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THE EFFECT OF GREENFIELD FOREIGN DIRECT INVESTMENT, MERGER AND ACQUISITIONS AND INSTITUTIONS ON ECONOMIC GROWTH FOR TEN SELECTED ASIAN COUNTRIES

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DOCTOR OF PHILOSOPHY
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THE EFFECT OF GREENFIELD FOREIGN DIRECT INVESTMENT, MERGER AND ACQUISITIONS AND INSTITUTIONS ON ECONOMIC GROWTH FOR TEN SELECTED ASIAN COUNTRIES

By

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Othman Yeop Abdullah Graduate School of Business,
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Kolej Perniagaan
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ABSTRACT

This thesis aims to examine the effect of Greenfield foreign direct investment (GFDI), merger and acquisitions (MNA) with the interaction effect of institutional factors on economic growth in ten selected Asian countries. The inconsistent results of previous studies are appealing researchers to advance further empirical testing with disaggregated FDI in the form of GFDI and MNA. The gap in the literature, as decreasing trend of GDP growth and increasing tendency of FDI in Asia need to be addressed. Therefore, the study examines the interaction effect of institutional factors separately on the relationship between GFDI, MNA and economic growth, in selected Asian countries. In this thesis, we use a two-stage least squares methodology to control endogeneity, while the results of the Hausman test recommends that the fixed effect model is more appropriate for the analysis of ten selected Asian countries covering the period 2002-2016.The findings of the study show that MNA has positive impact on economic growth. while greenfield FDI is not significant in ten selected Asian countries. The results of the interaction effect of institutional factors show that performance of MNA increases with interaction effect of institutional factors. The institutional factors like political stability, rule of law and control of corruption show positive interaction effect with MNA. Similarly, government effectiveness and COC depict the positive interaction effect with GFDI although, voice and accountability and regulatory quality have negative interaction effect on economic growth in selected Asian countries. The results suggest that MNA needs to be encouraged to enhance its potential impact to contribute positively to economic growth. The study further suggests that countries should improve their regulation which are in the favour of investors to get positive results from both types of investments (GFDI, MNA).

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Keywords: greenfield FDI, merger and acquisition, gross domestic product, institutional factors, Asia

ABSTRAK

Tesis ini bertujuan untuk mengkaji kesan pelaburan langsung asing *Greenfield* (GFDI), penggabungan dan pengambilalihan (MNA) dengan kesan interaksi faktor institusi terhadap pertumbuhan ekonomi di sepuluh buah negara Asia yang terpilih. Dapatan yang tidak konsisten dalam kajian terdahulu mendorong penyelidik untuk menjalankan ujian empirik dengan lebih lanjut terhadap FDI yang disebarkan kepada bentuk GFDI dan MNA. Jurang dalam literatur yang menunjukkan tren menurun bagi pertumbuhan KDNK dan peningkatan kecenderungan FDI di Asia perlu ditangani. Oleh itu, kajian ini menyelidik kesan interaksi faktor-faktor institusi secara berasingan terhadap hubungan antara GFDI, MNA dan pertumbuhan ekonomi di negara-negara Asia yang terpilih. Tesis ini menggunakan metodologi kuadrat terkecil dua peringkat untuk mengawal endogeniti, sementara keputusan ujian Hausman mencadangkan bahawa model kesan tetap lebih sesuai untuk menganalisis sepuluh negara Asia terpilih ini yang meliputi tempoh 2002-2016. Penemuan kajian menunjukkan bahawa MNA mempunyai kesan positif terhadap pertumbuhan ekonomi, manakala FDI *Greenfield* tidak signifikan dalam kesemua sepuluh negara Asia yang terpilih. Hasil kesan interaksi faktor institusi menunjukkan bahawa prestasi MNA meningkat dengan adanya kesan interaksi faktor institusi. Faktor institusi seperti kestabilan politik, peraturan undang-undang dan kawalan rasuah menunjukkan kesan interaksi positif dengan MNA. Begitu juga keberkesanan kerajaan dan COC yang menggambarkan kesan interaksi positif dengan GFDI, walaupun suara dan akauntabiliti dan kualiti pengawalseliaan mempunyai kesan interaksi negatif terhadap pertumbuhan ekonomi di negara-negara Asia terpilih ini. Hasilnya menunjukkan bahawa MNA perlu digalakkan untuk meningkatkan potensi impaknya untuk menyumbang secara positif kepada pertumbuhan ekonomi. Kajian ini selanjutnya menunjukkan bahawa negara-negara tersebut harus memperbaiki peraturan yang memihak kepada para pelabur untuk mendapatkan hasil positif daripada kedua-dua jenis pelaburan (GFDI,MNA)

Kata kunci: greenfield fdi, penggabungan dan pengambilalihan, keluaran dalam negara kasar, faktor institusi, asia

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List of Abbreviation

GDP	Gross domestic product
GFDI	Greenfield foreign direct investment
MNA	Merger and Acquisition
DI	Domestic Investment
TO	Trade openness
SECENR	Secondary school enrollment
INF	Inflation
POPG	Population growth
IF	Institutional factors
VA	Voice and accountability
PS	Political stability
GE	Government effectiveness
RQ	Regulatory quality
ROL	Rule of law
COC	Control of corruption

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Economic growth is generally considered as a measuring tool for social welfare. The phenomenon is implicit but exist, by which social welfare increases directly with a positive change in economic growth. However, through appropriate policies and established institutions, numerous benefits can get from economic growth to achieve economic welfare. Furthermore, the level of full employment, stable prices, the main objectives of macroeconomic stability, and high economic growth can determine the wellbeing at the individual level and social welfare (Clarke, 2004; Hediger, 2000). The stable macroeconomic condition, a minimal budget deficit, life expectancy, lower inflation, and rule of law are the factors affecting economic growth (Barro, 1996; Fischer, 1993).

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Foreign direct investment has grown at a remarkable proportion since the early 1980s, and the world market for it has become more competitive. Developing countries are becoming increasingly attractive investment destinations, in part because they can offer investors a range of "created" assets. Mainly FDI has three types.

(I) Greenfield FDI (GFDI)

(II) Cross border merger and acquisition (MNA)

(III) Joint venture

Greenfield FDI is involved in constructing new production and facilities in the host country. While MNA show a combination of two firms and involved in trading different assets owned by multinational corporations. Furthermore, A partnership arrangement

with profit sharing between partners created for a specific purpose, no separate legal entity created and each of the partners with full legal responsibility for the project is the main structure of joint venture. Generally, there is no limitation on liabilities unless this is a formalized into a limited partnership (World Bank 2016). Besides, data of greenfield and MNA have maintained due to its importance and increasing trend in developing Asia by United Nations Conference on Trade and Development (UNCTAD) but not in the case of joint venture.

According to the World Bank "Foreign direct investment refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10 percent or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship" (World Bank 2015).

Furthermore, Foreign Direct Investment (FDI) is one of the most important determinant of economic growth (Borensztein, De Gregorio, & Lee, 1998). The positive role of FDI is clearly related to host country's circumstances. To gain positive effects from FDI the prerequisite is a good financial system in the host country because a developed system plays a significant role in technologies transfer from investors to the host countries. Which become the milestone for economic growth in the receiving economy (Hermes & Lensink, 2003). Besides relationship between financial development and economic growth, both have a substantial position in the context of development. More importantly, financial development promotes growth especially in Asian developing

countries (Christopoulos & Tsionas, 2004; Habibullah & Eng, 2006; Hassan, Sanchez, & Yu, 2011).

Furthermore, the relationship between economic growth and Foreign Direct Investment (FDI) has extensive importance in the economic history. There are sound conceptual reasons for believing that FDI can ignite economic growth while the empirical evidence is divided, most of the studies show a strong complementary connection between FDI and economic growth in both developed and developing countries. The variables of the study have considerable importance on the ground of economic growth of every country as are the main determinants of growth. Although, FDI contributes to economic growth only when a host country has sufficient absorptive capacity of the advanced technologies (Borensztein et al., 1998). But FDI is a remarkably important variable for growth in transition economies, as its effect on economic growth is positive and statistically significant in transition economies (Campos & Kinoshita, 2002). In the same way, FDI is positively correlated with economic growth and accelerate country's growth with the condition of adequate human capital, trade liberalization and economic stability (Bengoa & Sanchez-Robles, 2003).

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There is a positive relation between inward FDI and economic growth in case of developed countries while developing countries show a mixed picture. FDI is considered as a source to transfer technology and train labor thus, the result of the human skills and technology in the host country should be economic growth. Interactions between FDI and human capital strive influence to attain economic growth (V. N. Balasubramanyam, Salisu, & Sapsford, 1999). Furthermore, foreign direct investment (FDI) and trade are catalysts for economic growth in the developing

countries. While the effect of total FDI on growth is ambiguous and investments in the primary sector tend to have a negative effect on growth while investment in manufacturing a positive one (Alfaro, 2003). The study of Akinlo on FDI seems to support the argument that extractive FDI might not be growth enhancing (Akinlo, 2004).

The inflow of FDI augmented in 1990s toward developing countries and became the main source of foreign investment. In economic literature, most of the studies are about total FDI, but to know the real picture of FDI and its impact on economic growth, it is necessary to see the types of FDI and its impact on growth. Furthermore, FDI can be divided into two major types, Greenfield FDI (investment in mainly new assets) and mergers and acquisitions MNA (the purchase of existing assets).

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1.1.1 Overview of Greenfield FDI, merger and Acquisition in Asian countries

Developing Asia is the largest recipient region of FDI inflows in the world, but a major part of FDI inflows is towards high-income and or large economies in the region. The detail study of data on announced greenfield investment projects and cross-border MNA sales support the anticipation that a decline is expected. In detail, the data at firm level entails that the investment in the form of greenfield FDI has been in a dominant position especially by the multinational companies investing in Asia. While, investment in the form of MNA is increasing quickly in recent years. In 2015, China, and India were the largest recipient countries (Asian economic integration report 2016).

1.1.2 Overview of Greenfield FDI in ten selected Asian countries

China is at the top of list for new FDI (Greenfield), mainly there are two approaches to foreign investment in China. The first one is greenfield investment, and second mergers and acquisitions (MNA). Greenfield FDI involves new fixed-asset investment while MNA can promote industrial restructuring with efficient use of existing resources.

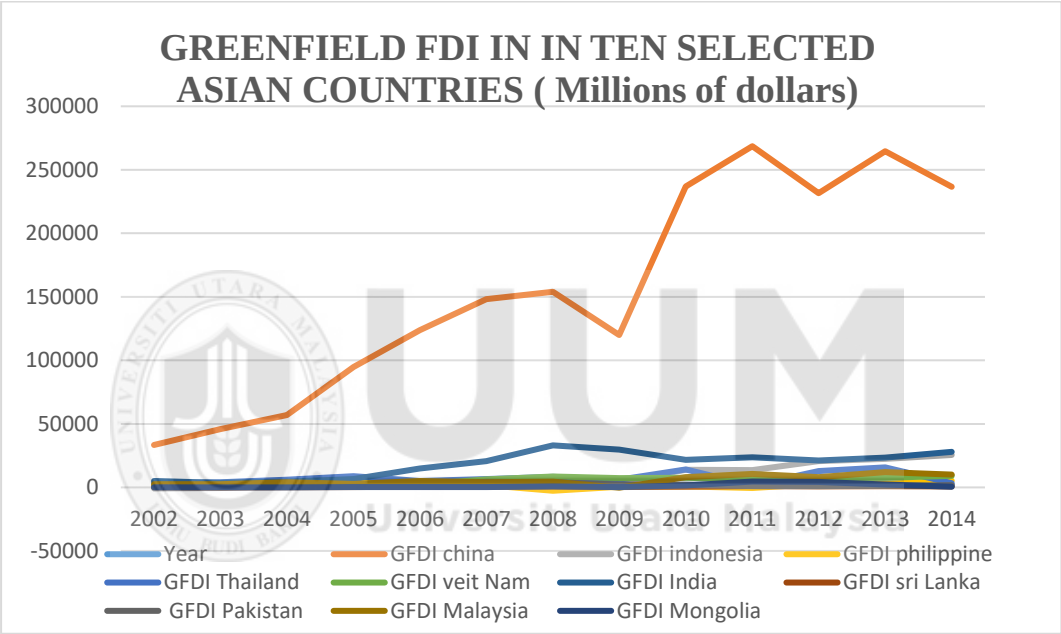

Figure 1.1
Greenfield FDI in selected Asian countries
Source: data.worldbank.org.

The Figure 1.1 depicts that India and Indonesia are at the 2nd and 3rd number in receiving the greenfield FDI respectively. Both these countries are showing the increasing trend in Greenfield FDI. As the matter of MNA is concerned, China is also on the top position in receiving this type of investment and India is on 2nd position.

1.1.3 Overview of Merger and acquisition in ten selected Asian countries

The Figure 1.2 shows that Chinese government encourages foreign investors to enter the Chinese market by the mode of MNA. The value of cross border MNA has been increasing continuously since 2010 except in 2012. Furthermore, the India is the second largest country to receive investment in the form of merger and acquisition. While, Indonesia, Philippines and Malaysia are also showing increasing trend but the trend looks slightly smooth after 2012.

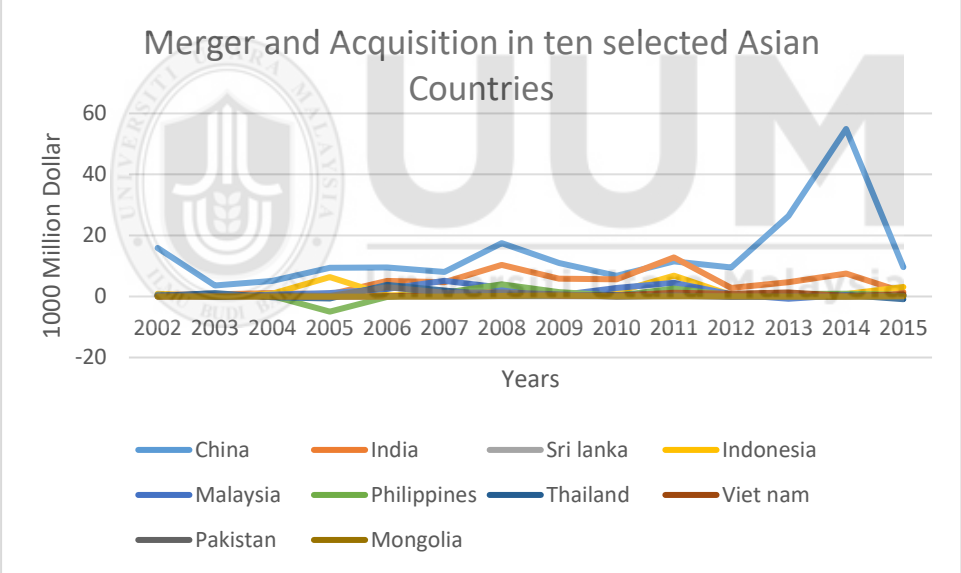

Figure 1. 2
Merger and Acquisition in selected Asian countries
Source: World investment report (2015: 4).

United Nations Conference on Trade and Development (UNCTAD) reported that in 2013 there was a sharp decrease in general FDI inflow, but in the same year Greenfield FDI projects in Mongolia had increased dramatically. This situation depicts that inward Greenfield FDI project has increased, which is a sign of interest to foreign investors

implying that Mongolia is attracting foreign investment. Greenfield FDI in 2014 suddenly decreased and remained only USD 165 million. In the next year (2015) greenfield investment sharply increased and reached USD 5318 million.

In 2014, Indonesia attracted USD 17183 million in the form of greenfield FDI, which was 7 % of total investment into the Asia-Pacific region. Indonesia is also competing with Malaysia, Thailand and a fast-emerging Vietnam. By number of announced greenfield FDI projects, Indonesia showed a figure of 167 in 2014 and 173 in 2015. Greenfield investments is the major source for Indonesia to regain its growth level and attention should also be given to FDI inflows in the form of MNA. Value of cross border MNA has also sharply increased in 2015 from USD 801 to USD 3082 million.

Value of greenfield FDI in Malaysia showed a mixed picture of up and down values from the last five years. In 2014 the value become double as compared to 2013 accounted for USD 9983 to USD 19230 million. Furthermore, in 2015 it remained low as USD 13609 million. The value of investment in the mode of MNA increasing from 2014 to 2015 valued as USD 273 to USD 501 million.

According to FDI market (an FT data service) the number of greenfield FDI projects in Philippine has increased dramatically since 2011 and reached USD 8739 million in 2015 from USD 4159 million in 2011. Similarly, number of companies investing also rose by 89 per cent comparing 2014 with 2011. Number of cross border MNA almost remains the same 26, 26 and 25 in 2013, 2014 and 2015 respectively. While value of MNA decrease from USD 955 million to USD 449 million in 2015.

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In Thailand, value of greenfield FDI become double in 2015 as compares to 2011 accounted for USD 8146 to USD 4041 million respectively. Furthermore, number of announced greenfield FDI projects has also increased from 140 to 183 between 2011 to 2015. While the number of cross border MNA continuously decreasing from 2012 to 2015 detailed as 67 in 2012, 58 in 2013, 48 and 34 are in 2014 and 2015 respectively. However, labor intensive manufacturing companies and natural resource sectors are interested to continue their investment in Thailand.

Vietnam remained on top position in an emerging market for greenfield FDI. Number of announced greenfield project increased continuously from 2012 except in 2015, in which the value slightly decreased and accounted for 233 as compared to 254 in 2014. Value of cross border MNA suddenly decreased in 2014 accounted for USD 156 million while recovered in 2015 and reached USD 701 million. As far as the number of MNA are concerned the value continuously deceasing since 2012 and recovered in 2015 calculated as 60.

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Greenfield FDI into India has been increasing since 2013 and the biggest change in greenfield FDI is seen in 2015. This growth in greenfield FDI by 8.6% in 2015 is a positive indication for economic development of India. The value of greenfield FDI accounted for USD 63440 million in 2015 increased from USD 24405 million in 2012. It is first time in the history that India showing the leading country in the world for greenfield FDI. Therefore, rapid growth of greenfield FDI in India is a major step to enlist it in the high-growth economies.

Furthermore, number of cross border MNA increasing from 206 to 246 between 2012 to 2015. While value of cross border MNA decreased to USD 1407 million in 2015 from USD 7545million in 2014.

In Pakistan, the value of greenfield FDI has been increasing since 2010 with a substantial change in 2015 accounted for USD 18898 million from USD 1249 million in 2010. Number of greenfield FDI projects also increasing since 2012 and reached 40 in 2015 from 18 in 2012. The number of cross border MNA remained below 10 since 2010 except in 2015 showing the value 11. Pakistan has also entered in the list of top 10 countries for capital investment in renewable energy for 2015.

Greenfield FDI in Sri Lanka has been showing fluctuation since last five years and accounted for USD 1167 million in 2015 as was only USD 973 million in 2010. While the number of cross border MNA decreased in 2015 from 15 to 7. Sri Lanka received 308 greenfield FDI projects between 2003 and 2015, spread across 34 different sectors.

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1.1.4 Average of GDP growth rate (%) middle income countries

The study focuses on middle income countries because the literature and statistics show that the Asia is facing three main types of issues, the decreasing trend of GDP growth from 2007, Dutch disease and the middle-income trap. The Figure 1.3 depicts the trend of GDP growth in middle income countries. It can be clearly seen from the graph that that GDP growth is decreasing science 2009 to 2015. The possible reason of this issue may be low productivity or bad governance. There is need to research to dig out the factors which are involved in this phenomenon. The study tried to fill this gap through

examine the effect of main determinant of economic growth with interaction effect of institutional factors.

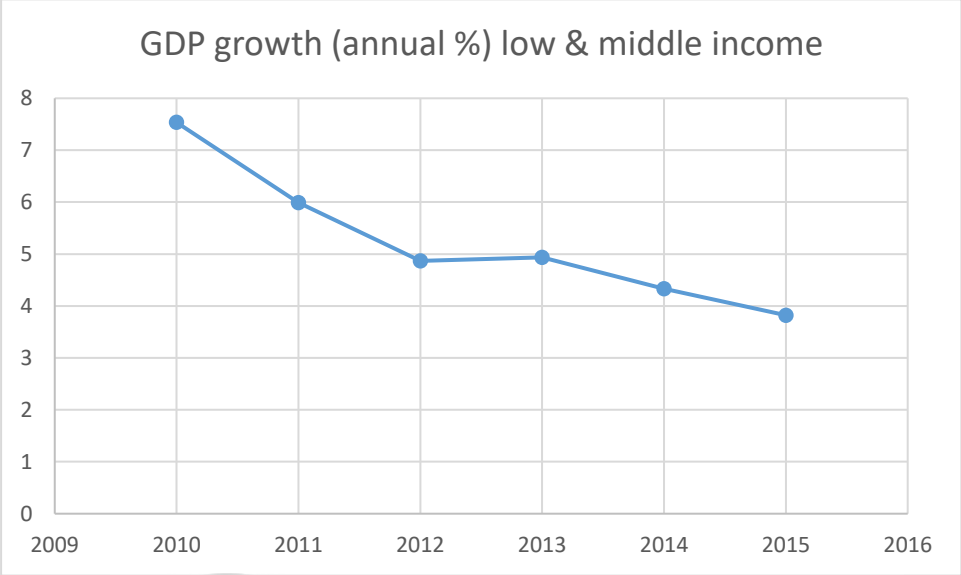

Figure 1.3
GDP Growth (annual %) Low & middle-income countries
Source: World investment report (2015: 4).

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Furthermore, the Figure 1.4 also strengthens the issue that GDP per capita in upper and lower middle-income countries continually decreasing since 2007 except in one year 2009. It could be seen that middle-income countries show a sharp decreasing trend of science 2007. The question arises that Figure 1 and 2 shows that FDI is increasing in middle income countries in Asia but the GDP of these countries is decreasing. Therefore, a gap on this issue need to be addressed.

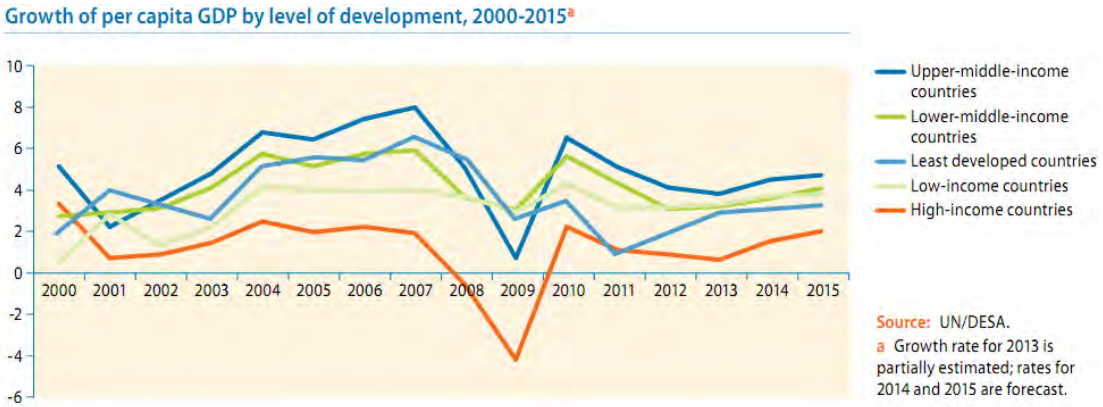

Figure 1.4
Growth of per capita GDP by level of development
Source: United Nation/DESA

The current study tried to show the closer picture of the issue in Figure 1.5 by taking the trend of average GDP growth of ten selected Asian countries. Many countries belonging to this region showed an upward trend of FDI inflow like china, Indonesia and Sri Lanka, But the average growth rate of these countries is not increasing.

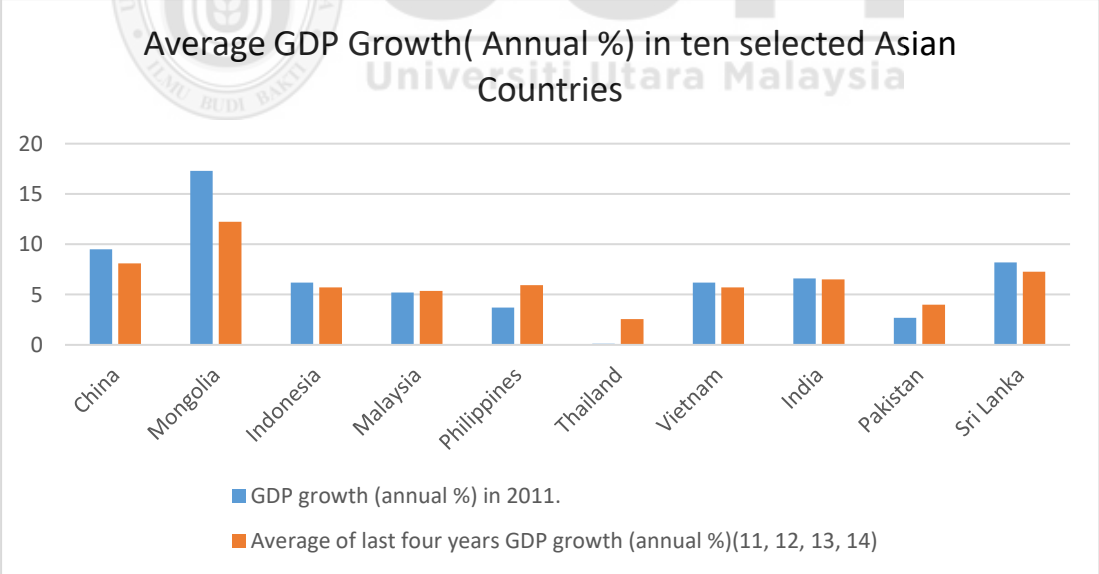

Figure 1.5
Average GDP growth (annual%) in ten Asian countries
Source: Compiled from UNCTAD STAT 2015

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The average GDP growth rate for most of the selected Asia countries shows decreasing trend except Pakistan, Philippines, and Thailand.

An increasing trend in FDI in developing Asian countries and decreasing growth trends of these economies make it interesting to search out the factors influencing this scenario. There are substantial factors that can influence the above mentioned foreign investments specially the institutions. Szanyi (2001) said if a country does not create a fundamental institutional framework and stable politically and economically it cannot expect that inflow of FDI increase in that economy.

Another inserting motivation is the mixed picture of aggregated and disaggregated FDI and economic growth makes it feasible to investigate how GFDI, MNA has contributed to the economic growth in Asian countries with an important role of institutional factors.

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1.2 Problem statement

The statistically data shows that in Asia especially, middle income countries (MIC) have decreasing trend of GDP growth since 2007, but this region remain on the top in receiving FDI. The issue highlights some gaps existing in the literature. The reason behind this issue could be the low quality of institutions, possibility of low productivity growth or Middle-income countries trap. The trend of rapid growth took many countries into the middle-income group but a few countries cross the group and reach high

income countries. One of the possible reason of sharp decrease in growth is low productivity (Agénor, Canuto, & Jelenic, 2012).

The main problem in the Asia is that regardless this region remained on the top in attracting FDI in recent years but the growth rate of this region is not very high and most of the Asian countries show decreasing trend of GDP growth. Bad governance, law and order situation, corruption, energy crisis, political instability are the main hurdles to achieving economic growth (Azam & Emirullah, 2014; Freckleton, Wright, & Craigwell, 2012; Quazi, 2014; Saidi & Yosra, 2013).

Related to this issue, the role of institutional factors gained a substantial position in this situation of Asian countries also where the growth rate is low. The questionable performance of institutions in these countries which are resource enriched leads to Dutch disease. In Asia, the countries have faced this problem of Dutch disease like Lao, Iran, Indonesia, Malaysia and Kuwait (Ismail, 2010).

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It is an institutional problem instead it to call a real economic problem, the cause of this danger to economy is mainly due to the mismanagement and transparency issue of institutions, so it relates to institutions of the host economy. Capital inflow has impact that can lead the economy towards Dutch disease. Along with the positive impact of foreign investment, this negative element attaches with FDI called mixed blessing for host country (M. Burger, Ianchovichina, & Rijkers, 2013; Saborowski, 2009). The rationale behind this negative phenomenon is that increased inflow of investment may cause an appreciation in the host countries and this can lead to a bad impact on domestic investment. Furthermore, this real appreciation of the currency deteriorates the current

account and leads to the economy to a vulnerable situation of crisis. This happens mostly in the resource enriched countries like Iran, Indonesia, Malaysia and Kuwait, because the export of the resources reduces the productivity of manufactured sector and the adverse effects of Dutch disease may prevail in the whole economy (Corden, 1984; Ismail, 2010; Saborowski, 2009).

Over the last two decades or more, FDI more precisely GFDI and MNA became the main source of economic growth in most of the countries in the world. Particularly in Asia, FDI has a substantial role in the growth of the countries but inconsistency in results shows that there is still a gap need to be filled. Due to the importance of FDI in the context of economic growth an extensive literature on this area is available. These studies focus on total FDI and its impact on growth, results show the mixed picture in different countries.

In some countries, total FDI has a positive impact on a country but MNA have negative although it is the part of total FDI. For instance, total FDI and greenfield FDI both are positively related to economic growth in different Asian countries like Pakistan, Indonesia, Malaysia, the Philippines, China, India, Vietnam, Thailand, Sri lanka (Aurangzeb & Stengos, 2014; Duttaray, Dutt, & Mukhopadhyay, 2008; Fadhil & Almsafir, 2015; Harms & Méon, 2013; Hayali, 2014; Johnson, 2006; Kalotay & Hunya, 2000; Khatun & Ahamad, 2015; Nennenkamp, 2002; Silajdzic & Mehic, 2015; Tahir, Khan, & Shah, 2015; Wang & Wong, 2009).

While on the other side researchers like (Ashraf & Herzer, 2014; Azeem et al., 2013; Bertrand & Capron, 2015; Blonigen & Slaughter, 2001; Carkovic & Levine, 2005; Herzer, 2012; Liu & Zou, 2008; Mehrara & Musai, 2015; Mencinger, 2003; Saqib,

Masnoon, & Rafique, 2013; Temiz & Gökmen, 2014) have evidences of negative effect of total FDI, GFDI and MNA on economic growth in China, India, Sri lanka, Thailand, Malaysia and other developing countries. To see more clearly the study has considered positive as well as negative impact of total FDI on economic growth.

Statistics show that in recent years FDI inflow increased in Asia and remained top in the word but percentage growth of these countries shows a low value (World Bank 2015). The question arises why major determinant of growth (FDI) fail to perform in these countries and shows the mixed result. Therefore, it is needed to find out the factors influencing the effect of FDI on economic growth. The next, total FDI inflow gives a mixed result, it is necessary to see FDI separately to clear the picture which type of FDI is better for the country whether Greenfield or MNA. A huge number of studies are available on relationship or causality between total foreign direct investment, and economic growth but few on the impact of Greenfield FDI and MNA on development including institutional factors and their specific role in selected Asian countries.

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The inconsistent results discussed earlier give a motive to get a clear picture by seeing FDI separately (Greenfield FDI and Merger and acquisition) in Asian countries. It is also misleading to just see overall FDI and its impact on economic growth as the performance of this investment is concerned it does not wholly depend upon the volume of FDI seems to be more dependent on the type of FDI (Nanda, 2009). Greenfield FDI cannot be used as a substitute of MNA and have offsetting effect with MNA. Due to this solid reason, it is worthwhile to see the impact of FDI separately, as multinational corporations (MNCs) also interested to do investment in a single type of investment like Greenfield FDI or MNA (Wang & Wong, 2009). In low-income and middle-

income countries, Greenfield FDI positively influence the economic growth while, MNA has no any substantial effect (Harms & Méon, 2011).

The most important goal of almost every country is to achieve its desired economic growth and FDI is one of the substantial element required to achieve this objective. A big hindrance in achieving this objective is a low level of institutional quality in Asia. The solid reason to check the role of institutional factors is that FDI can increase economic growth with the condition of human capital and institutional stability (Makki & Somwaru, 2004). Furthermore, bad governance, weak institutions are big issues to provide the proper and desired facilitation to the investor to do more investment (Gould, Tan, & Emamgholi, 2013; Mathur & Singh, 2013; Saidi & Yosra, 2013).

The studies discussed GFDI separately also give mixed results. Most of the studies believe that GFDI is more beneficial than MNA for host economy (Wang & Wong, 2009). However the conflicting result of different studies can be seen as Greenfield and MNA have no effect on growth or negatively related to growth (Ashraf & Herzer, 2014; Eren & Zhuang, 2015). There is a research gap whether these inconsistent results of GFDI and MNA are due to low level of institutional quality (Control of Corruption, Voice and Accountability, Rule of Law, Regulatory Quality, Political Stability and Absence of Violence and Government Effectiveness). Furthermore, GFDI is effective in some countries, while having a negative effect on economic growth in some countries. To fill this gap, it is inevitable to check Greenfield FDI inflow and MNA with the role of institutional factors separately.

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Inconsistent results and statistical justification of high FDI inflow in Asian countries and low growth rate left a big research gap. The data shows that in some countries which are included in sample of the present study, greenfield FDI is increasing and MNA showed a mixed trend. In Indonesia, greenfield FDI accounted for $ 38000 million in 2015 while $ 13000 million in 2010 and Pakistan improved the value of greenfield FDI from $ 1300 to $ 18000 million between 2010 and 2015. Different countries have different circumstances due to which performance of FDI may change and waving data of both greenfield FDI and MNA have a sign to investigate these investments with influencing elements like institutional factors.

It is clear from the literature that the contribution of FDI to economic growth is highly jeopardized without seeing it separately (Greenfield FDI and MNA) and noticing institutional factors. It also seeks to fill the literature gap currently existing. The research on GFDI and MNA with the role of the institution is also suggested by other studies like (Burger, Ianchovichina, & Rijkers, 2015; Gonchar & Marek, 2014; Harms & Méon, 2013; Reddy, 2015).

To the best of author's knowledge, a few prior studies are available on the GFDI and economic growth with the role of institutional factors, where some of them include a few Asian countries. Furthermore, from these studies, most of the studies use only single institutional factor like corruption. The study is contributing by taking six intuitional factors separately with GFDI as well with MNA. The present study covering only 10 Asian countries consist of Pakistan, India, Indonesia, Sri lanka, the Philippines and Vietnam, China, Malaysia, Mongolia, and Thailand. The time period of the present study is relatively longer as compared to other studies. Similarly, set of explanatory

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variables is visibly different and study also included all governance indicators (institutional factors). Finally, the study will use relatively more suitable methodology to achieve the set of objectives.

1.3 Research Questions

What is the impact of Greenfield FDI inflow on economic growth in selected ten Asian countries?

What is the impact of MNA on economic growth in selected ten Asian countries?

What is the interactive effect of institutional factors with Greenfield FDI on economic growth in selected ten Asian countries?

What is the interactive effect of institutional factors with MNA on economic growth in selected ten Asian countries?

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1.4 Research Objectives

1.4.1 General Objectives

The objective of the study is to explore the impact of greenfield FDI, cross border MNA and institutional factors on economic growth in selected Asian countries.

1.4.2 Specific objectives

The following are the specific objectives of the study.

1.To examine the impact of Greenfield FDI inflow on economic growth in selected ten Asian countries.

2.To examine the impact of MNA on economic growth in selected ten Asian countries.

3.To measure the interactive effect of institutional factors with GFDI on economic growth in selected ten Asian countries?

4.To measure the interactive effect of institutional factors with MNA on economic growth in selected ten Asian countries?

1.5 Scope and limitation of the study

The present study will use panel data set of 10 countries of Asia for the time period of 2002 to 2016. In detail, six countries from lower middle namely Pakistan, India, Indonesia, Srilanka, Mongolia, Philippine and Vietnam, four countries named as China, Malaysia, and Thailand are from upper middle-income group. The justification of the selection of these countries from middle income group is that these countries are a diverse group by size, population, and income level. Middle income countries are home of five of the world's seven billion people and 73 percent of the world's poor people. At the same time, middle income countries represent about one third of global GDP and are major engine to global growth.

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The selection of countries is also done to exclude the high income and oil and resource rich countries. Furthermore, the selection is also bound to the availability of data of MNA for some countries, although study selected a maximum number of countries whose data is available. The time period of the study is 15 years from 2002-2016 due to data of institutional factors availability. The study will use secondary data to explore the impact of Greenfield FDI and MNA on economic growth in ten selected Asian countries. The countries are selected as most of Asian countries show the increasing trend of investment inflow but with decreasing trend of growth. (World Bank 2016).

Furthermore, the dependent variable in the research is Gross domestic product (GDP) and independent variables are greenfield FDI, MNA, domestic investment, population growth, human capital, trade openness and inflation. The limitation of study is that, it does not sufficiently explain the role of institutional factors at dimensions level and on sectoral level like the impact of greenfield FDI and MNA in the service sector. This role is also checked by using Fraser index.

1.6 Significance of research

This study will contribute to the existing literature and development economics as it will investigate the factors which are the obstacle to economic growth. Most of the empirical studies have been done to check the relationship between FDI, domestic investment, and economic growth. However, little research has been done on disaggregated FDI (Greenfield FDI and MNA) and economic growth in the context of institutional factors. Therefore, this study obtains vantage of novelty to investigate the impact of Greenfield FDI and MNA with the role of institutional factors in selected Asian countries.

Furthermore, the results of this study can provide a fruitful guidance to the policy makers of developing Asian countries regarding policies about entry mode of investment and economic growth. In addition, understanding of the linkage of the institution between Greenfield FDI and economic growth is essential in formulating the appropriate policies to the future direction of development in developing Asian countries. Practical contribution of this study is that, if countries which are looking for investing from developed countries to Asian developing regions will be aware of the

intuitional factors affecting FDI, by seeing greenfield FDI and MNA separately. They will be able to decide, it is better to invest or not to get optimum results.

As for as receiving countries are concerned after having information about the institutional condition they will be also able to make policies to rectify their institution to attract FDI and to get their targeted growth rate. Finally, the study will empirically contribute to economic growth by developing new model about Greenfield FDI, MNA, and economic growth by using different econometric techniques. Additionally, the research will consider the data on institutional factors in ten Asian countries from 2002 to 2016.

1.7 Organization of the study

Chapter one will comprise of background: history, statistical data and statement of the problem, research question, research objective, the scope of the study and significance of the research. In the next chapter (two) the theoretical framework with underpinning theories of FDI literature review of previous studies such as the impact of FDI and economic growth role of institutional factors, GFDI and MNA with their effects on host economy in selected ten Asian countries are discussed. The third chapter consists of methodology, variable definitions and their measurement, sources of data, econometric models and the summary of the whole chapter. The fourth chapter consist of results and discussion while fifth chapter covers the conclusions and recommendations of the study.

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CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In the following section, study presents a review of the literature on growth in the perspective of FDI and GFDI. Literature supports the concept that FDI can play a facilitating role in promoting growth (Azam & Ahmed, 2015; Iamsiraroj & Ulubaşoğlu, 2015; Zeb, Qiang, & Rauf, 2013). It is also interesting to see separate effects of GFDI and MNA on economic growth. Both have a different impact on growth in different countries (Eren & Zhuang, 2015; Harms & Méon, 2012).

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2.1 Theories of economic growth

2.1.1 Basic Neoclassical (Solow) Model

Growth is fundamental concepts in economic literature have many theories. The most important theories are neo-classical theory and endogenous growth model theory. The Solow–Swan model is an exogenous growth model based on neoclassical economics. The core concept of this model is that output can be produced by the major contribution of two factors of production named as capital and labour. The main objective of this theory is to perceive the growth rates of these factors. Theory believes that growth rate changes with an increase in capital and labor force but not permanently rise because of diminishing return to scale. The Solow growth model believes that a rise in capital accumulation and labor force will increase the economic growth rate, but only

temporarily because of diminishing returns. Another important feature of this model is that it is a single commodity model. The output of every investment is consumed and rest of which is saved. The saved part of output further invested and the overall capital stock is called capital accumulation. As earlier mentioned that it is an exogenous model, this is mainly due to consider technology as an exogenous variable. Renelt (1991) argued that technical change has a substantial impact on growth but this growth does not reflect as input.

This uncalculated part of growth is called "Solow residual". Endogenous growth model has a wide scope to investigate the growth effect of variables like capital, labor, technology and population growth.

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2.2 Eclectic theory of international production

International production as a concept was discussed by Dunning in 1976 in a presentation named as “The International Allocation of Economic Activity”. The main aim of this working was that activities of multinational corporation should be supported by different economic theories. It is also considered that in different channels of economic activities FDI is a prominent channel of foreign economic activity. A research in 1980 was also the continuation of the same idea with some improvement. It was a step forward in theory by focusing on the importance of ownership and another important thing “location” in the context of economic activity. (Dunning, 1980, 1988a). The theory is a blend of three different concept of international production.

2.2.1 Ownership advantages

Ownership advantages are further divided into three forms:

(I) Advantage of possession of assets that can generate profits

(II) Advantage of enjoying growth of newly started company

(III) Advantage of being multinational and divergence of geographical location

The framework of location theory is suitable to see international direct investment. When a firm is working in local market it has a variety of option for growth, as it is involved in the production of knowledge it can purchase exiting firm, can penetrate in the foreign market also (Hirsch, 1976). In the international market, ownership advantages of the firms are different due to different features of MNEs and the markets. Another main feature of the theory is that ownership advantage should be shifted to other country but in the control and organization of home country's enterprises. It is also better to share these advantages instead of selling them.

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2.2.2 Locational Advantages

Pros and cons of location advantage can be seen independently from ownership benefits. But the decision of investment is strictly connected to the ownership of the assets of a firm that is getting benefits. The theory also tried to dig out the elements that have substantial influence regarding foreign direct investment (Vernon, 1966)

The theory reveals that enterprises should utilise its assets in foreign country otherwise the local firm will remain engaged in local markets and exports are only factor of international economic activity. To do this practice by MNEs can get benefits called locational advantage (Dunning, 1988b).

2.2.3 Internalization

The concept of internalization is the transfer of knowledge and activities of the firms by licensing or franchising. The theory explores the proficiency of firms and decisions of the organization to invest. The theory also reveals that internalization is a process of controlling of economic activity related to value addition of products in other markets. Buckley (1988) gave a concept that locational variable should be assimilated with internalization variables. An important point was discussed by Dunning that FDI has a considerable relationship with O, L and I variables (Dunning, 2000). Furthermore, Dunning and Lundan (2008) argued that institutional elements and components of OLI can be incorporated. As in volatile global economy, the institutions which are locational specific become more important in reducing the transaction cost of value added commodities across the border.

2.3 An Assignment Theory of Foreign Direct Investment

Nocke and Yeaple (2008) developed a theory to conceptualize the composition FDI. Greenfield investment and cross-border acquisitions are the main investing modes of FDI. They argued that GFDI and MNA can be in the same industry but not in any single firm. Therefore, different countries and firms received two different mode of investment due to location characteristics of the host country.

Furthermore, it is argued that GFDI is more important for the economies having more difference in cost of production. As, its flow is towards high to low cost countries. While, MNA have its own substantial position in those countries where difference cost

is minor. When two countries having the almost same cost of production of different commodities, foreign investment adopts the shape of MNA. The efficiency level of the firms related to GFDI is more than that engaged with MNA.

2.4 Theoretical framework

The Solow model is considered as a key item of theoretical framework to elaborate the growth patterns. The base of this model is affixed with the framework of neoclassical economics. However, the assumption of fixed proportion stated in Harrod-Domar Model is not considered in this model whether it is called an extension of Harrod-Domar model. In the model, the population growth, saving rate and technological progress are assumed to be exogenous. There are two main factors of productions, capital and labour by which output can be produced (Solow, 1956).

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Furthermore, endogenous growth theory explores that growth can be achieved by foreign investment (FDI) from Multinational corporations (Romer, 1989). The theory emphasis that it the force that is the main cause of technological progress. The addition of human capital in the determinants of economic growth instead of only physical capital is a contribution of the theory. The concept of endogenized technological change is also a hallmark of endogenous growth theory (Renelt, 1991). Furthermore, Grossman and Helpman (1991) indicate that growth is related to research and development (R&D) and add this concept in the previous model of growth. In addition, capital deepening is the main cause of technical development (Barro, 1995; Romer, 1989). North (1990) argued that along with conventional determinants of economic growth institutions have its own importance.

A detailed and fruitful explanation compelled the neoclassical researchers to think about the importance of institution in the process of growth. However, the process of incorporating institution into the general theory of growth was under thinking. Lal (2000) also, tried to solve this theoretical concept of incorporating institutional development in general growth theory. The conventional understanding of Solow growth theory is that technology is an exogenous variable, which became the main difference between endogenous and classical growth theory. The study argued that there is no rational that institutions have a direct impact on economic growth.

However, institutions can be related to the performance of investment indirectly. While the steady state growth rate may be targeted in countries which have the same level of institutions. By giving weightage to this discussion it can be concluded that institutions have a relationship with growth but not directly. It is an economic rational that growth can be determined by investment. Thus, the performance of investment is conditional and attached with institutions.

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Furthermore, according to Barro (1996), economic growth can be achieved by taking amelioration in school enrolment and expectancy of life. In addition, low fertility rate, controlled prices, the rule of law and control of expenditure from the government are also push up factor to enhance the growth of a country. Nocke and Yeaple (2008) develop a theory of assignment for foreign direct investment. The theory claims that in different countries and firm FDI is not in aggregated form but either in the form of greenfield FDI or MNA. Greenfield FDI is involved in constructing new production and facilities in the host country. While MNA show a combination of two firms and involved in trading different assets owned by multinational corporations.

Similarly, the theory also reveals that both types of investment have different consequences. Another claim of the theory is that role of both investments is different in different circumstance. When there is a minor difference between the costs of production between host and home country, more chances are there, the form of investment would be MNA. However, the role of greenfield FDI prominently can be seen in those countries which have low cost as compared to high cost country. On the base of above theoretical discussion current study develop a theoretical frame work as follows:

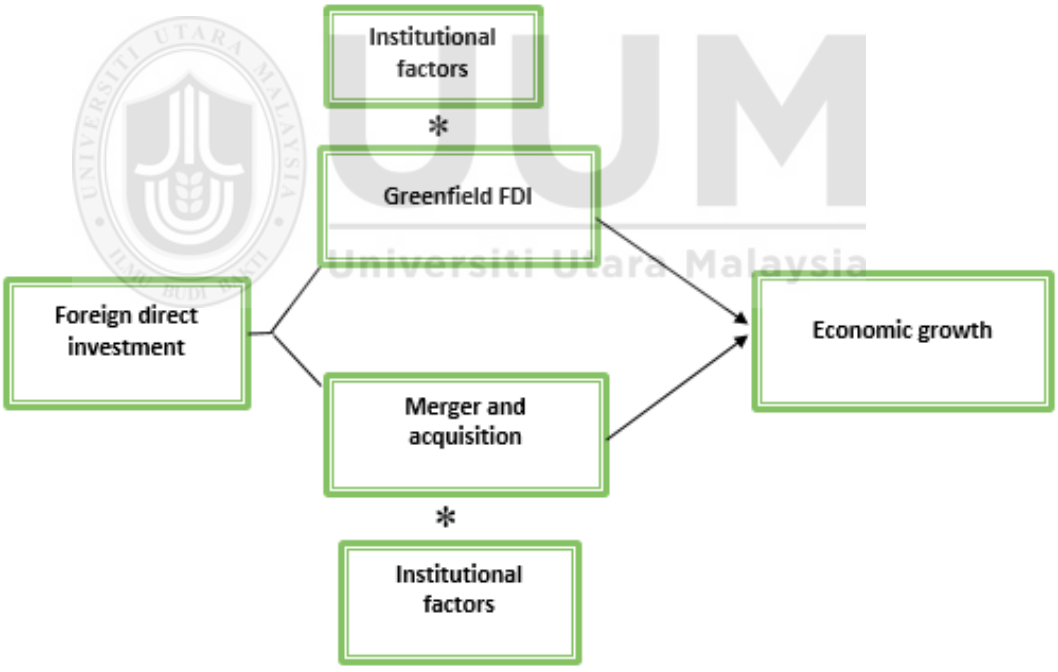

Figure 2. 1 Framework constructed in the light of theoretical literature.

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2.6 The empirical evidence

Barro (1996) discuss growth in reference to policy and tested the hypothesis proposed by (Bhagwati, 1985). They found, the impact of FDI relatively large in those countries adopted outwardly oriented trade policy as compared to countries with an inwardly oriented policy to achieve economic growth (V. Balasubramanyam, Salisu, & Sapsford, 1996). Furthermore, essential conditions for economic growth consider as prerequisite is discussed by taking data of 41 middle income countries. They state that polices having fewer trade barriers, low inflation rate and substantial investment in human capital along with physical are the main conditions for growth. The study also explores that price stability caused sustainable growth while inflation's impact on growth shows negative sign(Dewan & Hussein, 2001).

Economic growth's linkage with exports of the countries studied by Vohra (2001). Economic growth, especially in less-developed countries is associated with the economic development of that country. When a country achieves at least initial standards of economic development it becomes easy to gain positive impact from exports. These countries also are recommended to adopt the policies which could accelerate economic growth with increased foreign investment inflow by export expansion. Barro (2003) also, tried to explore determinants of economic growth. Life expectancy ratio and educational attainment as proxies for Human capital conditionally related to economic growth.

High level of these variables at initial stage influences the growth positively. Whereas inflation and high government expenditures are not in the favor of economic growth.

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An important determinant of growth is financial development but it gives a mixed performance in different countries. As in OECD countries and China, evidence shows that financial development does not lead to economic growth in a direct or indirect way (Shan & Morris, 2002). While Christopoulos and Tsionas (2004) utilized panel data of 10 developing countries to dig out the relationship between financial development and economic growth. By using fully modified OLS they find that financial development leads to economic growth.

In the same way, another important determinant of economic growth is FDI. It is positively correlated with economic growth and accelerate country's growth with the condition of adequate human capital, trade liberalization and economic stability (Bengoa & Sanchez-Robles, 2003). As the FDI comes from the European Union to the Middle Eastern countries resulted in economic growth, and also affect exports positively which in return help to attract more FDI (Metwally, 2004). Besides, FDI has a strong relationship to economic growth, it stimulates growth in developing countries as well as developed countries and combine with human capital exerts a strong positive impact on economic growth (X. Li & Liu, 2005). As well as, medium financial sector FDI supports growth conditionally sufficient human capital. Impact on economic growth also depends upon level and quality of FDI (Eller, Haiss, & Steiner, 2006).

In addition, the same determinant of growth shows different results in different countries this can be seen by observing the behaviour of export led growth hypothesis. In India, Iran, Nepal and Fiji impact of exports on economies growth shows a positive sign and results of different researches support. However, in some countries performance of exports is not appreciable, as this hypothesis shows opposite direction in Bangladesh and Bhutan and in these countries, economic growth leads to increase in

exports. The situation of Pakistan and Sri Lanka is totally different, there is no any causality between exports and economic growth (Atrkar Roshan, 2007; Love & Chandra, 2005; Narayan, Narayan, Chand Prasad, & Prasad, 2007).

Furthermore, M. Wang and M. S. Wong (2009) investigated the factors enhancing the growth effect of FDI. The study was conducted by using panel data of 69 countries from 1970-1989. Furthermore, study depicts that an economy with established financial markets and human capital can get a positive impact of FDI towards economic growth. The required results of economic growth can be achieved when human capital get a certain level. It is also revealed by a study that government can play a promising role in developing countries by tax holidays to attract FDI inflow.

Rahimi and Shahabadi (2011) studied the impact of trade liberalization on growth in the economy of Iran. The study used the ARDL approach, time series data (1980-2006) with Cobb Douglas production function. Trade liberalization is positively related to the growth of Iranian economy as an increase in imports leads to a big positive change in exports. While the economy is badly affected by labor force and education. Law and Singh (2014) supports Christopoulos' research with some addition. It is stated that financial development can play its positive role in the growth of a country until it remains under a specific threshold level. But when it exceeds that level its impact become negative and this is true in both developed and developing countries.

The literature on FDI, Greenfield FDI and MNA have substantial importance as it is the most attractive area of research in the context of Asia. Furthermore, Asia also

remained on top in attracting FDI (Greenfield FDI, MNA) even with the slowdown in economic growth (world investment report 2015).

2.4 The relationship between GFDI, MNA and economic growth

To achieve sustainable economic growth remained a salient object of every country. Determinants of economic growth have a substantial position in this regards. A boom of mergers in 1960 caught the attention of the researchers to trace the effects of these surges of foreign investment on different economies. While results showed inconsistencies among different countries of developed nation expect some cases of large firms gave a consistent result (Hannah, 1981). However, Deneckere and Davidson (1985) demonstrated that it was not necessary to gain an advantage, mergers should have a large capacity, small mergers also gave profits but in small quantity. Along with profit, mergers are also the cause of the increase in price. Particularly, mergers that are incapable of generating a synergy (The concept that the value and performance of two companies combined will be greater than the sum of the separate individual parts) caused an increase in price. Furthermore, to get benefits from mergers, economies of scale are required (Farrell & Shapiro, 1990). While the Japanese' corporations shifted their investment in the form of mergers from Asia to the developed countries in 1980 (Murmatsu, 1997).

Waves of these investment show ups and downs in Asian history, in 1990 MNA direction toward India clearly can be seen. But the mode of entry in the form of Greenfield FDI remained dominant in performing perspective. Because of the superior quality of Greenfield FDI, it showed positive spillovers in different economies. Furthermore, physical capital produced by MNA is not enough to contribute economic

growth. Greenfield FDI showed a considerable amount of transferred knowledge comparatively more than that of MNA (Kumar, 2000b).

Developing countries demonstrated an increasing trend of MNA, from 1991 to 1997 accounted for 14 billion US dollars and 108 billion respectively. While, 44 % decrease in the sale of MNA in Asian countries reversed this trend. However, the performance of both types of investment is comparable, in the Asian countries. Greenfield FDI performed well in the process of capital growth and MNA also contribute, but the difference is only that Greenfield performance belongs to short term. While the effect of MNA toward growth seemed to be the long term. As greenfield investment promptly involved in creating new jobs but MNA delivered this work in long run. Both type of investments involved in the transfer of technology in the host country. An interesting picture can be seen in the perspective of competition, as greenfield FDI increased while MNA decreased the competition in the host countries (Kang & Johansson, 2000). Antalóczy, Sass, and Sass (2001) explored that both investments have different results when competition, jobs, capital growth and technology transfer were required to check, in different studies.

Mody and Negishi (2000) noticed that a sudden increase in MNA had been seen in East Asia especially in Korea in 2000. Different factors like liberalized policy for the mode of entry and facilitations for foreign investors played a predominant role in this upsurge of MNA in East Asia. The economies that were financially disturbed significantly restructured by MNA and received positive effects for the development of the country.

Cheng and Kwan (2000)estimated the effects of the determinants of FDI in 29 Chinese regions, while the time period for this study was from 1985 to 1995. The specification test for independent variable and GMM estimation is used as methodology. The findings of the study show that better infrastructure, size of a region's market is positively related to the FDI although wage cost exert a negative pressure on FDI.

Alfaro, Chanda, Kalemli-Ozcan, and Sayek (2004) examine the connection among FDI, financial markets, and economic growth in 20 OECD and 51 non-OECD countries. The study used panel data between 1975 and 1995. Foreign direct investment alone shows uncertain results to contribute economic growth. Although good financial markets are complementary to gain positive effect of FDI on economic growth. The study further argues that low developed local financial markets are the main cause of ambiguous result of FDI. Furthermore, the study suggests that Better local conditions firstly can attract foreign investment and the other benefit is that it allows the receiving countries to take full advantage of these investments.

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Greenfield investment and MNA are the cause of the increase in domestic investment. However, both have a positive connection with GDP growth. In addition, economic growth worked as "pull" factor to attract both types of investments(Calderon, Loayza, & Serven, 2004). Economic growth is effected by mode of entry, GFDI and MNA have different impacts regarding employment. As GFDI is a considered a job creator investment while MNA show the inverse impact on employment sector in the host country. Due to launching new projects, GFDI can create new jobs and cause an addition of several assets in developing countries. However, MNA are not involved

such a type of activity and just takeover assets and liabilities of firms in the host countries.

The aim of transnational corporations is to earn more profit from both types of investments, in this regard, MNA in certain cases do downsizing which ultimately effected the employment rate badly in the host country. The case of developing countries is different from the developed countries. Most of the public sectors in the developing countries usually overcrowded and government sell their sector to TNCs. These types of mergers and acquisitions projects may cause an increase in unemployment (Geishecker & Hunya, 2005).

Mehic, Silajdzic, and Babic-Hodovic (2013) examine the impact of foreign direct investment on economic growth in seven countries of southeast Europe (SEE) by using the data from 1998–2007. The study used fixed effect panel data estimation, to get the results. The findings depict that there is significant positive relationship between FDI and economic growth in SEE countries. However, the impact of domestic investment in these countries are not strong enough to improve economic growth.

2.4.1 Positive impact of Greenfield FDI on economic growth

Typically, Greenfield FDI looks more beneficial for the receiving economy than MNA because former is resulted in the creation of new asset while the latter is not capable of producing the new capacities (Kalotay & Hunya, 2000). Another reason to choose GFDI is that as the case of MNA is concerned it is just the change of owner of the firm and not affiliated to increase in investment in the host country. Thus, expected gain

from MNA is less than GFDI. Additionally, GFDI is related to new investment so have more attraction for the countries in developing nations (Nennenkamp, 2002).

Motivated by the increased concern to see FDI separately because multinational corporations (MNCs) do investment in the form of either greenfield investment or MNA. However, both types of FDI are positively related to increases in the growth rate(Calderon et al., 2004). Furthermore, GFDI increases the physical capital especially in developing countries because of investment in new facilities. While MNA shows the opposite picture by changing the physical capital stock in a small amount (Johnson, 2006). Greenfield FDI and MNA can be differentiated in many ways but the most important difference is their implication. Because the MNA is an expansion of existing firm by trading in the foreign market initially it will have not a considerable impact on the productive capacity of the host country specifically in the developing countries. While the GFDI is involved in establishing the new capacity of production by purchasing the labor and capital from the host country (A. Wang, 2009).

As FDI is the most consistent and stable component of foreign capital and also important as playing the role in the process of economic growth by providing monetary resources, skills and technology know- how through MNCs (Adams, 2009). Welfare impact received from both types of FDI are different, in detail, welfare implications of GFDI are leading in the receiving countries as compared to MNA. Cross-border MNA shows a negative affiliation to capital formation however the greenfield investments show the positive correlation in the major portion of industries in Korea. But after the formation of free trade agreement (FTA), entry mode of multinational firm changed and MNA is also preferable when strategic effects are concerned by the countries (Y.-H. Kim, 2009).

Arslan and Larimo (2011) point out that the role of formal and informal institutional distance on entry mode of FDI; Greenfield FDI and merger and acquisition is different. The study used the data of 343 foreign direct investments in selected emerging economies of Asia, Central and Eastern Europe and Latin America. The results of the study show that greater informal institutional distance is in the favour of Greenfield FDI by the Finnish MNEs. While, the preference of merger and acquisitions is depending upon high formal institutional distance.

As for as the growth effect is concerned both types of FDI also have different results, such as in a sample of 84 countries including more than twenty percent Asian countries, greenfield investment positively attached with economic growth whereas MNA is negative. The reason behind this, MNA require a threshold level of human capital to achieve economic growth while GFDI promotes without it (Wang & Wong, 2009). Besides this GFDI augmented growth and while MNA is without any significant impact on growth (Harms & Méon, 2011).

M. Wang (2009) argue that the ambiguous result of FDI and economic growth may be due to taking total FDI. Therefore, they use sector-level data of inward FDI and check its effect on economic growth in 12 Asian economies between the period of 1987 to 1997. The findings show that performance FDI in manufacturing sector is positive but the non- manufacturing sector cannot get these effects from FDI in enhancing economic growth. The study further suggests that Asian economies should make policies in the favour of inward FDI in manufacturing sector.

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Equally important, GFDI and MNA have a substantial importance as first become the cause of the expansion of capital stock of the host country and latter produces rent for the domestic industry. Additionally, GFDI positively plays a role in enhancing economic growth while the MNA sales fail to do so, the reason behind this is a real appreciation in host countries in the case of MNA (Harms & Méon, 2013). In developing countries, greenfield investment is comparatively more beneficial to economic growth as compared to brownfield investment (MNA). Furthermore, GFDI can effect economic growth without any new requirement but the brownfield require additionally a certain level of human capital for having a direct impact on economic growth (Hayali, 2014).

2.4.2 Negative impact of Greenfield FDI on economic growth

Whether foreign investment seen combined (FDI) or separately, greenfield FDI and MNA, it gives the mixed picture towards growth, e.g. more foreign investment in a country has a significant negative relationship with the sale growth of the local firms of receiving countries (Djankov & Hoekman, 2000). Similarly receiving countries showed that greenfield investment negatively correlated with skill-upgrading (Blonigen & Slaughter, 2001). Furthermore, FDI inflow does not affect the economic growth(Carkovic & Levine, 2005). Similarly, the impact of FDI on economic growth is negative in ninety percent of the sample of study and sign remains the same in both time series and a panel of these countries except Lithuania (Mencinger, 2003).

Additionally, FDI can be seen in different sectors like primary, manufacturing and service with negative, positive and ambiguous result respectively in OECD, and selected Asian countries (Alfaro, 2003). In the same way, economic growth is

negatively affected by financial development as this generates high capital flight. FDI have a negative effect on economic growth if the transnational corporations (TNCs) demand concession and high dividends (Akinlo, 2004). Similarly, GFDI also has negative impact toward growth due to the grip of local firms on the labour force, the challenge they face is hiring of labour (Liu & Zou, 2008). Greenfield FDI effects domestic investment negatively in the same way cross-border MNA also have an insignificant impact on domestic investment. Furthermore, greenfield FDI and MNA both are not capable of increasing total factor productivity (TFP) in developing countries. However, the picture is opposite in developed nations as MNA have a substantial and positive impact (Ashraf & Herzer, 2014; Ashraf, Herzer, & Nunnenkamp, 2014).

Another angle of cross-border acquisition is that domestic investment and MNA are complementary to each other as both are essential to firm productivity. Because one makes more constructive to other for firm productivity (Bertrand & Capron, 2015).

In Asia, especially the Middle East countries have to face the Dutch disease effect and become the volatile in macroeconomic performance and show a low level of economic growth (Arezki & Nabli, 2012; J. Frankel, 2012; J. A. Frankel, 2012). Similarly, Foreign capital inflows in natural resources cause an appreciation trend in the exchange rate which ultimately reduces the competition and finally Dutch disease in Lao (the country belongs to South-East Asia) economy can be seen with its bad affects (Insisienmay, Nolintha, & Park, 2015).

Another essential point is the preference of entry mode, it is interdependent, if the export is more profitable as compared to greenfield investment then MNCs prefer to

choose the MNA mode of entry. Similarly, if there is a sharp increase seen in the cost of trade, MNCs also prefer MNA (Raff, Ryan, & Stähler, 2009). After selection of entry, the effect of both greenfield and MNA should rationally be different in different countries. Theoretically, both types of investments have different structure, nature and impact as compared to total FDI. Thus, it is interesting to see both investments separately to fill this research gap.

2.5 Effect of Institutional Factors on FDI, Greenfield FDI, MNA and economic Growth

The variables like tax and corruption both are negatively related to the inflow of FDI in the host country. In detail, multinational companies adversely react to the increase in tax rate and high corruption also diminish inflow of FDI (Wei, 2000). Seeing the direct impact of total FDI or disaggregated FDI on economic growth it is also important to see the factors responsible for shrinkage of the real effect of GFDI and MNA towards receiving economy. Some factors like Political instability and investment risk are the main determinant of FDI in the Middle East and North Africa (MENA) countries while in the developing countries both are less important because investment risk is less there(Chan & Gemayel, 2004).

Many institutional factors influenced the impact of aggregated or disaggregated FDI but the most important variable in term of the relation between domestic investment and FDI is political stability. As FDI is the cause of decreased domestic investment and increased total investment with a condition of the politically stable era (Morrissey & Udomkerdmongkol, 2012). The link between strong domestic institutions and bilateral investment agreements for the purpose of strengthening property rights protection

become the cause of negative effect on FDI inflow (Mina, 2012). Another essential point is political risk have an adverse effect on the inflow of FDI while this effect reduces with the possibility of larger capital flows from the all over the world (Méon & Sekkat, 2012). More importantly, the high quality regulatory system of a country and technology advancement in addition to political stability are the required condition for a market who is going to become an attractive market for MNA (Appadu, Faelten, Moeller, & Vitkova, 2014).

Economic growth may be improved by institutional quality instead of conventional determinants like capital stock and technological spillovers (Long, Yang, & Zhang, 2015). Because institutions play a moderating role between environmental externalities and FDI. The developed institutions can mitigate the negative FDI's environmental externalities. Thus, stable institutes are a precondition for the sustainable development of china (D. T. Wang & Chen, 2014). The reason is that there is significant negative relationship exit between GFDI and politically stable economy having an adverse shock. Furthermore, political instability becomes the cause of low growth by affecting the FDI portfolio and trade related to non-resource especially in the Middle East (M. Burger et al., 2013).

Another essential aspect discussed that institution of host countries and government can play a dominant role to display the valued picture of emerging market firm through MNA (Du & Boateng, 2015). Additionally, FDI and human capital have a significant impact on economic growth but with the condition of the better institutional role and less corruption in the host country (Azam, Ibrahim, & Bakhtyar, 2014; Mathur & Singh, 2013). A different angle is an attachment of FDI with innovation trough regional formal

institutions as these institutions can play a positive moderating role regarding innovation process (Qu, Qu, & Wu, 2015).

Furthermore, FDI can influence the economic growth by a different channel like ameliorated institutional environment rather than traditional, as advance technology transfer and increased capital stock (Long et al., 2015).

Floyd (2004) Compared the pros and cons of GFDI and MNA in Poland by taking data of 145 manufacturing firms. The study conducted a survey in 1997 and take as a sample those enter in Poland after 1989. MNA have more knowledge about host country than greenfield and advantaged in this regard. However, greenfield is more attached to different activities and creates more jobs than acquisitions. The study also finds that marketing activities and production level by greenfield are more than that in the case of acquisitions. Both types of investments are market seeking and short term in nature. The study reveals that GFDI is more uncertain than acquisition and less consistent. Furthermore, turnover from greenfield is more volatile in the case of Poland. It is suggested that investors should be taken more time to take a decision about entry mode.

Méon and Sekkat (2005) evaluates the impact of corruption on economic growth and investment. The sample of the study consists of 63 to 71 countries, and data spanning from 1970 to 1998. The findings are consistent with economic rationale as both investment and economic growth are negatively affected by corruption. The study further investigates these effects with governance of the host countries. The findings show that low governance badly effect to get positive effect from investment and growth. furthermore, “sand the wheels” hypothesis is support by the study implying that corruption dampen the economic growth.

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Demirbag, Tatoglu, and Glaister (2008) investigated the factors associated with the decision of mode of entry (GFDI or MNA) of multinational enterprise in Turkey. The study took the sample of 145 Western MNEs investing in turkey. Results of the study showed that motive of host country like the standard of input and capacity of the market influenced the entry mode. Furthermore, MNE prefers to enter in the form of MNA instead of greenfield if these motives become more important. While the other host country's motive, investment risk supported the greenfield entry mode.

Raff et al. (2009) discussed the mode of entry like GFDI, MNA and a joint venture from the multinationals firms in any host country. The study revealed that profit margin from these types of investments matters in accepting what type investment by domestic firms or host country. Furthermore, the study showed that these investments are interdependent as the profitability ratio of GFDI expected to reduce due to huge fixed cost the host country prefer to accept the MNA or joint venture. While a local form will not ready to accept a joint venture if the exports of that country are more profitable. However, home country firm preferred to enter with a mode of MNA when the trading cost was large enough as considered to reduce the profit.

A. Wang (2009) tried to elaborate the two different foreign investments, GFDI and merger and acquisitions. The study explained the whole phenomenon by taking a single country china and inflow of foreign investments. The results of study explored that if the position of the competition in the market was low and profit gap is high the choice will tend toward Greenfield. However, when a problem of limitation of resources was there it is the only choice, MNA. Similarly, if demand did not remain constant or more

fluctuated over time, the preference had given to the MNA. furthermore, in the presence of local and foreign competitors, it was seen to greenfield FDI in a position where it could not make its space in the market. Concluding, the study suggested that every investor must think before they enter a market whether what type of entry mode is more advantageous for their investment.

Masron and Abdullah (2010) Examine the role of institutional quality related to inward FDI into Asean. The study used annual data spanning from 1996 to 2008. Fixed effects method is found better model for estimation. The findings of the study support the concept that institutional quality could be used to accelerate the pattern of FDI inflows into Asean. Furthermore, Market size is also a main determinant of inward FDI. The study suggests that improving the institutional quality should be an essential element of future policy strategy to further enhance FDI inflow in this region.

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Alguacil, Cuadros, and Orts (2011) examine the absorptive capacity and its role to change the effect of FDI on economic growth in host economies. The study used the panel data over the period of 1976 to 2005. The findings show that institutional quality and macroeconomic stability are considerable contributor directly to economic performance. Furthermore, only incentives for foreign investors are not sufficient to achieve economic growth. Therefore, study suggest that better institutions and macroeconomic condition should be the prime priority of policy makers.

Sun, Peng, Ren, and Yan (2012) investigated how the emerging countries' multinational enterprises get advantages of their ownership. Data was consisted of 1526

mergers and acquisitions announced by the firm of China and India over the time period of eight years (2000 to 2008). The study developed a frame of comparative ownership advantage. The results of the study showed that investment inclination of Chinese firms remained towards natural resource sector. While Indian companies were more interested in service sector especially software. Therefore, both countries' MNEs had comparative ownership advantage in their respective industries through MNA.

Holtbrügge and Baron (2013) explored the entry decision about greenfield FDI and MNA with the strategic point of view. Data was taken from 564 multinational firms and studied their investments decision in BRIC (Brazil, Russia, India, and China) countries. The study also focused on success of the entry choice adopted by the firms in these countries. Results of the study indicated that greenfield FDI was preferable mode of entry in the BRIC countries as compared to MNA. In BRIC countries, affiliates which had a complete hold on firm's stock presented the positive influence on market success but with empirically insignificant value. However, only the positive and significant value was shown by china.

Slangen (2013) examined greenfield FDI and MNA and uncertain policies of the host economies. Data was collected by questionnaire from the executives of Dutch firms. The sample size consisted of 821 executives and 100 sub officers during the period of mid and late in 2003. The study found that GFDI increases when a country had not a certain policy and MNEs gave less attention on MNA. Further, the management of these enterprises expects less control form the political side and to get better performance of company they choose the country which was religiously very close to the home country. Furthermore, religious gap performs moderating role between uncertain policies and entry decision of MNEs.

Kumar (2000a) scrutinized Mergers and Acquisition's deals by multinational enterprises in India from 1993 to 2000. The study includes 256 deals entered in the host country from MNEs. Three major effects of disaggregated FDI were discussed in this research, the knowledge received from greenfield was more as compared to MNA. The second aspect was development effect, the result showed that greenfield had a constructive role to increase the physical capital stock while MNA could not play such a role of this stock augmentation. Thirdly, the study reveals that greenfield FDI accelerate the competition but MNA reduces this type of competition. The study also suggested that a framework of competitive policies is a serious need in India.

Calderon et al. (2004) analyzed the effects received from greenfield FDI and mergers and acquisitions. Panel data from 1987 to 2001 was used and number of countries was 72 out of which 22 developed and 50 were developing. The study reveals that greenfield accelerated by an increase in MNA. Both type of FDI seen to had a substantial positive impact on domestic investment. Furthermore, growth had leading effect on foreign inflow but investment did not influence the growth. The channel is seen in this research that GDP growth acted as a pull factor for FDI and the investment inflow further enhance domestic investment.

Di Giovanni (2005) studied the influential financial factor for the decision of investment that are related to MNA entry. Panel data was used with the time frame of 1990 to 1999 for both developed and developing countries. Study depicts that increase in tax rate had not a positive impact flow of MNA. However, these inflows were motivated by a capital tax treaty. Furthermore, financial market amelioration was one of the causes of increasing MNA activity. More, results showed that countries those can share a common language and already had trade relations were favorable for MNA

activity. The regional agreement like free trade was a big obstacle in flows of MNA. whereas agreements concerning to services had positively related to MNA activity. Finally, the study revealed that financial market arrangements had a promising role to attract these invests in the receiving economies.

Liu and Zou (2008) Investigated that how much industrial sector of china gained from GFDI and MNA through innovation. The study used panel data by dividing industrial sector of china into 21 subsectors and time period was from 1997 to 2004. Simple OLS was used to check the performance of the firm by innovation and the problem of endogeneity was tackled by suing GMM. The study revealed that research and development activities of GFDI accelerated the performance of local firms with a link of innovation. Furthermore, these benefits were within and between the industries of the host country. While the MNA showed the opposite in the same industry. Finally, the study pointed out that Greenfield had a negative effect with the interaction of labor market as in this case MNEs had faced the competition from a local firm in hiring laborers.

Marinescu and Constantin (2008) compared the two different entry modes (GFDI and MNA) of FDI inflow by transnational corporations. The study used panel data of 100 largest companies with time framework of 2002 to 2006 in Romania. The main determinant of GFDI was available resources in the host economy and for MNA, the most important element was the information. The present study also showed an inclination of Greenfield toward trade and MNA was tended to industry and service sector. Furthermore, high and low profit margin were associated with MNA and GFDI respectively.

Neto, Brandão, and Cerqueira (2008) estimated that what is a difference of impact of both types of FDI, GFDI and MNA. The study was consisted of a group of 53 countries for the time period of 10 years (1996 to 2006). To check causality between FDI, GFDI and MNA with economic growth, the study used granger causality test. Results depicted that when research had taken overall FDI for analysis, it was concluded that FDI and economic growth were positivity related to each other. On the other hand, GFDI and MNA showed the mixed results in developed and developing countries. Greenfield FDI had a positive impact on receiving country while MNA indicated positive affects to developed and negative impact on developing country's economic growth.

Slangen and Hennart (2008) investigated whether multinational corporations give some preference to choose GFDI or MNA to enter in an economy because of culture distance between two countries. The study investigated 171 greenfield investments and MNA in 35 countries invested by Dutch multinational enterprises. Furthermore, results indicated that MNEs when entering in an economy with culturally different country prefer GFDI. However, lack of international experience slows down the entry by greenfield mode. Finally, another important result that entry decision effected by previous market knowledge and working relationship with the host economy through acquisition.

Estrin, Baghdasaryan, and Meyer (2009) studied the importance of differences of institutions and host country's human resource in decision making, how to enter in a country. Panel data of 55 countries those invested in six economies of Asia, Africa and Europe was used in this study. Methodology explored that logit model was used by taking entry mode as a dummy dependent variable with value "1" for GFDI and "0" for

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acquisition or other any mode. The result showed a negative effect of previous experiences in taking a decision about greenfield investment but not significant. Further results indicated that institutions and resource gap between two countries were the main cause of selection of GFDI as an entry mode by the investors.

Y.-H. Kim (2009) examined the economies having the collaboration of policies and trade agreements with each other take what stance at the time of investment in selection between GFDI and MNA. Study constructed a model by taking three countries into account with a multinational firm in every country. An important result of the study showed a big shift in preference by selecting the MNA instead of GFDI after establishing a free trade area between two countries. Finally, the results presented that if the receiver economy had less specialized in technology perspective than the home economy, MNCs took the decision of greenfield mode of entry. Further welfare effects received by the GFDI were also high for the host country as compared to merger and acquisitions.

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Nanda (2009) investigated the growth effect of both types (greenfield FDI, MNA) of foreign investment, to check which one of the investment is more beneficial for the host economy. The study used the data of 83 countries out of which 65 are developing countries. Results of the study explored that GFDI is more advantageous for the host country as MNA especially in developing countries. But how the developing countries attract and welcomed the foreign investment the picture is different. Developing countries encouraged the FDI inflow in the form of MNA and dejected the GFDI. The study also discussed the reason behind the aspect of developing countries as the GFDI require several clearances from many departments at the government level. Finally, the study revealed that the regulation for the MNA seemed very weak.

Schiffbauer, Siedschlag, and Ruane (2009) scrutinized whether productivity of the local firms in the United Kingdom would enhance by Mergers and Acquisitions or not. To achieve this objective, the study used data of 2000 MNA having a time period of nine years (1999 to 2007). The results showed that benefits received from MNA were different in different industries. As information and communications technology (ICT) industries which were involved in manufacturing procedure can get more benefit from MNA as compared to the service sector industries. Furthermore, these foreign investments effect labor productivity positively while in the case of total factor productivity there was no effect. The further, MNA remained incapable in producing the technology spillovers and knowledge at the organizational level.

Harms and Méon (2011) examine how the growth of host economy is effected by greenfield FDI and cross border merges and acquisitions. Data used by the study was consist of 80 countries including low-income and middle-income. The time period of the study was divided into five year intervals from 1987-2005. Results of the study depicted that impact of GFDI on economies under this study was positive and significant. On the other hand, MNA had seen without effect or adverse for the economy. However, total FDI sowed a positive sign for the growth effect. In addition, when investment came in an economy in the form of MNA, the productivity of firm increased but competition regarding price faded and adversely effected to host economy.

Bertrand, Hakkala, Norbäck, and Persson (2012) studied the behaviour of GFDI and MNA regarding research and development. The study used a unique data of multinational enterprises of Sweden by taking 34 countries' panel over the period of 1970 to 1998. At firm level, detailed data make this research valuable. Results of the

study showed that the multinational enterprises were more interested to provide high quality by giving weightage to R&D instead to cut down their expenses in this regard. An important result of the research was that MNA gave more attention to R&D due to a threat of competition. Greenfield FDI showed a low intensity toward R&D as compared to MNA.

Byun, Lee, and Park (2012) investigated internal and external factors that can influence the decision of multinational enterprises, how to enter in the host economy. The study included 40 countries in a panel by taking the time period from 1990 to 2009. The study mainly obtained three different results, first, political stability effect both GFDI and MNA. Secondly, the investment decision was more inclined toward MNA when the host country included in the list of emerging market. Thirdly, the emerging countries that were financially stable showed a departed behaviour to select MNA. While, GFDI in this situation remained more attractive to the emerging economies.

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Chang and Chang (2012) examined the performance of greenfield FDI on assets of the shareholders. A sample of data was consisted of 343 announced GFDI over the time period of 1989 to 2007. These projects were announced by 289 US firms. Furthermore, the sample included developed and developing countries further divided into BRIC (Brazil, Russia, India, and China) and non-BRIC. Results of the study showed that unusual returns were seen in the BRIC countries when this foreign investment enter these countries very first time. Short run results revealed that GFDI created valuable effects in developing countries. Similarly, in the long run the effects of Greenfield remained positive in host economies. In addition, the event studies of this research showed that GFDI received unusual returns at the day of project announcement. Harms and Méon (2013) studied how economic growth effected when the mode of investment

would be in the form of greenfield FDI and mergers and acquisitions. Panel data of 78 countries was used for the time period of 1987 to 2005 in the Middle East and North Africa region. The study tried to explain both theoretical and empirical analysis of the difference between the results of these different types of foreign investment. Both analyses showed that GFDI remained dominant in its growth effect on receiving economy. The reason behind this was explored by a study that GFDI can augment the capital stock of host country but MNA had not this kind of effect on the economy. In addition, the study also suggests that future research should be done in the context of institutional factors, types of FDI and economic growth.

Nagano (2013) investigated the similarities as well as differences among the determinants of greenfield FDI and MNA. Data consisted of Japanese firms investing in the Asia-Pacific region for a time period of 1999 to 2009. Results clearly demonstrate that intellectual property rights accelerate the inflow of greenfield investment while MNA remained unchanged under these protection laws. However, laws for shareholder rights had a substantial impact on MNA and firms augment the acquisitions investments in this situation of a country. Equally important, increased population and tax rate were the major determinants of both types of FDI.

Zhuang and Griffith (2013) tried to explore the effects of two different types of investment greenfield FDI and MNA related to the income inequality. Unbalanced panel data was selected from 93 countries, for the time period of 1990 to 2009. A study presented that overall FDI augmented the income disparities. In detail, the study also gave results by analyzing GFDI and MNA separately. Greenfield FDI had positively concerned with income disparities and MNA showed an insignificant relationship with income inequality. The study also suggested that Policy makers should carefully handle

the effect of income equality when a country is receiving the investment in the form of GFDI. Hayali (2014) studied the effects received from brownfield FDI and greenfield to an economy regarding development. Data used in this analysis was cross section of 57 countries over the period of 1990 to 2010. A sample of the study was taken from the Asian and African developing countries. Ordinary Least Squares (OLS) method was adopted to get the results. Furthermore, GFDI could be seen such a type of investment that had a direct and positive effect on an economy. While, the matter of MNA was different as it had not a direct impact on host country's economic growth. It required a threshold level of human capital to get same results as from GFDI.

Burger and Ianchovichina (2014) discussed the sharp increase and decrease in the inflow of greenfield FDI and merger and acquisition and the factors behind these surges and stops. They constructed a unique type of data by taking 95 developing countries over the period of 1990 to 2010. A sudden increasing and decreasing trends can be seen frequently in GFDI than MNA, especially in developing countries. Further the factors behinds these changes in FDI inflow were different. The main factor behind the surges in both types of investment was Global liquidity. The elements behind the sudden increase in MNA were instability in the economic and financial sector in the host economy.

Antonietti, Bronzini, and Cainelli (2015) tried to investigate the effects of inward GFDI in making novelty at the firm level. The study measured the innovative ability of a host economy considering patents as a measure of innovation. The study gave an argument that patents are given based on the judgment of high experts in the field of invention. Therefore, it should be taken as a measure, instead of taking proxies data collected by surveys. The business service firms producing intensive knowledge were capable and

seen involve in innovative activity with inward GFDI. The study also confirms that innovation in sectors was not equal as in manufacturing sector it was less seen. Service sector remained dominated in the field innovation with an inflow of GFDI.

Appadu et al. (2014) assessed the capability and factors to attract the mergers and acquisitions in the host country through developing an index. Panel data of 148 countries was used for 2006 to 2012. The study also showed the detail of overall top 100 ranked countries. It was interesting to mention that three Asia countries Korea, Singapore and Hong Kong remained in the list of top five ranked countries. While other countries of Asia like Sri Lanka, Pakistan, Syria and Bangladesh remained in the lowest 20 ranked countries in the index. Political stability and advanced technology were the preconditions for a country to include itself in a list of mature countries. Finally, the factors like infrastructure, assets of a country and suitable environment for economic activities played a substantial role to attract the MNA in developing countries.

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Ashraf et al. (2014) studied total factor productivity and its link with two different modes of FDI inflow. In an analysis of this study 123 developed and transitional countries were included. Panel data with the time period of nine years (2003-2011) was used. GFDI looked ineffective regarding total factor productivity in both industrial and transitional countries.

The performance of MNA in developed countries remained appreciable as productivity enhancement can be seen through this mode of entry. However, the failure of this mode of entry in developing was that, the standard of development required to gain benefits from MNA was unattainable yet.

Zhang and He (2014) studied the accomplishment of acquisition with an effect of economic nationalism in China. In this research time series data of 7275 acquisition was used between the time period between 1985 and 2010. Government-owned enterprises showed a low figure of completion of activity with incoming acquisition due to security restriction imposed by country. Another important result revealed that the acquisition came from MNEs which were agreed to transfer technology and collaborate with a local firm in boosting their performance appears to be completed. Furthermore, the acquisition of friendly countries with China anticipated as beneficial for the economic growth of china. Finally, the study claimed that Political and economic policies can change the effect received from foreign acquisitions.

Ashraf and Herzer (2014) tried to manifest the outcomes of investing in the form of GFDI and acquisitions. The study had taken a large number of countries' sample for the time period of 2003 to 2011. Unit of analysis was 100 developing countries in which both types of investment were the major part of foreign capital inflow. As far as, outcomes of Greenfield were concerned this type of investment badly affected the host country's domestic investment. Similarly, MNA also had not positively influenced by domestic investment. In the same way, MNA also did not contribute to the growth of economies of the receiving countries. While, GFDI favored the developing countries in growth perspective but still not at an appreciable level.

Burger et al. (2015) investigated the institutional factor like the politically instable condition of a country how much disturb the level and type of coming investments. The study used quarterly data of GFDI of the Middle East and North African countries over the time period of 2003 to 2012. Political instability influenced different sectors of an economy in which GFDI was coming. Foreign investment in manufacturing and service

sector negatively affected by political instability. While the energy sector remained unaffected by the adverse political situation in a country. The reason behind this effect explained by the study was that when a country faces this type of circumstances, become more dependent on resources. The study suggested that institutional factors should be investigated in terms of two different type of FDI in developing countries.

Davies, Desbordes, and Ray (2015) tried to dig out the difference between two investments (GFDI and MNA) in manufacturing and service sectors. A unique data was used by the study from 2003 to 2010 including developed and developing counties. Gross domestic product and countries apart from each other matters in the flow of both investments. However, flow looked from developed to developing countries. Although manufacturing sector had a substantial share of both types of investment but not more than service sector. Furthermore, higher taxes from the host countries cut down the ratio of investment. The market size was a vital factor to attract foreign investment and this inflow accelerate when the barriers from host country are removed.

Eren and Zhuang (2015) studied how the growth of a receiving country effected by greenfield FDI and acquisitions. Data of the study consisted of 12 countries newly member of the European Union and time period from 1999 to 2010. To avoid being biased results and to control cross country effect generalized method of moments (GMM) was used. The study found overall FDI or disaggregated FDI both had not a positive impact. However, different factors like absorptive capacity played a functional role to gain positive spillovers from both investments. While a country with the developed financial system can receive more benefits from MNA. On the other hand, GFDI performs well if a specific country had achieved the threshold level of human capital. Furthermore, extensive use of electricity adversely related to that economy

which was receiving GFDI. Li and Hattari (2016) examined the determinants of cross border merger and acquisitions in developing Asian countries. The study comprised panel data of 342 pairs between sender and receiver countries for the time period of 2000 to 2010. The study explored that in financial crisis 1997, Indonesia and South Korea remained the most benefited countries along with Thailand in Asia. Both home and host country's real per capita GDP looked a favourable element of the flow of MNA and the direction of this flow remained mainly from advanced to developing Asian countries. The study founded two main determinants of MNA after analysis, first the global liquidity and other was a major element "risk conditions" associated with the host country.

2.6 Summary

This chapter reviewed the literature on GFDI, MNA, institutional factors and economic growth. Chapter puts light on theories of economic growth as well as foreign investment's theory. Previous and present studies reveal that major determinants of economic growth are greenfield FDI, human capital, trade openness and institutional factors have its own importance in determining growth especially in developing countries.

The gap from the literature is found that previous studies give a comprehensive work on total FDI and economic growth but to see the greenfield FDI and MNA with economic growth in selected Asian countries is less discussed. Furthermore, another gap is that the intuitional factors (Voice and accountability, Political Stability and Absence of Violence, Government effectiveness, Regulatory quality, Rule of law, Control of corruption) are also not checked separately with greenfield FDI and MNA.

The contribution of the study regarding investment is that it should have clear from the research that the countries can get more benefit from which type of investment whether greenfield FDI, or MNA, then the investors have confident to invest in the form of greenfield FDI or MNA. Another contribution is relevant to the performance of institution in the selected Asian countries as the study will express the situation of institution of these countries are properly contributing their role in economic growth.

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CHAPTER THREE

METHODOLOGY

3.0 Introduction

The aim of current chapter is to delineate research methodology for the investigation of the impact of GFDI and MNA on economic growth with interaction of institutional factors in 10 selected countries of Asia. The dependent variable is GDP per capita which is used as a proxy for economic growth. There is 6 independent variables named as GFDI, cross-border mergers and acquisitions, trade openness, human capital, inflation, population growth. Furthermore, along with theoretical framework an econometric model is included in this study for examining the positive or negative impact of GFDI and MNA on economic growth. The study contributed by checking interaction effect of institutional factors (Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Rule of Law, Regulatory Quality, Absence of Corruption) with both types of FDI separately.

3.1 Model specification

The current study focuses on the interactive role of institutional factors with segregated FDI inflow in the form of Greenfield FDI and MNA on economic growth. Thus, to check this interaction between institutional quality and foreign investments a model being developed on the base of endogenous growth theory and Romer growth model. The model will be used to check the impact of GFDI and MNA in 10 Asian countries out of which six countries from lower middle namely Pakistan, India, Indonesia,

Srilanka, Philippine and Vietnam, four countries named as China, Malaysia, Mongolia, and Thailand are from upper middle-income group. The dependent variable in this study is gross domestic product per capita which is used as a proxy for economic growth.

As far as the independent variables are concerned these are a blend of economic and demographic variables like foreign direct investment, GFDI, cross-border mergers and acquisitions trade openness, human capital, inflation, population growth. As the main aim of the study is to investigate the impact of GFDI and MNA on economic growth study developed a model by taking a base from growth model.

The study further extended this basic concept with the help of Cobb-Douglas production function. The study reconstructed and dynamically transformed this model into a general production function.

$$Y = F(K, L) \quad \text{.....(3.1)}$$

$$Y(t) = K(t)^{\alpha} (A(t) L(t))^{1-\alpha} \quad \text{where } < \alpha < 1$$

Y = output

K = capital

L =labor

A = level of technology

Labor and level of technology are assumed to grow exogenously at rates c and d:

$$L(t) = L(0) e^{ct}$$

$$A(t) = A(0) e^{dt}$$

While the A (0) term reveals not only technology but many other factors like institutions, resource grants etc. Therefore, it may be different in different countries

(Mankiw, Romer, & Weil, 1990). On the basis Romer and Barro's research, Borensztein develop a model including total FDI as determinant of economic growth. Basic model of (Borensztein et al., 1998) was to investigate the impact of FDI on economic growth is as follows:

$$Y_{it} = \alpha_{it} + \alpha_1 FDI_{it} + \alpha_2 FDI_{it} * H_{it} + \alpha_3 H_{it} + \alpha_4 Y_{0it} + \alpha_5 A_{it} + \mu_{it} \quad \ldots 3.2$$

Where

Y= Dependent variable

FDI = foreign direct investment

H = stock of human capital

Y_0 = initial GDP per capita

A = a set of other variables that affect economic growth

To see the segregated effect of FDI (greenfield FDI and MNA) Nocke and Yeaple (2007) develop a model. This model explores that different firms with distinct characteristics select different mode of investment like Greenfield investment or MNA. Furthermore, application of this model shows firms' characteristics can influence the choice of entry mode. Similar to this, Harms and Méon (2013) develop a model focused on impact of greenfield FDI and MNA on economic growth.

3.2 A Model of Greenfield Investment, MNA and Growth

Greenfield FDI and MNA sales have different growth impacts and possibly interact differently with institutional factors. To find the relationship between Greenfield FDI, MNA, and economic growth, study follows the basic theme of the models developed by Nocke (2007), Wang (2009), Philipp Harms and Méon (2013) model. However,

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institutional factors are added to make a model as a moderator to sure the novelty of work. Furthermore, the study disaggregated total FDI into Greenfield investment and MNA to differentiate the effects of two different modes of entry on economic growth. The econometric models are as follows:

$$\text{Log } (Y)_{it} = \alpha_{it} + \alpha_1 \log(GFDI)_{it} + \alpha_2 \log(MNA)_{it} + \alpha_3 \log(DI)_{it} + \alpha_4 \log(HC)_{it} + \alpha_5 \log(TO)_{it} + \alpha_6 \log(POPG)_{it} + \alpha_7 \log(INF)_{it} + \mu_{it} \ldots\ldots \quad (3.3)$$

$$\text{Log } (Y)_{it} = \alpha_{it} + \alpha_1 \log(GFDI)_{it} + \alpha_2 \log(MNA)_{it} + \alpha_3 \log(DI)_{it} \; \alpha_4 \log(GFDI*IF)_{it} + \alpha_5 \log(HC)_{it} + \alpha_6 \log(TO)_{it} + \alpha_7 \log(POPG)_{it} + \alpha_8 \log(INF)_{it} + \mu_{it} \ldots. \quad (3.4)$$

$$\text{Log } (Y)_{it} = \alpha_{it} + \alpha_1 \log(GFDI)_{it} + \alpha_2 \log(MNA)_{it} + \alpha_3 \log(DI)_{it} + \alpha_4 \log(MNA*IF)_{it} \; \alpha_5 \log(HC)_{it} + \alpha_6 \log(TO)_{it} + \alpha_7 \log(POPG)_{it} + \alpha_8 \log(INF)_{it} + \mu_{it} \ldots. \quad (3.5)$$

Where:

Y_{it} = Gross demostic product

DI = Domestic Investment

GFDI = Greenfield FDI

POPG = Population growth

MNA = Merger and Acquisition

IF = Institutional Factors

SECENR = Human Capital

TO = Trade Openness

INF = Inflation

μ_{it} = Error term

The main objective of the study is to determine, which type of FDI (GFDI, MNA) has a stronger impact on economic growth of the host country with the role of institutional factors.

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3.3 Definition of institutional factors

There are six governance indicators that can be defined as:

3.3.1 Voice and accountability

“Voice and accountability captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media”.

3.3.2 Political Stability and Absence of Violence

“Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism”.

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3.3.3 Government effectiveness

“Government effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies”.

3.3.4 Regulatory quality

"Regulatory quality captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development".

3.3.5 Rule of law

"Rule of law captures perceptions of the extent to which agents have confidence in and abide by the rules of society, in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence".

3.3.6 Control of corruption

"Control of corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests".

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Table 3. 1

Definition of variables measurement

Variable	Definition	Source	Expected Sign
Dependent variable Economic growth	GDP per capita (current US$ million) represents economic growth	World Development Indicator 2015 world bank data base and economic surveys of each country	+
Domestic investment	Gross capital formation (annual % growth)	World Development Indicator 2015 world bank data base and economic surveys of each country	+
Greenfield FDI	Value of inward greenfield FDI in millions of dollars	Data of green field FDI is constructed by the method suggested by (César Calderón 2004).	+
Cross-border Mergers and Acquisitions	Value of merger and acquisition seller in millions of dollars	UNCTAD cross-border MNA database (www.unctad.org/fdistatistics).	+
Trade openness	Exports of goods and services as a % of GDP	World Development Indicator 2015 world bank data base and economic surveys of each country	+
Human capital	Percentage of Gross secondary school enrollment proxy of human capital	World Development Indicator 2015 world bank data base and economic surveys of each country	+
Inflation	Proxy by Consumer price index annual percentage	World Development Indicator 2015 world bank data base and economic surveys of each country	-
Population Growth	Population growth (annual %)	World Development Indicator 2015 world bank data base and economic surveys of each country	-
Institutional Factors		World bank. Governance indicators/ WGI	+

Source: World Development Indicator 2015 world bank

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3.4 Data sources

The present study will use secondary sources of data for analysis. Panel data set of 10 countries included in the selection of countries, out of which seven countries from lower middle namely Pakistan, India, Indonesia, Mongolia, Srilanka, Philippine and Vietnam, three countries named as China, Malaysia, and Thailand are from upper middle income group. Furthermore, the time period for this study consists of 15 years from 2002 to 2016. Data will be collected from world development indicator 2016 (WDI) world bank database and also from united nation conference on trade and development (UNCTAD).

The study will also take help regarding data from the economic surveys of all the countries include in this research. More importantly, data of greenfield FDI was not available on these databases. To sort out this data issue the author adopted the method suggested by Calderon et al. (2004) for the construction of greenfield FDI data.

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3.4.1 Selection of countries

All countries in the sample of this study mentioned in chapter one are belonging to the middle income (lower middle and upper middle income) countries of Asia.

Middle Income Countries (MICs) are defined as;

"The countries having GNI per capita of more than $1,045 but less than $12,736".

The reason to select this group of income is that when the countries from low income to middle income there is a threat called middle income trap. This group consist of more than two third population of the world and 70 percent poor people in the world belongs to this group (World Bank 2016).

Moreover, one third of global GDP comes from middle income countries. To narrow down the sample selection, study select Asian middle-income countries as statistics show that regarding inflow of FDI (Greenfield FDI, MNA) it remains on top in attracting foreign investment. Another reason of selection of these countries is that growth rate in Asian countries is not consistent some economies shows upward trend while most selected countries demonstrate down ward trend. The middle income countries also have the threat of "middle income trap". (Ozturk, 2015). Lastly, unlike the developed countries in Asia countries, there is an issue of data availability of Greenfield FDI. However, study selected the maximum countries in Asia having the data of Greenfield FDI.

3.5 Justification of variables and measurement

3.5.1 Dependent varible (Economic growth)

Economic growth is acknowledged the main objective of every country. The measurement of economic growth is attached to many theoretical and practical problems. But normally growth rates are used for the measuremnt purpose. Measurement of economic growth continue to rely upon the theoretical framework of the neoclassical economists but some issues in measurement are need to be discussed. Economic growth is linked with resource development, advancement in technology and formation of capital. This shows that growth cannot be articulated by a single measure.

For measurement, if the output of a country is changed we cannot say that economy of that country is performing well and travel to economic growth. Because there is the difference between proposed out and actual output and the reason of this difference may be under utilization of resources and available technology.

Furthermore, the difference between potential and actual growth rates is the cause to think these rates as an uncertain measure of economic growth. If it takes the gross national product (GNP) as a measure of economic growth, the problem of double counting in the calculation of GNP become a big hurdle in considering it as a measure. Another problem of a clear declaration of final and intermediate goods is there, as these products are not classified as intermediate or final output (Treasury, 1964).

Another study by Fisher (2005) explores that for the measurement purpose several alternatives have been used, for example, the level of education and capital accumulation. But these measures are not appropriate as both are the end result of growth. All the above discussion guides us to take measurement concept given by new classical school of thought. The new classical economist believes that it is better and appropriate to measure the economic growth by taking GDP per capita income as a measure.

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3.5.2 Human capital

There are two proxies widely used for the measurement of human capital. Years of school attainment or high grades achievement both have substantial position as a measure of human capital. Several short comings remained attached with these proxies. Firstly, both of measures overlooked the quality of schooling. More importantly, education attainment is much concerned with the time which a student had spent at school. It is necessary to see schooling as a value-added product to become a clear measure of human capital. Another important indicator “heath” is also used because it easily measurable.

The data of child mortality can be used to define health. But the shortcoming of this indicator is that nutritional status, maternal education is also related to child mortality. Furthermore,

physical health and proportion of illness together are problematic in nature and it is hard to measure these indicators (Strauss & Thomas, 1995). Human capital can be measured empirically with help of educational quantity explained as years of school attainment. If the age of population consider 25 or above and in another sample take 15 years, the findings remain the same for the measurement of human capital (Barro, 2001). The age group 15 years or above shows better performance especially in the case of developing countries. Educational attainment as a measure of human capital considered a good option as the reliable data of quantity of education is easily available (Barro & Lee, 2001).

3.5.3 Foreign direct investment

The most agreed and practical definition also called operational meaning of FDI is that a type of foreign investment represents the interest and aim of investor by gaining a long term interest in a transnational corporation in another economy. The long trem interest reperesents the relationship between multinational corporation and the investor. In detail, the demand of this relationship is to get a considerable influnece in that enterprise. Influnce means control on the management of MNCs. The requirement for establishing this relationship is that FDI as ownership acquired 10 percent of the ordinary shares or voting power in a business enterprise operating in a country (Patterson, 2004).

3.5.4 Trade openness

Trade ratio (the ratio of exports plus imports to GDP) is the most common and popular measure of the trade openness (Barro, 2001). The data of this measure is easily available for most of the countries and it also provide a ground for comparing the cross-country situation. It is also called trade share and written as following.

$$\frac{Exports + Imports}{GDP}$$

Trade openness can be measured by many other proxies with their shortcomings. Population densities are also used to measure the openness. The calculation of this proxy is obtained simply divided total population to total are. The reason to take this proxy is that more international relations shows that the concerned country has high density. The other measures are related to trade restrictions. The tax on trade and tariff barrier are the measure of trade barrier and have connection with trade openness. All these measures have measurement errors and their own shortcomings. Underestimation of actual tariff is a big hurdle to make it possible that tariffs should takes as a good measure (Yanikkaya, 2003).

The best measure could be an index containing all barriers and average of tariff and non-tariff. Many other authors develop openness index but the problem is that data of these indices is not available for most of the countries. Coming back to first point, a problem with trade ratio divert the attention of the researchers towards a point that it is assimilated with foreign markets instead of trade policy aligned. However, trade (Exports of goods and services as a % of GDP) is frequently used measure of trade openness as it is a broad measure and availability of data is not an issue unlike other measures (David, 2007).

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3.5.5 Inflation

To measure the inflation there are two main indices, gross national or domestic product deflator and consumer price index (CPI). According to World Bank, “consumer price index reflects changes in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly”. The Laspeyres index is used to measure inflation and formulae for this calculation is as follows:

$$Lt = \frac{\sum_{j}^{n}=1 \text{ pjt qj0}}{\sum_{j}^{n}=1 \text{ pj0 qj0}}$$

Where Lt is the consumer price index and the 0 shows the value of base year, t refers

to the current year and j refers to the good. Due to change in the selection of base years

there may be different results received. Another method to measure inflation is GNP deflator.

But this deflator is not a reliable calculator of inflation as it is basically use for the monetary studies as nominal money balance deflator (Alchian & Klein, 1973). Furthermore, CPI is broadly used measure of inflation but in some calculation it gives overestimated results like cost of living (Shapiro & Wilcox, 1996).

Furthermore, an effort to calculate the biased results of CPI, considering it as a measure of inflation was done by Bryan and Cecchetti. They used a statistical framework to calculate weighting bias appeared in CPI. However, these weighting biases that are negligible because statically have very low value(Bryan & Cecchetti, 1993). The above discussion shows that CPI is the most reliable and widely used measure of inflation.

3.5.6 Population Growth

Population growth rate is defined as:

"The increase in a country's population during a period, usually one year, expressed as a percentage of the population at the start of that period". It reveals that total number of births in one year and deaths in the same period, also including the number of individuals migrating to

and from a specific country. The true picture of population growth trend can be seen through growth rate in a single year World Bank (2001).

3.5.7 Institutional Factors

Each of six aggregate WGI measures (VA, PS, GE, RQ, ROL, COC) are constructed by averaging together data from the original sources that correspond to the concept of governance being measured. The six aggregate indicators are reported in two ways: (1) in their standard normal units, ranging from approximately -2.5 to 2.5, and (2) in percentile rank terms from 0 to 100, with higher values corresponding to better governance.

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3.6 Panel Data Analysis

Any data which contains N cross sections and T number of observations is stated as Panel Data. For instance, the simple equation for this would be as follows where effect of one independent variable "W" on "Z" over the time would be examined:

$$Z_{it} = a + \beta_1 W_{it} + u_{it} \quad \text{.....(3.7)}$$

Where Z_{it} represents the dependent variable for N number of cross sections over the T number of periods. Panel data is called balanced panel if all the cross sections are same across the time. However, the unbalanced panel means that few of the observation in the data are not available across time for all the cross sections.

Moreover, in those cases where intercept would not remain same for all the cross sections will include some degree of heterogeneity in this panel by relaxing the fact that the constant *a* must be identical for all cross-sections. Following equation describes the situation. However, it may also be asked that if intercept varies across cross sections, slope values for individual cross sections can also vary. According to Asteriou and Hall (2007) it will require a separate analysis.

$$Z_{it} = a_i + \beta_1 W_{it} + u_{it} \quad \text{.....(3.8)}$$

3.7 Methods of estimation

Panel data can be analyzed using different methods including panel data estimation using a common intercept, using fixed effects estimation or using the panel data estimation with random effects.

3.7.1 Pooled Regression

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If z_i contains only a constant term, then ordinary least squares provides consistent and efficient estimates of the common α and the slope vector β (Greene, 2003b). furthermore, the principal assumption for pool model is cross-sectional dimension should have no differences among the data matrices. In the pool model estimation, there is common constant α for all cross-sections(Asteriou & Hall, 2007b)

3.7.2 Common Constant Method

The common constant means that the intercept for the different cross sections do not vary and same intercept has been allowed. These cross sections might be companies, countries or other entities that can form the panel data. According to (Asteriou and Hall (2007a)) this method

assumes that data is priori homogenous means that data includes the similar type countries, companies etc. Similar type of companies might be high growth, high income countries or the countries from a similar region like European Union etc. Nonetheless, this study intends to involve the estimation of fixed effect and random effect models and the selection of the appropriate model at the end.

3.7.3 Fixed Effect Method

The fixed effect method means that intercept is measured as cross sections specific. In the fixed effect method intercepts for each cross section would be reported separately. This case will include the model as is presented in the equation 3.2 above. It is a kind of dummy variable method because it includes dummy for each cross section to capture the different constant for every group. That is why this method is called least square dummy variables (LSDV). Following model can better explain the mechanism of the fixed effect estimation in the panel data format.

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$$Z_{it} = a_i + \beta_1 W_{it} + \cdots \ldots \ldots \beta_k W_{kit} + u_{it} \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots .. (3.9)$$

This can be rewritten as follows:

$$Z = d_a + W'_\beta + u \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots .. (3.10)$$

In the above equation dummy variable is used for every group to measure the different intercept for every cross section. It will provide the group specific estimates for the constants.

However, the estimation of fixed effect method requires some post estimation tests in order to diagnose if the fixed effect method suits. It can be confirmed by using the standard F -test that

will provide the F value. If the F value is greater than the F critical value, the null hypothesis of homogeneity of across cross sections will be rejected. In that case, common constant method will have rejected and fixed effect method will be applicable.

$$F = \frac{(R^2_{FE} - R^2_{CC})/\ (N-1)}{(1 - R^2_{FE})/\ \ (NT - N - K)} \sim F(N-1, NT-N-K) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots . (3.11)$$

Where, R^2_{FE} represents the coefficient of determination for the fixed effect estimation whereas the R^2_{CC} represents the coefficient of the determination for the random effect mode. The null hypothesis is the homogeneity of cross section means if the null hypothesis in not rejected common constant method will be appropriate.

3.7.4 Random Effect Model

Random effect method assumes that intercepts are not fixed across the groups but are random parameters. This method is treated as an alternative to the estimation of the fixed effect method. Similar to the previous diagnostic, this decision to choose among fixed and random effect will depend on the post estimation tests. Hence the variability of the constant for each section comes from the fact that:

$$a_i = a + \ v_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots . (3.12)$$

Where v; is a zero-mean standard random variable. As an outcome, the following random effect model can be defined:

$$Z_{it} = (a + v_i) + \ \beta_1 W_{1it} + \ \beta_2 W_{2it} + \ \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots + \beta_k W_{kit} + \ u_{it} \ldots\ldots\ldots .. (3.13)$$

$$y_{it} = a + \beta_1 W_{1it} + \beta_2 W_{2it} + \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots + \beta_k W_{kit} + (v_i + u_{it}) \ldots\ldots\ldots\ldots (3.14)$$

Random effect model is based on the assumption about the distribution of random components that makes it less attractive. This shortcoming comes in because of the biased and inconsistent estimates of random effect in that the disregarded cross section effect might show a relationship with regressors. In this case the estimates might prove biased and inconsistent. Nonetheless the random effect model brings the certain compensations because it requires lower number of parameters as are required in the fixed effect estimation. In addition, it could also come in as attractive because it does not hinder the inclusion of the dummies in that it does not restrict the additional regressors having equal observation within the cross sections.

According to Asterio and Hall (2007) using the random effects method requires the careful examination on the decision of choosing the most appropriate estimation between fixed effect and random effect method. However, the random effect estimation is superior as compared to the fixed effect model in that random effect estimation is generalized least square estimator whereas the fixed effect model deals only where deviation of individual effect is rather large. As mentioned earlier, random effect estimation is based on the assumption of uncorrelated regressors (see, for example, Asterio & Hall, 2007).

Besides the arguments given above, both tests should also be seen in terms of their application. For instance, random effect model differentiates the cross sections on the basis of error terms whereas the fixed effects model is based on the difference in the intercepts across the cross sections. Moreover, Asterio and Hall, (2007) stated that fixed effect method suit the balanced panel and random effect model suits in the situation where observations are low across the groups.

3.7.5 The Hausman test

Asterio & Hall, 2007 stated that the decision between the choice of random effect method or fixed effect method can be made up based on the Hausman test[1]. Given the estimates of fixed effect method, the results under the random effect method are analyzed if they are as good as got under the fixed effect method. The Hausman test examines the null hypothesis that random effect estimates are consistent against the alternative hypothesis that estimates from random effect are not consistent See, for example (Ahn & Moon, 2014; Asteriou & Hall, 2007a; Hausman, 1978).

The following equation explains the test:

$$H = (\hat{\beta}^{FE} - \hat{\beta}^{RE})'\left[Var\left(\hat{\beta}^{FE}\right) - var\left(\hat{\beta}^{RE}\right)\right]^{-1}(\hat{\beta}^{FE} - \hat{\beta}^{RE})' \sim x^2(k) \ldots\ldots (3.15)$$

In case the estimates of Hausman test show significant results, it means that null hypothesis of consistent estimates of random effect model would be rejected. On contrary, insignificant results states that null hypothesis of consistent random effects cannot be rejected.

[1] Hausman (1978) test states that according to null hypothesis of zero correlation, the estimates from ordinary least square or generalized least square are consistent however, ordinary least square estimates may not be efficient. On contrary, under the alternative hypothesis ordinary least square is consistent while the generalized least square is inconsistent.

CHAPTER FOUR

EMPIRICAL RESULTS

4.0 Introduction

This chapter four presents the findings of the empirical tests applied on the variables selected for this study and discussion of these results. The focus of the research is to find the effect of greenfield foreign direct investment, merger and acquisition and institutions on economic growth in ten Asian countries. The results present that institutions play a vital role to change the effect of greenfield FDI and merger and acquisitions towards economic growth in selected countries of Asia. The voice and accountability has a negative impact on the greenfield FDI performance to enhance economic growth. While the political stability has positive impact on to achieve economic growth by GFDI. In selected Asian countries control of corruption shows a positive impact on economic growth means "grease the wheels" rule is applicable. While, regulatory quality is negatively related to economic growth achieved by GFDI. In addition, government effectiveness and control of corruption both have positive impact on economic growth when interacting with MNA.

4.1 Descriptive Statistics of Variables

Descriptive statistics of data is used to define the basic features of dataset such as mean, median, and mode are the three measures of central tendency of a random variable (Gujarati, 2004). The key aspect of descriptive statistics is to present quantitative descriptions of the data in a manageable form like table. Thus, descriptive statistics are estimated for all the variables included in the model.

Table 4. 1
Descriptive Statistics of variables

Variable	Mean	Maximum	Minimum	Std. Dev.	Obs
GDP	2.9492	11.3070	0.4771	2.4724	150
GFDI	21.574	268.571	-4.061	53.014	150
MNA	2.3890	54.9126	-4.967	5.8238	150
DI	3.337	4.063	2.640	9.2904	150
TO	43.502	115.373	8.6945	26.226	150
INF	5.9101	25.0566	-0.895	4.6182	150
POPG	1.2514	2.12084	0.1427	0.5228	150
SECENR	19.457	119.400	0.2759	30.044	150
VA	2.5318	3.45026	1.3127	0.6510	150
PS	3.2809	5.10953	1.1936	0.9050	150
GE	1.9725	3.23873	1.1876	0.4667	150
RQ	1.8078	2.83654	1.1239	0.3715	150
ROL	1.7445	2.64048	1.0252	0.3951	150
COC	2.5356	3.47679	1.8660	0.3262	150

Note: GDP= Gross domestic product; GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption.

Table 4.1 depicts the descriptive statistics of dependent and independent variables taken by the present research. In this study, dependent variable is GDP per capita whereas, GFDI, MNA, TO, POPG, INF, SECENR and six institutional factors (VA, PS, GE, RQ, ROL and COC) are used as independent variables. These six variables are taken as to identify the interaction effect or simultaneous influence of these variables and GFDI, MNA on economic growth of selected

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countries in Asia. Table 4.1 shows that TO has the highest means value 43.50 although GFDI show the second highest average value 21.57. The mean value of GDP is 2.9.

The average population growth rate is 1.254 percent for whole sample size of countries, although peak value for growth of population is 2.12 percent and lowest percentage of population growth is 0.1428. The other macroeconomic variables like inflation have average rate 5.19 for over entire group of countries, however highest values accounted for 25 percent, and lowest -0.9 percent which could be considered as monotonic and should leave as they are (Sarel, 1996). The average value for secondary school enrolments is 19.29 million while the minimum value of school enrolment is 0.27 million while the maximum value is 119 million. The descriptive statistic of institutional factors show that PS has highest mean value 2.28.

4.2 Multicollinearity Analysis

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Multicollinearity is a related to the set of regressors variables excluding the account that existence of dependence between regressors and dependent variable (Farrar & Glauber, 1967).

As far as the detection of multicollinearity among independent variables is concerned, it is frequently determined by using two measures firstly, by pairwise high correlation between two independent variables. Secondly, large variance inflating factors (VIF) value (Mansfield & Helms, 1982). Variance inflating factor is a measure of the degree to which the variance of the OLS estimator is inflated because of the collinearity. Complementary to this, the inverse of VIF is called tolerance (TOL) (D. Gujarati).

Table 4. 2
Correlation Matrix

	GDP	GFDI	MNA	DI	TO	POPG	SECENR	INF
GDP	1							
GFDI	0.2929	1						
MNA	0.1771	0.5939	1					
DI	0.1417	0.5442	0.3865	1				
TO	0.3873	-0.122	-0.1691	0.062	1			
POPG	-0.3255	-0.4217	-0.2249	-0.341	-0.1965	1		
SECENR	-0.1902	0.6213	0.446	0.1562	-0.4734	-0.1031	1	
INF	-0.3466	-0.1914	-0.1097	0.0926	-0.1778	0.2302	-0.095	1

Note: GDP= Gross domestic product; GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment.

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Pairwise correlations indicate that a problem of multicollinearity exists when two independent variables are highly correlated and value for coefficient of correlation exceed or meet 0.90 (Gujarati, 2004; Mansfield & Helms, 1982). The correlation matrix presented in table 4.2, indicates that there is absence of multicollinearity among regressors. The highest value in this matrix is 0.6213 which shows a correlation between GFDI and SECENR.

The second highest value is 0.5939 demonstrate the correlation between GFDI and MNA. While another higher value for correlation -0.4734 exists showing the relationship between TO and SECENR. All these apparently high values in Table 4.2 are in safe area. As the yardstick value for multicollinearity is 0.90. Therefore, it may be called that there is no multicollinearity in explanatory variables.

Table 4. 3
Multicollinearity Diagnostic Test: VIF

Variable	VIF	1/VIF
GFDI	3.22	0.310394
MNA	1.61	0.621128
DI	1.72	0.580308
TO	1.5	0.667452
POPG	1.38	0.727015
SECENR	2.37	0.421578
INF	1.21	0.82545

Note: GDP= Gross domestic product; GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; DI=Domestic Investment; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment.

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According to the rule of thumb of O'brien (2007) which is most commonly used in research is the "rule of 10" which means that VIF value should not be more than 10. The highest value of VIF in this calculation is 3.22 for GFDI showing that it is less than the threshold level value for multicollinearity. In Table 4.3 all the VIF values are less than 10 showing the absences of multicollinearity in dataset of these variables.

4.3 Homoscedasticity Analysis

In classical linear regression model (CLRM) it is assumed that in a regression model disturbance should be spherical, means that error term u_i has uniform variance across observation and are not correlated with one another. If disturbances have same variance it is said to be the case of homoscedasticity. On the contrary, non-uniform variance of the disturbance affix a problem with itself called heteroscedasticity (D. Gujarati; Kennedy, 2003).

Furthermore, to detect heteroscedasticity the most common methods used in research are the Breusch-Pugan and white tests. Thus, present study used Breusch-Pagan-Godfrey test to find the heteroscedasticity in the dataset of 10 selected Asian countries.

The criteria to decide the presence of heteroscedasticity is that the value of p is greater than 0.05 ($p>0.05$) depicts absence of heteroscedasticity means that null hypothesis will be rejected which is there is heteroscedasticity. Complementary to this, if p value is less than 0.05 ($p<0.05$), allows us to do not reject null hypothesis which is about existence of heteroscedasticity. Breusch-Pagan-Godfrey has outcomes which is found to be significant at $p<0.05$ supports the presence of heteroscedasticity in the model of present study.

Table 4. 4
Heteroscedasticity Test

Test	Statistic	DF	Pr > ChiSq
Breusch-Pagan	4.74	1	0.0295

Note: If P, Value < 0.05 (or your chosen alpha value); you reject the null and infer the presence of heteroskedasticity

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If the sample size is large it is suggested that this problem can be rectified by using White's Heteroscedasticity-consistence standard errors also knowns as robust standard errors (D. Gujarati). Another essential point, this test is more appropriate test to remove heteroscedasticity from data if model is fixed effects (Greene, 2003a). Furthermore, these standard errors are asymptotically valid in the presence of any kind of heteroscedasticity (Wooldridge, 2010). Therefore, the White's corrected standard errors provide us with a better and more accurate estimation. (Asteriou & Hall, 2007a).

4.4 Auto-Correlation Analysis

The assumption regarding autocorrelation in classical linear regression model (CLRM) is that the error terms should be uncorrelated. One error term is not related to error term at time (t – 1) or any other term in the past. To see the presence of autocorrelation two commonly used test are Durbin-Watson (DW) and Breusch-Godfrey LM test. However, DW test has several drawbacks such as it may give results inconclusive and unable to detect higher orders of serial correlation (Breusch & Pagan, 1980; Debarsy & Ertur, 2010). Therefore, present study use Breusch-Godfrey LM test which is most appropriate for serial correlation. The dataset of ten selected Asian countries has problem of autocorrelation, in detail, the LM test have p value less than 0.05 as the null hypothesis for autocorrelation do not be rejected.

Table 4. 5
Lagrange Multiplier Test (LM)

Breusch-Godfrey Serial Correlation LM Test	
F-statistic	178.9614
P-value	0.000

Note: The null hypothesis of the Breusch-Godfrey Lagrange multiplier test is that there is no serial correlation in the residuals up to the specified order.

The autocorrelation problem is tackled by White cross-section clustered estimator. The estimator is designed to accommodate arbitrary heteroscedasticity and within cross-section serial correlation. This method is the most appropriate to remove autocorrelation problem (Arellano, 1987; Wooldridge, 2010).

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4.5 Two Stage Least Squares Instrumental Variable estimation for endogeneity

Endogeneity issue depicts there is a correlation between some of the explanatory variables and the error term of corresponding equation. We have checked the endogeneity of GFDI and MNA collectively called FDI. The results of Durbin and Wu-Hausman test show that endogeneity problem exit in the model. The problem could be tackled by using instrumental variable or by lag value of FDI.

While the study control for the endogeneity problem by using instrumental variable approach proposed by (Alfaro et al., 2004; Borensztein et al., 1998). The study used real exchange rate, voice and accountability and government effectiveness as instruments for disaggregated FDI. The two-stage least squares (2SLS) estimation was done by using instruments to tackle the problem of endogeneity. Furthermore, the results of the endogeneity, use of weak instrument and over identification are shown in appendix B.

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4.6 Panel Data Analysis

Several methods of estimation (linear) panel regression models, such as common effects, fixed effects and random effects can be used for analysis in dataset of ten selected Asian countries. But to search the most appropriate model different selection tests are applied. To choose between the common and fixed effect, redundant fixed effect test is performed. In the selection criteria null hypothesis is for common effect while the alternate define fixed effect model (Gujarati, 2004).

4.7 Selection among pool model, fixed effects and random effects model

The outcomes of redundant fixed effect test reject the null hypothesis of pool model and do not reject the alternate. So, the fixed is appropriate for the dataset of this study. For further selection between fixed effects and random effects a test is performed named as Hausman test. Selection criteria for decision is p-value <0.05, and for Hausman test, study test H0, the random effects are appropriate and H1, the fixed effects are consistent and efficient (Asteriou & Hall, 2007a).

Here in the present study, the results of Hausman test reject the null hypothesis and do not reject the alternate, recommends that fixed effect model is more appropriate for the following analysis. Accordingly, to analyse the panel dataset of ten selected Asian countries fixed effects are consistent and efficient.

Table 4. 6
Redundant fixed effect test, Hausman test

Test name	Statistic		P vale
Cross-section F	23.115764		0.0000
Cross-section Chi-square	141.24842		0.000
Test name	**Cross-section random**	**Chi-Sq. d.f.**	**P vale**
Hausman test	45.428741	7	0.000

Note: If the difference between the estimates is significant, so we reject the null hypothesis that the random effects model is consistent and we use the fixed effects estimators.

4.8 Empirical results

To empirically evaluate the role played by greenfield FDI and merger and acquisition to achieve economic growth the model will be estimated by applying panel data techniques. The problem of panel data like endogeneity is removed by using instrumental variables.

The other problem of panel data such as heteroscedasticity and auto correlation is corrected by applying FGLS (White cross-section) because this method is more appropriate to rectify the data problem like heteroscedasticity and auto-correlation. Feasible GLS is a transformed version of OLS and asymptotically more efficient than OLS (Wooldridge, 2010).

4.8.1 The Results of Fixed effect estimation

Table 4.7 presents the results of Fixed effect estimation on the relationship greenfield foreign direct investment, merger and acquisition, institutions and economic growth. To do analysis the present study determine that fixed effect model is more appropriate which is the result of several selection tests. The effect of greenfield foreign direct investment and merger and acquisition is measured on economic growth for ten Asian countries with interactive effects of institutions.

To get the results of these foreign investments the fixed effects model is applied. The next subsection consists of outcomes and discussions and explanations on the results.

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Table 4. 7 *Panel data estimations (fixed- effect estimations)*

Variable	Coefficient	t-Statistic	Prob.
GFDI	0.2810	1.4165	0.1590
MNA	0.1815	3.7184	0.0003*
DI	0.3884	0.9430	0.3474
TO	-0.7433	-3.7602	0.0003*
INF	-0.0056	-0.4095	0.6828
POPG	-0.1019	-1.0569	0.2924
SECENR	1.0314	2.1262	0.0353**
R-squared	0.7804		
Adjusted R-squared	0.7540		
F-statistic	29.5543		
Prob(F-statistic)	0.0000		
N	150		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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Table 4.7 show that F-statistics and its probability value is significant means that the whole model is significant. Table depicts that MNA, TO and SECENR have significant relationship with economic growth of ten selected Asian countries. Whereas GFDI, DI, POPG and INF show insignificant relationship with economic growth. In whole table, the only single significant negative value for TO show that it is negatively affixed with the economic growth.

The results show that coefficient of GFDI have positive sing but with insignificant probability value. It means that GFDI has not a significant impact on economic growth in the selected Asian countries. The study's findings are consistent with many studies (Calderon et al., 2004). state that neither type of FDI show a positive impact to economic growth in developing as well

as industrial countries. Another study claims that different experiences from developing countries suggest that FDI and trade, by themselves, may not guarantee economic growth. Institutional stability and good macroeconomic policies can affect the country's economic growth (Makki & Somwaru, 2004). Furthermore, FDI is a positive contributor to the economy but in Pakistan it has not contributed much to the economic growth this could be due less developed infrastructure and human resource (Falki, 2009).

Similarly, possible reason of current study's results is that the countries have not such an absorptive capacity to gain the positive effect of foreign investment on economic growth or the level of education is not at the level to gain the required results. As it is claimed that an availability of absorptive capacity can play a role to accelerate the economic growth of host country. Different types of FDI have different effect on the economy but GFDI and MNA do not have significant positive impact on the host countries. Additionally, to gain positive effect from GFDI a minimum threshold level of human capital is needed (Eren & Zhuang, 2015).

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The results of the current study show that the MNA has positive coefficient value with significant probability vale means that it is positively related to the economic growth in these countries. It shows that one percent increase in MNA have 0.18 percent increase in GDP of selected Asian countries. The results show that MNA is that type of investment which can positively influence the economic growth in Asian countries. In developing host economies MNA can derive substantial positive impact, as this type of investment involve cross-border capital transfers that is a big source of total investible funds available to receiving economies. Furthermore, the economies with low investment can get more profit from MNA if it induces sequential and associated FDI by the acquiring companies. The MNA is also a source of transfer technology like GFDI in host economies that do not possess these types of advance

technology. The MNA may introduce managerial innovative practices in the host economy and it is easy for a country to involve in global marketing networks.

The results of the study are consistent with previous studies, as Chen and Findlay (2003) state that Foreign affiliates established through MNA may easily adopt new technology because they already have the capability to absorb advance technology. Additionally, diffusion of technology is speedily due to stronger linkage between two affiliates. Furthermore, Liu, Shu, and Sinclair (2009) claim that FDI inflows and inward MNA are the substantial elements to accelerate economic growth in Asian countries. It is also found by another study that both GFDI and MNA contribute positively to enhance economic growth (Luu, 2016).

The findings show that the coefficient of DI is positive but the results is not significant. It shows that DI do not accelerate the economic growth in Asian countries. One of the possible reason of the result is that the insignificance of DI might be due to small nature of private capital in the host economy or the country has been dominated by other sector of investment like government sector over the years. The other rational behind this result is that the domestic firm has low capability to compete the advance technology owned firms and may not be beneficial to economic growth. The results of the current study are consistent with other studies. Makki and Somwaru (2004) find that coefficients for domestic investment is statistically insignificant that means the domestic investment do not contributes positively to economic growth. Furthermore, both private capital and foreign investment have small and not a statistically significant effect on the economic growth (Akinlo, 2004). The reason of insignificant impact of domestic investment is that the domestic investors may lack the ability to compete with more efficient foreign companies(Acar, Eris, & Tekce, 2012).

The result of trade openness is negatively significant means that impact of TO is not positive on economies of these Asian countries. The relationship between TO and economic growth has been theoretically controversial, some theoretical studies claim TO, is not always beneficial to economic growth. As the theoretical studies by Redding (1999) Young (1991) claims that TO openness due to comparative advantage in term of potential productivity growth in an economy might be welfare reducing element.

The results of the are consistent with previous studies like Makki and Somwaru (2004) estimated that the co-efficient for trade is not statistically significant, means that TO is not contributing economic growth. Another study points out that there is non-linear pattern between trade openness and growth. The low-quality export is considered the main cause of insignificant of TO on economic growth. Additionally, TO may enhances growth in those countries which have specialized in high quality products (Huchet-Bourdon, Le Mouël, & Vijil, 2011). In the same way, all types of TO measures, named as real openness, current openness, and fraction of liberalization are checked but all are not significantly associated with economic growth (Ulaşan, 2015). Similarly, the findings of a study support the view that there is non-linear relationship between TO and economic growth (Zahonogo, 2017).

While numerical value of coefficient of SECENR depicts its impact on GDP. This beta value implies that increase in SECENR has a substantial positive impact to make economic growth well. Numerically, one percent change in SECENR stood change in GDP by 1.03 percent. Present results of the study are also consistent with previous studies. Human capital investment in less-developed areas contributes to economic growth(Fleisher, Li, & Zhao, 2010). Furthermore, human capital is an important instrument to accelerate economic growth (Hanushek & Woessmann, 2012; Siddiqui & Rehman, 2017).

4.9 Fixed effect estimation

Fixed effect estimation is used to check the interaction effect of institutional factors on the relationship of greenfield FDI and economic growth in ten selected Asian countries. The data set for this analysis has problem of heteroscedasticity and autocorrelation which is tackled by using FGLS White-Cross estimation. Baron and Kenny (1986) stated that a directional change and/or strength of the interaction terms (regressors $*$ independent variable) are studied to find the presence of interaction effect on relationship of regressors and dependent variable in the model.

4.9.1 The interaction of six institutional factors on the relationship of greenfield FDI (GFDI) and economic growth in ten selected Asian countries.

Institutions have a protruding rule to economic growth of a country. Good institutions with better governance play a role to attract foreign investment that subsequently influence economic growth. Additionally, institutions have capability interact the effect of main determinants of growth like FDI. Furthermore, institutions and governance improve the development performance (Fayissa & Nsiah, 2013). Similarly, good institutions can directly affect the inflow of FDI in developing counties and without good governance economic growth stand on a vulnerable position (Asiedu, 2013).

4.9.1.1 The interaction Effect of VA on the Relationship of greenfield FDI and GDP in ten Asian countries.

To detect the interaction effect of voice and accountability (VA) to relationship between greenfield FDI and economic growth in ten Asian countries following model has been tested.

Table 4. 8
The interaction Effect of voice and accountability

Variable	Coefficient	t-Statistic	Prob.
GFDI	1.0981	6.0449	0.0000*
MNA	0.1655	3.4378	0.0008*
DI	0.3213	0.8425	0.4011
TO	-0.8539	-5.1982	0.0000*
POPG	0.0537	0.5538	0.5806
SECENR	0.8124	2.2092	0.0289**
INF	-0.0047	-0.3881	0.6986
VA	5.976	3.2450	0.0121**
GFDI*VA	-0.7862	-3.1583	0.0020*
R-squared	0.8109		
Adjusted R-squared	0.7849		
F-statistic	31.2107		
Prob(F-statistic)	0.0000		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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To detect the interaction effect of voice and accountability (VA) to relationship between greenfield FDI and economic growth in ten Asian countries following model has been tested.

The table 4.8 presents that in this model GFDI has positive beta sign and it is statistically significant. The main variable in this model is VA, having negative sign and statistically significant, when the interaction effect is applied in the form of GFDI*VA. The interaction effect institutional factor namely voice an accountability (VA) in the form of GFDI*VA in this model has proved. It is negative and statistically significant means that the relationship between GFDI and economic is weaker with interaction of VA.

4.9.1.2 The interaction Effect of PS on the Relationship of greenfield FDI and GDP in ten Asian countries.

Table 4. 9
Political Stability and Absence of Violence

Variable	Coefficient	t-Statistic	Prob.
GFDI	0.9903	1.7102	0.0896*
MNA	0.1976	4.4894	0.0000*
DI	0.4471	1.1001	0.2733
TO	-0.7762	-4.2722	0.0000
POPG	-0.0151	-0.1443	0.8855
SECENR	0.7622	2.0333	0.0440
INF	-0.0093	-0.7920	0.4298
PS	4.156	1.256	0.344
GFDI*PS	-0.5258	-1.0411	0.2998
R-squared	0.7884		
Adjusted R-squared	0.7594		
F-statistic	27.1236		
Prob(F-statistic)	0.0000		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

To estimate the interaction effect of Political Stability and Absence of Violence (PS) on relationship between greenfield FDI and economic growth in ten Asian countries a model has been tested. In table 4.9 sign of this core variable with its interaction (GFDI*PS) is negative but the results are not significant.

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4.9.1.3 The interaction Effect of GE on the Relationship of greenfield FDI and GDP in ten Asian countries.

The main purpose of this model is to distinguish the impact of greenfield FDI on GDP with or without applying interaction (GFDI* GE) in Asian selected countries. In this model, interacting

Table 4. 10
The interaction Effect of Government Effectiveness

Variable	Coefficient	t-Statistic	Prob.
GFDI	-0.1614	-0.4397	0.6609
MNA	0.1715	3.7012	0.0003
DI	0.3845	0.9639	0.3369
TO	-0.7308	-4.1338	0.0001
POPG	-0.0870	-0.8717	0.3850
SECENR	0.7944	2.2306	0.0274
INF	-0.0021	-0.1887	0.8506
GE	-6.4528	-1.0411	0.1034
GFDI*GE	0.7460	1.7065	0.0903
R-squared	0.7936		
Adjusted R-squared	0.7652		
F-statistic	27.9821		
Prob(F-statistic)	0.0000		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

variable has positive sign with significant result. The meaning of this result is that the institutional factor GE has a statistically significant effect on the relationship of GFDI and GDP. Furthermore, it may be said that one percent change in GE could change the impact of GFDI on the economic growth .74 percent. The GE is positively accelerating the impact of GFDI towards economic growth of Asian countries.

4.9.1.4 The interaction Effect of RQ on the Relationship of greenfield FDI and GDP in ten Asian countries.

Table 4. 11
The interaction Effect of Regulatory Quality

Variable	Coefficient	t-Statistic	Prob.
GFDI	0.7955	2.8537	0.0050*
MNA	0.1473	3.5355	0.0006*
DI	0.4613	1.1121	0.2681
TO	-0.7962	-3.6680	0.0004*
POPG	-0.1362	-1.4627	0.1459
SECENR	1.0507	2.1246	0.0355
INF	-0.0059	-0.4764	0.6345
RQ	7.9545	1.2560	0.0195
GFDI*RQ	-0.9100	-2.6910	0.0081*
R-squared	0.7892		
Adjusted R-squared	0.7603		
F-statistic	27.2582		
Prob(F-statistic)	0		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

In this model study, has checked the interaction effect of regulatory quality on relationship of greenfield FDI and economic growth in ten Asian countries. When interaction term GFDI*RQ applied results show that the probability values for is significant. It means that RQ is negatively interact the effect of GFDI on economic growth.

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4.9.1.5 The interaction Effect of ROL on the Relationship of greenfield FDI and GDP in ten Asian countries.

Table 4. 12
The interaction Effect of Rule of Law

Variable	Coefficient	t-Statistic	Prob.
GFDI	0.267634	0.954291	0.3417
MNA	0.144753	2.433983	0.0163
DI	0.267606	0.776433	0.4389
TO	-0.668069	-3.25318	0.0015
POPG	0.062904	0.747504	0.4561
SECENR	1.204091	2.43688	0.0162
INF	-0.016555	-1.262932	0.2089
ROL	-3.854	-2.356	0.0762
GFDI*ROL	0.203912	0.772025	0.4415
R-squared	0.81117		
Adjusted R-squared	0.785224		
F-statistic	31.26367		
Prob(F-statistic)	0		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4.12 depicts that effect of interaction (GFDI*ROL) on the relationship between GFDI and GDP has checked. In detail, the sign of rule of law (ROL) is positive means that it is positively related to the dependent variable but this result is not significant. Furthermore, the results show that ROL just has the positive value but insignificant result means that this institutional factor has no interaction capacity in the given sample of selected Asian countries.

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4.9.1.6 The interaction Effect of COC on the Relationship of greenfield FDI and GDP in ten Asian countries.

Table 4. 13
The interaction Effect of Control of Corruption

Variable	Coefficient	t-Statistic	Prob.
GFDI	-0.4427	-0.9580	0.3398
MNA	0.1667	3.6609	0.0004
DI	0.3917	0.9655	0.3361
TO	-0.6932	-3.2843	0.0013
POPG	-0.0730	-0.8008	0.4247
SECENR	1.0454	2.1306	0.0350
INF	-0.0111	-0.9290	0.3546
COC	-8.5218	-2.5421	0.0092
GFDI*COC	0.8344	2.3642	0.0195
R-squared	0.7898		
Adjusted R-squared	0.7609		
F-statistic	27.3414		
Prob(F-statistic)	0.0000		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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To estimate interaction capability of an important variable from institutional factors, control of corruption (COC), on the relationship of greenfield FDI and GDP a model has been tested on the data set of ten Asian countries.

To estimate interaction capability of an important variable from institutional factors, control of corruption (COC), on the relationship of greenfield FDI and GDP a model has been tested on the data set of ten Asian countries.

The interaction (GFDI*COC) is applied in the model produced a positive change. Therefore, interaction term used in the model proves its interaction effect. Another meaning of the result is that interaction effect of COC strengthen the relation between GFDI and economic growth in ten selected Asian countries. Specifically, one percent change in COC can change the effect of GFDI on economic growth by 0.83 percent in selected Asian countries.

4.10 The interaction of six institutional factors on the relationship of merger and acquisition (MNA) and economic growth in ten selected Asian countries.

The present study separately checked the moderating role of merger and acquisition on the relationship of MNA and economic growth in ten selected Asian countries. Luu (2016) states that MNA have the capacity to accelerate economic growth. Similarly, it can play a positive role particularly in high-tech industries (Yang, Wei, & Chiang, 2014).

Furthermore, MNA is a channel of productivity growth, as it involves the restructuring of domestic firms (Stepanok, 2015). While Jude and Levieuge (2013) claim that alone FDI is not sufficient to effect economic growth. Similarly, Eren and Zhuang (2015) stated that without developed financial MNA do not have their own effect on economic growth.

Therefore, present study inclined to investigate the interaction effect of institutional factors on economic growth.

4.10.1 The interaction Effect of VA on the Relationship of merger and acquisition and GDP in ten Asian countries.

Table 4. 14
The interaction Effect of Voice and Accountability

Variable	Coefficient	t-Statistic	Prob.
GFDI	0.3144	1.5270	0.1292
MNA	0.3197	2.7816	0.0062*
DI	0.2069	0.5612	0.5756
TO	-0.7491	-3.7810	0.0002*
POPG	0.0825	0.8798	0.3806
SECENR	1.2231	2.3563	0.0199**
INF	-0.0052	-0.3764	0.7072
VA	-0.114	-2.0563	0.9234
MNA*VA	-0.1412	-1.1884	0.2368
R-squared	0.7893		
Adjusted R-squared	0.7603		
F-statistic	27.2552		
Prob(F-statistic)	0.0000		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

The table 4.14 presents the interacting variable voice and accountability has been checked whether its effect changes the strength of relationship between MNA and GDP. The sign of interacting variable is negative and probability value is insignificant. The application of interaction remained in vain in this model.

As the result, may be interpreted as to say that interaction effect of VA has no statistically significant effect on the relationship of MNA and GDP in ten selected Asian countries.

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4.10.2 The interaction Effect of PS on the Relationship of merger and acquisition and GDP in ten Asian countries.

Table 4. 15
The interaction Effect of Political Stability

Variable	Coefficient	t-Statistic	Prob.
GFDI	0.2814	1.3078	0.1932
MNA	-0.6867	-1.8219	0.0708***
DI	0.5107	1.1531	0.2510
TO	-0.7437	-3.5776	0.0005*
POPG	-0.0795	-0.7653	0.4455
SECENR	0.9561	1.8388	0.0682***
INF	-0.0097	-0.7701	0.4426
PS	-7.296	-0.5632	0.01311
MNA*PS	0.8125	2.3574	0.0199**
R-squared	0.7848		
Adjusted R-squared	0.7552		
F-statistic	26.5358		
Prob(F-statistic)	0.0000		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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Political stability and absence of violence is an interacting variable in this model presented in table 4.15. The effect of this term has checked to interact the relationship between MNA and economic growth. The result of this model reveals that interaction term (MNA*PS) has positive sign with significant probability value.

In detail when PS is interacted to MNA to check its interaction effect, result shows that after combined these variables the sign of interaction term is positive. implying that one percent

change in PS could change 0.81 percent positively the effect of MNA on GDP in ten selected Asian countries.

4.10.3 The interaction Effect of GE on the Relationship of merger and acquisition and GDP in ten Asian countries.

Table 4. 16
The interaction Effect of Government Effectiveness

Variable	Coefficient	t-Statistic	Prob.
GFDI	0.2584	1.2246	0.2229
MNA	0.0083	0.0364	0.9710
DI	0.3790	0.8957	0.3721
TO	-0.7513	-3.9928	0.0001*
POPG	-0.0970	-0.9863	0.3258
SECENR	1.0861	1.9879	0.0489***
INF	-0.0033	-0.2842	0.7767
GE	-1.5246	-0.325	0.6365
MNA*GE	0.2289	0.6728	0.5023
R-squared	0.7821		
Adjusted R-squared	0.7522		
F-statistic	26.1233		
Prob(F-statistic)	0.0000		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

To check the interaction effect of government effectiveness on the relationship of MNA and economic growth a model has been tested.

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The results for interaction term shows positive value moreover the situation for the probability value remains insignificant. The results show that in this model interaction MNA*GE has no capacity to change the effect of MNA on GDP in the selected sample.

4.10.4 The interaction Effect of RQ on the Relationship of merger and acquisition and GDP in ten Asian countries.

Table 4.17 shows that regulatory quality is used as interacting variable in this model.

Table 4. 17
The interaction Effect of Regulatory Quality

Variable	Coefficient	t-Statistic	Prob.
GFDI	0.2715	1.2909	0.1990
MNA	0.6490	1.5142	0.1324
DI	0.4063	0.9576	0.3400
TO	-0.7526	-3.8250	0.0002*
POPG	-0.1004	-1.0123	0.3133
SECENR	1.0665	2.1576	0.0328**
INF	-0.0059	-0.4583	0.6475
RQ	6.5676	2.1695	0.3145
MNA*RQ	-0.7634	-1.0782	0.2829
R-squared	0.7825		
Adjusted R-squared	0.7526		
F-statistic	26.1793		
Prob(F-statistic)	0.0000		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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When the interaction of RQ and MNA is applied the value of coefficient become negative, but it is statistically not significant. It means that RQ has no capacity of interaction effect between MNA and economic growth.

4.10.5 The interaction Effect of ROL on the Relationship of merger and acquisition and GDP in ten Asian countries.

To detect the interaction effect of rule of law on the relationship between MNA and GDP, a model has been tested as shown in table 4.18.

Table 4. 18
The interaction Effect of Rule of Law

Variable	Coefficient	t-Statistic	Prob.
GFDI	0.3675	1.6821	0.0949***
MNA	-0.1246	-0.6781	0.4989
DI	0.2601	0.7708	0.4422
TO	-0.6820	-3.1844	0.0018
POPG	0.0622	0.7520	0.4534
SECENR	1.1850	2.4265	0.0166
INF	-0.0162	-1.2482	0.2142
ROL	-6.6968	-0.563	0.0068
MNA*ROL	0.5296	1.8747	0.0631****
R-squared	0.8117		
Adjusted R-squared	0.7859		
F-statistic	31.3787		
Prob(F-statistic)	0.0000		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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The value of β coefficient for the interaction of ROL and MNA is positive and statistically significant. The results depict that interaction effect is positive on the relationship between MNA and economic growth. In detail, one percent change in ROL may change the impact of MNA 0.52 percent on GDP of selected sample of the countries. This institutional factor proves its interaction effect on the relation between MNA and economic growth of selected Asian countries.

4.10.6 The interaction Effect of COC on the Relationship of merger and acquisition and GDP in ten Asian countries.

Table 4. 19
The interaction Effect of Control of corruption

Variable	Coefficient	t-Statistic	Prob.
GFDI	0.3117	1.3982	0.1644
MNA	-0.8045	-1.8096	0.0726
DI	0.3754	0.9158	0.3614
TO	-0.7588	-3.6635	0.0004
POPG	-0.0885	-1.0364	0.3019
SECENR	1.0075	2.0551	0.0419
INF	-0.0101	-0.8726	0.3845
COC	-10.534	-2.356	0.0184
MNA*COC	1.0868	2.2932	0.0234**
R-squared	0.7873		
Adjusted R-squared	0.7581		
F-statistic	26.9424		
Prob(F-statistic)	0.0000		

Note: GFDI= greenfield FDI; MNA= merger and acquisition; DI=Domestic Investment; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= interacting variable; GFDI*VA=Interaction terms; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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Table 4.19 demonstrates that interacting variable, control of corruption has been checked whether the relationship between MNA and GDP has changed.

Table 4. 20
summary of overall results

Results without institutional factors			
	Greenfield FDI	Mergers and Acquisitions	Results
	Not significant	Significant impact on GDP	Merger and Acquisition has positive effect on economic growth but not GFDI in Asian countries.
Results with institutional factors			
Instructional Factors	Interaction effect GFDI	Interaction effect MNA	Results
Voice and accountability	Negative and significant		Voice and accountability negatively interact with GFDI
Political Stability and Absence of Violence	-	Positive and significant	Political Stability and Absence of Violence is positively interacting the effect of MNA on economic growth.
Government effectiveness	Positive and significant	-	Government effectiveness is positively interacting the effect of GFDI on economic growth.
Regulatory quality	Negative and significant	-	Regulatory quality negatively interacts with GFDI
Rule of law	-	Positive and significant	Rule of law is positively interacting the effect of MNA on economic growth.
Control of corruption	Positive and significant	Positive and significant	Control of corruption is positively interacting the effect of GFDI as well as MNA on economic growth.

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Furthermore, interaction term has introduced in the model to estimate the change in relationship between MNA and GDP. The sign for β coefficient value is positive and this result is also significant. Results show that interaction term has capacity to perform its role to strengthen the relationship between independent and dependent variable. Clearly, COC is positively moderate the MNA's impact on economic growth. One percent change in COC may change the effect of MNA by 1.08 percent on GDP of selected Asian countries.

4.11 Country wise analysis

The present study did cross sectional analysis to check the significant of greenfield FDI and MNA on economic growth in each country. The study has achieved all its objective, but to know the significance of institutional factors this analysis has been done. Country wise analysis do by using panel data as previous studies also done the same methodology to check the cross-section analysis (Chou, 2013; Nath, 2009).

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More importantly, the study also checked the impact of institutional factors on the relationship of GFDI, MNA and economic growth in each country separately.

4.11.1 Greenfield FDI, MNA, interaction effects of institutions in China

The results of cross-country show that greenfield FDI has positive coefficient value in china. It means greenfield FDI has significantly positive effect on economic growth in China. In detail, one percent change in GFDI cause a change in GDP of China by 0.68 percent. Sign for trade openness is negative and probability value is significant. The study applied six interaction term to verify the moderation effect of these governance indicators. The results show that PS

and COC interacting the effect of GFDI on economic growth in China. While interaction term (GFDI*PS) has positive sign and statistically significant.

Positive sign of PS interaction term depicts that the effect of GFDI on GDP in China is increased. Another interaction term in this country wise analysis COC has the same result as PS. The interaction term (GFDI*COC) has a positive sign in this model. The positive beta value of interaction term shows that due to institutional factors named as control of corruption strengthen the impact of GFDI on GDP growth in China.

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Table 4. 21
country wise significance of institutional factors

	VA	PS	GE	RQ	ROL	COC
China		4.418 (0.0012) GFDI*PS -11.0196 (0.049) MNA*PS				3.845515 (0.004) GFDI*COC
India		0.905 (0.000) (GFDI*PS)				4.356 (0.006) (GFDI*COC)
Srilanka	80.822 (0.000) MNA*VA		13.454 (0.012) GFDI*GE		96.9435 (0.003) MNA*ROL	380.1859 (0.027) MNA*COC
Indonesia	-2.050 (0.001) GFDI*VA	-0.644 (0.076) GFDI*PS	-1.425 (0.000) GFDI*GE	-1.611 (0.000) GFDI*RQ	-0.729 (0.000) GFDI*ROL	-1.178 (0.095) GFDI*COC
Malaysia	-14.924 (0.000) MNA*VA		13.807 (0.010) MNA*GE			4.937 (0.051) GFDI*COC
Philippines						-7.349 (0.059) GFDI*COC
Thailand		-4.756 (0.006) GFDI*PS	-9.534 (0.006) GFDI*GE	-12.49 (0.056) GFDI*RQ 23.844 (0.000) MNA*RQ	-6.725 (0.016) GFDI*ROL	11.839 (0.099) GFDI*COC
Vietnam				-3.218 (0.012) GFDI*RQ -18.43 (0.002) MNA*RQ	-2.331 (0.090) GFDI*ROL -15.29 (0.070) MNA*ROL	5.566 (0.080) GFDI*COC 45.53 (0.075) MNA*COC
Pakistan	-5.206 (0.092) GFDI*VA		2.374 (0.057) GFDI*GE			
Mongolia	-10.043 (0.024) GFDI*VA		-3.127 (0.037) GFDI*GE 68.22 (0.001) MNA*GE		-127.359 (0.045) MNA*ROL	-4.849 (0.089) GFDI*COC 89.33 (0.007) MNA*COC

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

4.11.3 Greenfield FDI, MNA, interaction effects of institutions in Indonesia

The interaction effect of six institutional factors on relationship between greenfield FDI and economic growth in Indonesia has checked. The results of institutional factors show the negative coefficient values implying that the institutions are weak in Indonesia.

4.11.4 Greenfield FDI, MNA, interaction effects of institutions in Malaysia

To ascertain the interaction effect of institution in Malaysia a group of models has been tested. Firstly, the results show that GFDI have positive coefficient value with significant value of probability. Furthermore, interaction term (GFDI*COC) shows a positive coefficient value. The result of interaction (GFDI*COC) effect is significant meaning that COC is positively interact the impact of GFDI on economic growth of Malaysia. The interaction of (MNA*GE) has been tested, the results show that GE moderates the relationship and between MNA and GDP in Malaysia. The institutional factor GE strengthen the effect of MNA on the GDP of Malaysia. Moreover, VA is negatively related to outcomes expected by MNA for economic growth in Malaysia.

4.11.5 Greenfield FDI, MNA, interaction effects of institutions in the Philippines

The present study investigates the interaction effects of governance indicators on the relationship between GFDI and economic growth of Philippine. The coefficient value for greenfield FDI is positive and statistically significant. In detail, GFDI is positively related to economic growth in the Philippines. The institutional factor's result is that all the interaction terms have insignificant coefficient value. It could be said that

institutional factors have not a significant relationship with economic growth in the Philippines. However, the only COC is interacting the GFDI negatively.

4.11.6 Greenfield FDI, MNA, interaction effects of institutions in Thailand

To find out the moderating effect of six institutional factors on the relationship between GFDI and economic growth in Thailand six model has been tested. Results show direct relation of selected variables and economic growth. Greenfield FDI in this model has a positive coefficient value with significant probability value. Furthermore, interaction term (GFDI*PS) has a negative sign means that political instability negatively moderates the relationship between GFDI and GDP in Thailand. The coefficient value for (GFDI*GE) is positive and significant implying that GE positively interact the effect of GFDI on economic growth in Thailand.

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While, the interaction term (GFDI*RQ) having negative coefficient value meaning RQ can moderate the relation negatively. The rule of law has also negative coefficient and statistically significant. Likewise, the previous interaction it also has negative beta value. The results in model 6 show that ROL weaken the effect of GFDI on economic growth. The effect of interaction term (GFDI*COC) has positive coefficient value implying that COC strengthen the effect of GFDI on economic growth in Thailand.

The other interaction terms (MNA*RQ) has positive coefficient value. The result show that RQ positively interact the relation between MNA and GDP in Thailand.

4.11.7 Greenfield FDI, MNA, interaction effects of institutions in India

The present study tried to explore the interaction effect of institution on economic growth in India. The results depict that MNA has positive coefficient value with significant probability value. In this analysis, political stability significantly moderated the relationship between GFDI and GDP in India. More specifically, the sign for interaction term (GFDI*PS) is positive. It means that political stable condition strengthens the relationship between GFDI and GDP of India. Similarly, the interaction term (GFDI*COC) also have positive beta value implying that COC strengthen the relationship between GFDI and GDP.

4.11.8 Greenfield FDI, MNA, interaction effects of institutions in Pakistan

Institutions have a substantial position in a country to achieve economic growth also having capacity to moderate the impact of variables on growth. The interaction effect of governance indicators has been tested. The results show that greenfield FDI has negative coefficient value and the result is statistically significant. Furthermore, the results of interaction effect of institutional factors on the relationship of greenfield FDI and GDP show that VA has negative coefficient value.

This result is also statistically significant meaning that VA negatively influenced the economic growth. while the interaction effect of GE has positive beta value. Therefore, GE has positive influence on the relationship of GFDI and GDP in Pakistan.

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4.11.9 Greenfield FDI, MNA, interaction effects of institutions in Srilanka

The present study investigated the interaction effect of institutional factors on economic growth in Srilanka. Results show the direct effect of macroeconomic variable to growth. Greenfield FDI has positive coefficient value and this result is statistically significant. In Srilanka the greenfield FDI has positive impact on economic growth.

As far as the matter of interaction terms is concerned the results show that all intuitional factor GE has positive interaction effect on the relationship between GFDI and GDP in Srilanka. Furthermore, the interaction term MNA*VA also show the positive coefficient value implying that VA is positively interact the GFDI. Additionally, ROL is another institutional factor that is showing the interacting capability. The positive sign of MNA*ROL depicts that ROL has significantly change the effect of MNA in positive direction. Lastly, the COC is also interaction with MNA and the sign of this interaction term is positive implying that control of corruption enhances the positive effect of MNA on economic growth in Srilanka.

4.11.10 Greenfield FDI, MNA, interaction effects of institutions in Vietnam

To see the interaction effect of institutions on growth in Vietnam, six models has been tested. The results express that greenfield FDI is present here with positive beta value. This result is statistically significant meaning that GFDI is positively related to GDP in Vietnam.

Furthermore, the interaction term GFDI*RQ has statistically significant coefficient value with negative sign. The influence of this interaction term on the relationship of GFDI and GDP in negative means that RQ dampens the effect of GFDI to GDP in Vietnam. Similarly, the MNA*RQ also has negative sign implying that RQ negatively affect the relationship of MNA and GDP.

The interaction term GFDI*ROL and MNA*ROL both have negative sing. It shows that ROL is negatively related to growth effect of GFDI as well as MNA in Vietnam.

The interaction term GFDI*COC shows a positive sign meaning that COC have positive impact on the relationship of GFDI and GDP in Vietnam. Lastly, the MNA*COC also has positive sing showing that control of corruption positively favoured the effect of MNA on economic growth in Vietnam.

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4.12 Greenfield FDI, mergers and acquisition, institutions, and Economic Growth

The main research area of this study is to find growth effects of greenfield FDI, with certain weightage of interaction effect of institutional factors. It is likewise to scrutinize the effective factors that are capable to enhance greenfield investment's return on economic growth. Institutions of a country establish the framework to do economic activity and quality institutions offer an environment to enhance the economic growth. while, weak institutions dampen the effects of investment on economic growth. The countries with democratic institutions and a high value of "rule of law" improve growth performance (Butkiewicz & Yanikkaya, 2006). Foreign direct

investment has both direct and indirect effect on economic growth. In detail, institutions play a moderating role to enhance growth effect of FDI in developing countries. Furthermore, aggregate FDI can be divided into two investments namely greenfield FDI and merger and acquisition. Next, the question is that how different mode of FDI affect economic growth in recipient country.

The answer is, because greenfield FDI involve in setting up new facilities while purchasing of existing facility is the way of investment by merge and acquisition. Thus, it is clearly seen that both forms of FDI are different in nature and produce different economic consequences. For instance, greenfield FDI has positive effect on economic growth without considering the country's level of human capital while, MNA is effective to achieve economic growth when a host country has achieved a minimum level of human capital (Wang & Wong, 2009).

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Naturally, greenfield investment is connected with accumulation of production capacity (M. Wang, 2009). As far as the entry mode of FDI is concerned greenfield FDI have a stronger impact on economic growth than merger and acquisition (Harms & Méon, 2014). The growth effect of foreign investment is moderated by institutions quality. Institutions can play a substantial role to achieve economic growth. Certainly, good institutions, by the promotion of foreign investments exert their positive impact on economic growth. Additionally, less uncertainty with higher expected rate of return are affixed with good institution. Thus, institution consider an important channel to moderate the positive effect of FDI on economic development (Bénassy-Quéré, Coupet, & Mayer, 2007). Furthermore, institutional quality undoubtedly moderates the return of FDI to growth especially in developing countries. It is an important point

that singly FDI has no significant impact on economic growth. However, a promising institutional environment with FDI exert a positive pressure to achieve higher economic growth (Jude & Levieuge, 2013).

4.13 Fixed Effects Estimation Results of the effect of greenfield foreign direct investment, merger and acquisition on economic growth in ten Asian countries.

The results of regression shown in table 4.7 depict that MNA has positive effect on economic growth in ten selected Asian countries. The strength of coefficient is also high means that GFDI has positive substantial impact on economic growth. Similarly, the present shows that MNA also have positively related to economic growth. But the strength of the coefficient of MNA is low. Therefore, the impact of MNA is low as compared to GFDI on economic growth. These results are clear indication that GFDI is more effective than MNA in the selected sample of Asian countries. Greenfield FDI could more beneficial with many reasons as it is involved in new production capacity building, generate employment subsequently contributes to a more equal income distribution also. Another important contribution of GFDI is that it could be a cause of addition in the capital stock of a host economy. Our results are compatible with other studies, as Stepanok (2015) stated that greenfield investment is more productive than MNA. Greenfield FDI and MNA have a positive impact on an economy if a country have a specific level of human capital (Eren & Zhuang, 2015; Luu, 2016). Furthermore, trade openness has negative impact on economic growth in selected Asian countries. While on the other side secondary school enrolment is positively related to economic growth. As the secondary school enrollment is taken as a proxy of human capital it means that human capital has positive impact on the economy of

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selected countries. Additionally, population growth shows negative sign and inflation positive, but both results are insignificant.

4.13.1 Greenfield FDI and economic growth with interaction effects of institutional factors.

North (1990) stated that institutional quality indirectly effects economic growth by innovation and progress in technology. The sound institutional frameworks are crucial to achieve high economic growth for a country. Institution with its positive impact is a core entity to increase the inflow of FDI and subsequently high economic growth (Long et al., 2015). Beyond shadow of a doubt FDI can accelerate economic growth with good governance (Fayissa & Nsiah, 2013) but alone FDI is not sufficient to effect economic growth (Jude & Levieuge, 2013).

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4.13.1.1 Interaction effect of voice and accountability (GFDI*VA)

The results of our study reveal that voice and accountability has moderating effect between GFDI and economic growth. The results show that the interaction term (GFDI*VA) is included, the impact of greenfield FDI on economic growth become negative the result is also significant. There are many reasons that VA negatively moderate the relationship between GFDI and economic growth. The main reason is that, inclusive factors of VA like freedom of expression, independent media and fair participation of people to choose their governments are inefficient.

Therefore, it is less chance that GFDI perform well under this less accountability environment, which subsequently dampen economic growth. On the other hand, it is also noteworthy, the corrupt investors remain in seek to invest in a corrupt country that are ultimately less accountability approach. Our results also support different studies as Jadhav (2012) stated that Voice and Accountability in negatively related to inward FDI especially in Brazil, Russia, India, China and South Africa (BRICS). Furthermore, Voice and Accountability have no significant impact on FDI (Daude & Stein, 2007).

Additionally, Voice and accountability emphases on different indicators related to the political process, control of government actions, civil rights such as independent media. The possible reason of VA is not performing positively in ten selected Asian countries is, in such an environment where the government want to remain popular, reduces accountability either directly or indirectly. Therefore, governments take inefficient changes in policy which could be in favour of foreign investment. Another threat of military intervention is also a reason in which a government is unable to function effectively and that the country has an uneasy environment for foreign investors (Kaufmann, Kraay, & Mastruzzi, 2009).

4.13.1.2 Interaction effect of Political Stability and Absence of Violence (GFDI*PS)

The present study checked a moderating effect of PS on economic growth expecting from GFDI. In detail, the interacting effect of political stability on greenfield FDI and

economic growth of ten selected Asian countries is not significant. The results after interaction (GFDI*PS) reflect a change in direction but with insignificant probability value. The meaning of this result is that investment in the shape of GFDI is not effected by political stability.

4.13.1.3 Interaction effect of Government effectiveness (GFDI*GE)

The present study tried to investigate Greenfield FDI's outcome with interaction of GE on economic growth in ten selected Asia countries. Government effectiveness mainly checked by quality of public services, civil service and degree of its independence from political pressures.

The result of interaction term (GFDI*GE) is significant. The meaning of this result is that GE can strengthen the effect of GFDI on economic growth in selected Asian countries. The main reasons of this result are the favourable environment for investment, good civil service and less political pressure to interfere this type of investment. Our results are supported by many studied as Daude and Stein (2007) claim that government effectiveness has a positive impact on foreign investment (FDI). Furthermore, the efficient government exerts a positive impact on economic growth of a country's GDP by implementing the good policies (Bettin & Zazzaro, 2012). Likewise, if a country wants to increase in its investment projects it should have increase government effectiveness. Especially the non-African FDI is statistically significant positive relation with government effectiveness (Rolfe, Perri, & Woodward, 2015).

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4.13.1.4 Interaction effect of Regulatory quality (GFDI*RQ)

Sound policies and regulations to promote private sector are the core elements of regulatory quality has been tested whether can play moderating role between GFDI and economic growth of ten selected Asian countries. The outcomes reveal that after applying interaction term the sign of coefficient has changed and the results are significant. It means that interaction term has a negative effect on relationship between GFDI and GDP.

The results of our study are similar to previous study of Loayza, Oviedo, and Servén (2005). This study reveals that high levels of regulation are the main cause of lower growth especially in the product and labour markets. Furthermore, the reason could be simple that firms which are involved in production may adopt a way to work outside the legal framework if heavy regulatory burden is put on these firms. This step of these firm leads to lower growth in a country.

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Consequently, high levels of regulation are allied with low economic growth. Similarly, corporations of India and china invest in those countries that have high corruption and poor legal systems especially in the mining industry in the form of merger and acquisition. Because the corporations incline to poor institutional quality, have been blocked in some developed countries. Furthermore, investments are preferred from those emerging countries that are motivated to attach less conditionality (De Beule & Duanmu, 2012). Another study also claims that labour market regulatory quality negatively affected the subsidiary performance (Pattnaik, Choe, & Singh, 2015).

4.13.1.5 Interaction effect of rule of law (GFDI*ROL)

Interaction effect of rule of law has been verified to see its impact on GFDI to strengthen or weaken the relationship with GDP. The interaction term (GFDI*ROL) has positive beta coefficient but the results is not significant. It means that ROL neither strengthen nor weaken the impact of GFDI on economic growth of the ten selected Asian countries. These results also have support from other studies like Daude and Stein (2007) stated that rule of law have no significant impact on foreign investment (FDI). Furthermore, high rule of law can play a negative role for African companies in the context of investment (Rolfe et al., 2015).

4.13.1.6 Interaction effect of control of corruption (GFDI*COC)

The present study tried to check the interaction effect of COC, between association of greenfield FDI and GDP. Our main results for interaction term (GFDI*COC) show a positive coefficient value, meaning control of corruption enhance the impact of greenfield FDI on economic growth in ten selected Asian countries.

The result is according to a common belief that control of corruption has positive impact on economic growth. The meaning of this result is control of corruption can enhance the impact of GFDI on economic growth of selected Asian countries. The reason for this result may be that control of corruption is playing a key role to start a business.

The countries with high control of corruption could improve their institutions and produce effective bureaucracy, sincere politicians and good environment to the

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investors leads to economic growth. Consequently, improvements in governance by control of corruption creates a more efficient and effective bureaucracy and a better investment climate, as well as improve allocation of resources, that ultimately enhance economic growth (Azam & Emirullah, 2014).

The interpretation of this positive sign may be written as lower levels of corruption augment the effect of foreign invest on economic growth. Corruption is a big hindrance to achieve economic growth in Asian countries as economic activities are effected by corruption. Furthermore, investments may reduce due to high level of corruption because investors feel that cost of doing business increase in this environment of corruption. High level of corruption damages the institutions of a country as lack of accountability and transparency become main features of the economy.

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Our results are consistent with a number of previous studied, state that corruption dampens economic growth and low corruption (that is, a higher value on the corruption perception index) leads a country to a higher levels of GDP per capita (Azam & Emirullah, 2014; Higbee & Schmid, 2004). Furthermore, high corruption significantly lessens the effectiveness of FDI on growth for about 70 percent of 60 countries of non-OECD. The increase of 1 point in the level of corruption persuades a decline in returns earning from foreign investment (Delgado, McCloud, & Kumbhakar, 2014).

Higher levels of corruption reduce the impact of FDI on economic growth as the direct impact of FDI to economic growth is 70 points. Adding corruption as an interacting variable show that one-point change in this interaction term leads to 50 points change in per capita GDP. Thus, it is clear indication that high corruption weakens the

relationship between FDI and economic growth (Freckleton et al., 2012). Additionally, corruption have negative impact on economic growth more than military expenditures have on economic development. It is also considerable that interaction of corruption and military expenditures increase the negative impact of military expenditure on economic growth (d'Agostino, Dunne, & Pieroni, 2016).

4.14 Merger and acquisition and economic growth with interaction effects of institutional factors.

In contemporary business mergers and acquisitions (MNA) play a prominent role to get competitive advantages for those firms conducting MNA. According to Thomson Reuters (2013) global MNA review in 2012 the value of worldwide MNA accounted for US$2.6 and the project announced was over 37 thousand**.** The inflow of merger and acquisition mainly depends on two factors, the external push factors and internal pull factors. Furthermore, institutional quality plays an imperative role to attract MNA in a country. Another important factor to capture MNA is the level of economic integration between host and source country. Inflow of MNA is positively related to market size and same language in both countries whereas, distance between host and source country is negatively affixed with inflow of MNA (Hyun & Kim, 2010). As far as growth effect of MNA is concerned, MNA have no significant effect alone. It is the absorptive capacity of the host country plays an important role to stimulate the growth effects of MNA. Furthermore, a developed financial system can be considering as a precondition to see the impact of MNA on economic growth (Eren & Zhuang, 2015).

Notably, institutions have their own moderating capability to amend the impact of investment on economic growth whether investments are in the form of greenfield FDI and MNA. Quality of public institutions also matter to detect effect of MNA, Chinese firm are influenced by formal institutional distance. Thus government and institutions of the host country play a decisive role in obtaining the effects of MNA on economic growth (Du & Boateng, 2015).

4.14.1 Interaction effect of voice and accountability (MNA*VA)

Merger and acquisitions have a positive impact on economic growth in developing countries. The study tried to dig out the interaction effect of one institutional factor voice and accountability with MNA on the relationship between GDP and MNA. The results of the study depict that after applying interaction term results remained insignificant, means that this form of investment is not effected by moderating effect of VA. The selected sample of the countries receiving MNA do not receive any encouraging effect from interaction of VA.

4.14.2 Interaction effect of Political stability and absence of violence (MNA*PS)

The study checked the interaction effect of (MNA*PS) on the relationship between MNA and GDP. After applying interaction term (MNA*PS) the sign of relationship between MNA and GDP is positive. It means that this interaction effect positively influenced economic growth. Our results show that political stability and absence of violence positively influenced economic growth.

The economic rationale behind positive effect of political stability and absence of violence is that in a political stable environment, property rights are very secured. Consequently, the investors feel comforts to invest in these countries which are political stable. The investment become a base to achieve economic benefits. Similarly, average economic growth rates have positive connection with political stability.

Our results are consistent with previous studies, like Mauro (1995) political stability and bureaucratic efficiency are highly correlated and these are also affecting per capita GDP positively. Furthermore, the stable regime and a political system are main foundation of rapid economic growth. Political stable government is likely to provide favourable conditions to economic growth (Feng, 1997). Furthermore, political stability is positively related to FDI. The volume of FDI is increasing in political stable countries (Daude & Stein, 2007).

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A second possible interpretation is that; political instability is inversely related to economic growth as well as foreign investment. Practically, there are adverse effects attached with political instability especially on property rights. It is also valuable that property rights are linked with private investment and these linkages produce bad economic outcomes due to political instability (Barro, 1989). Another consistent statement with our results is that political instability is negatively affixed with economic growth in MENA countries (Omri, Shahbaz, Chaibi, & Rault, 2015).

4.14.3 Interaction effect of Government effectiveness (MNA*GE)

The present study tried to investigate mergers and acquisition's outcome with interaction of GE on economic growth in ten selected Asia countries. Government effectiveness mainly checked by quality of public services, civil service and degree of its independence from political pressures. If a government has preceding qualities and remained credible to implement such policies should have positive impact on investment to achieve growth.

The study checked the interaction effect of government effectiveness, whether GE moderate the relationship between MNA and economic growth. The results is not significant, the reason behind this inefficiency is that the leaders who are running governments have their personal benefits which are not compromised most of time. Thus, interaction term (GE*MNA) have insignificant results in dataset of selected ten Asian countries. The results of this study supported by Knutsen (2013) who investigated the interaction effect between democracy and state capacity on economic growth.

In detail, the democratic governments have low economic growth with interaction of high state capacity, nearly GE. These governments have a positive effect on economic growth but with weak capacity states. Non-functional interaction term of this study has been supported by this discussion as all the countries which are selected in this study have democratic government.

4.14.4 Interaction effect of Regulatory quality (MNA*RQ)

Regulatory quality is capability of the government to make and implement policies that are favourable to private sector. The expected sign of RQ is positive but our results show negative sign of regulatory quality's coefficient.

Furthermore, the interaction term (MNA*RQ) shows a negative coefficient value in our results but this is statistically not significant. It means that the investment in the form of MNA loose its effect with high regulations. Generally, MNA investment inclined towards less regulatory environment.

This result is also justifiable, one possible reason for this result may be that the investors who are doing investments in the form of merger and acquisition remained uncomfortable with high level of regulation and legal systems. Some empirical studies also support our results as Loayza et al. (2005) state that regulation may be negatively related to economic growth. Reason behind this scenario is deliberately create such a type of regulation may compel firms to work outside the legal framework of the country.

4.14.5 Interaction effect of rule of law (MNA*ROL)

Rule of law mainly capture the features like protection of property rights, economic activities abide by the rulebooks of society, probability of crimes and violence and well-mannered implementation of contracts. The present study finds that interaction effect (MNA*ROL) shows positive coefficient value with significant probability value.

The argument behind the positive impact of rule of law is that ROL is prerequisite for sustainable economic development. Furthermore, ROL is a foundation of property rights that can lead to economic growth. In Asian countries, there are considerable evidence that rule of law is necessary for economic growth but alone it is not sufficient Rule of law and formal legal system are positively correlated with economic growth (Peerenboom, 2002). Furthermore, an empirical study also indicates that the regions in which people have property rights awareness and a greater rule of law is present are gaining stronger economic growth (Hasan, Wachtel, & Zhou, 2009). Similarly, rule of law contributes significantly to economic growth and its interaction effect is also positive with remittances. The result is showing the presence of sound institutions (Bettin & Zazzaro, 2012).

Many experts believe that rule of law and property rights are substantial elements for foreign investment and in the presence of greater rule of law economic activities also increased manifold. Additionally, one of the possible path for economic growth is that democracy can leads to more rule of law and greater ROL results more democracy that can ultimately promote economic growth (Barro, 2013).

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4.14.6 Interaction effect of control of corruption (MNA*COC)

The study tried to check the impact of control of corruption on returns of MNA to economic growth. The effect of COC is positive means that it is positively related to economic growth. The sign for the coefficient of interaction (MNA*COC) term is positive and results are also significant. It means that control of corruption has capacity

to enhance the positive impact of MNA on economic growth in ten selected Asian countries.

The result of our study is consistent with other studies like Anoruo and Braha (2005) state that low corruption is allied with high economic growth, as one standard deviation decrease in corruption made increase in economic growth by 0.83 percent. The results also suggest that control of corruption accelerates economic growth. furthermore, the results of another study also state that control of corruption is in the favour of investment while high corruption tends to further reduce investment. Therefore, in the perspective of economic growth the "grease the wheels" hypothesis is rejected for the results of investment on growth. High corruption impedes investment in those countries where bad governance is present. Therefore, results are in the favour of "sand the wheels" and strongly reject the "grease the wheels" hypothesis (Méon & Sekkat, 2005).

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Furthermore, control of corruption shows a positive and statistically significant coefficient, suggests acquisitions are more likely to take place in countries with better control of corruption (De Beule & Duanmu, 2012). Similarly, findings indicate that impact of corruption is negative on economic growth. The economic rationale is that improved governance not only controls the corruption but enhances instruction's quality also. The quality institutions, low level of corruption is helpful as fuel for development projects and finally accelerates economic growth (Farooq, Shahbaz, Arouri, & Teulon, 2013).

The above discussion endorses our results, that control of corruption accelerates the positive impact of MNA on economic growth.

4.15 Country wise analysis of greenfield FDI, MNA, institution and economic growth in ten Asian countries.

The preceding analysis give a clear picture of impact of institutional factors on the relation of GFDI, MNA and economic growth in selected Asian countries. To further investigate the detail of significance of greenfield FDI, MNA and institutions in each country another analysis has been done. Furthermore, present analysis gives results of all institutional factors with interaction effect on greenfield FDI and MNA separately. These results are more profound to see the interaction effect of institution in each country. Additionally, it would also clearly have known that institutional factors can moderate the impact of greenfield FDI, MNA or both from which one of the selected countries.

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4.15.1 Greenfield FDI, institution and economic growth in ten Asian countries.

China is the first country that has been discussed in this part of chapter 4. The results for this country show that greenfield FDI is positively related to economic growth of China. The interpretation of this positive sign is that if greenfield FDI inflow is increased it can amplify the economic growth in china.

Our results are supported by other studies as Luu (2016) stated that greenfield FDI contribute positively to accelerate economic growth in emerging countries including China. Similarly Neto, Brandão, and Cerqueira (2010) argue that rapid growth of FDI

especially in the form of greenfield FDI, economic growth of host country increase more speedily. The main reason of effectiveness of GFDI is it evolves in new capacity building that could be a foundation to economic growth.

Furthermore, the study finds the result of interaction effect of PS on economic growth. As the sign of this interaction term GFDI*PS is positive it could be said that political stability strengthens the relationship between GFDI and economic growth. In other word, the results reveal that political stability is positively influence the impact of GFDI to economic growth in China.

The results are also consistent with previous studies as De Beule and Duanmu (2012) state that control of corruption shows a positive and statistically significant relationship with acquisitions. Furthermore, control of corruption is in favour of growth, while high corruption is negatively attached with economic growth (d'Agostino et al., 2016).

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As greenfield FDI in Mongolia is showing positive sign with insignificant probability value. Simply, GFDI is not significantly related to economic growth in Mongolia. While the performance of institutional factors to moderate the impact of GFDI to economic growth also produces uncommon result in this analysis. The interaction terms of VA, GE and COC show negative coefficient values implying that the effect is not as the expected results of institutions. In other word, no support has been found for the impact of interaction effect of all institutional factors with GFDI on economic growth in Mongolia.

The results of GFDI*COC show the negative sign meaning that COC has negative impact on the relationship of GFDI and GDP of Mongolia. It could be said that in a more corrupt environment GFDI perform well to economic growth in Mongolia. This result is also supported by other studies as Huang (2016) stated that in South Korea "grease the wheels" hypothesis is supported by the results as corruption has significantly positive impact on economic growth. Another justification of this result is that government official are involved in bribery to smooth operation, to do benefits to the investors (Y. Wang, Du, & Wang, 2015).

The results of data set of Indonesia disclose that Greenfield FDI has a high coefficient value than but the results are not statistically significant. As far as interaction terms are concerned results depict that all coefficient values are negative implying that institutions are very weak.

As the impact of institutional factors in Indonesia are not as the expected according to economic rational. The rule of law negatively treats the relationship between GFDI and GDP in Indonesia. These results indicate the greenfield investment perform low under higher rule of law. The argument may be see on the opposite side of the results, African companies show that feebler the rule of law, the larger the number of projects (Rolfe et al., 2015).

The situation of Malaysia is very different form Indonesia as there is a significant relationship between greenfield FDI and economic progress. The coefficient value for GFDI is also positive means that it is positively related to economic growth in Malaysia.

Greenfield FDI has positive effect on economic growth as it increases the productivity in the host economy (Stepanok, 2015). The interaction term GFDI*COC in Malaysia shows a positive coefficient value implying that control of corruption is highly correlated to economic growth. The high coefficient value for this interaction term show that COC is an effective institutional factor in Malaysia. Control of corruption positively interact the effect of GFDI and economic growth. It means that COC strengthen the positive effect of GFDI on economic growth in Malaysia. The results are also consistent with previous studies like Azam and Emirullah (2014) state that control of corruption will strengthen the country's institutions, and a suitable environment is created by good governance.

The results reveal that effect of greenfield FDI in Philippine is different from Malaysia. In Philippine GFDI has positive effect on economic growth. The results are justifiable as greenfield investment involved in new production and do transfer of technology from investor to host country, it could be a cause of healthier performance of GFDI in a country.

Stepanok (2015) also, argue that when a firm is investing in the form GFDI become more productive as compare to invest in the shape of MNA. Similarly, greenfield FDI contribute positively to accelerating economic growth (Luu, 2016). While the results for institution factors show not an encouraging situation in Philippine. The results show that institutions do not moderate the effect of GFDI on economic growth. The possible justification for this result is that inefficient and inadequate institutions are responsible of low growth in country. Similarly, Daniele and Marani (2006) argue that unfavourable trading reform to investors, inadequacy in institutional and legal

framework of a country is the main cause of low attractiveness to investors towards a country especially in MENA.

Whereas greenfield FDI has positive sign but with significant results. So, it could be said that GFDI is contributing the economy of Thailand.

Tourism is an important factor in Thai economy, according to the World Travel and Tourism Council (2015), direct and indirect impact induced by the tourism industry was 20.2 percent, 19.3 percent in 2013 and 2014 respectively (Kummong, Supratid, & Chan, 2016). But the situation is interesting, to see the results of interaction effects of institutional factor. Most of the institutional factor negatively moderate the relationship between GFDI and economic growth in Thailand.

The interaction term GFDI*GE also has negatively treated to economic growth. The possible reason can be attached more political pressure and weak policy implications are in disfavoured to investment performance. The regulatory quality also negatively influenced the foreign investment's outcome in Thailand.

The possible justification of this result is that high rules and regulations from the host country discourage the investors to invest. To support, a study claims that high regulation leads a negative impact on economic growth (Loayza et al., 2005). Similarly, regulatory quality in labour market negatively affect the subsidiary performance (Pattnaik et al., 2015). Furthermore, Rolfe et al. (2015) also stated that rule of law has a negative effect on African companies.

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The key aspect of the main result of dataset of India show that greenfield FDI has positive sign but insignificant probability value. It means that greenfield FDI is not significantly affecting economic growth in India. The possible justification of this result is that India has giant population while FDI inflows has labour displacing nature for India (Chakraborty & Basu, 2002). Therefore, to avoid unemployment it is more focused on domestic investment rather the foreign investment. Another important point is that multinational companies squeeze the profit from host country and take to the home economy which has a negative impact on the economic growth of receiving country. (Khurshid, Ahmad, Zhahiruddina, Zamanb, & Malaysia, 2014). Furthermore, Ashraf and Herzer (2014) also argue that greenfield FDI has a large negative effect and clearly damage the domestic investment.

The factors discussed lately may be the factors of ineffectiveness of greenfield FDI in India. As far as the interaction term GFDI*PS is concerned it has positive impact on the relationship of GFDI and economic growth in India. The results are also consistent with previous studies as Omri et al. (2015) state that political instability damage the economic growth in MENA countries. Furthermore, High corruption has a sizeable nonlinear impact on the relationship of FDI and economic growth. High corruption significantly lessens the effectiveness of foreign investment on growth for about 70 percent of non-OECD countries (Delgado et al., 2014).

In addition, the results for Pakistan show that there is a negative impact of greenfield FDI on Pakistan' economy. This result is also justifiable, in Pakistan the MNCs are not involved in producing the export quality product. Another reason may be that whole profit can be captures by home economy and the host economy does not positive

spillovers. Pakistan is still labour intensive country the foreign investment only helps to reduce unemployment but this effect has no capacity to increase economic growth.

Corrupt government officials and bureaucrats are also a hurdle to get benefited from foreign investment in Pakistan. Our results are also supported by other studies like Mencinger (2003) claims that FDI is negatively correlated to growth thus, FDI can hampered the economic growth. furthermore, country corruption is negatively affixed with foreign investment (Wei & Wu, 2002).

Additionally, the situation of institutional factors in Pakistan shows that the interaction term GFDI*GE has positive sign. The interpretation of this result is that government effect positively moderates the impact of GFDI on economic growth in Pakistan. The other studies also explored that governments effectiveness may enhance their ability to increase FDI projects (Daude & Stein, 2007; Rolfe et al., 2015).

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On the contrary, greenfield FDI in Sri Lanka shows a positive sign meaning that GFDI can enhance economic growth. The mean reason behind this result is Sri Lanka is moving towards higher middle-income country. It has the absorptive capacity to foreign investment. According to the world bank 2016 Sri Lanka's economy is changing from agriculture economy to urbanized economy. It is trying to provide a higher level of services, growing responsiveness to facilitate the foreign investment subsequent to increase economic growth.

The results for interaction term are very uncommon as no institutional factor has the capacity to moderate the impact of GFDI on economic growth in Sri Lanka. As we earlies mention that Sri Lanka is in transition stage and has not been fully developed

its institutions. Therefore, the results for influencing foreign investment through institutional factors are not very encouraging. Moreover, these results are still supported the other study like Daniele and Marani (2006)found that governance indicators including institutional factors related to business environment are not advantageous to MENA countries. The only interaction term GFDI*GE show a positive coefficient value implying that GE is exerting positive pressure to achieve economic growth in srilanka. Another study claims that government effectiveness exerts a positive impact on the economic growth of a country (Bettin & Zazzaro, 2012).

Similar to the results regarding greenfield FDI in Sri Lanka, the Vietnam also having positive gain from GFDI to economic growth. There are sound reasons present in literature to support that GDDI is positively affixed with economic growth. As Y.-H. Kim (2009) states that greenfield FDI, if selected is a welfare dominant entry mode for the host country. Similarly our result are supported by Stepanok (2015) who claims that greenfield investment is more productive than MNA. Furthermore, the interaction GFDI*RQ has negative sign suggesting that high RQ dampen the effect of GFDI on GDP in Vietnam.

It is a common practice in high rules and regulation are not in the favour of better investment. Similarly, regulatory quality for labour market has negative impact on performance (Pattnaik et al., 2015). Additionally, the case of corruption as an interaction term GFDI*COC has the same results as most of the other countries have in this study. Control of Corruption can accelerate the performance of GFDI regarding economic growth.

4.15.2 Merger and acquisitions, institution and economic growth in ten Asian countries.

The outcome of merger and acquisition is not statistically significant in China. It has no effect on the Chinese economy as Temiz and Gökmen (2014) stated that MNA are ineffective for the Turkish economy. The possible reason of this result is that MNA are not involved in new production capacity building.

As this type of investment is only involved to purchase or merge in existing firm so it may be not more beneficial for some economies. As far as the moderating effect of institutional factors is concerned the results show that interaction term MNA*PS has negative sing meaning that political stability reduces the impact of MNA on economic growth in China. The interpretation of this result is political stability is not supporting this type of investment. The result is consistent with the previous studies like H. Kim (2010) claims that while political stability is negatively correlated with the performance pf inward FDI.

The results of Mongolia show that MNA have negative sing showing that it is negatively related to economic growth. Our results are more consist the result of a study conducted by Wang, he claims that growth effect of MNA is negative (M. Wang & S. Wong, 2009). The interaction effect of GE in Mongolia show positive coefficient value implying that government effectiveness is positively related to economic growth.

The results are also consistent with previous studies. Government effectiveness exert a positive impact on productivity to enhance economic growth (Bettin & Zazzaro,

2012). While the interaction term MNA*COC has, positive sign suggesting that COC can play a moderating role between MNA and GDP. The clear meaning of this result is that control of corruption could be a source of high economic growth in Mongolia. High corruption dampen the economic growth (Méon & Sekkat, 2005).

The condition of MNA in Indonesia show that it has positive beta value but the result is not significant on Indonesians economy. The result shows that Merger and acquisition has not significant impact on economic growth in Indonesia. The interaction terms also show insignificant probability value implying that institutions are weak in Indonesia. The institutional factors have not in a capacity to strengthen or weaken the relationship of MNA on economic growth in Indonesia.

Furthermore, in Malaysia the MNA has positive coefficient value but result is not significant implying that this type of investment has no effect on economic growth in Malaysia. In the same way, government effectiveness is in favour of good economic progress. This interaction term MNA*GE also has positive interaction effect on performance of MNA to achieve economic growth. Many other studies are consistent with our result. As government effectiveness can be a cause of increase in investment as FDI (Daude & Stein, 2007; Rolfe et al., 2015).

Additionally, institutional factors give a result that rule of law has positive moderation role with the MNA. To support this result, a study claims that rule of law has a capacity to contribute economic growth significantly (Bettin & Zazzaro, 2012).

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Similarly, in Philippine the MNA has positive coefficient in the model suggesting that it is positively related to economic growth. On a part Nanda (2009) discuss a point while discussing the benefits of GFDI, the MNA have an advantage that there is low risk involved in this type investment as it not investing a new production unit. While it is taking over a running business and another benefit of MNA is that the profit start from the day first for both companies that are merging.

It is also an important point that when a firm is sick the most favourite way for the firm should merge. These may be the reason of good performance of MNA in Philippine. Another reason behind this result is that MNA transfer the new technology and positive impact on inter industry innovation. FDI influxes and inward MNA both have substantial position to achieve high growth level in Asian economies (Liu et al., 2009).

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As far as the result of MNA is concerned for Thailand it shows a negative value with insignificant probability value implying that MNA have no effect on economic growth. The reason for this result may be that MNA have possibility not to contribute in expansion of capital stock of the host country. Similarly, Harms and Méon (2014) claims that MNA have no impact on economic growth.

Furthermore, the results of institutional factors show that regulatory quality play an interaction role on the relationship of MNA and GDP in Thailand. The result is supported by another study, that claims that regulatory quality positively influenced the GDP growth rate in OECD Countries (Cebula & Mixon, 2014). Rule of law tends

to promote economic growth having a capacity to build an environment leads to economic development (Barro, 2013).

While the results of data set of India show that MNA has positive coefficient value with significant probability value. It means that MNA it is positively related to economic growth in India. As this type of investment is linked with specific type of firms, and some time merger or acquisition can occur in that industry which is very beneficial for the host economy. Similarly, MNA is a channel to economic growth as it is involved in restructuring of domestic firms that are may at the edge of shut done (Stepanok, 2015).

As well as intuitional factors have no effect on economic growth. The possible reason of these results may be that as MNA reflect a just change of ownership for the firms that are already exist in the host country.

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The results of interaction terms show that the institutional factors have not an aligned chemistry to moderate the effect of MNA on GDP in India. The result reveal that institution exert weak pressure to enhance the positive effect of MNA on economic growth. The following result also supported by other study's result as all institutional factors also called as governance indicators demonstrate the relative disadvantages to the MENA countries (Daniele & Marani, 2006).

Similarly, the data set of Pakistan's institutional factors with MNA give the same result as India. These factors show no capacity to moderate the effect of MNA on economic growth of Pakistan. While the direct effect of MNA on the economy of Pakistan is negative. The possible reason of this result may be that the regulator quality

in Pakistan is low enough to gain a positive effect from MNA. The institutional quality in Pakistan is very low, lack of interest of politician and bureaucracy to upheave the institution. In the case of MNA no interaction term has moderate the relationship of this investment and economic growth in Pakistan.

The same situation can be seen in Srilanka where the MNA have no effect on economic growth. If we see the coefficient value it looks the highest value in the table and highly significant. As the merger and acquisition are change of ownership and the profit also start from very first day, the investor seeks to invest in an easy way to earn instead of installing new plant. Therefore, in Sri Lanka, the MNA has no direct effect on economic growth. In Srilanka, three institutional factors have interaction effect on the connection of MNA and GDP. The first interaction term MNA*VA has positive sign meaning that voice and accountability positively interact the outcomes to growth. As good governance including voice and accountability has a positive and significant impact on growth (Fayissa & Nsiah, 2013).

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The second institutional factor ROL is also positive interact with MNA in srilanka. Furthermore, Rule of law tends to promote economic growth having a capacity to build an environment leads to economic development (Barro, 2013). The interaction term MNA*COC is interacting the relationship between MNA and GDP of Sri Lanka. It means that control of corruption can positively interact the MNA to support economic growth in srilanka. The result of data set of Vietnam is not so different from Sri Lanka as MNA has no effect on GDP.

The RQ and ROL have negative impact on MNA performance to economic growth. Due to weak institutional quality, political pressures, low quality of policy implementation it has negative impact on the relationship of MNA and GDP. Furthermore, the interaction term MNA*COC has positive impact on GDP means that control of corruption can augment the effect of MNA on economic growth in Vietnam.

The interpretation of this result is that low corruption leads to governance and finally accelerates economic growth. In other words, high corruption has adverse effect on economic growth (d'Agostino et al., 2016).

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CHAPTER FIVE

CONCLUSION AND POLICY RECOMMENDATIONS

5.0 Introduction

The recent increase in the inflow of greenfield FDI and merger and acquisitions in the Asia has motivated an extensive empirical literature to search out the outcomes of foreign capital flows in Asian economies. The central area of this study focuses on the impact of GFDI and MNA with the interaction effect of institutional factors on economic growth in ten Asian countries as illustrate in the chapter four and recommended by many studies like (Burger et al., 2015; Harms & Méon, 2014; Reddy, 2015) . Majority of the studies put light on the role of FDI to economic growth but a few studies tried to find the outcomes from disaggregated FDI (greenfield FDI and MNA) especially in Asia. Another research gap which remained ignored is the institutional factors' role to achieve economic growth with greenfield FDI and MNA separately. The present study tried to fill this gap attempting to describe the interaction effect of institutions with Greenfield FDI as well as MNA.

This present attempt can help to explore the impact of greenfield FDI and MNA to economic growth with interaction effect of institutional factors. In this chapter five, main finding, conclusion and policy recommendations will be discussed. Firstly, discussion has been made on findings for the impact of greenfield FDI, merger and acquisition and interaction effect of institutional factors on economic growth of ten Asian countries. Secondly, some conclusions are stated from the empirical results, Next part of this chapter discusses the recommendations and contribution of the study.

5.1 Findings

The results of Chapter four, based on panel data analysis provide evidence that merger and acquisition has positive impact on economic growth. Furthermore, greenfield FDI has positive coefficient value but the result is not significant in ten selected Asian countries. While the results of interaction effect of institutional factors show that greenfield FDI is more interactive with institutional factors. While MNA showed a less interactive capacity with institutional factors. Four out of six institutional factors considered as governance indicator show interaction effect for impact of GFDI on economic growth. On the other hand, MNA interact with three institutional factors.

In detail, findings show for disaggregated data, MNA is the type of FDI that accelerates GDP in Asian countries while GFDI shows positive sign but the result is not significant. The findings indicate that greenfield FDI has no direct effect on economic growth in selected Asian countries.

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The findings also indicate that voice and accountability has capacity of moderating the impact of GFDI to economic growth. It is negatively affect the impact of GFDI on GDP in Asian countries. In addition, Kaufmann et al. (2009) VA is not performing positively in those countries where the government want to remain popular and reduces accountability either directly or indirectly. On the other hand, the interaction effect of MNA*VA is not significant in selected Asian countries.

The institutional factor political stability is positively interacting the impact of MNA on economic growth. As Rolfe et al. (2015) claims that political stability is a significant determinant of FDI. while interaction effect of GFDI*PS is not significant.

The interaction effect of Government effectiveness with GFDI is statistically significant in Asian countries. The findings indicate that the institutional factor GE has positive effect on GFDI to accelerate its effect on economic growth. In addition, Alam, Kitenge, and Bedane (2017) state that GE has significant positive effect on economic growth.

Furthermore, regulatory quality does not interact with MNA in selected Asian countries. While RQ have statistically significant interaction effect with GFDI but the sing is negative. Furthermore, Loayza et al. (2005) argue that heavy regulatory burden on firms leads to lower growth in a country. The findings depict that interaction term MNA*ROL is statistically significant with positive sign implying that rule of law strengthen the effect of MNA in Asian countries. Similarly, Barro (2013) states that rule of law results more democracy that can ultimately promote economic growth. While ROL neither strengthen nor weaken the impact of GFDI on economic growth of the ten selected Asian countries.

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In addition, control of corruption is the only factor that interact both with GFDI and MNA in ten Asian countries. The result is consistent with economic rationale, here the obtained results from Chapter four shows that control of corruption has positive impact on performance of GFDI as well as MNA in Asia.

The findings are consistent with “sand the wheels” hypothesis. In addition low corruption is in the favour of foreign investment (Méon & Sekkat, 2005). In chapter four, the findings of country wise analysis show that, institutions have substantial position in Asia.

Theoretically, the role of greenfield FDI and MNA to promote growth cannot be ignored, but practically the results are mixed. As the present study also find a new result that MNA has positive and significant impact on economic growth in Asia but GFDI is not strengthen GDP in selected countries.

5.2 Conclusion

Foreign direct investment inflows and economic growth literature has shown a greater interest, predominantly FDI inflows have been regarded as a key stuff for economic growth all over the world. However, aggregated FDI has its own importance but currently the most critical questions whether disaggregated FDI (greenfield FDI and merger and acquisition) have different results with institutional impact on each type of investment to flourish economic growth. The choice approach to FDI, which recommends that performance of some types of FDI are better than others (Alfaro & Charlton, 2013).

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Despite the mounting studies investigating the role of FDI to achieve high economic growth, the interrelationship between greenfield FDI, MNA, economic growth and institutions paid a little attention in previous literature. In this thesis, we have attempted to fill the current gap in economic literature by studying different characteristics of the connection between greenfield FDI, merger and acquisition, and institutions and their implications to economic growth.

The main purpose of this thesis was to empirically investigate the interaction role of institutions on the relationship between greenfield FDI and MNA on economic growth. Furthermore, the major argument is that as the main determinant of economic

growth (FDI) is giving inconsistent results even in disaggregated form. To fill the gap, it is better to understand the relationship between GFDI, MNA, institutions and economic growth.

The study tried to give the answers of two main questions whether greenfield FDI and merger and acquisition give different results and institution have a capacity to interact the impact of these two types of investment on economic growth. These questions are broken down into four specific questions subsequent four objectives.

In this thesis, empirical methodology and different econometric models have been used to assess the effect of greenfield FDI and merger and acquisition on economic growth with interaction effect of institutional factors. This study applied panel-data techniques in selected sample from ten selected Asian countries for the period from 2002 to 2015. Furthermore, results of the Hausman test show that fixed effect is suitable method for analysis.

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The main conclusion of this study is that merger and acquisition is effective in selected ten Asian countries and institutions play a prominent role to interact the greenfield FDI and MNA's impact on economic growth. Another conclusion of this study is that performance of merger and acquisition has increased with interaction effect of institutional factors. The results of institutional factors like PS, ROL and COC show positive interaction effect with MNA and are in line with (Barro, 2013; Farooq et al., 2013; Mauro, 1995). Therefore, it could be concluded that the effect of merger and acquisition has increased with interaction of efficient institution in selected Asian countries. Similarly, GE and COC depict the positive interaction effect with GFDI.

These results also support previous empirical studies like (Azam & Emirullah, 2014; Daude & Stein, 2007). The conclusion of individual institutional factors is that control of corruption is the most influential factor that accelerates the positive impact of GFDI as well as MNA in selected Asian countries. Furthermore, secondary school enrolment has positive impact while trade openness has negative impact on economic growth of ten selected Asian countries.

The findings of existing empirical study suggesting that this field of literature may need more investigation of impact of GFDI and MNA in different sectors, particularly in Asian countries with the role of institutions.

5.3 Policy recommendations

The results of Chapter four suggest some policy implications for greenfield FDI, merger and acquisition and economic growth in ten selected Asian countries. The findings show that MNA exert positive impact on economic growth in ten selected Asian countries. This result suggests that MNA needs to be encouraged to enhance its potential impact to contribute positively to economic growth. The result of GFDI is also positive but not significant.

The study suggests that the agreement regarding GFDI should be fair and free from corruption to get more positive result from this type of investment. These results suggest that GFDI and MNA both needs to be encouraged, and efficient institutions can enhance its potential effect to contribute positively economic growth in Asian countries.

The finding of institutional factors show that the most capable moderating institutional factor is control of corruption. In detail, control of corruption has positive impact on economic growth in selected countries, that is in line with common belief that control of corruption is helpful to growth. The study suggests that governments should encouraged less corrupt bureaucracy to get more benefit from this institutional factor (COC) for their economies. The other most effective institutional factors are rule of law, government effectiveness and political stability and absence of violence. The study further suggest that countries should improve their regulation which are in the favour of investors to attract the investment and pay attention on political stability to get good results from greenfield FDI. It should be the priority for policies maker to improve the investment environment through better institutions in Asian countries to get positive effect from both (GFDI, MNA) types of investment.

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5.4 Contribution of the study

The findings of this thesis can be considered as important contributions to the discussion of issues about impact of greenfield FDI, MNA and institutopns on economic growth in Asia. The main contributions of this reseach can be summarised as follows:

1. Chapter two demonteates that the role of aggregated FDI to get economic growth has prime importance in the literature but theoretically it is controvertial. As Wang and Wong (2009) argue that greenfield FDI, and MNA, these two forms of investment are potentially different in nature and also not a substitutes for each other. Nocke and Yeaple (2008) also claim that GFDI is more effecive type of investmnt as compare to

MNA. The results of this study can contibute to to reduce the debates on impact of GFDI and MNA with the interaction effect of institutional factors on economic growth in Asian countries.

2. Chapter four contributes to existing economic literature with the empirical evidence regarding intereaction effect of the institutional factors on performance of greenfied FDI and MNA to economic growth.This chapter fills the gap in the literature by analysing the institutional factors' role with Greenfield FDI and MNA on economic growth by using panel data of ten selected Asian countries.

3. Chapter Four contributes to existing economic literature by testing whether institutional factors have capacity to strenghten or waeken the impact of Greenfield FDI and MNA on economic growth.

4. The practical contribution of this study to Asian countries, as the findings of this chapter will help Asian countries to decide whether it should invest in the form of Greenfield FDI or merger or acquistion.

5.5 Research for future

The empirical results of the thesis suggest the following dimensions for future research.

1. It is important to do further analysis on sectoral level like the impact of greenfild FDI and MNA in the service sector.

2. The analysis can be made on including absoptive capacity of asian for GFDI and meger and acquistion.

3. It is also recomende for the future reseachh to dig out the dimensions of institutional facors and their impact on economi growth.

4. It is also important to chek the impact of insitutional quality on greenfield FDI by index of Fraser Institute.

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Appendix

The study also tried to verify the existence of the long-run equilibrium relationship between GFDI, MNA and economic growth.

The Fully Modified Ordinary Least Squares (FMOLS) method introduced by (Pedroni (1996)) is a reliable estimation method for small sample size, this method is also checked for the panel data of ten Asian countries. To confirm the stationarity, Augmented Dickey-Fuller (ADF) test is applied, the result of this test shows that data is not stationary at same level. As the assumption of stationarity is not fulfilled, so this method is not used in this study.

Appendix A Panel Unit Root test

Variable	Tests	Level	First order difference
GDP	ADF - Fisher Chi-square	22.6948 0.304	22.4604 0.3161
	PP - Fisher Chi-square	52.8019* 0.0001	45.2813* 0.001
GFDI	ADF - Fisher Chi-square	41.7275* 0.003	54.5657* 0.000
	PP - Fisher Chi-square	71.8902* 0.00	119.145* 0.000
MNA	ADF - Fisher Chi-square	36.1501* 0.0148	74.2282* 0.000
	PP - Fisher Chi-square	81.1765* 0.000	146.553* 0.000
VA	ADF - Fisher Chi-square	26.8315* 0.1401	36.8109** 0.0123

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	PP - Fisher Chi-square	21.4898* 0.3688	73.8496* 0.000
PS	ADF - Fisher Chi-square	30.7039*** 0.0592	43.8899* 0.0016
	PP - Fisher Chi-square	32.5669** 0.0376	99.2871* 0.0000
GE	ADF - Fisher Chi-square	18.1192 0.5796	50.6961* 0.0002
	PP - Fisher Chi-square	22.1565 0.3321	108.128* 0.0000
RQ	ADF - Fisher Chi-square	26.1395 0.1613	44.0503* 0.0015
	PP - Fisher Chi-square	42.3251* 0.0025	131.821 0.0000
ROL	ADF - Fisher Chi-square	34.5949** 0.0224	54.9962* 0.000
	PP - Fisher Chi-square	37.48** 0.0102	93.7748* 0.000
COC	ADF - Fisher Chi-square	21.5638 0.3646	50.1935* 0.0002
	PP - Fisher Chi-square	40.4644* 0.0044	103.265* 0.000

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Appendix B Endogeneity test

Tests of endogeneity			
Ho: variables are exogenous			
Tests		P value	Result
Durbin (score) chi2(2)	63.2841	p =0.0000	
Wu-Hausman F (2,140)	51.085	p = 0.0000	Ho=Reject null hypothesis

Test for weak instrument				
Ho: Instruments are weak	10%	15%	20%	25%
2SLS Size of nominal 5% Wald test	13.43	8.18	6.4	5.45
LIML Size of nominal 5% Wald test	5.44	3.81	3.32	3.09

Tests of overidentifying restrictions:		P value	
Sargan (score) chi2(1)	0.026829	p = 0.869	
Basmann chi2(1)	0.0252	p = 0.873	No over identification

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Appendix C country wise results

Table 4. 22
Greenfield FDI, interaction effects of institutions in China

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Coefficient	Prob.												
GFDI	0.688	0.001*	1.193	0.680	-4.359	0.007	2.801	0.237	2.404	0.036	2.956	0.161	-3.153	0.014
MNA	0.109	0.181	0.085	0.454	0.007	0.935	0.095	0.140	0.141	0.058	0.059	0.689	-0.003	0.970
DI	2.453	0.084	0.108	0.956	1.641	0.030	2.396	0.050	-1.075	0.495	2.925	0.080	3.127	0.000
TO	-1.183	0.000	-1.285	0.001	-1.447	0.000	-1.148	0.001	-2.121	0.000	-0.791	0.149	-0.828	0.000
POPG	2.991	0.007	1.548	0.383	2.946	0.002	2.937	0.028	0.495	0.716	4.665	0.027	2.100	0.012
SECENR	1.472	0.011	2.383	0.009	0.796	0.029	0.590	0.491	0.686	0.336	1.311	0.045	1.767	0.000
INF	0.023	0.194	0.009	0.757	0.020	0.113	0.007	0.749	0.040	0.122	0.006	0.876	0.040	0.007
GFDI*VA			-1.885	0.812										
GFDI*PS					4.419	0.001*								
GFDI*GE							-2.736	0.367						
GFDI*RQ									-3.084	0.185				
GFDI*ROL											-4.326	0.270		
GFDI*COC													3.846	0.005*

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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Table 4. 22

Greenfield FDI, interaction effects of institutions in Mongolia

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	-0.010	0.758	11.363	0.025	4.182	0.721	1.213	0.042	-1.412	0.482	-3.389	0.280	4.384	0.089
MNA	-3.630	0.083	-2.981	0.031	-3.532	0.188	-1.247	0.555	-4.407	0.009	-4.065	0.041	-3.027	0.097
DI	-0.090	0.715	-0.119	0.599	-0.106	0.753	-0.039	0.835	-0.262	0.304	-0.168	0.387	-0.238	0.232
TO	-0.143	0.677	-0.158	0.528	-0.044	0.927	0.064	0.816	-0.351	0.289	-0.624	0.174	-0.145	0.755
POPG	1.025	0.000	3.609	0.000	3.539	0.000	3.818	0.000	3.458	0.000	3.038	0.000	3.760	0.000
SECENR	0.268	0.718	0.480	0.378	0.229	0.830	0.402	0.477	1.199	0.090	0.263	0.729	0.959	0.209
INF	0.007	0.354	0.010	0.113	0.007	0.476	0.006	0.383	0.011	0.169	0.011	0.084	0.010	0.164
GFDI*VA			-10.043	0.024**										
GFDI*PS					-2.750	0.720								
GFDI*GE							-3.127	0.037**						
GFDI*RQ									2.529	0.487				
GFDI*ROL											6.832	0.281		
GFDI*COC													-4.849	0.089***

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 23

Greenfield FDI, interaction effects of institutions in Indonesia

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.163	0.450	2.400	0.000	0.810	0.018	0.893	0.000	0.797	0.000	0.393	0.001	1.109	0.030
MNA	0.117	0.444	0.118	0.282	0.044	0.757	0.071	0.545	-0.057	0.460	0.106	0.238	0.135	0.349
DI	0.888	0.163	0.875	0.067	1.266	0.037	1.158	0.033	0.876	0.056	0.808	0.007	0.545	0.330
TO	-0.188	0.851	-0.336	0.490	-0.060	0.936	-0.019	0.981	0.519	0.271	-0.251	0.595	-0.519	0.549
POPG	-0.585	0.615	-0.850	0.433	0.125	0.949	-0.228	0.887	-0.485	0.621	-0.928	0.319	-0.053	0.982
SECENR	1.629	0.318	2.103	0.138	2.036	0.245	1.462	0.321	5.225	0.031	2.452	0.054	1.979	0.211
INF	0.003	0.854	0.013	0.473	0.008	0.630	0.006	0.666	0.054	0.100	0.013	0.229	0.011	0.533
GFDI*VA			-2.050	0.002*										
GFDI*PS					-0.645	0.077***								
GFDI*GE							-1.425	0.001*						
GFDI*RQ									-1.612	0.000*				
GFDI*ROL											-0.729	0.000*		
GFDI*COC													-1.178	0.096***

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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Table 4. 24

Greenfield FDI, interaction effects of institutions in Malaysia

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.306	0.061***	-10.002	0.137	7.374	0.118	-1.629	0.739	-0.271	0.916	-1.107	0.835	-5.458	0.051
MNA	0.183	0.320	0.567	0.071	0.120	0.311	0.262	0.389	0.195	0.269	0.222	0.043	0.207	0.131
DI	-1.043	0.084	-1.802	0.088	-0.698	0.272	-0.952	0.145	-0.158	0.854	-0.549	0.271	1.426	0.098
TO	-0.469	0.498	-0.720	0.360	-0.117	0.851	-0.047	0.961	-0.221	0.785	0.135	0.817	0.942	0.110
POPG	-1.776	0.429	-0.054	0.983	-1.709	0.179	-1.879	0.451	-1.968	0.289	-1.898	0.261	-1.525	0.322
SECENR	0.229	0.881	0.072	0.943	1.109	0.355	0.812	0.762	0.941	0.594	2.052	0.218	3.196	0.058
INF	0.022	0.381	0.028	0.415	0.028	0.250	0.019	0.555	0.007	0.840	-0.026	0.523	-0.034	0.100
GFDI*VA			11.139	0.123										
GFDI*PS					-5.106	0.128								
GFDI*GE							1.752	0.692						
GFDI*RQ									0.655	0.820				
GFDI*ROL											1.485	0.799		
GFDI*COC													4.938	0.051*

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 25

Greenfield FDI, interaction effects of institutions in the Philippines

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Coefficient	Prob.												
GFDI	0.166	0.023**	-2.676	0.444	0.259	0.458	0.461	0.765	-2.782	0.436	1.068	0.327	6.379	0.055
MNA	0.060	0.056***	0.059	0.097	0.061	0.074	0.065	0.125	0.054	0.110	0.034	0.361	0.061	0.029
DI	0.341	0.599	0.176	0.731	0.411	0.578	0.413	0.516	0.502	0.602	0.505	0.476	1.024	0.117
TO	-1.205	0.002	-1.501	0.000	-0.663	0.458	-0.915	0.048	-0.823	0.363	-1.193	0.016	-0.648	0.156
POPG	-1.330	0.020	-0.327	0.709	-1.930	0.080	-1.125	0.032	-1.697	0.115	-1.617	0.029	-4.179	0.009
SECENR	-0.200	0.832	-0.513	0.582	0.716	0.625	0.348	0.724	0.311	0.851	-0.025	0.983	-1.088	0.311
INF	0.022	0.262	0.003	0.921	0.011	0.458	0.024	0.190	0.022	0.282	0.023	0.369	0.057	0.056
GFDI*VA			2.633	0.421										
GFDI*PS					-0.202	0.633								
GFDI*GE							-0.439	0.836						
GFDI*RQ									4.519	0.416				
GFDI*ROL											-2.498	0.380		
GFDI*COC													-7.350	0.059***

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 26

Greenfield FDI, interaction effects of institutions in Thailand

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.313	0.092***	0.438	0.813	4.955	0.005	7.811	0.054	10.118	0.050	4.184	0.013	7.407	0.208
MNA	-0.116	0.667	-0.049	0.930	-0.157	0.468	0.018	0.899	-0.294	0.268	-0.197	0.005	-0.301	0.180
DI	-1.912	0.393	-2.458	0.570	-0.348	0.788	0.472	0.814	0.749	0.796	1.093	0.528	-1.019	0.655
TO	2.016	0.241	3.030	0.611	5.085	0.016	4.258	0.000	1.667	0.221	3.680	0.000	0.367	0.887
POPG	0.302	0.036	0.337	0.178	0.320	0.053	0.168	0.188	0.182	0.324	0.251	0.003	0.321	0.052
SECENR	7.574	0.000	7.953	0.005	3.544	0.099	4.402	0.001	6.305	0.004	0.631	0.773	8.034	0.000
INF	0.045	0.662	0.056	0.702	-0.062	0.396	-0.093	0.364	-0.059	0.685	-0.085	0.292	0.040	0.705
GFDI*VA			-0.075	0.966										
GFDI*PS					-4.756	0.006*								
GFDI*GE							-9.535	0.061***						
GFDI*RQ									-12.495	0.057**				
GFDI*ROL											-6.726	0.017**		
GFDI*COC													-7.276	0.216

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 27

Greenfield FDI, interaction effects of institutions in India

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.024	0.566	10.808	0.351	-1.047	0.000	0.272	0.576	0.151	0.800	0.222	0.865	-4.248	0.008
MNA	0.084	0.010*	0.134	0.004	0.224	0.000	0.066	0.107	0.091	0.131	0.072	0.090	0.170	0.011
DI	0.735	0.000*	0.686	0.000	0.854	0.000	0.471	0.033	0.777	0.013	0.765	0.004	1.093	0.000
TO	-0.407	0.113	-0.482	0.098	-1.100	0.000	0.038	0.923	-0.447	0.203	-0.331	0.444	-0.600	0.013
POPG	-2.134	0.006	-1.859	0.019	-1.162	0.093	-3.002	0.001	-2.072	0.016	-2.052	0.009	-2.941	0.000
SECENR	1.042	0.172	0.982	0.342	2.467	0.001	0.184	0.849	1.057	0.227	0.875	0.474	1.070	0.062
INF	0.004	0.706	0.013	0.308	0.018	0.007	0.012	0.186	0.004	0.764	0.003	0.867	0.008	0.482
GFDI*VA			-8.783	0.353										
GFDI*PS					0.906	0.000*								
GFDI*GE							-0.500	0.489						
GFDI*RQ									-0.243	0.842				
GFDI*ROL											-0.240	0.890		
GFDI*COC													4.356	0.007*

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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Table 4. 28

Greenfield FDI, interaction effects of institutions in Pakistan

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	-0.437	0.099***	3.807	0.077	-0.626	0.280	-1.259	0.065	-1.324	0.523	-0.137	0.726	-2.156	0.393
MNA	-0.498	0.121	0.025	0.945	-0.479	0.452	-0.213	0.575	-0.684	0.265	-0.695	0.096	-1.011	0.041
DI	0.264	0.681	-1.046	0.215	0.433	0.691	0.467	0.516	0.125	0.884	0.394	0.559	0.674	0.414
TO	0.565	0.320	-0.223	0.716	0.656	0.555	0.365	0.590	0.552	0.433	1.016	0.222	0.794	0.145
POPG	-8.797	0.071	-3.039	0.536	-9.138	0.238	-7.142	0.120	-9.547	0.129	-11.450	0.080	-11.521	0.015
SECENR	2.278	0.001	0.412	0.740	1.970	0.067	1.740	0.008	2.248	0.028	2.772	0.006	2.623	0.000
INF	0.007	0.303	0.007	0.380	0.001	0.943	0.002	0.904	0.010	0.333	0.004	0.547	0.020	0.043
GFDI*VA			-5.206	0.092***										
GFDI*PS					0.349	0.848								
GFDI*GE							2.374	0.057***						
GFDI*RQ									2.158	0.632				
GFDI*ROL											-3.586	0.311		
GFDI*COC													1.712	0.565

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 30

Greenfield FDI, interaction effects of institutions in Sri lanka

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	2.704	0.001*	22.668	0.163	0.393	0.972	-5.634	0.114	-0.708	0.962	19.349	0.523	6.812	0.716
MNA	1.014	0.786	1.535	0.643	4.595	0.320	-1.813	0.444	0.818	0.829	4.486	0.530	0.610	0.894
DI	0.256	0.450	0.147	0.582	-0.257	0.476	0.205	0.520	0.181	0.780	0.029	0.955	0.267	0.508
TO	-1.137	0.005	-1.268	0.005	-0.668	0.268	-1.521	0.000	-1.369	0.003	-1.068	0.094	-1.188	0.026
POPG	0.721	0.040	0.722	0.046	0.306	0.393	0.748	0.028	0.752	0.071	0.661	0.101	0.737	0.081
SECENR	-1.159	0.571	-3.787	0.158	-4.610	0.145	0.102	0.929	0.612	0.817	-5.408	0.511	-1.126	0.654
INF	-0.009	0.194	-0.005	0.432	0.007	0.558	-0.004	0.467	-0.008	0.682	-0.007	0.318	-0.008	0.400
GFDI*VA			-20.777	0.223										
GFDI*PS					2.273	0.809								
GFDI*GE							13.454	0.012**						
GFDI*RQ									5.714	0.808				
GFDI*ROL											-24.135	0.578		
GFDI*COC													-4.243	0.826

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 29

Greenfield FDI, interaction effects of institutions in Vietnam

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.420	0.028**	0.343	0.849	-10.222	0.133	1.840	0.104	1.593	0.003	1.737	0.027	-4.401	0.111
MNA	-0.284	0.369	-0.169	0.499	-1.572	0.062	-0.295	0.602	-0.419	0.249	-0.552	0.245	0.030	0.937
DI	-0.120	0.877	-0.266	0.824	-0.376	0.589	-0.261	0.736	-0.698	0.443	-0.791	0.336	-0.398	0.510
TO	1.333	0.036	0.943	0.155	1.641	0.003	0.965	0.373	0.943	0.201	0.919	0.268	0.596	0.274
POPG	-0.737	0.768	-3.858	0.161	1.156	0.520	0.878	0.760	-2.331	0.421	-1.094	0.786	-2.913	0.096
SECENR	-1.352	0.134	-0.597	0.606	-1.499	0.033	-1.551	0.145	-0.735	0.468	-0.613	0.582	-1.250	0.109
INF	0.003	0.563	0.000	0.938	0.008	0.147	0.001	0.864	0.000	0.943	0.001	0.814	0.006	0.445
GFDI*VA			-0.238	0.949										
GFDI*PS					7.675	0.117								
GFDI*GE							-2.113	0.233						
GFDI*RQ									-3.219	0.012**				
GFDI*ROL											-2.332	0.091***		
GFDI*COC													5.566	0.080***

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 30

Merger and acquisition, interaction effects of institution in China

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Coefficient	Prob.	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.688	0.001*	0.558	0.027	0.801	0.001	0.625	0.002	0.805	0.006	0.711	0.049	0.584	0.009
MNA	0.109	0.181	0.553	0.728	13.990	0.051	0.847	0.521	0.110	0.950	-1.132	0.378	-1.030	0.732
DI	2.453	0.084	0.303	0.882	0.898	0.254	3.770	0.072	0.986	0.671	1.896	0.259	1.622	0.250
TO	-1.183	0.000	-1.248	0.000	-1.518	0.000	-0.848	0.047	-1.807	0.012	-1.351	0.003	-1.232	0.000
POPG	2.991	0.007	1.518	0.351	2.785	0.000	3.361	0.056	2.003	0.143	2.339	0.097	2.046	0.128
SECENR	1.472	0.011	2.190	0.016	1.683	0.000	1.151	0.006	0.717	0.481	1.352	0.039	1.433	0.019
INF	0.023	0.194	0.010	0.715	0.019	0.225	0.014	0.259	0.020	0.444	0.023	0.460	0.030	0.129
MNA*VA			-1.344	0.758										
MNA*PS					-11.197	0.049**								
MNA*GE							-0.948	0.555						
MNA*RQ									0.053	0.987				
MNA*ROL											2.552	0.326		
MNA*COC													1.170	0.707

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 31

Merger and acquisition, interaction effects of institution in Mongolia

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	-0.010	0.758	0.005	0.913	-0.011	0.786	0.011	0.472	0.003	0.930	0.015	0.579	0.005	0.789
MNA	-3.630	0.083*	-124.639	0.433	-45.883	0.890	-23.979	0.003	42.520	0.447	64.003	0.058	-76.626	0.005
DI	-0.090	0.715	0.088	0.730	-0.092	0.760	-0.031	0.711	-0.120	0.724	-0.125	0.497	-0.105	0.315
TO	-0.143	0.677	0.082	0.877	-0.125	0.756	0.123	0.543	-0.292	0.431	-0.033	0.923	0.268	0.362
POPG	0.000		3.696	0.000	3.525	0.000	3.944	0.000	3.486	0.000	3.671	0.000	3.904	0.000
SECENR	0.268	0.718	0.062	0.938	0.273	0.797	0.276	0.674	1.223	0.073	0.312	0.763	0.137	0.759
INF	0.007	0.354	-0.001	0.896	0.008	0.446	-0.001	0.628	0.004	0.614	-0.003	0.741	0.005	0.461
MNA*VA			106.991	0.442										
MNA*PS					27.703	0.898								
MNA*GE							68.277	0.002*						
MNA*RQ									-86.270	0.404				
MNA*ROL											-127.360	0.046**		
MNA*COC													89.334	0.008*

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 32

Merger and acquisition, interaction effects of institution in Indonesia

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.163	0.450	0.182	0.379	0.262	0.250	0.182	0.526	0.164	0.554	0.201	0.379	0.109	0.662
MNA	0.117	0.444	2.301	0.470	-2.374	0.133	-0.424	0.707	-0.044	0.943	0.101	0.805	1.043	0.668
DI	0.888	0.163	0.814	0.241	1.602	0.012**	0.903	0.309	1.183	0.064***	0.889	0.271	0.929	0.141
TO	-0.188	0.851	-0.415	0.686	1.482	0.243	-0.033	0.980	-0.201	0.854	-0.067	0.952	-0.553	0.704
POPG	-0.585	0.615	-0.259	0.843	-4.347	0.133	-1.165	0.455	-0.408	0.834	-1.446	0.343	0.723	0.802
SECENR	1.629	0.318	1.575	0.402	-1.631	0.562	1.738	0.436	0.169	0.937	2.129	0.259	1.444	0.489
INF	0.003	0.854	0.004	0.845	-0.043	0.227	0.003	0.864	-0.019	0.343	0.004	0.858	0.008	0.664
MNA*VA			-2.011	0.490										
MNA*PS					2.105	0.131								
MNA*GE							1.000	0.652						
MNA*RQ									0.335	0.804				
MNA*ROL											0.090	0.942		
MNA*COC													-1.138	0.704

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 33

Merger and acquisition, interaction effects of institution in Malaysia

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.306	0.061**	0.213	0.019	0.337	0.069	0.463	0.011	0.309	0.050	0.238	0.133	0.085	0.750
MNA	0.183	0.320	14.424	0.000	-12.473	0.294	-15.197	0.012	2.168	0.660	-6.255	0.284	-0.063	0.993
DI	-1.043	0.084	-1.320	0.020	-0.694	0.377	-1.683	0.006	-0.312	0.697	-0.639	0.180	1.169	0.196
TO	-0.469	0.498	-1.715	0.015	-0.746	0.336	-1.068	0.224	-0.317	0.696	0.084	0.883	0.817	0.310
POPG	-1.776	0.429	0.721	0.709	0.087	0.957	1.646	0.539	-1.975	0.302	-1.599	0.162	-2.281	0.354
SECENR	0.229	0.881	1.013	0.340	1.153	0.154	3.393	0.089	0.935	0.602	2.531	0.044	3.282	0.197
INF	0.022	0.381	0.011	0.579	0.032	0.045	0.038	0.016	-0.004	0.919	-0.008	0.827	-0.019	0.546
MNA*VA			-14.925	0.000*										
MNA*PS					8.887	0.291								
MNA*GE							13.808	0.011**						
MNA*RQ									-2.075	0.688				
MNA*ROL											7.030	0.269		
MNA*COC													0.063	0.992

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 34

Merger and acquisition, interaction effects of institution in Philippine

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.166	0.023	0.274	0.172	-0.100	0.566	0.136	0.153	0.188	0.082	-0.064	0.744	-0.107	0.537
MNA	0.060	0.056***	9.079	0.438	-2.348	0.259	0.271	0.946	2.542	0.412	-1.808	0.412	-8.966	0.173
DI	0.341	0.599	0.246	0.654	0.407	0.544	0.404	0.511	0.452	0.625	0.308	0.603	0.288	0.533
TO	-1.205	0.002	-1.548	0.000	-0.488	0.590	-0.905	0.052	-1.062	0.101	-1.267	0.013	-0.863	0.077
POPG	-1.330	0.020	-0.599	0.322	-2.369	0.063	-1.141	0.031	-1.451	0.088	-1.628	0.048	-2.843	0.016
SECENR	-0.200	0.832	-0.731	0.410	0.935	0.538	0.329	0.726	0.117	0.932	-0.262	0.821	-1.204	0.308
INF	0.022	0.262	0.024	0.377	0.002	0.923	0.023	0.244	0.031	0.285	0.013	0.591	0.014	0.386
MNA*VA			-8.288	0.440										
MNA*PS					2.332	0.250								
MNA*GE							-0.320	0.957						
MNA*RQ									-3.889	0.418				
MNA*ROL											3.703	0.401		
MNA*COC													10.205	0.171

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 35

Merger and acquisition, interaction effects of institution in Thailand

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.313	0.092	0.355	0.232	0.272	0.154	0.289	0.017	0.161	0.000	0.180	0.120	0.199	0.197
MNA	-0.116	0.667	-1.507	0.299	-5.250	0.246	-2.741	0.446	-19.541	0.000	-2.096	0.412	-11.876	0.092
DI	-1.912	0.393	-2.263	0.566	-1.671	0.435	-1.561	0.396	0.505	0.673	-0.612	0.758	-0.349	0.870
TO	2.016	0.241	2.985	0.573	2.614	0.205	4.477	0.002	1.905	0.000	1.597	0.358	0.476	0.848
POPG	0.302	0.036	0.320	0.123	0.308	0.040	0.337	0.034	0.217	0.004	0.292	0.111	0.247	0.112
SECENR	7.574	0.000	7.566	0.003	6.738	0.000	5.265	0.004	7.408	0.000	3.839	0.265	6.999	0.000
INF	0.045	0.662	0.057	0.684	0.028	0.780	-0.009	0.921	-0.053	0.331	-0.005	0.955	0.017	0.867
MNA*VA			1.633	0.356										
MNA*PS					4.781	0.266								
MNA*GE							3.372	0.430						
MNA*RQ									23.844	0.000*				
MNA*ROL											2.961	0.453		
MNA*COC													11.840	0.100

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 36

Merger and acquisition, interaction effects of institution in India

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.024	0.566	0.094	0.282	-0.070	0.274	-0.074	0.207	0.036	0.489	0.066	0.464	0.044	0.679
MNA	0.084	0.010**	16.406	0.395	-1.081	0.212	0.860	0.484	0.363	0.497	0.375	0.616	0.447	0.677
DI	0.735	0.000*	0.663	0.000	0.792	0.000	0.510	0.015	0.762	0.006	0.739	0.005	0.717	0.008
TO	-0.407	0.113	-0.551	0.078	-1.299	0.003	-0.104	0.792	-0.458	0.124	-0.310	0.358	-0.332	0.369
POPG	-2.134	0.006	-1.247	0.381	-0.556	0.588	-2.586	0.005	-1.973	0.015	-2.056	0.014	-2.170	0.015
SECENR	1.042	0.172	1.539	0.190	3.160	0.010	0.614	0.518	1.153	0.153	0.849	0.377	0.878	0.380
INF	0.004	0.706	0.008	0.481	0.012	0.078	0.011	0.199	0.004	0.781	0.003	0.840	0.004	0.824
MNA*VA			-13.277	0.398										
MNA*PS					1.232	0.144								
MNA*GE							-1.131	0.525						
MNA*RQ									-0.558	0.594				
MNA*ROL											-0.458	0.687		
MNA*COC													-0.402	0.729

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 37

Merger and acquisition, interaction effects of institution in Pakistan

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	-0.437	0.099	-0.204	0.625	-0.921	0.038	-0.548	0.286	-0.376	0.405	-0.621	0.094	-0.705	0.071
MNA	-0.498	0.121	-12.086	0.430	1.154	0.553	0.497	0.824	-1.296	0.734	0.303	0.726	-1.928	0.729
DI	0.264	0.681	-0.056	0.951	0.928	0.151	0.574	0.487	-0.080	0.933	0.423	0.553	0.427	0.531
TO	0.565	0.320	0.650	0.471	1.242	0.122	0.943	0.320	0.365	0.546	0.769	0.266	0.716	0.232
POPG	-8.797	0.071	-8.004	0.218	-11.968	0.031	-9.880	0.102	-8.185	0.087	-9.398	0.095	-10.843	0.024
SECENR	2.278	0.001	2.045	0.286	2.700	0.002	2.521	0.047	1.947	0.022	2.475	0.004	2.472	0.000
INF	0.007	0.303	0.001	0.946	-0.001	0.864	-0.001	0.952	0.009	0.444	0.000	0.967	0.018	0.068
MNA*VA			15.764	0.440										
MNA*PS					-3.023	0.355								
MNA*GE							-2.175	0.693						
MNA*RQ									1.883	0.844				
MNA*ROL											-6.312	0.346		
MNA*COC													1.346	0.848

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

Table 4. 40

Merger and acquisition, interaction effects of institution in Sri Lanka

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	2.704	0.001	2.297	0.055	2.996	0.007	3.202	0.001	2.604	0.000	2.174	0.046	4.822	0.000
MNA	1.014	0.786	-75.723	0.001	15.088	0.781	0.159	0.997	-43.35	0.221	-67.78	0.005	-384.6	0.027
DI	0.256	0.450	0.615	0.029	-0.143	0.804	0.091	0.821	0.193	0.566	0.632	0.013	-0.272	0.455
TO	-1.137	0.005	-1.255	0.001	-0.585	0.281	-1.223	0.001	-1.513	0.000	-1.327	0.002	-0.854	0.019
POPG	0.721	0.040	0.931	0.019	0.352	0.361	0.819	0.131	0.835	0.033	0.967	0.004	0.777	0.033
SECENR	-1.159	0.571	-0.985	0.385	-4.705	0.110	-0.903	0.632	0.512	0.829	-0.903	0.332	-2.105	0.202
INF	-0.009	0.194	-0.005	0.410	0.002	0.872	-0.008	0.254	-0.003	0.742	-0.004	0.437	-0.018	0.017
MNA*VA			80.823	0.001*										
MNA*PS					-9.593	0.843								
MNA*GE							0.012	1.000						
MNA*RQ									68.133	0.205				
MNA*ROL											96.944	0.003*		
MNA*COC													380.186	0.027**

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP

Table 4. 38

Merger and acquisition, interaction effects of institution in Vietnam

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
GFDI	0.420	0.028	0.297	0.191	0.617	0.025	0.567	0.009	0.483	0.015	0.773	0.013	0.733	0.002
MNA	-0.284	0.369	-4.975	0.684	-30.905	0.271	7.568	0.184	5.763	0.005	6.520	0.097	-41.312	0.073
DI	-0.120	0.877	-0.014	0.990	-0.006	0.994	0.009	0.992	-0.443	0.621	-0.566	0.442	-0.630	0.285
TO	1.333	0.036	1.017	0.174	1.398	0.053	0.976	0.300	1.011	0.159	0.914	0.226	0.685	0.193
POPG	-0.737	0.768	-3.009	0.467	0.798	0.765	0.848	0.784	-1.833	0.518	-0.568	0.879	-1.516	0.380
SECENR	-1.352	0.134	-0.929	0.518	-1.576	0.082	-1.562	0.143	-1.061	0.313	-0.440	0.642	-0.682	0.550
INF	0.003	0.563	0.005	0.740	0.004	0.503	-0.001	0.874	0.002	0.749	-0.001	0.866	0.028	0.119
MNA*VA			9.744	0.694										
MNA*PS					21.296	0.283								
MNA*GE							-12.824	0.143						
MNA*RQ									-18.431	0.002*				
MNA*ROL											-15.293	0.071***		
MNA*COC													45.538	0.075***

Note: GFDI= greenfield FDI; MNA= merger and acquisition; TO=Trade openness; INF=inflation; POPG= Population Growth; SECENR= Secondary School Enrolment; VA= Voice and Accountability; PS= Political Stability; GE=Government Effectiveness; RQ=Regulatory Quality; ROL=Rule of Law; COC=Control of Corruption; *, **, *** denote significance at 1%, 5%, and 10%, respectively, Dependent variable GDP.

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