The effect of remittances on Egypt's economic growth

Samar Amr Naga

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The American University in Cairo

School of Global Affairs and Public Policy

The Effect of Remittances on Egypt’s Economic Growth

A Thesis Submitted to the

Public Policy and Administration Department

in partial fulfillment of the requirements for the degree of Master of Public Administration

By

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Supervised By:
Dr. Khaled Amin

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ACKNOWLEDGMENTS

Thank God for giving me the strength and power to finish this research paper.

I want to extend my sincere gratitude and appreciation to my supervisor Dr. Khalid Amin and my two readers Dr. Hamid Ali and Dr. Diaa Noureldin for their support, patience, and immense knowledge throughout my thesis. Their encouragement, guidance and their insightful comments throughout my research process made me believe that I wouldn’t wish for more.

My gratitude to my parents and family for their endless support and encouragement. Without their support and help, I would not have made it possible.

I cannot forget the flexibility of my manager, who showed extreme support and foresight throughout my master’s program.
This paper tests the relationship between remittances along with other macroeconomic variables such as; investment, FDI and openness to trade and GDP per capita. In order to test this relationship, this study has depended on Multiple Linear Regression Model in which time series analysis of the annual data about the variables from 1977 until 2013 is used. The results extracted from the model have shown that there is a strong positive and significant relationship between investment and GDP per capita. Besides, the results have showed that there is a strong positive and significant relationship between openness to trade and GDP per capita. However, the results have showed that there is a negative significant relationship between FDI and GDP per capita. Moreover, the findings have revealed that there is insignificant positive relationship between remittances and GDP per capita. Given the insignificant effect between remittances and economic growth, we have decided in this paper to use the data from the empirical survey done by the (IOM) in collaboration with the Ministry of Manpower and Migration on 200 remittance-receiving households for two main reasons. One of reasons is to identify the cause behind having this insignificant effect between the two pre-stated variables. The second reason is to demonstrate to the Government the importance of getting benefit of these international surveys to know how the remittances are used in the meantime from households’ perspective as well to demonstrate the variables that households perceive as critical and significant variables that could affect their decision to invest in the country. Finally, in this paper, we have showed case studies of how other countries have succeeded to encourage its migrants to transfer more money to be invested in productive projects. The main aim of showing these case studies is to give the Egyptian government a guideline of what are the policies and procedures it could follow to overcome the obstacles and the variables seen by the households as critical variables hindering their investment in Egypt.
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1. Introduction

Enhancing and sustaining growth rates and pinpointing the variables that could have a great effect on promoting growth are considered to be one of the most essential topics that have concerned several scholars and policymakers in both developing and developed countries. One of these variables that we are concerned about in this paper is the effect of remittances with the help of other macroeconomic variables such as; FDI, investment and openness to trade on enhancing any country’s economic growth.

Although some researchers have identified the negative effect of remittances on the receiving countries’ economy, however; other researchers have identified the remarkable positive effect of remittances on several countries in several areas and in several economic perspectives. For example, in the financial perspective, many researches have proved the positive relationship between remittances and the increase in home country's creditworthiness (Ratha, 2013; Iqbal and Sattar 2005). Since the foreign exchange inflow from migrants increase the home country's ability to secure more favorable terms of debt service as lenders perceive a lower risk of default in a sense that countries with high remittances inflows can borrow more from international institutions.

Moving to the role of remittances in poverty reduction, researches have proved the positive impact of remittances in decreasing the poverty rates in the recipient country. Since, according to Ratha (2013), remittances increase household incomes and are therefore a powerful anti-poverty force in developing countries, for the fact that remittance receivers can identify their own greatest needs and can allocate the remittance income accordingly. These researches were asserted by evidence from around globe that shows that households that receive remittances are financially better off across multiple dimensions such as; high income levels, high levels of consumer spending and lower incidences of extreme poverty in relative to other households that
don’t receive remittances (Ratha, 2013). In addition, one cross-country study of 71 developing countries found that, “a 10% increase in per capita official international remittances would produce a 3.5% decline in the share of people living in poverty"(Ratha and Timmer, 2013). For example, in Nepal, a remarkably increase in remittances was responsible for one third to one half of the overall reduction in headcount poverty rate in the country, which have declined from 42% in 1995-96 to about 31% in 2003-04 (Ratha and Timmer, 2013).

By stating the importance of remittances to solve some of the economic problems that both developing and developed countries are suffering from, we need to see whether remittances along with other variables have the same positive impact on Egypt’s economic growth or not. But, due to the literature limitation in addressing specific country’s characteristics and conditions in relative to the variables that best affect the country’s economic growth, this study will try to fill this gap by using an econometric model that can help to analyze the impact of remittances along with other variables on growth of GDP for a recipient country, in our case Egypt. Since most of the studies tackled Egypt for instance as one of the countries in a statistical panel while ignoring its unique economic features.

In addition, this paper will seek to identify ways on which remittances could promote Egyptian economic growth in the short run and the policies that the Egyptian government should adopt in order to encourage workers’ outside Egypt to transfer their money. In other words, this paper will discuss ways to enhance the economic conditions that Egypt is suffering from now by improving and boosting the country's economic growth through efficient and adequate usage of remittances from both the Government and household perspectives, which will be discussed in later sections.
2. Statement of the Problem:

Since 1970s, Remittance inflow became a phenomenon that has received much attention from considerable number of scholars, researchers and policy makers due to its importance as a source of international capital flows as well as due to its stable nature compared to other flows such as; FDI, foreign loans, etc. Given the possible impact that these remittances could have on the growth and development of developing countries, a number of studies have been carried out to test the impact of remittances on the receiving country’s economy and still there is a debate among scholars and researchers about whether remittances have a significant and positive impact on economic growth or not.

Since some researchers such as; Chami, el al. (2005) and Burgress and Haksar (2005) have stated that there is a negative relationship between the rate of growth of remittances and the rate of economic growth, while other researchers such as; Wakayama (2011) has proved that there is no relationship between the two variables. On the other hand, there are several researchers such as; Jawaid and Raza (2012); Waheed and Aleem (2008); Iqbal & Satar (2005); Giuliano & Ruiz-Arranz (2009); World Bank (2006) who have proved that there is a strong positive relationship between remittances and economic growth. And that, remittances could increase economic growth directly or indirectly either through reducing output volatility or through speeding up the development of the financial sector.

In spite of the fact that there are many studies have tried to identify the relationship between remittance and economic growth, however; most of these studies have depended on cross-country data rather than on a specific country environment to test this relationship. That’s why the main aim of this research paper is to try to fill this gap by using an econometric model, which helps
to analyze the impact of remittance along with other variables on growth of GDP for a recipient country, in this case Egypt.

This research paper will focus mainly on Egypt since Egypt like many other countries is suffering from economic and political conditions that are hindering its economic growth and its ability to compete with other developing countries that have succeeded in turning its economy to one of the World's fastest growing major economies such as; Brazil especially after 25th January revolution. And given the abundant resources that Egypt own, however; the Egyptian government has failed to use these resources to promote investments and to enhance its economic conditions. And by analyzing the economic condition of Egypt today, we could see the drastic decrease in tourism revenues from 11.591 billion US $ in 2009/2010 to 10.589 billion US $ in 2010/2011 to 9.42 billion US $ in 2011/2012 to a slight increase in FY 2012/2013 to reach 9.7 billion US $ (CBE, 2013). Besides, if we analyze the other main source of foreign currency which is the foreign direct investment, we could see that the drastic decrease in FDI to reach about 2.2 billion US $ in FY 2010/2011 against US$6.8 billion a year earlier and it has increased slightly in 2011/2012 to reach US $ 2.1 billion (CBE,2012). Moreover, if we analyze the Suez Canal revenues, we could see a relatively stable inflow since in 2010/2011 the revenues recorded to be 5052.9 (in million US $) while in 2011/2012, the revenues recorded to be 5207.8 (in million US $) and in 2012/2013 the revenues recorded as 5031.8 (in million US $), according to CBE (2013). If we look at Egypt’s balance of payment, we could see that the balance of payment recorded an overall deficit of US$ 10.3 billion in Jan./June 2011 against an overall surplus of US $ 571.7 million in the same period in 2010 (CBE, 2012). And in FY 2011/2012, BOP ran a wider deficit of US $ 11.3 billion and this was due to the huge decrease in tourism revenues and foreign investments (CBE, 2012). Moreover, if we analyze the company’s gross savings (which is calculated as gross national income less total consumption plus net transfers), we could see that it has decreased dramatically from about 42,154
(million US $) in 2010 to about 39,288 (million US $) in 2011 to about 34,242 (million US $) in 2012 (World Bank, 2014). This decrease in gross savings could actually give an indicator that the country is consuming more than it saves and that the country is depending on the foreign inflows to cover its imports as well as its budget deficit rather than depending on its savings. Besides, from all the pre-stated statistics, we could see the decrease in foreign direct investments, decrease in tourism revenues and decrease in the balance of payments and all these led to a dramatic decrease in the cash inflow of foreign currency to Egypt in general.

That's why in this paper, we will analyze one of the main sources of foreign currency in Egypt, which haven’t been affected much by the political and economic conditions that Egypt is suffering from and this source is remittances.

Therefore, this study will focus to test the relationship between remittances and Egyptian economic growth along with the help of other macroeconomic variables like investment, openness to trade and FDI. And after testing our main hypothesis in this study, which is the relationship between remittances and economic growth. We will try to answer other research questions such as; how could remittances promote Egyptian economic growth in the short run, the policies that the Egyptian government should adopt in order to encourage workers’ outside Egypt to transfer their money and the investment projects that Egyptian government should invest in by using remittances. All these questions will be discussed in details in later sections.
3. Literature Review

Given that, many researches have identified the possible impact that these remittances could have on the growth and development of countries especially the developing ones. A number of empirical studies have been carried out to test the proposition that there is a relationship between remittances and economic growth and still there is a debate among researchers on whether remittances have a significant positive effect on economic growth or not. That’s why this part will be divided into two sections; the first section will show the empirical studies that showed the positive relationship between remittances and economic growth while the second section will show the studies that proved the negative relationship between these two variables.
### 3.1 Positive Relationship between Remittances and Economic Growth

Table 1: Studies proved positive relationship between remittances and economic growth.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title of Empirical research</th>
<th>Research Main Hypothesis/objective</th>
<th>Model Specification</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdellatif, Tchantchane Gwendolyn, Rodrigues Fortes, Pauline Carolyne (2013)</td>
<td>An empirical study to test the impact of remittances, educational expenditure and investment on growth in the Philippines.</td>
<td>The main hypothesis in this research is to test the statement that &quot;remittances is the engine that drives growth and economic development in the Philippines&quot;</td>
<td>The ARDL (Auto Regressive Distributed Lag) model, which is an econometric model used by researchers to examine and analyze the impact of remittances, educational expenditure and Investment on the economic growth of the recipient country (Philippine) in both short and long run.</td>
<td>The findings show that remittances have a significant positive long-run relationship with Philippine's GDP growth rate with an elasticity of 0.35%. Findings show as well that a large part of remittances go to private consumption, which has a positive effect on GDP growth rate. In addition, remittances have a strong stabilizing effect in which the inflow of remittances is used to cover the balance of payments deficit as well as they are used to increase investment expenditure on education.</td>
</tr>
<tr>
<td>Bin Dilshad, Waqas (2013)</td>
<td>Impact of Workers' Remittances on Economic Growth: An Empirical Study of Pakistan’s Economy</td>
<td>Research question: What is the impact of worker’s remittances on economic growth in Pakistan? The research objective is to “identify the relationship between worker’s remittances and economic growth as well as to recommend some implications of policy on the basis of analysis”</td>
<td>Production function framework is used to study the impact of workers' remittances on economic growth. The researcher has used the time series data of Pakistan from 1991 to 2012, in which GDP is the dependent variable while remittances, employed labor force and fixed capital formation as independent variables. In addition, the researcher has used the correlation matrix to identify the relationship of all variables with each other.</td>
<td>By analyzing the time series empirical regression and correlation analysis, the results show that there is a strong positive relationship between the workers' remittances and economic growth in Pakistan. The researcher has recommended that Pakistan should best utilize the remittances inflows efficiently to promote more economic growth and development.</td>
</tr>
</tbody>
</table>
Table 2: Studies proved positive relationship between remittances and economic growth.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title of Empirical research</th>
<th>Research Main Hypothesis/objective</th>
<th>Model Specification</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thagunna, Karan Singh Acharya, Saujanya (2013)</td>
<td>Empirical Analysis of Remittance Inflow: The Case of Nepal</td>
<td>The objective of this paper is to examine the impact of remittances on several macroeconomic variables both empirically and theoretically as well as to evaluate the important role of remittances in building up Nepali economy.</td>
<td>The researcher has used Unit Root test, least squared regression analysis and Granger Causality test to empirically determine the effect of remittances on the macroeconomic variables such as; consumption, investments, savings, import and export.</td>
<td>By analyzing the regression analysis, we could find that consumption has the most significant contribution to Nepali economy followed by savings and investments followed by import and export in relative to the dependent variable (GDP). Consumption is highly related to the remittances in a sense that the economy is consuming more than it can afford, that’s why the country is depending more on the inflow of remittances to overcome its balance of payment, given the low percentage of exports.</td>
</tr>
<tr>
<td>Ben Mim, Sami Ben Ali, Mohamed Sami (2012)</td>
<td>Through Which Channels can Remittances Spur Economic Growth in MENA Countries?</td>
<td>To study the relationship between remittances and economic growth in MENA countries, over the period from 1980-2009.</td>
<td>In order to examine the effect of remittances on economic growth, the researchers estimate a linear regression model in which they used three different methods beneath it (the standard ordinary least square method (OLS), the Hausman test to choose the best specification among the fixed and random effects models and System Generalized Method of Moment (SGMM), which corrects for measurement errors and eventually problems.</td>
<td>The SGMM model shows that there is a positive and significant effect of remittances on growth with about (0.166). The SGMM model shows as well that remittances produce a positive and significant effect on investment with about (0.132); significant at 5%. Besides, there is a strong effect of remittances on consumption with about (1.554). On the other hand, a country by country correlation analysis is performed to show the relationship between investment and remittances in countries such as Oman, Egypt, Syria and Djibouti; which has proved that there is a positive effect of investment on remittances in these countries, which consequently assume that there is a positive relationship between growth and remittance.</td>
</tr>
</tbody>
</table>
Table 3: Studies proved positive relationship between remittances and economic growth.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title of Empirical research</th>
<th>Research Main Hypothesis/objective</th>
<th>Model Specification</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmed, Junaid Zaman, Khalid</td>
<td>An empirical analysis of remittances-growth nexus in Pakistan using bounds testing approach</td>
<td>To examine the impact of remittances, money supply, exports on Pakistan’s economic growth by using bounds testing approach.</td>
<td>The researchers have used ARDL (Autoregressive distributed Lag) model was used to test the relationship between remittances, money supply and exports on Pakistan’s growth. This model was used based on three validations. The first validation assumes that &quot;once the order of the ARDL has been recognized, the relationship can be estimated by OLS (Ordinary Least Square)&quot;. The second validation is the “bounds test permits a mixture of I(1) and I(0) variables as regressors and consequently, this model has the advantage of not requiring a specific identification of the order of the underlying data “&amp; the third and last validation is that technique is suitable for different sample sizes.</td>
<td>The findings have showed that there is a statistically significant relationship between remittances and economic growth in both short and long run, however with low elasticity of 0.02 and 0.03 respectively.</td>
</tr>
<tr>
<td>Khathlan, Khalid</td>
<td>The link between Remittances and Economic Growth in Pakistan: A Boon to Economic Stability</td>
<td>To test the impact of remittances along with other variables on Pakistan’s economic growth.</td>
<td>The researchers has used the ARDL (Autoregressive distributed Lag) test as well as ECM (Error correction Model) methods to test the relationship between remittances and Pakistan’s economic growth in both long and short run during period 1976-2010</td>
<td>The results have showed that there is a strong significant and positive relationship between remittances and economic growth in both the long and the short run in Pakistan. Besides, FDI and gross fixed capital formation have showed positive correlation in both the short and the long run, too.</td>
</tr>
</tbody>
</table>

As shown in tables 1,2 and 3, there are several studies that have been conducted by researchers using several statistical methods to test the relationship between remittances along with other macroeconomic variables and economic growth in several countries such as; Philippines, Pakistan, Nepal and MENA countries. All the above stated studies have shown the strong positive
relationship between remittances and economic growth in both short and long run as in case of some countries. Moreover, these researchers have identified the direct and the indirect effect that remittances could have on enhancing the country’s economic growth through decreasing output volatility or through accelerating the development of the financial sector. Similarly, Juwaid and Raza (2012) has used the data from about 113 countries for a period of seven years to see if there is a relationship between remittances and economic growth in these countries and the results have identified the positive relationship between these two variables in the studied countries. And as quoted in Waqas (2003), researchers such as; Waheed and Aleem (2008) have done empirical study to test the relationship between the two concerned variables on Pakistan’s economy during the period from 1981 to 2006. And although the study showed positive relationship between remittances and economic growth as most of the above studies have shown when they apply their study on Pakistan, but those researchers have shown the negative impact of remittances on the economic growth in the long run.

Having stated the positive relationship between remittances and economic growth, we will discuss in the next section the studies that were conducted and proved that there is a negative relationship between the two variables.
### 3.2 Negative relationship between Remittances and Economic Growth

Table 4: Studies proved negative relationship between remittances and economic growth.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title of Empirical research</th>
<th>Research Main Hypothesis/Objective</th>
<th>Model Specification</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chami, Ralph Fullenkamp, Connel Jahjah, Samir (2005)</td>
<td>Are Immigrant Remittance Flows a Source of Capital for Development?</td>
<td>The objective of this paper is to test the hypothesis that “remittances are not profit-driven capital flows, but are compensatory transfers, and should have a negative correlation with GDP growth”</td>
<td>The researcher has used standard cross-section as well as panel estimation to test the relationship between remittances and per Capita GDP growth by using the data from 113 counties related to workers’ remittances over the period from 1970-1998.</td>
<td>The findings have showed that there is a significant negative relationship between remittances and growth especially during the period from 1985-1998 and the researchers stated that “not only do remittances in low growth countries tend to be higher, but also higher remittances within a country are associated with lower growth”. The results showed however positive relationship between FDI and growth, which asserts the hypothesis that remittances are not profit driven while FDI is profit driven capital flows.</td>
</tr>
<tr>
<td>Catrinescu, Natalia Leon-Ledesma, Miguel Piracha, Matloob Quilin, Bryce (2006)</td>
<td>Could Remittances and Institutions promote Economic Growth?</td>
<td>The main objective is to test whether remittances play a role in developing long term growth through increasing financial and human capital or affects negatively long run growth by initiating labor substitution and “Dutch disease” effects.</td>
<td>The researcher has used standard population-averaged cross section estimation and dynamic data panel estimates to test the relationship between remittances and per capita GDP growth.</td>
<td>The findings showed that there is a negative relationship between remittances and long term macroeconomic growth and the researchers suggest that the long-term development impact of remittances could only be improved if the governments exert more effort to promote investing remittances in productive projects and to create effective economic policies and institutions.</td>
</tr>
<tr>
<td>Karagoz, Kadir (2009)</td>
<td>The relationship between remittance and economic growth: Evidence from Turkey</td>
<td>The main aim of this paper is to test whether workers’ remittances have growth impact on the Turkish economy or not.</td>
<td>The researcher has used the OLS (ordinary least squares) to test the relationship between per capita GDP and remittances along with other macroeconomic variables such as exports, imports, gross domestic investments, FDI, etc. Besides, the researcher has used the data from 1970-2005.</td>
<td>By analyzing the statistical model, we could see that the results have identified that there is a strong negative relationship between remittances and per capita GDP over the period of 1970-2005, with a growth elasticity of remittances (-0.03). However, exports and gross domestic investments to GDP showed significant and positive effect on per capita income.</td>
</tr>
</tbody>
</table>
Table 5: Studies proved negative relationship between remittances and economic growth.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title of Empirical research</th>
<th>Research Main Hypothesis</th>
<th>Model Specification</th>
<th>Main findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rao, B. Bhaskara Hassan, Gazi (2009)</td>
<td>A Panel data Analysis of the growth effects of remittances.</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 researcher has used the production function and Ordinary least square (OLS) by using the data from 40 countries (where remittances to GDP ratio of 1% or more) during the period from 1960 to 2007.</td>
<td>The findings have showed that remittances doesn’t have any significant direct growth effects and that they may have short to medium term growth effects in some countries but the majority of the tested countries have no long run growth effects.</td>
</tr>
</tbody>
</table>

As shown in tables 4 and 5 and on the contrary to the previous section, all the studies in this part have proved that there is a strong negative relationship between remittances and economic growth in both long and short run, as in the case of some countries. Similarly some studies have asserted the same negative relationship between the two concerned variables such as; Burgess and Haksar (2005) who have showed in the results of their empirical study that there is a negative relationship between the rate of economic growth and the rate of growth of remittances. Besides, IMF (2005) has found when doing empirical studies on the East European countries data that there is significant negative relationship between remittances and economic growth in these countries. Other researchers such as; Oruc (2011) has identified that there is a negative relationship between remittances and economic growth especially in the long run. For this researcher to reach this result, he has done a statistical regression model that tests the impact of remittances on economic growth by using a time series analysis as in the case of Bosnia. Oruc (2011) has proved that there is a negative relationship between remittances and economic growth due to its tendency to promote further migration of youth and the educated population at large and stated that the tendency of remittance to use the money remitted for consumption tends to have a negative consequence on microeconomic and macroeconomic level rather than positive one.
To conclude, whether remittances have positive or negative relationship with GDP has always been debated between researchers. That’s why we could find a number of empirical studies conducted by researchers proved that there is a positive relationship between the two variables by using several empirical models and by applying these models on several countries’ data. While, other researchers have proved that there is a negative relationship between these two variables when they test this relationship using different statistical models. And having this controversial debate make one wonder whether Egypt has a positive relationship between its remittances and GDP or not especially that most of these studies have depended on cross country data rather than focusing on a specific country environment to test this relationship. That’s why the main aim of this paper is to try to fill this literature gap by testing the impact the remittances along with other macroeconomic variables such as; investment, FDI and openness to trade on the growth of GDP for a recipient country, in this case Egypt. Given the severe economic conditions that this country is suffering from since 25th January revolution as stated in earlier sections.
4. **Research Hypotheses & Questions:**

**Main Research Hypothesis:**
There is a significant and positive relationship between remittances and economic growth.

**Sub-Research Hypothesis:**
There is a negative relationship between FDI and economic growth. While, there is a positive and significant relationship between Investment and openness to trade and Egypt’s economic growth.

**Research Question 1:**
How could remittances be used to enhance economic growth from households’ perspective and how migrant households invest their money in the mean time?

**Research Question 2:**
What are the policies that the Egyptian government should adopt in order to encourage workers’ outside Egypt to transfer their money?
5. Theoretical Framework

The first part will discuss how different researchers have defined remittances. The second part will tackle how different researchers and scholars have conceptualized the idea of remittances. The third part will discuss the theories that have tackled the reasons why remittances occur in the first place. The fourth part will discuss the different theories that have tackled economic growth variable.

5.1 Definition of Remittances:

Before getting into details on how remittances could play an important role in enhancing the economic growth and the effect of these remittances in the current economic situation, we have to define first what do we mean by remittances.

Remittances in the general terms are the transfer of money by a foreign worker to his/her home country or in other words the remitted money, usually cash transfers and goods that migrant workers send back to family at their home country (Zohry, 2011). In addition, remittances are not only money transferred to home country but rather value added money since the migrants usually have an idea on the best way to use this money (Ratha, 2009).

Besides, remittances act as insurance against economic adversity since migrants usually send more money when their family are facing any financial problems or experiencing hardships and that’s why remittances tend to be a stable and often "countercyclical" source of foreign exchange earnings (Ratha, 2009).

According to the International Organization for Migration, migrant remittances are defined broadly as “monetary transfers that a migrant makes to the country of origin” and in other words remittances are "personal, cash transfers from a migrant worker or immigrant to a relative in the country of origin” (2010). Remittances can also be defined as “funds invested, deposited or
donated by the migrant to the country of origin" and the definition could be expanded to include in-kind personal transfers and donations (IOM, 2010). Besides, Remittances could actually take different forms such as; investments, pension and social security transfers from destination countries where migrants obtain the right to pensions, intra-family transfers, personal deposits and it could be as well donations made by migrants in the form of either long term development contributions or crisis relief (IOM, 2010).

IMF (2010) has actually classified remittances into three variables; workers’ remittances, compensation of employees, and migrants’ transfers. Workers’ remittances are classified as a “current private transfers from migrant workers resident in the host country for more than a year irrespective of their immigration status to recipients in their country of origin”, while compensation of the employees is usually called for the income of migrants who lived in the host country for less than a year (IMF, 2010). On the other hand, migrant transfers are defined as the “ net worth of migrants who are expected to remain in the host country for more than one year that is transferred from one country to another at the time of migration” (IMF, 2010).

In this study, we will use the term remittance as the aggregate sum of the pre-stated variables.
5.2 Remittances Classifications

Throughout years, many researchers and scholars have conceptually categorized the idea of how the remittances are used as a distinction between "productive" and "non-productive" forms of investment.

Many researchers such as; Murshid et al. (2002) have stated that the definition of productive remittances as "investment in an asset or activity that produces a positive income flow" is not adequately defined. In addition, he stated that it is considered to be a controversial issue since some authors may consider constructing or repairing houses, purchasing lands or consumer durables to be unproductive while others consider them productive investment.

One of the researchers such as; Glystos (1993) stated that spending on non-investment related goods such as consumption on durable goods or purchasing real estates is considered to be productive investment since it positively impacts the local economy by benefiting the industries which produce these items. He states as well that employing labor, purchasing building materials and all the other supplies required for constructing houses and renovation produces consumption towards these items and thus increasing the demand in the local market specifically and in the local economy in general (Glystos, 1993).

Similarly, another researcher such as; Adam (2005) has the same direction of considering spending on human capital such as; education, health and housing as a form of investment since he claims that "expenditures on housing represent a form of investment for the migrant since it boosts the local economy through increased demand. This in turn has other positive developmental impacts such as; the creation of new employment opportunities in the local economy for both skilled and unskilled workers".
On the other hand, an increasing number of academic studies are supporting the hypothesis that states the negative impact of migration in creating and reinforcing problems of underdevelopment instead of positive productive development. These researchers were called "migration pessimists" and they have argued that "migration provokes the withdrawal of human capital and the breakdown of traditional, stable village communities and their economies" (Hein de Haas, 2007). From their point of view, this would then lead to the development of passive, non-productive and remittance-dependent communities since these remittances were mainly spent on "conspicuous consumption" and "consumptive investment" such as houses and rarely invested in productive enterprises which would weaken local economies and increase dependency, consumption and land purchases by migrants. And this would provoke inflationary pressures leading to a drastic increase in the land prices that could affect the economy in a negative perspective (Hein de Haas, 2007). In addition, they have stated the sociocultural negative effect of remittances in which exposure to the wealth of migrants seemed to contribute to a change in rural tastes (Hein de Haas, 2007). Since the wealth of migrants lead consequently to an increase in the demands for imported foreign produced goods and food, which would accordingly lead to worsening the cycle of increasing dependency, loss of community solidarity and undermining the sociocultural integrity of migrant sending communities (Hein de Haas, 2007).

To sum up, although the effect of remittances in the receiving countries has been a controversial issue among several researchers throughout ages, this paper would focus on the positive effect that these remittances could have in enhancing the country's economic growth in different perspectives and the importance of remittances on the receiving country, which will be more illustrated in following sections.
5.3 Why Remittances Occur in the First Place?

After defining remittances and how researchers have classified remittances according to its impact on the receiving country, we will discuss in this part the theories that have tackled the reason behind sending money on a periodic basis to the country of origin and why from theoretical perspective seems to be a stable source of foreign currency to the recipient country.

Some researchers such as; Rapoport and Docquier (2005) have studied the psychology behind the migrant sending money to the households living in the origin country through applying the theory of altruism & the theory of enlightened self-interest.

The theory of altruism revolves about the concept of benefiting others in which certain criteria should be present to call any behavior an "altruistic behavior" (Piliavin & Charng, 1990). For example, this behavior must benefit another person, must be performed voluntarily, must be performed intentionally, the benefit must be the goal by itself and must be performed without expecting any external reward (Piliavin & Charng, 1990). This could be applied on the migrants, our main concern in this paper, in a sense that the migrants care not only for their own utility but also for the utility of the household in the origin country (Piliavin & Charng, 1990). That’s why we can assume based on the theory that the level of remittances increases with the migrant's income and decreases with the recipient's income. In addition, the "altruism" motive shows that having an emotional attachment to the household in the country of origin is so crucial so that remittances reflect a kind of commitment that the migrants have towards their families (Van Wey, 2004).

However, other researchers have tested the issue of the migrants sending money to their households through applying the theory of enlightened self-interest (Van Wey, 2004). This theory is based on the assumption that self-interest is the prime and the main motive behind remittances in a sense that what "appears as mutual altruism between the family and the migrant could just as well
be enlightened self-interest” (Van Wey, 2004). For the fact that some families may deprive the migrant from his rights to future solidarity, inheritance as well as his right to return to the households after the migrant's retirement if the migrants don't remit money to his family in the country of origin (Lucas and Stark, 1985). That's why remittances could be seen as self-interest benefit rather than altruistic one. Besides, if we take the intentions of the migrant from self-interest perspective, we could see that remittances will have a negative effect on the emigration intentions to households living behind since remittances are perceived to the households as an income and insurance constraints so that there is no need for additional members to emigrate (Dalen and Fokkema, 2005). For the fact that insurance model assumes that if the contract pays off, it will sustain household members to live their lives in the country of origin. However, if contract is violated by the emigrant, the household will be forced to send another member abroad, which will actually affect remittances as well as the feelings of commitment to the sending household and community (Dalen and Fokkema, 2005). The researchers had tackled the perspective of self-interest perspective from a view that migrants may discourage others to follow their steps (Dalen and Fokkema, 2005). Since, according to Dalen and Fokkema (2005), remittances are seen as a way to protect the wage income of high skilled emigrant workers from being contaminated by the presence of low skilled workers in the same pool in a way that the emigrants' decision not remit is motivated by pure self-interest rather than altruistic considerations.

Given that there are controversial perspectives regarding whether remittances are seen as altruistic behavior or self-interest behavior, we will take in this paper the position that migrants have a positive altruistic behavior regarding sending money to the households due to several reasons. One of these reasons is that remittances amounts have increased drastically in most developing countries including Egypt, the main focus in this paper, and this could be shown in later sections. The second reason is that several researchers such as; Dalen and Fokkema (2005) have
studied the case of Egypt regarding whether the Egyptian migrants fall under which theory (self-interest or altruistic one) by using means of logistic regression analysis in which they concluded that Egyptian migrants tend to be more altruistic rather than self-interest oriented. Now we will move to discuss the theories that have tackled the economic growth variable.
5.4 Economic growth Theories.

Most of the theories and researches have tackled economic growth as a dependent variable to any input economic factors that could have either direct or indirect effect on any country’s growth, on the contrary to the remittances, which the researchers have tackled it as an independent variable.

One of these theories is the canonical model stated that “an economy has a unique and stable growth path determined by the growth of the labor force and of technical progress, with the latter usually assumed to expand at a regular, if unobserved, rate” (Solow, 1956). Another theory that have tackled growth is Arrow’s endogenous theory of the changes in knowledge in which growth occurs mainly through the learning process, which is actually resulted from experience. This experience could actually take place as a function of cumulative gross investment since from the researcher perspective “each new machine put in use is capable of changing the environment in which production takes place, so that learning is taking place with continually new stimuli” (Arrow, 1962). Besides, this theory has stated that economic development is basically a circular and cumulative causation process which tends to “award its favors to those who are already well endowed and even to thwart the efforts to those who happen to live in regions that are lagging behind” (Arrow, 1962). In other words, any country’s potential for growth is possible not when it is backward without qualifications but rather when it is technologically backward but socially advanced and this only could happen through having skilled human capital, which could only occur through realizing the important role of schooling. From this we could see how the researchers have linked between the role of education and its impact on economic growth.

Other theories were done to tackle the economic growth variable such as; Neoclassical theory. Neoclassical theory is, “the level and distribution of the national product based on the
social endowments of production factors such as; labor and capital, technical conditions of production, and consumer preferences” (Cesaratto, 1999). Besides, in reference to the capital accumulation, economic growth was regarded as “Endogenous” from neoclassical view since it depends on the community choice between saving (source of capital) and current consumption (Cesaratto, 1999). Other models have tested the relationship between saving as one of the most remarkable variable from researchers’ perspective and its impact on economic growth through several models such as; Solow’s model. This model showed that market forces have the power to adjust “warranted rate” in an economy and provide entrepreneurs to hold correct expectations, given that that the economic growth is equal to the sum of the growth rates of the labor force as well as the technical progress, which was independent of the propensity to save (Cesaratto, 1999). Solow’s model have concluded that there is a relationship between rise in the savings rate that drives from full employment income positively affects the level of per capita income and this rise in the savings rate has a positive effect on the rate of growth.

On the other hand, there are other theories that have tackled the economic growth as a dependent variable or as a result to other independent variables. For example, Jeremy Greenwood and Bruce D. Smith (1997) have identified theoretically and empirically the effect of financial markets in developing and promoting the country’s economic growth. Since these markets from their perspective, help people to reallocate their savings into projects that are more productive as well as channel the investment capital to its “highest return uses” since they provide external funding to the enterprises and allow the “efficient pooling of risk” instead of depending on one source of funding (Greenwood and Smith, 1977). That’s why Jeremy Greenwood and Bruce D. Smith (1997) have concluded in their study that financial markets have significant impact on the economic growth development. Moreover, Frankel, Romer and Cyrus (1996) conducted a study in which they are testing whether openness to trade leads to country’s growth or the growth that leads
to the development of trade by using the gravity model of bilateral trade and by using the data of 123 of East Asian countries. They have concluded in their study that openness to trade has a significant impact on growth especially in countries such as; Hong Kong, Singapore, Korea, Malaysia and Taiwan while other variables such as; investment and schooling have significant effect on growth more than openness to trade (Frankel, Romer and Cyrus, 1996). From this study results, we could deduct that the development of openness to trade and many other variables lead to the development of the economic growth and that’s why we could see that economic growth is seen as the consequence of the growth of several other variables.

Similarly, other studies such as Edison, Levine and Ricci (2002) have used the economic growth as a dependent variable to an independent variable, which is the international financial integration. The main aim of this study is to test the impact of international financial integration on economic growth and they used the simple ordinary least squares (OLS) regressions, two-stage least squares “instrumental variable estimator within the purely cross-country context” and the generalized method of moments (GMM) to avoid biases associated with “purely cross-sectional estimators” to be able to test this relationship (Edison, Levine and Ricci, 2002). The results have showed that international financial integration does not foster the economic growth in the tested countries even when the researchers controlled for other variables such as; economic and financial features. Besides, there are other studies such as; Barro (2000) study was conducted to test the relationship between income inequality and the economic growth and investment by using an extended version of neoclassical growth model, which is “conditional convergence”. The results have showed that there is a minimal impact of income inequality on growth and investment in the tested countries since high inequality benefits the growth in rich places on the expense of poor places (Barro, 2002).
From all these models and theories, we could see that the past theories and researches have tackled economic growth as a dependent variable to most well known independent variables especially in the classical theories and neoclassical theories such as; labor and capital and their impact on growth. Over time, we could see that the researchers have added several other independent variables such as; technology, international financial integration, inequality, education, investment, savings, R&D and their impact on economic growth. That’s why in this specific part, we don’t give much attention on whether there is a positive, negative or no relation between the variables since all what we want to focus on in this part is that economic growth was used in these researches as a dependent variable and as an effect to most of the independent variables.

On the other hand, in this paper, we will focus on the relationship between remittances and economic growth which the researchers have tackled it heavily in their research and have done several empirical studies to test this relationship, as stated in earlier section.
6. Research Methodology

In order to be able to test the main hypothesis of this paper, which is remittances have a strong and significant relationship with economic growth as well as to investigate other research hypotheses regarding the relationship between other macroeconomic variables and economic growth. And finally, to find out ways to enhance the Egyptian economic conditions by improving and boosting the country's economic growth through efficient and adequate usage of remittances from both the Government and household perspectives, this paper will depend mainly on quantitative analysis.

We will depend on this type of analysis in this research since a statistical model will be constructed to test the relationship between GDP and remittances along with other chosen independent variables to see whether there is a positive relationship between these variables or not.

Besides, in order to know how remittances could be used at the optimum level to enhance economic growth from households’ perspective and to see how migrant households invest their money in the mean time, we will use the data from the empirical survey. This empirical survey was done by the International Organization for Migration (IOM) in collaboration with the Ministry of Manpower and Migration on 200 remittance-receiving households in order to be able to analyze the households’ behavior towards investing this remitted money in productive projects that could enhance the country’s economic growth. After analyzing this data, we can figure out the variables that could affect the household investment decision –making and to see what the Egyptian government should do to encourage the receiving households to invest as well as to encourage Egyptians working abroad to send more money to their home country.

On the other hand, in order to know the policies that the Egyptian government could adopt to encourage workers’ outside Egypt to invest their money to enhance its economic growth,
we will show empirical case studies of how other countries have benefited from remittances to enhance its economic growth in both the short and the long run. And based on these case studies, we could see the policies that could be applied on a developing country such as; Egypt taken into consideration the household investment decision-making variables, discussed earlier.

That’s why a quantitative analysis is the optimum method to best address our research hypotheses & questions and all these issues will be discussed in details in further sections.
7. **Statistical Method:**

In order to be able to test the main hypothesis of the paper, which is remittances have a strong and significant relationship with economic growth as well as to investigate other research hypotheses regarding the relationship between other macroeconomic variables and economic growth, a statistical empirical model will be used to test the impact of these variables on GDP. This statistical empirical model is Multiple Linear Regression Model, in which an ordinary least squares regression analysis will be used. Besides, this model is based on the time series analysis in which the annual data from 1977 till 2013 will be used to understand the relationship between GDP per capita, remittances and other macroeconomic variables such as; FDI, investments and openness to trade. We will discuss in the next section why we selected these specific macroeconomic variables as well as how these variables will be used in the model.

7.1 **Model Specification:**

As stated earlier, Multiple Linear Regression Model is used to test the relationship between remittances along with other macroeconomic variables and GDP per capita.

Growth (dependent variable) used in this model is GDP Per Capita (Current USD). And to have a more accurate relationship between the variables, we have used the log transformation of GDP per capita in this statistical model. We have decided in this research paper to depend on GDP per capita rather than GDP per capita growth since the results extracted from running the regression by using GDP per capita growth seem to be unrealistic and not feasible. Since it showed for example that, investment variable has a significant negative relationship with GDP per capita growth, which contradicts with the most common assumption that investment has a strong positive relationship with GDP and that the more any country invests, the more it will have a positive impact on the development of its economy.
On the other hand, other independent variables will be used in this statistical model. One of these independent variables is remittances, which will be taken as a percentage of GDP by dividing the total remittances to GDP. The second independent variable is Foreign Direct Investment, which is taken as a percentage of GDP by dividing total FDI to GDP. The third independent variable is Openness to trade, which is commuted as the sum of exports and imports to GDP. The fourth independent variable is the investment variable, which is computed as the sum of private and public investments and is taken as a percentage of GDP while using this model. We have decided to use in this model the variables as a percentage of GDP instead of taking first difference of the chosen variables’ data since there is non-stationary in the data, so there is no need to use this technique in the chosen model. Besides, the results extracted from using the first difference technique seem to be misleading and don’t explain effectively and logically the relationship between the chosen variables and GDP.
7.1(1) Reasons for Choosing Specific Macroeconomic Variables in the Empirical Model:

As agreed earlier, the dependent variable that will be used in the chosen model is log GDP per capita and the other independent variables are remittances, FDI, investment and openness to trade, which will be taken as a percentage of GDP. In this paper, we will focus on the pre-stated macroeconomic variables due to their strong relationship with economic growth as shown below.

A. Relationship between Investment and FDI and Economic growth

In this paper, we will be concerned with the investment variable since it is considered to be one of the most fundamental variables of economic growth identified by both the neoclassical and endogenous growth models (Khathlan, 2012). These models have asserted the positive impact of investment on economic growth either in the transitional period as in the case of neoclassical model or more permanent effect as in the case of endogenous growth model (Khathlan, 2012). Besides, many researches were conducted to test the relationship between investment and economic growth and here are samples of these researchers (Mundaca, 2009; Burgess & Haksar, 2005; Iqbal and Satar, 2005; Waqas, 2013), in which they have all identified the strong positive relationship between investment and growth and they concluded that the higher the rate of investment, the higher would be the rate of growth. Besides, they consider investment variable as an indirect variable that we could test remittances through since remittances have the most effect on investment and consumption, so when there is a positive relationship between investment and economic growth, then consequently there is a positive relationship between remittances and economic growth (Thagunna and Acharya, 2013).
Now moving to the FDI (Foreign Direct Investment) which is considered to have played a crucial role in international economic activity and an important source of technology transfer and economic growth. For example, in 2011, countries such as Tajikistan, Liberia, and Nepal have recorded remittances of about 47%, 31% and 22% respectively of their countries Gross Domestic Product (GDP) in relative to a decrease of foreign direct investment percentage of GDP in those countries, according to Ratha and Timmer (2013). Although FDI is considered to be a volatile source of international capital inflow in relative to other relatively stable inflows such as; remittances, but many researchers have identified the strong relationship between FDI and economic growth such as; Burridge & Sinclair (2010). They have identified through econometric statistical model that is applied on Chinese economic index and they have identified there is a positive relationship between foreign direct investment and economic growth. Similarly, Barrell (1997) used cross section data for 46 developing countries and found that the positive effect of FDI, in terms of enhanced economic growth especially in countries that adopt free market forces and that provide an appropriate environment for the utilization of the potential of FDI to promote growth. The above stated statistical cases could give us a hint that investment and foreign direct investments could present valuable variables in our model while testing their effect on Egyptian economic growth, our main concern in this paper.
**B. Relationship between Openness to trade and Economic growth**

In this part, we will discuss other macro economic variable that will be used in our model to test the relationship between remittances and economic growth and this variable is openness to trade.

Openness of trade is actually considered an essential variable in determining economic developments. Whether openness of trade variable has a positive or negative effect on economic growth has been controversial issue between scholars and researchers. Some of the researchers such as; (Sachs and Warner, 1995; Edwards, 1998), have empirically shown that there is a positive relationship between openness to trade and economic growth. Since from their perspective, openness of trade participates in facilitating the transfer of knowledge and technology, identifying comparative advantages between countries as well as promoting competitiveness among countries that could act as an advantage to the country's economic growth (Sachs and Warner, 1995; Edwards, 1998).

On the other hand, other researchers have identified the negative relationship between openness of trade and economic growth such as;( Levine and Renelt,1992) in which they have empirically proved that there is a negative relationship between two variables and they raised in their findings suspicion regarding the robustness of the developed models and criticized the measurements and the calculations of the researchers who have stated that there is a positive relationship between two variables.

In this paper, we will test this variable to Egyptian economic growth and see whether it has a positive relationship or negative one. To conclude, we will test whether remittances and other macroeconomic variables have positive impact on Egyptian economic growth or not and this will be explained in details in further sections.
7.2 **Data Sources**

As stated earlier, a time series analysis will be used in which an annual data from 1977 till 2013 will be used to test the relationship between variables and GDP per capita. The numerical data about remittances, foreign direct investment and openness to trade were extracted from World Bank: World development indicators database (2014) as well as from the reports published by the central Bank of Egypt (2013) on its online database. Regarding the investments variable, the numerical values extracted from the Egyptian Ministry of Planning online database (2014).

7.3 **Data Limitation**

While conducting this research paper, we have faced some limitations that stand against obtaining the best optimum situation about the Egyptian economy with a special focus on the variables chosen in this paper. One of these limitations, as stated earlier, is the lack of practical literature to address specific country’s characteristics, features and conditions in relative to the variables that best affect this country economic growth since most of the studies tackled Egypt for instance as one of the countries in a statistical panel while ignoring its unique economic features. So, in order to overcome this limitation, the main aim of this paper is to fill this gap by using statistical method to test the correlation between different economic variables and GDP for a recipient country, in our case Egypt.

The second limitation is the lack of numerical data about Egypt’s economic indicators and components of the Egyptian economy before 1977, which make us in this paper use only the data from 1977 until 2013.

The third limitation is inability to record all the remittances that Egypt receives, so we focus in this paper only on the recorded remittances that enter the country through official channels such as; banks, posts or money receiving enterprises such as; Western Union while not taking into
account the unrecorded remittances. Besides, according to Luna Martinez (2005), as stated in Karagoz (2009), about 40 developing countries’ Central banks has stated that the data available doesn’t give a dependable indication about the full amount of remittances inflows. And since one couldn’t get worldwide agreement on the way to measure the remittances inflows to developing countries, many of the empirical studies show only the formal aspect of measurement while ignoring the informal flows of remittances, which in some countries could increase the total real size of remittances by possibly 50% or more (Karagoz, 2009).

The fourth limitation is due to the inaccessibility to reach the remittance-receiving households in different areas in Egypt. We have decided in this paper to use the data from the survey done by the International organization for Migration (IOM) in collaboration with the Ministry of Manpower and Migration on 200 remittance-receiving households to see the behavior of households in spending remittances and their perspective regarding investing their money. The fifth limitation is due to the lack of data about different economic variables such as; gross fixed capital formation, consumption, educational expenditure, etc that could have an effect on any country’s economic growth. We have decided in this paper to focus on some of the variables, which from the researchers’ view could have a direct effect on economic growth, as shown in the above section.
7.4 Descriptive Analysis of the data collected:

Before analyzing the results extracted from the chosen statistical model, we will first discuss in this part the statistical data of each of the independent variables used in the model. These independent variables are Investment, Foreign Direct Investment, Openness to trade and remittances.

A. Investment Variable

Investment is one of the independent variables that was used in the model along with other macroeconomic variables to test the relationship between remittances and economic growth in Egypt. And, if we analyze the investment variable, we could see that the total investment used in this model is the summation of private and public investments in Egypt throughout the years. Private and public investments have included investments in several areas such as; agriculture sector, electricity, petroleum and its derivates, construction, telecommunication, tourism, educational services, health services, social services and in many other economic sectors, according to the Ministry of Planning online database (2014).

Moreover, if we examine the total investments variable, we could see that the amount invested in public investment has exceeded the amount of money invested in the private sector throughout the years with an exception of some years in which private investment has recorded much higher amounts than the public investment, as shown in the below table 6.
Table 6: Private Investment is much higher than Public Investment.

<table>
<thead>
<tr>
<th>Year</th>
<th>Private Investment (in million USD $)</th>
<th>Public Investment (in million USD $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>1,787</td>
<td>1,641</td>
</tr>
<tr>
<td>2001</td>
<td>4,602</td>
<td>4,481</td>
</tr>
<tr>
<td>2006</td>
<td>9,475</td>
<td>7,059</td>
</tr>
<tr>
<td>2007</td>
<td>13,900</td>
<td>8,292</td>
</tr>
<tr>
<td>2008</td>
<td>18,440</td>
<td>10,065</td>
</tr>
<tr>
<td>2010</td>
<td>18,105</td>
<td>15,013</td>
</tr>
<tr>
<td>2011</td>
<td>20,239</td>
<td>12,484</td>
</tr>
<tr>
<td>2012</td>
<td>21,932</td>
<td>13,221</td>
</tr>
<tr>
<td>2013</td>
<td>20,816</td>
<td>13,700</td>
</tr>
</tbody>
</table>

Source: Egyptian Ministry of Planning online database (2014)

Other than the above stated years, we could see that Public investment has exceeded the Private investment during the examined period that starts from 1977 till 2013. On the other hand, if we analyze the investment variable in relative to GDP as shown in the below Correlation Matrix table 7, we could see that there is a positive and high relationship between the investment variable and GDP with about 0.7416. This actually seems to be realistic and logic since investment is considered to be one of the most important variables that have a direct effect on GDP. We will see whether the chosen statistical model could assert this result or not, while analyzing the model results in later section.
B. Foreign Direct Investment Variable

In this part, we will analyze the second independent variables used in the model along with other macroeconomic variables to test the relationship between remittances and economic growth in Egypt. If we analyze the below table 8 demonstrating FDI throughout years from 1977-2013, we could see that there is instability and fluctuations of foreign direct investment flows into Egypt throughout the mentioned years. This fluctuation of flows was seen especially in cases when Egypt is suffering from political instability such as; revolutions or weak economic conditions resulted from certain political situation that the country has suffered from in some of its periods. For example, the period from 1977 to 1980 was affected by the 6th of October war that took place in 1973. That’s why we could see that in 1977, FDI has accounted for only about 0.72% of GDP with an amount of 104,777,603 $; in 1978, FDI has represented only about 2.14% of GDP with an amount of 318,166,137 $ and the situation was improved slightly in 1979 with an amount of 1,216,285,716 $ with a percentage of 6.70% of GDP. However, this percentage has decreased drastically in 1982 and 1983 due to the political instability that this period has witnessed due to President’s Sadat assassination in 1981, that’s why we could see that FDI has accounted for only about 1.15% and 1.74% respectively. Besides, in 2011, FDI has recorded a negative sign with an amount of (-482,700,000) due to the 25th January revolution that took place in the same year and has caused political instability and instable economic conditions in the country. It is important to note that throughout the years, FDI has never exceeded 10% of the GDP.
Table 7: Correlation Matrix between FDI, Investment & GDP.

<table>
<thead>
<tr>
<th></th>
<th>GDP $</th>
<th>FDI Value (% of GDP)</th>
<th>Total Investments/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP $</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI Value (% of GDP)</td>
<td>0.055066174</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total Investments/GDP</td>
<td>0.741697488</td>
<td>0.289603371</td>
<td>1</td>
</tr>
</tbody>
</table>

Besides, if we analyze the relationship between FDI and GDP as shown in the above correlation Matrix table 7, we could see that FDI has low correlation with GDP with about 0.055, which asserts that assumption stated earlier that FDI has low impact on Egypt’s GDP. But we need to see as well whether the chosen statistical model could assert this result or not, while analyzing the statistical model results.
C. Openness to Trade Variable:

Graph 1: Openness to trade throughout the years (1977-2013).

In this part, we will analyze the third independent variable that was used in the model along with other macroeconomic variables to test the relationship between remittances and economic growth in Egypt. In the statistical model, openness to trade is computed as the sum of import and export and dividing them to the GDP (Current US$) throughout the concerned years. And since Egypt is an import based country, we could see that import values are far exceeding export values in almost all the concerned years from 1977-2013 as shown in the below table 8, but this doesn’t affect the results since the summation of both imports and exports are used in this model. Besides, if we analyze the above Graph 1 that shows openness to trade throughout the years, we could at first glance state that there is a fluctuation in openness to trade during 1977-2013. However, we could see that in years 1979, 1980, 1981 and 2008, openness to trade recorded 78%, 73%, 82% and 72% respectively and this actually considered to be a great percentage which has not repeated in the examined years (1977-2013).
And that’s why we could see fluctuations in relative to this high percentage in the above-mentioned years. It is important to note as well that the minimum percentage of openness to trade was recorded in 1999 and 2008 with 38% and 39%. Besides, these data could make us initiate a hypothesis that there is a strong positive relationship between openness to trade and GDP and again, this hypothesis will be verified while analyzing our statistical model results.
D. Remittance Variable

Graph 2: Remittances (% of GDP).

In this part, we will analyze our concerned independent variable in this paper, which is remittances and its impact on GDP. If we analyze the below table 8 that shows remittances inflows throughout years, we could see that there is an increasing trend throughout the mentioned years (1977-2013), which could give us an indication that remittances are considered to be relatively stable source of foreign currency inflows to Egypt when compared to FDI, stated in earlier section. Besides, if we look at the below table 8, we could deduct that the highest remittances inflows were recorded in years from 2010 till 2013 with about 12,453 (in millions USD), 14,324 (in millions USD), 19,236 (in millions USD) and 18,668 (in millions USD) respectively. It is important to note that Egypt was facing serious political issues during these years such as; 25th January revolution, 2011 and 30th June revolution, 2013. But this doesn’t stand against recording the highest remittance inflows, which asserts the theory of altruism that migrants usually send more in the crisis time than in any other time to support their families in their hard conditions, as stated in earlier sections. In addition, remittances have
recorded about $22 billion US dollars in 2014 according to Elise (2015) and experts and economists predict that this number will increase in the coming years.

Besides, if we analyze the above graph 2, we could see that remittances accounts for relatively high percentage of GDP in relative to FDI throughout the tested years. For example, in 1982 and 1983 (which represent the years that followed Sadat’s assassinations and which FDI recorded about 1.15% and 1.74%), remittances have accounted about 10% of GDP in 1982 and about 13% of GDP in 1983. Despite the fact the period from 2011 till 2013 has witnessed several political changes that have affected the economic conditions as a whole in an undesirable way, we could see that remittances have accounted for about 6% of GDP in 2011, about 7% of GDP in 2012 and about 8% in 2013. Taking into consideration, other economic indicators have decreased dramatically during these periods especially the other foreign currency inflows such as; FDI, tourism, etc. These positive indicators about remittances have given us an indication that remittances have positive and strong relationship with GDP. Whether this hypothesis is verified or not, will be shown in the following statistical results analysis.
Table 8: Remittances inflow, FDI value, Import & Export values throughout the years (1977-2013)

<table>
<thead>
<tr>
<th>Year</th>
<th>Remittances Value (in million US $)</th>
<th>FDI Value (in million USD)</th>
<th>Import Value (in millions USD)</th>
<th>Export Value (in millions USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977</td>
<td>928</td>
<td>105</td>
<td>4,859</td>
<td>3,291</td>
</tr>
<tr>
<td>1978</td>
<td>1,773</td>
<td>318</td>
<td>5,497</td>
<td>3,229</td>
</tr>
<tr>
<td>1979</td>
<td>2,214</td>
<td>1,216</td>
<td>8,773</td>
<td>5,396</td>
</tr>
<tr>
<td>1980</td>
<td>2,696</td>
<td>548</td>
<td>9,822</td>
<td>6,992</td>
</tr>
<tr>
<td>1981</td>
<td>2,181</td>
<td>753</td>
<td>11,423</td>
<td>7,811</td>
</tr>
<tr>
<td>1982</td>
<td>2,439</td>
<td>294</td>
<td>10,732</td>
<td>6,919</td>
</tr>
<tr>
<td>1983</td>
<td>3,666</td>
<td>490</td>
<td>10,250</td>
<td>7,170</td>
</tr>
<tr>
<td>1984</td>
<td>3,963</td>
<td>729</td>
<td>10,974</td>
<td>6,849</td>
</tr>
<tr>
<td>1985</td>
<td>3,212</td>
<td>1,178</td>
<td>11,115</td>
<td>6,908</td>
</tr>
<tr>
<td>1986</td>
<td>2,506</td>
<td>1,217</td>
<td>9,183</td>
<td>5,644</td>
</tr>
<tr>
<td>1987</td>
<td>3,604</td>
<td>948</td>
<td>9,222</td>
<td>5,087</td>
</tr>
<tr>
<td>1988</td>
<td>3,770</td>
<td>1,190</td>
<td>12,322</td>
<td>6,069</td>
</tr>
<tr>
<td>1989</td>
<td>3,293</td>
<td>1,250</td>
<td>12,827</td>
<td>7,094</td>
</tr>
<tr>
<td>1990</td>
<td>4,284</td>
<td>734</td>
<td>14,109</td>
<td>8,647</td>
</tr>
<tr>
<td>1991</td>
<td>4,054</td>
<td>253</td>
<td>13,234</td>
<td>10,284</td>
</tr>
<tr>
<td>1992</td>
<td>6,104</td>
<td>459</td>
<td>12,939</td>
<td>11,886</td>
</tr>
<tr>
<td>1993</td>
<td>5,664</td>
<td>493</td>
<td>14,016</td>
<td>12,035</td>
</tr>
<tr>
<td>1994</td>
<td>3,672</td>
<td>1,256</td>
<td>14,561</td>
<td>11,714</td>
</tr>
<tr>
<td>1995</td>
<td>3,226</td>
<td>598</td>
<td>16,662</td>
<td>13,565</td>
</tr>
<tr>
<td>1996</td>
<td>3,107</td>
<td>636</td>
<td>17,718</td>
<td>14,033</td>
</tr>
<tr>
<td>1997</td>
<td>3,697</td>
<td>891</td>
<td>19,528</td>
<td>14,779</td>
</tr>
<tr>
<td>1998</td>
<td>3,370</td>
<td>1,076</td>
<td>21,812</td>
<td>13,754</td>
</tr>
<tr>
<td>1999</td>
<td>3,235</td>
<td>1,065</td>
<td>21,144</td>
<td>13,654</td>
</tr>
<tr>
<td>2000</td>
<td>2,852</td>
<td>1,235</td>
<td>22,780</td>
<td>16,175</td>
</tr>
<tr>
<td>2001</td>
<td>2,911</td>
<td>510</td>
<td>21,802</td>
<td>17,066</td>
</tr>
<tr>
<td>2002</td>
<td>2,893</td>
<td>647</td>
<td>19,917</td>
<td>16,091</td>
</tr>
<tr>
<td>2003</td>
<td>2,961</td>
<td>237</td>
<td>20,219</td>
<td>18,074</td>
</tr>
<tr>
<td>2004</td>
<td>3,341</td>
<td>1,253</td>
<td>23,330</td>
<td>22,258</td>
</tr>
<tr>
<td>2005</td>
<td>5,017</td>
<td>5,376</td>
<td>29,246</td>
<td>27,214</td>
</tr>
<tr>
<td>2006</td>
<td>5,330</td>
<td>10,043</td>
<td>33,931</td>
<td>32,191</td>
</tr>
<tr>
<td>2007</td>
<td>7,656</td>
<td>11,578</td>
<td>45,443</td>
<td>39,469</td>
</tr>
<tr>
<td>2008</td>
<td>8,694</td>
<td>9,495</td>
<td>62,909</td>
<td>53,800</td>
</tr>
<tr>
<td>2009</td>
<td>7,150</td>
<td>6,712</td>
<td>59,713</td>
<td>47,164</td>
</tr>
<tr>
<td>2010</td>
<td>12,453</td>
<td>6,386</td>
<td>57,198</td>
<td>46,731</td>
</tr>
<tr>
<td>2011</td>
<td>14,324</td>
<td>483</td>
<td>58,264</td>
<td>48,539</td>
</tr>
<tr>
<td>2012</td>
<td>19,236</td>
<td>2,798</td>
<td>67,929</td>
<td>45,809</td>
</tr>
<tr>
<td>2013</td>
<td>18,668</td>
<td>5,553</td>
<td>67,043</td>
<td>47,932</td>
</tr>
</tbody>
</table>

7.5 Statistical Model Analysis

As stated earlier, we have used the Multiple Linear regression Model to test the relationship between the dependent variable (GDP per capita) and other independent variables such as remittances, FDI, Investment and openness to trade in which an ordinary least squares regression analysis will be used. The result of the chosen statistical model is shown in the below table 9:

Table 9: Regression Model Statistics:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remittances (% of GDP)</td>
<td>9.225980314</td>
<td>0.230856</td>
</tr>
<tr>
<td>FDI (% of GDP)</td>
<td>-21.9338199</td>
<td>0.029022</td>
</tr>
<tr>
<td>Openness to trade</td>
<td>7.361507955</td>
<td>0.000189</td>
</tr>
<tr>
<td>Total investments/GDP</td>
<td>25.6648223</td>
<td>2.93E-06</td>
</tr>
</tbody>
</table>

By analyzing the above model results, we could see that the estimated model shows high correlation between variables and this is shown in the high R square and adjusted R square with about 0.9762 and 0.9437 respectively. This means that the data obtained have highly fit in the statistical model and that 94% of the variance in the observed values of the dependent variable (GDP per capita) is explained by the independent variables chosen in this model, which are remittances, investment, FDI and openness to trade. Besides, the estimated model as a whole is significant as indicated by the significance F (1.05164E-25). We have 37 observations in this model which represent the data collected from 1977-2013.

Regarding the total investment variable, we could see that the model results have asserted the hypothesis of the paper that there is a strong positive relationship between investment
variable and GDP per capita with a p value of 2.92765E-06. As stated earlier, this result seems to be relatively realistic and logic since investment is one of the important variables that have a direct effect on GDP per capita. And this assumption is asserted by the results of our estimated statistical model as well as through the empirical studies done by several other researchers such as; (Mundaca, 2009; Burgess & Haksar, 2005; Iqbal and Satar, 2005; waqas 2013), which proved there is a strong positive significant relationship between investment and economic growth. That’s why we could deduct that investment is considered to be a corner stone in boosting and improving the economic development in Egypt.

Moving to the openness to trade variable, we could see that there is a strong significant positive relationship between openness to trade variable and GDP per capita with a p value of 0.000188866, which verified the hypothesis that there will be strong and positive relationship between the two variables. This result seems to be rational since openness to trade is considered to be one of the variables that could have a direct effect on GDP in any country especially in a developing country such as; Egypt since their balances of payments depend mostly on imports and exports transactions. And this positive impact was asserted by the results of the estimated statistical model as well as in different practical researches that have proved the strong relationship between both variables performed by different researchers such as; (Sachs and Warner, 1995; Edwards, 1998).

On the contrary to the above stated variables that showed positive relationship with GDP per Capita, we could see that foreign direct investment has showed negative significant relationship with GDP per capita with negative coefficients about (-21.9338199) and significant P value with about (0.029021541) as shown in the model results table shown above. And this result could be due to several reasons. One reason is the instability and fluctuations of foreign direct investment flows into Egypt throughout the mentioned years, especially in cases when
Egypt is suffering from political instability such as; revolutions or weak economic conditions resulted from certain political situation that the country has suffered from in some of its periods. The second reason which is related to the first reason is the difficulty for the economists and researchers to identify the effect of FDI on GDP due to its minimal effect on the economy given the low foreign currency inflows in relative to other foreign currency resources such as; remittances, tourism, Suez canal revenues, etc. The third reason is that there is a controversial debate between researchers on whether FDI has a positive effect or not on the economy. Some countries have proved to have positive relationship between FDI and GDP such as; Tajikistan, Liberia, Nepal according to Ratha and Timmer (2013) but this estimated statistical model has proved, unlike the pre-stated countries, that Egypt has a negative relationship between FDI and economic growth. And this result has asserted the hypothesis that there is a negative relationship between these two variables.

Unlike the FDI variable that showed negative relationship with GDP per capita, we can see that the estimated statistical model has showed a positive relationship between remittances, our main concerned variable in this research paper, and GDP per capita. But although there is a positive relationship between remittances and GDP per capita with positive coefficients about (9.225980314) but it showed insignificant P value with about (0.230856228), which actually contrast the main hypothesis initiated that there is a positive and significant relationship between the two variables. However, this insignificant effect could be justified due to several reasons. One of these reasons is the lack of data availability and inability to report all the remittances that enter the country in both formal and informal channels. This limitation has made us in this statistical model focus only on the formal recorded remittances that have entered the country through formal channels such as; banks, posts and money transfers enterprises such as; Western union. However, the model does not take into account the unrecorded remittances that enter the country
through informal channels such as; sending the money through hand delivery by either a trusted friend or a relative who was visiting the migrant household. The second reason is the difference between the official bank exchange rates and the black market exchange rate, which makes migrants and other people encouraged to sell their foreign currencies in the black market rather than the banks to get advantage of the difference between the two rates. For example, on February 3rd 2015, the black market money dealers stated that they are buying “dollars at the official exchange rate of 7.63 Egyptian Pounds and the pound was trading at an average of 7.982 to the dollar in the black market” (Namatalla, 2015). This difference in the exchange rates have increased the amount of unrecorded remittances and the money coming from unofficial channels, which have deprived the country from getting use of this money in investing in productive projects that could have a positive impact on GDP or to stabilize its balance of payments by increasing its foreign reserves. The third reason is that although remittances seem to be relatively steady source of foreign currency in Egypt even in the most difficult periods that Egypt has suffered from, however; these remittances have not been invested in productive projects that could have positive impact on GDP. This assumption was asserted by the survey on the 200 households that showed that most of the remittances goes to consumption rather than investment. Besides, several researchers have showed that most of the remittances are used mainly for consumption purposes rather than investment purposes in several countries including Egypt.

That’s why it is important to get benefit of this relatively stable source of foreign currency in investment projects that could foster the economic development in the country as a whole as well as to encourage the households to consume less and invest more, which will be discussed in details in the following section.
8. Characteristics of Remittance-Receiving households:

Given the insignificant relationship between remittances and economic growth, we have decided in this paper to use the data from the empirical survey done by the International organization for Migration in collaboration with the Ministry of Manpower and Migration on 200 remittance-receiving households for two main reasons. One reason is to identify the cause behind having this insignificant relationship between the two pre-stated variables. The second reason is to demonstrate to the Government the importance of getting benefit of these international surveys to know how the remittances are used in the meantime from households’ perspective. Besides, to present the areas that households believe they are the optimum areas to invest in as well as to demonstrate the variables that households perceive as critical and significant variables that could affect their decision to invest in the country. All these questions and issues will be discussed in this part.

But first, we should know that this empirical survey was done by the International organization for Migration (IOM) in collaboration with the Ministry of Manpower and Migration on 200 remittance-receiving households selected randomly using the snowball sampling method from 4 main governorates; Cairo, Fayoum, Menofeya and Sharkia (IOM, 2010). Besides, this survey was done through using semi-structured interviews, focus group discussions and survey questions.

A. General Characteristics about the migrants:

We will state some general characteristics about the migrants and households studied in this survey. For example, if we analyze the survey results, we could see that about 91% of all the migrants were males. And if we look at the age of the migrants, we could see that about 25% of the migrants in this study are between 26-30, 17.3% of migrants are between 31-35, 16% of the
migrants are between 36-40 and about 10.2% of the migrants are between 41-45 and the percentage of migrants are between 46-50 (IOM,2010). Besides, if we analyze the survey results regarding the migrants’ occupation in the destination country, we could see that about 44% of the migrants are professionals (such as: accountants, teachers, engineers, etc), about 13.3% are craft and related trade workers, about 10% are service and sales workers and skilled agriculture forestry fishery, 10% of the migrants are technicians and associate professional and the rest 22.7% are classified into managers, workers, elementary occupations & clerical support workers (IOM,2010).

B. Characteristics of Remittances Sent:

If we examine the characteristics of remittances sent, we could see that about 52.3% of the respondents in this survey receive the remitted money on monthly basis followed by 22.3% of the respondents receive remittances every several months and 22% of the respondents receive remittances irregularly (IOM,2010). Besides, if we evaluate the ways on how the respondents receive their money, we could see that 62% of the respondents received remittances through bank transfers. The second most widely used method of sending remittances in informal means through hand delivery by either a trusted friend or a relative who was visiting the migrant household, representing about 22% of the respondents in this survey, about 7% of the respondents use money transfer services, about 5% of the respondents have stated that they receive money through post office, 3% of the respondents receive their money through western Union, 1% of the respondents use debit cards to accesses their remittances (IOM,2010). And by analyzing the ways on how remittances are sent, the informal ways of sending the remittances represent about 22% of the respondents. This is actually a high percentage given the low number of respondents and this gives us an alarm that the Egyptian government should create new ways to encourage Egyptian living abroad to transfer their money through formal ways so that the country could benefit from
this money in productive projects that could have significant on economic growth afterwards.

Another important aspect we should focus on is the reasons for preferring certain method of receiving remittances from the households perspective, we could see that safety represents about 27% followed by having low/no cost service represents about 14%, the method is fast represents about 13% followed by convenience represents about 12 %, Ease represents about 11 %, only feasible option represent about 6.5% of the respondents and the remaining percentage is classified into confidentiality, proximity, habit, avoiding red tap, personal connection and good customer service (IOM, 2010). These variables should be taken into consideration while encouraging the migrants to transfer their money through formal ways by creating a safe, low cost, fast and convenient way of transferring the money to the targeted households.

C. How remittances are used in the mean time

Besides, if we look on how the remittance received are used which could give us an indication behind the insignificant relationship between remittances and GDP per capita, we have to note that according to the survey results, remittances represent about 43% of the total household income across the 4 governorates studied in this survey (IOM, 2010). In addition, we will analyze the most important aspect in this paper, which is how the remittances are used in the mean time. In this survey and as shown below in the graph 3, we found out that about 35 % of total remittances received go to general household expenses followed by about 15.5% of the total remittances received goes to Education. Besides, about 12% of the total remittances received goes to health care followed by 10% goes to savings followed by 8.2% goes to family expenses (IOM, 2010). Moreover, about 5.6% of the total remittances received goes to food and 4% to utilities and the remaining 10 % of the remittances received spent on different areas such as; property investment, personal items, capital investment, Emergencies, etc as shown below in the chart (IOM, 2010). From the below graph 3, we could see that the percentage of remittances that goes to property
investment, capital investment and investment are very minimal compared to the other areas of spending. This could give us an indication that there is a huge effort that should be done to motivate and encourage the remittance-receiving households and the migrants to invest larger part into the investment aspect.

**Graph 3: Different uses of remittances**

![Graph showing different uses of remittances](image)


On the other hand, if we analyze the advice of Migrants to their families on how to use the remittances as shown in the below graph 4, we could see that savings represents the first priority of the Migrants concerning the money they remit to their families with a percentage of 25% followed by 24% of the remitted money should go to the general household expenses from the Migrants perspective followed by 14% should go to property investment followed by education and family expenses with the same percentage of 6.2% and the remaining 25 % is classified to several areas on which the Migrants believe that their money should be spent in, as shown in the below chart (IOM,2010). Although there is a difference between how the Migrants hope their money should be spent and how the money are really spent, we could play on this issue to the increase the
investment percentage of the total remittances as they wish by promoting investing the money in several projects, which will be discussed in later sections.

**Graph 4: Advice of Migrants on how to use the remitted money**

![Graph showing advice of migrants on how to use remitted money]

Source: International organization for Migration (2010)

**D. What are the areas Households invest their money?**

Now, we will move to the most important two questions that would really help the Egyptian government to know what are the variables it should adopt and take into consideration while encouraging and promoting the Migrants and the remittance receiving Households to invest in project that could have a direct effect on GDP. One of these questions is how Migrant households invest and from the survey results, we could see that from the 20% of the migrants who stated that they invest; 39% stated that they invest in real estate followed by “22% who invested in small private businesses employing fewer than 5 people followed by 11% invested in agriculture activities followed by 9% invested in stock market/financial instruments followed by 6% invested in medium private businesses employing fewer than 20 people, 4% invested in retail
and 4% invested in transportation activities and the remaining 5% of the respondents includes those who reported participation in a group saving scheme as an investment” (IOM, 2010).

The second question is the reason why they have chosen these areas of investment. And by asking the respondents about the advantages of their investment choices, 30.6% believe that investment is profitable followed by 18.7% believe that investment is safe followed by 8.8% believe to be stable followed by 5.7% believe that investment provides employment opportunities followed by only feasible, experience and low/no risk with each aspect having a percentage of 4.7% and the remaining 22% are classified to different aspects, as shown in the below graph 5 (IOM, 2010).

Graph 5: Advantages of Investment Choice

![Graph showing the advantages of investment choice]

Source: International organization for Migration (2010)
Contrary to the advantages of investment, the migrants have stated that there is an disadvantage to the investment choice for different reasons; one of these reasons is instability with a percentage of 17.1% followed by the second reason which is high cost with a percentage of 11.4% followed by the third reason which is low profit with a percentage of 10.7% followed by the fourth reason which is high risk with a percentage of 8.6% followed by the fifth reason which is subject to market reasons with a percentage of 8.6% followed by different other reasons such as; large capital requirement, effort and red tape having each a percentage of 7.1% of the responses and the remaining percentages are distributed among several other negative reasons, as shown in the below graph 6.

**Graph 6: Disadvantages of Investment Choice**

![Disadvantages of investment choice](chart.png)

Source: International organization for Migration (2010)
E. Reasons for not investing in their home country

On the other hand, the respondents when asked about the reasons for not investing in their home country, about 28% of the responses stated that the issue is related to financial constraints or the economic constraints that the households face, 20% of the responses stated that the environment of Egypt is too risky and unstable to invest their money in, 11% stated they have no access to credit or cash to start up their investment projects, 10% of the responses stated that they didn’t know how or where to start the process, 7% of the responses stated they are too busy in their daily activities and couldn’t be engaged in investment related activities and the remaining percentage of the responses gave multiple responses of all the above stated reasons (IOM, 2010).

If we analyze the pre-stated data, we could see that the Egyptian government should take into consideration the above stated variables while encouraging the Migrants to invest in their home country in a way that the Egyptian government should provide safe, accessibility to cash and credit to start up their investment projects and to provide them with the information needed to start up their business as well as the Egyptian government should focus on the areas on which the respondents stated that they prefer to invest in so that they will be more enthusiastic and motivated to transfer more of their money to invest in their home country, which will consequently affect the whole country’s economic environment and GDP afterwards.

F. Obstacles that hinder investment

By looking at the obstacles that hinder investment from the migrant perspective, we could see that about 25.5% of the responses stated that red tap is the most obstacle that discourage them from investing followed by the second obstacle which is taxes (about 17% of the responses) followed by the third obstacle which is corruption represents about 13.5% and the forth main obstacle from the household perspective is licensing which represents about 10.5% of the
responses followed by the fifth obstacle which is lack of seeds, fertilizers and pesticides representing about 8% and the remaining percentage is distributed among several other obstacles such as; government doesn’t facilitate, decentralization of the authorities, lack of information and guidelines, access to credit liquidity, increase in property tax, environment requirements, etc (IOM, 2010). When researchers asked the respondents about the social projects that they would be encouraged to invest in, about 17.3% believe that manufacturing is the first area that could benefit from these social projects followed by 14.3% believe that education is the second area that could benefit from these social projects (IOM, 2010). The third area that could benefit from these social projects is services with about 11.2% and the fourth area is health care with a percentage of 9.2% followed by food and beverage and orphanages (each of these fields with a percentage of 7.1%). Followed by transportation with a percentage of 6.1% and the remaining percentage is distributed among several areas such as; nursing home, sewage system, retail, garbage collection, real estate investment, mosques, provide employment opportunities to youth, NGOs, etc (IOM, 2010).

To conclude, this survey has helped in demonstrating how the remitted money is used the mean time and the way the remitted money are transferred to the country and these two questions have asserted the statistical analysis results that remittances have insignificant effect on GDP per capita. Since most of the remitted money goes to consumption rather than investment as well as 22% of the remitted money are through informal channels. In addition, the government should use the variables that respondents have stated to be the main reasons for not investing in their home country as well as the obstacles that hinder investment in the country in general so that it can overcome these obstacles and work on creating an attractive economic environment that could encourage migrants and other investors to invest in this country. That’s why the Egyptian government should try to imitate or to see what other countries’ governments have done to
promote their migrants to invest their money in their home country as well as to adopt these policies so that we can get the optimum benefit of the remitted money like those countries, which will be discussed in details in our following section.
9. Practical case studies

In this paper, we will demonstrate case studies of how other countries have succeeded to encourage its migrants to transfer more money to be invested in productive projects so that we can give the Egyptian governments a guideline of what are the policies and procedures it could follow to overcome the obstacles and the variables that households in the selected survey perceived as critical variables that have hindered their investment in Egypt. That’s why we will show practical cases of how other countries have succeeded to increase the amount of money remitted to their country as well as to foster development opportunities through using the money remitted from their migrants in investment projects that could have a great benefit in enhancing its economy and in affecting their country’s GDP afterwards.

9.1 Reasons for choosing specific countries in this study

In this part, we have decided to choose certain countries to demonstrate how these countries have succeeded to promote its migrants to invest in profitable projects in their countries as well as the policies adopted to increase the amount of remittances inflow to the country. The countries presented in this case were chosen based on the criteria that these countries are receiving the highest amount of remittances worldwide based on several international organizations indicators such as; IMF (2010) as well as they are considered by several international organizations to be successful cases on how they get benefit of remittances, which will be discussed in details in the next section. For example, Mexico which is one of the countries chosen in this study is considered to be one of the highest remittance –receiving countries for the fact that their remittances have reached to about $ 69 billion over the past 10 years from 1993-2003 (Orozco & Lapointe, 2004). Another case study will be used in this paper is Latin America and Caribbean region. We have chosen the case of Latin America and Caribbean region to be analyzed in this
paper for several reasons. One of these reasons is that these countries have recorded to be one of the highest remittance receiving countries with an amount of $32 billion in 2002, exceeding the amount of Foreign direct investment and official development assistance in the same year (IFAD, 2004). The second reason is that by taking the total volume of worldwide remittances, we could see that the Latin America and Caribbean region represents about 31% of the total remittance flows followed by Southern Asia with about 20% of the total remittance flows followed by Middle East and North Africa with about 18% of the total remittances flows followed by East Asia and the Pacific with about 14% followed by Europe and Central Asia with about 12% and finally the Southern Africa with about 5% of total volume of worldwide remittances (IFAD, 2004).

The third reason is that remittances contribute huge percentage of total GDP in the concerned countries, for example; remittances in El Salvador constitute about 15.1% of GDP, remittances to GDP in Haiti represents about 24.2%, remittances to GDP in Jamaica counts for 12.2% and about 29.4% in Nicaragua (IFAD, 2004). That’s why it is essential to know the policies that were applied in these countries to promote investing these remittances in productive and investment projects, which will be discussed in details in below sections. Other countries will be used in this section such as; Philippines, China, Korea, Sri Lanka, Bangladesh, Pakistan, India and many other countries that will be demonstrated in the following section.
9.2 Countries’ Case study:

9.2 (1) Mexican case:

One of the cases that will be taken in this research is the Mexican case since Mexico as stated before is considered to be one of the highest remittance–receiving countries for the fact that their remittances have reached to about $69 billion over the past 10 years from 1993-2003 (Orozco & Lapointe, 2004). Besides, Mexico is considered to be one of the best countries that have benefited from remittances to develop its community in several aspects especially in social and economic aspects. To illustrate more, the Mexican immigrants have succeeded to initiate organizations called HTAs, which stands for HomeTown Associations and the main aim of these organizations is to “retain cultural ties” to their country hometowns, to provide their home communities with the goods that benefit collective needs in health, education and economic infrastructure through raising money from the immigrants as well as to support small local development projects (Orozco & Lapointe, 2004).

A. Hometown Associations (HTA)’s structure

If we look at these organizations’ structure, we could see that these organizations consist of “amalgam” of families who have decided to participate in these organizations to enhance their hometowns’ conditions and once these organizations (HTAs) are formed, their life cycle is relatively stable since they consist of active members who have the ability to get support from hundreds of other immigrants as well as their club leaders are elected democratically by these organizations’ board members (Orozco & Lapointe, 2004).
B. Reasons behind the success of these HTA’s in implementing several projects:

According to Manuel Orozco and Michelle Lapointe (2004), the basic success of these HTAs relies on different aspects. One of these aspects is project identification in which there are main factors that determine the projects that the HTAs would finance based on the identification of their community needs. One of these factors is the extent to which HTAs has a relationship with its hometown individuals or groups that could influence the HTAs decision to select specific projects to implement, the second factor is project decisions which are based on the club leaders’ view about what their home community needs which is actually formulated by listening to friends and family who are still living in Mexico, the third factor is that some of the clubs within the organization decide that they will devote their money to a certain projects or in a certain areas without changing the plan at any time of the organization, the fourth factor is that an emergency case may occur such as natural disasters which require direct help from the immigrants to their home country and the fifth factor is partnership with other organizations such as’ development agencies or partnership with local, state and federal in what it is called (3X1) programs/projects to implement projects that are considered to be essential for the inhabitants in several areas (Orozco & Lapointe, 2004). The implemented projects were basically related to “health and education services, church support, town beautification and construction and improvement of public infrastructure” in Mexican states such as; Zacatecas, Jalisco, Guanajuato and Michoacán which actually represent more than 30% of the Mexican migration to the United states that actually hosts more than 8 million Mexican as recorded in 2013 (Orozco & Lapointe, 2004).

The second aspect that HTAs has succeeded to achieve is resource allocation for the projects they planned to finance in their home country communities in a way that the funds for a given project is done through different ways such as; one of the association member delivers the
funds needed directly to the hometown, the second way is that the associations deposit the requested funds in a local bank branch close to the hometown and the third way is depositing the funds in a specific bank account agreed upon based on the collaboration between HTAs and the local, state and federal under (3X1) programs to finance certain projects (Orozco & Lapointe, 2004). It is important to note that the average amount raised for a given project is usually below 10,000 $ a year while the budget allocated annually for the whole municipal to do the public work is usually less than 50,000 $ as well as there are other cases in which HTA donations are equal to the budgeted allocated to local government to perform public works especially in town in rural Mexico (Orozco & Lapointe, 2004). And this means that the amount transferred contributes about 20% of the Municipal budget allocation for public works in some cases and other cases as stated above the amounts transferred to finance projects are equal to the allocation local government’s budget, which is actually considered to be a huge contribution that could actually help the Municipals to provide the inhabitants with the basic social and economic needs that couldn’t be done by the money allocated to the Municipal alone.

The third aspect of HTAs success is project implementation in which HTAs coordinates with a contact person in the hometown to supervise as well as to implement the projects that HTAs have decided to carry out in their hometown countries and this person is responsible to do several duties such as; to provide the organizations with the information needed about the projects costs, budgets and work schedule, to disburse funds, to supervise work performed to make sure that the money transferred are allocated in the right place and to provide evaluation based on the projects’ outcomes (Orozco & Lapointe, 2004).

On the other hand, HTAs according to Manuel Orozco and Michelle Lapointe (2004) have succeeded to implement projects that have a great effect on economic and social development of their rural hometowns. Since most of their projects were focusing on enhancing the infrastructure
of their towns and connecting it to larger cities through building and paving roads and construction of bridges which will accordingly facilitate public transportation as well as providing these rural towns with essential services such as; electricity, sewage treatment and health care to the whole community. Besides, these public projects have actually succeeded to create job opportunities to local residents given that these communities are suffering from a very high employment rates and these projects could actually create new jobs for those people (Orozco & Lapointe, 2004). Moreover, in the projects that are done with the collaboration of local, state and federal under 3X1 programs, HTAs has an upper hand in enforcing the government to maintain a higher standard for transparency and accountability by “making specific demands for the projects they fund” (Orozco & Lapointe, 2004). In addition, they require governments to produce “clear budgets and timelines for the implementation of projects, and followed up with insistent requests that the money be accounted for thoroughly” (Orozco & Lapointe, 2004).

C. Zacatecas Successful Case Study

In Zacatecas, HTAs have actually succeeded to form about 13 federations and during the early 1990s and by 2002, these organizations have managed to collaborate with the state officials to perform projects related to public work and their contributions have reached at least $16 million (Orozco & Lapointe, 2004). Jerez and Villanueva, two main municipalities of Zacatecas, have received an amount of $250,000 from HTAs to participate in public infrastructure projects related to street paving to allow easier access to public transportation, setting an irrigation system and rebuilding of a primary and secondary schools as well as building health care center for emergency cases. All these projects have actually helped the government and the municipal in the development of these communities and to avoid depending only on the government’s funding to finance these projects (Orozco & Lapointe, 2004).
D. Jalisco Case Study

In Jalisco, there are clubs that represent “the second largest proportion of hometown associations and the second largest partner in the 3X1 programs after Zacatecas” and these clubs have succeeded to finance specific projects such as; electrification, street paving and school rehabilitation as well as providing food to the needy and elderly (Orozco & Lapointe, 2004).

E. Michoacán Case Study

On the other hand, in Michoacán, the clubs related to HTAs have managed to differentiate itself from other municipalities under the 3X1 programs (programs done through the collaboration between local, state and federal and HTA associations) in establishing a small investment projects which is called “wealth-generation projects” that have the ability to create job opportunities as well as to attract investment in this community (Orozco & Lapointe, 2004). For example, in 2002, HTAs and the government have established a garment shop under 3X1 programs and invested in purchasing the sewing machines to produce pants and the workshop done consisted of different types of machines and is managed by women from the locality and in return, the state has supported these projects by providing training to the women to manufacture garments and also arranged a contract with the state textile chamber of commerce to purchase pants and sell them as school uniforms (Orozco & Lapointe, 2004).

F. Challenges that faced these associations:

Although there are some challenges that have faced these programs such as; politics matters, having a long term and costly projects and having difficulties working with government partners; but no one can deny the successful role that these HTAs organizations have done in development their hometown countries in both social and economic aspects, which make us as Egyptians want to imitate this model in our home countries too to enhance our hometown
community and provide better investment opportunities for the people living in Egyptian rural areas.

9.2 (2) Implemented Policies by Philippines, China & Korea to increase the remittance inflows:

In addition to the Mexican case, other governments have succeeded in increasing the money remitted to its countries as well as to encourage their immigrants to invest in their countries through creating investment projects that have high yield on the country’s economy in general. For example, governments in countries such as; Philippines, China and Korea have increased the money remitted to its countries by forming a mandatory remittance policies which state that a certain percentage should be deducted from the immigrants’ earnings and be sent to the country of origin as a part of commitment of the immigrants to their country and as stated by Meyers (1998), this mandatory policy was so effective in the pre-stated countries since these countries’ governments have a direct access and control over the migrant’s earnings in the host countries.

9.3 (3) Implemented Policies by Sri Lanka, Bangladesh & Pakistan to increase the remittance inflows:

Conversely, other countries such as; Sri Lanka, Bangladesh, Pakistan and India have performed several policies to encourage the migrants to send more money to their country through allowing them to transfer their money to saving accounts rather than current accounts that provide higher rate than the normal interest rates applied on current accounts, allowing them to have a low rate loan interest, permitting them to have access to credit and technical support, providing them with better exchange rates so that they minimize the amount of money lost in the converting cycle, exempting them from tax and customs as well as assisting them in establishing small business projects in their country (Meyers, 1998). Besides to all the above stated incentives, Pakistan has encouraged its migrants to “spend their earnings in Pakistan through tax-free stores at the airport.
rather than buying the goods in the country where they are working” (Meyers, 1998). By looking at the policies of what other countries have implemented to encourage their migrants to send money to their home country, we could see that the Egyptian government could work on applying these policies that could help on increasing the benefit of remittances as it did to other countries.

9.2 (4) Somali Case Study

Similarly to the above stated policies, we could see that the Somali governments have exempted incoming remittances from taxes but it enforced the money transfer enterprises to donate a percentage of its revenues to public projects (Lindley, 2007). In addition, the Somali migrants have established organizations/associations called “Somaliland diaspora” like the HTAs organizations in Mexico in which these organizations are responsible to collect money from immigrants and invest this money in public services through funding the reconstruction and contributing to the running costs of schools and health facilities (Lindley, 2007). According to Anna Lindley (2007), these organizations have succeeded to finance several health projects with the help of NGO donations in several areas in Somali especially Hargeisa (a major Somali city located in a highland area of Somaliland) which have benefited the inhabitants in these areas and contributed to the welfare of the society as a whole.

9.2 (5) Latin America and the Caribbean Countries Case Study

Additionally, we will analyze the case of Latin America and the Caribbean countries and what their governments and organizations have done to promote their migrants’ to transfer more money to their home countries to be invested in productive and investment projects.

Latin Americans and Caribbean Migrants have actually succeeded to initiate and develop organizations and migrant associations like the ones found in Mexico (HTAs) stated earlier with the purpose of developing their home town communities through collecting donations from Migrants living abroad and investing these funds in enhancing the town’s infrastructure such as’
paving roads, installing electricity, sanitation facilities and building schools and health clinic in way to enhance their home town communities and enhancing the welfare of the inhabitants living in these rural poor areas (IFAD, 2004). Most of the Latin American and Caribbean migrant associations are found in areas with large migrant communities such as; Florida, New York and Texas and these associations are found among the Dominican, Salvadoran, Colombian, Guatemalan and Nicaraguan Migrant communities (IFAD, 2004). Unlike the home town associations in Mexico (HTAs) which focused on economic development of their home town communities, these Latin American and Caribbean organizations have succeeded to develop its activities to foster social development along with its economic development by organizing community activities such as; dances and dinners for the aim of collecting money to assist in development projects such as; paving roads of their town, building or improving cemeteries, etc as well as they have focused on enhancing the health and education standards of the inhabitants of the community by “providing scholarships, books for the town library, medical equipment and medication and financing local sport activities” as well as these organizations became more involved in investing in profit generating projects that are managed by the community members with the help of NGOs and other local organizations (IFAD, 2004).

On the other hand, according to the International Fund for Agricultural Development (2004), the governments in these countries have decided to get benefit of the new skills and knowledge that the Migrants have acquired in the country of settlement and promoting the inclusion of these returning Migrants in the economy through training programs and providing them with low cost loans. For example, the Jamaican government has established a program called “Returning Residents Programme” in a way to “encourage the return of Jamaican nationals from abroad through a public information campaign and through offering tax concessions on the import of household goods” (IFAD, 2004). Besides, several governments such as’ Salvador government
has realized the importance of migrant purchase power and that’s why trade fairs and real estate fairs were organized in the areas with the high concentration of Latin American and Caribbean migrants in a way to encourage them to start up businesses in their countries of origin to produce local goods or to purchase lands or apartments in their country to boost the real estate sector in the remittance receiving countries (IFAD, 2004). Besides, Latin American governments have realized the importance of promoting tourism to the migrants living abroad, so several campaigns were done in the areas with high concentration of migrants to promote them to visit their home town country and to flourish the tourism sector in their country given that about 20% of the tourists who arrive in the country are Mexican living abroad and in Dominican Republic, we could see that about 40% of the tourists arriving to Dominican Republic are Dominicans who live abroad (IFAD, 2004).

Besides, IFAD (2004) has invested in the “sensitization of Salvadoran migrant communities on the productive use of remittances and on the potential role of these organizations to partner with IFAD for the economic development of their communities of origin” and this objective was done through establishing workshops in the areas with high concentration of Latin American and Caribbean migrants to raise awareness regarding the productive use of remittances and investing their money in investment projects with the collaboration of migrant associations. The most important role that those IFAD has played is acting as an intermediate between those migrant associations and communities of origin and this role could actually help in ensuring that the projects implemented in the most efficient, cost saving and within the time schedule as well as “identifying effective mechanisms for tapping the knowledge and the enthusiasm of migrants to help their communities of origin” (IFAD, 2004). IFAD (2004) has actually helped in developing the environment for migrants to invest in their home country in collaboration with other migrant associations as well as developing other projects through assisting in developing the local financial
institutions in the rural areas so that it can offer better remittance services and therefore decreasing the costs of sending remittances to Latin America and the Caribbean and increasing the amount of capital available for the receiving communities, which will promote savings mobilization and the availability to access diversified financial services such as; loans, savings and insurance.

By analyzing the previous practical case studies, we could see that there a lot of policies that Egyptian government could adopt to promote the Egyptian migrants to invest in productive projects that could benefit the whole society and enhance the economic and social welfare of many rural and urban communities in Egypt. It is important to identify the important and effective role that the migrant organizations have done to promote several investment projects with a special focus on the infrastructure projects that actually most of the rural communities in the whole world are badly in need for and especially the Egyptian rural areas. Besides, international organizations such as; IFAD, World Bank and IMF as well as other organizations should actually play an important role as an intermediate between the home town communities and migrant communities settled abroad, so that they can promote remittances not only as a consumption tool but rather as a tool for rural development. In addition, these organizations should involve these migrant communities in the design, implementation and evaluation of the projects that their hometown communities are in badly need for to develop the economic and social welfare of its inhabitants. Egypt should actually benefit of all above stated examples of how countries have encouraged migrants abroad to invest in productive projects as well as the policies implemented by these countries to increase the amount of remittance inflows to the country. All these issues will be discussed in details in the next sections.
10. Results Implications:

In this part, we will discuss the implications that we could deduct from the results of the statistical model. In addition, we could imply how we could promote households and migrants to invest their money remitted in productive projects that could yield benefit to the economic growth. In addition, implying what the government should do to promote those immigrants to send more money and to create an attractive environment that could motivate them to invest in profit driven projects.

Based on the results of the statistical method, we could imply that Egypt should focus on investment variable since this variable has proved to have a significant and positive relationship with GDP per capita with P-value (2.92765E-06). This could actually be done through creating an attractive investment environment that could motivate investors to build up new factors and open new companies that could have an effective impact on several economic aspects such as; decreasing the employment rate, increasing competition in the market which could result in decreasing the prices of the product (resulting in decreasing the inflation rate) and increasing the quality of the products provided as well as enhancing the economic growth in the country in general.

Conversely, to the positive relationship between investment and GDP per capita, foreign direct investment has shown to have negative relationship with GDP per capita for several reasons stated earlier. That’s why we should encourage the foreign investors to be more engaged in long term projects rather than short term ones in a way to overcome the fluctuations and instability of this inflows in a short period of time. Besides, the country should maintain its political stability that could greatly affect the investment in any country and make this country either an attractive country to invest in or a repellent country to be reluctant to invest.
On the other hand, given the effective impact of investment on Egypt’s economic growth and the insignificant effect of remittances on economic growth with p value (0.230856228), we could imply that households and migrants should be encouraged to invest the remitted money in productive projects such as; investing in infrastructure projects, building new schools, building new hospitals and even in profit driven projects that could yield profit to both the individuals and the society as whole. And to be able to encourage these households and migrants to invest their money, we should know first how this remitted money are used in the mean time, what are the characteristics that migrants and households perceive as critical variables that could either hinder them from investment or promote them to invest and several other issues that will be discussed in the following paragraphs.

On the other hand, we will analyze the empirical survey done by IOM in collaboration with Ministry of Manpower and Migration on 200 remittance-receiving households to identify the reasons for this insignificant relationship between remittances and households as well as to identify the variables that Egyptian government should take into consideration to promote investment from migrants perspective. For example, if we first analyze the characteristics of the migrants studied in this survey, we could see that about 25% of the migrants aged from 26-30 and about 17.3% of migrants are between 31-35 and this could give us some indication that the investment projects that the government could promote to encourage investment should be targeted to youth, for example, minimizing the minimum capital required to open a company since those youth won’t have enough funds to start business if the capital required to open the business is above their financial capacity. Besides, if we analyze the migrants’ occupation in the destination country, we could see that about 44% of the migrants are professionals (such as; accountants, teachers, engineers, etc) and about 13.3% are craft and related trade workers. And by taking into consideration the hypothesis stated by researchers that “the higher the salary these migrants get, the higher they remit”, we could
assume that those professional migrants representing the highest percentage in the study are supposed to get higher salaries than other categories for example and therefore, they would remit more. But this assumption could be just theoretically since we couldn’t test the verification of whether we could depend on this hypothesis or not.

Besides, if we analyze the frequency of the remittances sent, we could see about 52.3% of the respondents receive the remitted money on monthly basis followed by about 22.3% of the respondents receive remittances every several month, which give us an indication that remittances could be relatively stable source of foreign currency to the country given the high percentage of remitted money on monthly basis in the studied respondents. And the most important aspect that should be taken into consideration since it could be the reason behind having insignificant relationship between remittances and economic growth is the way how remitted money are transferred to Egypt. As per the survey results, we could identify that about 22% of the respondents in the survey send their money in informal means through hand delivery by either a trusted friend or a relative who was visiting the migrant household. This high percentage of sending money through informal way represent part of the unrecorded remittances, which is actually one of the limitations that we have mentioned before in getting an accurate figure about the total actual amount of remittances received by the country. Besides, this high percentage of sending money through informal way gives us an alarm that the Egyptian government should create new ways to encourage Egyptian living abroad to transfer their money through formal ways so that the country could benefit from this money in productive projects that could have significant on economic growth afterwards.

Moreover, by analyzing the most important aspect in this study which is how the remitted money are used in the mean time, we could see that only 10% of the total remittances spent on property investment and capital investments and the remaining percentage are spent mainly on
general household expenses and several other items such as; education, health care, food, utilities, etc. This could actually give us a justification for the insignificant relationship between remittances and economic growth since most of the remitted money goes to consumption rather than investing these remitted money in productive projects, that could have a positive effect on the economic growth. On the other hand, we should benefit from the difference between how the migrants hope their money to be spent and how the money is really spent and to play on this issue to increase the investment percentage of the total remittances as they wish by promoting investing the money in several desired projects, which will be discussed in later sections.

One the other hand, when migrants were asked the areas in which they invest their money in the mean time, we could see that 20% of the migrants who stated that they invest; about 39% invest in real estate followed by 22% in small private business employing less than fewer 5 people followed by 11% in agriculture activities and the least two percentages go to transportation activities and retail with each 4%. The government could use the data provided to know the areas of interest of the migrants and investors in general and initiate several projects in these areas to promote investment and provide facilities for the investors to obtain land or apartment since about 39% invest in real estate or provide credit facilities and less bureaucratic procedures to initiate a small company since it constitutes the second percentage in the areas in which respondents invest in.

Besides, the government should use get use of the information provided by the respondents in this survey regarding the disadvantages of investment choice from their perspective as well as the reasons provided from their side for not investing in their home country such as; instability, high cost, low profit, high risk, larger capital requirement, etc while encouraging the Migrants to invest in their home country. This could be done if the Egyptian government managed to provide safe, accessibility to cash and credit to start up their investment projects as well as to
provide them with the information needed to start up their business. In addition, the Egyptian government should focus on the areas on which the respondents stated that they prefer to invest in so that they will be more enthusiastic and motivated to transfer more of their money to invest in their home country, which will consequently affect the whole country’s economic environment and GDP afterwards. Moreover, the Egyptian government should exert great effort to eliminate the obstacles stated by respondents to have a great effect on hindering the investment in Egypt for all investors in general and for the Migrants and remittance-receiving households in specific as well as to promote social projects that could have a great benefit to the whole society.

On the other hand, the practical case studies have shown many policies that Egypt could adopt for example to decrease the informal channels of transmitting the money and to encourage migrants to transfer the money through formal channels such as; decreasing the cost of transfers, providing some privileges for those who transfer the money through banks such as’ the ability to have loans and to get more credit privileges, to get interest rate on the money remitted and several other policies that some of the presented countries have implemented to increase its remittance inflows. Besides, Egyptian migrants should adopt the idea of the organizations initiated in Mexico and Latin American and the Caribbean countries and try to formulate these organizations and participate in implementing several infrastructure programs such as; paving roads, building schools, constructing hospitals and other projects like the ones performed by Mexican HTAs so that they can enhance the infrastructure of their hometown countries as well as they could invest in other profit driven projects like the ones performed in Latin American and the Caribbean countries. In other words, we should encourage migrants to invest in small projects that could yield profit to both individuals and the society as a whole such as; small shops or small factory along with investing in infrastructure projects. In addition and as stated earlier, international organizations such as; IFAD, World Bank and IMF as well as other organizations should play an important role.
like what they performed in several other countries. For example, these organizations should act as an intermediate between the hometown communities and migrant communities settled abroad so that they can promote remittances not only as a consumption tool but rather as a tool for rural development and involve these migrant communities in the design, implementation and evaluation of the projects that their home town communities. Besides, these organizations should create some workshops for the Egyptian migrants to raise awareness regarding the productive use of remittances and investing their money in investment projects rather than spending it on general household expenses, education and health service like what households do in the meantime as shown earlier in the survey results. In the next section, We shall discuss the other recommended policies that Egyptian government could adopt to encourage migrants to transfer more remittances to the country through formal channels rather than informal ones. Besides, the Egyptian government should take into consideration the variables perceived by households to be vital for promoting investment as well as to remove the obstacles that hinder households in specific and the investors in general to open new businesses in Egypt.
11. Conclusion and Recommendation:

To conclude, improving growth rates and identifying the variables that could have a great effect on enhancing economic growth are considered to be one of the most essential topics that have attracted several scholars and policymakers in both developing and developed countries. And given the relative stable inflow of remittances in comparison to other foreign inflows such as; FDI and foreign aid development, this has made several researchers and scholars attracted to test the impact of this relative stable foreign inflow on the receiving country’s economic growth. Some scholars have identified the positive effect that remittances could have in several areas such as; in the financial sector by increasing the company’s creditworthiness as well in decreasing the poverty rates. But, whether remittances have positive effect on economic growth or not has always been a controversial issue between several scholars and researchers. Some of the researchers such as; Abdel, Gwendolyn and Pauline (2013); Waqas (2013); Ben Mim& Ben Ali (2012) have proved that there is a positive relationship between remittances and economic growth, while other researchers such as; Ralph, Fullenkamp and Jahjah (2005) and Karagoz (2009) have proved that there is a negative relationship between remittances and economic growth. And in spite of the fact there are many studies that are concerned about identifying the relationship between remittances and economic growth, however; many of the studies have depended on cross-country data rather than on a specific country environment to test this relationship.

That’s why the main aim of this paper is to fill this gap by using an economic model, which have the ability to analyze the impact of remittance along with other variables on growth of GDP for a recipient, in this case Egypt. In this paper, we have focused on Egypt since Egypt, like many other countries, is suffering from both economic and political conditions that are hindering its economic growth and its ability to compete with other developing countries such as; Brazil. And given the abundant resources that Egypt owns, however the Egyptian government has failed to use
these resources to promote investments and to enhance the economic conditions. That’s why in this paper, we will focus on remittances which considered to be a relative stable source of foreign currency that hasn’t been affected by the political and economic conditions that Egypt is suffering from.

In this research paper, we have examined several hypotheses and answered several research questions. One of the hypotheses tested in this paper is that “there is a significant and positive relationship between remittances and economic growth”. The second hypothesis is that “there is a negative relationship between FDI and economic growth”. The third hypothesis is that “there is a positive and significant relationship between Investment and openness to trade and Egypt’s economic growth”. On the other hand, in this paper, we have answered several research questions such as; “how could remittances be used at the optimum level to enhance economic growth from households perspective and how migrant households invest their money in the mean time?” as well as “what are the policies that the Egyptian government should adopt in order to encourage workers’ outside Egypt to transfer their money?

The main hypotheses were tested by using a statistical model called Multiple Linear Regression Model in which an ordinary least squares regression analysis is used. We depend in this study on the annual data from 1977-2013. We have faced some limitations in this study such as; lack of practical statistical data about Egypt which makes us in this paper test the relationship between remittances along with other macroeconomic variables and GDP, focusing only on the recorded remittances while ignoring the unrecorded ones, inaccessibility to reach the household receiving remittances which make us depend on the IOM survey on 200 remittance receiving households as well as focusing on certain variables in this study such as; FDI, investment and Openness to trade due to the lack of data on other economic variables such as; gross fixed capital formation, consumption and educational expenditure.
The results of this statistical model have asserted the hypotheses that there is positive and significant relationship between investment and GDP per capita with a p value of 2.92765E-06. Besides, the results have shown that there is a positive and significant relationship between openness to trade and GDP per capita with a P value of (0.000188866). On the other hand, the model results have asserted the hypothesis initiated in this paper that there is a negative relationship between FDI and GDP per capita with a P value of about (0.029021541) due to several reason such as; instability and the fluctuations of FDI flows to Egypt throughout the mentioned years as a result of political instability or week economic conditions that Egypt suffered from, inability of the researches to identify the effect of FDI on GDP due to its minimal effect on the economy in relative to other foreign inflows as well as several reasons as stated earlier. In addition, the model results have contrasted the hypothesis that remittance has a positive and significant relationship with GDP per capita since the results shows that remittances have insignificant effect on GDP per capita with about (0.230856228). This insignificancy will lead us to test the reasons behind having this result from remittance-receiving households since they are the key factors and the decision makers on how the remittances are spent in the mean time and how we would like to be used in the future.

The survey done on 200 remittance-receiving households have given us justifications and reasons behind having this insignificant impact of remittance on economic growth in the statistical model applied. One of the reasons that this survey has revealed is that about 22% of the respondents in the survey send their money in informal means through hand delivery by either a trusted friend or a relative who was visiting the migrant household. This high percentage of sending money through informal way , given the small and random sample chosen in the survey, could give us a hint that the total remittances inflows to the country are far exceeding the recorded official remittances. This could actually make it difficult for any researcher to test the real impact
of remittances on the economic growth. Besides, this high percentage of sending money through informal way gives us an alarm that the Egyptian government should create new ways to encourage Egyptian living abroad to transfer their money through formal ways so that the country could benefit from this money in productive projects that could have significant impact on economic growth afterwards.

Moreover, by analyzing the most important aspect in this study which is how the remitted money are used in the mean time, we could see that only 10% of the total remittances spent on property investment and capital investments and the remaining percentage are spent mainly on general household expenses and several other items such as; education, health care, food, utilities, etc. This could actually give us another justification for the insignificant relationship between remittances and economic growth since most of the remitted money goes to consumption rather than investing these remitted money in productive projects, that could have a positive effect on the economic growth. On the other hand, the survey has revealed the variables that from their perspective could hinder them from investment in Egypt as well as the obstacles that they face while initiating new business in Egypt. That’s why the Egyptian government should exert great effort to encourage these migrants to transfer their money through formal ways as well as to invest their money in productive projects that could have a positive impact on enhancing the economic growth afterwards. In order to help the government to identify the policies that could be used to increase remittances inflows and to get better use of this source, a number of practical case studies about what other governments in several countries have done to encourage its migrants to transfer more money has been demonstrated so that the Egyptian government could imitate and adopt these approaches and policies to motivate their migrants to invest these remitted money.

In addition to the recommended policies stated in the result implication part, there are several other policies that the Egyptian government should do to promote investing in productive
projects. For example, given that about 22% of the respondents in the survey send their money in informal means through hand delivery by either a trusted friend or a relative who was visiting the migrant household. Therefore, the Egyptian government should create new ways to motivate Egyptian living abroad to transfer their money through formal ways. One of the ways is decreasing the cost of transfer since cost is considered to be one of the variables that households stated is important aspect in encouraging them to transfer the remitted money through formal ways. In addition, the second way is providing some privileges for the people transferring their money through formal ways, like what other countries such as; Sri Lanka, Bangladesh, Pakistan and India, such as; allowing them to transfer their money to saving accounts rather than current accounts that provide higher rate than the normal interest rates applied on current accounts, allowing them to have a low rate loan interest, permitting them to have access to credit and technical support, providing them with better exchange rates so that they minimize the amount of money lost in the converting cycle, exempting them from tax and customs as well as assisting them in establishing small business projects in their country (Meyers, 1998). The third way is eliminating the currency black market, which provide higher exchange rate than what is offered in banks that make migrants to transfer their money trough informal way rather than formal one. The fourth way is opening branches of national banks in countries with high migrants so that it can encourage the migrants to transfer their money to their home country with a minimal transaction cost (Meyers, 1998). Besides, creating what is called “remittances banks” in which Migrants deposit their money in them and part of their deposited money to be transferred to the households in their hometown and the remaining amount to be invested in local projects or to finance small business development (Meyers, 1998).
Moreover, the government should encourage saving since it is an important aspect that could decrease the balance of payments and provides stability to the economy as a whole. That’s why the governments should apply effective monetary policies that provides positive and attractive interest rates to encourage people to save even in short term assets as well as decreasing the lending interest rate to motivate people to invest their money in productive projects rather than spending these money in consumption (Connell, 1995). The governments could decrease the lending rate through applying interest rate subsidies and guarantees on loans granted to investors like the loans provided by the aid-supported development banks who applied the same technique (Connell, 1995). Moreover, the government should decrease the budget deficit by controlling its expenses, increasing exports and decreasing the imports, which will result consequently in controlling inflation, which actually affects the percentage of money that households would save or invest (Connell, 1995). For the fact that, the lower the inflation rate, the higher the households will have money to either invest or save.

Besides, as stated earlier, we should raise awareness to the Egyptian communities living abroad to consume less and invest more in productive projects and to formulate organizations that could help develop its hometown communities and provide better infrastructure facilities for their country like what HTAs have done in their hometown communities. Besides, fostering investment actually requires formulating an independent financial institution, which could operate the best possible methods in attracting funds from migrants and in lending these funds domestically and internationally.

To finalize, this research paper has tried to pinpoint the importance of remittances as a source of foreign currency to many of the developing countries; especially Egypt, our main concern in this paper. This paper has tried as well to identify the policies that Egyptian government could implement if it wants to motivate their migrants to transfer more money and to
invest these remitted money in productive projects. Identifying the current implemented policies and evaluating whether these policies have succeeded to create an attractive economic environment for investors in general and for migrants in specific or not, will be subject to further research.


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