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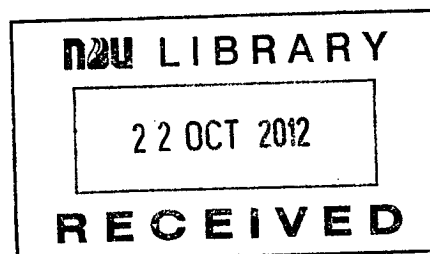
The effect of the Lebanese Diaspora remittances
on the growth of the overall economy

**A Thesis Submitted in Partial Fulfillment of the
Requirements for the Joint Degree of the Master of Business
Administration (M.B.A.) and the Master of Science in
International Business (M.I.B.)**

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Approval Certificate

**The effect of the Lebanese Diaspora remittances on the growth of
the overall economy**

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DECLARATION

I hereby declare that this Thesis is entirely my own work and that it has not been submitted as an exercise for a degree at any other University.

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Abstract

Money transferred by Lebanese immigrants represents a significant percentage of total deposits at banks and of GDP. There is therefore a need to study the effect of these remittances. The aim of the thesis is to assess the effect and contribution of the international Lebanese Diaspora on the growth of the Lebanese economy.

Primary and secondary data were analyzed to back up the argument that there is misuse of remittances, and that corrective actions are required. The study found that the highest relation is between remittances flow and private sector deposits and the weakest relation is between remittances and consumption; although that 70% of the Lebanese economy is built on consumption. In addition, the survey that was conducted demonstrated that the biggest deployment of money transfers to the country is in deposits and saving accounts in local banks (62.7%). The lowest deployment, on the other hand, is in business entrepreneurship (7.8%). Evidence was found that remittances are not fueling growth in the Lebanese economy.

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Chapter 1: Introduction

1.1 Emigration and Remittances in the Lebanese Community

“The individual learns to identify himself with his family group from the moment of birth.” (A. Tannous, 1942). Family constitutes the basic foundation of the Lebanese society. It is the principal shelter and final refuge for its members. Lebanese people search for assistance from family members whenever needed, in every aspect of their lives including from those that emigrated. Parents are essential in the Lebanese society, both at home and abroad.

In the Lebanese community, family is not only limited to the immediate relatives, but it is extended to include siblings, maternal and paternal grandparents, aunts, uncles, and cousins. The culture prevailing in the Lebanese society pushes emigrants into helping relatives and family members who are often in need of assistance to survive in the battered country. Therefore, when immigrants send funds to the country of origin, they will create a transnational family network that will turn out to be the main source of networks for economic, social and political survival of the individual. (Hourani, 2005)

These networks continue to be essential in maintaining the linkage between the population inside and outside Lebanon. These networks play an important role in supporting new emigrants in the receiving countries. They are also contributors to the prosperity of the tourism sector in Lebanon. Yet, the most valuable output of these networks remains the huge monetary transfers that the emigrants send to their families in Lebanon. These

remittances, not only play a vital role in the lives of the recipients household members, but also play a crucial role in keeping the economy of the country afloat.

1.2 Emigrants Outflow

The emigration of the population from Syria and Lebanon to countries like Australia started in the second half of the nineteenth century. People started leaving their home country to go to Egypt, other Arab countries, to the North and South America, Australia and New Zealand. By the end of the 20th century, emigration had reached an ultra high level. In fact many families had lost at least one member to a land overseas. Just between 1900 and 1914, the Lebanese population shrunk by one fourth due to emigration. (Hage, 2002)

For the last one hundred and sixty years, the continuation of emigration has resulted in the conception of an important Lebanese diaspora throughout the world.

1.2.1 Waves of emigration

Taking the emigration to Australia as an illustrative example, Trevor Batrouney (2001) has divided Lebanese immigration to Australia into three waves. The first immigration took place in the 1880s and the outbreak of World War II. The second was part of Australia's great post World War II immigration program. The third spanned the period of the Lebanese civil war between 1976 and 1990. Batrouney has added a fourth movement of large numbers of return visits by Australian Lebanese to Lebanon in the 1990s for family reunions and tourism.

Before the 1870s, a number of Christian missionaries emigrated from Lebanon to study in Rome. The first wave of emigration from Lebanon started between 1840 and 1860, and was due to a mixture of badly economic situation and deeply corrupted political scene. Furthermore, the geographic location of Lebanon, in the center of a region devastated by national and international conflicts, contributed greatly to the emigration of population searching for better chances overseas. The *Muqata'a* governing system started disintegrating and the economy in Mount Lebanon began merging further into the British and French capitalist market system, also contributing into extending the first emigration wave (Tabar, P. 2009).

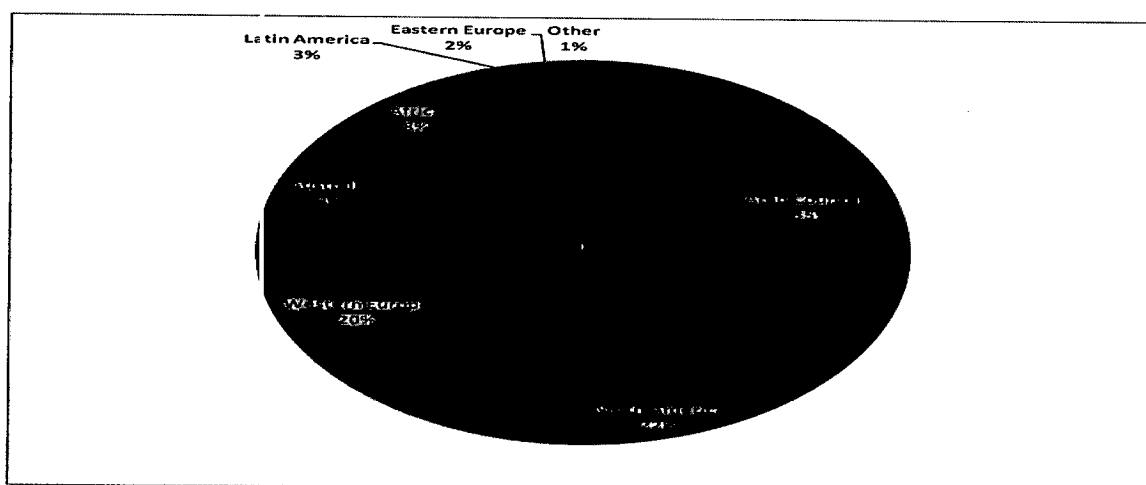
The second wave of emigration was initiated by “the emancipation of the peasants in 1860 and the advance integration of the national economy into the Western capitalist market” (Tabar, 2009). Emigration was fueled by a major population expansion. The emigrants began sending money to educate their children, so the level of education started rising among the Lebanese population. In the end of the nineteenth century, the silk industry collapsed (Hourani, 1992), a middle class emerged, and people needed higher incomes to cope with the difficult financial situation and increase in land prices. Therefore, they were encouraged to move, probing for better opportunities, and escaping the raining poverty in their home country.

The number of people who left Mount Lebanon between 1860 and 1900 averaged 3,000 per year, rising sharply to 15,000 between 1900 and 1914 (Labaki and Abu Rjaili, 2005).

The third wave of emigration started in 1945 and ended in 1975. In the 1930s, the world was hit by a severe depression, which caused a considerable decrease in emigration. But due to the increase in demand for labor in the Gulf States after the oil boom, and the eruption of the Arab-Israeli war in June 1967, emigration picked up substantially. The average number of emigrants leaving Lebanon annually climbed from 3,000 in the 1950s (Labaki, 1992) to 8,000 between 1960 and 1970, and then to 10,000 between 1970 and 1975 (Labaki, 2005).

The fourth wave of emigration occurred in the period ranging from 1975 till 1990. That period was characterized by a violent civil war that ravaged the country. Starting after the war against the Israeli invasion, inter and intra communal wars pushed the dislodgment of people, a destruction of economic activity and a dominating sense of insecurity. Consequently, an estimated 990,000 people (40% of total population) left Lebanon for countries like Australia, Canada, the United States of America, France, Germany and the Gulf States (Tabar, 2009).

Figure 1 : Destination of emigrants 1992-2007.



Source: BYB In Focus May 2011.

Despite the fact that reliable detailed data on emigration and remittances are unavailable to the public, trends were clearly recognized: an increase in the outflow of young and educated Lebanese from both genders, and a substantial inflow of remittances that is well higher than both FDI (Foreign Directed Investment) and Tourism receipts. It is clear that the importance of the volume of emigration outflow and remittances inflow have increased: The country's "push" and the regional and international "pull" factors continue to polarize the Lebanese, especially the young and educated.

Figure 2: Percentage of Total MENA Emigrants to Total MENA Population

	Migrants in North America & Australia to Total Population		Migrants in Main European Countries to Total Population		Migrants in GCC & Other Arab Countries to Total Population		Total Migrants to Total Population	
	1960	2000-02	1960	2000-02	1960	2000	1960	2000-02
MENA	1.34	0.47	4.44	1.57	3.70	1.30	9.48	3.35
<i>Maghreb</i>	<i>0.43</i>	<i>0.16</i>	<i>12.35</i>	<i>4.70</i>	<i>1.71</i>	<i>0.65</i>	<i>14.49</i>	<i>5.52</i>
Algeria	0.31	0.11	12.29	4.32	0.61	0.22	13.22	4.64
Morocco	0.58	0.23	13.19	5.18	2.43	0.96	16.20	6.37
Tunisia	0.30	0.13	10.17	4.46	2.54	1.11	13.02	5.71
<i>Mashrek</i>	<i>1.68</i>	<i>0.59</i>	<i>1.19</i>	<i>0.42</i>	<i>6.44</i>	<i>2.28</i>	<i>9.32</i>	<i>3.29</i>
Egypt, Arab Rep. of	0.67	0.27	0.52	0.21	6.87	2.77	8.07	3.25
Jordan ^a	6.42	1.11	1.45	0.25	53.57	9.26	61.45	10.62
Lebanon	13.51	7.10	5.34	2.80	6.67	3.50	25.52	13.40
Syrian Arab Rep.	1.70	0.46	1.24	0.34	5.74	1.56	8.68	2.36
Iraq	2.09	0.60	2.80	0.80	0.00	0.00	4.89	1.40
Occupied Palestinian Territory	0.76	0.24	0.64	0.21			1.39	0.45
Iran, Islamic Rep. of	1.77	0.57	1.19	0.38	0.67	0.22	3.65	1.18

Source: OECD Database on immigrants and expatriates, Demography and Population, November 2005, and (for GCC and other Arab countries) Baldwin-Edwards 2005. Note: a. Figures for GCC also include Palestinians.

1.3 Drivers of emigration outflow

One of the major drivers of both emigration outflow and remittances inflow is the transnational family network. These transnational family networks are similar in their logic and structure to the national networks, built on family property in the home village or town or metropolitan area. These networks are incubated locally and transferred transnationally at need or under specific conditions like wars, epidemics or catastrophic events.

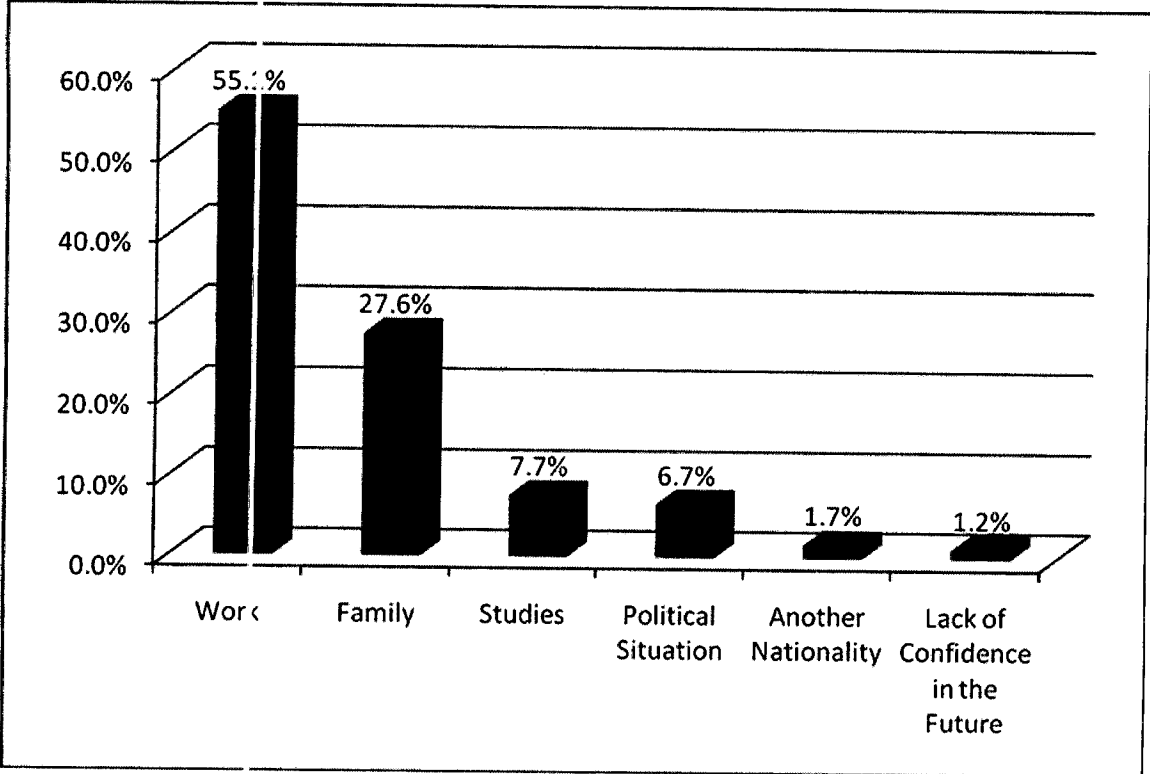
Although emigration was essentially dynamic in the Lebanese society since the 1850's era, the Lebanese community didn't give the needed care to the emigrating population until the end of the civil war in 1990. A survey published by "Presses de l'Université Saint Joseph" magazine in 2003 highlighted that about 490,000 people left Lebanon between the years of 1975 and 1990, whereas around 420,000 left after the end of the war. The largest age span of these emigrants was between 25 and 44 years; they were either university or high school graduates. Indeed, 15% of emigrants were below 25 years old when emigrating, 69% were between 25 and 44 years old, and 13.5% were between 45 and 59 years old. Moreover, 77% of the emigrants who left Lebanon were between 18 and 35 years old.

1.4 Reasons for emigration

The two most important factors promoting emigration continue to be the lack of job opportunities and the lack of security. For a country as small as Lebanon, being one of the 30-top skilled emigration countries in the world is not an indicative of the country's good economic situation. In a recent publication (2006) *International Migration Remittances and*

the Brain Drain, the World Bank stated: “In relative terms (in proportion of the educated labor force), small countries are the most affected [by emigration].” In Lebanon, emigration rate of tertiary-educated population reached 38.6% in 2000 (one third of the educated labor force is leaving the country) and the stock of emigrants, as a percentage of population, has reached 15.6% in 2010.

Figure 3: Main Reasons for Emigration from Lebanon.



Source: University Saint Joseph (1992-2007).

1.5 Emigrants Contributions

During the First and Second World Wars, and throughout the last civil war of the twentieth century, Lebanese emigrants did not forget their fellow citizens. Their money and kind contributions were the help people needed during that difficult period.

These contributions took the form of inflow of investments in areas like village's real estate development and improvement along with charity contributions. Emigrants also returned to the home country for visits and seek their home villages in order to conduct religious services and ceremonies. They help uphold the outflow of emigrants by facilitating their arrival, adjustment, settlement, employment; they smooth the legal processes in the host countries, they provide finances for the immigration process, and they offer information about the host country. They used the telephone, Internet and electronic mail as line of communication, in addition to subscribing to satellite and TV channels and various media vehicles.

Emigrants give resilience to the tourism sector of local economy, through their family visits, local stay and touristic vacations. Beside remittances, support from immigrants took the form of commodities such as clothes, consumer durables, medicines, and other necessary goods. The example of the Lebanese community in West Africa can be put forward: when a person living abroad decides to visit his relatives in Lebanon, he or she should tell them about the trip beforehand, and the voyager is expected to bring letters as well as gifts (such trousers, dresses and tropical fruits) of all shapes and sizes. When returning to Africa, the same traveler will carry other goods in the opposite direction.

1.6 Overview of the Lebanese Economy and resilience to financial crisis

In 2009, in the midst of a brutal financial crisis that hit the world, Lebanon was relatively isolated. It had a remarkable GDP of 34.5 billion USD, growing at a rate of 8.5%. Lebanon registered the second highest GDP growth in Arab countries behind Qatar. This growth rate was slightly higher than the average of emerging market countries and considerably higher than mature economies (3%).(Lebanese Ministry of finance, Central Bank of Lebanon, 2010)

Some consider that the resilience of the Lebanese economy in the face of the credit crisis was due to several facts:

1. The flushed banking sector with cash sent from abroad as remittances and foreign direct investments (banking assets is 334.1% of GDP).
2. The accumulation in foreign reserves, reinforcing investors' confidence.
3. The high regulation done by the central bank.
4. The fixed exchange rate regime (1 USD = 1,507.5 LBP). The BDL takes measures to stabilize the USD/LBP rate and limits the banks' ability to speculate in highly risk assets, demanding low level of loans/deposits ratios.

External financial shocks, and even internal financial, political, and security shocks did not withhold the inflow of remittances from workers overseas. In fact, deposits and reserves have been on the rise since 2008 and money supply increased by USD 13.4 billion (39% of GDP) in 2009.

GDP per capita is around 8,175 USD/year, a figure indicating that the Lebanese population still suffers from poverty; unemployment rate is at a staggering level of 9.2%, showing that the attractiveness of the country's sound financial environment (FDI of 4.8 billion USD in 2009) is not being used to create jobs and improve living standards. Domestic credit to private sector is only 74% of GDP.

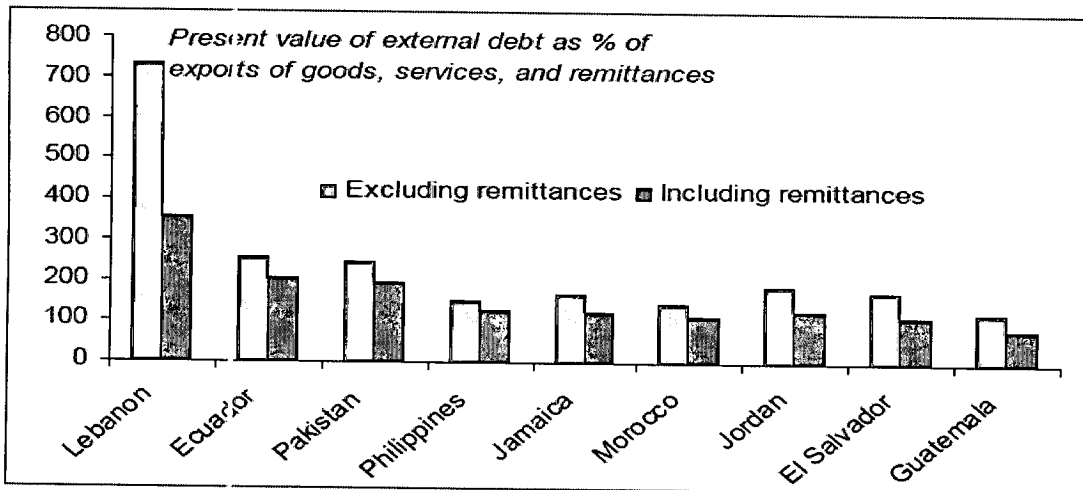
The Lebanese government is continuously under deficit; the government budget deficit has reached 8.57% of GDP in 2009. The reason behind this budget deficit is the ultra high public debt service. Net public debt is very high at 128% of GDP in year 2009, although it has been reduced from 139% in 2008 and from 156% in 2007. (Ministry of Finance in Lebanon, 2010)

Lebanon is an economy that is built on consumption, rather than on production. Lebanese trade balance shows a deficit in year 2009 of around 12.8 billion USD (Lebanese ministry of Finance, Central Bank of Lebanon ,2010) demonstrating that imports tremendously surpass exports.

Competition and private ownership is the base of Lebanon's liberal economy. Services and banking sectors predominate, together representing 70% of the country's gross national product. Agriculture constitutes 10% while the industrial sector constitutes the remaining 20%. Remittances play an essential role in the decomposition of the gross national product, being the biggest source of currency inflow to the country, along with foreign inflow of services, capital and income, realizing 60% of GDP in 2009. In addition, remittances have big effect on the country's credit worthiness, as shown by the graph below.

In the following discussion of the different aspects of the Lebanese economy, the study will try to establish their link with the remittances flowing into the local economy.

Figure 4: Effect of Remittances on Country Credit Worthiness.



Source: Global Economic Prospects, 2006

Need for the Study

Beginning year 2000, oil prices started climbing and GCC countries started proliferating. Consequently, remittances to Lebanon have seen their highest expansion in decades.

Deposits, which are the primary drivers of banks' assets growth and local currency stability, were fueled by the strong and generous Diaspora inflows. In addition, real estate sector was the primary beneficiary from the boom in remittances from year 2000 until now. Prices increased and artificial demand was created by the deployment of remittances in the property segment of the economy.

This thesis study wants to assess the impact of the remittances on the Lebanese economy in order to guide policy makers to better manage this inflow of money in a way to boost the development of broader economic sectors. Wise policies are able to channel remittances toward productive investments.

Purpose of the Study

The objective of this paper is to assess the relation between the robust Lebanese Diaspora and the GDP growth of the country. The aim of this study is to answer the following questions: what is the material contribution of the vigorous Diaspora remittances on the GDP growth of the country? Is the strength of Lebanese immigrating population fulfilling a supportive role in the local economy? Is the money flow into Lebanon being invested or only deposited in the local banks?

International Perspective

The study has an international dimension; since Lebanese expatriates are transferring money from abroad into the Lebanese economy, thereby possibly leading to the economic growth of the country. Lebanese emigrants worldwide are transferring remittances to their home country which incorporates analysis and concerns from different parts of the world.

Chapter2: Literature Review

IMF's Balance of Payments Statistics Yearbook (2009) cited that remittances flow has rapidly increased in the years between 2001 and 2007.

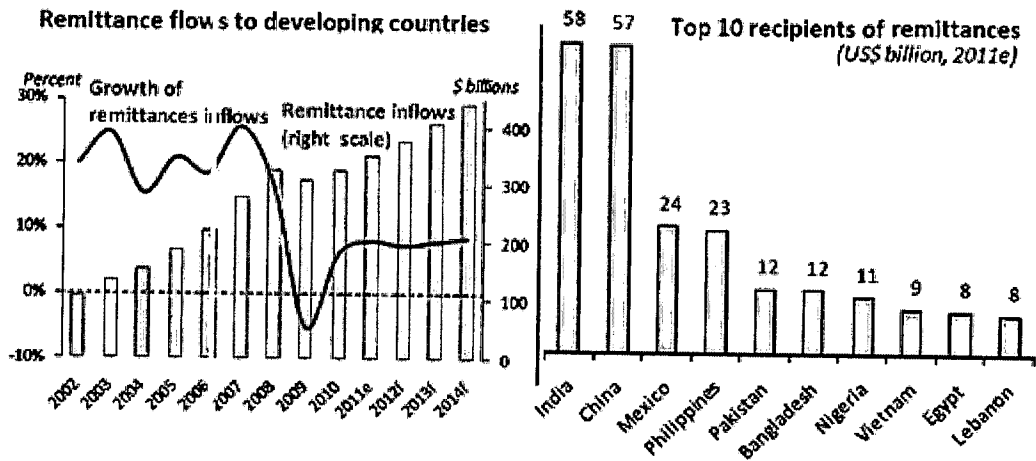
This spike in workers' remittances was attributed to several factors:

1. Rising migration
2. Rising labor mobility
3. More liberal and competitive financial intermediaries
4. Improved data recording

For some countries, receipts from remittances surpass receipts from the export of goods and services and from financial inflows on foreign direct investment.

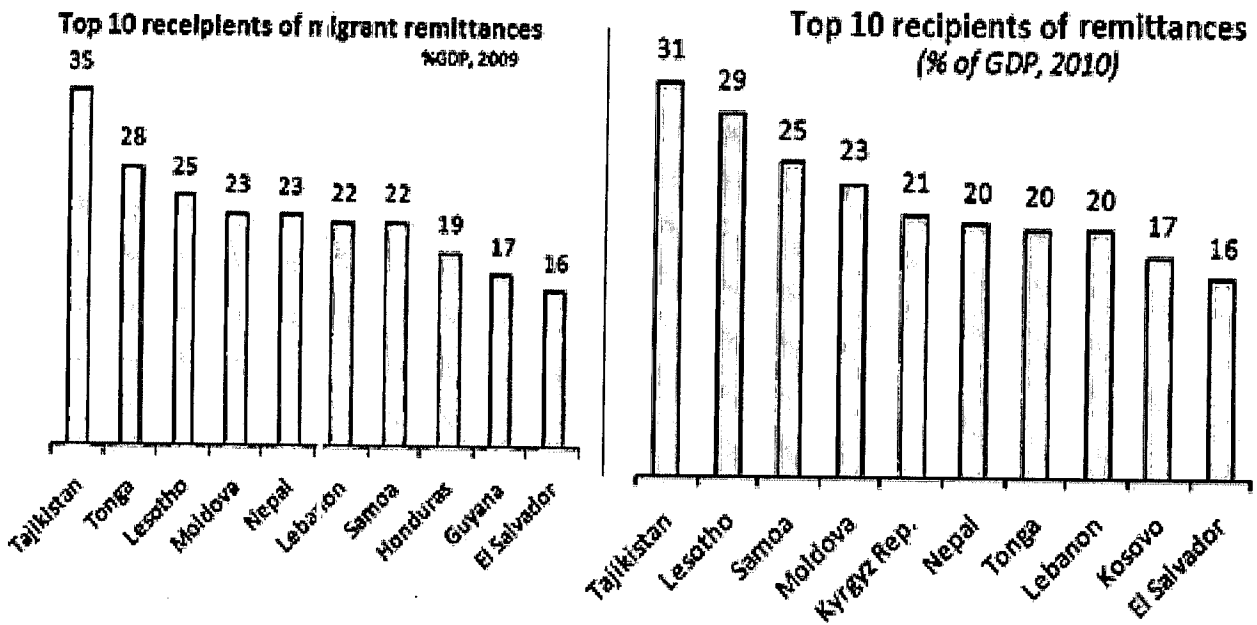
Poor countries receive relatively larger remittances, and remittances in Lebanon have reached around 20% of overall GDP in year 2010. (World Bank, top 10 recipients of migrant remittances as % of GDP, 2011)

Figure 5: Top Recipients of Remittances, 2011



Source: World Bank

Figure 6: Remittances as a percent of GDP, 2009,2010.



Source: World Bank.

2.1 Immigrant remittances and economic Growth

Previous written literatures do not agree concerning the effect of remittances on the GDP and economic development. In this context, the basic questions to be asked are: How are remittances spent? Do migrant workers channel their remittance earnings into human and capital investments back home, or do they use these funds to buy new “status-oriented” consumer goods for themselves and their families?

The huge majority of remittances in Lebanon are channeled toward buying real estate or opening saving accounts. Migrants are motivated by the relatively high interest rates in Lebanon (H.Hamadi, M. Hamadeh and R. Khoueiri, 2012).

A research written by Chami, Fullenkamp and Jahjah (2003) was very pessimistic on how remittances are used, and their impact on economic development. These authors pointed that the majority of worker remittances are spent on consumption, a small portion goes into saving or investment, and the ways in which remittances are saved or invested, in housing and land, are not productive to the overall economy. Chami argues that higher remittances may worsen moral hazard problems on the recipient' side and discourage work effort.

On one hand, a study published by Chami et al in 2008 found also that there is no significant relationship between remittances and economic growth. On the other hand, Stark and Lucas (1998), Faini (2002) and Taylor (1992) had found positive significant conflicting evidence on the link between growth and remittances.

Another paper that investigates the effect of worker remittances on the poverty in the developing world using data from nationally-representative household surveys in 71 developing countries, found evidence that these remittances reduce the level of poverty in these countries (Adams and Page, 2005). "A 10% increase in per capita worker remittances will lead to 3.5% decrease in the share of people living in poverty, and 3.9% decline in the depth of poverty in a labor-exporting country". The reason behind this analogy is that workers transfer funds mainly to poor households.

Favorable exchange rate shocks are accompanied with higher investment by remittance-receiving households in entrepreneurial activities, specifically transportation, communication and manufacturing enterprises. Households receiving more remittances as a result of positive exchange rate shocks are able to invest more in capital-intensive enterprises because they no longer face the credit constraints that had previously delayed such investments (Yang, 2004).

Remittances affect the probability that migrants will become entrepreneurs, employers, self-employed or business owners, when returning from abroad. The level of literacy, time spent working abroad and total amount of money saved are the three factors having a significant effect on the possibility of a return migrant to become an entrepreneur (McCormick and Wahba 2001). 70% of literate Egyptians returning home in this survey have pointed that the amount of time spent working abroad is the primary factor determining the probability of becoming an entrepreneur. Whereas 30% of illiterates returning have indicated that the amount of money saved is the most important factor.

A fourth study examining the impact of international remittances on school retention rates in El Salvador, has found first that remittances represent a vital source of household income in this country: 15% of all households stand to benefit from international remittances (Edwards and Ureta, 2003). This study has found also that income from remittances has bigger impact on school retention rates than any other source of income: remittances have 10 times the effect of other income on the hazard of dropping out of school. While another study analyzing the effects of remittances from the United States on child labor and school attendance in recipient Mexican households has found negative shock on remittance receipts caused a significant increase in child labor and a significant reduction of school attendance. (Alcaraz, Chiqiar, Salcedo, 2012)

A fifth paper analyzing the spending behavior of remittances in Ghana pointed that households receiving international remittances spend less at the margin on food than do those not receiving remittances. Households in Ghana receiving international remittances spend more on investment goods, education and health in particular, because they view these remittances as temporary and uncertain stream of income (Adams, 2006).

Another study by Abdih ,Yasser and Dagher (2012) find “that a higher ratio of remittances to GDP leads to lower indices of control of corruption, government effectiveness”. An increase in remittance inflows can lead to deterioration of institutional quality.

Mark Arvin and Byron Lew (2011) find that both remittances and aid are sources for entering happiness in recipient countries; therefore they recommended encouraging the remittances to the household.

2.2 Expatriates Support

“Remittances are defined as monetary flows that include a portion of the migrant income earned in the host country that is sent back to the country of origin in either the tangible form of money or through goods” (Hertlein and Vadean, 2006).

Early papers analyzing the primary motivations behind remittances found them of altruistic nature (Johnson, G. and Whitelaw, E., 1974). As underlined by much of the remittance literature, the clearest motive for remitting is pure altruism. It is the care of a migrant for those left behind. The altruistic utility function includes the consumptions of the other members of the household. In addition, immigrants may have investments that need to be taken care of when they are away, so family members are hired as agents. “The remittances sent are used to fund the migrant’s interest back home, and also contain some compensation for the agents” (Lucas B. *et al.*, 1985).

Expatriates abroad give the support for the housing of their families, relatives, and in some cases also friends. Lebanese can let their immediate family members and relatives use their houses/apartments. And they invest sometimes in real estate to help family members obtain a roof over their heads.

Other forms of mutual support between families resident in Lebanon and those living in foreign countries exist, like taking care of a child who is going to school or university, of a member who needs medical treatment, or of an elderly relative who needs help. Measuring and expressing these family networks in financial terms is difficult, but they are part of active transnational networks between residents and migrants.

Other than financial transfers, migrants also transmit social remittances, including the transfer of ideas, practices, and behavior such as the respect of the environment, of human and female rights awareness, of gender and social equality, and of democracy.

However, remittances flows remain the most influential network binding families in the source countries with those in the home country. A survey that was carried out to study Arab Canadian attitudes toward Canada and their countries of origin in 1974 showed that 50% of native emigrants send money regularly to their relatives in the native country. And 22% of Canadian-born respondents still sent money to relatives at one time or another. The author of this study, Aby-Laban, goes on to assess that “the fact that one-half of the foreign-born and over one-fifth of the Canadian-born had sent money to kin abroad illustrates not only the reciprocity one might anticipate with the first generation immigrant, but in addition feelings of responsibility beyond the first generation.”

2.3 Financial Support

Financial support provided by the Lebanese Diaspora to family members is not restricted to those who live in Lebanon, but it extends to reach other family members around the world. Ghassan Hage(2004), in his extensive research on transnational Lebanese migrant family, found that the form of remittances that were formally transmitted through banks and money transfer agencies and informally through friends, or family members, or personally are not limited to immediate relatives.

There are two ways through which remittances of cash and kind are sent to Lebanon. The formal way that is measured statistically through the banking and financial system and the

informal way that relies on immigrants bringing along money on their visits, or sending it with friends or family members, which is difficult to estimate.

Another role played by the family members is that of financial intermediary. Stark (1991), Agarwal *et al.* (2002) and Gubert (2002) pointed that the family can function as an insurance company, providing members with protection against income shocks by diversifying the sources of income. Alternatively, Poirine (1997) argues that the family acts as a bank that finances migration for some of its members. The borrowers (immigrants) remit funds to repay the loans, and the family uses the proceeds of these remittances to take up more loans that serve their own interest.

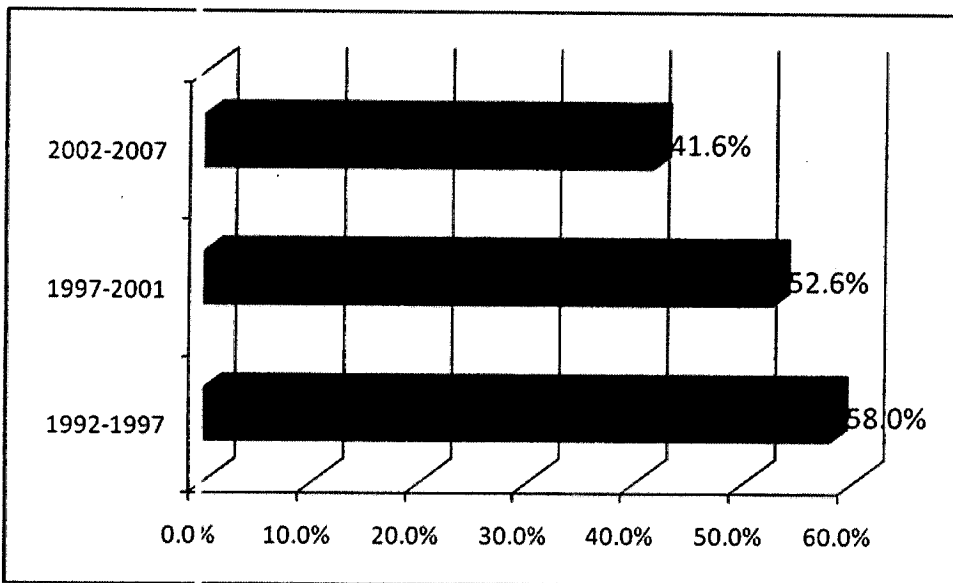
The population abroad has the ability to remit enormous amounts of money because of the fact that the monetary system in Lebanon allows free flow of capital and hard currency and cheers and facilitates the inflow of migrants' remittances through formal and informal channels. In addition, Lebanon has stable exchange rate and the banking system in Lebanon is very developed with one branch per 5,000 inhabitants, with international standards, a tradition of banking secrecy, and competitive interest rates. Moreover, Lebanon has more than 550 money transfer outlets, of which around 437 are Western Union branches, and 120 Money Gram dealers.

On the macroeconomic level, remittances are becoming a fundamental building block of the Lebanese economy: they represent a sizeable proportion of Lebanon's foreign revenue. Lebanese expatriates remittances have been keeping the country afloat with an increasing inflow every year. In 2003, Lebanon received 4.74 billion USD in workers' remittances

inflow, ranking it ninth in absolute terms among the principal recipient developing countries. This level has reached \$7.56 billion in 2009.

A survey published by Byblos Bank research and analysis department in the *IN FOCUS* issue number one, May 2011 indicated that 49% of emigrants give financial support to their families in Lebanon frequently or occasionally. In the emigration brackets, the recent emigrants tend to be less supportive than the earlier ones.

Figure 7: Percentage of emigrants who send financial support regularly to their families.



Source: Byblos Bank, In Focus.

The reason behind the decline in support of the more recent emigrants is the fact that those leaving Lebanon need to start generating enough income to be able to send it back to their home country. In addition, financial conditions in foreign countries are not very robust,

which make emigrants job a lot harder. The high cost of living in places like the Emirates and Dubai, leaves those emigrants unable to send a lot of money to their families. However, the proportion of emigrants who help their families is still elevated, irrespective of the stage of emigration. The element enduring this financial support is the fact that two third of emigrants who left the country are aged between 18 and 35, and still visit Lebanon, including 41.4% who visit irregularly, and 34.3% who visit regularly.

2.4 Remittances' influence on Lebanese Banking Sector

With the absence of banks' secrecy in Europe, and in the presence of unstable circumstances in the Arab and Gulf countries, money influx into Lebanese banks have been on the rise. The performance of the Lebanese banks is dependent on the remittances inflow and is connected to the economic situation which is sensitive to the political and security developments in Lebanon and the region. These deposits that go into local banks have their sources, mainly Foreign Direct Investments (FDI), and remittances seeking refuge in the safety of the local banking system.

Despite the political and security developments of recent years, especially after the assassination of the Prime Minister Rafik El Hariri, and the destruction of governing regimes in surrounding countries, Lebanese banks remain the best safe havens. The Lebanese Diaspora played a crucial role in maintaining the solidity of local banks. It contributed tremendously to the banks' profitability, liquidity, and capitalization.

The Lebanese banking sector continued to grow, while the global financial and banking system was improving as well. The Lebanese banking sector was encouraged by good

economic developments as indicated by a real growth of the Lebanese economy at 7.5% in 2010 (International Monetary Fund (IMF), 2011) with a surplus of 3.3 billion USD in the balance of payments was also recorded in the same year. Deposits represent more than 80 % of the banking sector assets that had a growth of 12 % in 2010. (BDL, FFA private bank, 2011)

From 2006 till 2010, deposits of residents and non-residents in commercial banks have grown from 61 to 107 billion USD. Loans to residents and non-residents have doubled from 17 till 35 billion USD for the same period. However, these loans still constitute a dismal percentage of overall deposits, indicating that remittances are not employed as an investment tool to help fuel some other sectors of the local economy besides the services sector. In fact, between 1997 and 2009, services sectors have grown from 27.7 to 34.5% of nominal GDP, whereas agriculture and industry have shrunk.

2.4.1 Flow of Remittances to Lebanon

The high level of emigration has a devastating effect on the tax revenue in Lebanon, especially since the government budget suffers from long lived deficit that keeps on mounting. Yet, this effect is not felt on the local level because the remittances sent back home from the Diaspora offset some of these losses. Further, on the macro level, remittances increase the country's stock of foreign currency which give confidence to the investors, and remittances will generate positive multiplier effect when are consumed; despite they are mostly used for consumption. On the household stage, emigration is

sensed predominantly in terms of family relations, even though the money sent by emigrants to their families alleviates part of the economic burden.

“For some countries, remittances are the most stable source of financial inflow” (Kapur, 2004), especially for countries undergoing nonstop political and economic shocks. In places of wars and instability, such as Lebanon, remittances become a survival line, used as an insurance mechanism against poverty and famine (Kapur, 2004).

Remittances are the most stable financial flows to Lebanon; they continued to play an important role in the life of the country and its people. On the micro level, remittances are a protection net for families affected by unemployment, underemployment, the high fees of children’s education and medical cost of member treatment and elderly relative.

Remittances are an essential source of foreign exchange earnings in Lebanon (Ghobril, 2004). Between 1998 and 2001, FDI in Lebanon reached 250 million USD, one sixth of the total of remittances that reached 1.6 billion USD. Remittances were higher than exports and tourism, which averaged 740 and 840 million USD respectively (Project Middle East, 2010).

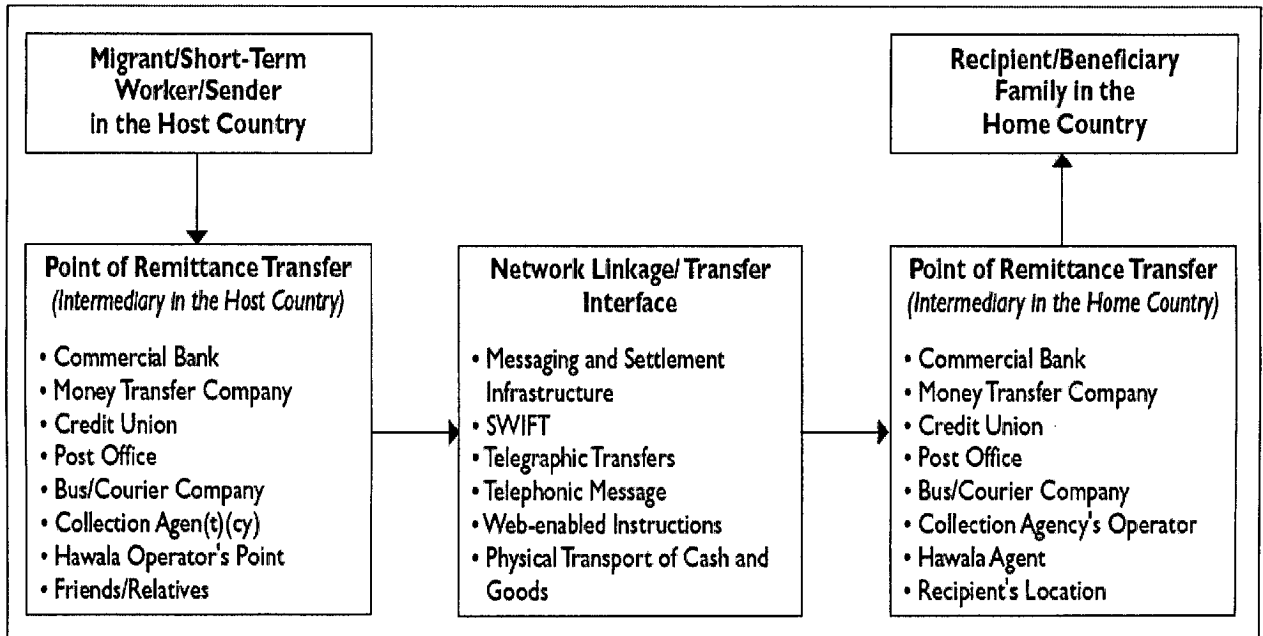
According to the center for global development (2003) , foreign remittances present an insurance for residents of affected countries by political , economic and natural crisis. Remittances provided lots of help to the Lebanese during the civil war and to the Haitian during the natural disasters.

However, the continuous mass departure of the young and educated indicates that the immense flow of these remittances is not being invested in job creation. But they are rather

spent on household consumption, education, health, and care of the elderly. Therefore, instead of witnessing a broad based economic growth, deployment of remittances have some sectors like services, tourism, education and retail being favored in the detriment of other industrial and agricultural sectors.

Remittances may have raised the standard of living of households or stimulated trade and commercial transaction, but whether or not remittances contributed to structurally enhancing the living conditions of their recipients in Lebanon and whether the vigorous Diaspora remittances are contributing to the GDP growth of the country are still questionable hypotheses.

Figure 8: Remittances Channels



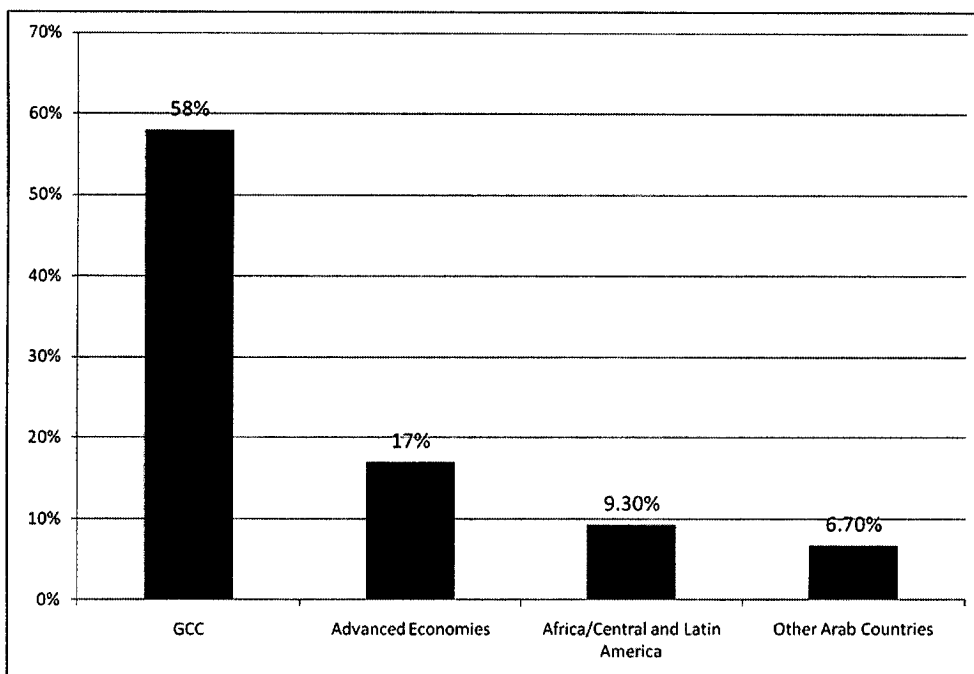
2.4.2 Sources of Remittances

Sources of remittances flowing into Lebanon are closely related to the destination of emigration. Between 1992 and 2007, Arab countries remained in the first place, as the most pursuit destination for emigrants searching for better living standards especially after the oil boom of the 1990's. 20% of the overall Lebanese emigrants went to the GCC countries from 1992 till 1996, this percentage became 31% from 1997 till 2001, and the uptrend continues to reach 45.5% during the 2002-2007 periods. In the second place comes North America, i.e. the U.S. and Canada.

For a more reliable data concerning the sources of remittances inflow to Lebanon, the Lebanese Central Bank publishes the source of inward electronic cash transfers to the country. These compiled transfers grew from 8% of emigrants inflows to Lebanon in 2005, to 14.5% of remittances in 2009.

The data show a consolidation of the sources of transfer inflow to Lebanon, since the top 10 sources of cash transfers amount to about 85% of the total, whereas the top 20 represent 90.6%. Arabic countries overall account for 64.5% of inward cash movement, from which 58% are attributed to the six countries of the Gulf Cooperation Council (GCC).

Figure 9: Main Sources of Electronic Cash Transfers to Lebanon.



Sources: Central Bank of Lebanon and BYB Economic Research and Analysis Department.

Table 1: The top 10 sources of inward electronic cash transfers.

UAE: 24%	United States: 6%
Saudi Arabia: 13.5%	Iraq: 4.5%
Qatar: 9.3%	Gabon: 3.7%
Kuwait: 8.8%	Canada: 2.3%
Australia: 6.2%	Jordan: 2.2%

Source: BDL

2.5 Elements affecting Remittances Flow

2.5.1 Exchange-rate

One of the most influential elements that affect the flow of remittances to developing countries like Lebanon is exchange-rate. The depreciation of foreign country currency consequently deteriorates the inflow of remittances to the home country.

Yet, since 1993, Lebanon has not faced this effect for three reasons. First, starting 1993, the Lebanese pound has been pegged to the U.S. dollar, and this exchange rate continues to be stable in the face of numerous shocks (political, security and financial shocks). Second, the main countries sources of remittances (GCC) are also pegging their currency to the U.S. dollar in order to defend against any financial/economic pressure. Five of the six GCC countries peg their currency to the dollar, whereas the Kuwaiti dinar is pegged to a basket of currencies. And third, other countries important as sources of remittances like the United States, Canada and Australia, did not face currency concerns.

2.5.2 Return Emigration

Any crisis that erupts in regional countries increases speculation of mass return of expatriates to Lebanon. As an example, the recent financial crisis that started in developed countries has spread throughout emerging and developing world in 2008. Given its magnitude, it has tremendous impact on GCC countries.

Speculation started with expectation that 10% of the Lebanese based in the GCC are going to return to Lebanon, and that the economic and financial downturn in the U.S. will push migrants to seek their home country.

But those expectations did not materialize:

1. The crisis in the GCC had its impact limited to the Emirate of Dubai in the UAE.
2. The financial and real economic sectors in Dubai were the most heavily hit, because other GCC countries used their massive budget surpluses to respond rapidly to the crisis by creating fiscal stimulus that contained the slowdown and propped up economic activity, maintaining consumer and business demand.
3. The Lebanese expatriates in GCC are mostly white-collar, skilled workers. They have the flexibility to shift sectors and move to different cities and adjust their finances to the new realities accepting lower packages to keep their job or move to other work opportunities.
4. Lebanese emigrants in the U.S. find it more suitable to shift sectors or states and even careers rather than returning to Lebanon.
5. The main reason behind the emigrants first leaving their home country did not disappear. Business opportunities remained distressed which did not encourage those abroad to return and seek employment in Lebanon.
6. Political instability in Lebanon remains at record highs. Its potential frequent recurrence discourages migrants from returning home.

If those expectations of massive return of expatriates to Lebanon did materialize, the benefits would have been the value-added experience and skills, the brain return, and the increase in domestic demand for goods and services.

2.5.3 Political and Other Risks

A simple relation study published by Byblos Bank in 2011 showed a moderate relation between the level of political risks in Lebanon and the inflow of remittances. A stronger relation was found between the financial risk and remittances inflow in the same country. During the period of the study, between 2005 and 2009, 2 important risk waves passed: the assassination of Prime Minister Rafiq El Hariri in February 2005, which was followed by political, security and military instability, and the start of the global financial crisis in August 2008.

Chapter 3: Methodology

3.1 Introduction

Remittances effect on the local economy is a topic widely debated across literature. Remittances are an important source of income for third world countries. In poor countries suffering from large budget deficits like Lebanon, in countries where the population is in an urgent need for financial help, remittances are the life line to close the gap of educational and healthcare expenses. People use the money transfers of their affiliate in order to improve their living standards.

In order to formulate the following hypothesis: “expatriate deposits in Lebanese banks lead to economic growth”; the study asked the following questions:

1. Where are remittances deployed?
2. Are remittances contributing to broad economic development?
3. Are these flows of funds being properly channeled towards economic expansion?

This study uses two sets of data to answer the above questions.

- First part: Secondary data collected from different sources in order to be analyzed and interpreted, using regressions, to draw meaningful conclusions.
- Second part: descriptive primary data collected thru a small conducted survey in order to inflict on the first conclusions.

3.2 Secondary Data Collection

Secondary data were collected from various sources in order to study the relation present between remittances and economic growth of Lebanon. The table below shows the remittances flow into the country as collected by Labaki and Abu Rjaili, 2005 and published by the World Bank in the Migration and Remittances Factbook. Sample size is 31; observations are done on yearly bases and unit is in Millions of USD.

Table 2: Remittances Flow into Lebanon.

<i>Year</i>	<i>Remittances</i>
1979	1,772.00
1980	2,252.00
1981	1,920.00
1982	1,200.00
1983	900.00
1984	700.00
1985	400.00
1986	850.00
1987	2,130.00
1988	600.00
1990	1,818.00
1991	1,900.00
1992	2,000.00
1993	2,000.00
1994	2,115.00
1995	1,200.00
1996	1,200.00
1997	1,200.00
1998	1,200.00
1999	1,400.00
2000	1,582.00
2001	2,307.00
2002	2,544.00

2003	4,743.00
2004	5,591.00
2005	4,924.00
2006	5,202.00
2007	5,769.00
2008	7,181.00
2009	7,558.00
2010	8,177.00

Sources: Labaki and Abu Rjaili, 2005 and Migration and Remittances Factbook, World Bank.

The most pertinent indicator of economic growth of a country is its Gross Domestic Product (GDP). GDP figures were estimated and published by the IMF and Euromonitor. GDP is calculated as real GDP based on the value of US Dollar of year 2000. Sample size is 31; observations are done on yearly bases and unit is in Millions of USD.

Table 3: Real GDP, Constant 2000 US\$.

Year	GDP
1979	3,389.06
1980	3,608.25
1981	3,522.01
1982	3,187.60
1983	2,790.03
1984	1,399.32
1985	1,468.04
1986	1,174.65
1987	1,085.27
1988	2,607.69
1990	1,760.61
1991	4,383.48
1992	5,128.69
1993	7,693.56
1994	9,124.77
1995	11,171.22
1996	13,173.83
1997	15,925.70
1998	17,006.97
1999	17,012.94

2000	16,678.61
2001	17,065.34
2002	18,712.44
2003	19,801.66
2004	21,465.34
2005	21,860.70
2006	22,438.47
2007	25,057.38
2008	29,933.00
2009	34,528.03
2010	39,247.72

Source: IMF and Euromonitor.

An Alternative way to assess economic development is to measure income growth, so this study retrieved and analyzed Gross National Income figures from IMF and Euromonitor Publications. Sample size is 21; observations are done on yearly bases and unit in Millions of USD.

Table 4: GNI, Constant 2000 US\$.

<i>Year</i>	<i>Gross National Income</i>
1990	2,167.16
1991	5,095.31
1992	5,432.48
1993	7,936.34
1994	10,150.03
1995	12,440.21
1996	14,286.05
1997	16,399.34
1998	17,434.83
1999	17,901.82
2000	17,750.58
2001	17,767.83
2002	18,896.19
2003	19,631.84
2004	21,437.48
2005	22,382.75
2006	22,815.26

2007	25,479.27
2008	30,202.32
2009	35,779.10
2010	41,053.48

Source: IMF and Euromonitor.

To assess the relation between deposits and remittances, this study retrieved and analyzed the aggregate Resident private deposits and Private Sector Deposits in Foreign Currencies. These metrics are measured by Lebanese officials and published by the Lebanese Central bank on its official website: www.bdl.gov.lb. Sample size is 31; observations are done on yearly bases and unit is in Millions of USD.

Table 5: Resident Private Sector Deposits and Private Sector Deposits in Foreign Currencies in Lebanon.

Year	<i>Resident Private Sector Deposits</i>	<i>Private Sector Deposits in Foreign Currencies</i>
1979	5,572.64	2,464.93
1980	6,398.45	2,464.93
1981	7,494.34	3,206.94
1982	10,867.30	3,011.29
1983	9,388.49	2,622.95
1984	5,851.62	2,396.06
1985	4,486.60	2,109.61
1986	3,535.73	2,521.28
1987	3,330.14	2,892.73
1988	3,989.16	3,101.13
1990	3,170.13	3,069.63
1991	5,746.34	3,853.71
1992	6,061.41	4,066.86
1993	8,446.17	5,740.13
1994	11,373.34	6,705.47
1995	13,701.41	8,273.62
1996	17,747.79	9,464.60
1997	22,094.14	13,286.75
1998	25,754.82	15,638.85
1999	28,725.51	16,258.40
2000	31,563.62	19,664.24
2001	33,986.14	23,509.77

2002	36,783.15	24,118.60
2003	40,989.33	25,301.60
2004	45,285.74	29,798.54
2005	47,517.23	32,895.39
2006	51,320.98	37,336.59
2007	57,698.69	42,917.75
2008	66,273.86	43,514.92
2009	79,192.77	47,525.45
2010	88,718.67	52,210.14

Source: BDL.

Gross national expenditure is a gauge of consumer consumption and expenditure. Taking this measure into consideration is essential, because consumption accounts for the largest portion of Lebanese GDP. Gross national expenditure is taken as nominal figures and published by World Bank. Prices are fixed at constant year 2000 US\$ value. Sample size is 17; observations are done on yearly bases and unit is also in Millions of USD.

Table 6: Gross National Expenditure.

<i>Year</i>	<i>Gross national expenditure</i>
1994	20,715.88
1995	21,832.61
1996	22,411.10
1997	21,227.55
1998	21,799.53
1999	21,166.12
2000	21,016.25
2001	22,590.16
2002	22,695.64
2003	23,516.96
2004	25,066.05
2005	24,548.22
2006	24,447.06
2007	26,778.47
2008	29,753.20
2009	34,034.42
2010	34,839.08

Source: World Bank.

3.3 Variables and Hypothesis

Using regressions, this study tried to measure the effect of remittances on the Lebanese economy. Expatriate remittance is the independent variable: the hypothesis is that remittances to Lebanon have positive relation with GDP growth and how remittances are employed dictates their effect on the local Lebanese economy.

A number of regressions were established between expatriates' remittances and the below dependent variables:

Table 7: Variables and Hypotheses.

	<i>Dependent Variables</i>	<i>Definition</i>	<i>Expected relation</i>
Migrants Remittances	Gross Domestic Product (GDP)	An estimation done by IMF, World Bank and Euromonitor, reflecting the aggregation of country's economic output and income.	Positive
	Gross National Income (GNI)		Positive
	Total resident private sector deposits	Variables published by the BDL reflecting the flow of money into commercial banks deposit accounts.	Positive
	Private sector deposits in foreign currency		Positive
	Consumption	Gross National Expenditure, published by the World Bank	Positive

Migrants' remittances are the inward electronic cash transfers to the country, not including money transfers directly or with relatives outside the electronic system channels. This

mode of calculation definitively does not compass the totality of remittances sent to Lebanon, but it is the most precise way to compute remittances, given that electronic cash transfers are documented.

GDP is the financial value of all finished goods and services inside the country's borders, during a well defined period of time, usually on an annual basis. GDP calculation includes the aggregate of private and public consumption, government expenditure, and net exports within the defined territory. GDP is used as an indicator of the country's economic health country, as well as to gauge the country's standard of living.

GNI is the sum of all income earned while producing goods and services within a country's borders. GNI is a different, less used indicator to measure economic activity that relies on income measurement rather than economic activity and expenditure.

A total resident private sector deposit is an indicator of the saving level of private sector in commercial banks accounts. Private sector deposits in foreign currency are the amount of private deposits in commercial banks, denominated in foreign currency, mainly in USD.

Gross National Expenditure measures the behavior of households, how they deploy their income, as well as government and investment expenditures. It is an aggregate of all consumption expenditure by the population. Gross national expenditure is the sum of household final consumption expenditure, general government final consumption expenditure.

Chapter 4: Results and Discussions

4.1 Descriptive Analysis

This thesis study is doing the job of collecting and interpreting data, with the aim of guiding Lebanese policy makers in the process of decision making. The analysis of the collected data is essential when it comes to drawing appropriate conclusions concerning the effect of remittances and how to use them in order to fuel growth.

There is a clear shortage in Lebanon for enough data analysis that can lead to appropriate planning and better implementing of rules to aid the economy and population in their quest for survival and prosperity.

Table 8: descriptive analysis

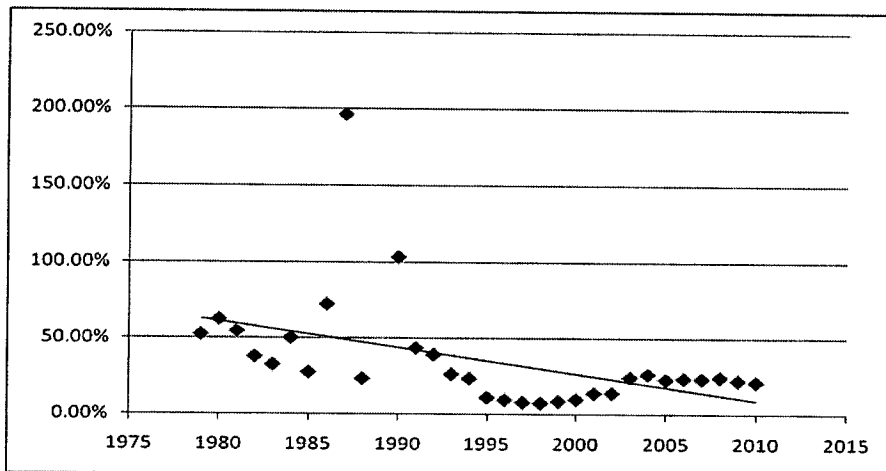
<i>Variable in Millions of USD</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Standard Deviation</i>
<i>Remittances</i>	400	8,177	2,720.48	2,135.82
<i>GDP</i>	1,085.27	39,247.72	12,690.40	10,658.08
<i>GNI</i>	2,167.16	41,053.48	18,211.41	9,733.70
<i>Total resident private sector deposits</i>	3,170.13	88,718.67	25,260.18	24,082.19
<i>Private sector deposits in foreign currency</i>	2,109.61	52,210.14	15,869.12	15,783.77

Consumption	20,715.88	34,839.08	24,614.02	4370.46
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What can be seen from the above table is that remittances have reached, at their highest levels, 196.26% of GDP in 1987 and 64% of total deposits also in 1987. 1987 was a year preceding the outburst of the gulf war, and in the midst of the brutal Lebanese civil war. So it was marked by very depressed Lebanese GDP, famine and high remittances sent for aid the local residents.

As illustrated in the chart below, remittances as a percentage of GDP are in a long-term downward trend because GDP is growing, and the boom in Arab countries has reached a cap, especially following the last global financial crisis that shook the world in 2008.

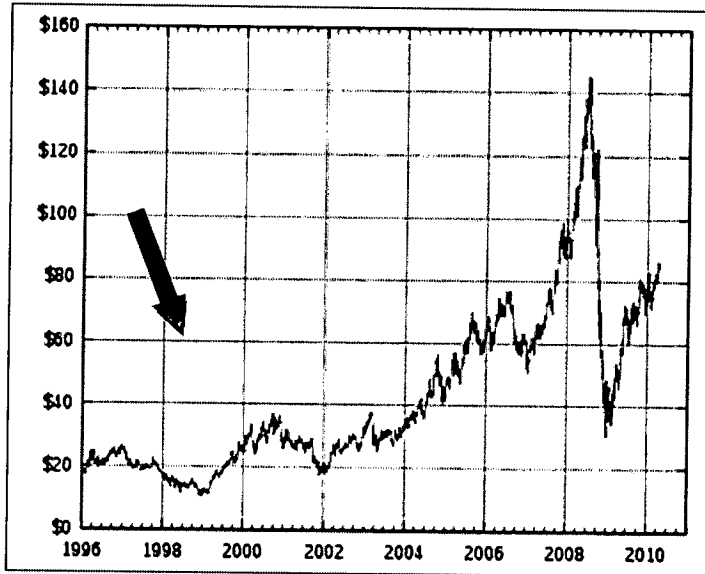
Figure 10: Remittances as a percentage of GDP vs Time.



At their lowest level, remittances have reached 7% of GDP in 1998, and 4.66% of total deposits for the same year. As demonstrated in the chart below, 1998 was a year when oil

prices was in bear market territory, reaching the low level below the 20 dollar mark, so expatriates in GCC could not send enough remittances to their home country.

Figure 11:Oil prices Fluctuations.

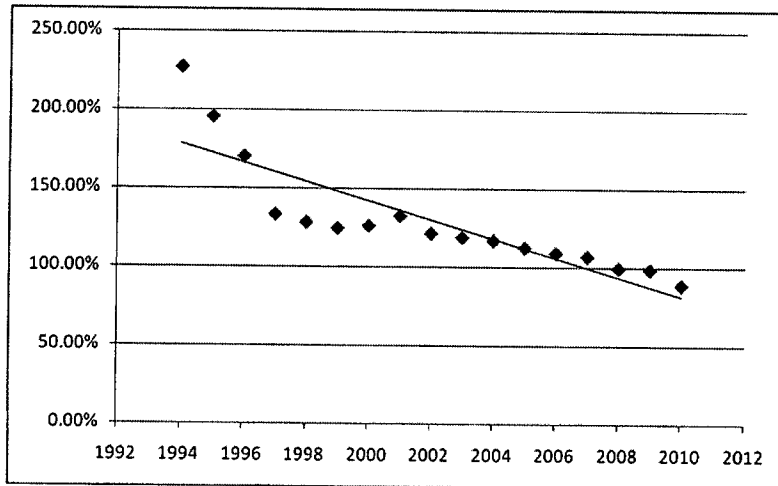


Source: New York Mercantile Exchange, Wikipedia.

Consumption has reached, at its lowest point, 88.77% of total GDP in 2011, and 227% at its highest level in 1994. These numbers illustrate the profound reliance of the Lebanese economy on consumption expenditure. From the part of consumer that spend additional income to lift their living standards, or governments that use funds for the country's reconstruction after the end of the war.

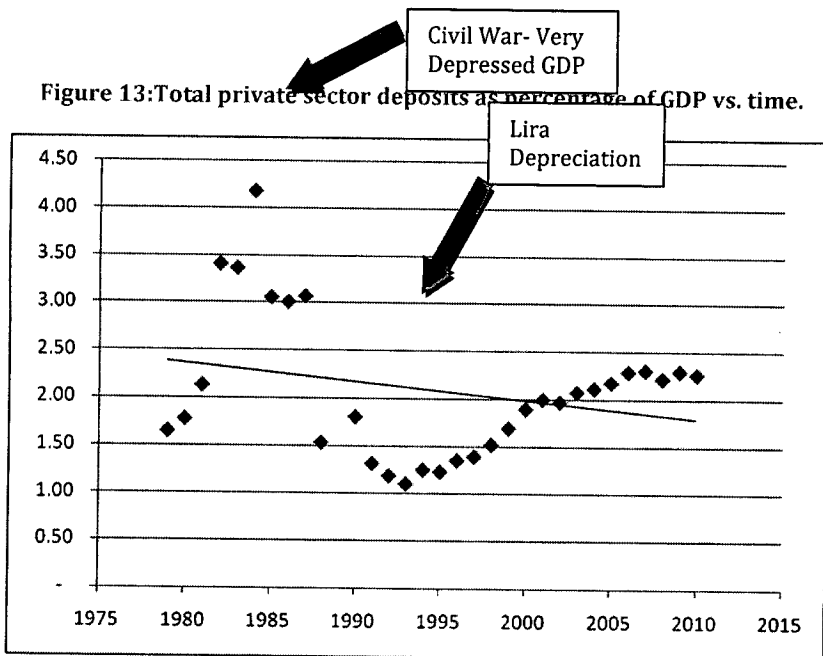
The chart below shows that Gross National Expenditure, as a percentage of GDP, has been drifting lower. On one hand, Lebanon is still far from full reconstruction, but the government and consumer are heavily indebted and cannot spend anymore at the levels seen in the nineties. From the other hand, GDP is growing at a faster pace than expenditure.

Figure 12: Gross National Consumption as a percentage of GDP.



Total resident private sector deposits have reached 4.2 times GDP in 1984, when GDP was so depressed by the Israeli invasion of Lebanon. Between 1982 and 1993, there was a loss of confidence in the Lebanese financial system, the Lira was deteriorating and money was fleeing the local banks. In 1993 total resident private sector deposits as a percentage of GDP was at its lowest point of 1.1, before regaining steam after the stabilization of exchange rate.

Figure 13: Total private sector deposits as percentage of GDP vs. time.



Remittances, consumption and deposits are substantial in amount when compared to the country's GDP, and investigating their drivers and effects is a key for structuring balanced fiscal and monetary policies to drive overall economic prosperity.

4.2 Equations

4.2.1 Simple Regressions

The simple regression equations take the following form:

$$\text{dep. variable} = a \times (\text{indep. variable}) + b$$

Where the independent variable is the Remittances ; the dependent variables are detailed in the table below, and “a” is the relation coefficient.

Table 9: Equations and Results.

<i>Equations</i>	<i>Dependent Variable</i>	<i>Relation coefficient (a)</i>	<i>R-square</i>	<i>t-ratio</i>
1	<i>GDP</i>	4.139	0.735	8.98
2	<i>GNI</i>	3.460	0.701	6.69
3	<i>Total resident private sector deposits</i>	9.957	0.833	12.05
4	<i>Private sector deposits in foreign currency</i>	6.545	0.838	12.28
5	<i>Consumption</i>	1.582	0.821	8.29

Remittance is the independent variable.

The coefficients calculated in table 9 confirms the prior expected positive relation between remittances and the different other dependent variables. Yet the extent of relation differs greatly between variables.

The two variables with the highest relation are remittances inflow and private sector deposits. The two variables with lowest relation are remittances and consumption. A relation was observed between remittances and GDP, but weaker than the relation between remittances and deposits.

Equation 1 in table 9 demonstrates the effect of remittances on GDP, $R^2 = 0.735$ indicating that about 74% of the variation in the Lebanese GDP can be accounted for by the level of remittances flowing into the country. For each 1 million dollar increase or decrease in remittances, the study shows a 4.14 million increase/decrease in GDP.

Equation 2 in table 9 demonstrates the effect of remittances on GNI, $R^2 = 0.701$ indicating that about 70% of the variation in the Lebanese GNI can be accounted for by the level of remittances flowing into the country. For each 1 million dollar increase/decrease in remittances, there is a 3.5 million increase/decrease in GNI.

Equation 3 in table 9 demonstrates the effect of remittances on total resident private sector deposits, $R^2 = 0.833$ indicating that about 83% of the variation in the Lebanese total resident private sector deposits can be accounted for by the level of remittances flowing

into the country. For each 1 million dollar increase/decrease in remittances, there is a 10 million increase/decrease in total resident private sector deposits.

Equation 4 in table 9 demonstrates the effect of remittances on private sector deposits in foreign currency, $R^2 = 0.838$ indicating that about 84% of the variation in the Lebanese private sector deposits in FC can be accounted for by the level of remittances flowing into the country. For each 1 million dollar increase/decrease in remittances, there is a 6.5 million increase/decrease in private sector deposits in foreign currency.

Equation 5 in table 9 demonstrates the effect of remittances on gross national expenditure, $R^2 = 0.821$ indicating that about 82% of the variation in the gross national expenditure can be accounted for by the level of remittances flowing into the country. For each 1 million dollar increase/decrease in remittances, there is a 1.5 million increase/decrease in gross national expenditure.

4.2.2 Multiple Regression

The multiple-regression equation takes the form (Equation 6):

$$GDPgrowth = \alpha RemittancesGrowth + \beta SavingGrowth + Constant$$

GDP growth is the dependent variable, while Remittances growth and saving growth are the independent variable.

- Saving refers to gross national saving in millions of USD, calculated as gross national income minus gross national expenditure.
- $\alpha = 0.106$, $t = 1.445$
- $\beta = 0.012$, $t = 0.659$
- *Constant* = 0.108
- R^2 of this equation is equal to 0.042. Sample size is 16, from year 1995 till 2010.

The multiple-regression (equation 6) came to confirm the weak relation present between Remittances and GDP ($t = 1.445$) and also showing the weakest relation between GDP and Saving ($t = 0.0659$).

Although the coefficient of remittances is positive, it is insignificant with a t-ratio below 1.96 which concludes that remittances have no significant on economic growth. More investigations and surveys need to be done to explore the use of remittances.

The coefficient of saving rate is positive, but highly insignificant with t-ratio equal to 0.0659 indicating that private and foreign deposits do not stimulate economic growth and do not driving the engine of investments up.

Moreover; the multiple regression analysis describes the effect of the two explanatory variables acting jointly on the GDP. R-square is 4.2% indicating that remittances and national saving are not important factors in determining GDP.

4.3 Conclusions

The higher regression relation of remittances with deposits (equation 3-4) can lead towards the conclusion that the bulk of remittances flowing into the country ends up as deposits in commercial banks.

From one hand, people are attracted by the higher interest rates in Lebanese banks compared to the expected return on any other investment.

From the other hand, the inherited instability of the Lebanese investment environment added a superior risk premium to the cost of capital. The higher required rate of return on investments motivates people to deposit funds more willingly than investing them in production.

The lowest relation between remittances and consumption (equation 5) indicates that the poor population receiving the funds is reluctant to spend it on consumable goods because of the uncertainty of the economic and political situation. The receivers of remittances perceive this source of income as temporary so they try to preserve it in banks as safety net in case any emergent event takes place.

The lower relation between remittances and GDP (equation 1) indicates that the monetary flows coming from abroad are not channeled properly toward driving economic development. Migrants' remittances are deposited rather than invested. The positive relation between remittances and GDP (equation 1) can be explained by the fact that GDP

growth of recent years is due to real estate development, and a good part of remittances is deployed in buying real estate to fuel this boom (See survey conducted).

The very weak relation in the multiple regression between GDP growth and the other two variables (equation 6) proves the fact that remittances and savings are not contributing to economic growth.

The main conclusion to draw is the fact that remittances are not deployed in the best way to feed into the economic development. Remittances are fueling deposits in banks, which in turn is used to cover the governments' long term budget deficits.

Chapter 5: The Survey

5.1 Description and Data Collection

The second part of data collection is primary data, collected using a small survey. This survey is constituted of one simple question: where are the remittances (money transfers) from abroad deployed? This question was asked to bankers from 3 regions (Mount Lebanon, Beirut and the Bekaa) whose name cannot be disclosed due to the constraints imposed by the Lebanese law concerning bank's secrecy.

The sample was constituted of 102 migrants distributed by location, according to the below table:

Table 10: Survey migrants by location in 2011.

<i>Country</i>	<i>Number of emigrants</i>	<i>Percentage</i>
Arab and GCC countries	39	38.24%
North and South America	12	11.76%
Australia	11	10.78%
Europe	16	15.69%
Africa	24	23.53%
Total	102	100

The study showed that migrants in Africa, Arab and GCC countries are more interested to buy real estate in Lebanon than other migrants settled in America, Australia and Europe. We can attribute this observation to the fact that the living standards in western countries are higher than regional and African states. In addition, most emigration is temporary rather than permanent, especially to Africa and GCC for young generation looking for better job opportunities.

5.2 Results

The results detailed, in the findings section and in this survey, confirm the findings of a previous study published by Hamadi H., M. Hamade and R. Khoueiri in 2009:

Table 11: Number of transfers by use in 2009 and 2011.

<i>Deployment of Remittances- Hamadi H., M. Hamade and R. Khoueiri study results (2009)</i>			
To help relatives	To buy real estate	To start a business	To deposit in a saving account
66	124	32	228
14.7%	27.6%	7.1%	50.6%
<i>Deployment of Remittances- The Survey (2011)</i>			
9	21	8	64
9%	20.5%	7.8%	62.7%

64% of migrants' transfers went as deposit in saving accounts of commercial banks. 21% of remittances went to the real estate sector, whereas only 7% of these transfers are deployed to start businesses and boosting the local economy.

Table 12: Total amount of remittances by use in 2009 (in USD).

To help relatives	To buy real estate	To start a business	To deposit in a saving account	Others
2,337,966	28,282,238	6,904,000	35,485,158	318,000
(3.2%)	(38.6%)	(9.4%)	(48.4%)	(0.4%)

Source: Hamadi H., M. Hamade and R. Khoueiri, 2009.

As seen in the table above, the majority of remittances are used for deposits in saving accounts in commercial banks, whereas a minority is used for starting businesses

Chapter 6: Conclusions and Recommendations

The profound trust in the local Lebanese banking sector drives expatriates to transfer funds to be deposited back home. Dead deposits do not contribute to economic expansion, but they are only used to close the gap of high budget deficit of the Lebanese government. Remittances, when deposited and saved in banking accounts, do not drive economic growth.

The majority of Lebanese public debt is held by local banks, which assets are fueled by the solid remittances flow. The banks take advantage of the higher interest rates paid by treasuries. The population also consequently prefers to deposit their funds, get interest payments, without investing it.

If the private sector does not invest the proceedings from remittances flow, the overall economy won't reach prosperity, and the Lebanese financial and social situation will likely stay anemic.

It is not enough that remittances are used to buy and speculate real estate. Remittances should be directed toward other less developed sectors, like alternative energy, industrial production, agriculture... the key to dispatch the economy from its lackluster pattern is to find the optimal way to invest remittances productively instead of just increasing deposits and banks' assets.

6.1 Managerial implications

The study has indicated that remittances are not correctly channeled toward economic growth. The question to be asked next is: what can the public and private sectors, managers and decisions making do to change this situation?

The remittances can be more productive to stimulate development; if remittances are deployed in production, the economic engine could shift from a consumption base toward a production and export base. Stability can increase and FDI will more likely flow into the country.

The government can contribute by growing, motivating the private sector into taking more risks, and investing more diversely in manufacturing and agriculture.

Private Banks can direct the remittances towards fueling the entrepreneurial spirit of the young population thru organized deregulation of the banking and monetary system, and thru investment credit easing.

When taxing the remittances flowing into the country and considering it as regular income, the government will close budget deficit, redistribute wealth and lower poverty levels.

By lowering barriers to open businesses, the public sector also could revamp some buried economic sectors and push emigrants into investing in sectors outside the real estate.

6.2 Limitations

The first limitation faced in the research study was the unavailability of data. The Lebanese law forbids commercial banks from disclosing material information about specific clients.

The second limitation was the reliance in the survey on data provided by bank's management personnel. These data are not audited, so their accuracy could be questioned.

The third limitation is the unavailability of longer term official quantitative data for two specific variables: gross national income and gross national expenditure.

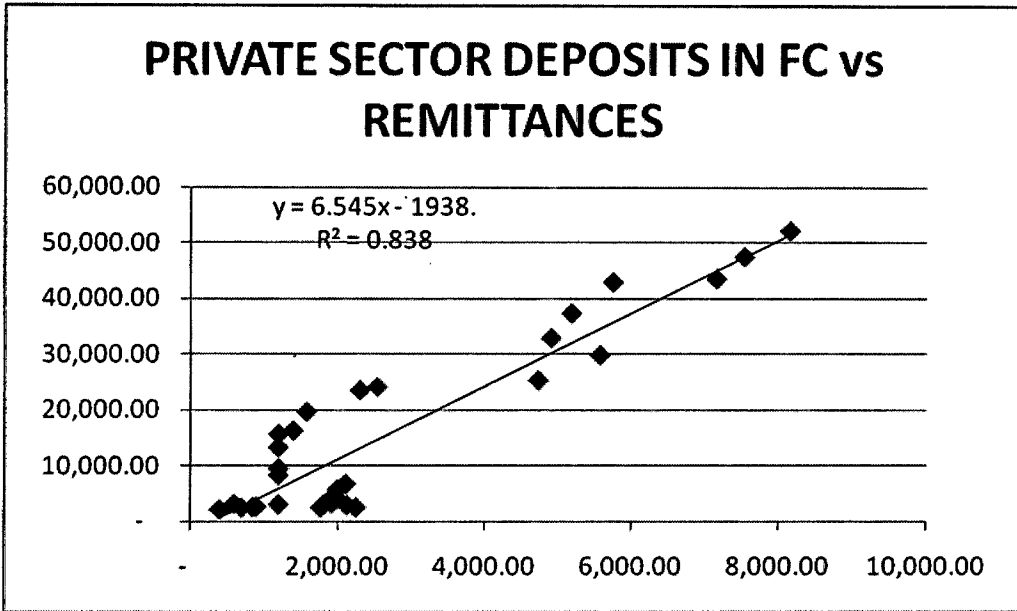
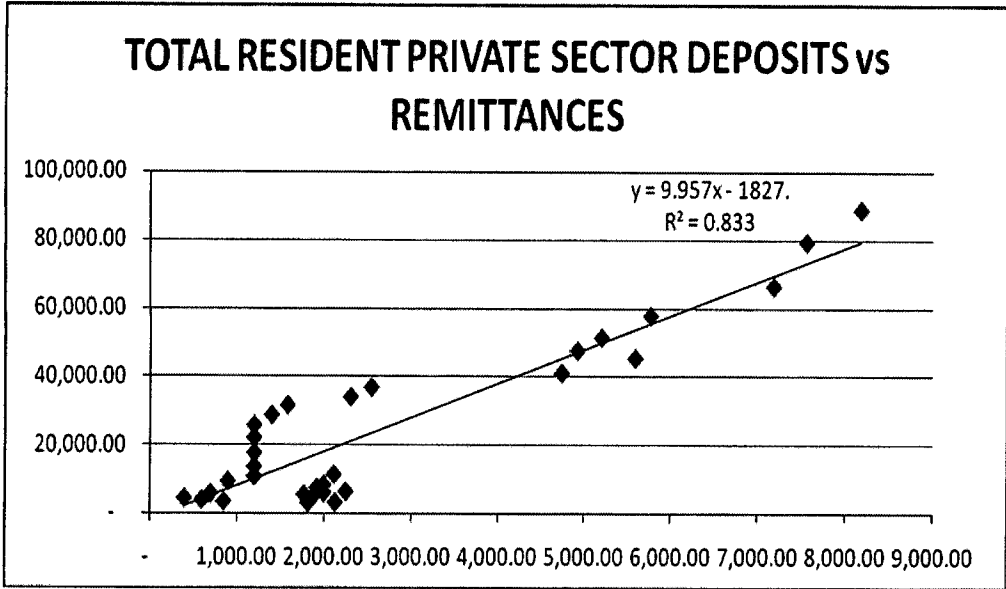
The findings of this thesis will need to be confirmed by additional research, especially at the household level.

Appendix

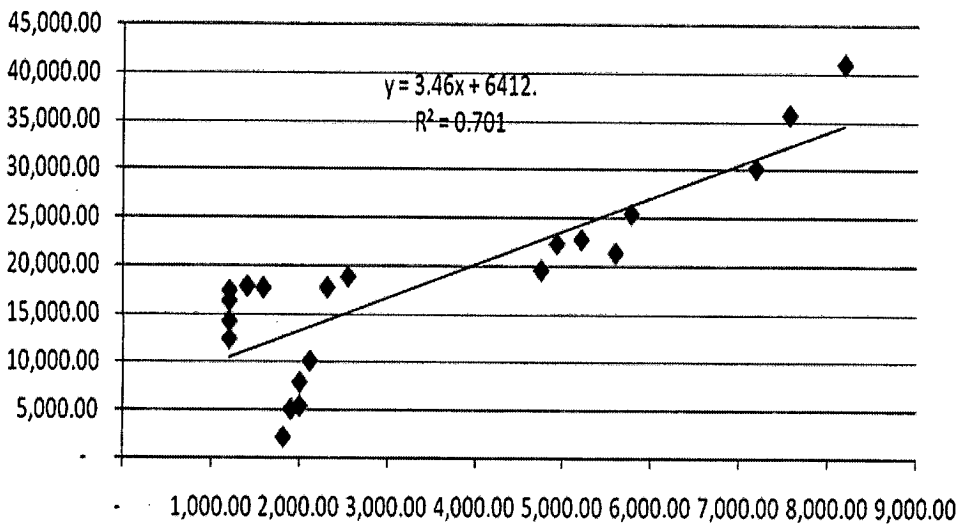
Figure 14: Data

<i>Year</i>	<i>Remittances</i>	<i>GDP</i>	<i>Resident Private Sector Deposits</i>	<i>Private Sector Deposits in Foreign Currencies</i>	<i>Gross National Income</i>	<i>Gross national expenditure (constant 2000 US\$)</i>
1979	1,772.00	3,389.06	5,572.64	2,464.93		
1980	2,252.00	3,608.25	6,398.45	2,464.93		
1981	1,920.00	3,522.01	7,494.34	3,206.94		
1982	1,200.00	3,187.60	10,867.30	3,011.29		
1983	900.00	2,790.03	9,388.49	2,622.95		
1984	700.00	1,399.32	5,851.62	2,396.06		
1985	400.00	1,468.04	4,486.60	2,109.61		
1986	850.00	1,174.65	3,535.73	2,521.28		
1987	2,130.00	1,085.27	3,330.14	2,892.73		
1988	600.00	2,607.69	3,989.16	3,101.13		
1990	1,818.00	1,760.61	3,170.13	3,069.63	2,167.16	
1991	1,900.00	4,383.48	5,746.34	3,853.71	5,095.31	
1992	2,000.00	5,128.69	6,061.41	4,066.86	5,432.48	
1993	2,000.00	7,693.56	8,446.17	5,740.13	7,936.34	
1994	2,115.00	9,124.77	11,373.34	6,705.47	10,150.03	20,715.88
1995	1,200.00	11,171.22	13,701.41	8,273.62	12,440.21	21,832.61
1996	1,200.00	13,173.83	17,747.79	9,464.60	14,286.05	22,411.10
1997	1,200.00	15,925.70	22,094.14	13,286.75	16,399.34	21,227.55
1998	1,200.00	17,006.97	25,754.82	15,638.85	17,434.83	21,799.53
1999	1,400.00	17,012.94	28,725.51	16,258.40	17,901.82	21,166.12
2000	1,582.00	16,678.61	31,563.62	19,664.24	17,750.58	21,016.25
2001	2,307.00	17,065.34	33,986.14	23,509.77	17,767.83	22,590.16
2002	2,544.00	18,712.44	36,783.15	24,118.60	18,896.19	22,695.64
2003	4,743.00	19,801.66	40,989.33	25,301.60	19,631.84	23,516.96
2004	5,591.00	21,465.34	45,285.74	29,798.54	21,437.48	25,066.05
2005	4,924.00	21,860.70	47,517.23	32,895.39	22,382.75	24,548.22
2006	5,202.00	22,438.47	51,320.98	37,336.59	22,815.26	24,447.06
2007	5,769.00	25,057.38	57,698.69	42,917.75	25,479.27	26,778.47
2008	7,181.00	29,933.00	66,273.86	43,514.92	30,202.32	29,753.20
2009	7,558.00	34,528.03	79,192.77	47,525.45	35,779.10	34,034.42
2010	8,177.00	39,247.72	88,718.67	52,210.14	41,053.48	34,839.08

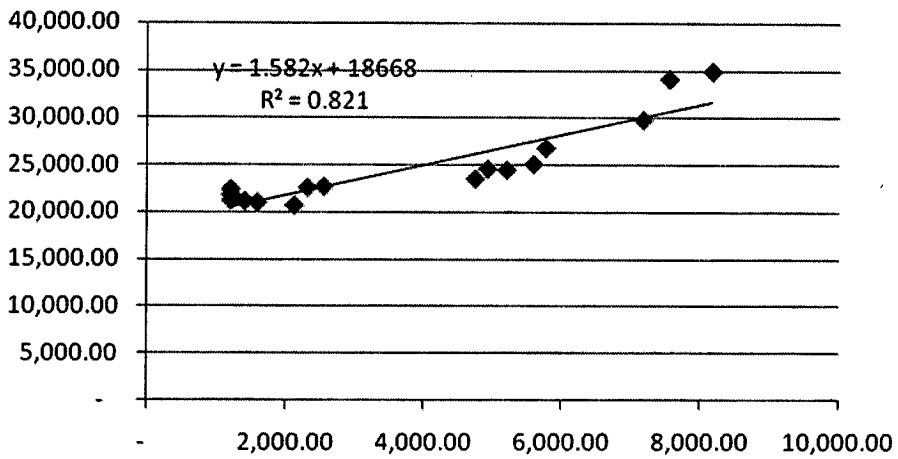
Sources: Bank Du Liban, World Bank, IMF, Euromonitor.



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CONSUMPTION vs REMITTANCES



Bibliography

Arvin,M. and Lew,B.(2011). Are foreign aid and migrant remittances sources of happiness in recipient countries? *International Journal of Public Policy*.7.4/5/6 (Nov.8, 2011):p282

Alcaraz,Chiqiar,Salcedo (2012). Remittances, schooling and child labor in Mexico. *The journal of development economics*, 97.1 (Jan 2012) : p 156

Abdih ,Yasser and Dagher (2012).Remittances and institutions: are remittances a curse ? *Word Development*, 40.4 (Apr. 2012) : p 657

Adams, R. and Page, J. (2005). *Do International Migration and Remittances Reduce Poverty in Developing Countries?* *World Development* (Montreal, Canada), vol. 33 (October): pp. 1645-1669.

Adams, R., Jr. (2006). *Remittances, Consumption and Investment in Ghana*, Unpublished manuscript, Washington, DC: World Bank.

Agarwal, Reena, and Andrew W. Horowitz, (2002). *Are International Remittances Altruism or Insurance? Evidence from Guyana Using Multiple-Migrant Households*, *World Development*, Vol. 30, pp. 2033-44.

Chami, R., A. Barajas, T. Cosimano, C. Fullenkamp, M. Gapen and P. Montiel (2008). *Macroeconomic Consequences of Remittances*. IMF Occasional paper #259.

Chami, R., Fullenkamp, C. and Jahjah, S. (2003). *Are Immigrant Remittance Flows a Source of Capital for Development?* IMF Working Paper 03/189.

D. Kapur and Center for Global Development (2003). *Remittances: The New Development Mantra?* August 25, 2003. Available online at: [http://www.livelihoods.org/hot_topics/docs/RemitMantra.pdf].

D. Ratha , S. Mohapatra and A. Silwal (2011). *The Migration and Remittances Factbook 2011*, Migration and Remittances Unit, World Bank publications 2011.

D. Ratha and S. Mohapatra (2007). *Increasing the Macroeconomic Impact of Remittances on Development*, Development Prospects Group, World Bank, Washington D.C. 20433, November 26, 2007.

Edwards, A. and Ureta M. (2003). *International Migration, Remittances and Schooling: Evidence from El Salvador*, *Journal of Development Economics* (Cambridge, Massachusetts), vol. 72 (December), pp. 429-461.

Faini, R. (2002). *Development, Trade and Migration*, proceedings from the ABCDE Europe Conference, 1-2 pp. 85-116.

G. Corm (2004). *Labor Migration in the Middle East and North Africa A View from the Region*, World Bank publication.

G. Hage (2004). *Issues of Structure and Culture in Researching The Lebanese Transnational Family*, lecture presented at the Lebanese Emigration Research Center, NDU, May 19, 2004.

G. Hage (2002). *Arab-Australians Today : Citizenship and belonging*. Melbourne University Publish , May 1 , 2002.

Ghobril, N. (2004). *Expatriates' remittances and the Lebanese economy: brain drain or economic gain?* Lecture presented at Lebanese Emigration Research Center, Notre Dame University, Lebanon: 21 April 2004.

Gubert, F. (2002). *Do Migrants Insure Those Who Stay Behind? Evidence from the Kayes Area (Western Mali)*, Oxford Development Studies, Vol. 30, pp. 267-287.

Hamadi H., M. Hamade and R. Khoueiri (2012). *Expatriate Transfers and Their Effects on the Lebanese Economy*, International journal of business and economic perspectives 7 (1), pp. 85-98.

Harald F. and Heiko H. (2009). *Lebanon—Determinants of Commercial Bank Deposits in a Regional Financial Center*. IMF Working Paper, Middle East and Central Asia Department.

Hertlein, S. and Vadean, F. (2006). *Remittances – A bridge between migration and development?* Hamburg: Hamburg Institute of International Economics.

Ibid., 1980, p. 172.

IDAL, Investment Development Authority of Lebanon (2010) Economic Outlook. Available online at: <http://www.idal.com.lb/uploadedfiles/Economic%20Outlook.pdf>.

IMF (2009), *International Transactions in Remittances, Guide for Compilers and Users*.

- Johnson, G., and Whitelaw, E. (1974). *Urban-Rural income Transfer in Kenya: An Estimated-Remittances Function*, Economic Development and Cultural Change, Vol. 22, pp. 473-479.
- Kapur, D. (2004). *Remittances: The new development mantra*. Paper presented to the United Nations Conference on Trade and Development, New York and Geneva: April 2004.
- Kruger M. (2011). *A Goal Programming Approach to Strategic Bank Balance Sheet Management*. SAS Global Forum 2011, Centre for BMI, North-West University, South Africa.
- Labaki, B. (1992). *Lebanese Emigration during the War (1975-1989)*, in Albert Hourani, and Nadim Shehadi, eds. *The Lebanese in the World: A century of Emigration*. London: Centre for Lebanese Studies and Tauris.
- Labaki, B., and Abu Rjaili, K. (2005). *Jardat Hisab al-Hurub min 'Ajl 'Al'Akhareen 'ala 'Ard Lubnan, 1975-1990*. Beirut, Personal Publication.
- Lucas, B., Robert E., and Stark, O. (1985). *Motivations to Remittances: evidence from Botswana*, Journal of Political Economy, Vol. 93, pp. 901-918.
- McCormick, B. and Wahba, J. (2001). *Overseas Work Experience, Savings and Entrepreneurship amongst Return Migrants to LDCs*, Scottish Journal of Political Economy (Oxford, England), vol. 48 (May), pp. 164-178.
- Poirine, B. (1997). *A Theory of Remittances as an Implicit Family Loan Arrangement*, World Development, Vol. 25, pp. 589-611.

Stark, O. (1991). *Migration in LDCs: Risk, Remittances, and the Family*, Finance and Development, December, pp. 39-41.

Stark, O and R. Lucas (1988). Migration, Remittances and the Family. *Economic Development and Cultural Change*, 36: 465-81

Labaki, B. (1992). 'Lebanese Emigration during the War (1975-1989)' in Albert Hourani and Nadim Shehadi, eds. *The Lebanese in the World: A Century of Emigration*. London: Center for Lebanese Studies and Tauris.

Tabar, P. (2009). *Politics among Arab Migrants in Australia*, CARIM, RR2009/09, Robert Schuman Centre for Advanced Studies, San Domenico di Fiesoli (FI): European University Institute.

Tabar, P. (2010). *Lebanon: A Country of Emigration and Immigration*, Institute for Migration Studies, LAU Press, Beirut, 2010.

Tannous A. (1942). *Group behavior in the Village Community of Lebanon*, The American Journal of Sociology, Vol. 48, No. 2, September 1942, pp. 232.

Taylor, J.E. (1992). Remittances and Inequality Reconsidered: Direct, Indirect and Intertemporal Effects. *Journal of Policy Modeling*. 14: 187-208

Yang, D.n (2004). *International Migration, Human Capital and Entrepreneurship: Evidence from Philippine Migrants' Exchange Rate Shocks*, Unpublished manuscript, University of Michigan, Ann Arbor, MI, USA.