s40888-018-0119-1

Moosa, I. (2002). Foreign Direct Investment Theory, Evidence and Practice. https://doi.org/10.1057/9781403907493

Nelson, R. R. (2008). What enables rapid economic progress: What are the needed institutions? *Research Policy*, *37*(1), 1-11. https://doi.org/https://doi.org/10.1016/j.respol.2007.10.008

Noorbakhsh, F., Paloni, A., & Youssef, A. (2001). Human Capital and FDI Inflows to Developing Countries: New Empirical Evidence. *World Development*, *29*, 1593-1610. https://doi.org/10.1016/S0305-750X(01)00054-7

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press. https://doi.org/DOI: 10.1017/CBO9780511808678

Nunnenkamp, P., & Spatz, J. (2002). Determinants of FDI in Developing Countries: Has Globalization Changed the Rules of the Game? *Transnational Corporations*, *11*.

OECD. (2002). *New horizons for foreign direct investment, global forum on international investment*.

Ourvashi, B. (2012). Can better institutions attract more Foreign Direct Investment

(FDI)? Evidence from developing countries. *International Research Journal of Finance and Economics*, *82*, 142-158.

Pattayat, S. (2016). Examining the determinants of FDI inflows in India. *Theoretical and Applied Economics*, *XXIII*, 225-238.

Pravin, J. (2012). Determinants of foreign direct investment in BRICS economies: Analysis of economic, institutional and political factor. *Procedia - Social and Behavioral Sciences*, *37*, 5-14. https://doi.org/10.1016/j.sbspro.2012.03.270

Richards, D., & Nwankwo, S. (2005). Reforming the legal environment of business in Sub-Saharan Africa: Moderating effects on foreign direct investment. *Managerial Law*, *47*, 154-163. https://doi.org/10.1108/03090550510771179

Rodrik, D., & Subramanian, A. (2003). The Primacy of Institutions (and What this Does and Does Not Mean). *Finance and Development*, *40*, 31-34.

Rodrik, D., Subramanian, A., & Trebbi, F. (2004). Institutions rule: The primacy of institutions over geography and integration in economic development. *Journal of Economic Growth*, *9*, 131-165.

Rojid, S., Sannassee, R., Seetanah, B., & Taruna, R. S. (2009). Determinants of FDI: lessons from African economies. *Journal of Applied Business and Economics*

1.

Root, F. R., & Ahmed, A. A. (1979). Empirical Determinants of Manufacturing Direct Foreign Investment in Developing Countries. *Economic Development and Cultural Change*, *27*(4), 751-767. http://www.jstor.org/stable/1153569

Saadatmand, Y., & Choquette, J. (2012). Neo-Liberal Policy and Foreign Direct Investment in Africa. *International Journal of Business and Social Science*, *3*(17), 1-8.

Sabir, S., & Khan, A. (2018). Impact of Political Stability and Human Capital on Foreign Direct Investment in East Asia & Pacific and South Asian Countries. *Asian Journal of Economic Modelling*, *6*(3), 245-256. https://doi.org/10.18488/journal.8.2018.63.245.256

Sabir, S., Rafique, A., & Abbas, K. (2019). Institutions and FDI: evidence from developed and developing countries. *Financial Innovation*, *5*(1), 8. https://doi.org/10.1186/s40854-019-0123-7

Sahoo, P., Nataraj, G., & Dash, R. (2014). *Foreign Direct Investment in South Asia: Policy, Impact, Determinants and Challenges*. https://doi.org/10.1007/978-81-322-1536-3

Sahraoui, M., Belmokaddem, M., Guellil, M., & Ghouali, Y. Z. (2015). Causal Interactions between FDI, and Economic Growth: Evidence from Dynamic Panel Co-Integration. *Procedia Economics and Finance*, *23*, 276 – 290. https://doi.org/10.1016/S2212-5671(15)00541-9

Sanchez-Robles, B., & Bengoa-Calvo, M. (2003). Foreign direct investment, economic freedom and growth: New evidence from Latin America. *European Journal of Political Economy*, *19*(3), 529-545.

Sankaranarayanan, D., & Bandekar, B. (2017). TRENDS AND DETERMINANTS OF FDI IN BRICS COUNTRIES: A PANEL DATA ANALYSIS. *7*, 53-65.

Saqib, N., Masnoon, M., & Rafique, N. (2013). Impact of foreign direct investment on economic growth of Pakistan. . *Advances in Management & Applied Economics*, *3*(1), 35-45.

Schneider, F., & Frey, B. S. (1985). Economic and political determinants of foreign

direct investment. *World Development*, *13*(2), 161-175. https://doi.org/https://doi.org/10.1016/0305-750X(85)90002-6

Sedik, W. M., & Seoudy, H. (2012). The impact of country risk and new institutional economics on foreign direct investment: A panel data analysis for Middle East and North Africa region. *University of Southern California: The 16th Meeting of the International Society for New Institutional Economics.*

Seim, L. (2009). FDI and Openness: Differences in Response across Countries.

Shah, M. (2017). Political Institutions and the Incidence of FDI in South Asia. *Business & Economic Review*, *9*, 21-42. https://doi.org/10.22547/BER/9.1.2

Shah, M. H., & Faiz, M. F. (2015). Terrorism and Foreign Direct Investment: An Empirical Analysis of SAARC Countries.

Shah, S. H., Ahmad, M. H., & Ahmed, Q. M. (2016). The nexus between sectoral FDI and institutional quality: Empirical evidence from Pakistan. *Applied Economics*, *48*(17), 1591-1601.

Sheytanova, T. (2015). The Accuracy of the Hausman Test in Panel Data: a Monte Carlo Study.

Staats, J., & Biglaiser, G. (2012). Foreign Direct Investment in Latin America: The Importance of Judicial Strength and Rule of Law. *International Studies Quarterly*, *56*, 193-202. https://doi.org/10.2307/41409831

Subasat, T., & Bellos, S. (2011). Economic Freedom and Foreign Direct Investment in Latin America: A Panel Gravity Model Approach. *Economics Bulletin*, *31*, 2053-2065.

Tadesse, S., & Kwok, C. (2006). The MNC as an Agent of Change for Host-Country Institutions: FDI and Corruption. *Journal of International Business Studies*, *37*, 767-785. https://doi.org/10.1057/palgrave.jibs.8400228

Tajul, A., & Hussin, A. (2010). Institutional Quality as a Determinant for FDI Inflows: Evidence from ASEAN. *World Journal of Management*, *2*.

Taylor, C. (2000). The Impact of Host Country Government Policy on US Multinational Investment Decisions. *The World Economy*, *23*, 635-647. https://doi.org/10.1111/1467-9701.00294

Tokunaga, M., & Iwasaki, I. (2017). The Determinants of Foreign Direct Investment in Transition Economies: A Meta-analysis. *The World Economy*, *40*(12), 2771-2831. https://doi.org/https://doi.org/10.1111/twec.12477

Tomassen, S., & Benito, G. R. G. (2009). The costs of governance in international companies. *International Business Review*, *18*(3), 292-304. https://doi.org/https://doi.org/10.1016/j.ibusrev.2009.02.005

Tun, Y.-L., Azman-Saini, W. N. W., & Law, S.-H. (2012). International Evidence on the link between Foreign Direct Investment and Institutional Quality. *Engineering Economics*, *23*(4). https://doi.org/10.5755/j01.ee.23.4.2569

Ullah, I., & Khan, M. A. (2017). Institutional quality and foreign direct investment inflows: evidence from Asian countries. *Journal of Economic Studies*, *44*(6), 1030-1050. https://doi.org/10.1108/JES-10-2016-0215

UNCTAD. (2022). *World Investment Report 2022: International tax reforms and sustainable investment*. U. Nations.

Verbeke, A. (2008). Multinational Enterprises and the Global Economy. *Journal of International Business Studies*, *39*(7), 1236-1238. https://doi.org/10.1057/palgrave.jibs.8400426

Verbeke, A., Dunning, J., & Lundan, S. (2008). Multinational Enterprises and the Global Economy. *Journal of International Business Studies*, *39*(7), 1236-1238. http://www.jstor.org/stable/25483338

Voyer, P., & Beamish, P. (2004). The Effect of Corruption on Japanese Foreign Direct Investment. *Journal of Business Ethics*, *50*, 211-224. https://doi.org/10.1023/B:BUSI.0000024737.57926.bf

Wei, S.-J. (2000a). How taxing is corruption on international investors? *Review of Economics and Statistics*, *82*(1), 1-11.

Wei, S.-j. (2000b). Local Corruption and Global Capital Flows. *Brookings Papers on Economic Activity*, *2000*, 303 - 346.

Wernick, D., Haar, J., & Singh, S. (2009). Do governing institutions affect foreign direct investment inflows? New evidence from emerging economies. *International Journal of Economics and Business Research*, *1*, 317-332. https://doi.org/10.1504/IJEBR.2009.024307

Wheeler, D., & Mody, A. (1992). International investment location decisions: The case of U.S. firms. *Journal of International Economics*, *33*(1), 57-76. https://doi.org/https://doi.org/10.1016/0022-1996(92)90050-T

Yaffee, R. (2003). A Primer for Panel Data Analysis A Primer for Panel Data Analysis. *Connect*.

Zhang, K. H. (2001). How does foreign direct investment affect economic growth in China? *Economics of Transition*, *9*(3), 679-693. https://doi.org/https://doi.org/10.1111/1468-0351.00095

Zulfikar, R. (2018). *Estimation Model And Selection Method Of Panel Data Regression : An Overview Of Common Effect, Fixed Effect, And Random Effect Model*. https://doi.org/10.31227/osf.io/9qe2b

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