MIGRATION, REMITTANCES, AND THE STANDARDS OF LIVING IN THE REPUBLIC OF MACEDONIA

(A REPORT BASED ON THE 2008 QUALITY OF LIFE SURVEY)

ABDUL GHAFFAR MUGHAL
International Visiting Professor
South East European University, Tetovo
Visiting Scholar
University of California, Los Angeles
Email: mughalag@gmail.com

HRISTINA CIPUSHEVA
Assistant Lecturer
South East European University, Tetovo
Email: h.cipusheva@seeu.edu.mk

HYRIJE ABAZI
Assistant Lecturer
South East European University, Tetovo
Email: h.abazi@seeu.edu.mk

JEL Classification:
Welfare Economics, International Economics, Economic Development

---

Abstract

There are two particular contributions that we seek to make to the scholarship on migration and remittances in Republic of Macedonia. First, we examine patterns of migration and remittances (including in-kind and other informal transfers) based on a household survey that is representative of the whole country as well as of different regions of the country. Second, the report compares the patterns of migration and remittances between two main ethnic groups, i.e., Albanians and Macedonians. The analysis is expected to have significant policy implications.

Abbreviations and Acronyms

BMP5
BOP – Balance of Payment
CEE – Central and Eastern Europe
DM – Deutch Mark
ECB
EU – European Union
EUI - Economics Intelligence Unit
EUR – Euro currency
FCB
FCDs
FDI – Foreign Direct Investments
GDP – Gross Domestic Product
HHs – Households
HHM – Household Member
IFS - International financial statistics
IFT - Informal funds transfer
IVT - Informal value transfer
IMF – International Monetary Fund
MBM – Marten Board Macedonia
MKD – Macedonian denar
MQLS08 – Macedonian Quality of Life Survey 2008
MTOs - Money Transfer Operators
NBRM – National Bank of Republic of Macedonia
NLM - New Economic Theory of Labor Migration
NMS – New Member States
ODA/OA - Official development assistance / Official aid
OECD – Organization for Economic Cooperation and Development
OENB
RM - Republic of Macedonia
SEEU – South East European University
SAA – Stabilization and Association Agreement
SEE - Southeastern Europe
UNDP – United Nations Development Program
USA – United States of America
USD – United States Dollar
WB – World Bank
WDI - World Development Indicators

Index of Tables

Index of Figures

Executive Summary

Republic of Macedonia is a very small landlocked economy, and as such appears to exemplify the typical pattern of labor mobility - an estimated 18.2% of the population in the country was living abroad by 2005 (WB, 2008). With such a high proportion of emigrant population relative to the total population of the country, remittances sent by migrant workers have become critical to the survival and welfare of a significant number of Macedonian households.

Even that the absorption of remittance flows into the economy is important for stabilization and growth of the country, there has been little concerted effort to estimate the true size of remittances into the economy, so far.

The official statistics shows that on average, private transfers have accounted for 11.4% of GDP in 2001-2004. The 2005 figures show a dramatic increase and in 2006, the increased inflows of foreign assets in the form of private transfers reached 18.7% of GDP and financed 90.6% of the trade deficit of the Macedonian economy. The ratio of gross remittances to FDI highlights another important contribution of remittances to the economy as a source of external financing - 517.70% for the 2004 in Macedonia. The upward trend is unmistakably present as well for the ratio of remittances to export earnings from 1996 through 2006. Therefore, the Diaspora's economic input (through remittances as well as FDI) can enhance the growth potential of the country.

The main objective of the paper is to examine the impact of migration on the standards of living in the Republic of Macedonia drawing upon the latest Quality of Life Survey. The survey is based upon regional representative sample of 2.797 households. Households with members who lived / worked abroad at any time since January 2004 constitute 4.12% of all households, while households reported receiving remittances in the last 6 months constitute about 7% of all households in the country. The results of the survey show that while only 26.76% of the households are of Albanian origin, 41% of all households with migrants happen to be of Albanian origin. The percentage of such households in rural and urban areas other than the capital city of Skopje is substantially higher than in the capital (7% in rural areas as opposed to less than 1,5% in Skopje).

While the percentage of households with migrants is small, there is considerable evidence in the survey in favor of migration pressure - respondents in 22% of the households expressed the intention to migrate in

the next 12 months, which is more than 5 times the number currently prevailing.

The most important motive for migration for those who migrated during the most recent migration episode was to work or look for work (57%). For those who reported the country of destination, the biggest percentage migrated to Switzerland (19%) and Italy (19%). A very small percentage of migrants of Albanian origin migrate to the US relative to the migrants from the Macedonian community.

The mean value of the duration of the migration in months during the last migration episode for Macedonians is about 7 months, for Albanians is about 5 months.

The survey also show that more households reported using remittances money for durable goods than for any other item, yet human capital investment was also an important use of remittances (medical care, educational expenses, etc).

The analysis of macroeconomic implication of remittances demonstrate that absolute poverty in the country is reduced as a result of migration - reported median net monthly earning of employed migrants during the 12 months prior to the most recent migration episode was 12,000 MKD or approximately 200 Euros. In contrast, the median earning during the most recent trip abroad was 1,000 Euros per month with the mean being about 4500 Euros.

Given the rate of unemployment in the country, emigration increases the income dramatically. Thus, about 9% of the households mentioned using remittances to pay off debts; about 10% reported using remittances for medical care, 12% for food and 14% for education. The percentage of unemployed in the receiving households is about 6% higher than the percentage of unemployed in the non-receiving households. Among the Macedonians, it is puzzling – only the extremely poor seem to be receiving remittances and they still remain poor – thus, 29% of the receiving households are poor whereas 24% of non-receiving Macedonian households are poor; the situation is just the opposite for Albanian households – the proportion of the poor among receiving households is lower - 32 % as opposed to 44%.

When we review the distribution of household by quintiles, we notice a significant difference between the top quintile and the three middle quintiles, with the top quintile showing more than two percentage point higher incidence of migration (6% as opposed to slightly over 3.15%).

This is a very important result which shows positive association between highest income quintile and the presence of migrant household member. Remittances are an important source of income for Polog and the Southwest, where 12% and 15% of the households reported receiving remittances from abroad respectively.

Results from MQLS08 show that the bulk of remittances transfer into RM are through informal means, only 22% of the households reported receiving money through formal banking channels.

According to these calculations, in 2007, we estimate that a sum of about $685 million was transferred through both official and unofficial channels. The actual size of remittances in 2007 may have been more than two and a half times the officially reported remittances.

Chapter I

I.A.Introduction

Adam Smith famously remarked that division of labor is limited by the size of the market. Small economies have limited domestic markets and are typically observed to be open economies. Small size of the market limits gains from specialization in industries in so far as such potential gain are based on attaining economies of scale. This is particularly true of industries characterized by increasing returns to scale, and, are, in general, viable *only if export demand is guaranteed*. Assured access to foreign market often depends upon foreign direct investment by multinational corporations. Although technological advances in telecommunication and transportation have eased the structural constraints faced by small countries, other economic factors, not to mention the geopolitical imperatives, still limit the options open to small countries (Demas 1965, Salvatore et al, 2001). Given the limited size of the market and difficulties in realizing economies of scale, *international migration tends to become a structural feature of small landlocked economies that have limited access to foreign markets for competitive export of goods*. Although geography is not destiny, and there are examples of some small countries that have been able to export their way to growth, in the absence of FDI and other countervailing factors, small economies are typically labor exporting economies.[1]

Republic of Macedonia is a very small[2] landlocked economy and as such appears to exemplify the typical pattern of labor mobility; at least partially as a substitute for export of goods as export oriented FDI in RM has

---

[1] This is a positive rather than a normative observation. Small economies could be labor importing economies too if they succeed in expanding the size of their markets through exports. The example of Tiger economies and other successful small economies, including some small landlocked economies such as that of Switzerland, clearly demonstrates that the most successful firms and entrepreneurs are those that overcome the limited size of domestic market by creating a niche and expand into overseas markets. Discussion of this issue is beyond the scope of this report. Interested readers can consult the literature on these economies. For the Tiger economies of South East Asia, see the volume by Deyo (ed.). Deyo, Frederic C. ed. 1987. *The political economy of the new Asian industrialism*. Ithaca and London: Cornell University Press.

Alam. M.S. *Governments and Markets in Economic Development Strategies* (Praeger: 1989).

[2] We take the definition of small and very small proposed by Salvatore et al (2001). Very small countries have a population ranging from 1 to 5 million.

remained very limited.[3] Thus, an estimated 18.2% of Macedonian population was living abroad by 2005 (World Bank, 2008).[4] A significant size of emigrants from RM population is transnational[5] with strong socio-economic linkages.

There are some particularities which characterize the migration history of Macedonian citizens. While in some parts of the country permanent emigration predates the breakup of Yugoslavia, in others the migration is a more recent phenomenon, triggered mainly by the painful structural adjustments and chronic unemployment and poverty following the onset of transition to the market system. Since the breakup of Yugoslavia the migration dominated by people of Albanian ethnicity. The two main ethnic groups – Macedonians and Albanians – differ significantly in their migration and remittance behavior as the present study confirms.

With such a high proportion of emigrant population relative to the total population of the country, remittances sent by migrant workers have become critical to the survival and welfare of a significant number of Macedonian[6] households, as to millions of families around the world and to the health of many national economies. Many Macedonian households often depend on the money sent by household members working or living abroad to cover day-to-day living expenses, to provide a cushion against emergencies or, in some cases, as funds for making small investments (Janeska, 2008; Roberts et al, 2008).

I.B.Macroeconomic Performance of the Macedonian Economy and the Significance of Remittances

While there is consensus in the literature that remittances benefit the migrants and the migrants sending households in the countries of origin, our concern here is mainly with the significance of migration and remittances for larger social entities and the economy as a whole. We turn to this subject here and begin with the discussion of the macroeconomic

---

[3] Although there has lately been some increase in FDI into the Republic of Macedonia, as of 2005, Macedonia had the lowest per capita flow of FDI ($49 per capita) and the lowest share of FDI in GDP (1.7%) in the South East European region (Zulfia, 2008).

[4] Other sources put the estimate of people of Macedonian ethnicity overseas to be as high as 40 percent. See Appendix III.

[5] Transnational as opposed to international has the implication that people perceive their identities to be multiple. See (Ellerman, 2005)

[6] Macedonian refers to the citizen of RM, not the ethnic group

performance of the Macedonian economy to highlight the significance of remittances for the economy as a whole.

I.B.1.Macroeconomic Performance of the Macedonian Economy [7]

The macroeconomic performance of the Macedonian economy since the breakup of Yugoslavia has been mixed. However, over the last few years, several indicators have shown significant improvement.

Table 1 below provides a capsule summary of the key macroeconomic trends since 1993. Thanks to the stabilization program initiated in 2003 focusing on tighter fiscal policy supported by the de facto peg of the exchange rate against the euro, macroeconomic stability was quickly restored and economic growth has gradually recovered in the years following the 2001 conflict. Public debt ratios have been declining steadily, with government debt amounting to about 30% of GDP at the end of 2006 (WB: 2008). At 0.6% of GDP in 2007, budget deficit has been the lowest in the region. Even though the balance of trade has shown an increasing deficit over the years, at 0.4% of GDP, Republic of Macedonia has the smallest current account deficit in the region. The country has met the Maastricht economic criteria par excellence. By 2005, progress in advancing political and economic reforms since the Ohrid Framework Agreement and the implementation of the Stabilization and Association Agreement (SAA) with the EU has been substantial enough from the viewpoint of the European Council to earn the country candidacy for the EU.

With success in achieving low inflation rate and fiscal discipline, robust growth has eluded the country. Real GDP growth averaged a moderate rate of about 3.5% a year during 2003-2006, well below most countries in the region. Real GDP growth picked up in 2007 and 2008 and averaged over 5%, but formal job creation has not kept pace with it. Reducing unemployment and formalizing of economic activity remains the key challenge of the Macedonian economy. The economy has not diversified and output remains driven by a few key sectors of the economy. At about 20% of GDP, investment levels have remained relatively low. In contrast to the new member states of the EU (NMS), Republic of Macedonia has attracted only modest inflows of Greenfield foreign direct investment (FDI), with only a small impact on the expansion of output and exports (Mughal, 2009; Zulfia, 2008).

---

[7] This part draws heavily upon (WB 2008b).

Table 1 *Selected Macroeconomic Indicators of Republic of Macedonia (1993 - 2007)*

Selected Macroeconomic Indicators of FYR Macedonia (1993 - 2007)															
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Real GDP growth (%)	-7.5	-1.8	-1.1	1.2	1.4	3.4	4.3	4.5	-4.5	0.9	2.8	4.1	4.1	4.0	5.9
Average inflation rate	350	122	15.9	3	4.4	-0.8	-1.1	5.8	5.5	1.8	1.2	-0.4	0.5	3.2	2.3
Central budget and public funds balance (% of GDP)	-13.4	-2.9	-1.2	-0.5	-0.4	-1.7	0	1.8	-7.2	-5.7	-1.1	0	0.2	-0.5	0.6
Trade balance in m. of USD	42.8	-1185	-2235	-3155	-3866	-5155	-4966	-6900	-5266	-8044	-9399	-12555	-11886	-13662	-18117
Foreign exchange reserves (in million USD)	123	172	283	278	259	324	450	700	756	725	903	975	1325	1866	
Foreign debt (per cent of GDP)	45.4	37.2	32.1	26.5	30.3	41.1	40.9	43.1	43.5	43.5	39.7	38.7	39.1	39.2	
FDI (per cent of GDP)	n.a.	0.7	0.3	0.3	0.9	3.6	0.9	4.9	12.8	2.1	2.1	2.9	1.7	6.2	

Unemployment rate	27.7	30	35.6	31.9	36	34.5	32.4	32.2	30.9	31.9	36.7	37.2	37.3	36.0	34.9
Workers' Remittances + compensation of employees (per cent of GDP)				2	2	2	2	2	2	3	4	4	4	4	
Source: NBRM, Ministry of Finance and State Statistical Office; Remittances figures from WDI Database; Note: Remittances figures pertain to only official recorded remittances channeled through formal means.															

What is the significance of remittances in relation to the macroeconomic performance of the economy? We turn now to an answer to this question in the next subsection.

I.B.2.The Significance of Remittances in Relation to the Macroeconomy

The significance of remittances for an economy can be assessed in terms of several macroeconomic ratios. These ratios include, among others, the ratio of remittances to GDP, the ratio of remittances to FDI, the ratio of remittances to export earnings, and the ratio of remittances to other sources of foreign exchange, such as official development assistance (ODA). We will discuss the significance of remittances to the Republic of Macedonia in terms of these ratios. But, before we present the ratios, we would like to discuss the issue of magnitude of remittances in the official records as it affects the calculated ratios significantly.

I.B.2.a. Underestimation Bias in the Official Records of Remittances

The true size of remittances into the Republic of Macedonia remains shrouded in mystery.[8] There has been little concerted effort to estimate the

[8] This report does not purport to resolve the issue of the actual size of remittances into the Republic of Macedonia. We are mainly concerned here with the impact of migration and

true size of remittances into the economy. The absorption of remittance flows into the economy is important for stabilization and growth. But, it has always been a challenge for Macedonia to appropriately account for the flow of remittances as it has been for most countries.[9] Thus, we are confronted with a smorgasbord of figures from different sources.

Figure 1a below presents officially recorded remittances from 1996 through 2007. These show a structural shift starting 2002 when remittances show a dramatic increase over previous six year. How can we explain this upward trend in the flow of remittances? Many factors can account for the upward trend in remittances flows. First, large year-on-year increases in remittances may reflect improvements in central banks' remittance recording systems rather than changes in migrants' behaviors. Second, part of the explanation may lie in the increased confidence that Macedonians abroad have in the economy, after the country became a candidate for accession to the EU in 2005. Thus, the large increase in foreign currency exchanged might also reflect unrecorded portfolio investment or cash FDI. Alternatively, as noted in the IMF country report (IMF 2006), increased confidence in the MKD may have prompted residents to switch their savings from foreign exchange to MKD. "Ahead of the Euro conversion roughly €1 billion worth of DM was converted into other currencies" (ibid.). Third, increase in the officially recorded flows could reflect the switch from formal to informal channels, as a result of the reduced cost of transfers witnessed around the world (WB, 2006).

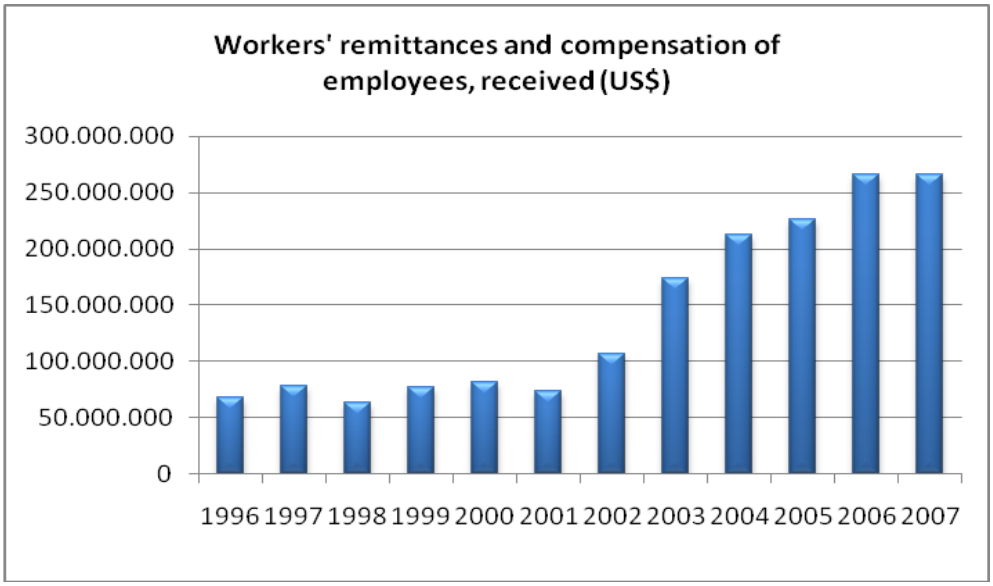
Officially recorded data on remittances should be taken with a great deal of skepticism. These figures report remittances channeled through banks or MTOs. There is a consensus among scholars that official remittances grossly underestimate the true magnitude of remittances. Thus, even when private transfers through official channels are included in the calculation of remittances, underestimation bias of an unknown magnitude still remains. We will try to substantiate this hypothesis below.

Figure 1a: *The trend of remittances in the Republic of Macedonia*

---

remittances on living standards as revealed in the Macedonian Quality of Life Survey of 2008 (henceforth MQLS08).

[9] ECB Monthly Bulletin February 2007 www.ecb.int/pub/pdf/other/pp85-94_mb200702en.pdf



Source: WDI, CD Rom. WB, 2008a

Figure 1a shows the trend of remittances in the Republic of Macedonia in relation to other countries of the region.

Table 2: *Migration stock*

The fact book of migration and remittances show the following migration snapshot:		
Emigration, 2005	**Albania**	**Macedonia**
Stock of emigrants	860,485	370,826
Stock of emigrants as % of population	27.50%	18.20%
Top 10 destination countries	Greece, Italy, FYR Macedonia, USA, Germany, Canada, Turkey, France, UK, Austria	Germany, Switzerland, Australia, Italy, Turkey, USA, Austria, Slovenia, Croatia, France
Immigration, 2005	**Albania**	**Macedonia**
Stock of immigrants	82,668	121,291
Stock of immigrants as % of population	2.60%	6.00%
Females as % of immigrants	50.80%	58.30%
Refugees as % of immigrants	0.10%	1.90%

Top source countries	Greece, FYR Macedonia, The Czech Republic, Serbia and Montenegro, Israel, Italy, Russia	Albania, Turkey, Serbia and Montenegro, Bosnia and Herzegovina, Egypt, Croatia, Bulgaria, Slovenia, Greece, Russia

Table 2 compares the migration stock from Macedonia and Albania. We find a mismatch between the stock of migrants from RM and the flow of remittances. While, Albania has an estimated migration stock of about 27% of its population, the Republic of Macedonia has over 18%. Ceteris paribus, one would expect the ratio of remittances into Macedonia to be equal to two-third of the remittances into Albania. Another way to compare the remittances across the countries of the region is to compare the per capita amount of remittances (WB, 2007).

The main reasons why we ought to suspect a serious under-estimation bias *lie among other things, in the degree of Euroization in the Republic of Macedonia. Many migrants bring foreign currency with them upon return visits home. These may never be exchanged at Cash Exchange offices. If foreign exchange holdings remain in circulation without ever being exchanged, these holdings never get counted in the flows of remittances, including the flow of remittances and other private transfers. The Republic of Macedonia is exceptional among all CEE and SEE countries in terms of having the highest percentage of population with Euro holdings. A recent OENB survey on foreign currency holdings[10] conducted in several CEE and SEE countries is highly revealing. The survey asked individuals in each country questions about the currency composition and the amounts of foreign currency cash holdings and foreign currency deposits, as well as, to the motives for holding foreign currency cash and deposits. The authors found that the euro plays a dominant role in foreign currency-denominated*

[10] *The survey was conducted for the first time in late 2007 in four Central and Eastern European (CEE), as well as, seven Southeastern European (SEE) countries.* The survey waves will be repeated every half year. The current survey comprised face-to-face interviews with about 1,000 persons aged 15+. The sample was selected via a multi-stage stratified random sample procedure. Results are representative for the respective population structure in most countries, including the Republic of Macedonia. For further details on the semiannual survey on the euro in Central, Eastern and Southeastern Europe, see http://www.oenb.at/en/geldp_volksw/zentral_osteuropa/central_and_eastern_europe.jsp .

assets (both cash and deposits) throughout the region (OENB, 2008). Some of the findings of the survey are highly significant for the issue under consideration here.

First, the Republic of Macedonia has the highest Euroization in the Balkans. Second, the share of respondents holding foreign cash varies considerably across countries, ranging from 8% in Hungary (lowest) to 49% in the RM (highest). Macedonia has the highest proportion of people holding Euros in the entire CEE and SEE region!

Second, they found that the amount of euro cash in circulation is considerably higher in SEE, than in CEE which may be explained by differences in the motives for holding euro cash in CEE (mainly for shopping abroad) and in SEE (mainly as a store of value)."

Third, Albania which has the highest remittances to GDP ratio in the entire CEE and SEE region had only 32% of the population with Euro cash holdings, a significantly lower incidence of Euro holdings. The combined answers on euro cash holdings and on the respective euro amounts enabled the authors to project per capita Euro holdings in each country. Again, the Republic of Macedonia shows one of the highest per capita Euro holdings in the region. The breakdown is as follows: EUR 12 for Hungary, EUR 80 to EUR 110 for Poland, Slovakia, Bulgaria and Romania, around EUR 170 for Bosnia and Herzegovina, EUR 260 for Croatia and about EUR 310 for Albania, the RM and Serbia. Adjusting these figures for differences in purchasing power showed that the median holdings of Albanians and Macedonians are in range from 400 to 500.

The survey also included a direct question on the use of the euro for *domestic payments*. "In Albania, Bosnia and Herzegovina, the Republic of Macedonia and Serbia, between 20% and almost 50% of the respondents said that they had made payments in euro in their respective country within the past six months." Additional motives for Euroization included the following: better protected against counterfeiting than the respective local currency. 21% of Macedonian population has FCDs, ranking Macedonian population among the top FCD holders.

The ratios presented below are based on officially recorded remittances and such are likely to be biased downward for reasons discussed above.[11] In addition to underestimation bias, the recording of

[11] World *Factbook* published by the World Bank adds the following caveat to the data on remittances: "This table reports officially recorded remittances. The true size of

remittances in the official BOP is not without some conceptual problems. According to the IMF BOP Manual, remittances consist of three components: workers' remittances, compensation of employees, and migrant transfers.[12] The WDI figures do not include *migrant transfers which are likely to be very significant in case of the Republic of Macedonia as we will find later*.

With these caveat, we now turn to a discussion of the key macroeconomic ratios.

I.B.2.b Macroeconomic Ratios

Thus, according to the WB, remittances sent to Macedonia by permanent and/or temporary migrants living and/or working abroad are conservatively estimated to be 4.3% in 2006 (WB, 2008). Even these low estimates put Macedonia among the top 50 countries (out of 204) in the world in terms of the ratio of remittances to GDP. Figure 1b presents the flow of workers' remittances and compensation of employees as a % of GDP from 1996 through 2006. The figures appear to be too neat: from 1996 through 2006, remittances were 2% of GDP; starting 2003, they are consistently shown to have doubled to 4% of GDP. One conclusion is unmistakable, i.e., as a % of GDP, 'officially recorded' remittances have been showing a tendency to increase over time. This is in conformity with the pattern observed all over the world (WB, 2006; Ratha, 2005).

---

remittances, including unrecorded flows through formal and informal channels, is believed to be larger. Total flows may not always equal the sum of the components as they may have been taken from alternative sources" (WB, 2008).

[12] See Appendix I for details.

Figure 1b: *Worker's remittances and compensation of employees, received (% of GDP)*

Source: World Bank. WDI CD Rom.

Official figures do not always match each other. Thus, quoting the NBRM, the Economic Intelligence Unit reports "workers' remittances" (without compensation of employees) to be almost twice as high as the figures reported by the WB. These are depicted in Figure 2.

Figure 2: *Workers' Remittances/GDP*

Source: National Bank of the Republic of Macedonia, Bulletin; reported in EIU[13]

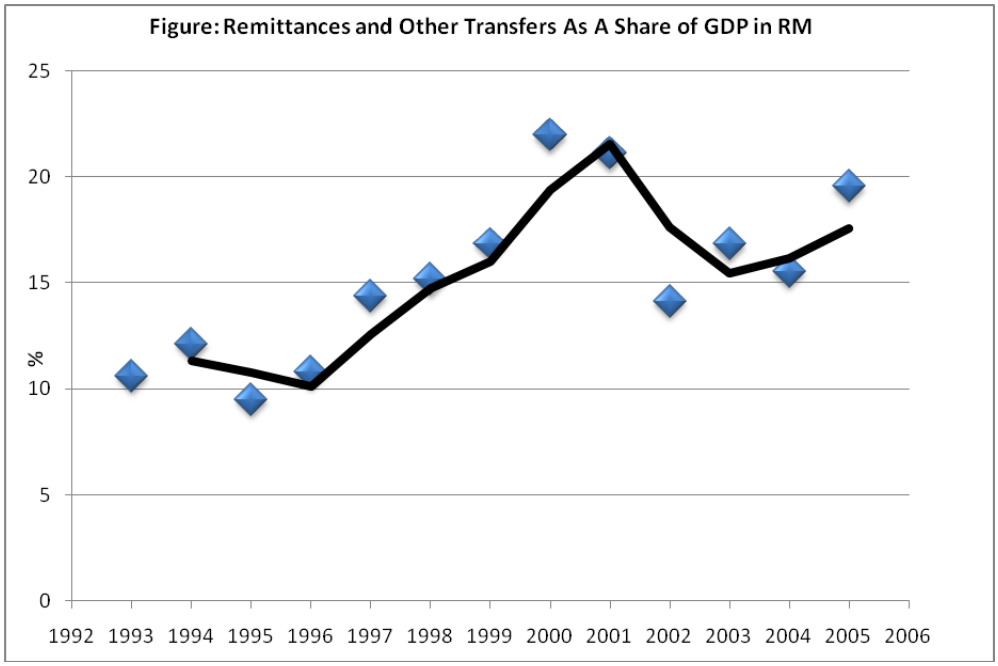
If private transfers and official aid are added to remittances, the ratio jumps significantly as shown in Figure 3 below. When increased by the cash exchange at exchange bureaus in the country (included in 'private transfers' of the Current Account in the BOP) the total amount calculated as workers' remittances and compensation of employees rises to 17.4% of GDP.[14] On average, private transfers have accounted for 11.4% of GDP in 2001-2004. The 2005 figures show a dramatic increase. This growth was among the highest in the region. Private transfers as reported in the official

[13]Available online at http://store.eiu.com/search.asp?action=filter&fName=pubtype&fValue=50000205&fDesc=Country%20Report

[14] The National Bank of the Republic of Macedonia (NBRM) gives the following explanation:" The private transfers consist of: remittances, cash exchanged and other transfers of which the most are compensations of employees. The source of data is the ITRS [International Transactions Reporting System as proposed in *BMP5* by IMF]. Cash exchanged on the exchange market in accordance with the BPM5 should be classified in the capital and financial account of the balance of payments. *However, regarding the fact that the largest part of these assets originates from the residents' receipts from non-residents on the basis of provided goods and services (unrecorded transactions) and transfers received in cash foreign currency, these transactions are recorded as a part of the balance of payments' current account (private transfers)*." [Notes on Methodology for the Foreign Exchange Sector Tables"]

BOP have been financing the negative trade balance, covering about 60% of the deficit in the balance of trade. As noted by IMF, this ratio is among the highest in the region - as compared with Serbia and Albania (around 14%), Bosnia and Herzegovina, Bulgaria (approximately 10%), and Croatia (4%) in 2005 (IMF, 2007). According to the International Monetary Fund, remittances in 2005 doubled since 2002. In 2006, the increased inflows of foreign assets in the form of private transfers reached 18.7% of GDP and financed 90.6% of the trade deficit of the Macedonian economy (Government of RM, 2007).[15]

Figure 3: *Remittances and other transfers as a share of GDP*



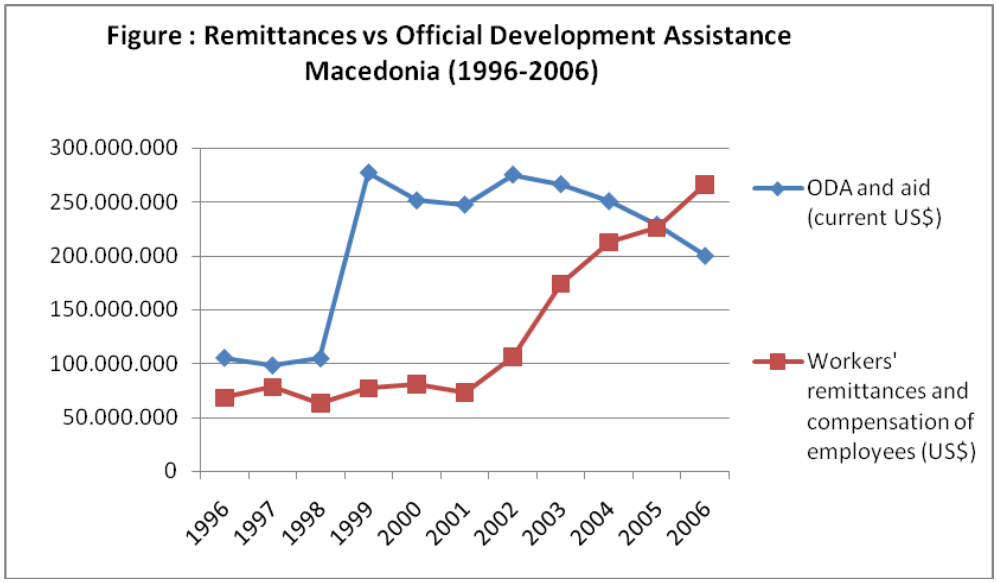
[15] The IMF has cast some doubts on the assumption that all cash exchanged at the bureaus is "migrants' transfers". Because cash exchange includes also some payments for informal trade and exchange of services, the real amount of migrants' transfers is expected to be somewhere between these two figures. Thus, IMF has made some adjustments in the figures assuming that "the migrant transfer component of cash exchanged in bureaus grew in line with "true" remittances (which are measured separately), total private transfers would be only 14 percent of GDP. The current account deficit in 2005 could then be as high as 4.4% of GDP instead of the 1.4 percent estimated" (IMF Country Report No. 06/188. May 2006).

Source: IMF, International Financial Statistics.

Note: Figures include current transfers, including workers' remittances, and foreign aid grants (US $).

Other important ratios include the ratio of remittances to FDI and to ODA. Figure 4a below depicts the ratio of official remittances to FDI and to official development assistance (ODA/OA). A ratio above 100% shows remittances exceeding other flows. Several points are worth noting here. First, the ratio of remittances to FDI is highly volatile, it mainly reflects the volatility in FDI rather than in remittances which have shown to be relatively stable compared with other sources of foreign capital (Schrooten 2006; Mughal, 2007). Second, as noted above, FDI in the Republic of Macedonia has been low by regional standards (Mughal, 2009; Zulfia, 2008). Third, while official development assistance and aid is less volatile, it is U-shaped. After 2001, it shows a tendency to grow. In 2006 official remittance flows exceeded ODA and DA. Figure 4b shows the magnitude of these inflows in more stark terms. The same has been true of remittances flows in relation to FDI: remittances flows exceeded FDI starting 2002 except for 2006. This pattern of remittances exceeding FDI and ODA has been confirmed for the developing countries as a whole and for most labor exporting economies (Ratha, 2005).

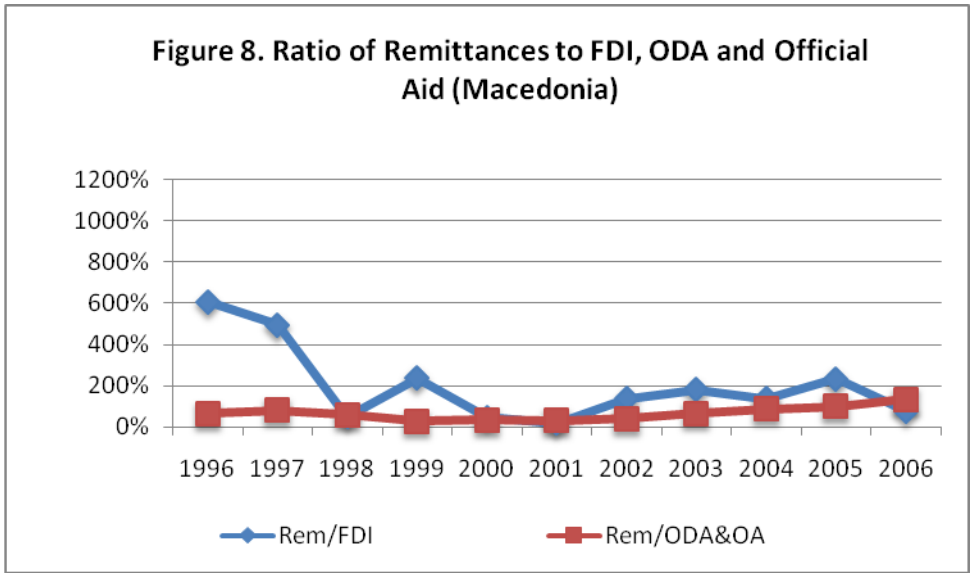
Figure 4a: *Remittances vs. Official Development Assistance Macedonia (1996-2006)*



Source: WDI CD ROM

The ratio of gross remittances to FDI highlights another important contribution of remittances to the economy as a source of external financing - 517.70% for the 2004 in Macedonia. (ECB - Monthly Bulletin, February 2007).

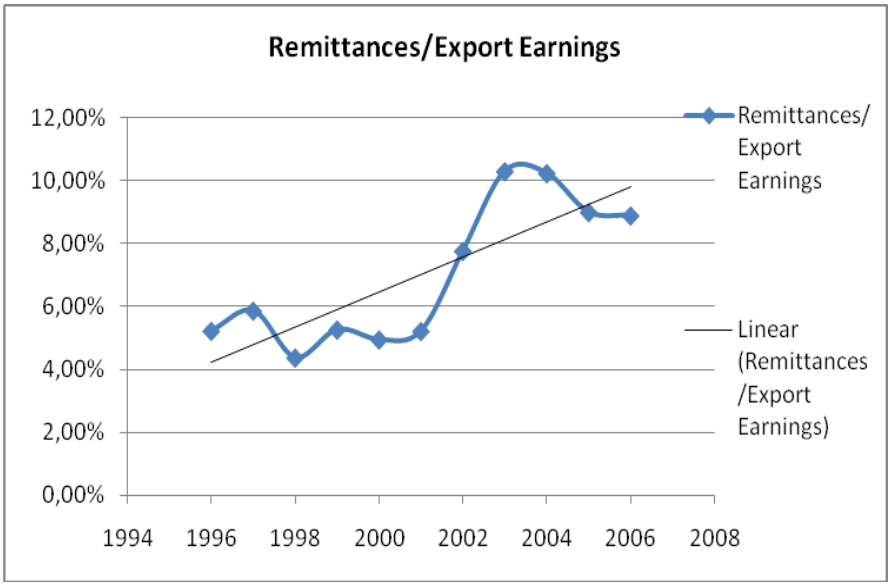
Figure 4b: *Ratio of Remittances to FDI, ODA and Official Aid (Macedonia)*



Source: WDI CD ROM

Figure 5 shows the ratio of remittances to export earnings from 1996 through 2006. While there was a slight drop in the ratio in 2005 and 2006, the upward trend is unmistakably present.

Figure 5: *Remittances /Export Earning*



Source: WDI CD ROM

These flows are highly significant in financing external imbalances. As noted above, remittances financed 90.6% of the trade deficit of the Macedonian economy in 2006.

I.C.The Nexus between Migration and Development and the Justification of the study

There is a consensus in the literature that remittances and periodic transfers of in-kind assets make a significant difference in the standard of living of the remittance receiving households (Ratha, 2005; WB, 2006).

While the beneficent effects of remittances on the migrants and migrants sending households are undeniable, it is legitimate to ask whether these beneficent effects are replicable for larger social groups, such as the community and the economy a whole. In other words, can remittances catalyze development at the local, regional, and national levels? Remittances have both macroeconomic and microeconomic consequences. The macroeconomic ratios presented about underscore the enormous significance that remittances may have for a labor exporting economy. Migration and remittances have enormous implication for the development

prospect of a small landlocked economy such as Macedonia.[16] The Diaspora's economic input (through remittances as well as FDI) can enhance the growth potential of the country.[17]

While the macroeconomic implications of remittances are huge, they are beyond the scope of this report. The microeconomic implications of remittances for individuals and families are equally if not more important.

The prospect of accession to Europe adds another important dimension to the significance of remittances. In 2005, Macedonia became a candidate for EU membership. As such, Macedonia's approach to emigration, transit migration, trafficking, asylum, and ultimately immigration are issues on which European political attention will focus in the near future. With accession, the migration regime will change and will have enormous implications for the mobility of the population and the associated flows of remittances.

Despite the enormous significance of remittances for the economy at both the macro and the micro levels, there is little institutional recognition of the significance of this phenomenon in the Republic of Macedonia.[18] Although as compared with trade, investment, and aid, migration is, in general, one of the least-studied aspects of global flows all over the world, Macedonia is in a different league in terms of the neglect of the subject and lags far behind its neighbor to the west, Albania. Economic

---

[16] For a discussion of the structural constraints faced by small landlocked economies and the significance thereof for migration, see Mughal (2007); for a discussion of how landlockedness can hamper the growth prospects of a small economy, see Raballand (2006).

[17] There are some signs of change in the acknowledgement by the Macedonian authorities of the significance of Diaspora. The governing coalition, elected in Macedonia in 2006, put four members of the Diaspora in key cabinet positions aiming to stimulate foreign direct investment. (Source: *www.migrationinformation.org*). A government agency has been created to leverage the Macedonian Diaspora for development. Recently it has started to produce its own promotional materials, focusing on DVDs aimed at children and the potential investment community. The government, seeking foreign investment and targeting the Diaspora as potential investors, has asked the agency to survey regions and cities in Macedonia with industries and products that could be attractive to investors or for export.

[18] The macroeconomic effect of these individual transactions is nothing short of a mini geographical discovery in the annals of macroeconomics albeit the recognition has been slow (Mughal, 2007).

consequences of migrations and remittances in Macedonia are hardly recognized. Reliable data on remittances are the key to understanding the impact of development, yet little effort has been made to collect data on the magnitude of migration and remittances in the country. Informal remittances are large and indeterminate. But even recorded data are also incomplete. No wonder there have been only a couple of serious studies of this important phenomenon. Hence, the justification for the present study.

Objectives of the Present Study

The main objective of the paper is to examine the impact of migration on the standards of living in the Republic of Macedonia drawing upon the latest Quality of Life Survey (MQLS08).

A second objective is to identify areas where social intervention could be potentially useful.

A third objective is to compare the patterns of migration and remittances by region and ethnicity; in particular, between two main ethnic groups, i.e., Albanians and Macedonians and to interpret the ethnic and regional differences in the pattern of migration.

A fourth and final objective is to identify promising areas of further research in the field of migration and remittances and the impact thereof on the Macedonian economy and society.[19]

Organization

The introductory part above provides an overview of migration and remittances in Macedonia based mainly upon the official data. This is followed by a discussion of the significance of migration and remittances for the Macedonian economy. The rest of the paper is structured as follows. The next section presents a review of the literature on the determinants and microeconomic consequences of remittances. This is followed by a discussion of the methodological framework, including the Quality of Life Survey and its design and sampling strategy. The next section presents the findings from the survey. The following section discusses the results and draws policy conclusions. The final section suggests areas of further

[19] The possible negative effect of migration and remittances arising from migrants' absence from home and their engagement in other income generating activities in the home country are beyond the scope of the study.

research in the field of migration and remittances and the impact thereof on the economy and society.

Chapter II
Determinants and Consequences of Remittances
A Brief Review of the Literature

II. A. Determinants of Remittances

There has been a large body of theoretical and empirical literature in relation to the subject, offering both micro, as well as, macro perspectives on the phenomenon of migration and remittances. A brief review of the literature on the microeconomic consequences of migration, remittances, and development follows.

As Massey et al. (1998, p. 17) rightly observe, at present, there is no single theory widely accepted by social scientists to account for the emergence and persistence of international migration. Economic migration involves two distinct decisions: migrants must choose to leave their country of origin and they must 'choose' their country of destination, with the word 'choice' does not preclude consideration of push factors beyond the control of individuals that may induce migration in the first place.

While our knowledge of the push factors is well developed (Hatton & Williamson 1994, 1998), we do not have a dominant theory of why migrants are attracted to a specific country. What explains the pull to a particular country?

As in Hooghe et al (2006), we can distinguish at least three possible approaches to explaining the pull factors determining a country's attractiveness for migrants.

Standard classical and neoclassical theories (Lewis, 1954; Fei-Ranis, 1964; Todaro 1976) maintain that migrants react to employment and capital investment opportunities (e.g., surplus/shortages in the labor market, poverty), thus providing for an equilibrium in labor markets, both in their country of origin and in the country of destination. This involves both a micro decision in terms of cost-benefit analysis and macro supply and demand effect leading to the establishment of equilibrium on the labor market, reached by the aggregate effect of individual decisions to migrate to another country. Push and pull factors, i.e. factors in place of origin (e.g. poverty, unemployment) push people into places with attractive features (pull factors), e.g. high living standard or job opportunities.

These theories typically imply that people migrate from low income to high income economies, or from regions experiencing economic

downturn to regions experiencing economic boom (Borjas: 1989, 1995). The standard neoclassical theory focuses on maximization of income and skills development by individuals. Unlike the neoclassical economic theory, NELM or the New Economic Theory of Labor Migration (Stark, 1981) maintains that individual migration is the result of household decision-making.

Emigration contributes to diversification of income sources of the household and provides insurance against idiosyncratic and macro risk.

The old and new economic approaches run afoul of the empirical finding that migrants do not typically originate from the poorest countries, as individual cost-benefit approaches would have it, but rather from regions undergoing rapid social and economic upheavals (Castles & Miller 1994: 22).

Dual labor market theory (Piore, 1979) maintains that only macro level factors, i.e., structural labor needs of modern economies in destination countries determine migration.

Here the focus is on pull factors in destination areas, i.e. structural shortage of labor at bottom-end, occupational hierarchy/low status/low income jobs. Wage-level differences reflect social stratification in countries of destination where people seek upward mobility away from bottom-end jobs.

This approach is criticized for its neglect of individual and household level motives and decision making processes.

Like the Dual labor market theory, World Systems Theory (Wallerstein, 1974, Massey, 1989) Macro level factors only: main determinant of emigration is economic and political globalization. It focuses on macro-economic global processes, e.g. market penetration of multinationals from rich countries into poor countries affecting local norms, values, desires, aspirations inducing emigration. Globalization brings about social upheavals and alters traditional employer/labor relations and introduces modern technology pushing unskilled laborers out of jobs. Within the world system framework, cultural and hegemony theory maintains that migration patterns are determined by center/periphery relations in the world system. Migrants typically move from the periphery to the center with the latter characterized by linguistic dominance or cultural hegemony.

Like the Dual labor market approach, this approach is criticized for its neglect of micro level individual and household decision making.

A third, social capital or social network approach maintains that migrants are attracted by the fact that other migrants from the same ethnic

group are present in the countries of destination, thus allowing for the networks externalities that facilitate migration (Massey et al. 1993, 1998).

This approach explains *the persistence* of migration par excellence rather than its emergence in the first place.

II.B. Microeconomic Consequences of Migration and Remittances

Impact of migration and remittances on the Migrants and Remittance Receiving Families

The literature on the benefits of migration and remittances generally agrees that the bulk of the economic gains from migration accrue to migrants and their families, and these gains are often large. Since wage levels (adjusted for purchasing power) in high-income countries are approximately five times those of low-income countries for similar occupations, migrants can earn salaries that reflect economically advanced host-country prices, return, and spend the money in economically lagging home countries, where the prices of non-traded goods and services are much lower. (World Bank, ibid. p. xi). [20]

Remittances directly increase the income of the recipient and can help smooth household consumption, especially in response to adverse shocks, such as crop failure, death of a family member, or a health crisis. Indeed, the New Economic Theory of Labor Migration (NELM) maintains that migration and remittances allow households to overcome two major obstacles they face: the credit constraint and lack of insurance to hedge against unforeseen adverse shocks. They reduce what is called 'idiosyncratic risk', i.e., risk that is confined to the recipient household.

However, the literature also recognizes that earnings of migrants in the host country may grossly overestimate the benefits to migrants. Regardless of the magnitude of the gain, migration is not without costs. For one thing, in so far as migrants are gainfully employed prior to migration, the output of the sector of employment will be lower - this, of course, assumes that the marginal product of migrants in the sector prior to migration was greater than zero. Nor is the cost only monetary (costs of transportation and foregone earnings) migrants incur substantial psychological costs in being separated from their loved ones: immigrants

[20] Non-traded goods are goods that are not traded, either because they cannot be by nature or because trade barriers are too high - services such as haircutting and law are examples of non-traded goods.

(particularly undocumented or irregular immigrants) are subject to exploitation, loss of status, and abuse.

Given the existing knowledge of migration and remittance flows into the Republic of Macedonia, we expect the psychic costs of separation to be limited because of the proximity of the main countries of contemporary migration. We also expect the incidence of illegal migration to be very limited given the fact that Republic of Macedonia is already a candidate for the European Union and the visa regime is less strict than it is for the non-European developing countries. Given the high unemployment rate in the country discussed above, the opportunity cost for the economy in terms of lost output is likely to be limited.

Reduction in Poverty, Improved Liquidity, and Insurance

While the impact of remittances on overall growth in the sending countries remains debatable, there is a near consensus in the literature that remittances do play an important role in reducing the incidence and severity of poverty without worsening income inequality (Adams, 2004, 2005, 2008; Taylor, 2005).

Low-skilled migration is particularly conducive to poverty alleviation. Migration of low-skilled workers is usually beneficial because of their low marginal productivity and higher probability of being unemployed, ceteris paribus. Thus, it has been argued, both theoretically and empirically, that low-skilled migration can improve labor market conditions for other poor workers who stay behind. Given the high and persistent unemployment in the Republic, we would expect migration to relieve unemployment pressure in the Republic of Macedonia and contribute directly to the reduction of poverty in so far as there is high correlation between unemployment and poverty. Given the high unemployment rate in the economy, reduced supply of skilled and unskilled workers is likely to not only relieve unemployment pressure in the economy, but is also expected to increase the wage rate for the remaining body of workers.

There is another channel through which remittances are expected to reduce poverty. In the literature, remittances appear to be associated with increased household investments in education and health—the benefits of the latter go beyond the individuals and accrue to the community as a whole.[21] Even when remittances are spent on consumption goods, the fact

[21] There is considerable evidence in the literature on the spillover benefits to the

that money is fungible implies that funds earmarked for consumption prior to the receipt of remittances could be spent on merit goods such as education and health whose social return is greater than the private return. Thus, we would expect to see increased expenditure on health and education in the Republic of Macedonia by the recipients of remittances to indirectly contribute to further reduction in poverty.

While the poverty reducing effect of remittances is robust, the magnitude of this effect may depend on the proportion of remittances that are allocated to productive investment. Remittances allocated to investment are expected to reduce poverty in the long run, resulting in lower vulnerability at the both household as well as the community level and possibly in lower inter-household inequality; remittances allocated to consumption tend to have a greater effect on short term poverty and could possibly increase inter-household inequality (Chimhowu et al, p. 89). However, the argument by Chimhowu et al needs to be qualified as expenditure on health, education, and other forms of human capital tend to have long run benefits. In the literature, remittances appear to be associated with increased household investments in education and health—the benefits of which go beyond the individuals and accrue to the community as a whole.[22]

Do Remittances Lead to the Moral Hazard of Increased Dependency?

Remittances could be a double-edged sword. On the one hand, remittances increase the purchasing power of the recipient and may lead him/her to work less and enjoy more leisure. This is what is called the income effect and there is nothing undesirable about it as increased leisure improves the welfare of the recipient because leisure is a normal good. On the other hand, remittances may also lower the opportunity cost of leisure (non-work) resulting in reduced supply of work. (Chami, Fullenkamp, and Jajah 2003; 2005) show that remittances may have a dampening effect on the supply of labor on the part of remittances receiving household members. This is the moral hazard involved in having the benefit of remittances – they provide insurance against starvation for non-work and create a perverse incentive to withdraw from the labor market or reduce

---

community from having an educated population. A classic reference here is (Lucas, 1988).

[22]There is considerable evidence in the literature on the spillover benefits to the community from having an educated population. A classic reference here is (Lucas, 1989).

hours of supply of work. However, reduced supply of effort by some individuals need not translate into lower unemployment in the economy with extremely high rates of unemployment as firms can always find workers willing to fill any vacancies that arise from withdrawal of labor by some members of the labor force. Again, reduced labor supply does not necessarily mean lower welfare in so far as leisure is a normal good. Consumption of leisure does improve the welfare of the recipient.

Do Remittances Worsen Income Distribution?

Do Remittances Have A Matthew Effect?[23] Frequently, the windfall income associated with natural resources is concentrated in the hands of a small regional or social group and gives rise to a great deal of rent seeking and corruption. Economic literature abounds in cases of rent seeking that attends upon natural resource abundance.

However, a key distinguishing feature of remittances, as a macroeconomic windfall is, that they are, in general, not concentrated in the hands of a small group, nor are they confined to a small region of a country: remittances tend to be distributed across social classes in so far as migrants come from a broad strata of society.

While there is a strong theoretical and empirical case in favor of the equalizing effect of remittances, some studies argue that in so far as remittances are spent to finance purchase of real estate and urban enterprises, they increase rural urban inequality. This case is very weak and may have been due to distortions in the economy that diverted investment away from the rural areas (Ratha, 2005, p. 33). Koechlin Valerie & Gianmarco León (2006) provide empirical evidence in support of existing theoretical framework that incorporates network effects, describing how, in the first stages of migration history, there is an inequality-increasing effect of remittances on income inequality, as mentioned above. Then, as the opportunity cost of migrating is lowered due to network effects, remittances tend to reduce inequality. They also show how education and the development of the financial sector can help countries reach the lower inequality section of the curve more quickly. Their findings are robust to

[23] Matthew effect refers to the worsening income inequality in the economy with increased per capita income. *To the ones who have, will be given; from those that do not have, will be taken away! (Matthew)*

several empirical specifications, as well as for a wide variety of inequality measures. As far as the Republic of Macedonia is concerned, it is indeed the case that migrants come from all walks of society and from all oblasts/regions of the country. Even within oblasts, they appear to be more evenly spread. Thus, at least on the surface, we do not expect remittances to be associated with the so-called Matthew Effect; nay we expect remittances to have an equalizing effect on income distribution.

Chapter III
Data and Methodology

Both primary and secondary sources of information are used in this study. However, the report is mainly based on the Quality of Life Survey (henceforth, MQLS08) done in July-August, 2008 as part of the UNDP/SEEU People Centered Analysis Report (UNDP-SEEU, 2009). Secondary information was obtained from the official yearly reports of State Statistical Office about migration, from the Central Bank's published data on the balance of payments, IMF international financial statistics (IFS), World Development Indicators CD, and economics intelligence unit (EUI), and from other reports and publications treating the issue under consideration.[24]

Household Survey on Quality of Life in Macedonia

The Quality of Life Survey (MQLS08) included questions on 9 particular aspects bearing directly or indirectly on the quality of life in Macedonia:

1. demography and housing conditions
2. employment,
3. social exclusion (inclusion),
4. ethnic relationships,
5. education,
6. health services,
7. local governance,
8. income and expenditure.
9. migration and remittances

A local research agency, Marten Board Macedonia (MBM), carried out the fieldwork. The survey was based on a nationally and regionally representative samples, which allows for analysis and comparison across all regions - NUTS 8 – namely, Skopje, Northeast, Northwest, Vardar, Southeast, Southwest, Polog and Pelagonia regions. [25] In the absence of a

[24]CEA Macedonia, IOM, IFAD

[25] In accordance with the EU's NUTS 8 regions and definition of regions by the State Statistical Office; NUTS stands for Nomenclature of Territorial Units for Statistics. It is a geocode standard for referencing the administrative divisions of countries for statistical purposes. The standard was developed by the European Union, and thus only covers the member states of the EU in detail.

sampling frame, a *random route sampling methodology* was adopted. The method involved selecting in urban areas every fifth house from the assigned side of the street in a municipality starting from a central reference point (the next house being used as a substitute in case of refusal or non-occupancy). In rural areas, the selection of the households was performed on both sides of the main village street.

The survey was based on a two stage stratified sample in each region. At first stage, about 42 Municipalities were selected, stratified by region and type of municipality (3 largest municipalities in each region combined with one or two smaller municipalities in each region) representing 50% of the total number of municipalities in the country. Households were second stage sampling units. In the absence of a sampling frame, a *random route sampling methodology* was adopted. The method involved selecting in urban areas every fifth house from the assigned side of the street in a municipality starting from a central reference point (the next house being used as a substitute in case of refusal or non-occupancy).

There are eight statistical regions in Republic of Macedonia. The number of respondents in each region was proportionately distributed in accordance with the share of the region in the total population of 18+ in Macedonia as estimated by the national census of 2002. In some cases where the municipality was significantly small oversampling was allowed in order to reduce potential sampling error (the limit being at least 15 respondents per municipality). In cases when two or more municipalities contain similar number of inhabitants, both were included in the sample (as it was the case in the East and Southeast regions) using the same methodology described above.

The primary selection criteria to obtain representative sample at the regional level was to pick the top 3 most inhabited municipalities in the region representing a broad cross section of the population. This criterion was applied taking into account the specific nature of the geo-demographic structure in Macedonia, namely:

1. **Wide coverage:** According to the latest municipal division in Macedonia the top 3 most inhabited municipalities contain on average 70.5% of the total 18+ population in the region (excluding Skopje region).
2. **Heterogeneity:** Urban areas were oversampled because of the greater degree of heterogeneity of the urban population relative to the rural population.

The survey was conducted at the household level and information was collected for each individual within the household from one adult respondent who was picked based on the criterion of nearest birthday to the interview day. A subset of interviews was back-checked by telephones to ensure quality of responses.

The sample was divided into two components: regular and booster samples. The idea of the Booster needs elaboration. The participation in the booster was determined by the criteria for social exclusion of the adult population, such as low educational level, low literacy level, high unemployment rate, and low level of average GDP per capita in the municipality. The municipalities that were included in the booster were in addition to the three largest municipalities in each region. The booster was selected from communities of deep and concentrated social exclusion (vulnerable populations). These were selected either on the basis of indicators of multiple deprivation, if available, or on the basis of selection of one or two irregular settlements in each region, where known.

The regular sample consisted of 2,700 households and the booster included 300 households predefined at 10% of the total sample. Distribution of the sample by region is given in Table 3 below. Out of the 3000 questionnaires completed, 203 were rejected by MBM as 'unusable', leaving an actual sample of 2,797 households. The overall sample represented 0.5% of the total population of the country (Table 3). Distribution of the sample by location was as follows: Urban: 58%; Rural: 14.6%; Skopje (urban): 27.4%. Urban areas were oversampled because of the diversity and heterogeneity of the urban population and the ethnic composition of the country as well: Sampling weights were constructed to adjust for oversampling of urban areas.

Table 3: *Summary of Survey Sample by Location*

Summary of Survey Sample by Location				
	Total Population	**Sample Size N**	**Share in total sample %**	**Sampling fraction %**
Country	2,022,547	10,029	100%	0.5%
Skopje	506,926	2,615	26.09%	0.52%
Other urban areas	700,535	5,827	58.10%	0.83%
All rural areas	815,086	1,587	15.82%	0.19%

While the sample was not representative at the rural urban settlement level, it was representative at the region level as shown in Table 4 below.

Table 4: *Distribution of the Population and Sample by Region*

Region	Total Population	% Share of Population	Sample Size	% Share of Sample
Skopje region	578,144	28.58	767	27.42
Vardar region	133,180	6.58	231	8.26
Northeastern region	172,787	8.54	170	6.08
Polog region	305,930	15.13	396	14.16
Pelagonia region	238,136	11.77	359	12.84
Eastern region	203,213	10.05	273	9.76
Southwestern region	219,741	10.86	343	12.26
Southeastern region	171,416	8.48	258	9.22
Republic of Macedonia	2,022,547	100	2,797	100
Source: Census 2002; MQLS 2008				

Two caveats are in order here. First, we suspect the data from this survey to contain high degree of selection bias and measurement error. The survey results were affected by an unusually high non-response rate. The non-response rate for Macedonian was 67% and for the Albanian community it was 81.5%. We suspect that the non-respondents are systematically different from the respondents for the following reasons: people with high opportunity cost are more likely to have not participated in the survey or refused to answer sensitive questions such as questions about income.

Second, data on migration and remittances is particularly suspect for the following reason. The migration and remittances module was not a part of the original survey questionnaire (MQLS08). We piggybacked the migration and remittances module on MQLS08. Only a limited number of questions were allowed. Given the limited amount of time available for the survey, no pilot testing was done by the survey agency. The principal author was involved in the designing of the migration and remittance module. Some questions were household level questions; many questions designed by the principal author were meant to be directed at individual migrants but

were not implemented as designed. This led to the following features of the data on migration and remittances:

i. All data on remittances and migration was collected at the household level. There are no data on individual migrants. This limits the scope of the analysis as questions related to occupation and earnings, number of months abroad, intentions to migrate can only be addressed at the individual level.

ii. No data was collected on the *number* of migrants in each household with migrant(s). This makes it difficult to calculate per capita remittances as it is impossible to attribute remittances figures collected to individual migrants.

iii. We had to make an assumption that each household with migrant(s) has only one migrant member. This assumption is wrong, but we have no other alternative. It is possible for us to identify the direction of bias in the results and we have reported such bias in the results below.

Chapter IV
Empirical Results

IV.A.Profile of Sample Households by Migration and Remittance Receiving Status

Table 5 presents the main socio-demographic characteristics of the households in comparative perspective. The mean household size in the country is 3.58. Male and females were equally represented in the sample. The following points are worth noting. First, households with migrant members tend to be smaller, have fewer children under the age of 6 and fewer adults over the age of 65, have more household members between the ages of 25 and 44, and are more negatively and positively selected in terms of educational attainment of household members 30 and above. They are also more likely to have married members and less likely to have divorced or separated members. Also, the migrant to population ratio in the Albanian community is much higher than the migrant to population ratio in the Macedonian community. Figure 6 shows the distribution of the sample by ethnic origin of the household. While only 26.76% of the households are of Albanian origin, 41% of all households with migrants happen to be of Albanian origin.

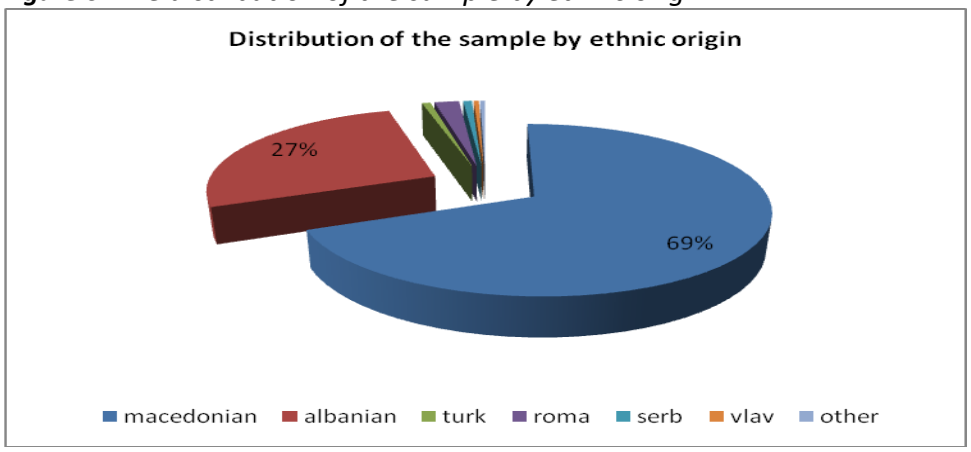
Table 5: *Socio-Demographic characteristics of sample household members*

Base: All household members in the sample unless otherwise specified				
	N	**Share in total sample %**	**Share in Migrant Households**	**Share in non-Migrant Households**
Gender composition				
Male	5003	51	52.91	50.92
Female	4988	48.8	46.96	48.72
Household Size	2797	4.17	4.04	4.18
Age composition				
Younger than 6 years	537	6.28	3.98	6.39
6-14 years old	933	10.15	14.7	9.96
15-24 years old	1884	17.61	15.2	17.69
25-34 years old	1754	17.55	20.46	17.43
35-44 years old	1425	13.63	15.85	13.53
45-54 years old	1729	15.75	14.55	15.79

55-64 years old	1132	12.75	10.51	12.85
65 years or older	642	6.29	4.75	6.36
Educational Attainment of Population over 30				
Up to primary	1180	24.76	20.73	24.96
Above primary up to Secondary	2833	53.37	51.99	53.37
Above secondary up to PhD	1335	21.87	27.28	21.67
Marital Status of Population 15 and Older				
Never married and not living with partner	2550	30.2	29.38	30.23
Widowed and not living with partner	429	4.36	2.52	3.06
Separated or divorced and not living with partner	157	3.05	2.42	4.45
Married or living with partner	5396	61.99	65.41	61.85
Ethnicity				
Macedonian	7068	68.91	55.71	69.46
Albanian	2463	26.76	40.69	26.16
Turk	91	0.7	0.94	0.7
Roma	223	2.06	0.67	2.13
Serb	84	0.73	0.44	0.74
Vlav	54	0.43	0.89	0.41
Other	46	0.41	0.67	0.4

Notes: *The household member was defined loosely as those "eating from the same pot". All the estimates have been carried out on the weighted sample.*

Figure 6: *The distribution of the sample by ethnic origin*



What percentage of households has migrants and what percentage receives remittances?

Households with members who Lived / Worked abroad at any time since January 2004 constitute 4.12% of all households in the Republic. Households reported receiving remittances in the last 6 months constitute about 7% of all households in the country. This is shown in Figure 7a & 7b.

Figure 7a: *Share of households with migrants in Republic of Macedonia*

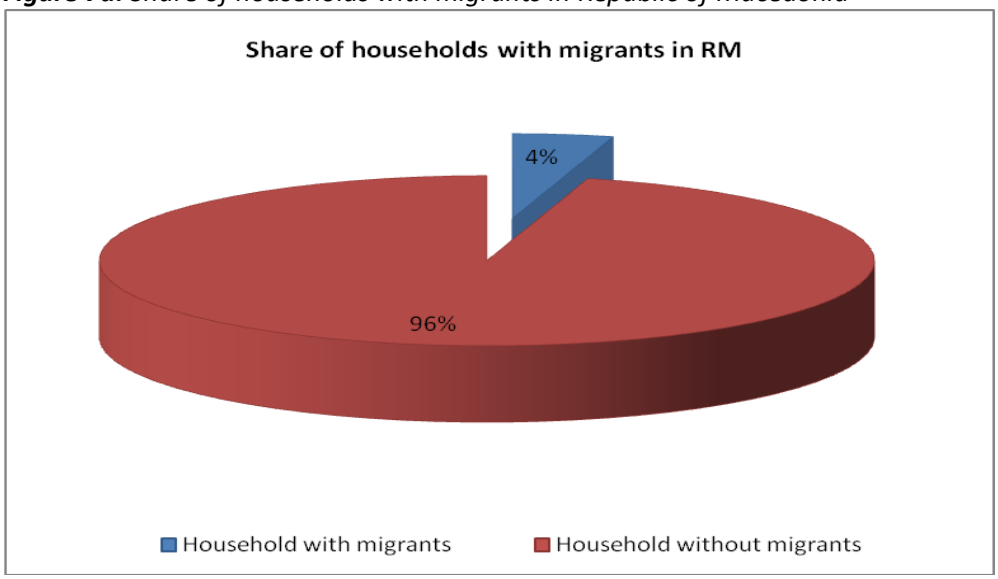
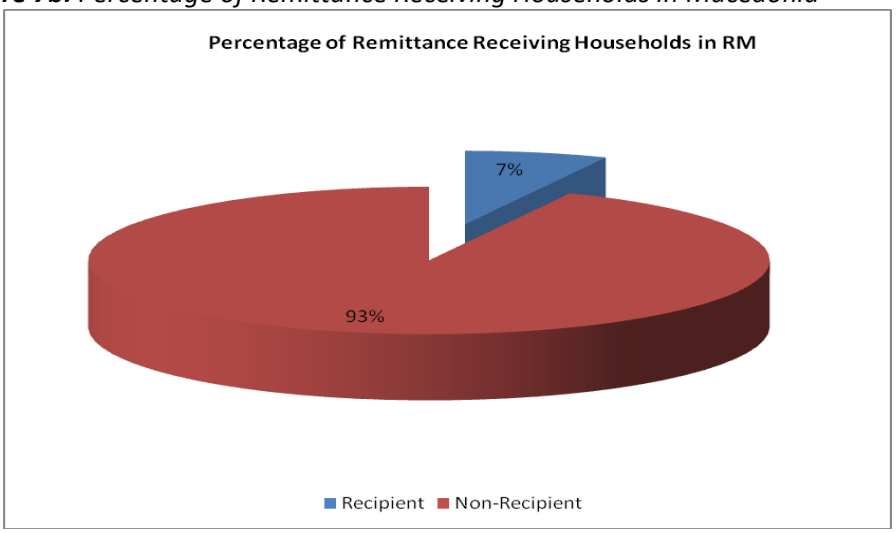


Figure 7b: *Percentage of Remittance Receiving Households in Macedonia*



As shown in the Figure, paradoxically, the number of remittance receiving households is smaller than the number of households with migrants. While the proportion of households with migrants (with any household member migrating since January 2004) is slightly over 4%, 7% of the households reported receiving remittances in the last 6 months. Why is the number of remittance receiving households in Macedonia higher than the households with migrants? In general, scholars have noted that the number of households that receive remittances is smaller than the number of households with migrant household members (Ruggiero, 2003; Mughal, 2007). The study of Tajik migrants by the primary author shows that the proportion of households that receive remittances is smaller than the proportion of households with migrant members mainly because only two thirds of the migrants send remittances. The lack of correspondence between the household with migrant(s) and the remittance receiving households is due to several factors. First, not all migrants send money or do all remittance receiving households have migrant members working abroad. In fact, only 22% of the households reporting receiving remittances have migrant members. Second, not all households who need income support have adult members to spare to supplement household income. Thus, the bulk of remittance receiving households reported having no migrant members in the household since Jan 2004. This is in sharp contrast with the pattern observed in the Republic of Macedonia and underscores an imp difference between the nature of migration from Macedonia and other developing and transition countries in the Former Soviet Union. Unlike the sending countries in the CIS-Russia corridor, we find a much lower incidence of temporary migration from Macedonia (Straubhar, 1993).

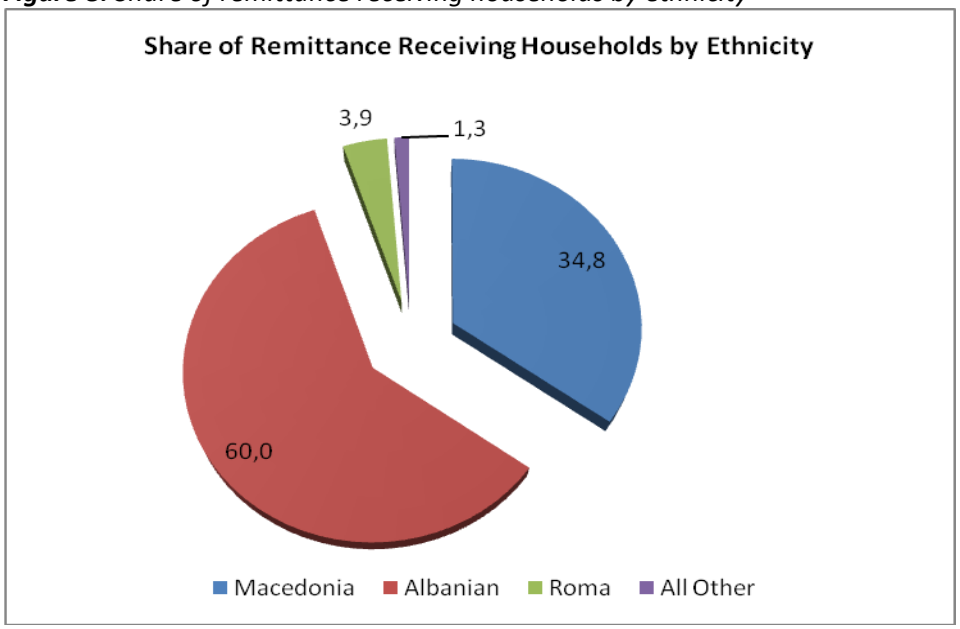
Table 6 below provides the share of households with migrant household members in the total number of households in the country as a whole, various localities within the country, and by income quintiles. The survey results show that 4.3% of the households in Macedonia had at least one migrant member over the last three and a half years (beginning January 1, 2004) preceding the survey. The percentage of such households in rural and urban areas other than the capital city of Skopje is substantially higher than in the capital (7% in rural areas as opposed to less than 1,5% in Skopje). This is in accordance with our a priori expectations as people living in the capital city enjoy better and numerous job opportunities, not the least in the public sector, ceteris paribus.

Table 6: *Households with migrant household members*

Households with migrant household members (in % of the total number of sample households in country/locality/quintile)	
	Households with at least one migrant household member
Whole Country	115 (4.05%)
Skopje	11 (1.44%)
Other urban areas	75 (4.64%)
Rural areas	29 (7.09%)
Poorest Quintile	27 (4.77%)
Lower Middle Quintile	18 (3.26%)
Middle Quintile	19 (3.53%)
Upper Middle Quintile	19 (3.15%)
Richest Quintile	32 (6.05%)
	Note: the first number reports the number of cases

Figure 8 shows the share of remittance receiving households by ethnicity. The share of households of Albanian origin is 34.8% and that of Macedonian origin 60%. The rest are accounted for by other minorities.

Figure 8: *Share of remittance receiving households by ethnicity*



Appendix I table presents a variety of patterns of migration and remittances into the Republic of Macedonia.

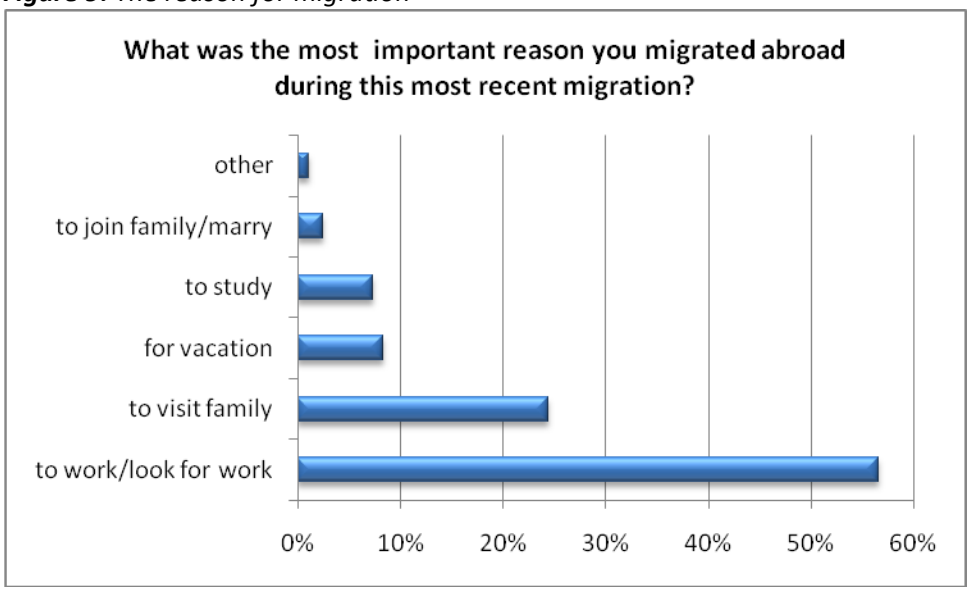
Migration Pressure

Intention to migrate in future by household members could serve as a proxy for what is called migration pressure. Migration pressure is caused by "an excess supply of migration-willing people relative to migration demand in immigration countries" (Straubhar, 1993). When asked whether you are planning to migrate within the 12 months, about 6% of the households said yes; but another 17% said 'maybe'. Altogether respondents in 22% of the households expressed the intention to migrate in the next 12 months. This is more than 5 times the number currently prevailing. While the percentage of households with migrants is small, there is considerable evidence in the survey in favor of migration pressure.

Motives for Migration

The most important motive for migration for those who migrated during the most recent migration episode was to work or look for work (57%). Thus, as expected, labor migration is the dominant feature of migration in Macedonia. *Visiting family members* was cited to be the second most important motive for migration. What is significant is that about 7% respondents reported vacation as the primary reason to go abroad. An almost equal number goes for stud. Figure 9 depicts the responses on motives.

Figure 9: *The reason for migration*



Major Destination Countries

Figure 10 shows that 42.5% of the respondents didn't specify the country where household members had migrated. For those who did report, the biggest percentage migrated to Switzerland (19%) and Italy (19%). These results need to be interpreted with caution given the high percentage of non-response as the non-respondents may be systematically different from the respondents.

Figure 10: *Major destination countries*

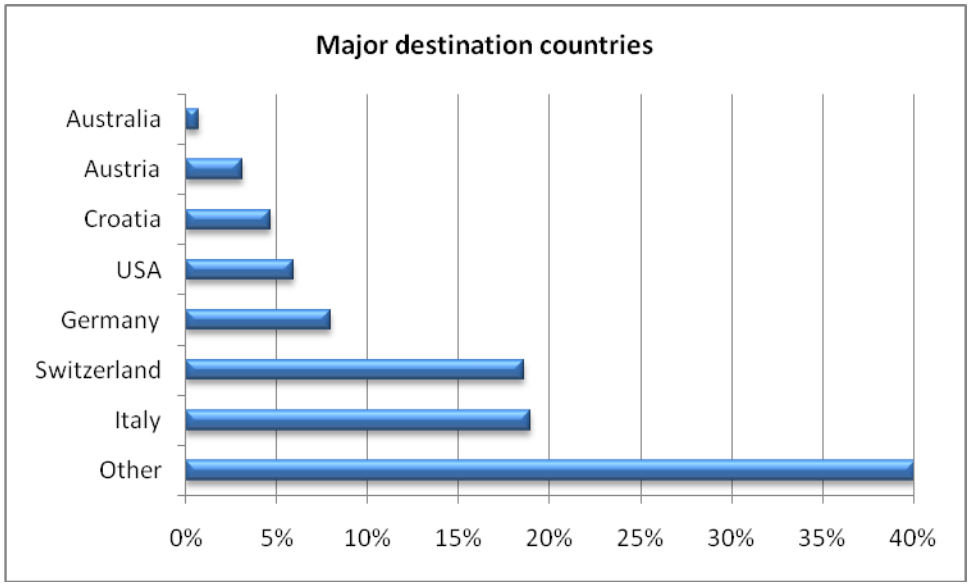


Table 7 below reports the choice of destination by ethnicity. Macedonians show preference for Italy (19.43%), which is equally preferred by Albanian. However, the country of choice for the Albanian appears to be Switzerland – almost 3 out of 10 Albanians migrated to Switzerland, followed by Italy. Only people of Macedonian ethnicity reported to have migrated to Australia (1.24%). As discussed in chapter 2, the theory of network migration explains why migrants from a particular region/ethnicity tend to concentrate in certain areas. The main reason has to do with the reduction in transaction costs and network externalities: search for job, accommodation, and overcoming of the language barrier are all made easier when a critical threshold of migrants of a particular ethnicity is present in the country of destination. A very small percentage of migrants of Albanian origin migrate to the US relative to the migrants from the Macedonian community. Almost half of the migrants of Macedonian origin reported migrating to a number of other countries. The comparable percentage for Albanian is about 23%.

Table 7: *Countries of Destination by Ethnicity*

Countries of Destination by Ethnicity									
	Switzerland	Germany	Austria	Italy	USA	Croatia	Australia	Others	Total
Macedonian	11.54	7.77	1.51	19.43	8.05	1.24	1.24	49.21	100

Albanian	29.63	8.9	5.44	20.09	3.68	9.6	0	22.66	100

Duration of Stay Abroad

The mean value of the duration of the migration in months during the last migration episode for Macedonians is about 7 months, for Albanians is about 5 months. The difference is significant at the 10% level. Part of the explanation lies in the differential pattern of destination exhibited by the two communities. A higher proportion of Macedonian migrants head to more distant regions: Australia and North America.

Table 8: *Duration of Stay the most recent Migration Episode*

Duration of Stay the most recent Migration Episode							
	N	**Weight**	**Mean**	**Median**	**Std. Dev**	**Min**	**Max**
Macedonian	67	41269	7.0	4.0	8.2177	1	40
Albanian	31	32076	4.8	3.0	6.0338	1	24

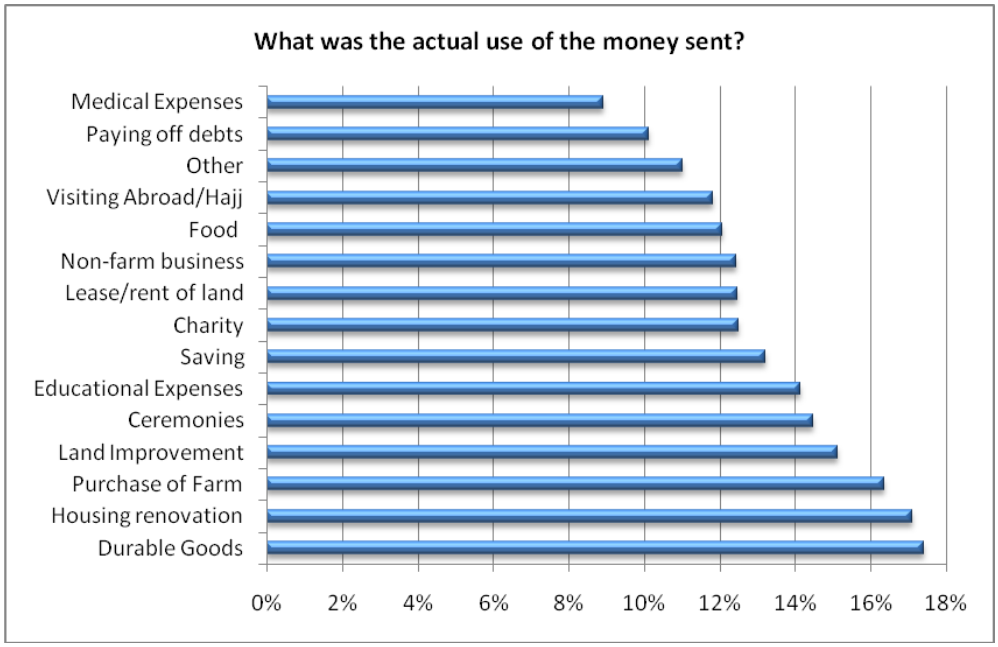
Table 9: *Migration for at least one month*

	Did you or somebody else from your household ever migrate abroad for a total time of at least one month since January 1, 2004?	
Has your household received financial remittances from abroad in the last 6 months?	**Yes**	**No**
Yes	22%	78.7%
No	2.8%	97,2%

Uses of Money

Figure 11 depicts the uses to which remittances are put. The percentages here represent the households that reported using remittances for a variety of purposes, ranging from purchase of food to durable goods. Several points are worth noting. First, money is fungible. Thus, for instance, a household that reports using remittances money for medical reasons did not go without medical care prior to receiving remittances. There may not have been any net increase in medical expenses.

Figure 11: *The use of the remittances*



Second, more households reported using remittances money for durable goods than for any other item. Third, human capital investment is an important use of remittances. Several items of expenses can be considered to be investment, including medical care, educational expenses, etc.

If we take into consideration the opportunity cost of migration, which means to estimate the money that the migrant would have earned if he/she had stayed home, then migration could be shown to have highly positive effect in the short run. The long run dynamic effects are important, but they are beyond the scope of this report, nor do we have relevant data to assess the long run impact.

There are significant differences in the pattern of remittances by ethnicity. The most important difference is the lower reliance of the Albanian households as a source of income on the formal sector (both public and private). This is shown in Table 9. As expected, Albanian are under-represented in the formal sector (both public and private), and, as such, “employment in the public institution” and “private firms” is reported to be a source of income for only 19% of the Albanian households as opposed to 79 and 78% of Macedonian households. Albanian reliance upon the public sector is further confirmed by the extremely low percentage of Albanian households (about 14%) reporting pension as a source of income

as compared with 79% of the Macedonian households. About 27% of the Albanian households report "self-employment" to be a source of income and even a larger percentage (34%) report profits from business to be a source of income. Households that report remittances and financial means from working abroad tend to have a disproportionate incidence in the Albanian community relative to the Macedonian. Although only about one-quarter of the population of the Republic of Macedonia is of Albanian origin, about half of all the households that report income from "temporary work abroad" are of Albanian. If "help from abroad" as a source of income is considered, about seven out of every ten households reporting it as a source of income are of Albanian origin.[26]

Table 10: *Source of Income by Ethnicity (Base: All households in the Category)*

	% Macedonian	**% Albanian**
Employment in Public Institutions	76.89	19.4
Employment in private firms	78.26	19.02
Self employment	70.47	26.62
From social security	58.58	13.95
From temporary work	69.04	20.29
Help from abroad	30.9	69.1
Pension	78.85	14.39
Humanitarian aid	19.84	66.36
Unemployment benefit	58.15	21.72
Income from agriculture	92.89	3.85
From temporary work abroad	50.58	49.42
Rent, renting, real estate	77.52	22.48
Profit from business activities	53.46	34.01

[26] As emphasized in the report, disproportionately high non-response in the Albanian community and other selection biases likely to have resulted in an underestimation bias as relates to the incidence of migration and remittances receipts in the country. One recently published report found that **18.5%** of the population in the Republic of Macedonia depends on remittances as their main source of income (Selm, 2007).

We now turn to an examination of the microeconomic consequences of migration and remittances. *We would like to caution the readers that the impact of remittance transfers is likely to be underestimated given the underestimation bias in reporting remittances. This observation is particularly relevant in the present context given the high overall non-response rate, in general, and the extremely high non-response rate among the ethnic Albanians, in particular.*

IV.B. Income, Expenditure, and Poverty Status of the Households

Household income is taken as reported by households. The main sources included in the appraisal of aggregate income are as follows: (1) all sources of cash income related to work, (2) income from agricultural activity (crops and livestock as well as other agricultural activity), and (3) cash and non-cash transfers unrelated to work.

Cash income of households consists of income from their labor activity (salary), pensions, revenues from business and entrepreneurial activity, state benefits, compensations and other bonuses, interest payments, rental payments and other revenues from real estate and finally, the total amount of all types of cash transfers from abroad. Income from agricultural activity includes three components: income from crops, income from livestock and income from other agricultural activity. Other incomes received by household in kind are represented by goods and assets, including food items which were sent by friends and relatives living elsewhere in the home country as well as abroad. All these items were grouped under the common rubric of support *in goods*.

Table 11 below gives summary statistics on household income in MKD. It should be noted that about 15% of all the households (a total of 428 out of 2797) reported zero income. It is clear from the table that income is distribution is skewed: the mean income is almost 62 Euros (4,000 MKD) more than the median income and income has quite wide spread – one standard deviation is as big as the median income. While the income has a wide dispersion and skewed distribution, household expenditure is predictably less skewed and less dispersed. Again, predictably, expenditure is higher than income. The inequality in income is expected to be greater than the inequality in expenditure as expenditure on food tends to increase less than proportionately to income and the rich have a higher propensity to save. More on income inequality later.

Table 11: *Income of sample households (in local currency)*

Range	Income Approach	Expenditure Approach	Discrepancy (Income-expenditure)
Minimum	0.7	0.27	0.46
Maximum	8877	4585	4292
Mean	395	405	-10
Median	333	371	-38
Standard deviation	334	251	83

The households in the sample were divided into quintiles in accordance with per capita income (see Table 12). As noted above, about 15% of all the households (a total of 428 out of 2797) reported zero income. These constitute 75% of all households in the bottom quintile. To avoid exaggeration of the difference in the average income of the bottom and the top quintiles, income of the households reporting zero income was imputed. In 5 cases imputed income was negative. These cases were eliminated from analysis.

Migration and Poverty[27]

Republic of Macedonia was one of the poorest republics in former Yugoslavia and remains one of the poorest countries in Europe today with its GDP per capita in terms of purchasing power parity being only one quarter of the average for the EU-27. Headcount poverty rate has been steadily increasing from 1997 through 2002 and have remained relatively stable since then around 30% through 2007 with showing some decline in 2008 (28%). Table 13 below depicts the picture of poverty in Republic of Macedonia since 1997.

[27] Detailed examination of the nexus between poverty migration, and remittances is the subject of the sequel to this report.

[28] Data prior to 2001 is dubious quality (communication with Prof. Shukarov). As for the lower poverty rate for 2008, we take it with a grain of salt for two reasons. First, it is based on the Quality of Life survey done in July-August 2008 and as such does not register the overall decline in economic activity associated with the last few months of 2008 in the aftermath of the global financial crisis. Second, given the high non-response rate in the survey, we suspect there to be an underestimation bias in the calculation of median household income on which the measure of poverty is based.

Table 12: *Poverty in Macedonia, 1997-2008*

(Percentage of households living under the relative poverty line)												
Year	'97	'98	'99	'00	'01	'02	'03	'04	'05	**'06**	**'07**	**'08**
Headcount Poverty rate	19.0	20.7	21.0	22.3	22.7	30.2	30.2	30.0	30.0	29.8	29.4	25.2
Poverty rate by economic status of household members												
All Unemployed	26.0	29.0	31.2	32.6	35.5	37.5	36.1	39.0	41.5	40.9	39.1	42.2
1 Employed	19.2	22.1	21.2	22.2	21.0	28.0	29.3	27.8	28.2	28.1	30.7	25.0
2 and more Employed	9.8	7.3	7.3	6.8	9.9	18.7	18.9	18.1	16.8	18.5	17.2	16.7

Source: State Statistical Office for 1997-2007; for 2008, author's calculation from MQLS08.

Note: Poverty rate is calculated as 70% of the median equivalized household income.

How does migration affect poverty? In the absence of data on individual migrants and details of migration and pre-migration work history, it is hard to answer this question rigorously. However, we have indirect evidence to show that absolute poverty in the Republic is reduced as a result of migration. According to the survey, reported median net monthly earning of employed migrants during the 12 months prior to the most recent migration episode was 12,000 MKD or approximately 200 Euros. In contrast, the median earning during the most recent trip abroad was 1,000 Euros per month with the mean being about 4500 Euros. Thus, the median earning abroad is about 5 times the reported monthly median earnings at home prior to migration. Given the rate of unemployment in the country, emigration helps in two ways. It is expected to lower the incidence of unemployment and for those who worked in the country before migration, it increases their income dramatically. Figure 11 above shows that remittances are used for a variety of purposes which are directly or indirectly related to poverty status of the households. Thus, about 9% of the households mentioned using remittances to pay off debts; about 10% reported using remittances for medical care, 12% for food and 14% for education.

While migration clearly benefits the migrant himself in terms of increasing his or her income dramatically, what about the household members left behind? Household members are affected both directly and indirectly. Household members receive remittances from household

members. The survey shows that the median stay during the most recent migration spell was only 3 months and the total amount of money sent or brought home during the most recent migration spell was 2,000 Euros which translates into a median amount of about 777 Euros per month of stay with the mean being much higher, i.e., 1,457 Euros per month. As for in-kind remittances sent or brought home during the most recent migration spell, only 23 households (about 50%) reported doing that with the median value of such in kind transfers being 1000 Euros and mean being 1800.

Table 13: *Migration and Poverty*

Migration and Poverty			
	For All HHS	For HHs W/O Migrants	For HHs with Migrants
Headcount ratio %	31.1	31.5	20
Per capita poverty gap	793	799	666
Poverty gap ratio %	12.1	12.2	10
Note: Calculation is based on poverty line constructed on the basis of equivalized household income. Poverty line is 6,571.428 MKD or 60% of the median equivalized household income.			

We calculated a variety of poverty statistics by migration and remittance receiving status of the households in the sample.

We present 3 different measures of poverty: headcount ratio, per capita poverty gap, and poverty gap ratio. Headcount ratio is the most commonly used measure but has the disadvantage of being insensitive to the severity of poverty particularly if the poor households are extremely poor and lie too far below the poverty line. Thus, it counts extremely poor people still as poor as long as they are below the poverty line even though they may experience significant increase in their income. Poverty gap and poverty gap ratios seek to overcome this limitation. Per capita poverty gap measures the required annual income transfer to all poor households to bring them out of poverty. Poverty gap ratio calculates “the average distance” from the poverty line expressed as a percentage of the poverty line, with the non-poor being given a distance of zero. It is the most instructive of the 3 measures as it gives the percentages rather than absolute amount of money required to end the poverty gap.

Given the unusually high non-response rate, we regard any measures based on income with suspicion. Expenditure based measures are 'relatively' more reliable. We present here poverty measures based on income, expenditure including durables, education, and agricultural income, and a second measure of expenditure which excludes agriculture.

Table 13 presents poverty rates by migration status of the household. A word about different measures of poverty used should be helpful for readers. It is clear from the table that household with migrants on average do better than household without migrants on all three measures of poverty. This apparently negative relationship between migration status of the household and poverty does not imply causation. Migrant households may simply be more able to support migration trips of household members. We will discuss this issue only briefly as detailed examination of this is the subject of the sequel to this report.

For migration to have a positive effect on the income status of the migrant households, they must receive remittances, at a minimum. As we noted earlier, not all migrant households receive remittances. Only 22% of the households with migrants reported receiving remittances from household members in the last 6 months. Although there is no one to one correspondence between migration status since Jan 2004 and receipt of remittances in the last 6 months prior to the survey as we discussed above, we would expect a systematic relationship between households that receive remittances and migration status of the households. Table 13a presents evidence from the survey. Given the small number of cases, the evidence must be interpreted with caution. A paradox is quite clear from this table. Remittance receiving households have a higher incidence of poverty. The difference is dramatic for migrant households by all three measures. No causal conclusion can be drawn from this association. We will not dwell on this issue further as we intend to examine this thoroughly in the sequel to this report. The discussion of the nexus between inequality and migration/remittances should shed additional light on this paradoxical pattern observed in the Republic of Macedonia.

Table 13a: *Remittances and Income Poverty by Migration Status*

Remittances and Income Poverty by Migration Status						
	For HHs with Migrants	**Remrec Mighhs**	**Non-receiving Mighhs**	For HHs W/O Migrants	**Remrec Mighhs**	**Non-receiving Mighhs**
Headcount ratio %	20.2	30.0	15.9	31.5	31.8	31.5
Per capita poverty gap	665.8	1,262.2	361.1	798.9	976.7	788.5
Poverty gap ratio %	10.1	19.2	5.5	12.2	14.9	12.0
Note: Calculation is based on poverty line constructed on the basis of equivalized per capita household income. Poverty line is 6571.428 MD or 60% of the median equivalized household income.						

Migration and Inequality

Income distribution in RM remains highly unequal and shows an increasing trend. Table 14 below presents results from the recent Quality of Life Survey. Predictably, inequality in expenditure is less pronounced than in equality in income. Inequality cuts across all ethnicities and settlements. The Roma community is most poor and most unequal also.

Table 14: *Income Inequality in RM (in terms of Gini Coefficient)*

	By Equivalized Income	**By Equivalized Expenditure**
Republic of Macedonia	0.37	0.29
By Ethnicity		
Macedonians	0.37	0.28
Albanians	0.38	0.30
Roma	0.46	0.36
Other	0.32	0.23
By Location		
Rural	0.38	0.27
Urban	0.35	0.30
Skopje	0.34	0.29

Source: MQLS08

MQLS08 shows that both unemployment and poverty rates in Macedonia remain very high (approximately 31% and 25% respectively).[29]

When we review the distribution of household by quintiles, we notice a significant difference between the top quintile and the three middle quintiles, with the top quintile showing more than two percentage point higher incidence of migration (6% as opposed to slightly over 3.15%). This is a very important result which shows positive association between highest income quintile and the presence of migrant household member. However, it should be noted that no causality can be deduced at this point, because higher incidence of migration in the top quintile can be simply a reflection of the greater *ability* of these households to support migration of household members, and, therefore, reverse causality cannot be ruled out.[30] *This may also explain why we see lower incidence of poverty among non-remittance receiving households.*

Migration and Income Inequality by Region and Ethnicity

The average income per household in the Republic amounted to 17,000 MKD per month. The highest income recorded was 212,000 MKD (approximately $5,300) per month in the Polog region.

The average incomes of household living in other urban and rural areas showed a significant difference from the republican level. As expected, mean household income in urban areas greater than the mean household income in rural areas by over 3,000 MKD per month. The median income in urban areas other than Skopje is higher than the median income in rural areas by 4,000 MKD. The analysis of household income distribution shows considerable difference: the minimum income value is 0. When we eliminate households with zero income from calculation, the difference is magnified twofold between Skopje and rural areas (8,000 MKD instead of 3,000 MKD when households with zero income are included). It is not clear to what extent households with zero income are truly representative of

[29] On surface, the two statistics appear to be inconsistent but if we consider the number of people who depend on external remittances sent by migrant household members, it is easy to see how the poverty rate could be lower than the rate of unemployment – remittances may hold the key to the puzzle! See (Mughal et al. 2009) for a discussion of this apparent paradox.

[30] This issue would be further explored in the next paper that employs econometric techniques to sort out these issues.

households with zero income and to what extent they represent measurement error.

Table 15: *Share of Equivalized disposable Income and Expenditure by Quintiles and Location*

	Equivalized disposable income by quintiles			Equivalized disposable expenditure by quintiles		
Quintiles	Rural	Urban	Skopje	Rural	Urban	Skopje
Poorest Quintile	5%	6%	6%	8%	8%	8%
Lower Middle Quintile	11%	12%	12%	15%	13%	14%
Middle Quintile	17%	17%	18%	20%	17%	18%
Upper Middle Quintile	24%	23%	25%	23%	22%	23%
Richest Quintile	43%	41%	40%	35%	38%	37%
Ratio of Richest to Poorest Quintile Share	8	7	7	4	5	5

Source: MQLS08

Table 15 above provides a classification of the households by income quintiles. The first *quintile* thus indicates the poorest 20% and the fifth *quintile* indicates the richest 20% of the households. To measure household welfare, household income was transformed into equivalized per capita income by using the following adjustment scale: The first person was given a weight of 1, next 0.5, with the third and subsequent, 0.3.

Inequality and the Role of Migration in Smoothing Regional and Ethnic Disparities

There are significant regional disparities in GDP per capita as shown in Table 16. Large differences in GDP per capita across different regions in Republic of Macedonia signify differences in level of development and job opportunities. Thus, Skopje has more than 3 times per capita GDP of the least developed regions of Northeast and Polog. However, disparities in regional development as indicated by per capital GDP do not translate into regional differences in per capita household income because of inter-regional commuter flows as well as remittances from abroad.

Table 16: *Regional disparities in GDP per capita*

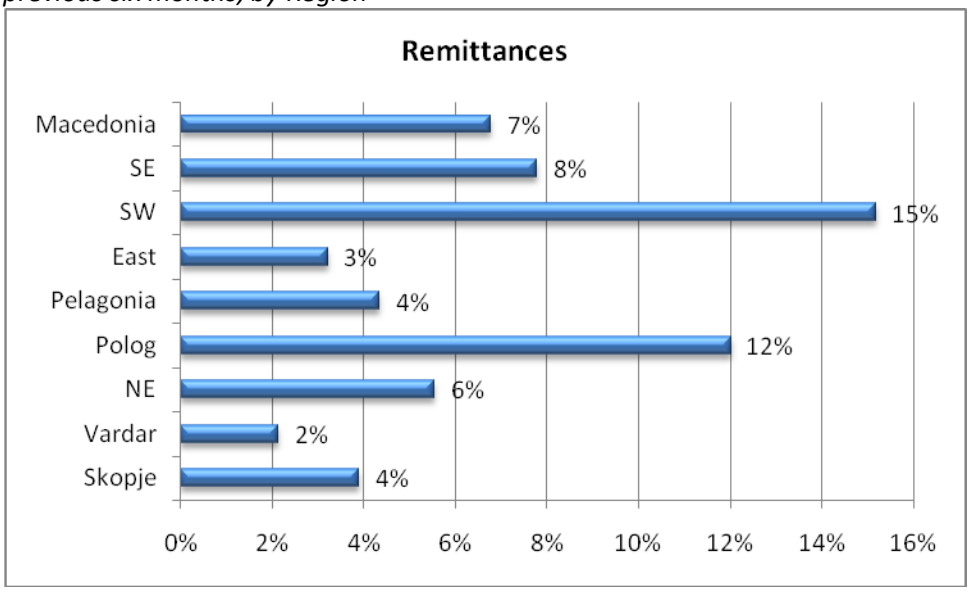
	GDP per capita (PPP)	**Equivalized Household Income in Euros**

		Median	Mean
Pelagonia	97	175	203
Southeast	90	163	196
East	73	172	186
Southwest	70	160	176
Northeast	50	105	151
Polog	50	160	182
Skopje region	165	149	183
Vardar	110	163	194
Whole country	100	160	187
Exchange rate: 1 Euro=61,5 MKD			

Source: State Statistical Office, Skopje; MQLS08

Remittances are an important source of income for Polog and the Southwest, where 12% and 15% of the households reported receiving remittances from abroad respectively.[31]

Figure 12: *Proportion of households receiving remittances from abroad in the previous six months, by Region*



Source: MQLS08

[31]Given the significance of remittances for the balance of payment.

Education and Health

Money is fungible and as such it is very hard to causally relate high expenditure on education and health to migration and remittances. A simple correlation analysis finds little evidence of a causal relationship between monthly expenditure on education and remittances. The correlation between migration status of the household and monthly educational expenditure is positive but are unable to draw any broad conclusion from the scanty information on health and education expenditure. The absence of a correlation between remittance amount and educational expenditure combined with the positive relationship between migration status and educational expenditure suggests the possibility of brain drain.[32] This is beyond the scope of this report and requires careful investigation.

Remittances and the Moral Hazard of Reduced Labor Supply

Figure shows that there is no significant difference in the rate of unemployment between the households with migrants and households without migrants. This result may be surprising to those who maintain that migration induces moral hazard in the form of reduced labor supply of household members who receive remittances. However, when we crosstab employment status by remittance receiving households, we find a statistically significant difference in the employment status of the household members by receiving status: the percentage of unemployed in the receiving households is about 6% higher than the percentage of unemployed in the non-receiving households.

No conclusion about the negative effect of remittances on labor supply can be drawn from this and the presence of moral hazard in the supply of labor cannot be ruled out because it may be the case that household members in remittance receiving households have a higher reservation wage rate. Further analysis is required for a deeper understanding of this phenomenon.

---

[32] A brain drain may imply short term loss but may more than compensate the sending economy in the medium to long run. Recent scholarship has stood the conventional wisdom on "brain drain" on its head. See Docquier, F, and for an excellent survey of this literature.

Figure 13: *Rate of Unemployment by Household's Migration Status*

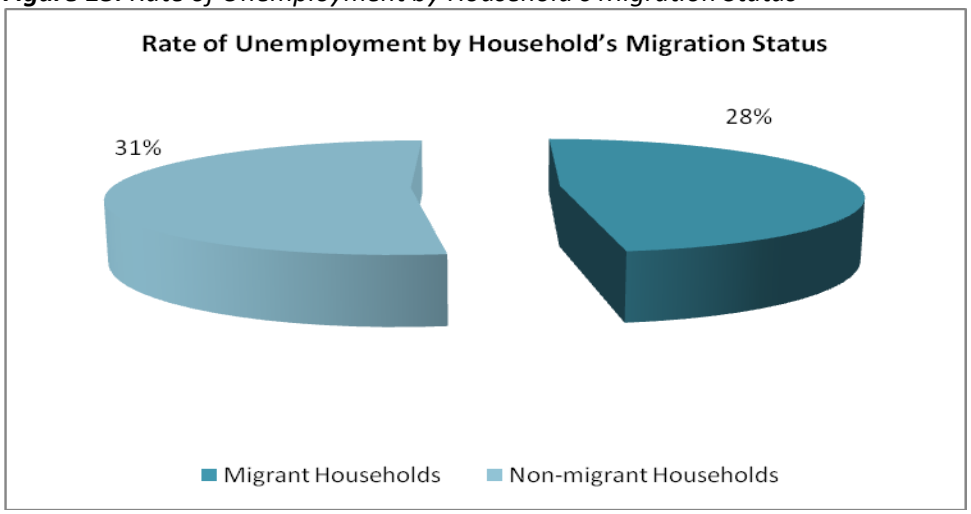


Table presents the same picture by ethnicity. Two points are worth noting here. First, there is a statistically significant difference between the migrant and non-migrant households in the Albanian community. While less than 11% Albanian households with migrants report having all working age adults to be unemployed, over 37% of the households with migrants of Macedonian ethnicity report being unemployed. The difference is significant at the 10% level.

Table 17*: Unemployment Rate by Ethnicity and Household's Migration Status*

Unemployment Rate by Ethnicity and Household's Migration Status			
	Households with Migrants	Households w/o Migrants	P-Value for Difference in the Rates
Macedonian	37.34	30.75	0.1966
Albanian	10.72	27.61	0.0101
Roma	100	72.82	too few observation
All Others	0	28.48	0.0872

The following table crosstabs remittance receiving households with their employment status. The percentage of households which all working age adults are unemployed is about 7% points higher than the percentage of households with no employed member in the non-receiving group.

Table 18: *Employment Status by Remittance Receiving Status of the Household*

Employment Status by Remittance Receiving Status of the Household		
	Recipients	**Non-Recipients**
Employed	62.88	69.68
Unemployed	37.12	30.32

The difference is significant at the 10% level (P = 0.0604). Does this mean remittances have resulted in the moral hazard of reduced supply of labor?

There is also a significant difference between the Albanians and Macedonians in terms of headcount poverty rate by remittance receiving status of the household. Among the Macedonians, it is puzzling – only the extremely poor seem to be receiving remittances and they still remain poor – thus, 29% of the receiving households are poor whereas 24% of non-receiving Macedonian households are poor; the situation is just the opposite for Albanian households – the proportion of the poor among receiving households is 12 percentage points lower - 32 % as opposed to 44% (Mughal et al, 2009).[33]

IV.C. Size and Patterns of Remittances

IV. C. 1.Channels of Transmission

Results from MQLS08 show that the bulk of remittances transfer into RM are through informal means. As shown in Figure below, only 22% of the households reported receiving money through formal banking channels. These include bank to bank transfers, transfers through money transfers operators such as Western Union, and transfers through the post office and money orders. Informal means include self delivery, delivery through friends and relatives, and other ways of transfers. Since only 36 households in our sample reported the mode of transfer, we need to take these numbers with a great deal of caution.

Figure 14: *Remittances transfer*

[33] We suspect that this overstates the true incidence of poverty among Albanian receiving households because of exclusion of durables from the measure of expenditure and durables are likely to be significance for remittances receiving households.

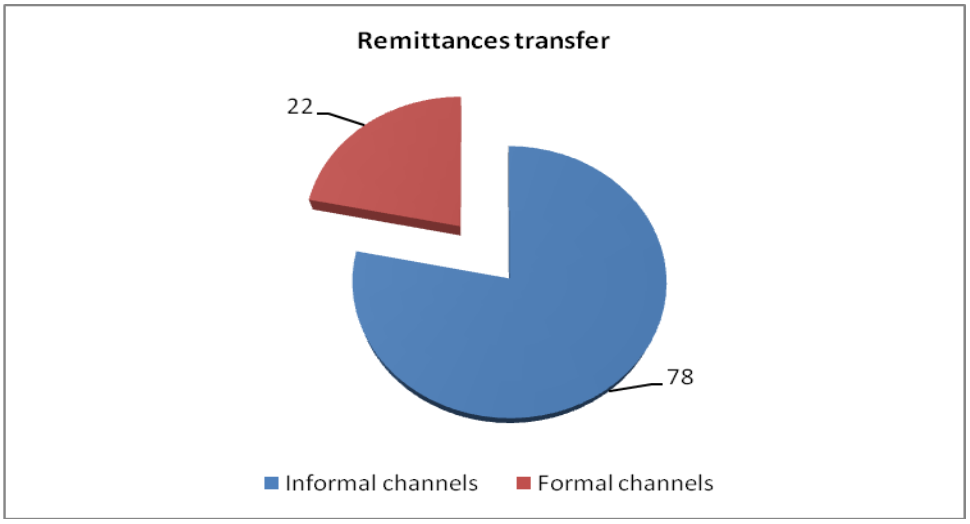


Table 19: *Channels of Transmission*

Channels of Transmission						
	N	Weight	Mean	Std. Error	95% confidence interval	
Formal total monthly remittances	8	5719	1037	9.83221	1017.8	1056.35
Informal total monthly remittances	28	21254	1153	6.94967	1139.38	1166.62

The Estimate of Total Size of Remittances in the Republic of Macedonia in 2007

Table 20 summarizes the data on remittances from MQLS08. Several points are worth noting. First, the net average monthly earnings of the migrants abroad were more than 4 times the average monthly earnings at home. Second, paradoxically, the average cash and in-kind monthly remittances are higher than the average monthly earnings.

Table 20: *Earnings and Remittances (in Euros)*

Earnings and Remittances (in Euros)					
	Weight	Mean	Std. Dev	Min	Max
Mean monthly (net) earnings prior to migration	36189	315	391	4	1951
Mean monthly (net) earnings abroad	40613	1346	1213	50	6000

Mean monthly cash remittances in Euros during the most recent migration	36411	2867	2710	100	10000
Mean monthly in-kind remittances during the most recent migration	13801	1914	1741	150	6000

The seeming contradiction here is easily resolved if the following points are kept in mind. There is no one to one correspondence between the households with migrants and the households receiving remittances for the following two reasons. First, the period over which migration was reported to have taken place is different from the period for which remittances were reported (last 6 months). Second, households with migrants may have more than one migrant and the remittances may have been pooled over all migrant members.

To better understand the relationship between migration and remittances, we need to condition remittances on migration status of the households. Cross-tabulation of households with migrants with remittance receiving households shows that only 22% of the households with migrants reported receiving remittances as noted above (see table 21 above) because the last migration may have taken place more than 6 months prior to the survey. Again, the correspondence between migration status, net monthly earnings of migrants prior to and after migration and remittances amount is likely to be tenuous. Even then, we are likely to have an upward bias in the reported monthly remittances *in so far as a household with migrant(s) has more than one migrant member* and each one of them is contributing to the amount of remittances sent home. Moreover, the most recent migration episode for which remittances were reported may not have been the last six months for which remittances were reported.

Table 21 provides an estimate of the average amount of remittances transferred through informal and formal means. We assume that a household that reports receiving remittances through formal channels receives “all” of the “cash” remittances through formal channels. We assume that a household that reports receiving remittances through informal channels receives “all” of the “cash” as well as in-kind remittances through formal channels.

Table 21: *Average Amount of Earnings and Remittances by Migration Status*

Average Amount of Earnings and Remittances by Migration Status						
	N	**Weight**	**Mean**	**Std. Dev**	**Min**	**Max**
Mean monthly (net) earnings prior to migration	49	37417	518	1168	4	6504
Mean monthly (net) earnings abroad	52	42550	3487	10642	50	80000
Mean monthly cash remittances in Euros during the most recent migration	48	39259	879	846	44	3333
Mean monthly in-kind remittances during the most recent migration	23	13801	463	392	33	1667

Table above shows the average monthly earnings for those households that reported having migrants. Several observations can be made here. First, the average monthly earnings after migration are almost seven times the average monthly earnings prior to migration. Second, *cash remittances more than compensate for the loss of income*: the total of cash and in-kind remittances are more than two and a half times the average monthly earnings prior to the most recent migration episode. A note of caution is in order here. In so far as remittances represent the amount sent by more than one migrant, there is an overestimation bias in the figure.

The fact that only about 22% of the remittance receiving households report receiving remittances from migrant household members, reveals an important fact about the type of migration from the RM. As mentioned about, the Republic of Macedonia has a large Diaspora settled in high income countries, mainly Australia, Switzerland, USA, and Germany. Remittances sent by people who are not household members are by definition either friends or relatives or members of Diaspora who are no longer household members. *That the bulk of households reporting receiving remittances receive them from people who are no longer household members shows the strength of family bonds between the members of Diaspora settled abroad permanently and the family members staying in the Republic of Macedonia .*

About 7% of the households (N=196) reported receiving remittances but only one-fourth of these households (N=48) reported *the amount* received. It is likely that the non-respondents are the ones with higher amount of remittances. This is likely to have resulted in an underestimation bias in the average amount of remittances reported here. All households that receive in-kind remittances also receive cash remittances but the

converse is not true. About one-third of all who reported receiving cash also reported receiving remittances in-kind.

A caveat about the data is in order here. We suspect the data remittances figures suffer from a serious underestimation bias. Since the non-response rate was higher among the Albanian households, and, Albanian households show a significantly higher incidence of receiving remittances, we suspect there is an underestimation bias in the proportion of households reporting receiving remittances. We suspect there is systematic bias and thus these numbers ought to be taken with a great deal of caution.

The analysis of remittances is replicated by ethnicity and reported in Table below.

Table 22 replicates the results reported in table above by ethnicity. Several points are worth noting here. First, as noted above, Albanians have a higher incidence of migration and remittances relative to their share in the population of the country. Second, the average monthly earnings prior to migration are higher for Albanians but are statistically insignificant (there is a 60% chance that this difference is due to sampling error). However, there is a significant difference in the average monthly earnings aboard: Albanians on average earn 431 Euro less per month. Given the few cases, the result is statistically insignificant and should be interpreted with caution (there is almost a 40% chance that the result is driven by chance). However, there is no difference in the median earnings abroad by ethnicity. The median monthly earning of both Albanians and Macedonians is 1000 per month. Unfortunately, we do not have socio-demographic information on individual migrants and cannot shed more light on this difference. While the average monthly earnings by Macedonian migrants abroad is 40% higher than the average monthly earnings of Albanians, there is no statistically significant difference in the average monthly remittances, either cash or in-kind. The median cash average monthly remittances by Macedonian migrants are two and a half times the median average monthly remittances by Albanian migrants, but the difference is statistically insignificant as there are only 9 cases for Albanian migrants reported.

Table 22: *Earnings and Remittances by Ethnicity (in Euros)*

	N	Weight	Mean	Median	Std. Dev	Min	Max
Mean monthly (net) earnings prior to migration							
Macedonian	34	21,961	305	163	426	8	1,951

Albanian	13	13,868	335	211	333	4	1,463
Mean monthly (net) earnings abroad							
Macedonian	35	24,548	1,536	1,000	1,432	100	6,000
Albanian	12	14,805	1,095	1,000	667	200	3,000
Mean monthly cash remittances during the most recent migration							
Macedonian	35	24,391	2,894	2,500	2,057	300	8,000
Albanian	9	10,940	3,053	1,000	3,788	200	10,000
Mean monthly in-kind remittances during the most recent migration							
Macedonian	16	24,391	2,894	1,500	2,057	300	8,000
Albanian	5	10,940	3,053	2,000	3,788	200	10,000

Table 23: *Estimate of Total Remittances in the Republic of Macedonia in 2007*

Estimate of Total Remittances in the Republic of Macedonia in 2007	
Officially estimated remittances (in m $) through formal channels in 2007	$267
Formal as fraction of total remittances	0.19
Estimated fraction of remittances held by households in foreign currencies	0.50
Estimated Total Remittances in millions of dollars	$685
Ratio of true and officially reported remittances	2.57

Source: WB, 2008; authors' calculation from MQLS

According to these calculations, in 2007, we estimate that a sum of about $685 million was transferred through both official and unofficial channels. The actual size of remittances in 2007 may have been more than two and a half times the officially reported remittances.

A number of caveats are in order here. **These estimates are crude and should not be interpreted as definitive but only *indicative* of the gulf between the officially reported and the true magnitude of remittances.** While we do not offer these estimates of the true size of remittances as definitive, we are very confident that there is a substantial underestimation bias in the official estimates of remittances as recorded in the balance of payment of the Republic of Macedonia. Given the implications of inaccurate measurement of remittances for the economy, the case for research to measure the size of remittances in the Republic of Macedonia cannot be stronger.

Chapter V
Areas of Further Research on the Nexus between Migration, Remittances, and Development in the Republic of Macedonia

Over the last several years significant research has been conducted on the subject of migration and remittances from the perspective of labor sending countries, including the South Eastern European country of Albania. Yet, the nexus between remittances and development in the Macedonian-OECD corridor has remained one of the least explored areas. The present study is the first study that draws upon a country and region wide representative household survey to examine the phenomenon of migration and remittances and the impact thereof on living standards of Macedonian population. It seeks to make a significant contribution to the emerging cottage industry of research on migration and development in the SEE.

While descriptive analysis is very important and necessary to generate insights about the phenomena under study and to suggest hypotheses to be tested, to test hypotheses about causal relationships, we need to carry out econometric studies. Such studies are non-existent in the Republic of Macedonia. The field is wide open to study the following issues:

a. the impact of remittances on poverty[34]
b. the impact of remittances on inequality
c. the impact of remittances on labor supply
d. the impact of remittances on savings and/or physical capital accumulation;
e. the impact of remittances on health

However, given the limited scope of the migration and remittances module in MQLS08, there remains a vast area of ignorance about the patterns of migration and remittances that need to be addressed in future studies.

In this section we will identify additional promising areas of research.

Measurement of the Size of Remittances into the Republic of Macedonia

As emphasized in the report, the actual size of remittances into the Republic of Macedonia remains shrouded in mystery. Several approaches

[34] We are currently working on an econometric study of the impact of migration on poverty.

can be taken to estimate the true magnitude of remittances. We suggest some strategies to estimate the actual flow of remittances into the Republic of Macedonia briefly here:

a. *Comprehensive household surveys* with details about channels of transmission and Euroization/dollarization of the economy;
b. *Surveys of senders of remittances* in Destination countries ; and,
c. *Panel Surveys*: Living standards Measurement surveys using a panel design to examine the dynamic of migration and poverty and other indicators of development.

The Shadow Economy in the Republic of Macedonia and Savings Mobilization

The shadow economy of the Republic of Macedonia remains a relatively non-researched area. There has been considerable anecdotal evidence but little rigorous research into this elusive phenomenon. However, it is commonly agreed that there is a large informal sector in the Republic of Macedonia (WB, 2008b; IMF, 2007, 2008). Workers' remittances are intertwined with transactions generated in the shadow economy. For this reason alone, the analysis and policy recommendations for migration and remittances presented in this report must remain tentative.

A large but unknown portion of remittances is transmitted through informal means for a variety of reasons discussed above. But, informal value transfer (IVT) and informal funds transfer (IFT) methods being employed by remitters remain under researched. Research on IVT and IFT methods is important for two reasons. First, regulation and supervision of these informal methods should help reduce the size of the informal sector in the country. Various structural reforms undertaken are premised upon employment in the formal sector (Mughal, 2009). Second, channeling the transfers to formal banking systems should enhance their growth enhancing potential. It is clear that to realize the *full* growth potential of remittances, a significant proportion of the transfers ought to be saved and invested into productive forms. In so far as poverty is a significance economic problem in the Republic of Macedonia, a study to explore the possibilities of harnessing remittances for innovative microfinance schemes to alleviate poverty should be a highly promising area.[35] This is extremely hard, if not

[35] Hristina Cipusheva (2007) offers a comprehensive overview of the phenomenon of poverty and microfinance in the Republic of Macedonia.

impossible, unless remittances are 'visible' and channelized through the formal banking system.

The Case for Multinational Studies of Macedonian Migration to Major Destination Countries

A systematic analysis of migration and remittances behavior is invariably constrained by the partial nature of information available to the investigator who relies either upon household level surveys in the *sending* countries or upon surveys of migrants in the countries of *destination*.

Household surveys in sending countries provide limited information migrants *living and working abroad*. The composition and socio-economic characteristics of Macedonian migrants who do settle permanently are expected to be different from the socio-economic characteristics of the temporary migrants. Members of Diaspora settled abroad are not considered to be household members and their demographic and socio-economic characteristics are not revealed in household surveys conducted in countries of origin.

While surveys of actual migrants in destination countries can be effective at profiling their demographic and labor force characteristics, they are generally poorer at generating accurate information on the structure, welfare status and composition of the households in the countries of origin.[36]

Thus, what is needed is *a comprehensive multinational survey in the Republic of Macedonia as well as the major destination countries* for Macedonian migrants, particularly countries of the EU that receive the bulk of contemporary Macedonian migration. Any unilateral measure by the sending country could be easily neutralized by another unilateral measure by the receiving country. Nowhere is this truer than the issue of brain drain. More and more the receiving countries have been enacting policies that give preferential treatment to highly educated immigrants as they are expected to be more easily *assailable* in the host countries. Thus, a policy of retaining the highly educated professionals and scientists on the part of *home* countries is likely to be thwarted by measures taken by the host countries.

Brain Gain through Brain Drain

---

[36] Adriana Castaldo, Julie Litchfield And Barry Reilly, 2005, pp. 7-8

Macedonian Diaspora in Western Europe, Australia, and North America is likely to have a disproportionate number of highly educated professionals. Very little is known about highly educated Macedonian emigrants who are settled in high income countries.

Whether there is a significant brain drain cannot be determined with the information at our disposal. Additional work needs to be done, particularly in the destination countries.[37]

A well-educated Diaspora in advanced countries can improve access to capital, technology, information, foreign exchange, and business contacts for firms in the countries of origin. To what extent these and other network benefits are accruing to the Republic of Macedonia is an important issue to be investigated. Formulating expectations about the costs and benefits associated with migration is extremely difficult even for prospective migrants when information on the destination country's labor market conditions and *immigrant policies*[38] is unavailable and where informal sector is as large as it is expected to be in the Republic of Macedonia. Whether brain drain has benefited the Republic of Macedonia through the channels identified above deserves serious attention of the research community and further underscores the need for a study that encompasses major destination countries.

There are shared interests in the flow of Macedonian migration to these countries of the EU but aligning them will require enlightened policies informed by sound research and data. This is in keeping with the agenda of the European Union as indicated in published documents.

Thus, we strongly believe that migration and remittances is a multinational problem and a unilateral approach may not help realize the full developmental potential of migration and remittances. There is a need to refine and make precise estimates of remittance flows using data from multiple sources from both the sending and the receiving countries.

The Case for Studies Utilizing Mixed Methods

---

[37] Subject of availability of funds, we plan to carry out a comprehensive study of the Macedonian Diaspora in major destination countries

[38] An immigration policy involves rules regarding who can enter the country. An immigration policy involves rules regarding who can enter the country. The *immigrant policy* is distinguished from the *immigration policy* in focusing upon the integration and assimilation of immigrants already in the receiving country.

The following issues are best studies with a multinational mixed methodology approach.

Non-economic Consequences and Mixed Methods

Migration is a multi-faceted phenomenon and has social and political implications that may be just as important as the economic ones discussed in this report.

More research is needed to investigate into the non-economic implications of migration and remittances. This calls for a mixed methodology which involves not only quantitative analysis of data but also qualitative analysis involving ethnography and focus groups.

Trained as we are as economists, the authors strongly support a mixed methods approach. Research using mixed methods should help scholars and policy makers better understand the dynamics of poverty, unemployment, governance, and democratic transition in the Republic of Macedonia and help design appropriate approaches to alleviate poverty, achieve the Millennium goals, promote good governance, and reduce the incentives to operate in the informal sector, in so far as the latter thrive in conditions of poverty and misdirected or delayed structural reforms.

Thus, funding for research on Macedonian migration and remittances is imperative not only from an economic, but also from a broad political perspective.

Migration Pressure and Need to Incorporate Intentions

The discipline of economics has been, in general, highly skeptical of studies based on *attitudes and intentions* (Manski, 1990). The discipline emphasizes how behavior can generally be predicted through judicious use of appropriate econometric models from actual revealed preference (and not intended) outcomes. This aversion to intentions studies stems from the view that 'expressed motives' may not be 'reasons' (Smith). However, limitations of behavior based data have prompted some economists to explore migrant behavior more indirectly through the use of intentions data, and cast the empirical analysis in terms of migration willingness (Louviere, Hensher and Swait, 2000; Adriana Castaldo, Julie Litchfield and

Barry Reilly, 2004).[39] We believe, with Louviere, Hensher and Swait and Adriana et al. that stated (rather than revealed) preferences are capable of generating data consistent with economic theory and facilitate the estimation of econometric models that are almost indistinguishable from those using revealed preference data. They argue that the empirical track record of stated preference data models is as impressive as their revealed preference counterparts (ibid.).

Migration and Gender Inequality in the Republic of Macedonia

Our results show that migrant from the Albanian community in the Republic of Macedonia are predominantly male. Little attention has been paid to the effect of gendered migration on the women's socio-economic status in the Republic of Macedonia in general, and, on women of Albanian ethnicity, in particular. This short-term negative distributional consequences can stall economic reform (see e.g., Przeworski, 1991; Kim and Pirttila, 2003). The project of empowerment of women may be doomed without economic parity; the issue needs serious attention from both economists and sociologists. Hence, the need for a mixed methods approach.

In short, the time is ripe for a comprehensive multinational and multidisciplinary studies of remittances and migration with scholars from countries of destination as well as local scholars representing a broad spectrum of disciplines, including economics, sociology, demography, and political science. The expected payoff in terms of sound policy analysis is likely to be huge.

[39] For instance, see Hughes and McCormick (1985), Papapanagos and Sanfey (2002), Ahn, De la Rica, Ugidos (1999), Ahn, Jimeno, Garcia (2002), Drinkwater (2003a), Drinkwater (2003b).

References

1. Adams, Jr., Richard H. 1991. “The Effects of International Remittances on Poverty, Inequality and Development in Rural Egypt.” Research Report, no. 86. International Food Policy Research Institute, Washington DC.
2. Adams, R. (2007): International Remittances and the Household: Analysis and Review of Global Evidence, World Bank Policy Research Working Paper No. 4116
3. Adams, R. and Page, J. (2003): International migration, remittances and poverty in developing countries; World Bank Policy Research, Working Paper 3179
4. Agunias, D. R. 2006. “Remittances and Development: Trends, Impacts, and Policy Options”. MPI Washington, DC
5. An analysis of 22 Thai villages; Princeton University, mimeo
6. Becker, G. (1975): Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education, 2nd edition, The University of Chicago Press.
7. Becker, G. Chiswick, B. (1966): Education and Distribution of Earnings, The American Economic Review, Vol. 56, No.1/2
8. Bougha-Hagbe, J. (2006): Altruism and Workers’ Remittances: Evidence from Selected Countries in the Middle East and Central Asia, IMF Working Paper 06/130
9. Chiswick, B. (1997) Interpreting the Coefficient of Schooling in Human Capital Earnings Function, World Bank Policy Research, Working Paper No. 1790
10. Chiswick, Barry R. (2000): Are Immigrants Favourably Self-Selected: An
11. Chiswick, Barry R. (2003): Jacob Mincer, Experience and the Distribution of Earnings, IZA Discussion Paper No. 847.
12. Chiswick, Barry R. and Miller, Paul W. (2005): Why is the Payoff to Schooling Smaller for Immigrants? IZA Discussion Paper No. 1731
13. Craciun, C. 2006. “Migration and Remittances in the Republic of Moldova: IMF Country Report No. 08/107
14. DRC Working Paper Series
15. ECB Monthly Bulletin February 2007. “MIGRANT REMITTANCES TO REGIONS NEIGHBOURING THE EU”
16. Economic analysis, IZA Discussion Paper No. 131
17. Empirical Evidence at Micro Level” A thesis, Master of Arts in Economics. National University “Kyiv – Mohyla Academy”
18. Faini, R. 2002. “Migration, Remittances and Growth”. Italian Ministry of the Economy and University of Brescia.
19. Funkhouser, E. (1995): Remittances from International Migration: A Comparison of El Salvador and Nicaragua; Review of Economics and Statistics, 77(1): 137-46

20. Garip, F. (2006): Social and economic determinants of migration and remittances: Fourth Review mission will discuss), the macroeconomic framework remains appropriate. (IMF, 3rd Review, Mar 2008, p. 2, 12)
21. Gerbert, T. P. (2005): Individual and Contextual Determinants of
22. Government of the Republic of Macedonia – Poverty Reduction Strategy Paper (Interim Version). 2000
23. Gupta, P. (2005): Macroeconomic Determinants of Remittances: Evidence from India. IMF Working Paper05/224
24. Heckman, J. Loncher, L. and Todd, P. (1995): Does Measured School Quality Really Matter? An Examination of the Earnings-Quality Relationship, NBER Working Paper, No. 5274
25. Heckman, J. Loncher, L. and Todd, P. (2003): Fifty Years of Mincer Earnings Regressions, NBER Working Paper, No. 9732
26. Heckman, J. Loncher, L. and Todd, P. (2005): Earnings Functions, Rates of Return and Treatment Effect: The Mincer Equation and Beyond, IZA Discussion Paper No. 1700
27. Hoddinott, J. (1994): A model of Migration and Remittances Applied to Western Kenya, Oxford Economic Papers, Vol. 46, No.3, pp459-476
28. Holst, E. Schrooten, M. (2006): Migration and Money-What Determines Remittances? Evidence from Germany, German Institute for Economic Research, Discussion Paper No. 556
29. http://www.migrationdrc.org/publications/working_papers.html
30. IMF Working Papers
31. IMF. 2006. *Country Report* No. 06/188, May 2006
32. IMF. 2007. *Republic of Macedonia: National Development Plan 2007 – 2009*; Skopje
33. Internal Migration in Russia, 1985-2001; University of Wisconsin, Madison,
34. Lehtonen R, Pahkinen EJ. Practical Methods for Design and Analysis of Complex Surveys (1995) New York: John Wiley & Sons.
35. Leuth, E. and Ruiz-Arranz M. (2006): A Gravity Model of Workers' Remittances, IMF Working Paper 06/209
36. Lucas, R. and Stark O. (1985) Motivations to Remit: Evidence from Botswana, Journal of Political Economy, 93 (5): 901-918
37. MACEDONIA – annual country report March 2007
38. Maddala, G. (1983): Limited dependent variable and qualitative variables in Econometrics, Cambridge University Press.
39. Maddala, G. (1992): Introduction to Econometrics, Macmillan Publishing Company, USA
40. Maimbo, S. M. and Ratha, D. 2005. "Remittances: Development Impact and Future Prospects". The World Bank. Washington, DC.
41. Mansoor, A. and Quillin, B. 2006. "Migration and Remittances: Eastern Europe and the Former Soviet Union" The World Bank. Washington, DC.

42. Markiewicz, M. (October, 2006): “Migration and remittances in Macedonia”. Center for Economic Analyses (CEA). Skopje
43. Mitrovic, R. D. and Jovicic, M. 2006. “Macroeconomic Analysis of Causes and Effects of Remittances: A Panel Model of the SEE Countries and a Case Study of Serbia”. Global Development Network Southeast Europe.
44. Mof. 2006. 2006 annual economic report of the Republic of Macedonia. Available online at http://www.finance.gov.mk/mk/mp/god_06_mf_ang.pdf
45. MPI: www.migrationinformation.org
46. Mughal, A. G. 2007. *Migration, Remittances, and Living Standards in the Tajikistan: A Report Based on Khatlon Remittances and Living Standards Measurement Survey. Dushanbe: IOM. Available online at www.iom.tj/publications.html*
47. Mughal, A.G. 2009. “Theoretical Perspectives on the Role of Public Finance in Addressing the Key Economic Problems of the Republic of Macedonia”. Paper presented at the 2009 OSI Budget Conference in Skopje. February 27, 2009
48. National Bank of the Republic of Macedonia (2006): Annual Report 2006
49. National Bank of the Republic of Macedonia (2006): Monthly Bulletin: Balance of Payments,
50. NBRM Annual Report 2005
51. NEIGHBOURING REGION. European Central Bank. WORKING PAPER SERIES NO 688 / OCTOBER 2006
52. Newland, K. and Patrick, E. July 2004. “Beyond Remittances: The Role of Diaspora in Poverty Reduction in their Countries of Origin”. MPI Washington, DC
53. Pre-accession economic programme 2008-2010. Government of RM, 2007. *ec.europa.eu/economy_finance/publications/publication13061_en.pdf*
54. Poirine, B. (1998): A theory of remittances as an implicit family loan arrangement. Université Française du Pacifique, Tahiti, France.
55. Poirine, B. (2006): Remittances sent by Growing Altruistic Diaspora: How do they grow over time? Asia Pacific viewpoint, Vol. 47 No.1
56. Quartey, P. (May 2006): “The Impact of Migrant Remittances on Household Welfare in Ghana”
57. Ramírez, C., Domínguez, M., Morais, J. M., Crossing Borders: Remittances, Gender and Development, United Nations International Research and Training Institute for the Advancement of Women, 2005
58. Rapoport, H. and Docquier, F. (2005): The Economics of Migrants’ Remittances, IZA Discussion Paper No. 1531
59. Ratha, D. 2004 “Understanding the Importance of Remittances”. World Bank

60. Roberts,Bryan, Malgorzata Markiewitz. Marjan Nikolov. Aleksandar Stojkov. A Study on Determinants and Trends in Remittance Flows in Macedonia. Center for economic analysis (CEA**)**
61. Sander, C. June 2003. "Migrant Remittances to Developing Countries". Bannock Consulting. DFID
62. Schiopu, Ioana and Nikolaus Siegfried. 2006. DETERMINANTS OF REMITTANCES
63. Selm, J. 2007: "Macedonia: At a Quiet Crossroads". MPI
64. Sharp, A. M., Register, Ch. A. and Grimes, P.W. 2000. "Economics of Social Issues". 14th Edition. McGraw – Hill
65. Stark, O. Taylor, E. and Yitzhaki, S. (1986): Remittances and Inequality, The Economic Journal, Vol. 96 No. 383
66. Statistical office Macedonia
67. Straubhar. T. 1993. "Migration Pressure". International Migration / Migrations Internationales / Migraciones Internacionales, 1993; 31(1):5-41.
68. Suleri, A. Q. and Savage, K. 2006. "Remittances in crises: a case study from Pakistan". HPG Backgroun
69. Terry, D. F. (Editor) and Steven, R. W. 2005. "Beyond Small Change: Making Migrant Remittances Count". Washington, DC, USA: Inter-American Development Bank.
70. UNDP (2008). *People-Centred Analyses*, Skopje: UNDP
71. UNDP. *People-Centred Analysis*: Quality of life and regional development in FYR Macedonia. March, 2009: UNDP
72. Unicef. 2007. Child poverty study in FYR Macedonia. Skopje, Macedonia, UNICEF, 2007.
73. WB 2007. *World Economic Prospects*. Washington, D.C.
74. WB 2008a. *Factbook 2008*. Washington, D.C.
75. World Bank (2006): Global Economic Prospects: Economic Implications of Remittances and Migration; The International Bank for Reconstruction and Development/The World Bank, Washington D.C
76. World Bank Report (2007): *Migration and Remittances in Eastern Europe and Former Soviet Union*
77. WB. 2007. Macedonia - *Country Fiduciary Assessment* Report Number: 40888
78. WB. 2008b. Macedonia – *Public Expenditure Review.* Poverty Reduction and Economic Management Unit Europe and Central Asia Region. February 4, 2008
79. World Bank. 2008a. *Factbook*. Available online at
80. World Bank. 2008b. *Factbook*. Available online at
81. www.crpm.org. the Republic of Macedonia
82. www.ecb.int/pub/pdf/other/pp85-94_mb200702en.pdf

83. Xhaferi, S. 2005: “Kapitali financiar i mërgimtarëve dhe përfshirja e tyre në ekonominë e Republikës së Maqedoniasë”. Shkup
84. Zankera, H. Jessica, Siegelb, Melissa. (2007): “The determinants of remittances: A review of the literature”.

Appendix I

Patterns of Migration and Remittances				
	Proportion	Linearized Std. Err.	[95% Confidence Interval]	
Base: All households in the sample				
Recipient	0.07	0.0071929	0.0537041	0.081912
Non-Recipient	0.93	0.0071929	0.918088	0.9462959
Did you ever migrate abroad for a total time of at least one month since January 2004?				
Base: All households in the sample				
Households with Migrants	0.04	0.0054174	0.0314606	0.0527057
Households without migrants	0.96	0.0054174	0.9472943	0.9685394
Are you planning to migrate to another country in the next 12 months?				
Base: All households in the sample				
yes or Maybe	0.22	0.0155576	0.1938962	0.2549073
no	0.78	0.0155576	0.7450927	0.8061038
What was the most important reason you migrated abroad during this most recent migration?				
Base: All households in the sample with Migrant members				
to work/look for work	0.57	0.0467554	0.4731842	0.6589319
to join family/marry	0.02	0.0169722	-0.008814	0.0586121
to study	0.07	0.0223017	0.0282927	0.1168919
to visit family	0.24	0.0469357	0.1503337	0.3367975
for vacation	0.08	0.0292596	0.0245454	0.1407865
other	0.01	0.0073031	-0.004288	0.024726
What country did you go to during this most recent Migration episode?				
Base: All households in the sample with Migrant members				
Switzerland	0.19	0.0577942	0.071322	0.3009587
Germany	0.08	0.0387093	0.0024822	0.1562878
Austria	0.03	0.0200085	-0.008873	0.0706274
Italy	0.19	0.0540711	0.0820575	0.2969007
USA	0.06	0.0214001	0.0166795	0.1017096
Croatia	0.05	0.0209363	0.0050866	0.0882737
Australia	0.01	0.004463	-0.002117	0.0156163
Other	0.40	0.0535954	0.2950174	0.5079706
Are remittance receiving households the same as migrant sending households?				

Households with Migrants				
Recipient	0.22	0.0423431	0.136538	0.3025925
Non-recipient	0.03	0.0039718	0.0197191	0.0352951
Households without Migrants				
Recipient	0.78	0.0423431	0.6974075	0.863462
Non-recipient	0.97	0.0039718	0.9647049	0.9802809
How long were you away during the most recent trip abroad?				
Number of Months	5.91	0.7326774	4.455596	7.366779

APPENDIX II

I.A.1. International Standards of Measuring Remittances

International remittances comprise three categories of transfers: workers' remittances, compensation of employees, and migrant transfers.

Official statistics on remittances are primarily collected and reported in the BOP, which is conceptually based on the IMF's Balance of Payments Manual of 1993 (BPM5). The BPM5[40] divides remittances into three categories with separate definitions:

- **Workers' remittances** (WRs) cover current transfers by migrants employed in other countries than that of their citizenship for more than a year who are thus considered residents there.
- **Compensation of employees (**CoEs) comprise wages, salaries and other benefits (in cash or in kind) earned by individuals – in countries other than those in which they are citizens and (still considered) residents – for work performed for and paid by residents of those host countries. Employees, in this context, include seasonal or other short-term (i.e. less than one year) workers and border workers who have centers of economic interest in their own countries.
- **Migrants' transfers** (MTs) are not transactions between two parties but contra-entries to flows of goods and changes in financial items that arise from the migration (change of residence for at least a year) of individuals from one country to another. The transfers recorded are thus equal to the net worth of the migrants at the time of migration (cash and goods transferred).

International efforts to improve remittance data and ensure that providers of remittance transfer services operate in a safe and sound manner are well underway. The box below is given a section of the BOP Manual of the NBRM:

BOX 1 - BALANCE OF PAYMENTS MANUAL

-Compensation of employees comprises wages, salaries, and other benefits (in cash or in kind) earned by individuals—in economies other than those in which they are residents—for work performed for and paid for by residents of those economies. Included are contributions paid by

[40] IMF. 1993. *Balance of Payments Manual*. Washington, D.C.

employers, on behalf of employees, to social security schemes or to private insurance or pension funds (whether funded or unfunded) to secure benefits for employees. Employees, in this context, include seasonal or other short-term workers (less than one year) and border workers who have centers of economic interest in their own economies. Because embassies and consulates are considered extraterritorial to the economies in which they are located, the compensation received by local (host country) staff of these institutional entities is classified as that paid to resident entities by nonresident entities.

-A cash transfer could be regarded as a capita transfer by one party to a transaction and as a current transfer by the other party. So that a donor and a recipient do not treat the same transaction differently, it is recommended that a transfer be classified as a capital transfer by both parties—even if the transfer is linked to the acquisition or disposal of a fixed asset by only one of the parties. On the other hand, if available evidence creates serious doubt that a cash transfer should be classified as a capital transfer; the transfer should be classified as a current transfer. (The Manual and the SNA contain consistent criteria for distinguishing between the two types of transfers.)

-Current transfers between other sectors of an economy and nonresidents comprise those occurring between individuals, between nongovernmental institutions or organizations (or between the two groups), or between nonresident governmental institutions and individuals or nongovernmental institutions. The same basic items for the government sector are generally applicable to other sectors, although there are some differences within components. In addition, there is the category of workers' remittances.

-Workers' remittances cover current transfers by migrants who are employed in new economies and considered residents there. (A migrant is a person who comes to an economy and stays, or is expected to stay, for a year or more.) Workers' remittances often involve related persons. Persons who work for and stay in new economies for less than a year are considered nonresidents; their transactions are appropriate mainly to the component for compensation of employees.[41]

[41] For more details
http://www.nbrm.gov.the Republic of
Macedonia/WBStorage/Files/IR_Annual_Report_2006.pdf

Remittances may be sent through (Sander 2003):

1. Formal Transfer Systems – that are offered primarily by banks with account to account transfers such as through SWIFT and by money transfer operators, such as Western Union or MoneyGram, and their agents, and
2. Informal Transfer Systems - A range of informal systems exist which include the migrants carrying money themselves or sending it with relatives or friends. There are also a number of informal services, typically operating as a side business to an import-export operation, retail shop, or currency dealership. Most of them operate on the basis of no or very little paper or electronic documentation. The transaction is communicated by phone, fax, or email to the counterpart who will be paying out. The details vary, such as whether there is a password or form of identification or not.

Remitters use informal channels because these channels are cheaper, better suited to transferring funds to remote areas where formal channels do not operate, and offer the advantage of the native language and, on rare occasions, anonymity. Informal channels, however, can be subject to abuse. Strengthening the formal remittance infrastructure by offering the advantages of low cost, expanded reach, and language can shift flows from the informal to the formal sector. Both sender and recipient countries could support migrants' access to banking by providing them with identification tools. (Ratha, 2004)

The common remittance channels cover the spectrum from formal to informal transfer services. Sander (2003)

At the formal end, are:

- Banks (with various products, most commonly electronic transfers between accounts)
- Money transfer operators (MTOs) (such as Western Union and MoneyGram, as well as many smaller global or market-specific MTOs22)
- foreign exchange or currency bureaus (at times operating their own service but often an agent to a global or regional MTO)
- post offices (operating in part with their own products and/or as agents of either postal banks or MTOs)

At the informal end are service providers as well as personal:

- Hundi or Hawala agents as part of an organized network (e.g. shop owners, travel agents)
- Shop owners, business people (e.g. import-export traders), or individuals who 'do a favor'
- Personally carrying the remittance either oneself or sending it with a family member or friend

Informal channels tend to be used more where the financial sector is either missing (e.g. as can be the case in conflict or post-conflict countries), weak, or mistrusted (for instance due to bankruptcies). Similarly, foreign exchange controls generally lead to a higher use of informal channels. Conversely, formal sector use increases in stronger, more liberalized economies with a stronger financial sector.

Key issues regarding accessibility of services are familiarity, trust, proximity, reliability, and awareness of a service. Many of the smaller MTOs and also the informal services are successful because they work with a market segment of migrants who are located in 'micro-markets' – often certain cities and neighborhoods within them.

Access to the transfer service at both the sending and the receiving end is a critical factor. Many of the remitters need to send money to locations with often weak or no financial infrastructure and where banks of their host country have little or no other business volume or connection. While capitals and other urban centers have fairly good financial service availability, rural regions tend to be much less well serviced by the financial industry. Thus, while the main transfer channel into a country such as Bangladesh may be banks for some sub-regions, for other sub-regions informal channels are more popular. The choice of service is often limited at the receiving end due to lack of an outlet or point of sale close to the receiving home, unfamiliarity with the service, or, for instance in the case of banks, due to perceived or actual rejection of the potential client by the service provider. Banks can be intimidating to people not used to dealing with them and banks typically prefer to target high net worth individuals and corporate clients; this they project in image, choice of buildings and locations, as well as through access barriers such as account fees and/or minimum balances on accounts (Sander 2003).

Appendix III
Migration Module in MQLS08

400. a) Has your household received financial remittances from assistance from abroad in the last 6 months?
    1. Yes
    2. No

    b) If yes, roughly how much? _____ MKD)

401. Are you planning to migrate within the 12 months?
Yes = 1; No = 2; Maybe = 3

402. Did you ever migrate abroad for a total time of at least one month since January 1, 2004?
Yes = 1; No = 0

403. In what year and month did you most recently migrate abroad for at least one month? _____Year ____Month

404. How long did you remain away during this most recent migration episode? _____ (months)

405. What was the most important reason you migrated abroad during this most recent migration episode?

To work/look for work	1
To join family/marry	2
Moving with family	3
Study	4
Security	5
Health	6
Family visit	7
Vacation	8
Other	9

406. What country did you go to during this most recent migration episode?

Switzerland	1
Germany	2
Austria	3
Italy	4
USA	5
Croatia	6

Other 7
IF OTHER *(Specify)* _____

407. What was your main occupation, i.e. the occupation in which you spent the most hours, at the end of the time period during this most recent migration episode? _____

408. What was your usual or normal monthly (net) earning during the 12 months prior to the most recent migration? _____ (Denars)

409. What was your usual or normal monthly (net) earning while working abroad during the most recent migration? _____(Euros)

410. What is the value of all remittances in cash sent or brought home during the most recent migration? _____(Euros)

411. What is the value of all remittances in kind sent or brought home during the most recent migration? If no in-kind remittances sent or brought, write zero _____(Euros).

412. What was the actual use of the money sent? *(Interviewer: circle all items in **10a** that remittances were used for; then ask the percentage of remittances spent on each and write in 10b, making sure the shares add up to 100%)*.

Item Of Use	**10a.**	**10b. Percentage Share**
Purchase of food and basic necessities	1	
House construction / repair	2	
Start non-farm business	3	
Purchase of a durable good	4	
Educational expenses	5	
Medical expenses	6	
Wedding / funeral	7	
Charity	8	
Payoff debts	9	
Visits abroad / hajj	10	
Buy farm implements	11	
Land improvement	12	
Rent / lease land	13	
Saving	14	
Other	15	

Appendix IV

Regions with significant populations of Macedonian Ethnicity		
Country	Estimated Range	Estimate
Australia	83,978 - 200,000	124,000
Italy	78,090	78,090
Germany	62,295 - 85,000	73647.5
Switzerland	61,304 - 63,000	62,000
United States	51,891 - 200,000	125,000
Brazil	45,000	45,000
Canada	37,055 - 150,000	93,500
Turkey	31,518	31,518
Argentina	30,000	30,000
Serbia	25,847	25,847
Austria	13,696 - 15,000	14,500
Netherlands	10,000 - 15,000	12,500
Czech Republic	11,623	11,623
United Kingdom	9,000	9,000
Hungary	7,253	7,253
Bulgaria	5,071 - 25,000 (est.)	15,000
Albania	4,697 - 35,000 (est.)	21,000
Slovakia	4,600	4,600
Croatia	4,270	4,270
Slovenia	3,972	3,972
Sweden	3,669 - 15,000	9,000
Belgium	3,419	3,419
Denmark	3,349 - 12,000	7,600
Norway	3,045	3,045
France	2,300 - 15,000	8,500
Bosnia and Herzegovina	2,278	2,278
Poland	2,000 - 4,500	3,750
Russia	1,000	1,000
Greece	962 (2001 census) to 10,000 – 30,000 (1999 est.)	15,000
Montenegro	819	819
Total Outside RM		846,731.5
Republic of Macedonia		1,297,981
Total Population of Macedonian ethnicity		2,144,712.5