

# IMPACT OF FINANCIAL FLOWS ON HUMAN DEVELOPMENT AND INCOME INEQUALITY IN ASEAN COUNTRIES

# By SITI NURATHIRAH BINTI ABU HASSAN

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Master of Science

May 2021

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

# IMPACT OF FINANCIAL FLOWS ON HUMAN DEVELOPMENT AND INCOME INEQUALITY IN ASEAN COUNTRIES

Ву

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May 2021

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International financial flows like remittance and foreign direct investment (FDI) have been important elements of development strategy for many countries including the South East Asian countries. The general objective of this study is to evaluate the impact of financial flows on economic development in the South East Asian region. Specifically, the first objective of this study is to examine the impact of remittance inflows on human development in selected East Asian countries (i.e. Indonesia, Malaysia, the Philippines, and Thailand) over the 1990 to 2019 period. The results based on panel estimators reveal that remittance inflows have a positive impact on human development. Additionally, financial development also appears to be important determinants of human development in the region. The second objective of this study is to investigate whether FDI inflows in the region play any role in reducing income inequality. Using a sample of ASEAN-5 countries (i.e. Indonesia, Malaysia, the Philippines, Singapore and Thailand) over the 1975-2017 period, the results obtained using Pool Mean Group (PMG) estimator reveal that FDI inflows has actually widened income inequality in the region. Interestingly, government expenditure appears to have significant influences in reducing income inequality. Therefore, policymakers should devise a specific policy which deliver a positive economic impact of remittance and FDI inflows in the region

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

# KESAN ALIRAN KEWANGAN KE ATAS PEMBANGUNAN MANUSIA DAN KETIDAK SEIMBANGAN PENDAPATAN DI NEGARA-NEGARA ASEAN

Oleh

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May 2021

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Aliran kewangan antarabangsa seperti pengiriman wang dan pelaburan langsung asing (FDI) merupakan elemen penting dalam strategi pembangunan di kebanyakan negara termasuk negara-negara Asia Tenggara. Secara umumnya objektif dalam kajian ini adalah untuk menilai kesan aliran kewangan terhadap pembangunan ekonomi di rantau Asia Tenggara. Secara khusus, objektif pertama kajian ini adalah untuk mengkaji kesan aliran masuk pengiriman wang ke atas pembangunan manusia di negara-negara Asia Tenggara terpilih (iaitu Indonesia, Malaysia, Filipina, and Thailand) bermula pada tahun 1990 hingga 2019. Keputusan kajian berdasarkan penganggar panel menunjukkan bahawa aliran masuk wang memberi kesan positif kepada pembangunan manusia. Selain itu, pembangunan kewangan juga menjadi elemen yang penting dalam pembangunan manusia di rantau ini. Objektif kedua kajian ini adalah untuk mengkaji sama ada aliran masuk FDI di rantau ini berperanan dalam mengurangkan ketidaksamaan pendapatan. Dengan menggunakan sampel negara-negara ASEAN-5 (iaitu Indonesia, Malaysia, Filipina, Singapura dan Thailand) bermula pada tahun 1975-2017, hasil yang diperoleh menggunakan penganggar Pool Mean Group (PMG) menunjukkan bahawa aliran masuk FDI sebenarnya telah melebarkan jurang ketidaksamaan pendapatan di negaranegara terpilih. Menariknya, pembelanjaan kerajaan mempunyai pengaruh yang signifikan dalam mengurangkan ketidaksamaan pendapatan. Oleh itu, pembuat dasar harus merangka dasar khusus bagi pengiriman wang dan aliran masuk FDI untuk memberikan kesan ekonomi positif di rantau ini..

#### **ACKNOWLEDGEMENTS**

Alhamdulillah, all prises to Allah for the strengths and His blessing in completing this thesis. My special appreciation goes to my supervisor, Associate Professor Dr. Wan Azman Saini Bin Wan Ngah for his continuous support, patience, motivation, enthusiasm, and immense knowledge. With his supports, I able to complete this challenging journey successfully. My sincere thanks also go to all academic staffs at the School of Business and Economics and my colleagues especially Fatihah Shaari, Norashidah dan Muhammad 'Afif. Last but not least, I would like to thank my family members for their encouragement, concern, and help. Lastly, I would like to thanks those who have always supported me spiritually throughout my life.



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## LIST OF ABBREVIATIONS

ASEAN Universiti Putra Malaysia

ARDL Panel Autoregressive Distributed Lag approach

CLMV Cambodia, Laos, Myanmar, and Vietnam countries

FE Fixed Effects

FDI Foreign Direct Investment

GDP Gross Domestic Products

HDI Human Development Index

ODA Official Development Assistance

OECD Organisation for Economic Co-operation and Development

OLS The Pooled Ordinary Least Square

RE Random Effects

SDG Sustainable Development Goals

UNCTAD United Nation Conference on Trade and Development

UNDP United Nations Development Programme

UNDESA United Nations Department of Economic and Social Affairs

UNESCAP United National Economic and Social Commission for Asia

and the Pacific

#### **CHAPTER 1**

#### INTRODUCTION

## 1.1 Overview

In today's world, poverty and income inequality are significant challenges many countries face, and they need to be addressed immediately as emphasised in the United Nation's Sustainable Development Goals (SDGs). One of the possible solutions to these problems for countries to rely on international financial flows such as remittances. Remittances can be defined as direct transfers from an individual to other individuals or groups; family, friends etc. It can be seen that many of the developing countries depend on remittance inflows as a significant source of foreign capital. Barajas et al., (2009) claimed that remittances to developing countries were large relative to other financial flows. According to The World Bank (2015), total remittances globally were more than double the amount of global official development assistance. Remittances form as much as 20% of the GDP in some of the world's poorest countries (Gambia, Lesotho, Comoros and Liberia).

Furthermore, international remittances are essentials tools for receiving countries especially during recessions. They serve as an essential source of income to migrant's families. In 2016, people transferred about \$574 billion back to their recipient countries. In 2017, an estimated US\$466 billion in remittances were transferred from developed countries to middle-income and low-income countries (World Bank, 2018). Interestingly, the report also revealed that US\$299.6 billion of the total amount of remittances were channelled to South Asia, Central Asia, Southeast Asia, East Asia and Pacific countries. This observation indicated that remittance flows were critical economic resources, especially for developing countries, because they were stable than other external capital flows, such as private investment or development aid (Stojanov et al., 2019).

Figure 1.1 depicts the remittance flows to developing countries and the world between 2014 to 2019. The Remittance inflows increases US\$444 billion in 2014 to US\$548 billion in 2019 for developing countries. The figure reveal that more than half of the remittance inflows were sent to developing countries from the overall world. According to International Fund for Agriculture Development report (date), about 75% of remittance inflows were used for immediate needs and the balance of 25% for other purposes. It is also reported that between US\$200-US\$300 were sent regularly by individuals to their home countries. This amount represented about 60% of total household income which was, beneficial to their families, friends and communities in their home countries. This significant source of income could be used to improve the living standards of migrants if they leverage it effectively.



Figure 1.1 : Comparison between remittance inflows to developing countries and the world (2014-2019)

(Source: World Development Indicators database, the World Bank)

#### 1.2 Financial inflows in ASEAN Countries

Several previous studies have revealed that remittance inflows have an important influence on the growth of recipient economies, which influence human development and help mitigate the problems of poverty and income inequality. Based on previous studies, remittances could lead to; higher level of consumption levels, access to better education, and quality medical care (Amuedo-Dorantes and Pozo, 2004). Immigrant's remittances allow recipients to increase their social spending on goods, such as; education and health care (Rapoport and Docquier, 2006). It also catalyst for entrepreneurial activities (Yang, 2004).

Apart from remittances, foreign direct investment (FDI) can be tool to reduce poverty and income inequality. FDI is one of the primary sources for capital formation, especially in developing countries. According to Groh and Wich (2012) FDI is crucial in developing international trade and long-term economic relations. It may leads to higher economic development and increase capital flows for domestic development investment (Asiedu, 2002). In the globalised environment, FDI serves as an engine for growth in the recipient country, as it is a crucial element of economic globalisation (Bhandari, 2007).

According to UNCTAD (2019) FDI flows to developing economies have remained stable, rising by 2% to US\$706 billion, with significant differences across regions. The highest recorded FDI inflows in 2018 were to developing Asia. In 2018, FDI inflows to developing Asia rose by 4% to US\$512 billion and this growth was mainly in; China, Indonesia, Singapore and other ASEAN

countries, India and Turkey. Asia has continued to be the world's largest FDI recipient region, 39% of global FDI inflows in 2018. FDI inflows to South-East Asia increased by 3% to US\$149 billion. This outcome was attributed mainly to robust investment from other Asian economies, including the relocation of manufacturing activities and investment diversion from China.

According to Trinh (2016), FDI reduced income inequality by employing predominantly low-skilled workers. This argument supported by Ravinthirakumaran & Ravinthirakumaran (2015), who also found that, FDI inflows reduced income inequality in the long-run while not harming the economy. Reducing income inequality through FDI enables local firms to take advantage of outside firms' technology and knowledge and benefit from their experience. Domestic firms may also compete with multinational enterprises or merge their businesses leading to equal income distribution (Hermes & Lensink, 2003).

Figure 1.2 shows the trend of financial flows which comprise; remittance inflows, FDI inflows, and Net Official Development Assistance received (ODA) for selected ASEAN countries from 2000 to 2019. An increasing trend of remittance inflows compared to FDI and ODA can be observed from 2000 to 2019. Remittance inflows exceeded the total ODA in 2019, which accounted differences about US\$7.307 billion. FDI and remittance inflows dramatically increased from 2015 to 2019. Remittance inflows represented the most significant external source of financial flows in the selected ASEAN countries.

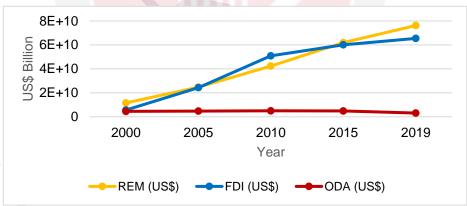


Figure 1.2 : Remittance, FDI and ODA in selected ASEAN countries between (2000-2019)

Notes: The data calculated was for Indonesia, Myanmar, Malaysia, the Philippines, Thailand, and Vietnam.

(Source: Author's calculation using data from World Development Indicators database, the World Bank)

Figure 1.3 displays a comparison between remittances and FDI inflows as a percentage of the GDP of the selected ASEAN countries from 2014 to 2019. From the figure, it is evident that remittance inflows increased year by year from 2014 until 2019. Remittances have become important sources of financial flows for these countries, as crucial as FDI, especially during hard times because it is more stable and less volatile than other significant financial flows, such as; FDI and ODA (Mohapatra, Ratha & Silwa, 2011). The figure, reveal that FDI showed a fluctuating trend which dropped from 2017 and 2019 whereas for remittance inflows, it depicted a slight decrease over the same years. However, the total remittance inflows were more significant than FDI inflows by 5.17% where remittance inflows, as a percentage of the GDP, accounted for 21.9% in 2019. Thus, remittance inflows and FDI have played important roles in economic development.

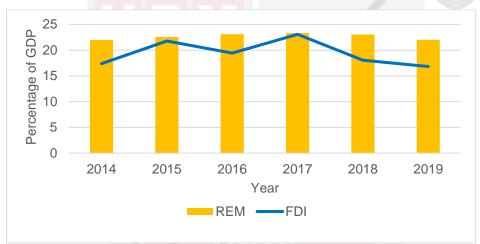


Figure 1.3 : Remittance and Foreign Direct Investment (FDI) inflows in selected ASEAN countries (2014-2019)

Notes: The data calculated was for Indonesia, Myanmar, Malaysia, the Philippines, Thailand, and Vietnam.

(Source: Author's calculations using data from World Development Indicators database, the World Bank)

# 1.3 The link between remittance inflows and human development in selected ASEAN countries

Remittances can be considered part of a welfare system that transfers purchasing power from more affluent to poorer communities. In addition, receiving remittances helps to increase household spending and consumption. Vacaflores (2018) claimed that remittance improve the standard of living by increasing consumption, initiating business initiatives and giving the green light to the recipients to be more forward-looking. What is the influence of remittance inflows on human development? Previous studies have stated a strong

connection between remittances and economic growth as increased remittances contribute to economic growth, thus benefitting human development.

The New Economics of Labor Migration (NELM) concept states that migration mitigates risk among local and international markets; it underpins previous academic work on the link between remittances and human development. Furthermore, the theory based on Development Optimist School of thought has been used to explain the link between remittances and human development. It arose from the neoclassical migration theory, claiming that remittances help recipient nation grow (Adenutsi, 2010).

The human development index (HDI) is a composite index that considers; economic growth, health, and education. The HDI was published by the first human development report and has become the standard of assessment of accomplishment in the fundamental aspects of human development (Klugment et al., 2011). According to Amaluddin et al. (2018), a higher in human development index (HDI) will improve growth performance and reduce poverty. The Human Development Report of 1990 presented a novel perspective on human advancement. Human development emphasises people and their chances and choices, emphasising three critical elements for individuals: a fair quality of living for the population, a long and healthy life, and knowledge.

Because the HDI is a multidimensional approach beyond a traditional economic perspective, it has become a viable alternative to the traditional one-dimensional measure of development. By measuring three dimensions of achievements in life expectancy, education, and income. The HDI allows for a more comprehensive view of a country's development than income alone. Since the shift in development's conceptualisation and measurement, it's been suggested that the factors of economic growth have a significant impact on this widely defined measure of human development.

According to UI Haq (2003), the standard development measures were the GDP and GDP per capita, derived from the assumption that economic growth and human development are highly correlated. Economic growth and human development are not inextricably linked. While economic expansion increases the availability of material resources to meet human needs, the quality of life is determined by resource allocation, and the increased resources are utilised to fund public services (Anand & Ravallion, 1993). The current flow of remittances, particularly in ASEAN nations, is one potential among these sources. As a result, it's worth examining if remittances have an impact on HDI, as can be seen below.

Figure 1.4 displays the link between remittance inflows and human development in the selected ASEAN countries. The UNDP (2018) classified countries with HDI of less than 0.550 as low human development, 0.550-0.699 as medium human development, 0.700 to 0.799 as high human development and 0.800 or more as extremely high human development. It can be seen that an increase in

remittance inflows in 2017 led to increased human development. In contrast, in 2018, a decrease in remittance inflows caused human development to fall to 0.594. In 2019, the figure illustrated the contradictory relationship where a drop in remittance inflows increased human development. Remittances help enhance the proxies for human development since they are monetary flows in a foreign currency. As a result, it is necessary to determine whether remittance inflows in selected ASEAN countries promote or inhibit human development.

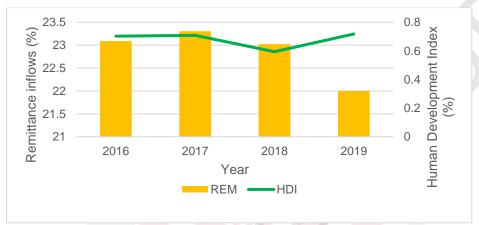


Figure 1.4 : Remittance inflows and Human Development in selected ASEAN countries (2016-2019)

Notes: The data calculated was for Indonesia, Myanmar, Malaysia, the Philippines, Thailand, and Vietnam.

(Source: World Development Indicators database, the World Bank)

# 1.4 The relationship between Foreign Direct Investment (FDI) and income inequality in the ASEAN-5 countries.

Foreign direct investment (FDI) is a form of cross-border investment associated with a resident in an economy that governs or has a substantial degree of influence on the management of a company that resides in another economy (usually owning 10% or more of the business). Moreover, FDI inflows measure foreign residents' investment in a country. Every country needs FDI to drive its economy. FDI is viewed as an essential source of capital and a booster for economic growth (Farhan et al, 2015). FDI has become a key factor for economic integration. Since the 1980s, many countries have started to remove regulations and trade barriers to allow the free movement of capital across borders. As globalisation has taken place, other countries have regarded the ASEAN region as an opportunity to enhance their economies. This situation has been especially true for many firms reaching out to unchartered markets that offer low wage labour, low transaction costs and low tax payments (Celik and Baldes, 2010).

Substantial investment has come mainly from China, the Netherland, Germany, Switzerland, and Australia in the ASEAN region. Increases in wholesale and retail investment, real estate, manufacturing and mining have all played a role. Singapore, Indonesia and Vietnam accounted for about 72% of FDI inflows in the region in 2017, indicating a high investment concentration. Nevertheless, FDI flows to other countries have been increasing gradually. Singapore remained the largest recipient in the region, however in 2017, investment from the European Union and the United States, the two most prominent investors in Singapore, fell. The substantial decrease in Singapore's share of FDI from 63% in 2016 to 45% in 2017, influenced the overall FDI inflows into the ASEAN region (see Figure 1.5).

There was also a reduction in FDI inflows to Malaysia. Investment growth in Malaysia from China, Germany, Japan and the United Kingdom was not enough to counter a fall inflows from the United States and Singapore (ASEAN, 2018). A record increase in FDI in Indonesia was driven by an increase in investment in manufacturing, wholesale and retail and other services by investors from; Singapore, Japan, China and the Netherlands. The significant increase in investment inflows to Indonesia in 2017 increased Indonesia's share of ASEAN FDI inflows from 3.2% to 16.8% in 2017.

Increased FDI may help recipient countries boost their economies by enhancing technology, skills transfer and reducing income inequality. In addition, FDI could increase productivity, introduce new management techniques and offer employees opportunities to gain training connected with international production methods. However, in some cases, economic growth reduces income distribution. Chongvilaivan (2013) claimed that although most ASEAN countries showed fast growth in economic development and FDI inflows, the benefits were unevenly distributed. This situation might be due to such flows only benefiting certain groups of people. For instance, the existence of MNCs in a sector may increase the demand for high skilled workers to fill positions at the company. When high skilled workers are hired, their income will be higher, while low skilled workers will continue to receive a low income. This situation will cause income inequality to become more prevalent in the country.

Income inequality refers to the uneven distribution of income between individuals or households in a country. The income gap, imbalance in income, unequal distribution of income, income disparity and income inequality are terms used interchangeably in the existing literature. These terms apply when one individual or group have more money than others. Because of this, inequality exists and it should not necessarily be pictured as either a good or bad situation in a country. The Gini coefficient is widely used to measure income inequality, with the value spreading from 0 (perfect equality) to 1 (perfect inequality).

Inequality indirectly affects poverty and growth, Birdsall et al. (1995) found that greater initial income inequality reduced future growth even after controlling for initial GDP and human capital levels. Figure 1.5 shows the link between FDI and

income inequality in the ASEAN region from 2014 to 2017. The figure reveals that in 2015, increases in FDI slightly increased the income gap from the previous year. In 2016, FDI dropped to 30.59% of the GDP, positively impacted GINI when the income gap reduced to 1.62 from the year 2015. In 2017, when FDI inflows increased to 38.49% of the GDP, income inequality still decrease. The results in the figure below reveal mixed results. Thus, to better understand the effectiveness of FDI in reducing income disparity, this issue critically needs further study, especially for the ASEAN-5 countries as they received the highest amount of FDI of the Southeast Asian countries.

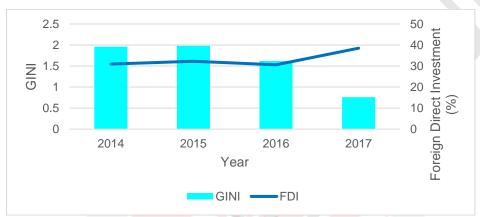


Figure 1.5 : Foreign Direct Investment (FDI) and income inequality in the ASEAN region (2014-2017)

Notes: The data calculated was for Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

(Source: World Development Indicators database, the World Bank)

#### 1.5 Problem Statement

As a result of globalisation and the migration of workers across borders, remittances play a significant role in the global economy as major foreign currencies flow to millions of households. Remittance inflows serves as one of the most critical inputs for economies, particularly for recipient countries during hard times (recession), because they provide a substantial income source of income for recipient families. According to the World Bank (2018), the flow of remittances to recipient low-and middle-income countries increased from U\$\$633 billion in 2017 to U\$\$689 billion in 2018. For the selected ASEAN countries the Philippines for example, received remittance inflows in 2018 of about U\$\$34 billion contributing 9.7% of the GDP. This statistic revealed, how important remittance inflows could contribute to economic development and increase people's living standards, especially in ASEAN countries.

Remittance inflows have increased steadily and become a critical key factor in helping economic development due to increased household consumption and investment. However, despite many scholars finding that remittances help increase economic well-being, there is still a lack of references for human development indicators. There are currently extensive studies on the impact of remittances on economic growth, which is the most commonly used measure for economic development and well-being in many countries (Mcgillivray, 1991; and Klugman et al., 2011). However, this standard measure of development is ineffective because the gross domestic product (GDP) is cannot capture broader measures of human development. Therefore, it is critically important to examine the impact of remittance on human development using a comprehensive index covering various aspects of human development such as; health, education, and income. It gives the actual scenario of the relationship between these two variables especially in ASEAN.

Besides investigating the impact of remittance inflows on human development, it is also essential to examine the effectiveness of foreign direct investment (FDI) in helping to reduce income inequality, as FDI is one of the crucial sources for economic development. In the Asian region, East Asia appears to be the top destination for multinational corporations (MNCs) where FDI inflows to ASEAN have reached a record level of US\$137 billion in 2017. The share of FDI inflows to the ASEAN region increased from 31% in 2016 to 34% in 2017. FDI inflows are viewed as a significant driver of economic transformation and modernisation. Many countries try to attract more FDI as any additional FDI received will positively impact recipient countries, particularly their economies and indirectly reduce income disparities.

However, there are some cases when increased FDI might harm income inequality, as it may widen the gap between the richest and the poorest. This observation motivated the researcher to conduct an empirical assessment of the effectiveness of FDI inflows on reducing income inequality, especially in the selected ASEAN countries.

# 1.6 Research Questions

Specifically, this study sought to answer the following questions.

- i. Do remittance inflows have any impact on human development in the ASEAN countries?
- ii. Does foreign direct investment effectively reduce income inequality in the ASEAN countries?

# 1.7 Research Objectives

The general objective of this study was to examine the impacts of different types of financial flows on the economic development of the ASEAN countries. Specifically, this study aimed:

- To investigate the impact of remittance inflows on human development in the ASEAN countries:
- ii. To examine the effectiveness of foreign direct investment in reducing income inequality in the ASEAN countries.

# 1.8 Justification of the Study

This study has provided several contributions to the current literature and policy implications. Firstly, in this study, the researcher used the HDI as a comprehensive measure of socioeconomic development (Sanderson, 2009) to investigate the impact of remittances on human development. To date, there have only been limited studies on remittance inflows and human development for reference, especially for the ASEAN countries. Since there have been very few studies on this issue, this study has closed the gap by contributing to the existing literature on remittance inflows and human development. It will also be a foundation for future research by providing a reference point of empirical evidence on the effects of remittances on human development, especially in the ASEAN region.

Secondly, this research has provided crucial empirical evidence concerning the effectiveness of FDI on reducing income inequality by focusing on the relationship between the variables in the selected ASEAN countries. The importance of FDI has been discussed in-depth in past literature. However, only a few studies have examined the effectiveness of FDI on reducing income inequality for the ASEAN countries. These pioneering studies have focused on selected individual and developing countries, providing broad views. However, in this study, the researcher focused on the case of selected ASEAN countries. The findings of this study provide an assessment of the link between FDI and income inequality.

Lastly, the results of this study can act as guide as reference for policy makers when creating new policies related to remittances, FDI, human development and income inequality. For instance, the results can be used to identify the interaction between remittances and human development and the effectiveness of FDI in reducing income disparities.

# 1.9 Organisation of the Chapters

This thesis is organised into five chapters. Chapter one offers an overview of the issues covered by this research. It also describes the problem statement and research objectives and justifies the existing study. Chapter two review of the theoretical and empirical literature related to international remittance inflows, human development, foreign direct investment, and income inequality. Chapter three explains the theoretical framework, model specification, estimation procedures and the data used in the analysis. Chapter four provides and discusses the empirical results. Finally, chapter five concludes by providing a summary and suggestions for policy formulation to government and policymakers and suggestions for future studies.

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