Bachelor Thesis in Economics

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The Impact of Remittances on the Economic Growth of Developing Countries: A Literature Review.

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This report is written in close collaboration between the co-authors as all text has been written with both of the attendants. This undeniably lead to several discussions regarding interpretation of information from the various sources as well as problem solving.
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Abstract

Firms, financial institutions and governments have been the main source for international financial flows to developing countries. Moreover, from the late 1990s remittances sent from migrants abroad to their home countries became a vital source of income as they exceed official development assistance or aids.

Our interest concerns on how remittances affect economic growth in developing countries. However, we have come across considerable contradictory findings regarding the positive or negative contribution of remittances to a sustainable economic development.

A main obstacle in detecting the effect on economic growth is due to the problem of measuring the real financial flows across countries and to the informal channels migrants use to send money.

Unlike many studies, which are based on empirical method, this paper is based on a literature review as we are interested in a broader overview of the subject.

Comparing various findings, we conclude that remittances contribute positively to economic growth.

The level of contribution is based on how remittance receiving families use the inflows of money inflows. Both physical and human investment have a larger impact on the economic growth in a long-term perspective, while direct consumption on primary goods activate a multiplier effect of aggregate demand which results beneficial to the entire economy.

Particularly attention is dedicated to the need of policy interventions to optimize the positive impact of remittances and prevent their possible bad side effects.
List of Abbreviations

FDI – Foreign Direct Investment
G8
G20
BMF6- Balance of Payments and International Investment Position Manual (6th ed.)
BOP - Balance of Payments
GDP - Gross Domestic Product
HIES – Household Income and Expenditure Survey
IMF – International Monetary Fund
ODA – Official Development Aid
OECD – Organization for Economic Co-Operation and Development
UN – United Nations
UNDP -United Nation Development Program
WB – World Bank
Table of Contents

1 Introduction ........................................................................................................................................7
  1.1 Aim of the Thesis ..........................................................................................................................7
  1.2 The Methodology .........................................................................................................................8
  1.3 Limitations ....................................................................................................................................8
2 Background .........................................................................................................................................9
  2.1 Migration and Remittances .........................................................................................................9
  2.2 Definition of Remittances ..........................................................................................................11
  2.3 Remittance Data ..........................................................................................................................12
  2.4 Why do people remit? ...............................................................................................................13
3 Findings ............................................................................................................................................16
  3.1 Microeconomics Impact of Remittances ......................................................................................16
  3.2 Macroeconomic Impact of Remittances ......................................................................................19
  3.3 Remittance, Poverty Reduction and Income Inequality ...............................................................20
  3.4 Remittances and Economic Growth ............................................................................................21
    3.4.1 Dutch Disease .......................................................................................................................23
    3.4.2 The Problem of Moral Hazard ............................................................................................27
    3.4.3 Migrant Syndrome or Brain Drain .......................................................................................28
4 Conclusion .........................................................................................................................................28
References ..........................................................................................................................................31
Annexes ............................................................................................................................................36
  Appendix 1. Remittances and Economic Growth ..........................................................36
  Appendix 2. Remittances and Economic Growth ..........................................................40
1 Introduction

Remittances are a form of aid, both monetary and material, that migrant workers waged outside their country of origin, send to their families in the home country. These private donations do not only result in a growth of the living conditions of the receiving families, but due to the huge and growing aggregate flow of remittances, it has a significant impact on national economies and subsequently on a global scale (Munzele, & Ratha, 2005). The phenomenon has grown to such a considerable size that the value of remittances has reached the amount of Foreign Direct Investments (FDI) for the most vulnerable countries and has clearly exceeded Official Development Aid (ODA) (World Bank, 2016).

This theme and its documented global importance has been recognized since 2004 within the G8 and G20 Summits, where they have identified the General Principles\(^1\) on the issues of remittances and the kind of interventions that the various countries should pursue while facing this relevant topic.

1.1 Aim of the Thesis

Through a thorough analysis of the available literature on remittances, we intend to present a general picture of the phenomenon, classifying remittances with data that confirm its growing importance. By conducting a literature review we will investigate the economic implications at the micro and macroeconomic level with some reference to the social impact. The research objective is to answer the question:

*How does remittances affect economic growth in developing countries?*

The aim of the study is therefore to analyse and compare the impact that this important flow of money has on households in developing countries (consumption trends and investment decisions) and, consequently evaluate the potential impact on economic growth on national and global level.

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\(^1\) The summit report provides an analysis of the payment system aspects of remittances and sets out general principles designed to assist countries in improving the market for remittance services.
1.2 The Methodology

The thesis will be conducted as a critical review of several articles. We have decided to proceed in this way due to the lack of literature reviews on remittances, and as a way to confront a complex research topic with often conflicting results. Furthermore, most studies are descriptive theories based on empirical research from different countries or cross-country studies, that can only partially explain the phenomenon, due to the geographical, socio-cultural and time limitations.

After a thorough overview of the phenomenon, the critical review will divide the literature into two main sections:

(i) In the first section we will analyse and compare the impact that this important flow of money has on households, such as consumption trends and investment decisions.

(ii) The second section of analysis will be based on literature that highlights the impact of remittances on economic growth, defined as increase in percentage of Gross Domestic Product (GDP).

Positive and negative effects of remittances on growth will be examined and discussed, in accordance with studied literature and data from sources such as the World Bank (WB), International Monetary Fund (IMF), United Nation Development Program (UNDP) and globally recognized economic journals. Due to the large number of studies that have been conducted on this topic, we will try to focus on specific relevant papers that responds to our research question. To have a clearer picture on the literature studied, we will present a the most recent articles from recognized scientific journals in a table, which provides a base for discussion during our analysis.

1.3 Limitations

As previously mentioned, this topic is affected by a range of geographical, socio-cultural and time limitations. A main problem with the literature in the field of remittances is the reliability of data. Most of the articles used in this literature review is based on estimations and not actual amounts of remittances, the latter being unknown due to the informal channels often used by migrants to transfer money. This could potentially undermine the work of researchers and question the accuracy of their results. The social, cultural and economic differences
between recipient countries is a significant challenge when examining household consumption trends. A conspicuous amount of literature relies on the estimation of common sociocultural trends which may not fully represent the country’s tendencies and therefore may not reflect the reality. Furthermore, many analysed studies exclude variables from their statistical methods that may have an impact on the analysis of economic growth, raising questions on the consistency of the conclusions. All of the above are limitations that are central to research conducted in the field remittances. Conducting a literature review based on the available research makes us vulnerable to the same limitations and can therefore also be applied to our review.

2 Background

2.1 Migration and Remittances

During the last 30 years, the world has faced the expanding phenomenon of globalization, a result of economic growth along with social and cultural integration between different areas of the world. Further contributing to this is the recent development of technologies and communication that has diminished the barriers between countries, combined with a liberal market that has reduced the obstacles to free movement of goods and capital. This international environment has in turn led to the development of one of the oldest phenomenon concerning globalization, which is migration flows. By migratory flows we mean the movement of people crossing national borders. Thanks to globalization, migration has steadily increased, bringing radical changes to society, moving beyond local and national borders and becoming global (International Migration Report, 2017).

The migration process has brought enormous changes to our societies, involving both the countries of origin (native country of the migrant) and destination (country where the migrant resides legally or illegally). The international migration process has allowed workers around the world to move in search of a better allocation in the labour market. Most of the time people migrate from developing countries to more developed ones. By migrant we intend, following the definition of the Organization for Economic Co-operation and Development (OECD), every person that has the residency in a different place
than his/her original nationality, including the children born from these migrants (International Migration Report, 2017).

According to UN data from 2017 (International Migration Report, 2017) the number of migrants has risen from 150 million in 1990 to 258 million in 2017 (which means that more than 3% of the global population is resident in a country other than that of birth). The countries with the highest number of migrants are: the United States of America with 47.5 million immigrants, followed by Germany (12.6 million), Saudi Arabia (12.2 million), Russia (11 million), United Kingdom (9.2), United Arab Emirates, France and Canada (8 million), Australia and Spain (6 million).

![Graph 1](image1.png)

*Fig 1: Graph elaborated from "Migration and Remittances Fact book 2017", World Bank.*

![Graph 2](image2.png)

*Fig 2: Graph elaborated from "Migration and Remittances Fact book 2017", World Bank.*
2.2 Definition of Remittances

Based on the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6), we define Remittances as the monetary link between migrants and their families left behind in the country of origin. Temporary or permanent movement of people to other countries allow a creation of income which is transferred fully or partially back to the home economies. These transfers may happen through more formal channels like electronic recordable systems, or through informal channels, such as the help of trustworthy friends that carry cash from the senders to the receiving families. Despite the large interest in remittances from monetary institutions, the problem of the reliability of data is still evident, such that the gap between the amounts sent and received has been growing in recent years, proving the strong inconsistency of remittances data.

In this section we intend to explain how calculation of aggregates remittances is made through different items of the Balance of Payments (BOP). Remittances are derived mainly from three items in the BOP framework: income earned by workers in economies where they are not resident (or from non-resident employers) and transfers from residents of one economy to residents of another.

Three main items of the balance of payment are classified:

- **Compensation of employees** refers to all income received from seasonal, border or short-term jobs (less than 12 months) carried out by the migrant in a country other than the country of origin; including wages, salaries and/or other benefits received from the work of residents in the host country (recorded under Current Account of the balance of payments category “Income”).

- **Personal transfers** are all monetary transfers sent home from residents abroad for more than one year (recorded under Current Account, category “Current Transfer”).

- **Migrant transfers** are net wealth (asset minus liabilities) of migrants that moves from one country of employment to another (recorded under Capital Account, category “Capital Transfer”).
To these three items of remittances, a fourth has been added, although not classified in the BOP:

- **Collective remittances**: financial transfers (from the country of destination to that of origin) made by groups of migrants who pool their contributions to the purpose of collective projects carried out in a specific geographical area or city, for the benefit of their communities; they are often carried out through associative networks called *Home Town Associations* dedicated to the promotion of activities mainly concerning health and education in the countries of origin.

From the distinction of the different channels of measurement of remittances comes already a problem. Although the analysis of IMF appears to be well conducted and reliable, not every national bank follows it when recording remittances. This results in a serious problem of comparability. An example of this is the case of Philippines, where the central bank categorizes all migrants’ remittances under “compensation of employees, without distinguishing if the employment is more or less than one year. In other National Banks, worker remittances are recorded together with other private transfer in the category of “current transfers from other sectors” (Elsner and Oesingmann, 2016). Furthermore, many national banks do not distinguish the “migrant transfers” in the capital account.

### 2.3 Remittance Data

The graph below is based on data from the World Bank. It presents the top ten countries that have received remittance in 2017 as a percentage of GDP. India and China have received a remarkable amount of remittance while Indonesia seem to have the lowest inflow among those top ten countries. Remittance as a GDP has been relatively high in countries like Kyrgyz Republic, Tonga and Tajikistan. The total amount of world remittance inflow estimated in 2017 was 613 billion dollars of which a significant amount of flow goes to low and middle-income regions followed by the East and south Asia and Pacific countries.
2.4 Why do people remit?

For decades, research has distinguished the investigation on the effects of the remittance flows from the actual causes that bring people to remit (Grigorian and Melkonyan, 2012). The amount of remittances depends on several factors related both to the migrant worker and the receiving family, such as income of the migrant, means of transfer, time spent in host country and other variables that will be classified.

Remittance flows are tightly connected to the migrant capacity to gain income abroad and to reduce their utility level, by saving money that can be sent back to their countries. Under this perspective we analyse different situations that determines the level of remitting.
The first study that investigates the reason behind the decision of remitting was conducted by Lucas and Stark (1985) in the Journal of Political Economy. They divide the reason of remittances in two main categories: altruistic and self-interest reasons.

One of the most natural incentives to remit, the *altruistic* reason, is the attitude of remitting without imposing any restrictions on the future usage of that inflow of money on the receiving households. The sender reduces his personal satisfaction (utility level) by increasing the budget constraint of his/her family. Altruistic reason is tightly connected to the need of increasing the average consumption level of the receivers in means of goods, health or education, to cover extraordinary expenses such as weddings or funerals, or in respond to economic shocks in the home country, serving as a form of insurance (Chami, Fullenkamp, Jahjah, 2003).

This model creates additional consequence in relation to the amount of remittances in proportion to the income gained by the migrant in the host country, and the level of connection between the migrant and the left behind family. Lucas and Stark (1985), found evidence in Botswana that, leaving all other variables constant, a 1% growth of salary from the migrant abroad results in an increase in remittance from 0.25 to 0.75 %. Another finding on altruistic reasons showed a positive relation between remittance level and children in the home country. Immigrants in America with minors left in the country of origin were more than 50% more likely to remit money home, while those without children present in the country of origin were 25% less likely to remit (Lowell and de la Garza, 2000).

On the other hand, *self-interest* reasons include all practices of sending money, but with restriction on the usage of the money by the sender. Except for the aspiration to inherit\(^2\), most of the self-interest incentives to remit are classified within the range of investment in either physical or human capital in the country of origin. These assets are seen as a saving strategy for the future return to the homeland, resulting as a form of personal maintenance and as a tool of migrant’s prestige or influence (Lucas and Stark, 1985). In accordance with this, the positive correlation between remittance flow and desire to return has been found, e.g. the Greek migratory community in Germany used to send consistent higher quantity of transfers to Greece than the Greek migrants from Canada or Australia and were less likely to return to their country of origin. On the other side, different migrants from United States decreased the

\(^2\) The literature presents situations where migrants send large amount of remittances to family member in order to ensure a future inheritance, excluding the risk of being cut off the family’s future distribution of inheritance.
probability to remit by 2% on every 1% increase in time spent in US, referred to as the so-called “permanent settlement syndrome” (Glytos, 1988 and Lowell, De La Garza, 2000). Part of the self-interest incentives are the repayment of old debts, most probably connected to the previously faced cost of migration or related education. Other examples are payment for, and costs of administration and control of, investment assets bought by the remitter in the home country such as land, houses, or small business (Yang, 2008).

A third reason, often considered to be in between the two previously mentioned, is the so-called countercyclical. This motivation consists in an informal contract between sender and the family (or home community). There is a strong correlation between highly-educated migrants and the quantity of remittances, concluding that these inflows of foreign currency are often sent in order to amortize the previous costs faced by the family to send the one member abroad (Johnson and Whitelaw, 1974). In the light of these findings, migration becomes a form of human capital investment instead of an individual decision. A broad family strategy of risk diversification which sees remittance as the primary objective of migration (Taylor 1999).

The increased interest to study the motivations behind sending remittances, that has emerged during the last two decades, has paved the way for a better understanding of the bigger picture of the subject. By finding out the reasons why migrants remit, researchers have been able to understand and forecast the migration trends, the amounts that families are able to receive, and weather that would be temporary or permanent, which in turn has encouraged more research in this specific subarea. Individuals sending money for altruistic reasons indicates greater transfer to household with higher needs, or under the poverty level, which leads to larger direct consumption usages. On the other hand, self-interest, mostly directed on investment and savings, denote the important consequence of the desire of returning, which suggest the temporary nature of migration and remittances (Medina and Cardona, 2010).
3 Findings

3.1 Microeconomics Impact of Remittances

The impact of remittances on the recipient developing countries has been a reason of public debate. Meanwhile, there is little empirical evidence covering a wide set of countries that can fully answers such a debate, as most studies are based on country cases and anecdotal evidences. In order to answer the research question of this paper we need to review the microeconomic impacts of remittances on households to better understand and identify related behaviours. It is quite complex to determine how recipient households use the inflow due to the lack of comprehensive information collection in this field. According to some studies, the inflow is mainly used for either direct consumption of goods, or investment in human or capital assets. Among the literature that we have gone through, conflicting findings were found. These differences could partly be attributed to the parameters considered or the differing econometric models used in the respective analysis. Bahadir (2014), unlike previous studies, try to identify the usage of remittance by assuming that the access to the domestic credit market is limited, but most importantly he separates households into two main types:

- wage earners which generate their income solely by labour supply with neither ownership of capital nor access to credit.
- entrepreneurs who own capital and have limited access to credit.

This distinction identifies how relevant the cash inflow from remittances are to both type of households. Explaining under those specifications, Bahadir (2014) found that the impact of remittances on entrepreneurs increases investment and labour demand, and subsequently leads to a reduced labour supply among wage earners. Continuing assessing the finding about the usage of remittance by the household, Javid (2017) assumes remittance as a source of household income that maintains other parameters equal. This assumption shifts the budget constraint outward from the receiving families as the amount of remittances increases. Hence, such an increase will lead to a positive impact on the household consumption. Starting from this notion the question that the author address is if the increase of consumption concerns all
goods and services. According to Javid (2017), it is unlikely that there would be an equal consumption across the goods and services, which is also supported by other studies. In fact, a study from Guatemala by Adams (2005) concludes that inflow of remittances to households are spent more on education, health and housing than on food. A way to distinguish the type of consumption is by divining it into three main sections:

i) primary/direct consumption of food, clothes and other goods,

ii) human investment through on education and health,

iii) capital investment in housing and/or enterprises.

Taylor and Mora (2006) study on Mexico supports the results above, by stating that families receiving remittances direct those flows mostly in human investment and have lower income elasticity for direct consumption. This is also supported by P. Acosta, Schiff, Adams, Cordova, Hallock, Lubotsky, Zutshi (2006) in the case of El Salvador, where they found that remittances have a mixed effect in terms of investment in human capital. Based on the household migration history and the usage of migration network at the community level they estimated that a certain range of age among boys (15-17 years) and girls (11-17 years) seem to benefit from remittances by staying in school, compared to non-recipient households. While this does not apply to all ages, it does have a remarkably positive effect on the reduction of child labour.

Yang (2004) claim that in the Philippines the appreciation of currency in the country of origin of the remittent increases children’s schooling and lowers child labour. Furthermore Yang (2004) shows once again that favourable exchange rate can lead to greater entry of capital and increase migrant’s investment in enterprises in the home country. This result allows us to understand that even a small amount of cash inflow can lead to a significant benefit, particularly to the developing countries with low purchasing power currency. There is also a strong positive relationship between family member living abroad and providing capital, and child education level.

Other studies have shown that migration has a positive effect on child health by reducing infant mortality and increasing birth weight in the country receiving remittances (McKenzie, 2005).

Going through the available literature, we find other studies that contradict the finding that a significant part of remittances is used for human investment. Orzoco (2003), remaining on the
The case of Mexico, El Salvador and Nicaragua, claims that remittances inflow was mainly used on consumption of food. Others who argue that remittances are absorbed into direct consumption rather than productive investment are Lipton (1980). According to Lipton, more than 90% of remittances are used for consumption, while the study by Grigorian and Melkonyan (2012) state that only 2.1% is spent on direct consumption.

We have found that the usage of remittances is differing between households, and therefore the theoretical model cannot assume that remittances are equal to other sources of money such as income from labour or asset. “Often, remittance flows come with conditions about the uses that remittance-receiving households can give to this money” state Taho (2009) in his study on Vietnam. Therefore, he suggested that theoretical models of remittance should be adjusted in a way that they meet the diversity of the empirical data. Taho (2009) pursued his research by separating non-receiving households from receiving households and found short-term and long-term differences in consumption. The receiving households showed high direct consumption patterns on short term but a higher level of saving and investment in the long term.

Another researcher that used the same distinction between the household is Syed and Amzad (2016) in their study of the case of Bangladesh. They have examined empirical data from the Household Income and Expenditure Survey (HIES) of 2010 to estimate the impact of remittance to households. They had information on the examined household prior to remittance which allowed them to evaluate the changes in household consumption and came to conclude that remittance is used for both human investment and direct consumption.

Despite the difficulty in analysing the usage of remittance inflow, we have generally seen that remittances improves living standard through increase of household income. Remittances have also been valuable as a way of financing microenterprises in developing countries. Dilip Ratha (2005) claims that countries like El Salvador, Philippine, Guatemala and Mexico have succeeded in establishing a large number of enterprises by relying on remittances.

According to Grigorian and Melkonyan (2012) remittances inflow in Mexico are responsible for almost 20% of the capital invested in the microenterprises. Moreover, Woodruff and Zenteno (2001) underlined this finding in their study on Mexico confirming that remittances were affecting microenterprise development positively. Therefore, the presence of a relationship between receiving remittance and having small business in the home country is credible. It is also recognizable that there is a positive relationship between remittance inflow,
consumption and human investment. Meanwhile, identifying a single common trend is
difficult with the available research. It differs from case to case, and many factors need to be
taken into consideration when understanding the usage of remittance inflow, therefore more
studies ought to be done in order to measure accurately the usage of the remittances inflow.

3.2 Macroeconomic Impact of Remittances

In recent years, many studies have been focusing on the macroeconomic effects triggered by
remittance transfers. Their local impact has encouraged many countries to increasingly
support and protect the phenomenon. Unfortunately, this leads to a complicated challenge
since economic theories show that the macroeconomic effects of workers' remittances change
depending on the characteristics of the receiving country and according to the nature of the
remittance flow. If this is not taken into consideration, it is easy to over- or under estimate the
effects of these flows.

The literature that analyses various countries over a couple of years, find both positive and
negative effects of remittances on economic growth. A majority of the these agree on the fact
that remittances are a stable source of external financing and foreign currency, often playing
the critical role of "social insurance" in countries affected by economic or political crises.
(Ratha, 2005). Many recipient countries have seen the volume of remittances increase at times
of greater need for foreign support and assistance, e.g. following natural disasters or economic
or political crisis (Lucas and Stark 1985).

From our previous analysis, we can easily affirm that by having a direct impact on a large
number of variables related to the households, remittances have played an undisputable role in
the general framework of developing countries’ economies and increasing international
attention is given to this phenomenon. This has also been confirmed by the evidence of profit
opportunity from money transfer agencies and official financial institutions. Especially after
the September 11th attacks in New York when the aftermath of the international crisis led to
financial policies of increased control over unofficial transaction intermediaries, channelling
remittances toward more secure and measurable systems (Ruiz and Vargas-Silva, 2009). The
dramatic increase of recorded flows, reported in the last two decades, could actually be related
to the increase of control rather than an actual increase in remittances (McKanzie, 2005).
3.3 Remittance, Poverty Reduction and Income Inequality

What remittances most probably seems to accomplish on a developmental level in the poorest countries is the reduction of people living under the poverty level (Ratha, 2005). Before analysing the actual impact, it is necessary to understand the meaning of the concept of poverty. Most often, poverty is viewed in terms of income. World Bank defines poverty as “encompassing not only material deprivation (measured by an appropriate concept of income or consumption) but also low achievements in education and health” (World Bank, 2000). However, it is believed that relying only on income status does not cover the wider standard of living or the full concept of human development. By poverty reduction in developing countries, we do not only mean the rising income and consumption level, but we also intend the accumulation of assets that reduces vulnerability from financial shocks and give access to better education and health care.

Remittances alone do clearly not offer a permanent solution for poverty, but the ability of the recipients to properly use the cash inflows of remittances and their interaction with other economic, social and cultural factors may effectively contribute to poverty reduction. Ratha (2005) in his book has classified the impact of remittances on poverty at four levels: individual household, community, national and international level.

Remittance is beneficial for poverty reduction by firstly allowing household to increase consumption of goods and service. It also leads to an increased saving and asset accumulation which improves access to health and education, and consequently reduces child labour.

At the community level the impacts of remittances are mainly due to the multiplier effect\(^3\) of the increase in aggregate demand which creates more job opportunities and encourages new economic and social infrastructure and services. The expansion of local markets and the reinforcement of development institutions lead to a reduction of income inequality among households, particularly the poor ones.

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\(^3\) **Multiplier effect** is the mechanism through which an injection of extra income leads to more spending, which creates more income, and so on. The size of the multiplier depends upon household’s marginal decisions to spend, called the marginal propensity to consume (mpc), or to save, called the marginal propensity to save (mps). It is important to remember that when income is spent, this spending becomes someone else’s income, and so on. The following general formula to calculate the multiplier uses marginal propensities, as follows: \(\frac{1}{1-\text{mpc}}\). Hence, if consumers spend 0.8 and save 0.2 of every £1 of extra income, the multiplier will be: \(\frac{1}{1-0.8}=\frac{1}{0.2}=5\). Hence, the multiplier is 5, which means that every £1 of new income generates £5 of extra income (Ramey, 2011).
At the national and international level, remittances (whether internal or external\(^4\)) redistribute resources from rich to poor areas or countries, decreasing inequality and promoting poverty reduction. (Lucas and Stark, 1985).

Adams and Pages (2004), support Ratha’s results in their cross-section analysis of a set of countries which shows that on average, a 10 percent increase in remittances as a share of GDP will lead to a 1.6 percent decrease in the percentage of people living in poverty. In relation to these findings, it is important to visualize remittances as the results of a costly migration process, which is not often accessible to members of the poorest families. This enhances the potential risk of income inequality growth, but shows at the same time that the poorest families can benefit from a dynamic mechanism of common growth activated by the increase in consumption from remittance receivers. Even if the grade of the impact can vary by region in some countries, it seems quite certain that remittances have a significant impact on poverty mitigation.

Besides contributing to the reduction of the poverty rate, remittances also represent a stable and reliable source of foreign currency, protecting fragile households against negative shocks, thus, reducing macroeconomic volatility, promoting investment in physical and human capital and alleviating credit constraints (WB and IMF).

### 3.4 Remittances and Economic Growth

A large amount of recent literature, through different regression methods, confirm that remittances positively influence GDP growth rate (see Table 1). In support of this, Yang (2005) finds evidence in the Philippines on the positive impact on growth, based exclusively on the analysis of the usage of remittances for consumption on goods and educational purposes. Since consumption on goods covered almost 78% of the GDP in the Philippines in 2011 (IMF, 2012), and due to the huge amount of remittances used the same year for the same type of consumption, he verifies the positive relation between remittances and GDP growth rate, with 0.35 % change in growth on every 1 % increase of remittances. In addition to this he finds evidence on the positive relation that education expenditure has on the growth rate of remittances and, consequentially, to the increase in economic growth.

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\(^4\) Remittances are classified by internal or external, in coherence with the type of emigration: national or international.
Through a study on remittances in a rural area of Mexico, Taylor (1999) finds a multiplier effect that would consistently increase the output value of a village. He argues that remittances become an important resource with positive effects on local development, especially over the long term. The intensity of these effects depends on the use of remittances in the local economy and on the integration of families into the community. If the family of origin is perfectly integrated in the local context, maintaining an active role on the market, the multiplier effect will be healthy for the whole local economy, resulting in higher production and increase in income even for households not receiving remittances. Grigorian and Melkonyan (2012) also supports the positive impact on economic development by acknowledging the spending of remittances in direct consumption.

Furthermore, by triggering market mechanisms, investments also increase due to ease of access to credit and risk reduction, which leads to an improvement in infrastructure and consequently to a general wellbeing of the community (Taylor 1999). Following the same conclusion, through data collected in Nepal, Thagunna and Acharya (2013) prove that the return from investment in productive activities and infrastructure would generate more opportunities for further investments resulting in a virtuous circle. In accordance to this, a greater economic return would imply a decrease in emigration, as would provide incentives for people to stay in the country. Progressively, the economy would abandon dependency from remittances by increasing confidence and competitiveness.

In the studies conducted by Rajan and Subramanian (2005) the large body of micro-evidence indicates that remittances can have a positive influence on entrepreneurship, supply of labour, and increased investment.

The lack of credit is a main challenge for private sector growth in developing countries, especially in small and medium size enterprises. By providing them with credit opportunities, the intervention of remittances become crucial for their future growth (Grigorian and Melkonyan, 2012). Financial institutions, main possible intermediaries between senders and receivers, have also been able to strengthen their business activities with an increase in profit opportunities. Reena et al’s (2010) paper in fact highlights the potential channel through which remittances may have a positive influence on recipient countries’ development by finding that remittances are positively associated with bank deposits and credit.

After an extensive work of 27 years on a data set of more than 100 developing countries, Giuliano and Ruiz-Arranz (2009) summarizes that remittances are able to enhance growth through multiplier effect of consumption, development of financial institution that operate
with remittance payments and through mitigation of credit constraints. Therefore, he confirms the valuable positive correlation between remittances and growth in developing countries. In detail, his findings reveal that remittances boost growth in countries with less developed financial systems by serving as alternative way to finance investment and solving liquidity constraints.

We have seen how less or more recent articles that approach this complex topic, confirm the common conviction that remittances can support an economic growth of a country, both by increasing percentage of GDP but also through the less measurable effect of poverty reduction. However, strong evidence from literature make researchers more cautious in front of the optimistic and largely shared judgement of the phenomenon (See Table 2).

3.4.1 Dutch Disease

A main reason of criticism on the impact of remitting money to developing countries, is explained by the so called ‘Dutch Disease’. This terminology was born in the Netherland in 1959, after a natural gas discovery that resulted in a sudden increase of revenue. The increased demand for non-traded goods increased their price. However, prices in the traded good sector are set internationally, so they did not change. This lead to an increase in the real exchange rate, which resulted in a loss of international competitiveness for the traditional manufacturing sector of the country (Acosta, Larkey and Mandelman, 2007).

Another way to see the Dutch Disease problem is by looking at the change in wage from the two sectors, which of course lead to an increment of the production costs (labour), and the following loss in international competitiveness.

Dutch Disease and Labour Market

Supposing that the economy is composed by only two sectors; manufacturing and non-manufacturing. With manufacturing we mean all tradable sector, while with non-manufacturing we mean all non-tradable sectors like education and health. Workers are able to move free from one sector to another, based on the wage (the sector that pays more will attract more labour).

The blue lines are the demand for labour in the two sectors and the red lines are the supply of labour. Market-clearing wages and employment are at the intersection of the labour demand
and supply curves — where supply equals demand and there’s no excess supply or excess demand. Before the shock, wages and employment are at levels denoted by the 0 subscript.

The discovery of natural resources, or in our case, a significant inflow of money inside the country from altruistic remittances, have a direct effect on consumption, meaning that families will consume more from both sectors: manufacturing and non-manufacturing. Prices for the manufacturing sector, being fixed at the world market level, remain the same, while price of non-manufacturing sector increases due to the increase in demand. An increase in the relative price of the non-manufacturing to manufacturing goods causes an increase in the labour demand in the non-manufacturing sector, resulting in a wage increase (from Wo to W).

Consequently, labour will move out of the manufacturing sector production towards the non-manufacturing sector. Hence in the longer term this leads to an expansion of the non-manufacturing sector, while the traded sector contracts.

The arrival of new workers in the resource sector attenuates the wage increase there, and — this is the important bit — the departure of workers from the manufacturing sector increases manufacturing wages. Consequentially this result in higher cost of production for the traded sector and increase in the final price which will lose competitiveness internationally. The shift of workers from manufacturing to resources will continue so long as the resource sector offers higher wages. When wages are equalized across sectors, there is no reason to move from one sector to the other. Note also that $w_1$ is higher than $w_0$, meaning that an increase in labour demand in one sector increases wages in both sectors.

While it most often refers to natural resource discovery, Dutch Disease it is also referred to the potential consequence of the large inflow of foreign currency, including, foreign aid and FDI (Acosta et al., 2007).

Farid Makloufh (2010) shows the occurrence of Dutch Disease as a consequence of remittances, through a study conducted in Pakistan that demonstrated that remittances are mostly directed to household consumption. He suggests that the consequential fall in competitiveness of the tradable sector could be reduced through monetary measures and by channelling the remittances inflows in more productive directions (Farid Maklouf, 2010).
The theory of the consequential effect of Dutch disease from remittances in the developing economy is also supported by Acosta et al (2007). While these findings reach the conclusions of a positive relation between remittances and Dutch disease through the main usage of remittance for basic consumption, Acosta et al (2007) verify the same conclusions although observing households using remittances for consumption of more durable goods or even under investments on long term assets. However, these results seem to apply to very few countries.

Contradicting many studies, over the period 1995-2010 in Jamaica, findings report that remittances is negatively correlated to real exchange rate appreciation, which is more sensitive to other fundamental variables such as FDI and ODA (Barrett, 2010). These last findings are also supported by studies on small island developing states, which confirm the real exchange rate to be negatively correlated with remittances and positively with FDI (Adenutsi, 2009). Furthermore, the analyses of Rajan and Subramaniam (2005) gives meaningful explanation and proof to the erroneous associations between Remittances and Dutch disease. Their finding highlights the compensatory nature of remittances, showing specific trends of consumption that are connected to the desire of increasing their human living conditions. His cross-country analysis finds that most of the time, it is evident that receivers spend remittances on e.g. adding a room to the house, or fixing a damaged part of it, which in turn increases the demand for lower skilled labour or imported cements. All factors that do not lead to real exchange rate appreciation.

An even more valuable result was found from examining patterns of remittance inflows and exchange rate overvaluation. It has been shown that from 1990s to 2005 countries with overrated exchange rates received considerably lower remittances. It seems credible that migrants intentionally stopped to send remittances when the exchange rate increases, finding it cheaper to buy goods from abroad and send it to their families. It is also likely that appreciation of exchange rate is followed by dual exchange rates\(^5\) or high exchange controls, which are highly restrictive for remittances (IMF, 2005).

If remittances result in a loss of competitiveness, depends mostly on the tendency of reducing the transfers amount that migrants send. As a result, in countries where remittances are an important source of development, astute policies need to be implemented in order to always keep real exchange competitive. The endogenous nature of remittances gives a reliable prove

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\(^5\) A situation in which there is a fixed official exchange rate and an illegal market-determined parallel exchange rate.
of not affecting adversely the growing of the manufacturing sector. On the other hand, ODA, more exogenous we would critically add, might even enhance appreciation of exchange rate leading to poor economic performance, intensifying the problem (Rajan and Subramaniam, 2005).

3.4.2 The Problem of Moral Hazard

According to some authors, remittances can damage economic growth by creating moral hazard (Chami, Fullenkamp, Jahjah, 2005). Remittance flows are transfers of income between private individuals that often occur under asymmetric market information and whose monitoring is very difficult due to the distance that separates the remitter and the recipient. These difficulties lead remittance recipients to a psychological state that entails two serious risks for the internal market (i) less desire to work with negative repercussions on the labour market, and (ii) the incentives to engage in risky investments which has devastating effects on the whole economy and individual households. In accordance to this, Chami et al. (2005), using data from 113 countries, find that remittances are negatively correlated with GDP growth, especially during the period from 1985 to 1999. According to this study, it seems that the remittance flows tend to be higher in countries that face low or even negative growth. Furthermore, Chami et al. (2005) demonstrate the positive relationship between FDI and economic growth, validating the theory on the what he refers to as “deviant nature of remittances”, which are very little profit-driven capital flows and more compensatory. Trying to find possible solutions to this problem, Chami et al. (2005) propose to channel remittances through microcredit institutes which would assume the role of monitoring of the type of activities that the recipient would initiate.

Not all researchers see reduction in labour supply due to remittances as an absolute negative aspect. Some analyse the shifting in leisure consumption of remittance receivers from a more developing perspective, arguing that women for instance can finally afford parenting and home production activities due to this income effect. Recipient households could even spend the extra income on hiring outside labour, therefore creating a positive externality in the neighbouring families, or by simply investing their time in more recreational activities, which are more difficult to calculate in term or return (P. Acosta et al., 2008). Paradoxically, in the

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*Moral hazard is a situation in which one party gets involved in a risky event knowing that it is protected against the risk and the other party will incur the cost. It arises when both the parties have incomplete information about each other (Belhaj, Bourlès and Deroian, 2014)*
case of Bangladesh, the potential diminishing in labour supply may also reveal some positive considerations. The large inflows of valuable foreign currencies that remittances produce can decrease the pressure in the domestic labour market from the high rate of unemployment and thereby resetting the market wage. In addition to this, it also offers an outlet for frustrated unemployed workers who might otherwise present serious domestic problems (Wadood and Hossain, 2017).

3.4.3 Migrant Syndrome or Brain Drain

Other pointed negative aspects that is mentioned by various studies regarding remittances and their impact on economic growth, is the result of the so called migrant syndrome or brain drain. Various studies consider the labour force involved in the phenomenon of migration a variable dependent on the flow of remittances. Oruc (2011) goes through a statistical regression model on data from Bosnia, testing the negative relationship between remittances and economic growth, underlining the tendency of remittances to promote more migration, especially aimed at the younger and more educated population. In other words, with the increase in emigration, the country becomes indirectly an exporter of its labour force, depriving its own economy of the best agents. The more the phenomenon creates remittances the more it feeds itself, creating a vicious circle of migration. Logically, this phenomenon affects all the productive sectors of the country, triggering some negative effects which then hit the whole economy (Oruc, 2011). On the opposite direction, Adams (1991), in his study on the determinants of migration in a group of Egyptian males, shows that education may not necessarily be positively correlated to migration. He actually proves that who majorly get involved in the migration process are agricultural labourers, which represent the least educated group of study subjects. In addition to this, the migration of highly educated citizens appears considerable only in very few number of smaller countries, such as Caribbean and the Pacific Islands. Nevertheless, this mass high-skilled migration can also be seen as a symptom of development failure rather than its cause (Hein de Haas, 2007).

4 Conclusion

The purpose of this thesis was to thoroughly review the empirical literature on migrant remittances on developing countries. The aim was to determine whether or not, remittances
have a positive or negative impact on economic growth. By describing the phenomenon, the literature categorizes the reasons to remit in altruism, self-interest and countercyclical. These reasons are fundamental for the understanding of the connected household’s behaviours and their broader effects on economy. The literature on remittances highlights both beneficial as well as harmful effects on the growth of developing countries.

However, we can affirm that remittances have a positive impact on the growth of a developing economy. To sustain our conclusion, we have found a dominant large number of recent articles from recognized economic journal which through empirical data find evidences on the positive relation between remittances and GDP growth. The grade of the impact differs based on the way receiving families channels the monetary inflows. It is evident that capital and human investments have a greater impact on growth on the long-run than the increase in consumption for primary goods. Still, the multiplier effect of the aggregate demand created by the increase in consumption improve the living condition of receiving families and results in a more discrete positive impact on growth. Last but not least, other observers highlight the vital importance of remittances in the reduction of credit constrains, as a tool of growth for the private sector in less developed financial markets.

On the other hand, few and older articles find evidence of negative side effects of remittances, although recognizing their potential value that could be enhanced through policies to better educate remittance receivers in the most optimal use of remittances. In support to their results, they find the mere increase in direct consumption leading to a negative impact on GDP. Among the causes of this reduction researchers underline three main problematics: Dutch disease, brain drain and moral hazard problem.

By contrast, a relevant number of studies dissent these pessimistic results:

- The Dutch disease effect is inconsistent with the nature of remittances, which decrease when the country faces appreciation of exchange rate.
- The findings that highlight the decrease in labour supply through the Moral hazard problem do not reveal what could be the potential beneficial effect from the increase in leisure. Furthermore, this research does not contemplate the potential benefit that the decrease of labour supply may have on countries effected by high rate of unemployment.
- The brain drain or migrant syndrome, another critical main point of the pessimistic literature, are often inconsistent with other studies that consider it a vital engine for more remittances flows entering the country.

This said, further studies need to be conducted in order to confirm the importance of remittances and find effective ways in which remittances can increase the contribution to sustainable economic development.
References


Elsner, D. and Oesingmann, K. (2016). Migrant remittances. *CESifo DICE Report*. Available at: [https://doi.org/10.1257/jep.25.3.129](https://doi.org/10.1257/jep.25.3.129)


32


*The Economist.* (1977). The Dutch Disease. 82–83


## Annexes

### Appendix 1. Remittances and Economic Growth

Table n° 1: Literature in accordance to the positive relation between remittances and Economic growth.

<table>
<thead>
<tr>
<th>Author and Journal of Publication</th>
<th>Article title</th>
<th>Research objective</th>
<th>Model of the research</th>
<th>Results</th>
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</thead>
<tbody>
<tr>
<td>Karan Singh Thagunna, Saujanya Acharya (International Journal of Economics and Financial Issues, 2013).</td>
<td>Empirical Analysis of Remittance Inflow: The Case of Nepal.</td>
<td>Investigate the impact of remittance on different macroeconomic variables. It also tries to establish how important remittance is for the Nepali economic growth rate, specially evaluating the case of infrastructure Investment.</td>
<td>The research article uses Unit Root Test, Least Squared Regression Analysis, and Granger Causality Test Method, through which it has been possible to determine the causal rapport of two variables at a time.</td>
<td>Through the investment in productive activities and infrastructure, remittances appear to be a generator of economic return, improving the domestic market and the entrepreneurial sector. The return from this investment would generate more opportunities for further investments resulting in a vicious circus. In accordance to this, a greater economic return would imply a decrease in emigration, as would provide incentives for people to stay in Nepal. Progressively, the economy would abandon dependency from remittances by increasing confidence and competitiveness.</td>
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<tr>
<th>Author and Journal of Publication</th>
<th>Article title</th>
<th>Research objective</th>
<th>Model of the research</th>
<th>Results</th>
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<tr>
<td>Tchantchane, Abdellatif* Rodrigues, Gwendolyn Fortes, Pauline Carolyne (Journal of Applied Econometrics and International Development).</td>
<td>An empirical study of the impact of remittance, educational expenditure and investment on growth in the Philippines.</td>
<td>This paper attempts to verify the hypothesis that remittance is the engine of growth and economic development in the Philippines.</td>
<td>Through an Auto Regressive Distributed Lag modelling (ARDL) promoted by Pesaran and Shin (1995, 1996) the author Intend to establish the existence of a long-run relationship between GDP growth rate and each of the variables (remittances, education expenditure and investment contribute).</td>
<td>The study proves a positive relationship between remittance and GDP growth due to the i) indirect effect from the large amount of remittances in the Philippines directed to private consumption, which result in a positive impact on GDP growth rate, and ii) indirect effect of expenditure on education, which is positive and has a high elasticity (2.28%) because of the multiplier effect. Higher expenditure on education results in higher inflow of remittance and therefore leads to economic long-term growth.</td>
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<tr>
<td>Author(s)</td>
<td>Title and Source</td>
<td>Study Description</td>
<td>Findings</td>
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<td>Waqas Bin Dilshad (International Journal of Business and Management, 2013)</td>
<td>Impact of Workers' Remittances on Economic Growth: An Empirical Study of Pakistan’s Economy.</td>
<td>The study aims to identify the relationship between worker’s remittances and economic growth, and to recommend some implications of policy on the basis of analysis.</td>
<td>By examining time series data from 1991 to 2012, the author has used a Regression model in order to identify the relationship between the variables (workers’ remittances, employed labour force and gross fixed capital formation). The paper proves a positive relationship between workers’ remittances and economic growth in Pakistan. Furthermore, remittances reduce poverty, acting as major source of foreign exchange and contributing to the problem of balance of payment. The author suggests solutions in order to help overcoming the problem of brain drain and high migration, achieving sustainable development.</td>
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<tr>
<td>Joseph Dery Nyeadi, Nuhu Yidana, Mohammed Imoro (International Journal of Academic Research in Business and Social Sciences, 2014)</td>
<td>Remittances and Economic Growth Nexus: Empirical Evidence from Nigeria, Senegal and Togo.</td>
<td>Investigate the causal link between remittances and economic growth in three of the leading remittances recipients in West Africa i.e. Nigeria, Senegal and Togo.</td>
<td>The article proceeds through Granger-causality and co-integration tests under the Vector Autoregressive Regression framework. The time series data applied here is made of an annual data from 1980 to 2012. In both Nigeria and Senegal remittances are found to lead to economic growth while economic growth does not lead to remittances inflows, supporting the temporary nature of remittances. There is however no causal link between remittances and economic growth in Togo.</td>
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<tr>
<td>Sami Ben Mim and Mohamed Sami Ben Ali (E-Journal Article Economics, 2012)</td>
<td>Through Which Channels Can Remittances Spur Economic Growth in MENA Countries?</td>
<td>This paper studies the remittances’ effect on economic growth in MENA using panel data over the period 1980–2009.</td>
<td>Authors firstly conduct a regression using the standard Ordinary Least square method (OLS), then they proceed with the Hausman test, in order to choose the best specification among the fixed and random effects models, finally they run a set of regressions using System Generalized Method of Moment (SGMM). The findings provide evidence on the positive relationship how between remittances and economic growth. The impact is proved to be lower in countries where remittances are directed toward direct consumption, and consistently higher when they are channelled to investment purposes. Empirical results suggest importance to encourage human capital accumulation. In MENA countries, human capital is the most considerable channel through which remittances spur economic long-term growth.</td>
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<tr>
<td>Deodat Adenutsi (Journal of)</td>
<td>The Impact of Remittances on Economic Growth</td>
<td>The study tries to evaluate the macroeconomics.</td>
<td>The study empirically analyses a set of dynamic panel models specified within the framework of Blundell-Bon Generalized. The paper finds a positive relation in the long run between economic growth and remittances. In addition to this the result specify a much larger impact on</td>
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<tr>
<td>Source</td>
<td>Title</td>
<td>Abstract</td>
<td>Methodology</td>
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<tr>
<td>Applied Sciences, 2009.</td>
<td>Small-Open Developing Economies.</td>
<td>Repercussions of cross borders remittances, particularly assessing the impact on economic growth in small-open developing countries for the period 1996-2006.</td>
<td>Method of Moments, using annual panel data from 31 small-open developing countries form Sub-Saharan Africa, Latin America and the Caribbean.</td>
<td>Growth, resulting from investment and human capital activities, which suggest the intervention from policy makers to better channel remittances inflows. However, the contribution of remittances on growth is more evident in Latin America and the Caribbean, rather than Sub-Saharan Africa.</td>
</tr>
<tr>
<td>Jamel Jouini (Journal of Policy Modeling, 2015).</td>
<td>Economic growth and remittances in Tunisia: Bi-directional causal links.</td>
<td>The paper seeks to investigate the causal links between economic growth and remittances for Tunisia over the period 1970-2010 through two specific transmission channels of financial development and investment.</td>
<td>The analysis is built on the autoregressive distributed lag (ARDL) method to co-integration offered by Pesaran et al. (2001) which has the benefit to offer estimates with valid properties and to make consistent conclusions.</td>
<td>The results reveal co-integrated relationships among the variables and show evidence of limited support over the long-run since most causal nexuses are unidirectional. By cons, over the short-run, there are significant bidirectional causal links among the variables, in particular between remittances and economic growth.</td>
</tr>
<tr>
<td>Reena Aggarwal, Asli Demirgüç-Kunt, Maria Soledad Martinez Pería (Journal of Development Economics, 2010).</td>
<td>Do remittances promote financial development?</td>
<td>This paper investigates the link between remittances and financial development, focusing on the ratio of bank deposits and credit to GDP.</td>
<td>The authors empirically examine the link between financial development and remittances using balance of payments data on remittance flows to 109 countries for the period 1975-2007. In particular, they examine the association between remittances and the aggregate level of deposits and credit intermediated by the local banking sector.</td>
<td>We provide evidence of a positive, significant, and robust link between remittances and financial development in developing countries. This paper highlights another potential channel through which remittances may have a positive influence on recipient countries' development by finding that remittances are positively associated with bank deposits and credit.</td>
</tr>
<tr>
<td>Paola Giuliano, Marta Ruiz-</td>
<td>Remittances, financial</td>
<td>Attempting to filling a gap in the existing</td>
<td>Using a newly-constructed dataset for remittances covering about 100 developing</td>
<td>Findings highlight that remittances boost growth in</td>
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<tr>
<td>Author(s) &amp; Journal</td>
<td>Topic</td>
<td>Methodology</td>
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<tr>
<td>Arranz (Journal of Development Economics, 2008).</td>
<td>Development and growth.</td>
<td>Literature, this paper aims at contributing to the debate of the impact of remittances on growth. Countries, we estimate the impact of remittances on economic growth by ordinary least squares (OLS).</td>
<td>Countries with less developed financial systems by serving as alternative way to finance investment and solving liquidity constraints. Evidences show that investment channel could be found through which remittances can stimulate growth particularly in situations where financial sector does not meet the credit needs of the population.</td>
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<tr>
<td>Khalid Al Khathlan (British Journal of Economics, Management &amp; Trade, 2012).</td>
<td>The link between Remittances and Economic Growth in Pakistan: A Boon to Economic Stability.</td>
<td>This paper tries to establish the long-run and short-run relationship between worker remittances and economic growth in Pakistan during the period 1976-2010. This paper adopted the autoregressive distributed lag (ARDL) test and the error correction model (ECM) techniques.</td>
<td>The study provides evidence for a positive and significant relationship between worker remittances and economic growth in the long-run and short-run. Playing as an important foreign capital source. The gross fixed capital formation has a positive and significant effect on growth in the short run. In the long run, such financial flows play a negative role that shows the inappropriateness of policy measures aimed at improving real sectors of the economy.</td>
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<tr>
<td>Gyan Pradhan, Mukti Upadhyay, Kamal Upadhyaya (The European Journal of Development Research, 2008).</td>
<td>Remittances and Economic Growth in Developing Countries.</td>
<td>The paper investigates the effects of remittances flows on economic growth observing 39 developing countries in a period of 24 years. This paper examines the effect of workers’ remittances on economic growth in a sample of 39 developing countries using panel data from 1980-2004 resulting in 195 observations. A standard growth model is estimated using both fixed-effects and random-effects approaches.</td>
<td>Remittances have a positive impact on growth. Since official estimates of remittances used in our analysis tend to understate actual numbers considerably, more accurate data on remittances is likely to reveal an even more pronounced effect of remittances on growth.</td>
<td></td>
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<tr>
<td>Junaid Ahmed, Khalid Zaman and Iqtidar Ali Shah (Journal of Economics and International Finance, 2011).</td>
<td>An Empirical Analysis of Remittances-Growth Nexus in Pakistan using Bounds Testing Approach.</td>
<td>The objective of this study is to assess the impact of remittance, exports and money supply on GDP growth of Pakistan in the long and long-run relationship. Data set from 1976-2009 have been used for time series analysis.</td>
<td>Remittances have a positive impact on economic growth of Pakistan in both the short run and long run. The short-run effect of remittances and exports are significant and contributing to about 0.034 and 0.078% to economic growth, however with low elasticities that is, 0.02 and 0.03 respectively.</td>
<td></td>
</tr>
<tr>
<td>Authors</td>
<td>Article Title</td>
<td>Research Objective</td>
<td>Research Method</td>
<td>Results</td>
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<tr>
<td>Dilip Ratha (Migration Policy Institute, 2013).</td>
<td>The impact of remittances on Economic Growth and Poverty Reduction.</td>
<td>The report shows the evidence of remittance on development in terms of health care, education and poverty reduction which possibly leads to a sustainable economic growth.</td>
<td>A cross country comparison of six sub Saharan African nation has been made for study of impact on health-care and education. And the same study of 71 developing countries have been made for the study of the impact of remittance on poverty reduction.</td>
<td>The report found a 10% increase in per capita official international remittance would a 3.5 decline in the share of people living in poverty. Such increase of level of income might contribute to the economic growth as a whole.</td>
</tr>
<tr>
<td>Edward J. Taylor (International migration, 1999).</td>
<td>The new economics of labour migration and the role of remittances in the migration process.</td>
<td>The study is addressed on understand how remittance shape the development in the receiving countries.</td>
<td>Comparison of previous empirical studies.</td>
<td>Remittance may have a positive impact on development specifically supported by economic policies. Such increase in development is also measured in terms of income growth, inequality, and poverty alleviation.</td>
</tr>
</tbody>
</table>

Appendix 2. Remittances and Economic Growth

Table n° 2: Literature in accordance with the negative effects of remittances on economic growth.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Article Title</th>
<th>Research Objective</th>
<th>Research Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karagoz Kadir (Journal of Yasar University, 2009).</td>
<td>The Relationship Between Remittances and Economic Growth: Evidence from Turkey.</td>
<td>Aim of the paper is to test whether worker remittances have an impact on the economic growth in Turkey or not.</td>
<td>The author uses OLS (ordinary least squares) to test the remittances and pro capita GDP, together with other variables (import, export, investment, FDI). Researcher uses data from 1970 to 2005.</td>
<td>Results identify the strong negative relationship between remittances and pre-capita GDP over a time period of 35 years. At the contrary, both export and gross domestic investment shows a positive and significant effect on GDP.</td>
</tr>
<tr>
<td>Chami, Ralph, Fullenkamp,</td>
<td>Are immigrants remittances flows</td>
<td>The study tests the hypothesis that</td>
<td>The Authors use standard cross-section as well as panel estimation to test the</td>
<td>Studying a period from 1985-1998 the authors prove negative relation between remittances and economic</td>
</tr>
<tr>
<td>Source</td>
<td>Title</td>
<td>Author(s)</td>
<td>Methodology</td>
<td>Findings</td>
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<tr>
<td>IMF, 2003</td>
<td>a source of capital for development?</td>
<td>Connel, Jahjah, Samir</td>
<td>“Remittances are not profit driven capital flow but are compensatory transfers and therefore result negatively correlated with growth.</td>
<td>The relationship between remittances and per-capita GDP growth by using data from 113 countries related to workers remittances over the period of 28 years (1970-1998).</td>
</tr>
<tr>
<td>The Institute for the Study of Labor, 2006</td>
<td>Remittances, Institutions and Growth</td>
<td>Catrinescu Natalia, Leon-Ledesma Miguel, Piracha Matloob</td>
<td>The main objective is to test the role of remittances in developing long-term growth increasing financial and human capital or affects negatively long run growth by initiating labour “Dutch disease” effects.</td>
<td>The study has gone through a used standard population-averaged cross section estimation and dynamic data panel estimates to test the relationship between remittances and pro-capita GDP growth.</td>
</tr>
<tr>
<td>Economic Modelling 2009</td>
<td>A Panel Data Analysis of the Growth Effects of Remittances</td>
<td>Rao B. Baskara Hassan M. Gazi</td>
<td>The main aim of this research is to test whether remittances have direct effects on the economy in the short and long run or not.</td>
<td>The research used the production function and Ordinary least square (OLS) with data from 40 countries (where remittances/GDP ratio is 1% or more) during the period from 1960 to 2007.</td>
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</table>