



**UNIVERSITI PUTRA MALAYSIA**

***EFFECTS OF REMITTANCES ON POVERTY AND HUMAN  
DEVELOPMENT IN DEVELOPING COUNTRIES***

**CHONG SIEW HUAY**

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**EFFECTS OF REMITTANCES ON POVERTY AND HUMAN  
DEVELOPMENT IN DEVELOPING COUNTRIES**

By

**CHONG SIEW HUAY**

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

**July 2017**

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## DEDICATION

This thesis is dedicated to my loving parents, Chong Chun Fatt and Son Mee Cheng, without their encouragement, affection and love, the completion of this thesis would not have been possible



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment  
of the requirement for the Degree of Master of Science

**EFFECTS OF REMITTANCES ON POVERTY AND HUMAN  
DEVELOPMENT IN DEVELOPING COUNTRIES**

By

**CHONG SIEW HUAY**

**July 2017**

**Chairman : Nor Yasmin Binti Mhd Bani, PhD**  
**Faculty : Economics and Management**

The issues of the increasing trend of worker's remittances continue to attract the interest of scholars and policymakers because the growing consensus is that remittance inflows result in economic growth, poverty reduction and human development. The purpose of this study is to examine the effect of remittances on poverty and human development. The first objective analyses the role of human capital in remittances and poverty relationship, whereas the second objective examines the impact of remittances on human development. Both objectives are applied the Generalized Method of Moments (GMM) for the estimation. In the first issue, the main contribution of our work comes from the finding that while remittances reduce poverty, the effect is moderated via education. The impact of remittances on poverty reduces as years of education increases, which show that education exerts a stronger impact than remittances on poverty reduction. The findings imply that the role of remittances in reducing poverty should not be overemphasized particularly in the developing countries, and education is vital in these countries. As to reduce poverty in developing countries, the policy should focus on education by facilitating more schooling opportunities. The remaining control variables such as GDP per capita and financial developments have a negative and significant impact on poverty. Inequality has a positive and significant effect on poverty. The second objective is to examine the impact of remittances on human development. Using the panel data of 67 developing countries from 1981 to 2014, this study aims to answer the question, 'How does remittances affect human development?' Results reveal remittances exert a significant positive effect on human development, indicating that a 10 percent increase in remittances will lead to 8.51 percent increase in human development. We also find the effect of other variables on human development in the study. GDP per capita, financial development, inflation and government expenditure have a positive and significant effect on human development. Policy makers need to consider the indicators of human development as a catalyst to human development. Specifically, to improve human development, the policy should concentrate on health, and education in developing countries.

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

**KESAN KIRIMAN WANG TERHADAP KEMISKINAN DAN PEMBANGUNAN  
MANUSIA DI NEGARA-NEGARA SEDANG MEMBANGUN**

Oleh

**CHONG SIEW HUAY**

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Isu-isu peningkatan kiriman wang pekerja telah menarik minat para penyelidik dan penggubal dasar kerana peningkatan aliran masuk kiriman wang menyebabkan pertumbuhan ekonomi dan mengurangkan kadar kemiskinan. Tujuan Kajian ini adalah menyelidik kesan kiriman wang terhadap kemiskinan dan pembangua insan. Objektif pertama meninjau peranan modal insan dalam hubungan kiriman wang dan kemiskinan, manakala objektif kedua mengkaji kesan kiriman wang terhadap pembangunan manusia. Kajian empirical yang sistematik berdasarkan kepada Generalized Method of Moments (GMM) telah dilakukan oleh kajian ini. Hasil objektif pertama kajian ini mendapati bahawa kiriman wang mengurangkan kemiskinan, kesan itu dimoderasikan melalui pendidikan. Kesan kiriman wang terhadap kemiskinan berkurang apabila tahun pendidikan bertambah, menunjukkan bahawa pendidikan mempunyai kesan yang lebih guguh terhadap pengurangan kemiskinan. Kajian ini mencadangkan bahawa peranan kiriman wang dalam pengurangan kemiskinan tidak seharusnya memberi penekanan yang berlebihan dalam negara-negara yang sedang membangun dan peranan pendidikan adalah amat penting di negara-negara tersebut. Dasar seharusnya menumpukan kepada pendidikan dengan menawarkan lebih banyak peluang persekolahan supaya mengurangkan kemiskinan di negara-negara yang sedang membangun,. Pemboleh ubah kawalan yang lain, KDNK per kapita dan pembangunan kewangan mempunyai kesan negatif dan signifikan kepada kemiskinan. Ketidaksamaan mempunyai kesan yang positif dan signifikan kepada kemiskinan. Bagi menurunkan kemiskinan, dasar harus menumpu kepada pendidikan formal dan tidak formal seperti latihan dan pembangunan kemahiran. Objektif kedua mengkaji kesan kiriman wang terhadap pembangunan insan. Dengan menggunakan data panel daripada 67 negara-negara sedang membangun dari tahun 1981 hingga tahun 2014, kajian ini bertujuan untuk menjawab persoalan “Adakah kiriman wang mempengaruhi pengukuran pembangunan insan?”. Hasil kajian mendapati bahawa kiriman wang mempunyai kesan positif terhadap pembangunan insan, di mana sebanyak 10 peratus peningkatan dalam kiriman wang akan meningkatkan pembangunan insan sebanyak 8.51 peratus. Kami juga mendapati bahawa

terdapat kesan pembolehubah yang lain. KDNK per kapita, pembangunan kewangan, inflasi dan perbelanjaan kerajaan mempunyai kesan yang positif dan signifikan kepada pembangunan manusia. Penggubal dasar perlu mempertimbangkan penunjuk pembangunan insan sebagai satu pemangkin terhadap pembangunan insan. Secara khusus, polisi harus memberi tumpuan terhadap pertumbuhan ekonomi, kesihatan dan pendidikan di negara-negara sedang membangun untuk meningkatkan pembangunan insan.



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I certify that a Thesis Examination Committee has met on 26 July 2017 to conduct the final examination of Chong Siew Huay on her thesis entitled "Effects of Remittances on Poverty and Human Development in Developing Countries" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

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## LIST OF ABBREVIATIONS

ARDL	Autoregressive Distributed Lag
FDI	Foreign Direct Investment
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GMM	Generalized Method of Moments
GNI	Gross National Income
HDI	Human Development Index
HDR	Human Development Reports
IMF	International Monetary Fund
LAC	Latin America and the Caribbean
LAMP	Latin American Migration Project
MDG	Millennium Development Goals
NELM	National Economic of Labour Migration
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Square
PPP	Purchasing Power Parity
PRSP	Poverty Reduction Strategy Paper
SDG	Sustainable Development Goals
SSA	Sub-Saharan Africa
UNDP	United Nation Development Program
WDI	World Bank Indicator

## CHAPTER 1

### INTRODUCTION

#### 1.1 Background of Study

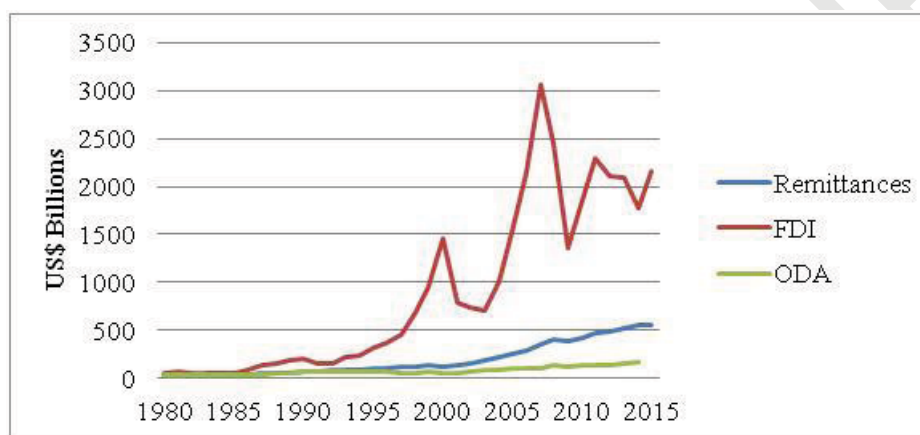
According to the World Bank (2011), 215.8 million of people in the world are currently living outside of their countries of birth, a number that is increasing each year. Hundreds of millions of people are working outside of their country and migrate to urban areas in search of work and better living conditions. When they are abroad, they send money and goods to their home country. Thus, the money and goods transmitted to households by migrant workers who are working outside of their origin country, are defined as remittances (Adams, 2011).

Remittances have played an important role in the world economy over the past decades as representing an important flow of foreign currency directly reaching to millions of households. In developing countries, remittances have seemingly compensated the deficit of national savings as a source of financing investments in the private sector. Moreover, since remittances are money and goods that are transmitted to their friends and families from migrant workers, these transfers tend to be well targeted to the needs of their recipients.

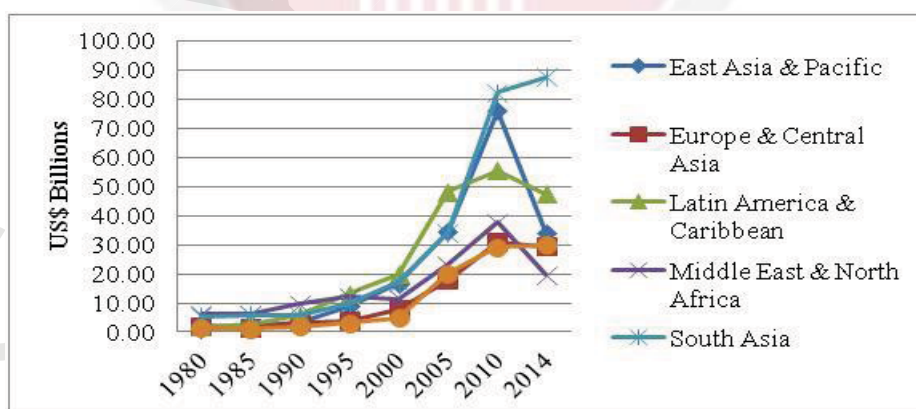
Remittances are one of the important injections for an economy, especially for the recipient countries during the times of economic recession because they provide a significant source of income for recipient families. In 2009, remittances have become as large as foreign direct investment (FDI) in some countries and constitute a resource inflow in a large group of developing countries which exceeds a variety of other balance of payments flows (IMF, 2009). The flows of remittances to the developing world have reached \$552.30 billion as of 2015, which increased 6.3 percent over 2012. India was reported as the largest remittances receiving country, attracting about \$69 billion in remittances, followed by China, with \$64 billion; the Philippines, with \$28 billion; Mexico, with \$25 billion; and Nigeria, with \$21 billion. Similarly, Tajikistan (42%), the Kyrgyz Republic (30%), Nepal (29%), Tonga (28%), and Moldova (26%) were the largest recipients of remittances as their GDP shares. Given these statistics, remittances are important contributors to development in receiving countries.

In addition, remittances are the major source of external financial flows. Also, these transfers have become a more stable and less volatile source as compared with other important traditional funding sources, including FDI and Official Development Assistance (ODA), especially under economic and financial crises (Mohapatra, Ratha, & Silwal, 2011; and Grabel, 2009). Figure 1 shows the remittances, ODA, and FDI inflows in the world. It is observed that in 2010, migrants sent over \$325 billion to their countries of origin, far exceeding the total ODA received in 2009. These transfers have

dramatically increased over the last two decades and represent the second largest external source of funding after FDI in developing countries (Hubert Ebeke, 2012). Record in 1981 shows remittance inflows amounted to \$37.1 billion, with an increase to \$552.3 billion in 2015, representing 25.50 percent of total FDI flows and 34.2 percent of ODA. However, following the global fiscal crisis in 2008, remittance inflows dropped from \$405 billion in 2007 to \$387 billion in 2008. On the other hand, a sharp increase in FDI inflow has been witnessed since the mid-1980s and early 1990s. The global FDI inflow, however, declined in the year 2008 during the global fiscal crisis.



**Figure 1.1 : Remittances, ODA and FDI flows in the World during 1980-2015**  
 (Source: Author's calculations using data from World Bank, Migration and Remittances Fact book, 2015)



**Figure 1.2 : Remittances received by region, 1980-2014**  
 (Source: Author's calculations based on World Bank data, Migration and Remittances Factbook, 2015)

Furthermore, as evidenced by Solimano (2003), remittance inflows are mostly concentrated in a group of developing countries. Figure 1.2 shows the remittance inflows to developing countries by regions. From the figure, it is evidence that there is a continuous increase in remittances since 1980 and the increase is highest in South Asia. Similarly, Latin America stands as the second highest region for remittance inflows. On the other hand, it is exhibited that Europe and Central Asia are receiving a very less amount of remittances among all the developing regions. The decreasing trend in remittances, which began in 2012, was worsened by low oil prices from the Gulf Cooperation Council (GCC). This is an issue of great importance since the Gulf region is one of the largest sources of remittances in the world (World Bank, 2015). As a result, many remittance receiving regions, including East Asia & Pacific, Latin America and Caribbean, and Middle East & North America experience a sharp decline in remittance flows.

Table 1.1 reports the estimates for the share of remittances as a percentage GDP for different regions of the world. From the given statistics, it is revealed that a sharp increase in remittance inflows has been witnessed since the early 2000s. At magnitude wise, from 1980 to 2014, remittances flows to developing countries increased from \$17.71 billion in 1980 to \$220.96 billion in 2014 with South Asia as the leading region in remittance inflows. In 2014, South Asia manages to increase their remittance inflows by 14.30 percent in 1980 to 25.49 percent in 2014. Again, it is observed that the second highest growing region in remittance inflows is Latin America. The share of remittances in Latin America increased by 13.8 percent from 1980 to 2014. However, remittances to Europe and Central Asia increased from 5.59 percent in 1980 to 8.59 percent in 2014. The share of remittances in Sub-Saharan Africa improved by 3.78 percent from 1980 to 8.74 percent in 2014. Meanwhile, remittances to East Asia Pacific increased from 2.83 percent in 1980 to 9.92 percent in 2014. The next section is allocated to illustrate the impact of remittances on key macroeconomic fundamentals such as poverty, human capital and their contingent effects.

Table 1.1 : Share of remittances as percentage of GDP by region, 1980-2014

Region	Share of Remittances (%)									
	1980	1985	1990	1995	2000	2005	2010	2014		
<b>All developing countries</b>	47.84	54.98	42.62	50.16	57.68	67.51	72.62	72.25		
<b>East Asia &amp; pacific</b>	2.83	5.95	4.58	8.72	12.34	13.04	17.72	9.92		
<b>Europe &amp; central Asia</b>	5.59	4.83	4.78	3.88	5.83	6.77	7.19	8.59		
<b>Latin America &amp; Caribbean</b>	5.01	7.28	8.31	12.92	14.78	18.30	12.91	13.80		
<b>Middle East &amp; North Africa</b>	16.32	17.32	14.11	11.77	8.47	8.75	8.77	5.70		
<b>South Asia</b>	14.30	16.37	8.21	9.77	12.70	13.01	19.20	25.49		
<b>Sub-Saharan Africa</b>	3.78	3.23	2.63	3.10	3.57	7.65	6.83	8.74		
<b>Low income</b>	1.51	1.19	0.74	0.53	1.08	1.50	2.10	0.01		
<b>Middle income</b>	46.32	53.80	41.88	49.63	56.61	66.01	70.52	64.37		
<b>High income: OECD</b>	51.53	44.48	56.97	46.58	40.36	29.48	24.27	31.73		
<b>High income: non OECD</b>	0.64	0.54	0.41	3.26	1.96	3.01	3.11	3.89		

(Source: Calculated using data from the World Bank, Migration & Remittances Factbook , 2015)

### 1.1.1 Remittances and Poverty

The linkage between remittances and poverty has drawn attention recently. Studies have indicated economic growth as an important channel in poverty alleviation. However, the existing literature on the relationship between poverty and economic growth has criticized that economic growth alone is inadequate to alleviate poverty (Green, 2007). Therefore, remittances are claimed to be one of the key determinants to enhance economic growth and to reduce poverty in developing countries.

In developing countries, poverty alleviation is one of the crucial topics for the United Nation's Millennium Development Goals (MDG). The United Nations proposed the goal of halving poverty in the developing world from 1990 to 2015. However, only a few nations' poverty rates (e.g., East Asia Pacific, Latin America, and the Caribbean) in 2010 were not lower than that of 1990. The poor countries are all from Sub-Saharan African regions (such as, Guinea, Ethiopia, The Gambia, Democratic Republic of Congo, Madagascar, Liberia, Niger, Central African Republic, Burundi, and Malawi). The number of poor people in sub-Saharan Africa increase from 117.05 million in 1990 to 224.43 million in 2005.

Table 1.2 shows the estimates for poverty headcount and number of people living below the poverty line in different regions. The poverty headcount index is defined as the share of people living below the certain poverty line such as \$1.25 a day per person was proposed (Ravallion, 2001).

Table 1.2 : Poverty headcount and number of poor people (1990-2008)

Region	1990		1996		2005		2008	
	Poverty Headcount (%)	Number of poor (millions)	Poverty Headcount (%)	Number of poor (millions)	Poverty Headcount (%)	Number of poor (millions)	Poverty Headcount (%)	Number of poor (millions)
East Asia and Pacific	31.21	500.51	16.20	283.31	5.53	104.78	4.32	83.67
Europe and Central Asia	0.39	1.79	2.86	13.34	1.99	9.28	1.16	5.43
Latin America and Caribbean	8.60	38.66	7.80	38.77	5.88	33.25	3.79	22.25
Middle East and North Africa	0.85	1.93	0.65	1.68	0.48	1.46	0.33	1.06
South Asia	15.00	169.92	11.71	150.40	8.12	122.68	6.57	103.95
Sub-Saharan Africa	34.81	177.05	38.36	230.11	29.86	227.68	27.13	224.43
<b>Total</b>	<b>20.31</b>	<b>889.79</b>	<b>14.78</b>	<b>715.72</b>	<b>9.07</b>	<b>499.17</b>	<b>7.70</b>	<b>440.59</b>

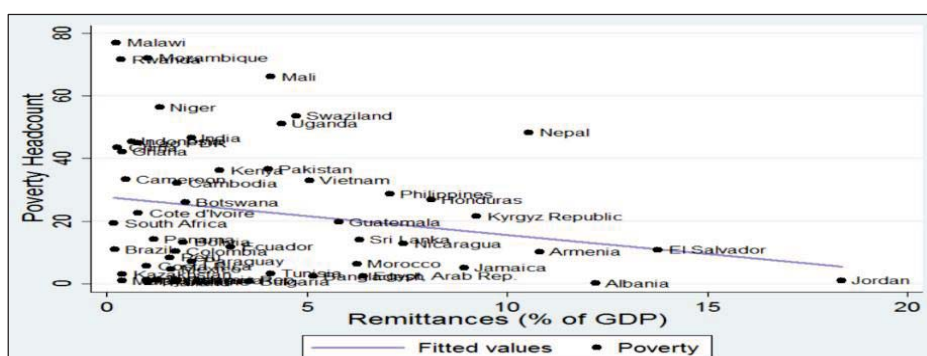
(Source: Calculated using data from PovcalNet, 2015)



The poverty headcount was 20.31 percent in 1990, which corresponds to 889.79 million people living in poverty. It decreased to 7.70 percent in 2008, which corresponding to 440.59 million people living in poverty. In 1996, Europe, Central Asia, and Sub-Saharan Africa experienced an increase in the poverty headcount and the number of poor people. The poverty headcount for Europe and Central Asia was 0.39 percent in 1990 and increased to 2.86 percent in 1996. Meanwhile, Sub-Saharan Africa increased its poverty headcount by 34.81 percent in 1990 to 38.36 percent in 1996. In 2008, East Asia and Pacific managed to reduce poverty headcount index from 31.21 percent to 4.32 percent, and South Asia managed to reduce poverty headcount index from 15 percent to 6.57 percent.

The study on the relationship between poverty and remittance has attracted increasing interest from researchers, academics and policy makers around the world. A number of studies have investigated the impact of remittances on poverty for example, Imai, Gaiha, Ali and Kaicker, 2014; Adams and Page, 2009; Acosta, Fajnzylber and Lopez, 2007; and Jongwanich, 2007) among others. From a theoretical perspective, remittances contribute to poverty reduction in developing countries, because it increases the household income (Ratha, 2013). Remittances receiving households have higher incomes and expenditure relative to similar households that do not receive remittances. Evidence across the globe demonstrates that households that receive remittances are financially better off (Gupta, Pattillo, & Fund, 2009). Remittance inflows can directly contribute to poverty reduction if they flow towards the neediest groups, and can also contribute to the investment in human and physical capital, thus supporting economic growth. These inflows can also reduce the financial constraints faced by households and small-scale entrepreneurs.

Figure 1.3 displays the correlation between poverty and remittances for the sampled countries over the period 1981 to 2010. The fitted line illustrates a negative correlation between poverty and remittances, which means that as the remittances increase, the poverty headcount decreases. Countries with higher remittances inflow tended to have lower poverty headcount (such as, Jordan, El Salvador, Albania and Armenia). On the contrary, countries with higher poverty headcount tended to have lower remittances inflow (such as, Malawi, Rwanda and Mozambique).



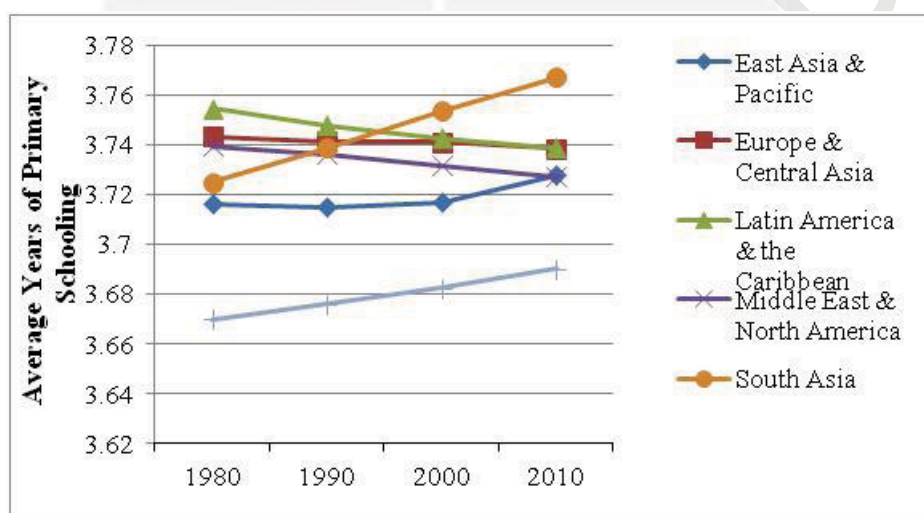
**Figure 1.3 : Scatter plot for the relationship between remittances and poverty**  
(Source: World Bank Indicators 2014)

### 1.1.2 The Role of Human Capital in Remittances-Poverty Nexus

Besides the significant impact of remittances on poverty alleviation in developing countries, remittances can also contribute to human capital improvements. According to OECD (2001), human capital is defined as “the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social, and economic well-being”. The importance of human capital has been emphasized in both theoretical and empirical literature.

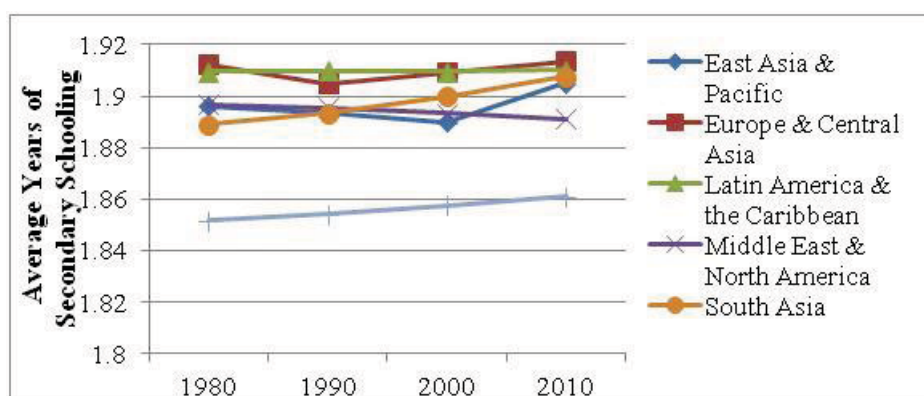
In developing countries, remittances are considered as parts of welfare system that transfer purchasing power from the rich to poorer members of a family or community. The existing empirical literature on remittances and poverty confirmed that remittances do not only reduce poverty, but also provide working capital which affects the labor supply. In addition, it has a multiplier effect through increased household spending and consumption smoothing. Empirically, Adams and Page (2005) examined the impact of remittances on poverty in developing countries and argued that remittances reduce the level, depth, and severity of poverty. Microeconomics evidence based on household survey data suggests that remittances are generally associated with reductions in poverty (Adams & Page, 2005; and Acosta et al., 2007). For instance, in Nepal, one third to one half of the reduction in the poverty headcount ratio from 42 percent in 1995–1996 to 31 percent in 2003–2004 is attributed to the increase in remittances (World Bank, 2006). Despite the abundance of empirical studies on the relationship between remittances and poverty these studies focused on the direct relationship between remittances and poverty. Most of the studies have overlooked the relationship by not considering the indirect effect of remittances on poverty which may happen through other economic drivers or macroeconomics variables. Specifically, these studies did not take into account the channels through which remittances affect poverty. Thus, this study fills the gaps in the literature by specifically addressing the indirect role of remittances on poverty through a channel, which is human capital. It highlights the contingent role of human capital and remittances on poverty reduction.

Figures 1.3 to 1.5 show the average years of primary, secondary, and tertiary schooling by region between 1985 and 2010, respectively. The average years of primary, secondary, and tertiary schooling in developing countries exhibit an increasing pattern over this time period, except for Latin America, the Middle East, and North America, whereas the average years of secondary and tertiary schooling in East Asia and Pacific region show a sharp decline but an increase after 2000. The decline in secondary and tertiary schooling is due to the bad macroeconomic performance in developing countries (Permani, 2008). Specifically, during the Asian crisis (1997-2000), there was a significant decrease in GDP growth in some East Asian economies, (e.g., Indonesia, Thailand, and Malaysia) which significantly decreased the government financial supports for education.

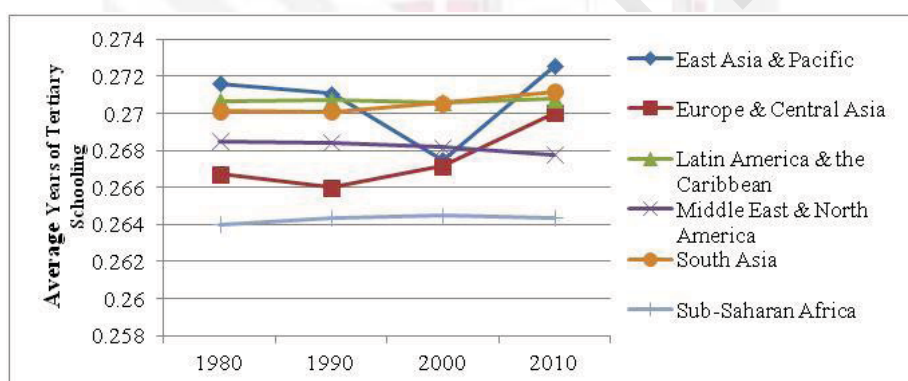


**Figure 1.4 : Trends of Average Years of Primary Schooling by region, 1980-2010**  
 (Source: Calculated using data from Barro & Lee<sup>1</sup> 2010)

<sup>1</sup> Barro and Lee(2010) dataset is a complete dataset that estimates the educational attainment for the total populations by using information from consistent census data at the five-year intervals from 1950 to 2010 for 89 countries. For the detailed explanation of the estimation method, see Barro and Lee (2015).



**Figure 1.5 : Trends of Average Years of Secondary Schooling by region, 1980-2010**  
 (Source: Calculated using data from Barro and Lee, 2010)



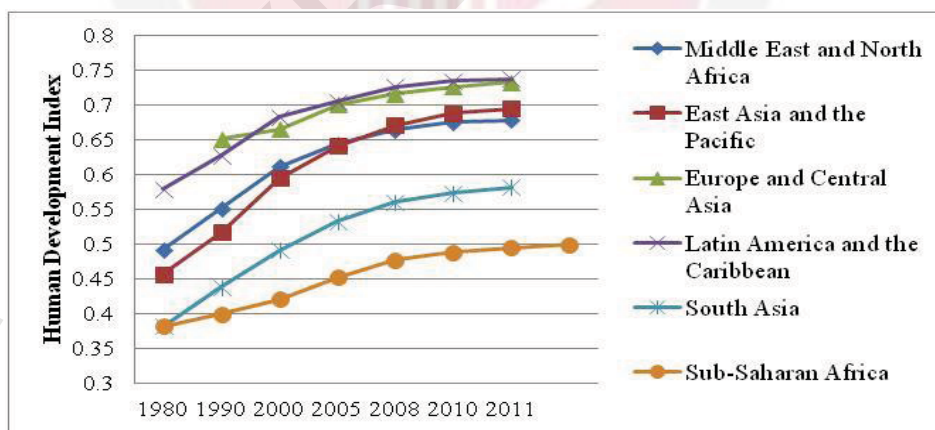
**Figure 1.6 : Trends of Average Years of Tertiary Schooling by region, 1980-2010**  
 (Source: Calculated using data from Barro and Lee 2010)

As of 2010, the average years of primary schooling are highest in South Asia, with 3.767 years, and lowest in Sub-Saharan Africa, with 3.690 years. Meanwhile, the average years of secondary schooling are highest in Europe and Central Asia, with 1.914 years, and lowest in Sub-Saharan Africa, with 1.860 years. On the other hand, Europe and Central Asia are the highest in average of tertiary schooling among all the developing regions. The average years of tertiary schooling in Europe and Central Asia decreased in the first 10 years, but increased to 0.272 years in 2010. Although increased remittance inflows can directly promote economic growth and development in recipient countries, the existing evidence on the role of human capital in remittances-poverty relationship is limited. According to Acosta et al. (2007), human capital is also an important channel need to be considered. Remittances can also affect the household income and poverty by means of affecting human capital formation.

### 1.1.3 Remittances and Human Development Nexus

Economic growth is the most widely used indicator for the level of development and a measure of well-being in many countries (Mcgillivray, 1991; and Klugman, Rodríguez & Choi, 2011). However, scholars argue that this traditional one-dimensional measure of development is inadequate because it is a narrow definition to measure human development. In the 1970s and 1980s, researchers considered using alternative focuses to go beyond economic growth, including putting better emphasis on employment, followed by redistribution with growth, and then whether people had their basic needs met. These ideas helped to shed the light on human development (Sen, 2003).

Human development is a development of expanding people's choices. In 1990, the first Human Development Report introduced an original approach for advancing human well-being. Human development focused on people and their opportunities and choices, and placed importance on three essentials for individuals: having a decent standard of living for a population; a long and healthy life; and being knowledgeable. The Human Development Index (HDI) introduced by the first Human Development Report has become a standard of measure of achievement in the basic dimensions of human development because it is a composite index taking economic growth, health, and education into consideration (Klugman et al. 2011). Since 1990, the United Nations Development Program (UNDP) has proposed HDI in annual Human Development Reports (HDRs). HDI combines three dimensions: GNI per capita (PPP US\$) has been selected as indicator for standard of living, life expectancy at birth as the indicator for health, and mean years and expected years of schooling as the indicator for the education.



**Figure 1.7 : Trends of Human Development Index (HDI) by region, 1980-2013**  
(Source: Calculated using data from UNDP, 2015)

Figure 1.6 shows the trends of HDI by region between 1980 and 2013. The value of the index is computed on the scale of 0 to 1, where zero corresponds to the minimum and one corresponds to the maximum value for the indicator. There is a noticeably increasing trend over the period, where the increase of HDI is recorded highest in Latin America. The trend of HDI increased from 0.57 in 1980 to 0.74 in 2013. Meanwhile, Europe and Central Asia are the second highest of HDI, which increased by 0.70 in 2013. Conversely, Sub-Saharan Africa is the lowest in HDI among all developing regions. HDI to the Sub-Saharan Africa only increased from 0.38 in 1980 to 0.58 in 2013.

The HDI has become an alternative to the traditional one-dimensional measure of development because HDI is a multidimensional approach beyond a traditional economic perspective. By measuring three dimensions of achievements in life expectancy, education, and income, the HDI allows a broader view of a country's development than does income alone. For instance, Bolivia has achieved a higher HDI 0.641 with a lower GDP per capita (\$1205.24) compared to Guatemala (\$2805.95) with HDI 0.611, because it has done more to translate that income into human development. Congo, one of the world's poorest countries, has an HDI (0.554) comparable to Bhutan (0.573), a country almost 7.5 times richer. On the other hand, countries at the same level of income have stark differences in HDI—Vietnam (\$900.49) has roughly the same income as Lesotho (\$876.63) but a much higher HDI, due to its higher life expectancy and literacy. The HDI for Vietnam is 0.654 and 0.471 in Lesotho. These examples highlight the importance of a country's policies to translate wealth into human development. Since the shift in the conceptualisation and the measure of development, it is argued that the determinants of economic growth also significantly influence this broadly defined measure of human development

According to UL Haq (2003), the standard measures of development were GDP, which derived from the assumption that economic growth and human development are strongly correlated. The link between economic growth and human development is not an automatic connection. While economic growth enlarges the material support in satisfying human needs, the qualities of life depend on resource allocation and the additional resources are used to support public services (Anand & Ravallion, 1993). One possibility among these sources is the existing flow of remittances, specifically in developing countries. Therefore, it is a matter of interest to explore whether remittances also affect HDI as illustrated hereinafter.

What is the influence of remittance inflows on human development? Previous studies stated a strong connection between remittances and economic growth as an increase of remittances will contribute to economic growth, thus benefitting human development. The earlier theoretical literature on the relationship between remittances and human development is based on the doctrine of the New Economics of Labor Migration (NELM) which states that migration mitigates the risk among local and foreign markets. Moreover, the relationship between remittances and human development also relies on the theory based on the Developmental Optimistic School. This theory holds an optimistic view of remittances and its effect on development. It emerged from the

neoclassical migration hypothesis which suggests that remittances will enhance development in the recipient countries (Adenutsi, 2010; and De Haas, 2007). Among the existing empirical evidence, Ustubuci and Irdam (2011) is the pioneer study on the impact of remittances on human development. They relate the contributions of remittances to human development and influential role of remittances in human development compared to foreign currency inflows such as FDI, ODA and exports.<sup>2</sup> As remittances are cash flows in foreign currency, they contribute to the improvement of human development. Evidence on remittances and human development using HDI as a proxy for human development is scarce and limited. Therefore, the question of whether the increasing trend of remittances has been generated into an increase of human development in a broad range of developing countries remains a puzzle. Thus, this study attempts to analyze whether remittance inflows in developing countries encourage or discourage human development.

## 1.2 Problem Statement

According to World Bank (2015), the remittance inflows surged from \$325 billion in 2010 to \$ 431.60 billion in 2015. This implies that the remittance inflows steadily rose by 32.80 percent. Remittance inflows have grown rapidly and become an increasingly key factor in poverty reduction because they increase household consumption and investment. However, despite the increasing trend of remittances, poverty is still the burning issue for developing countries because of the global financial crises and subsequent economic slowdown. According to Alvaredo, & Gasparini (2013), 1 of every 5 persons in the developing world still lives in extremely deprived conditions (less than \$1.25 a day), while 4 out of 10 people have household per capita consumption levels lower than \$2 per day. For the indirect effect, remittances lead to decrease in poverty through an increase in the standard of living (Gianetti; Federici & Raitano, 2009) such as providing better nutrition and health care (Aairola, 2007). However, according to Acosta et al. (2007), human capital is also an important channel need to be considered. Remittances can also affect the household income and poverty by means of affecting human capital formation. Therefore, this study also takes into account the human capital channel. Specifically, this study attempts to evaluate the influence of human capital channel to remittances-poverty relationship in developing countries.

Besides identifying the importance of human capital in remittances-poverty relationship, it is also important to examine the impact of remittances on human development. Thus, for the second issue, this study considers the effects of remittances on human development. Although there is an evidence on the use of remittances for the improvement and enhancement of human capital (Bansak & Chezum, 2009), many scholars highlighted the influential role of remittances as an investment in human capital<sup>3</sup>. However, very little attention has been given to the relationship between remittances and human development in developing countries. Arguably, remittances can

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<sup>2</sup> Adenutsi (2010) also evidenced for the positive relationship between remittances and human development in a small panel of Sub-Saharan countries.

<sup>3</sup> For instances Salas (2014), Mansour, Chaaban & Litchfield (2011).

also be invested in other projects which eventually contribute to human development. Therefore, the question that whether the increasing trend of remittances has any impact on human development in a broad range of developing countries, still remains a puzzle.

In other words, this study attempts to answer the following research questions:

- i. Is there any effect on the role of human capital formation in the remittances and poverty relationship?
- ii. What is the impact of remittances on human development?

### **1.3 Research Objectives**

The objectives of this study are as follows:

- i. To analyse the role of human capital in the remittances-poverty relationship.
- ii. To examine the impact of remittances on human development.

### **1.4 Significance of the Study**

This present study provides several important contributions to the existing literature and policy implications. First, this study provides the importance of remittances and human capital in reducing poverty by focusing on the interaction between remittances and human capital in developing countries. Though the importance of remittances is clearly recognized in previous literature, only few studies empirically examined the relationship between remittances and poverty in a broad range of sample countries. Earlier studies on the relationship between remittances and poverty are mainly focusing on individual countries, particularly in Latin America, by using household surveys. However, this study focuses on the case of developing countries. The findings of this study can provide an assessment of the magnitude of the links associated with remittances, poverty, human capital and human development, respectively.

Second, the findings of this study may serve as a guide and reference for the government in its policy formulation with regards to remittances, human capital, poverty, and human development. For example, it is useful to identify whether and how remittances and human capital interact in their effect on poverty in deciding the most desirable allocations of available resources between these two priorities. The rational decision of the funds through the increasing inflows of migrant remittances may facilitate more schooling opportunities which contribute to poverty reduction and enhance economic growth. This is particularly related to the countries where economic resources and funds are limited, and funds are only used exclusively for the basic needs of the population.



Third, we use the HDI as a comprehensive, accurate, and complex measure of socioeconomic development (Sanderson, 2009) to analyse the impact of remittances on overall of human development. The question of whether the remittances affect human development has not been the subject of much empirical work. Since there are very few studies on this issue, the present study serves as a complement to the existing literature on remittances and human development. The present study will also serve as a basis for future research due to growing issues of human development. Consequently, this study complements to the literature on remittances, poverty, human capital and human development. It provides the empirical evidence on the importance role of human capital in remittances-poverty relationship, and the effect of remittances on human development.

### **1.5 Organisation of the study**

The organisation of the thesis is as follows: Chapter one describes the background of the study, problem statement, research objectives and significance of the study. Chapter two reviews the theoretical and empirical evidences on the impact of remittances on poverty, human capital and human development. Chapter three describes the theoretical framework, model specification, estimation procedures, variable description and data sources. Chapter four presents and discusses the result and findings. Lastly, chapter five provides the summary of the study and suggestion of policy measures.

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