

**Development on the Move:  
Measuring and Optimising Migration's  
Economic and Social Impacts in Georgia**

## Foreword

This report is one of the main outputs produced by the project 'Development on the Move: Measuring and Optimising Migration's Economic and Social Impacts'. Development on the Move is a joint project of the Global Development Network (GDN), an international organisation headquartered in Delhi, India and dedicated to promoting development research; and the Institute for Public Policy Research (ippr), one of the UK's leading think tanks.

Development on the Move is a ground-breaking global research project gathering new qualitative and quantitative data about migration's development impacts. The project aims to comprehensively assess how migration affects development in a number of different countries around the world, and how policy can maximise migration's development benefits and minimise its costs.

We believe the project is unique in terms of scope, depth and focus. We have conducted comparable research in seven countries, each on a different continent, speaking to hundreds of thousands of people and gathering in-depth data from almost 10,000 households. The project examines a wide range of migration's development impacts, thinking about how migration as a *whole* affects development as a *whole*. And it is uniquely policy focused, with policymaker inputs at various stages of the research and fresh, workable policy ideas one of the key project goals.

All the in-depth country reports are authored by research teams primarily composed of researchers living and working in the country of study, with this no exception. This, we hope, ensures that our research is shaped by and references the local context, making the analysis and resulting policy recommendations as relevant as possible. We would like to thank the main report authors Robert Tchaidze and Karine Torosyan, as well as the staff at CRCC who led on the implementation of the household survey, and everyone else who contributed to the production of this report. It was a pleasure to collaborate with such insightful and rigorous researchers, and we believe that they have produced an interesting analysis with many important new insights.

The project would also not have been possible without the generous support provided by an international group of donors, comprising the Australian Agency for International Development, the Austrian Ministry of Finance, the Finnish Ministry of Foreign Affairs, the Luxembourg Ministry of Finance, the Norwegian Agency for Development Cooperation, the Spanish Ministry of Foreign Affairs, and the UK Department for International Development. However, the views in this paper do not necessarily represent those of any of the project funders.

If you are interested in the project more widely it has also produced a diverse range of additional outputs including workshops, a working paper series, a short film, a number of comparative reports, a publicly available household dataset, and the other in-depth country studies (which examine Colombia, Ghana, Jamaica, Macedonia and Vietnam). Other outputs can be obtained from GDN and ippr's websites [www.gdnet.org](http://www.gdnet.org) and [www.ippr.org](http://www.ippr.org).

Please contact ippr and GDN with any questions or comments you have on reading this report. Development on the Move has been a collaborative endeavour between partners

from all over the world hoping to learn from one another while adding to the global stock of knowledge. We would be delighted to further broaden that dialogue.

**Ramona Angelescu**  
**Laura Chappell**  
**Alex Glennie**  
**George Mavrotas**  
**Dhananjayan Sriskandarajah**

**Project Management Team**

# Table of Contents

About the authors

Acknowledgements

Executive Summary

Section 1: Introduction

Section 2: Patterns of migration in Georgia

2.1 History of migration

2.2 Characteristics of migrants

Section 3: Remittances

3.1 Overview of remittances

3.2 Characteristics of households receiving remittances

3.3 Profile of remitters

3.4 Amount of remittances sent by absent migrants

3.5 Remittances from non-household members

3.6 Uses of remittances

Section 4: Impact analysis of migration in Georgia

4.1 Impacts of migration on individuals

4.2 Impacts of migration on households

4.3 Impacts of remittances on households

Section 5: Policy discussion and recommendations

5.1 Stakeholder interviews and public opinion

5.2 Current migration-related domestic and foreign policies

5.3 Policy recommendations

References

Appendix A: Report Methodology

Appendix B: Dynamics of remittance inflows from Russia

Appendix C: Propensity of a household having absent or return migrants

## About the authors

This study was undertaken by a joint CRRC/ISET team.

The Caucasus Research Resource Centres ([www.crrc.ge](http://www.crrc.ge)) is a programme of the Eurasia Foundation funded by the Carnegie Corporation of New York. Since its opening in 2003, CRRC has become a nexus of activity for social science community in the South Caucasus by providing open access to scholarly literature, data, and professional training for social science researchers.

The International School of Economics at Tbilisi State University ([www.iset.ge](http://www.iset.ge)), which was established in 2006 with the support of the World Bank and other donors, administers a Master's level programme in economics and provides economic policy research for the benefit of the public and private sectors in the countries of the South Caucasus.

## Acknowledgements

Principal writers of this report – Robert Tchaidze (IMF) and Karine Torosyan (ISET)\* – would like to thank the following individuals and groups for their help and support:

- Eric Livny, Lasha Labadze, Sophie Skhirtladze, Salome Baslandze, Maka Chitanava, Maia Grigolia, Grigol Modebadze, and others at ISET;
- Koba Turmanidze, Aaron Erlich, Giorgi Babunashvili, Lika Chapidze, Robia Charles, Kristina Vacharadze, Tinatin Zurabishvili, and the rest of the CRRC team;
- the local research community, in particular Varlam Chkuaseli, and all the participants of workshops and roundtables organized by ISET, DRC, CIPDD, IOM, and PMCG;
- Randy Filer (Hunter College, CUNY) and Ted Gerber (University of Wisconsin-Madison), who served as external advisers for the project;
- George Mavrotas, Danny Sriskandarajah, Ramona Angelescu, Laura Chappell, and other members of the GDN/IPPR Project Management Team;
- the other DOTM country teams and all the participants of workshops in Brisbane, Washington, D.C., Kuwait City, and Vienna.

All remaining errors and omissions are the authors' own.

Correspondence: [k.torosyan@iset.ge](mailto:k.torosyan@iset.ge) or [rtchaidze@imf.org](mailto:rtchaidze@imf.org).

---

\* This report was written while Robert Tchaidze was on leave of absence from the IMF serving as a visiting professor at ISET. Opinions and views expressed in this report are solely those of the authors and not of the IMF staff, IMF Executive Board, ISET International Faculty Committee, or ISET Governing Board.

## Executive Summary

Migration – both forced and voluntary – has dramatically affected the former Soviet republic of Georgia in recent decades. Correspondingly, interest in the question of how migration affects the country is increasing. However, most of the migration studies about Georgia produced in the last few years have been descriptive only, focusing on the structural characteristics and the causes of migration rather than its developmental consequences. This report aims to fill in some of the gaps in the evidence base by providing the first comprehensive dataset on migration and development in Georgia, and by using rigorous propensity score matching methodologies to assess a range of the impacts that migration appears to be having on the development of individuals and households in Georgia. It then interprets these findings to draw out some key recommendations for policymakers.

### Key findings

1. According to our data, 7.4 per cent of Georgia's current population has experienced some kind of migration: that is, they are either absent migrants or they have migrated and returned, with a roughly equal number in each group. Based on the size of the sample, the number of migrants currently abroad is estimated to be around 140,000. Another 138,000 are estimated to be returned migrants.
2. Men are more likely to migrate from Georgia than women: while the share of men among non-migrants is 48.4 per cent, among migrants (both absent and returned) men constitute just over 60 per cent. Males also start migrating earlier, with our survey indicating that 14.6 per cent of male migrants are aged 18-24, whereas only 5.1 per cent of female migrants fall in this age range.
3. Russia has traditionally been the most important destination for Georgian migrants, and our survey indicates that the number of migrants currently in Russia who left in the last ten years is somewhere around 49,000. However, our evidence also suggests that migration patterns seem to be changing. The countries of Western Europe, particularly Greece, now have a higher share of currently absent Georgian migrants at 40.4 per cent, while 36.5 per cent are currently in Russia. This contrasts with the destination choices of returned migrants (more than 57.3 per cent of returned migrants in our sample had come back from Russia, but just 17.8 from Western Europe).
4. Economic factors dominate in people's reasons for migrating: 73 per cent of currently absent migrants and 60.8 per cent of returned migrants left in the hope of acquiring a stable job and/or earning more money. Meanwhile, 40.6 per cent of currently absent migrants and 21.8 per cent of returned migrants left to study, to learn a language or to acquire other skills. Finally, 36 per cent of absent migrants and 11.2 per cent of returned migrants left for family reasons, including to get married or to reunite with or follow other family members.
5. Remittances are a significant source of income for the Georgian economy, both in absolute and relative terms. Inflows have risen tenfold between 2002 and 2008, and now constitute more than a billion US dollars, or 7.8 per cent of GDP. Russia

is the most important source of bank transfers into Georgia, accounting for 63.3 per cent of total inflows in 2008 (some US \$630 million). Inflows from Russia are more than six times larger than inflows from the second largest source country (Ukraine, which accounts only for 7 per cent of total inflows). Thus while Russia is increasingly unpopular as a destination for migrants, it is still vital as a source of remittances.

6. From our survey, it appears that around 70 per cent of absent migrant groups<sup>1</sup> remit to their households in Georgia, with most of these remitting fairly regularly. 58 per cent of migrant groups send remittances every year or more often, while approximately 10 per cent remit only on special occasions or in emergencies.
7. The average amount remitted per year is the equivalent of US \$1,470 (compared to an average annual income in Georgia of US \$3,665), but there is considerable variation around this figure, with a minimum reported amount of US \$67 and a maximum of US \$8,065. It is rare for remitters to send extremely large amounts, with 75 per cent of households having received US\$ 1,680 or less in remittances during the year preceding the survey.
8. Around 10 per cent of the households in our sample reported receiving remittances from migrants who they do not consider to be members of their household. The amounts sent by non-member remitters vary. 75 per cent of households reporting this kind of remittance receive around US \$670 or less, although the maximum reported amount was approximately US \$13,450. In 37 per cent of cases, remittances from non-members are sent to a specific household member, rather than the household as a whole (compared to only 14 per cent in the case of remittances from household members). It seems as if these funds are mostly sent to help households in emergency situations and with unexpected expenses, rather than as regular budget support.
9. A number of factors affect an absent migrant's propensity to remit, including the length of their absence from Georgia, the destination country they have moved to and their employment status while abroad. Unsurprisingly, the migrants most likely to remit are those who have moved to richer European countries, those who had a confirmed job in their destination country before departing and those working on a full-time (or almost full-time) basis. Our survey found that migrants tend to remit most in their third year away from home, after they have established themselves financially. But after this, the amounts remitted start to decrease.
10. Household characteristics also play a part in determining the level of remittances sent by absent migrants. As expected, migrants are more likely to remit back home if they have left their children in Georgia, if their households are located in rural areas (which tend to be poorer) and if they have frequent contact with families left behind.

---

<sup>1</sup> 'Migrant groups' are groups of migrants from one household who have migrated together. They tend to remit as one unit, for which reason the report treats them as the unit of analysis when it examines remittances, rather than looking at each migrant individually. This concept is explained further at the start of Section 3 on remittances.

11. Overall, 34.5 per cent of survey respondents stated that they spend remittances from migrants absent from their own households differently than they do other sources of household income. 44.4 per cent of households that receive remittances from non-members said this. The most common uses of remittances that are not simply added to household budgets are for healthcare costs, household goods, paying off debts, child support and special occasions, such as funerals and weddings. Few households reported using remittances for direct savings or investments in business and property. Note, however, that reported use of remittances may not tally with actual use – if remittances are spent on healthcare, for example, this might mean that other sources of income do not need to be spent there, and are reallocated.
12. Migration appears to have a mixed impact on certain development indicators in Georgia (as do remittances), though on the whole the effects are positive. For example, our survey suggests that while households in rural areas that receive remittances are less likely to have members in poor health, in the capital Tbilisi the effect is the opposite. Meanwhile, remittances do not seem to have a significant impact on unemployment and the rate of labour force participation, while migration itself has a positive impact on employment rates. So having a migrant depart from your household means you are more likely to be in work, as does having a returned migrant in your home.
13. Migration does not appear to have significantly changed gender roles in Georgia, which remains a very traditional society. However, there is some evidence to suggest that returned females are more likely to perform traditionally male tasks (9 per cent more than the average), while return males are less likely to engage in female tasks. When asked whether more effort is needed to ensure that men and women are treated equally in Georgia, the majority of female respondents agreed or strongly agreed that it was, with return migrant females being particularly supportive (86 per cent of them agreed or strongly agreed, compared with 72 per cent of non-migrant females). Returned females do stand out as the most supportive group when it comes to ensuring gender equality in Georgia, suggesting that their experience of migration might have an impact on their opinions and values.

## Policy responses

The literature review, stakeholder interviews and surveys carried out in support of this study have revealed substantial gaps in Georgia's policy framework around issues of migration and development. We therefore make three recommendations about where policymakers should focus their attention:

**1. Domestic labour market policies.** Although the government has succeeded in strengthening the Georgian business environment in recent years, much more needs to be done in terms of creating sustainable employment opportunities. This would reduce the need for high levels of outward migration from Georgia, which our data suggests is driven primarily by the demand for employment and for higher wages. It would also support the reintegration of returned migrants. Some policy innovations to make Georgia more competitive might be to establish vocational schools and training programmes, and to promote the adoption of internationally recognised business ideas and practices.



**2. Policies to improve information and assistance for migrants.** The Georgian government should improve its collection and dissemination of information on legal migration routes, and should help to organise pre-migration assistance. That could involve the creation of support centres that would gather information on migration programmes and opportunities in destination countries. Preparation is important for a number of reasons, among them the fact that where Georgian migrants have employment arranged in advance they are more likely to remit. Basic language training could also be provided by these centres, as the significant language barriers that exist for many Georgians abroad seem likely to prevent migrants from utilising their skills and education most effectively. Such centres could employ returned migrants who possess the right language skills and the knowledge of such programmes and other aspects of residing abroad (legal, social, cultural and so on).

**3. Policies to maximise the benefits of remittances.** Given the size of remittance flows entering Georgia, it is vital that policymakers understand what drives these transfers and how families use them. The fact that remittances are mostly spent on basic needs suggests that those who send them from abroad do not feel able to invest them in local businesses. It might therefore be fruitful for policymakers to investigate whether there is scope for the encouragement of pooling and joint investment of assets in community development projects, though careful planning would be required to ensure these projects were attractive to remittance senders and recipients. The government could also help with facilitating remittance transfers. Although the monetary costs of remitting to Georgia are relatively low, there is scope for reducing inconvenience costs, for example by developing technology to transfer remittances electronically rather than requiring recipients to travel to collect them from banks.

## Section 1: Introduction

Migration – both forced and voluntary – has affected Georgia profoundly in recent decades. Georgia has experienced one of the highest global rates of emigration since the 1990s (in 2003 it was ranked ninth in the world<sup>2</sup> [Mansoor and Quillin 2007]) and in 2006, the UN Economic Commission estimated that there were around 191,000 Georgian migrants (see Shelburne and Palacin 2007). By some estimates Georgia has lost up to 20 per cent of its 1989 population as a result of migration, and now hosts an aging population facing high levels of ‘brain drain’ and low birth rates.<sup>3</sup> This makes Georgia an interesting case to study the impact of migration on development and social stratification in the context of a country undergoing market transition, especially given the political and economic developments of the last few years.

As a result of the ‘Rose Revolution’ in 2003 that strengthened democratic governance in Georgia, migrants and members of the diaspora have become much more active in their attempts to take advantage of new business opportunities. Although the exact numbers are hard to come by some have even chosen to return (around 138,000 by our estimates, though not all since the Rose Revolution) with several high-profile cases (those who have taken on top positions either in the government or in business) very prominent. Given the size, economic resources and intellectual might of Georgian migrant communities, the utilisation of the diaspora’s financial and human capital is viewed by the Georgian government as an important instrument in Georgia’s development.

In addition, Georgia has recently been experimenting with liberalisation policies on an unprecedented scale. According to the World Bank’s Doing Business reports, Georgia was ranked 100<sup>th</sup> in 2006 in terms of the ease of conducting business (next to Azerbaijan, Vietnam, Ethiopia, and Morocco) but had risen to 18<sup>th</sup> place in 2008 (next to Switzerland, Estonia, Belgium, and Germany)<sup>4</sup>. The Georgian government has demonstrated a determination to cut bureaucratic red tape and reduce direct and indirect taxes in an attempt to promote entrepreneurial activities and self-employment in Georgia. These developments could potentially mitigate outflows of migrants and promote sustainable return of high-skilled and educated migrants if viable employment opportunities start to emerge at home.

Finally, since the 1990s, Georgia has been going through a complex process of cultural, political, and economic change. For almost two centuries, Georgia was a part of the USSR, and as such, has maintained very strong cultural, educational, and business relations with the Russian Federation. Russia has been the main destination for Georgian migrants until the early 2000s, when, after the introduction of a visa regime with Russia that was followed by a trade embargo and blockade, Europe has become an increasingly popular destination for Georgia’s migrants. This reorientation has had an impact on both the economy and socio-cultural environment.

---

<sup>2</sup> If measured per thousand of population.

<sup>3</sup> According to Statistics Georgia, the share of the population aged 70 or more increased from 7.9 per cent in 2000 to 10.3 in 2009, while the share of the population aged 9 and less decreased from 11.8 per cent to 9.5 correspondingly. The birth rate (17.1 per thousand of population in 1990) reached 10.7 in 2005.

<sup>4</sup> Following methodological changes introduced in 2009, 2008 rankings have been recalculated with Georgia moving to the 21<sup>st</sup> position. In 2010 Georgia has been ranked 11<sup>th</sup>.

Migration is viewed as a major challenge by the Georgian authorities, and five ministries (the Office of State Minister for Diaspora Issues, Ministry of Refugees and Accommodation, Ministry of Internal Affairs, Ministry of Justice, and Ministry of Foreign Affairs) and other state agencies are involved in managing these flows. Several international organisations as well as local think-tanks and NGOs<sup>5</sup> participate in discussions that aim to understand both the causes and consequences of migration as well as draw relevant policy lessons.

Georgia provides an interesting case for any study of migration's development impacts, given its recent history of very high levels of emigration, and its fast changing political and economic climate. This research was carried out in the midst of Georgia's shift towards the 'West' and away from its historical close links with the countries of the Former Soviet Union – indeed the fieldwork for the household survey was successfully carried out only weeks after the end of the war which took place at the end of 2008. Alongside political change Georgia has also been experiencing dramatic economic reforms to improve the business climate. These changes appear to be reorienting patterns of emigration, and possibly also immigration, as well as playing an important role in shaping the ways in which migration impacts upon development in Georgia.

## **Methodology**

This report on migration's impacts on development in Georgia is multi-disciplinary and draws its findings from a range of methodological tools, including examination of existing literature and data, stakeholder interviews, and a large, nationally representative, in-depth household survey. It is also designed to be policy-focused, involving policymakers and other key actors from the start.

The dataset is based upon a 178-question survey, synchronised with other DOTM country teams and covering many aspects of both migration and socio-economic environment in which households live in Georgia. The data collection fieldwork was done by CRRRC in November-December 2008. See Appendix A for further details of the survey methodology used.

This report relies primarily on the dataset compiled as part of the DOTM study, and is based on a nationally representative multi-stage sampling design that covers about 1,500 households. The questionnaire gathered wide-ranging information both about individuals within the household (including demographic and socio-economic information, as well as data on their migration histories) and about the household as a whole. It also gathered data on the household's opinions on migration.

The sample is divided into three categories: households with no migrants (NM); households with currently absent migrants (AM); and households with returned migrants (RM). See Box 1 below for our definitions of these.

---

<sup>5</sup> Examples include the International Organization for Migration (IOM), International Labour Organization (ILO), Organization for Security and Cooperation in Europe (OSCE), United Nations Development Programme (UNDP), United Nations Association of Georgia (UNAG), the Danish Refugee Council (DRC), the Caucasian Institute for Peace, Democracy and Development (CIPDD), Policy and Management Consulting Group (PMCG), World Vision, CARE, People In Need, People's Harmonious Development Society, WomenAid and Caritas.

### **Box 1: Definition of migration**

Development on the Move uses the following definitions:

- **Migrant:** Someone who has spent three months or more living continuously in a country other than that of their birth.
- **Household:** people presently living together in the same dwelling most of the time, regardless of their legal place of residence, and who share income and expenses.

Within this, the project examines three different kinds of migrants:

- **Immigrant:** A person who was born in another country but has come to live in the country of our study.
- **Absent migrant:** A person who was born in the country of our study but who, within the last years, left to go and live in another. Absent migrants are still living abroad. We only examine people who went to live abroad in the last 10 years in order to try to minimise 'recall errors' when respondents discuss them, so anyone who left more than 10 years ago is not included in this category.
- **Returned migrant:** A person who was born in the country of our study and who lives there now but who at some point has lived in another country for three months or more.

A three month definition of migration differs from the usual definition used in official data sources, which only includes people who moved for a year or more. We feel our definition is more useful as it allows us to capture short-term, irregular and seasonal movement, as well as more permanent emigration.

### **Report structure**

The report is organised as follows: section 2 describes the historical aspects of migration and provides statistical portraits of migrants that emerge from the collected data; section 3 discusses remittances, which are a crucial way in which migration can affect development outcomes; while section 4 uses econometrical tools to address the following questions:

- Is material poverty different in households with migrants or households receiving remittances?
- What is the impact of migration on labour markets?
- Is educational attainment different among members of migrant households or households that receive remittances?
- Do gender roles change within households with a migrant?
- Are status and opportunities different for female migrants?
- How does migration affect migrants' level of education?

Finally, section 5 discusses current Georgia's current policy framework and makes policy recommendations.

## Section 2: Patterns of migration in Georgia

### 2.1 History of migration

Military conflicts and harsh socio-economic conditions have been key drivers of Georgia's recent migratory flows, with large number of Georgian citizens since the early 1990s resorting to migration as a survival strategy. For many reasons – including a collapse of the registration system, poorly maintained birth and death records, use of questionable methodologies, etc. – exact numbers of migrants do not exist. The UN (2009) estimates net emigration between 1990 and 2005 to have been 598,000 people, while Badurashvili (2004) of the Georgian Centre of Population Research states that between 1989 and 2002, Georgia lost around one million of citizens'. Other estimates often quoted in press, are as high as 1.5 million.

As our own data shows (see the following sections of this report), migrants are of working age and often well educated. Limited job market possibilities in Georgia have prompted many to leave for jobs or career advancement. Others who obtain education abroad often end up travelling abroad again in search of work. The United States, Germany, and the United Kingdom have become popular destinations for educational migrants. Women have increasingly joined men in search of better economic opportunities abroad, with each gender favouring different countries.

Recent external migration in Georgia can be viewed as occurring in three waves that could be called Collapse and Conflict (1990-1995), Economic Struggle (1996 to 2004), and Possible Revival (2004-present).<sup>6</sup> We focus here on the first two waves of migration, as less is known about more recent movements.

The first wave of migrants left Georgia between 1990 and 1995, when the disintegration of the Soviet Union and the resulting power struggle led to three military conflicts (in the Autonomous Region of South Ossetia in 1991-2, in Georgia proper in 1992-3, and in the Autonomous Republic of Abkhazia in 1992-3). The country experienced significant outflows during this period, estimated to be around 650,000 people or 12 per cent of the 1989 population (CRRC 2007). While this period was dominated by two particular types of migration – war refugees and ethnic minorities returning to their homelands – some economic migration, both within the country and abroad, took place as well. The result of these years was the emergence of a post-Soviet Georgian diaspora<sup>7</sup> in Russia, the disappearance of several ethnic communities in Georgia (for example Greek and Ashkenazi Jewish), as well as the movement of large numbers of internally displaced refugees to Tbilisi.

Between 1996 and 2004 a substantial, but smaller, group of Georgian citizens left the country, mainly for economic reasons. These years saw an increasing number of ethnic Georgians decide to try their luck abroad. A political stand-off with Russia led to introduction of a visa regime in 2000 and while Georgian citizens of Armenian and Azerbaijani ethnicity could still reach Russia by adopting citizenships of their titular

---

<sup>6</sup> For more on the history of migration in Georgia see CRRC 2007.

<sup>7</sup> As opposed to ethnic Georgians that have settled in Russia during the times of the Russian Empire or the USSR. The new group comprised ethnic Georgians that moved from Abkhazia to Russia, mixed families, and others.

homelands, ethnic Georgians were prompted to look for other destinations.<sup>8</sup> Ukraine was seen as the closest substitute, but more and more migrants have started moving to the West.

## 2.2 Characteristics of migrants<sup>9</sup>

According to our Development on the Move dataset, 7.4 per cent of Georgia's current population has experienced some kind of migration: that is, they are either absent migrants or they have migrated and returned, with shares being equally distributed between the two groups. Such a sharp difference with the commonly cited estimate of 20 per cent can potentially be explained by differences in definitions. Many of those who left in the early 1990s and have settled in other countries are not incorporated in our survey, as our survey only counts absent migrants who left in the last ten years. Moreover, some more recently departed migrants will also not be counted since the survey could only collect information about migrants who are still attached to a household in Georgia (because it was conducted by asking households in Georgia about people who used to live with them but who are currently away). Any households of migrants which have departed in their entirety will therefore not be accounted for.

Given the size of the sample, the number of migrants currently abroad is estimated somewhere around 140,000 people. Another 138,000 are estimated to be returned migrants.

Table 1 below provides the main characteristics of Georgia's migrants – both those who are currently abroad and those who have returned, and compares them to Georgia's non-migrants. As our data shows, men are more likely to migrate than women: while the share of men among non-migrants is 48.4 per cent, among migrants men constitute just over 60 per cent in both groups. Males also start migrating earlier, with 14.6 per cent of males with experience of migration being in the 18-24 age group, compared with only 5.1 per cent for females. Before migration most of the migrants were neither employed nor enrolled in educational programmes, though they were marginally more likely to be employed, and marginally less likely to be in education than the average non-migrant. The latter finding probably reflects the different age profile of migrants, of whom fewer are of school age than the average Georgian non-migrant.

Only 25.7 per cent of return migrants and 15.4 per cent of those currently abroad had a job offer in their destination country before leaving Georgia. Among currently absent migrants 65 per cent are married, and among these, 47.9 per cent have a spouse or partner left behind in Georgia.

While more than half of the returned migrants are from the capital city, Tbilisi, 47.3 of those currently abroad are from other urban areas, and 33.1 per cent are from rural areas. Migrants are much more likely to come from urban areas, including the capital, than the average non-migrant, meaning that migrants have a more urban profile than the

---

<sup>8</sup> The introduction of visa requirements followed a decade-long regime of visa-free travel within the Commonwealth of Independent States (CIS) that until recently included both Russia and Georgia, and caused significant inconvenience for many citizens of Georgia who used to rely on travel to Russia as source for their livelihood (see United Press International 2000). Currently, visa issuance is effectively limited to those with immediate relatives in Russia. According to Russian officials, this step was an attempt to prevent Chechen rebels from moving into Russia from Georgia.

<sup>9</sup> Except where stated, all data presented is weighted to be nationally representative.

average Georgian. Among the returned female migrants, the share of those from Tbilisi is 54 per cent with the rest evenly split between other urban and rural areas. For male returned migrants the shares are more evenly distributed.

**Table 1: Basic characteristics of migrants (percentages)**

	Non-Migrants <sup>10</sup>			Migrants		
	Overall	Male	Female	Overall	Male	Female
Overall		48.4	51.6		61.9	38.0
<b>Age</b>						
Up to 17	19.5	22.4	16.8	5.0	3.6	7.4
Between 18 and 24	12.7	13.3	12.2	11.0	14.6	5.1
Between 25 and 45	28.2	28.6	27.9	51.6	48.1	57.5
Between 45 and 65	26.2	24.1	28.1	31.5	32.9	29.0
Above 65	13.4	11.6	15.1	0.9	0.7	1.1
<b>Origin</b>						
Rural	44.7	47.4	44.7	26.8	30.6	26.8
Urban	28.1	26.4	28.1	36.5	36.9	36.5
Capital	27.2	26.2	27.2	36.7	32.5	36.7
<b>Employed before migration?</b>						
No	79.7	75.8	83.3	79.1	74.6	86.3
Yes	20.3	24.2	16.7	20.9	25.4	13.7
<b>In education before migration?</b>						
No	80.2	77.1	83.0	81.8	84.8	76.8
Yes	19.8	22.9	17.0	18.2	15.2	23.2
<b>Absent Migrants</b>						
	<b>Overall</b>	<b>Male</b>	<b>Female</b>	<b>Overall</b>	<b>Male</b>	<b>Female</b>
Overall		62.3	37.6		61.5	38.5
<b>Age</b>						
Up to 17	6.2	5.1	7.9	3.9	2.1	6.8
Between 18 and 24	13.3	17.0	7.3	8.7	12.2	2.9
Between 25 and 45	54.7	52.4	58.4	48.5	43.8	56.5
Between 45 and 65	25.3	25.2	25.4	37.7	40.7	32.7
Above 65	0.6	0.3	1.0	1.2	1.1	1.2
<b>Origin<sup>11</sup></b>						
Rural	33.1	36.7	33.1	20.5	24.5	20.5
Urban	47.3	41.9	47.3	25.5	31.7	25.5
Capital	19.7	21.3	19.7	54.0	43.8	54.0
<b>Employed before migration?</b>						
No	76.7	75.0	79.5	81.4	74.2	93.0
Yes	23.3	25.0	20.5	18.6	25.8	7.0
<b>In education before migration?</b>						
No	83.0	82.6	83.8	80.5	87.0	70.1
Yes	17.0	17.4	16.3	19.5	13.0	29.9

<sup>10</sup> For non-migrants, data on education and employment correspond to their current status.

<sup>11</sup> In most cases, the origin and current location of returned migrants is assumed to be the same, since few surveyed families report having moved in the last 5 years.

Among destination countries, Russia remains the top choice for Georgian migrants, as Table 2 shows, though patterns for returned and absent migrants vary. Among returned migrants more than half had chosen Russia (57.3 per cent against 17.8 in Western Europe), whereas the countries of Western Europe (particularly Greece) have a higher share of absent migrants (40.4 per cent) as opposed to the 36.5 per cent currently in Russia). These differences in the destinations of returned and absent migrants may reflect changing patterns over time (migration patterns may have changed as a result of worsening relations between Georgia and Russia), though they may also reflect the fact that migrants tend to stay longer (or permanently) in some destinations as opposed to others. We also see that while share of migrants in the other Former Soviet Union (FSU) countries varies little between returned and absent migrants, there are far more migrants currently in Greece than have returned. This may indicate that Greece is more popular destination for recent Georgian migrants and/or that those who go to Greece tend to remain longer than those who go to the other countries of the FSU.

**Table 2: Destination countries**

	Absent Migrants			Returned Migrants		
	Overall	Male	Female	Overall	Male	Female
<b>Overall</b>		61.3	38.7		59.6	40.4
Russia	36.5	40.4	30.3	57.3	52.8	64.0
Western Europe	25.2	25.3	25.1	16.1	14.8	18.1
Greece	15.2	9.2	24.8	1.7	1.7	1.6
Other FSU	6.9	8.8	3.8	6.2	8.5	2.8
Turkey	5.8	2.9	10.3	9.2	8.6	10.1
North America	3.3	4.5	1.6	2.3	2.9	1.5
Israel	0.9	0.7	1.1	0.3	0.3	0.2
Azerbaijan	0.5	0.3	0.7	0.3	0.3	0.2
Armenia	0.1	0.2	0.0	0.2	0.0	0.4
Other	5.6	7.7	2.4	6.5	10.1	1.1

Changing trends in destinations are certainly taking place in relation to Russia at least, as can be seen by looking at the average shares of currently absent migrants heading to Russia by year of departure (Table 3). In the early 1990s, this share was 71.8 per cent, while it is now less than 20 per cent.

**Table 3: Share of migrants heading to Russia by departure date**

Departure date	1991-3	1994-6	1997-9	2000-2	2003-5	2006-8
Share of migrants	71.8	60.0	46.5	27.8	33.7	19.3

Using the results of the sample, the number of migrants currently in Russia who have left household members behind and who left in the last ten years can be estimated as somewhere around 49,000. Estimates popularly quoted in Russian press are usually much higher, but those numbers count migrants who left at any time, and also tend to lump together Russian citizens of Georgian ethnicity and migrants from Georgia, irrespective of their ethnicity and current citizenship.



Table 4 shows that Russia remains a top destination when the origin of a migrant is taken into account. However, if 71.6 per cent of returned migrants from the capital chose Russia, only 15.6 per cent of absent migrants from the capital did so, with the majority having chosen countries of Western Europe (39.7 per cent) or Greece (23.7 per cent) instead (the very high numbers of returned migrants going to Russia may be related to migrants from the capital choosing to go to Russia for education, particularly tertiary education). Migrants from other urban areas also appear to have consistently chosen to move to Russia: 40 per cent of this group of returned migrants lived there in the past, while 37.3 per cent of currently absent migrants do. Migrants from rural areas appear to be going to Russia in even higher proportions than previously (48.3 per cent of currently absent migrants from rural areas have moved there, compared to the 42.3 per cent who have returned). For migrants from urban areas the second most popular choice is Western Europe (28.3 per cent), while for migrants from rural areas it is Greece (20.4 per cent).

These statistics portray a sharp dichotomy between those departing from the capital in particular and those leaving from rural areas. It seems likely that those departing from the capital are more likely to be educated and wealthier and therefore have more opportunities to choose a wider variety of destinations than those who depart from rural areas.

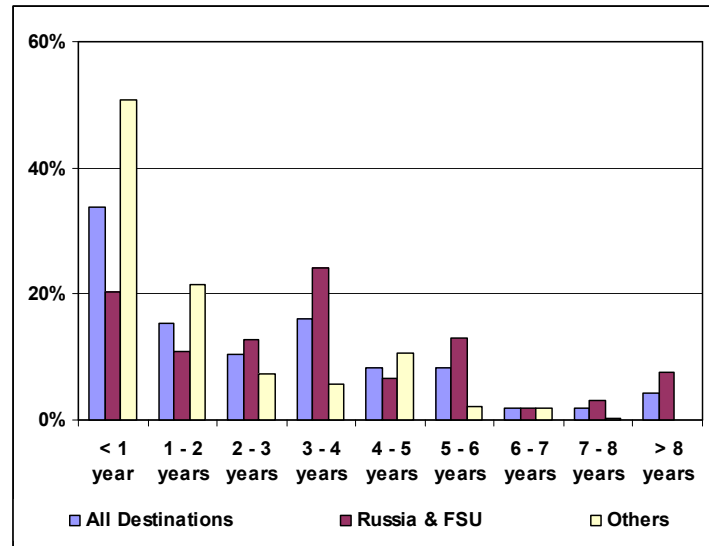
**Table 4: Destination countries by origin**

	Absent Migrants				Returned Migrants			
	Overall	Rural	Urban	Capital	Overall	Rural	Urban	Capital
<b>Overall</b>		32.7	47.0	20.3		19.9	26.7	53.4
Russia	36.5	48.3	37.3	15.6	57.3	42.3	40.0	71.6
Western Europe	25.2	11.9	28.3	39.7	16.1	14.5	19.7	14.9
Greece	15.2	20.4	7.9	23.7	1.7	0.8	2.5	1.6
Other FSU	6.9	12.6	4.0	4.5	6.2	22.2	5.1	0.7
Turkey	5.8	4.3	8.6	1.5	9.3	17.0	11.3	5.4
North America	3.3	1.6	2.0	9.2	2.3	0.4	5.7	1.3
Israel	0.9	0.3	1.6	0.0	0.3	0.4	0.0	0.4
Azerbaijan	0.5	0.2	0.6	0.5	0.3	0.4	0.7	0.0
Armenia	0.1	0.0	0.2	0.0	0.2	0.8	0.0	0.0
Other	5.6	0.4	9.5	5.3	6.4	1.2	14.9	4.2

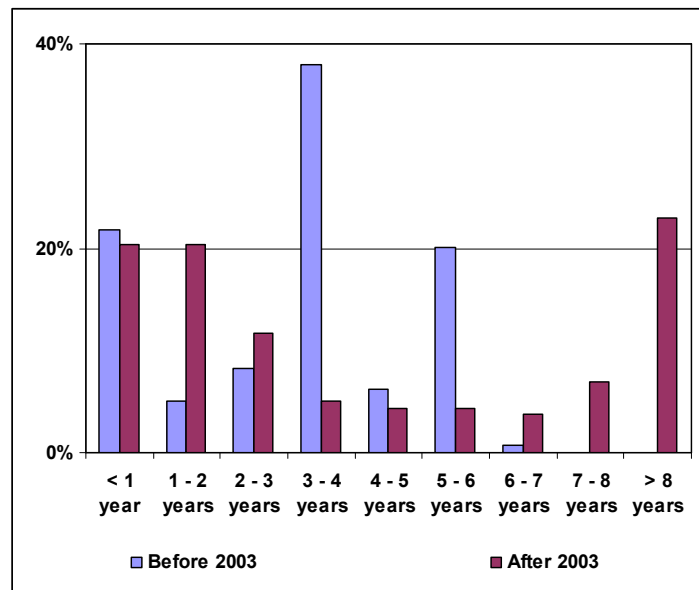
Most of the returned migrants have tried their luck abroad only a few times – 81.2 per cent have lived abroad once; 9.3 per cent twice; and 3 per cent three times, although some report leaving more than 7 times. While on average the returned migrants leave Georgia for slightly more than 3 years, there is dramatic variation in results. There are also significant differences in duration that depend on destination and on the timing of return, as figure 1 and figure 2 demonstrate. In particular, migration to the countries of the Former Soviet Union is more long-term than to the other countries. Another interesting observation is that following the Rose Revolution and the deterioration of relations between Russia and Georgia, some longer-term migrants started to come back from Russia. Almost 80 per cent of those who came back before 2003 had been in

Russia for up to 5 years, and almost 40 per cent of those who came back after had been there for longer than that.

**Figure 1: Duration of stay for returned migrants (percentages)**

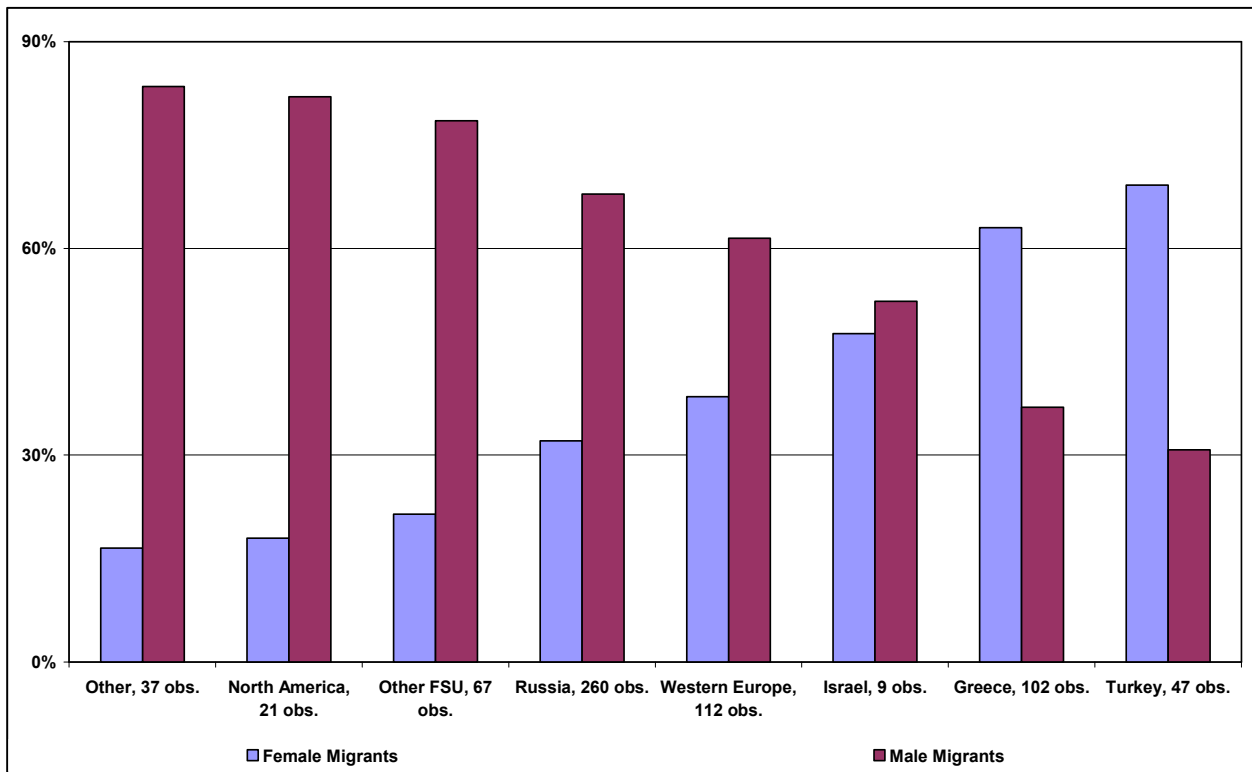


**Figure 2: Duration of stay for returned migrants returning from Russia (percentages)**



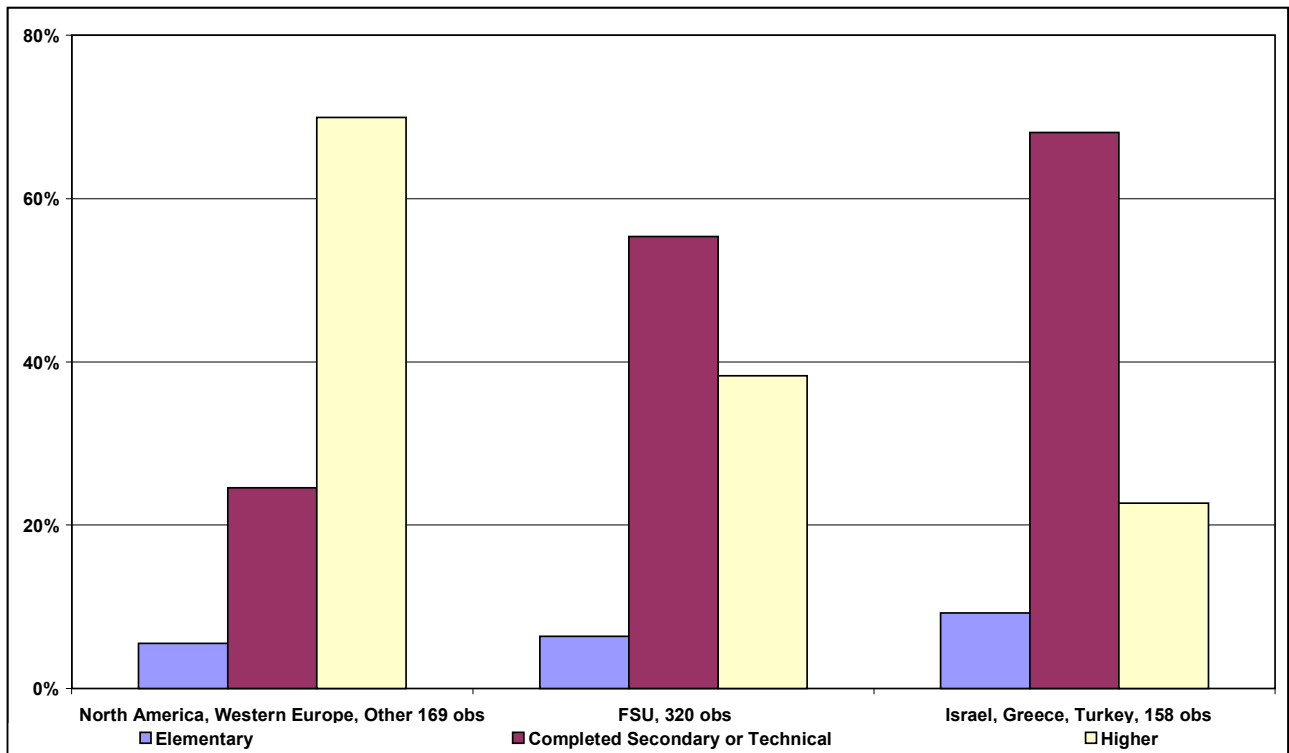
Our data reveal gender differences in the pattern of migration, which can possibly be attributed to the nature of the work that migrants do in different countries. For example, in Greece and Turkey, where the percentage of female migrants is higher, there is a higher demand for female-intensive jobs such as baby-sitting, house keeping and serving. In contrast, migrants in Russia and other FSU countries are often involved in industries that require manual labour, such as construction, which accounts for the overrepresentation of males (CRRC 2007).

**Figure 3: Gender distribution of absent migrants by destination (percentages)**



The data also reveal differences in the educational background of migrants, depending on their choice of destination. As Figure 4 shows, migration to North America and Western Europe is dominated by those with higher levels of education (those with at least a bachelor’s degree), while migration to Israel, Greece, and Turkey is dominated by those with secondary education.

**Figure 4: Educational background of absent migrants by destination**



While knowledge of Russian is almost universal among migrants (97.2 per cent, compared to 58.5 per cent for non-migrants), knowledge of other languages is not as widespread. 20.9 per cent of migrants reported knowledge of English; 1.4 per cent of German; 1.4 per cent of Turkish; 0.8 of Greek and 8.5 of some other language. For non-migrants these numbers are smaller. Overall, 98.5 per cent of migrants know at least one foreign language, while for non-migrants this number is 63.3 per cent.

When evaluating migrants' experiences abroad, families speaking on behalf of currently absent migrants were more enthusiastic than the returned migrants: 42.6 per cent of absent migrants were reported to be much wealthier now, and 44.9 per cent slightly wealthier; while only 23 per cent of returned migrants considered themselves to be much wealthier as a result of migrating and 46.7 per cent slightly wealthier.

Two explanations for this can be suggested. One is that of a selection bias – those who returned may have done so exactly because they were not successful, while those who were successful may have chosen to stay abroad. An alternative explanation is that the returned migrants who speak about their own experiences evaluate their successes differently to family members of absent migrants. In some cases it may be that they are more realistic than family members who might be inadvertently painting a rosier picture than is actually the case, or in some cases it may be that returned migrants do not feel comfortable reporting their significantly improved standard of living to interviewers.

**Figure 5: Qualification gains by absent migrants and return migrants (percentages)**

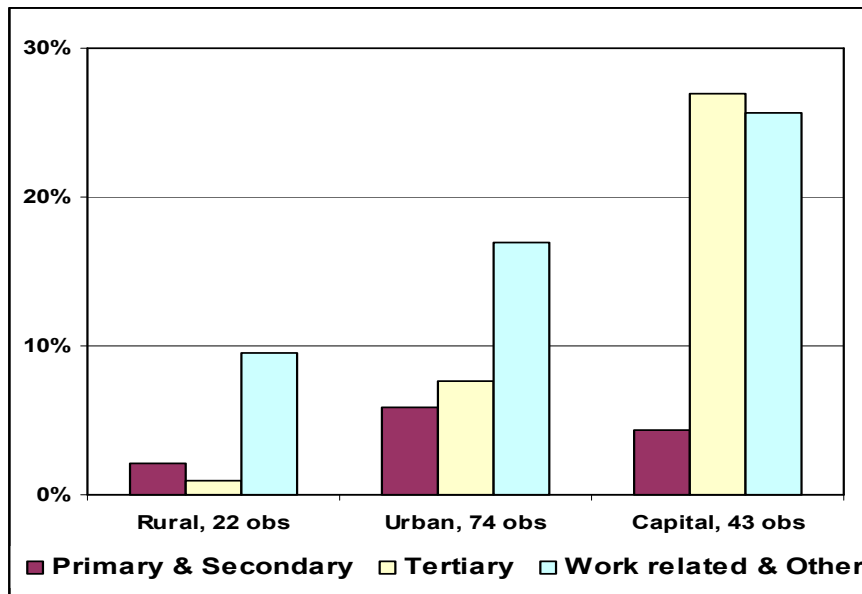


Figure 5 shows the types of qualifications gained by migrants while abroad. Migrants from the capital gain primarily in terms of tertiary education and work-related skills. Meanwhile, migrants from urban areas gain mostly in terms of work-related skills, although there is a sizeable share of those who gain in terms of tertiary education. Finally, very few migrants from rural areas make gains in terms of tertiary education with most of those who do make gains acquiring work-related or other skills.

*Reasons for migration*

When discussing the reasons that motivate people to migrate, it should be noted that while 77.1 per cent of the survey respondents either strongly or somewhat agreed with the statement that Georgia was a good place to live, just 25.8 per cent did not want to live in an another country and only 14.7 per cent were happy with the way Georgia is run.

Among the reasons for emigrating, economic factors were mentioned most frequently: 73 per cent of currently absent migrants and 60.8 per cent of returned migrants left because they ‘thought [they] would be able to earn more money,’ ‘hoped it would be easier to get a steady job,’ or ‘thought [they] would be able to send money back’. 40.6 per cent of currently absent migrants and 21.8 per cent of returned migrants left because they went to study, learn a language or acquire other skills. Finally, 36 per cent of absent migrants and 11.2 per cent of returned migrants left for family reasons, including to get married or to reunite with or follow other family members.

Decisions about returning are driven by similar reasons. Absent migrants are primarily choosing not to return because job opportunities in Georgia are scarce (57.9 per cent) or because they do not have enough money to do so (13.6 per cent). Family reasons prevent a further 12.3 per cent from returning. Meanwhile, 35.5 per cent of returned migrants came back because they accomplished their original goals (earned a certain

amount of money, did a particular job, finished studies etc.) and 28.6 per cent came back because of family reasons (to join the family or to follow the returning migrant).

While 13.7 per cent of returned migrants came back because they wanted to be back in Georgia, 19.7 per cent of absent migrants do not want to come back. 9.2 per cent of returned migrants came back because they were deported or their visas expired and 11.2 per cent of absent migrants do not come back because of visa-related problems. Finally, government schemes facilitating return appear to have played no role for the returned migrants in our survey.

Political considerations do not seem to play much of a role in these considerations. 9.9 per cent of returned migrants mention them as one of the factors behind their decision to leave, while for the absent migrants they are not mentioned at all, although for 5.4 per cent of them it is one of the reasons not to return. These results imply that political improvements are not very likely to attract a lot of migrants back. However, one should note that even if political reasons are not quoted as affecting migration decisions, they are likely to play a significant role indirectly via their impact on economic incentives.

#### Box 2: Voices of Migration

- 'When your family is starving here, this is *the only way to survive*.' (Female, 68, pensioner, Imereti, a household with NM).
- 'The economic situation in Georgia is hopeless. *Jobs are catastrophically few*. If you go abroad to work, then you learn the value of your work....' (Male, Batumi, returned from Germany)
- 'The positive thing that I see is that people earn money and help their families. *We all live with money sent from migration*.' (Male, unemployed, Imereti, a HH with AM).
- 'My relative is living in the United States and *has achieved many things there that she would never achieve here*. I fully support her decision.' (Female, 45, employed, Imereti, a HH with RM).
- 'The *educational system is terrible here*, and by going abroad to study one can learn a lot. (Male, 71, pensioner, Imereti, a HH with NM).
- 'The positive side of living abroad is that you *get more experience both personally and professionally*.' (Female, 20, student, Achara, a HH with NM).
- 'The negative aspect [of migration] for me is that parents leave and children are brought up by grandparents or other relatives. This is *a major problem for a child's psychological development*.' (Female, 47, employed, Imereti, a household with NM).
- 'The most problematic [thing] is that mainly younger people, who should get married and have children, leave and *this negatively affects the demographic situation* in Georgia.' (Female, 43, housewife, Imereti, a HH with RM).
- 'I know people that *returned and they live better than they did before they departed*.' (Female, 36, Batumi, returned from Russia).
- 'I *have not seen anyone returning*; those who returned migrated again.' (Male, 26, employed, Achara, a HH with NM).
- 'People move, *all of them return, but not forever*. They stay for some period and leave again.' (Male, 32, Batumi, Sailor, last time was in Russia).
- 'The only people who came back are the ones who are *deported or were imprisoned there [abroad]*.' (Male, unemployed, Imereti, a HH with AM).

## Section 3: Remittances

### 3.1 Overview of remittances

One of the most important consequences of migration is the flow of remittances between migrants and their families at home. Remittances into Georgia constitute a significant source of income for the economy, both in absolute and relative terms. Table 5 shows the volume of money transfers between Georgia and foreign countries that are processed via the Georgian banking system. Since there is still a substantial amount of remittances that bypass the official banking system, numbers in Table 5 underestimate the true remittance flows (some of the data described later gives a sense of the size of the undercount). However, the discrepancy must have decreased in the recent years, as the reliance of the population on the banking system for money transfers has increased (National Bank of Georgia 2008).

**Table 5: Dynamics of bank transfers**

Year	Transfers (US\$ millions)		Transfers (per cent of GDP for that year)	
	In	Out	In	Out
2000	63	10	2.1	0.3
2001	70	11	2.2	0.4
2002	97	17	2.8	0.5
2003	197	31	4.9	0.8
2004	259	46	5.1	0.9
2005	403	88	6.3	1.4
2006	553	133	7.1	1.7
2007	866	111	8.5	1.1
2008	1,002	84	7.8	0.7

Money transfers out of Georgia are relatively modest in volume and do not seem to have expanded significantly over time. The highest outflow was recorded in 2006 (1.4 per cent of GDP), and the numbers have gone down since then. Meanwhile, inflows – measured both in US\$ and as a share of GDP – have risen tenfold between 2002 and 2008 to more than a billion US\$, or 7.8 per cent of GDP. This is despite the sharp drop in the volume of bank transfers following the military conflict with Russia in summer of 2008 and a global financial crisis that struck the world in 2008.

The significant increase in the volume of bank transfers after 2003 can be accounted for by several factors. First is the development of the financial system in Georgia, with the quality and quantity of services provided by both money transfer companies like *Western Union* and banks in Georgia having grown considerably during this period. Second is the dramatic improvement in the business climate that followed the Rose Revolution and that created a favourable environment for personal investments, which in turn have stimulated remittance inflows (World Bank 2009). Third is a rise in the number of migrants: our dataset indicates an increasing number of migrants leaving Georgia over time, with the upward trend having been particularly strong after 2003-2004. Finally, since 2004 the Georgian Lari has been appreciating, which has inflated demand for remittances that mostly are sent in US\$.

Table 6 breaks down these bank transfers by source countries. As quickly becomes apparent, Russia is by far the most important source of bank transfers into Georgia, accounting for 63.3 per cent of total inflows in 2008, or some US \$630 million. Inflows from Russia are more than six times larger than inflows from the second largest source country (Ukraine, which accounts only for 7 per cent of total inflows). The rest of the 'pie' is fragmented among many source countries, with major migration destinations at the top of the list, as expected. Given these observations, a simple model of bank transfers between Russia and Georgia is presented in Appendix B.

**Table 6: 2008 bank transfers by source countries**

Source country	Amount (US\$ millions)	Per cent of total
Russia	634	63.3
Ukraine	70	7.0
USA	64	6.4
Greece	47	4.7
Italy	37	3.7
Armenia	22	2.2
Turkey	21	2.1
Spain	20	2.0
Other	87	8.7
<b>Total</b>	<b>1003</b>	<b>100</b>

### 3.2 Characteristics of households receiving remittances

This section examines households that receive remittances, both from their own absent migrants and from non-member remitters, and tries to explain the probability of being a recipient as a function of household characteristics. Overall, there are 423 households in the sample that report receiving remittances: among these, 312 receive remittances from absent migrants only, 93 from non-members only and 18 from both sources.

Table 7 reports percentages of households in the sample that receive remittances from household members currently abroad, non-members, or both. The data show that households in urban areas and in Tbilisi are less likely to receive remittances from household members who have migrated compared to rural households, but are more likely to get remittances from non-members. An explanation would be that in villages and small towns the structure of the 'household' might be somewhat different and include non-immediate family members, since people tend to stay under the same roof even when they are not closely related (for example, with three generations living together or having uncles, cousins, in-laws in the same household), while Tbilisi residents may be referring mostly to close relatives.

Among households that report remittances, only 80 get assistance in the form of food and goods. In 56 cases this assistance is sent by absent household members, and in 23 cases by non-members. Only one household gets food and goods from both sources.



**Table 7: Sample shares of households receiving remittances from (1) HH members (2) non-members**

Settlement type	Percentage of HHs receiving remittances				Percentage of HHs receiving food/goods		
	(1) or (2)	Only (1)	Only (2)	(1) and (2)	(1) or (2)	Only (1)	Only (2)
Rural	27.0	20.9	5.1	1.0	3.2	2.7	0.5
Urban	31.3	23.7	6.3	1.3	5.7	3.7	1.8
Tbilisi	25.4	15.4	8.6	1.4	9.3	6.1	3.2
Overall	28.5	21.0	6.3	1.2	5.4	3.8	1.5
<b>Observations</b>	423	312	93	18	80	56	23

Overall, 28.5 per cent of households in the sample report receiving remittances. However, this number cannot be used directly to estimate a share of the entire population, since the design of the survey implied over-sampling households with migrants that are more likely to receive remittances. Applying appropriate weights, we estimate that 14.3 per cent of the households in Georgia receive remittances (Table 8). Slightly more than half of these households (57 per cent) get remittances from absent household members and about half (50 per cent) from non-members.

**Table 8: Estimated population shares of households receiving remittances from (1) HH members, (2) non-members**

Settlement type	Percentage of HHs receiving remittances				Percentage of HHs receiving food/goods		
	(1) or (2)	Only (1)	Only (2)	(1) and (2)	(1) or (2)	Only (1)	Only (2)
Rural	12.5	5.6	6.7	4.1	1.3	0.5	0.8
Urban	21.6	12.8	8.5	2.9	3.1	2.2	0.8
Tbilisi	18.5	5.9	12.5	3.1	6.8	2.0	4.8
<b>Overall</b>	<b>14.3</b>	<b>8.1</b>	<b>7.1</b>	<b>3.2</b>	<b>3.2</b>	<b>1.4</b>	<b>1.8</b>

To analyse the probability of a household receiving remittances a Logit model is estimated where probability is a function of household and location characteristics. Table 9 reports the results of this estimation.

**Table 9: Probability of a household receiving remittances (Logit Model)**

Variables	Coefficients		Marginal Effects	
	Estimate	z-value	Estimate	z-value
Religion index	0.15**	2.36	0.02**	2.36
HH education index	0.12*	1.67	0.02*	1.66
Number of children 0-6	0.28*	1.83	0.04*	1.82
Number of children 7-17	0.22**	2.05	0.04**	2.05
Number HH members 18-25	0.21*	1.67	0.03*	1.67
Number of males, 25-65	-0.35**	-2.50	-0.06**	-2.50
Number of HH members 65-older	-0.24**	-2.17	-0.04**	-2.15
HH with return migrants	0.91***	3.46	0.16***	3.24
HH with absent migrants	4.23***	15.30	0.75***	24.43
Urban dwelling	-0.47**	-2.48	-0.07**	-2.53
Capital dwelling	-0.27	-1.10	-0.04	-1.16
Percentage of HH in PSU without migrants	-0.02**	-2.27	0.00**	-2.27
Constant	-1.80**	-2.09		
<b>Pseudo R-squared</b>	<b>0.40</b>			
<b>Log-likelihood</b>	<b>-497.19</b>			
<b>Number of observations</b>	<b>1,358</b>			

Note: \* - 10% significant, \*\* - 5% significant, \*\*\* - 1% significant.

Drawing out the key facts from Table 9, it appears that:

- The most important variables that predict the probability of getting remittances is, perhaps unsurprisingly, the presence of a migrant. Households with absent migrants are 75 per cent more likely to get remittances, while families with returned migrants also have a higher chance – approximately 16 per cent.
- Households in urban areas are 7 per cent less likely and households in Tbilisi are 4 per cent less likely to receive remittances.
- When the education level of the household (measured by the average education level of adult household members) goes up, the likelihood of getting remittances increases by 2 per cent.
- The presence of children and youth in the household increases the probability of receiving remittances by 3-4 per cent for each additional youngster.
- However, as the number of adults in a household goes up, the probability of getting remittances decreases by 4-6 per cent for each additional adult.
- Families that practice religion more often (as measured by number of times a respondent attends religious services) have a 2 per cent higher chance of receiving remittances.

### 3.3 Profile of remitters

This section examines the types of absent migrants that send remittances home. The word ‘remittances’ will denote both money and goods sent to households in Georgia, though in most the cases, they are in the form of money. According to the survey, 361 out of 691 current migrants are reported to send remittances (in either form) to their households in Georgia, while only 63 send goods.

Rather than looking at individual migrants, the concept of 'a migrant group', defined as a group of people related to the household and located in the same destination country, is used. The rationale for this approach is that in most of the cases with multiple migrants in the same destination, households receive remittances as if they were sent by the head of the migrant group. For example, if a married couple that has migrated abroad jointly sends remittances to a household in Georgia, a reported observation will most likely refer to it as if sent by the husband.

The dataset supports this assumption: out of all 484 absent migrant groups only 19 have two remitters and only one has three remitters. For each migrant group a variable is defined that takes a value of one if at least one member of the group sends remittances to the household in Georgia, and zero otherwise.

Overall, there are 691 household members reported to be currently away. Among these, 369 are reported to be away alone; in 66 cases there are two people from the same household abroad in migration; and in 34 cases there are three household members away. Only a few families report having four or more absent migrants. These numbers suggest that in most cases it is a single person that migrates from a family.

However, even if a household reports only one migrant abroad, it often turns out that a migrant is living with a partner and/or children. For example, some households report one migrant, however when looking at variables 'Has a husband/wife or a long-term partner with him abroad' (question 51) and 'Has children abroad' (question 53) the answers are affirmative, indicating the fact that the migrant is living with his/her family. In these cases the migrant is considered a member of the household they left in Georgia, but their family members are not. From the dataset it is impossible to tell the nationality of these additional members (one could guess that in majority cases they are of Georgian origin), but in order to capture correctly the size of groups in migration, a variable that takes into account presence of a partner and children abroad was constructed. With this correction, the share of single migrants is much smaller than before.

In most cases migrants from the same household are in the same country. In a few cases migrants from the same household are in two different countries; in these cases migrants in different countries are treated as separate migrant groups, which means that some families have two migrant groups.

**Table 10: Proportions of remitting migrant groups**

Size of group in migration	Remitting (per cent)	Destination	Remitting (per cent)
1 person	76.8	Greece	65.8
2 people	76.2	North America	73.1
3 people	61.2	Russia	59.7
4 people	56.3	Turkey	82.9
<b>Frequency of contacts</b>		Western Europe	89.4
Never	18.2	Other FSU	71.4
Less than once a year	22.1	Other	75.4
More than once a year	27.9	<b>Duration in migration</b>	
More than once every 6 months	36.1	Less than 1 year in migration	58.9
More than once every 3 months	36.8	1-3 years in migration	72.5
Monthly	79.9	3-6 years in migration	83.9
More than once a month	63.1	6-10 years in migration	81.6
Weekly	78.8	10-16 years in migration	53.1
More than once a week	87.1	<b>HMG education before migration</b>	
<b>Children in Georgia not in HH</b>		Primary education	21.4
No	74.3	Secondary education	69.4
Yes	51.7	Higher education	78.0
<b>AM's children in HH</b>		<b>HMG job status</b>	
No children	60.2	No Full-time job	54.7
1 child	91.7	Full-time job	78.4
2 children	90.8	Job not fixed before migration	69.5
3 children	100.0	Job fixed before migration	85.1
<b>Settlement type</b>			
Rural	72.8	<b>Overall percentage of migrants who remit</b>	<b>72.2</b>
Urban	73.9		
Tbilisi	69.7		

Notes: HMG – head of a migrant group; HH – household. Head of a migrant group (HMG) is an absent migrant whom surveyed households list first in the list of absent migrants. Additional migrants usually are accompanying members of the immediate family. 'Children in Georgia not in HH' refer to children of migrants that may be residing in a household different from the one that was surveyed

Table 10 summarises the distribution of migrant groups by size and proportion of groups of each size that remits to households in Georgia. The table only reports cases where households receive remittances from migrants who were previously members of their household, and does not include remittances from other sources (these statistics are reported below). Overall, 72.2 per cent of migrant groups remit to their households in Georgia.

Those who have migrated alone are most likely to remit, as these people are using migration as an opportunity to earn and support their immediate families back home. As the size of migrant groups increases, the probability of remitting decreases: these people are likely to be already accompanied by partners and children, hence, incentives to support the rest of the family back in Georgia is lower compared to single migrants. Also,

as they have to support their own migrant group abroad, saving and remitting to Georgia becomes more difficult.

To analyse the probability of remitting a model is estimated where a probability of remitting is linked to characteristics of both a migrant group and a receiving household. Overall, there are 447 migrant groups with full data for variables used in the model. Those variables include those that determine the ability of a migrant group to send remittances (HMG education, job status, job being fixed before migration, duration of stay, destination); those that control for the migrant group's own needs for money (for example, size of the migrant group); those that reflect closeness of a migrant group to household members left in Georgia (frequency of contacts, number of children left in Georgia); and those that control for characteristics of a receiving household (for example, settlement type). Some variables that initially were thought to be important in predicting the propensity to remit (such as household size, a partner left behind, etc.) turned out to be insignificant and were dropped from the estimation.

Table 11 summarises results from the model. There are 470 observations that are used to estimate the model; in 70 per cent of the cases absent migrant groups send remittances, in 30 per cent they don't. Overall, the model explains almost 30 per cent of variation in the dependent variable, which is relatively good and is comparable to other studies using survey data (including the other DOTM reports).

The most influential factors among the absent migrant group characteristics that positively affect the probability of remitting include:

- **The duration of stay abroad.** This reflects the fact that migrants need time to adjust to their new environment abroad before they are in a position to send remittances home. The probability of remitting is the highest for migrants in their third year of stay abroad. The effect diminishes with the duration of stay.
- **The HMG having a full time or almost full time job.** Employment status determines the amount of income migrants receive and hence their ability to remit.
- **The HMG having a job arranged before migration.** These are usually cases when migrants go to take on some specialised positions, and/or have relatives or friends helping to arrange for a job. In either case, the outcome is a higher propensity to remit, possibly because the work they find is higher paid.
- **The migrant group being in Europe.** It is logical to expect migrants in richer countries to remit home. Due to the relatively low number of migrants in North America (only 16 migrant groups are reported for this destination), North America is not separated from the base group.
- **The number of children abroad.** This finding seems somewhat counterintuitive, since migrants need more funds to support their children abroad and hence are expected to have less money left for other uses, including remittances. However, the coefficient on 'Number children\*Russia' interaction term reverses this result, indicating that for migrant groups staying in Russia the effect of having children abroad has the expected negative influence on probability to remit.

**Table 11: Probability of remitting by absent migrant groups (Probit Model)**

Variables	Coefficients		Marginal Effects	
	Estimate	z-value	Estimate	z-value
<b>Absent migrant group characteristics:</b>				
Male head	0.26	1.05	0.08	1.01
Age head	0.32	1.04	0.09	1.03
log(duration abroad)	0.43***	4.31	0.13***	4.49
Duration abroad missing)	-0.43	-1.16	-0.15	-1.09
Number of children in group	0.36**	1.85	0.11**	1.83
Number of adults in group	-0.48***	-3.85	-0.14***	-3.54
Head education, secondary	0.43	0.79	0.13	0.78
Head education, tertiary	0.32	0.63	0.09	0.64
Head education, missing	0.15	0.21	0.04	0.23
Head working, full time	0.78***	4.68	0.20***	4.79
Head working, almost full time	0.61***	3.19	0.17***	3.61
Head had job contract	0.31*	1.66	0.08**	1.83
Europe (inc. Greece)	0.41**	2.27	0.12**	2.21
Russia	-0.25	-0.55	-0.08	-0.54
Number children*Russia	-0.54	-1.35	-0.16	-1.35
Number adults*Russia	0.20	0.91	0.06	0.91
<b>Georgia HH characteristics:</b>				
Children in other Georgian HHs	-0.09	-0.42	-0.03	-0.41
Children in HH	0.37***	4.78	0.11***	4.53
Capital dweller	-0.09	-0.30	-0.03	-0.29
Rural dweller	0.78***	2.96	0.21***	3.33
Per cent non-migrant HHs in PSU	-2.62	-1.45	-0.78	-1.44
Per cent return migrant HHs in PSU	3.27	1.11	0.98	1.13
HH size	0.06	1.27	0.02	1.25
HH Religiosity	0.02	0.37	0.01	0.37
Frequency of contacts with AM	0.23***	4.26	0.07***	4.56
Constant	-1.76	-0.84		
<b>N</b>	<b>470</b>			
<b>log-likelihood</b>	<b>-199.82</b>			
<b>Pseudo-R2</b>	<b>0.296</b>			

Note: \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant.

The migrant group characteristic that has a negative effect on the probability to remit is:

- **The number of adults in the migrant group.** This is not surprising, given that the size of the group in migration, and as a result, the need of the group, is higher. Also, having more household members abroad is usually associated with having fewer people left in the household in Georgia, hence there will be less need to assist them.

Among household characteristics there are several factors that play an important role in soliciting remittances. These factors include:

- **The number of children left in the Georgian household.** Migrants that leave their children behind are more likely to remit back home.
- **The household being located in rural Georgia.** This increases the probability of sending remittances to that household. This finding might reflect the fact that it is more difficult to find employment in rural areas, hence households left behind will be in greater need of help by absent migrants.
- **The frequency of contacts between the migrant group and the household.** This variable ranges between 0 (no more contacts) and 8 (a couple of times per week), and reflects the level of attachment between the migrants and the household. All else being equal, higher level of contacts indicates closeness and a desire to be involved in household matters, and should be positively correlated with the probability to remit.

### **3.4 Amount of remittances sent by absent migrants**

Analysing the amount of remittances sent by absent migrants is complicated by the quality of the data. About 57 per cent of respondents either refused to answer or did not know how much they receive. Thus, data are available only for 150 households with currently absent migrants. However, even in these cases the quality of information is somewhat questionable, due to errors in the responses common to surveys, particularly when asking income related questions.

Figure 6 shows the distribution of remittances received by households during the twelve months preceding the survey. The average amount remitted is 2,187 GEL which is equivalent to US \$1,470<sup>12</sup> (for comparison, the average annual income of Georgian households is 5453 GEL, equivalent to US \$3665, according to the Annual Report for 2008 of the National Bank of Georgia), but the variation in values around this mean is quite large (with a standard deviation of 2,287 GEL). The minimum amount reported is 100 GEL and the maximum amount is 12,000 GEL. It is apparent from the picture that the distribution of remittance amounts is highly skewed, with a few outliers that report unusually high amounts (see Figure 6). 75 per cent of households received 2,500 GEL or less in remittances during the period in question.

---

<sup>12</sup> Using 1 US\$ = 1.488 GEL exchange rate for 2008, calculated as the average of monthly average rates reported by the NBG.

**Figure 6: Distribution of remittance amounts from absent migrants**

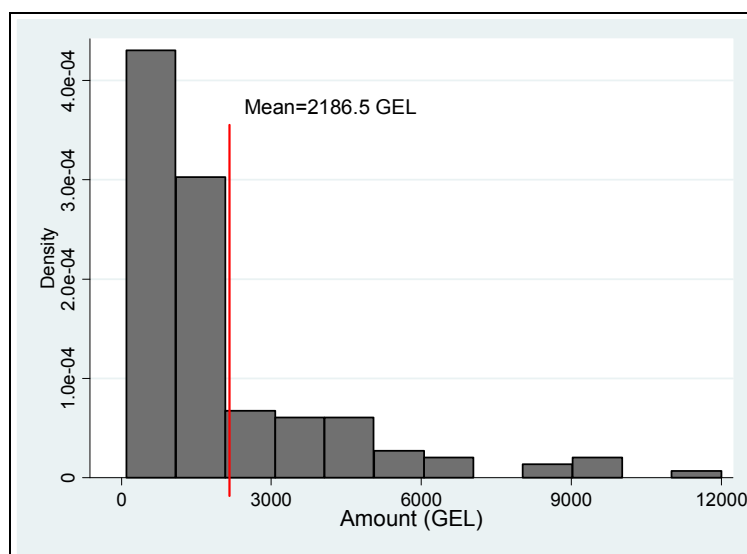


Table 12 reports average remittance amounts by major migration destinations. While the average size of remittances sent from Russia is low compared to some other countries, it is characterised by a rather high standard deviation, indicating high variability in data. Migrants in other non-FSU countries and North America send more on average, but for these destinations the sample sizes are rather small.

**Table 12: Remitted amounts by sending countries (GEL)**

Country	Observations	Mean	St. Dev.	Min	Max
Russia	50	1,855	2,142	100	10,000
Greece	34	2,157	1,506	200	5,000
Western Europe	30	1,943	2,076	200	9,000
Other non-FSU	10	3,140	2,022	1,000	7,000
Turkey	9	1,333	1,780	500	6,000
Other FSU	8	2,306	2,202	200	7,000
North America	5	3,590	4,032	450	10,000

As Table 13 shows, migrants that leave children behind in Georgia send on average more than migrants who do not have children back home. On the contrary, migrants that have their children residing with them abroad send on average less than those who are not accompanied by children.

**Table 13: Remitted amounts for migrants with and without children in Georgia (GEL)**

Status	Observations	Mean	St. Dev.	Min	Max
No children left in Georgia	80	1,863	2,285	100	10,000
With children left in Georgia	70	2,557	2,248	200	12,000
Without children abroad	123	2,340	2,407	100	12,000
With children abroad	27	1,489	1,470	200	7,000



Most migrant groups in the sample send remittances through banks (69.2 per cent), while the second most popular method is through money transfer agencies (17.3 per cent). Together these two methods account for 86.5 per cent of all money transfers reported in the dataset, meaning that the amounts coming in through unregistered channels do not appear to be very large.

**Table 14: Methods migrant groups use to remit money to Georgia**

Method	Observations	Percentage
Banks	220	69.2
Money transfer agency	55	17.3
With a friend/relative	22	6.9
By post	13	4.1
Other	5	1.6
Unlicensed agent	3	0.9
<b>Total</b>	<b>318</b>	<b>100.0</b>

As Table 15 shows, unrecorded remittances mostly come from Turkey and Greece, while migrants in other destinations, particularly in developed countries, rely on banks and licensed money transfer agencies to send remittances.

**Table 15: Methods of remitting by source countries**

Source	Percentage of Migrant Groups using:			Total, Migrant Groups
	Banks and money transfer agencies	With friends and other	By post and unlicensed agents	
Russia	88.0	8.0	4.0	100
Western Europe	93.8	3.1	3.1	65
Greece	78.3	5.0	16.7	60
Other FSU	93.5	6.5	0.0	31
Turkey	62.1	31.0	6.9	29
Other non-FSU	100.0	0.0	0.0	22
North America	90.0	10.0	0.0	10
<b>Total</b>	<b>86.4</b>	<b>7.8</b>	<b>5.7</b>	<b>317</b>

Most remitting migrant groups send money fairly regularly: 58 per cent of migrant groups send remittances every year or more often. Another 9.9 per cent remit only on special occasions or in the case of emergency while 32.1 per cent of migrant groups do not remit money at all (Table 16).

**Table 16: Frequency of remittances**

Frequency	Migrant groups	Percentage
Never	146	32.1
Only on special occasions	45	9.9
Every year	17	3.7
Every 6 months	42	9.2
Every couple of months	98	21.5
Monthly	99	21.8
Twice a month	8	1.8
<b>Total</b>	<b>455</b>	<b>100</b>

### 3.5 Remittances from non-household members

In addition to receiving remittances from migrant household members, some families report receiving remittances from other migrants that are not considered to be members of the household (non-members). There are 111 households in our dataset that report receiving remittances from non-members, with 38 per cent of these non-member remitters located in Russia, 22 per cent in Greece and 15 per cent in Western Europe. For comparison, 34 per cent of remittances from members come from Russia, 17 per cent from Greece and 19 per cent from Western Europe. Hence, the percentages of source countries are not very different for remittances sent by non-members and members. Table 17 reports the relationship of remitting non-members to the survey respondent.

**Table 7: Relationship of non-member remitters to the respondent**

Relationship to the respondent	All settlements		Rural		Urban		Tbilisi	
	Obs.	%	Obs.	%	Obs.	%	Obs.	%
Spouse/ex spouse	10	9.4	4	11.1	4	9.3	2	7.1
Son/daughter	9	8.4	0	0.0	4	9.3	5	17.9
Mother/Father (including in laws)	22	20.6	9	25.0	6	14.0	7	25.0
Sister/brother	4	3.7	1	2.8	2	4.7	1	3.6
Grandmother/grandfather	4	3.7	3	8.3	1	2.3	0	0.0
Son in law/daughter in law	1	0.9	1	2.8	0	0.0	0	0.0
Grandchild	14	13.1	5	13.9	3	7.0	6	21.4
Other relative	43	40.2	13	36.1	23	53.5	7	25.0
<b>Overall</b>	<b>107</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>	<b>28</b>	<b>100.0</b>

A major difference in the numbers is that most 'other relatives' are reported by households in rural and urban areas (other than Tbilisi), where families are believed to have a wider network of relatives which they stay connected to.

Remitted amounts are reported only in 44 cases. The average amount of these remittances is comparable to the average amount received from absent household members (2,003 GEL), but the variation in the amounts sent is much larger in this case (with a standard deviation of 3,988 GEL). The distribution of amounts is highly skewed with minimum at 100 GEL and maximum at 20,000 GEL. 75 per cent of households that report this kind of remittances receive 1000 GEL or less.

Interestingly enough, a half of the cases where amounts remitted by non-members are reported (22 cases) refer to remittances from Russia, and these are characterised by both a very high average amount (3,366 GEL) and standard deviation (5,328 GEL). To compare, remittances from Greece (the second largest category with 17 cases) have an average amount of 610 GEL and a standard deviation of 574 GEL. Hence, in addition to regular remittances sent by household migrants in Russia back home, there are significant amounts of money sent to households by non-member migrants located in Russia.

Almost 90 per cent of remittances from non-members are sent either via banks (in 74 per cent of cases) or licensed money transfer agencies. Unlike remittances received from household members, these remittances are sent mostly for special occasions (18 out of 44 cases) or annually (9 out of 44 cases). A large proportion of remittances from non-members are sent to a specific household member (37 per cent of cases, compared to only 14 per cent in the case of remittances from household members). Thus, it seems that this channel mostly serves to help households in emergency situations and with unexpected expenses. It is interesting to note that none of the recipient families reported that they had to repay the assistance.

### 3.6 Uses of remittances

This section describes the uses of remittances as reported by the respondents. Overall, 34.5 per cent of respondents stated that received remittances are spent differently than other household income (see Table 18). The share is higher for households that receive remittances from non-members (44.4 per cent).

**Table 8: Share of households that spend remittances differently (1) from absent HH members (2) from non-members**

Expenditure Category	(1)		(2)	
	Number of HHs	Percentage of 'Yes'	Number of HHs	Percentage of 'Yes'
Health care	51	42.1	6	30.0
Buy HH goods	38	31.4	4	20.0
Pay off debt	37	30.6	3	15.0
Child support	36	29.8	4	20.0
Education	25	20.7	5	25.0
Funeral	23	19.0	1	5.0
Buy land	19	15.7	0	0.0
Wedding	15	12.4	0	0.0
Savings	7	5.8	0	0.0
Business	6	5.0	0	0.0
Buy property	5	4.1	3	15.0
Give to friends/relatives	4	3.3	0	0.0
Religious	3	2.5	0	0.0
<b>Overall</b>	<b>121</b>	<b>34.5</b>	<b>20</b>	<b>44.4</b>

In general, the most common uses of remittances are for health care, household goods, paying off debts, child support and special occasions, such as funerals and weddings.

Direct saving (i.e. not paying off debt), and investments in business and property are among the least often quoted options, although 15 per cent of households that receive money from non-members do mention purchases of property. To properly assess where remittances are spent however requires a full impact analysis, to which we turn in section 4.

## Section 4: Impact analysis of migration in Georgia

This section discusses the impacts of migration and remittances at individual and household levels.

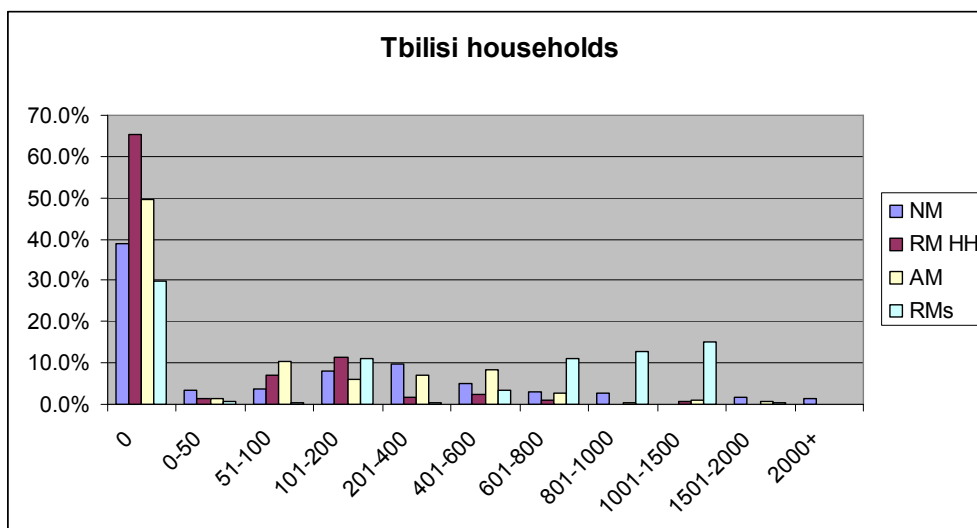
### 4.1 Impacts of migration on individuals

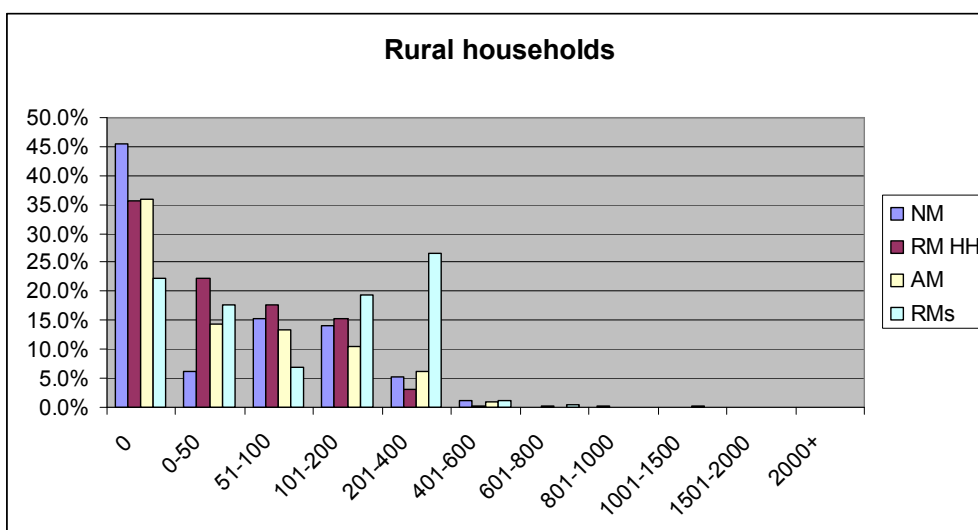
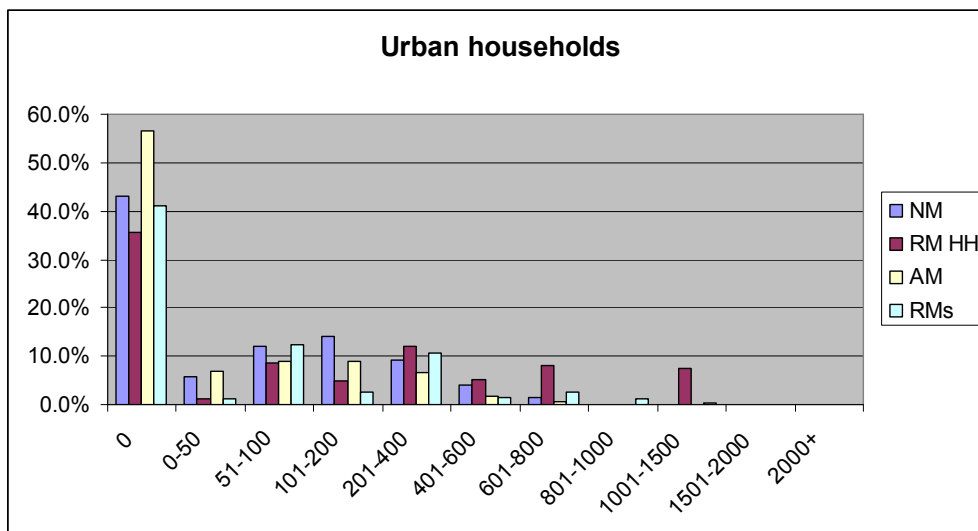
#### *Income effects*

Figure 7 shows the income distribution in three types of settlements for four types of individuals between the ages of 18 and 65:

- People in non-migrant households.
- People in return migrant households, excluding return migrants.
- Return migrants
- People in absent migrant households

**Figure 7: Income distribution for 18-65 year old individuals (percentage of population in each income bracket) in GEL per month**





An interesting pattern emerges from the graphs: in all three types of settlements, income distribution for return migrants is skewed to the right, implying that they have a higher income on average, compared to individuals without any experience of migration.

It appears that in Tbilisi, a higher share of individuals from return migrant and absent migrant households report an income of 0 or 0-50, compared to non migrant households. It also seems that in the capital return migrants hold higher paid jobs, while their household members tend to have lower paid jobs, or to have exited the labour force, compared to other families.

In rural areas the difference between the income of return migrants and other individuals is even more pronounced, with return migrants earning significantly more on average. In this case, however, the likelihood of AM and RM household members being in the 0 and 0-50 income brackets is 10 per cent lower than for non migrant families.

**Table 19: Income equation for working age individuals**

<b>Variable</b>	<b>Estimate</b>	<b>t-value</b>
Migrant	0.86**	2.48
Returned in 2000	-0.93**	-2.43
Returned in 2008	-0.83	-1.32
Male	0.84***	7.26
Age	0.05	0.77
Age, squared	0.00	-0.83
Health status	-0.38***	-3.50
Employed 5 years ago	0.75***	2.71
Self-employed 5 years ago	-0.23	-0.64
Unemployed, looking for job 5 years ago	-0.59	-1.10
Unemployed, not looking for job 5 years ago	-0.01	-0.02
Doing unpaid work 5 years ago	-0.23	-1.39
Married	0.89***	3.04
Cohabiting without marriage	1.18	1.28
Divorced/separated	-0.06	-0.07
Widowed	0.62	1.15
Incomplete secondary education	-1.01*	-1.91
Completed secondary education	-0.83*	-1.63
Secondary technical education	-0.56	-1.15
Incomplete higher education	-0.83	-1.34
Completed higher education	-0.45	-0.94
Post-graduate education	0.68	0.60
Knowledge of Armenian	1.62***	3.39
Knowledge of Azeri	-2.65**	-2.33
Knowledge of English	0.09	0.29
Knowledge of Georgian	-1.25	-1.40
Knowledge of German	1.86***	6.06
Knowledge of Greek	-0.69***	-2.60
Knowledge of Russian	-0.57**	-2.42
Knowledge of Turkish	0.88**	2.33
Currently in education	0.88**	2.44
Constant	3.24*	1.74
<b>Within R2</b>	<b>0.39</b>	
<b>Between R2</b>	<b>0.12</b>	
<b>Overall R2</b>	<b>0.14</b>	
<b>Number of obs</b>	<b>1169</b>	
<b>Number of groups</b>	<b>728</b>	

Table 19 investigates the importance of migration in determining individuals' incomes, reporting the results from estimating an income equation for individuals of working age (between 17 and 65 years old) that are either employed or self-employed, referred to as 'working' individuals. Income is a categorical variable (with ranges of income coded as categories) collected for all household members. As explanatory variables, the model uses personal characteristics that influence a person's income level.

The estimation approach used is to treat households as units, and individual within households as observations within the same unit. This approach allows us to cancel out any household level unobserved variables that could potentially influence individual income (for example, networks that the household has access to, family values, etc.). Cancelling these variables out reduces potential bias resulting from omitted variables. Given that any household specific variables are cancelled out in the procedure, the model does not include any family or PSU specific variables. The sample size reflects the fact that families with only one working age individual are dropped out of the regression. To account for sampling specifics, residuals clustered by primary sampling units (PSU) and appropriate data weights are used.

To account for the date of return and the migration destination of return migrants in the sample, the model includes two dummy variables for years of return from migration. Specifically, separate dummy variables for RMs who came back in 2000 and 2008 are used. The dummy for 2000 is used to control for return migration after the crisis of 1999-2000, trying to capture the effect of unfavourable conditions during the year of return. The dummy for year 2008 is introduced to control for newly returned migrants that possibly did not have time to settle down properly yet. Other years were checked and were not found to be significant; hence they are not included in the model.

In general, the results are fairly predictable. Gender has an expected effect on individual earnings: males are almost one level higher in income categories than comparable females. Age has a positive but insignificant effect on earnings. Health status is very important in determining income level: healthier people (lower level of health index) are earning more; in particular if health index changes from excellent (=1) to poor (=4) income level is expected to be one bracket lower than otherwise. If a person was employed 5 years ago (a proxy for experience), his or her income will be higher on average (0.75 of a bracket higher). Married people enjoy higher wages by almost one bracket (0.89).

An individual's level of education appears to have a rather weak effect on income, after controlling for other factors. People with secondary education seem to be earning less compared to those with less (primary) or more (tertiary or technical) education. Language skills have a varied effect on income, and in many cases are likely to reflect nationalities rather than pure knowledge of language (Armenian and Azeri languages). Among languages that are foreign to the region, German has a strong positive effect on income level. Knowledge of Russian and Greek seem to put people in a disadvantaged position.

Turning to migration variables, it is interesting that in general, the experience of migration is associated with higher individual earnings (by almost one bracket for RMs) – quite a striking finding. However, if the person came back in 2000 following the financial crisis at the end of the 1990s, earnings are significantly lower, which may indicate that a



lack of choice about when to return has seriously affected their long-run earning potential. People returning in 2008 do have lower income, but not significantly so.

### Gender roles

Georgians have very traditional views on gender roles in society and in the household. Modern-day Georgian males are more active as breadwinners, protectors of the household, performers of physical tasks (house construction/renovation, wood collection etc), while women tend to perform more traditionally female tasks like cooking, cleaning and taking care of children.

Table 20 lists the main household tasks as defined in the survey, and the percentages of males reporting these tasks as their first, second and third household tasks. It is clear from the table that the survey results support the fact that there is a gendered distribution of tasks between males and females. For example, only about 5 per cent of males report cooking as one of their main tasks. 5 per cent or fewer men report that they clean, or do the dishes, ironing and laundry. Finally, child care is also not very popular among males. Hence, these tasks have been termed ‘female tasks’ for the purpose of this section (i.e. those that have 65 per cent or more performance by females as their first, second, or third main household activity).

Traditionally male tasks include repairing the home, collecting firewood and water, engaging in social activities and resting/recreation. The analysis below relies on a definition of traditionally male tasks as those that 65 per cent or more males report as being their first, second or third main household activity.

**Table 20: Percentage of males doing various household tasks**

Main household tasks	1st task	2nd task	3rd task	F/M task
Cooking	4.8	5.1	5.5	F
Doing dishes/laundry/ironing/cleaning	4.9	4.3	3.0	F
Repairing your home	89.8	68.7	64.2	M
Collecting water	83.9	60.3	20.8	?
Collecting firewood	96.7	93.4	71.3	M
Growing/collecting food for the household to eat/looking after animals	69.7	73.2	34.7	?
Shopping for food and household items	85.1	69.7	38.7	?
Caring for children	11.7	31.0	8.0	F
Caring for the sick/old	53.2	36.6	19.6	?
Resting, recreation (e.g. chatting, watching TV)	69.5	70.0	40.3	?
Social occasions/visiting family and friends	65.1	71.5	66.6	M
Community work	42.0	89.2	31.0	?

To analyse the possible effect of migration on gender roles in the household, this section looks at the probability of a male or female performing tasks that are not considered to be traditional for their gender as function of household and individual characteristics,

including the fact that the person has migration experience. For this analysis two models are estimated, one for males and one for females.

In the first model the probability of male household members aged 18 years and older performing traditionally female tasks is estimated, using observations for non-migrant households only (the first two columns of Table 21 report the results of this estimation). Then, the probability of naming a female task as their first, second or third main task is predicted for males in the households with absent and return migrants.

**Table 21: Probability of doing various household tasks (Probit Model)**

Independent variables	Male doing female work		Female doing male work	
	Coef.	z	Coef.	z
<b>Individual characteristics</b>				
Age	0.05	1.59	-0.10***	-4.31
Age, squared	0.00	-1.55	0.00***	3.77
Current level of education	0.22***	3.21	-0.01	-0.29
Current health status	-0.20**	-2.06	0.03	0.32
Student	0.39	0.81	0.49	1.59
Employed	-0.02	-0.07	0.27	1.28
Self-employed	-0.13	-0.48	0.42*	1.95
Unemployed, looking for job	-0.08	-0.29	0.42**	2.07
Unemployed, not looking for job	0.35	1.09	-0.07	-0.26
Doing unpaid work	0.15	0.79	-0.12	-0.79
Retired	0.66**	2.03	-0.14	-0.47
<b>Household characteristics</b>				
Tbilisi PSU	0.23	0.76	0.25	1.10
Other urban PSU	0.05	0.21	-0.26	-1.49
Number of additional females in HH	-0.25**	-2.48	0.07	0.71
Number of additional females in HH	0.01	0.12	-0.03	-0.49
Number of children, 0-5	0.31	0.78	-0.33	-0.92
Number of children, 6-17	0.27*	1.76	-0.20	-1.47
Religion index	0.08	1.35	0.09**	1.83
Number of rooms	-0.15***	-2.70	0.02	0.47
Household has land	0.31	1.50	0.12	0.78
Household has business	0.17	0.69	-0.76***	-2.91
Household has a car	-0.01	-0.03	0.40***	2.55
Household has a TV	-0.09	-0.40	-0.10	-0.57
Household has a DVD	-0.16	-0.66	-0.01	-0.08
Household has a refrigerator	-0.56***	-2.76	-0.07	-0.41
Household has a washing machine	0.14	0.64	-0.19	-1.07
Household has a cell phone	-0.10	-0.46	0.16	0.90

Household has PC	-0.34	-1.32	0.18	0.93
Household pays rent	-0.66	-1.62	0.46*	1.92
Constant	-2.52***	-3.09	0.70	1.14
<b>N</b>	<b>719</b>		<b>780</b>	
<b>log-likelihood</b>	<b>-175</b>		<b>-269</b>	
<b>Pseudo-R2</b>	<b>0.14</b>		<b>0.16</b>	

Note: \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant.

Table 22 reports predicted and actual proportions of males doing female tasks separately for households with absent and with return migrants. Males in households with absent migrants are 4 per cent more likely to perform female tasks, perhaps because there are fewer people around the home to undertake these tasks, meaning that everyone has to do more. Males in households with return migrants are slightly less likely to perform female tasks, and the difference is mostly due to the fact that return migrants themselves are less likely to be engaged in female activities. This is an interesting result – it suggests that men who have been away return to perform even more stereotypically masculine roles around the house than those who haven't migrated, perhaps in contradiction to expectations that living in another environment might have loosened gender roles.

**Table 22: Predicted and actual proportions of males doing female tasks**

Household type ->	AM	RM		
Individual type ->	All males	All males	Only RMs	Non-RMs
Actual proportion	0.11	0.06	0.04	0.07
Predicted Prob	0.07	0.07	0.08	0.06
Actual-Predicted	0.04	-0.01	-0.04	0.01
<b>Observations</b>	<b>419</b>	<b>379</b>	<b>182</b>	<b>197</b>

In Table 23 similar calculations are performed for females doing male tasks. Females in households with absent migrants are slightly less likely to do traditionally male tasks. This makes us question the logic that having fewer people around means tasks need to be shared more broadly and less along traditional stereotypical lines. In the households with return migrants the situation is very different for return females and for the rest of females in the household: return females are 9 per cent more likely to engage in male tasks in the household, while the other women in the household are less likely to do so.

**Table 23: Predicted and actual proportions of females doing male tasks**

Household type ->	AM	RM		
Individual type ->	All females	All females	Only RMs	Non-RMs
Actual proportion	0.11	0.13	0.25	0.10
Predicted Prob	0.13	0.14	0.16	0.13
Actual-Predicted	-0.02	-0.01	0.09	-0.03
<b>Observations</b>	<b>548</b>	<b>393</b>	<b>85</b>	<b>308</b>

Clearly then to the extent that migration affects gender roles it does not have a simple impact through either the loosening or tightening of traditional roles. Rather, households with absent migrants seem to require or involve more typically 'female' tasks to be undertaken by the remaining members, and households with returned migrants involving more 'male' activities being undertaken by the returning migrants, whether male or female.

The finding that returned migrant women are the group least likely to keep to their traditional gender role is in line with the answers given by survey respondents to the statement 'We need to make more of an effort to ensure that men and women are treated equally in Georgia' (see Table 24). The majority of female respondents agreed or strongly agreed with this statement, with return migrant females being particularly supportive of (86 per cent of them agreed or strongly agreed, compared to 72 per cent of non migrant females). Males were also quite supportive of this statement, although only 64 per cent of non migrant males and 60 per cent of return migrant males agreed. As such, return females do stand out as the most supportive group when it comes to ensuring gender equality in Georgia, suggesting that their experience of migration might have an impact on their opinions and values.

**Table 24: Opinion question: 'We need to make more of an effort to ensure that men and women are treated equally in Georgia'**

Options	Non-RM males (per cent)	Non-RM females (per cent)	RM males (per cent)	RM females (per cent)
Strongly agree	8	31	38	23
Agree	35	40	22	63
Neutral	21	20	37	8
Disagree	12	5	3	6
Strongly Disagree	3	3	1	0
<b>Observations</b>	<b>368</b>	<b>749</b>	<b>69</b>	<b>61</b>

The next table reports survey results for another opinion question that might be relevant to this discussion. When asked if 'traditional ways of life in Georgia should be protected', the opinions of return migrant females stand out as strongly supportive of this statement. This is quite counterintuitive in light of the responses to the previous question. But since this question is more general and not confined to gender issues, it might still be consistent with the views reported in Table 24. For instance, when looking at responses to the statement 'People leaving leads to family breakdowns', 46 per cent of female return migrants answered positively, compared to only 30-34 per cent for all the other groups of respondents. It could be that since female RMs are more concerned with the unity of the family they are supportive of protecting Georgian traditions, which include strong family ties.

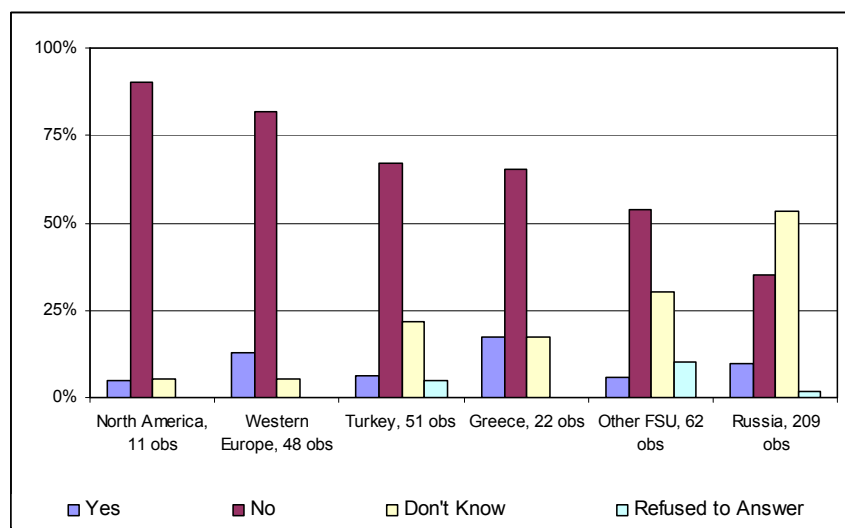
**Table 25: Opinion question: 'Traditional ways of life in Georgia should be protected'**

Options	Non-RM males (per cent)	Non-RM females (per cent)	RM males (per cent)	RM females (per cent)
Strongly agree	47	47	49	75
Agree	36	35	27	16
Neutral	14	3	23	4
Disagree	1	4	1	4
Strongly Disagree	2	1	0	1
<b>Observations</b>	<b>406</b>	<b>814</b>	<b>82</b>	<b>63</b>

*Political views*

Interestingly, the experience of migration does appear to affect political views of migrants. The survey had several additional questions which sought opinions on democratic developments in Georgia. For example, one of the questions asked was 'In your opinion, is Georgia a democracy now?'. Figure 8 demonstrates that responses to that question by returned migrants seem to be influenced by their choice of destination. In particular, among those who migrated to North America and Western Europe the share of critical voices is much higher than among those who migrated to Russia and other FSU countries. Similarly, the share of those who had difficulties answering this question was much higher among those who migrated to Russia and other countries of the former Soviet Union.

**Figure 8: Views on democracy by destination**



## 4.2 Impacts of migration on households

To estimate the effects of migration on households, the sample of all households is split into 3 groups: household without migrants, households with absent migrants and households with return migrants. Since the situation for households with current and with return migrants might be rather different, as some of the descriptive statistics would give us reason to believe, it is instructive to compare non-migrant households with absent migrant households and separately perform a comparison of non-migrant and return migrant households (see Appendix C for an estimate of the propensity of households having absent migrant and return migrants).

This analysis relies on the propensity score matching technique. For the given two types of households (for example, households with and without an absent migrant) the propensity of being of each type is estimated in the first stage of analysis. Based on results, households are grouped into sets with similar estimated probabilities (propensities). Some households in each of these sets happen to have a migrant, these are the treatment group. Those households in each set that don't have a migrant are the control group. Finally, the differences in outcome variables (variables affected by migration) for control and treatment households are computed and averaged. So, this procedure estimates the average treatment effect on treated households (households with migrants).

### *Current migration's effects on household welfare*

We look first at the effect that having an absent migrant in the household appears to have on a household's economic welfare, by examining effects on household's spending patterns and assets.

The first table below reports the average effect that having an absent migrant appears to have on households' expenditure pattern (comparing absent migrant households with matched non-migrant households). The only significant impact when looking at expenditure categories appears to be increased spending on toiletry and cosmetics by urban households.

**Table 26: Expenditures last month**

Outcome Variable	Overall		Rural		Tbilisi		Urban	
	ATT	t	ATT	t	ATT	t	ATT	t
Food	1.32	0.1	-14.57	-1.0	-14.47	-0.5	13.99	1.0
Travel	-3.24	-1.5	2.89	1.1	-7.63	-1.1	-4.57	-1.3
Household Supplies	2.14	0.9	-0.47	-0.3	0.89	0.4	4.22	1.1
Cosmetics	1.38	1.4	1.40	1.2	-0.90	-0.3	2.12**	2.1
<b>N treated/ N control</b>	<b>262</b>	<b>408</b>	<b>86</b>	<b>118</b>	<b>40</b>	<b>81</b>	<b>136</b>	<b>157</b>

Notes: Kernel matching results (bootstrapped standard errors). \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant. ATT stands for 'Average effect of Treatment on the Treated'.

We also find that having an absent migrant in the household has a modest positive effect on household asset ownership. To estimate this effect, households that have acquired items during the last 5 years are compared. Based on the results, shown in Table 27, it

is clear that in most cases there is no difference between non-migrant and absent migrant households in acquiring household items. In only a number of cases households with absent migrants were more likely to have acquired household items (rural households were more likely to have acquired DVD players and refrigerators and urban households were more likely to have acquired DVD players, washing machines and personal computers). This suggests that migration has a positive but moderate effect allowing households to build up their wealth.

**Table 27: Items owned by a household with absent migrants (if not owned 5 years ago)**

Outcome Variable	Overall		Rural		Tbilisi		Urban	
	ATT	t	ATT	t	ATT	t	ATT	t
TV	0.04	0.7	0.16	1.3	-0.23*	-1.8	-0.04	-0.5
<b>N treated, controls</b>	<b>124</b>	<b>160</b>	<b>54</b>	<b>71</b>	<b>16</b>	<b>15</b>	<b>54</b>	<b>70</b>
DVD player	0.10***	3.1	0.10*	1.7	0.09	0.9	0.10**	2.3
<b>N treated, controls</b>	<b>243</b>	<b>397</b>	<b>81</b>	<b>118</b>	<b>38</b>	<b>78</b>	<b>124</b>	<b>151</b>
Washing machine	0.09**	2.0	0.05	1.0	0.10	0.7	0.11*	1.8
<b>N treated, controls</b>	<b>238</b>	<b>368</b>	<b>83</b>	<b>116</b>	<b>35</b>	<b>65</b>	<b>120</b>	<b>142</b>
Refrigerator	0.12	1.5	0.15*	1.8	0.14	0.8	0.10	0.9
<b>N treated, controls</b>	<b>104</b>	<b>166</b>	<b>31</b>	<b>53</b>	<b>15</b>	<b>27</b>	<b>58</b>	<b>66</b>
Air Conditioner	0.01	0.7	0.00	-0.9	0.00	0.0	0.02	0.8
<b>N treated, controls</b>	<b>254</b>	<b>396</b>	<b>86</b>	<b>118</b>	<b>40</b>	<b>78</b>	<b>128</b>	<b>150</b>
Car	-0.02	-0.7	0.02	0.5	-0.06	-0.9	-0.04	-0.7
<b>N treated, controls</b>	<b>232</b>	<b>340</b>	<b>71</b>	<b>86</b>	<b>32</b>	<b>66</b>	<b>129</b>	<b>136</b>
Cell phone	0.00	0.1	0.04	0.4	-0.12	-0.7	0.01	0.1
<b>N treated, controls</b>	<b>171</b>	<b>263</b>	<b>64</b>	<b>82</b>	<b>26</b>	<b>48</b>	<b>81</b>	<b>91</b>
Personal computer	0.04	1.2	0.01	0.6	-0.12	-1.1	0.11***	3.1
<b>N treated, controls</b>	<b>257</b>	<b>394</b>	<b>86</b>	<b>118</b>	<b>38</b>	<b>73</b>	<b>133</b>	<b>151</b>

Note: Kernel matching results (bootstrapped standard errors). \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant.

### *Current migration and unemployment*

We next examine the impact of having an absent migrant in the household on various economic attributes – like having a business – and possessions – like owning land. While in most cases households with absent migrants and those without migrants appear similar, migration appears to have one clear effect – a strong positive impact on employment levels within the household: households with absent migrants have fewer unemployed members than matched non-migrant households. This effect could be due to the fact that high levels of unemployment leads to migration (presumably of HH members that are unemployed), leaving households with fewer unemployed members than they would otherwise have. The effect is particularly strong in rural and urban areas, while in Tbilisi it is of comparable magnitude, but only significant at the 20 per cent level.

**Table 28: Households' economic attributes and possessions**

Outcome Variable	Overall		Rural		Tbilisi		Urban	
	ATT	T	ATT	t	ATT	t	ATT	t
Business last 12 months	-0.02	-0.4	0.01	0.1	0.01	0.2	-0.04	-1.1
Internet access	0.01	0.6	-	-	-0.09	-1.2	0.05*	1.7
Land owned	-0.05	-1.3	-0.05	-1.6	0.07	0.7	-0.07	-1.3
Number of rooms	-0.20	-1.2	-0.33	-1.0	0.09	0.4	-0.25	-1.4
Anyone in poor health	-0.15	-1.6	-0.26	-1.4	-0.09	-0.5	-0.05	-0.5
Anyone unemployed	-0.37 ***	-4.2	-0.33 ***	-2.8	-0.31	-1.5	-0.43 ***	-3.5
<b>N treated/ N control</b>	<b>262</b>	<b>408</b>	<b>86</b>	<b>118</b>	<b>40</b>	<b>81</b>	<b>136</b>	<b>157</b>

Note: Kernel matching results (bootstrapped standard errors). \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant.

Below, we summarise the propensity score matching results from comparing non migrant and matching return migrant households.

#### *Return migration and household welfare*

Again, we look at the effects on expenditure and assets, but this time the focus is on their relationship with return migration. Among the expenditure categories reported in Table 29, in some ways the results are similar to the effect of households having absent migrants, in that the effects appear quite modest. In this case there is no effect on food spending and a weakly positive effect on the other 3 categories, mostly concentrated in non-Tbilisi households.

**Table 29: Expenditures last month**

Outcome Variable	Overall		Rural		Tbilisi		Urban	
	ATT	t	ATT	t	ATT	t	ATT	t
Food	-0.59	-0.1	-5.47	-0.7	-6.35	-0.2	11.06	1.4
Travel	3.19	0.9	14.25**	2.1	-7.47	-0.6	-0.93	-0.2
Household Supplies	5.32*	1.7	7.50	0.9	3.48	0.6	3.82*	1.8
Cosmetics	0.47	0.5	-3.41	-1.2	2.40	0.6	1.94**	2.1
<b>N treated, controls</b>	<b>108</b>	<b>412</b>	<b>7</b>	<b>139</b>	<b>23</b>	<b>67</b>	<b>80</b>	<b>165</b>

Note: Kernel matching results (bootstrapped standard errors). \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant

In terms of the durable goods owned by households, the effects of return migration are slightly more pronounced than in the case of previous outcomes. Rural households with return migrants are more likely to have washing machines, cars, and cell phones; urban residents have more DVD players and cells; while in Tbilisi the effect is the least pronounced and only affects the probability of owning a cell phone. However, overall the effect seems clear – households with returned migrants are more likely to own consumer durables – presumably a positive outcome for those households. And in some cases – such as having a car – it could be quite transformative.



**Table 30: Items owned by a household with return migrants (if not owned 5 years ago)**

Outcome Variable	Overall		Rural		Tbilisi		Urban	
	ATT	t	ATT	t	ATT	t	ATT	t
TV	0.07	0.9	0.13	1.0	-0.26	-1.0	0.06	-0.6
<b>N treated, controls</b>	<b>70</b>	<b>196</b>	<b>36</b>	<b>91</b>	<b>8</b>	<b>6</b>	<b>26</b>	<b>52</b>
DVD player	0.02	0.4	-0.15	-1.5	-0.12	-1.0	0.21***	3.2
<b>N treated, controls</b>	<b>166</b>	<b>401</b>	<b>72</b>	<b>139</b>	<b>20</b>	<b>65</b>	<b>74</b>	<b>157</b>
Washing machine	0.11***	2.8	0.13***	2.6	0.15	0.9	0.09	1.4
<b>N treated, controls</b>	<b>162</b>	<b>368</b>	<b>73</b>	<b>131</b>	<b>19</b>	<b>51</b>	<b>70</b>	<b>149</b>
Refrigerator	0.02	0.2	0.09	1.0	0.26	0.8	-0.08	-0.7
<b>N treated, controls</b>	<b>56</b>	<b>175</b>	<b>19</b>	<b>63</b>	<b>8</b>	<b>9</b>	<b>29</b>	<b>70</b>
Air Conditioner	-0.01	-0.4	0.00	0.0	-0.08	-0.9	0.02	0.5
<b>N treated, controls</b>	<b>173</b>	<b>400</b>	<b>77</b>	<b>136</b>	<b>21</b>	<b>65</b>	<b>75</b>	<b>158</b>
Car	0.08***	2.5	0.14***	3.1	0.00	0.0	0.02	0.4
<b>N treated, controls</b>	<b>159</b>	<b>333</b>	<b>72</b>	<b>104</b>	<b>21</b>	<b>54</b>	<b>66</b>	<b>142</b>
Cell phone	0.21***	5.0	0.19***	2.5	0.29***	3.1	0.17***	2.1
<b>N treated, controls</b>	<b>100</b>	<b>268</b>	<b>46</b>	<b>100</b>	<b>13</b>	<b>42</b>	<b>41</b>	<b>98</b>
Personal computer	0.02	0.6	-0.02	-0.5	0.13	1.0	0.01	0.1
<b>N treated, controls</b>	<b>173</b>	<b>396</b>	<b>77</b>	<b>139</b>	<b>21</b>	<b>56</b>	<b>75</b>	<b>159</b>

Note: Kernel matching results (bootstrapped standard errors). \* - 10% significant, \*\* - 5% significant, \*\*\* - 1% significant

### *Return migration and unemployment*

Turning then to households' economic attributes and possessions, the results are quite similar to those for households with absent migrants. As indicated in Table 31, having a return migrant does not appear to have a significant effect on household business ownership, land ownership or number of rooms in the dwelling – suggesting that in Georgia there is currently no link between return migration and household entrepreneurialism. This may be a disappointment to some stakeholders who might have hoped that returned migrants might be an engine of business creation. There is also no effect on the health status of the household members. Again, however there is a significant positive effect on employment, though only for rural areas. This is a positive result though, as it might be expected that return migration would be associated with increased unemployment, rather than employment, particularly in rural areas where employment tends to be scarcer.

**Table 31: Households' economic attributes and possessions**

Outcome Variable	Overall		Rural		Tbilisi		Urban	
	ATT	T	ATT	t	ATT	t	ATT	t
Business last 12 months	0.05	0.8	0.12	1.0	-0.07	-0.9	0.03	0.6
Internet access	0.02	0.8	0.01	0.8	0.05	0.4	0.01	0.1
Land owned	0.00	-0.1	0.01	0.1	0.04	0.3	-0.04	-0.6
Number of rooms	0.16	0.8	-0.16	-0.6	0.24	0.8	0.39	1.6
Anyone in poor health	-0.02	-0.3	0.02	0.2	-0.16	-0.5	0.01	0.1
Anyone unemployed	-0.08	-0.8	-0.31*	-1.9	-0.03	-0.1	0.15	0.9
<b>N treated, controls</b>	<b>108</b>	<b>412</b>	<b>7</b>	<b>139</b>	<b>23</b>	<b>67</b>	<b>80</b>	<b>165</b>

Note: Kernel matching results (bootstrapped standard errors). \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant

### 4.3 Impacts of remittances on households

Remittances are an important addition to household income, and as such they should have an impact on household behaviour and wellbeing. We study these impacts by comparing households with and without remittances and observing how outcomes are different across these households, after controlling for certain factors. The analysis is limited to households that currently have migrants, which constitute a more homogeneous group than the overall sample. This allows us to minimise selection bias that otherwise could have skewed the results.

The probability of households receiving remittances is estimated using the model developed in section 3.2. Since this is a household level analysis, families that have more than one absent migrant group were dropped, resulting in a sample of 451 households. Thus, the probability of the AM group remitting (which is now the probability of the household receiving remittances from their AM group) has been estimated. The results are very similar to estimates reported earlier and so are omitted here. Households with and without remittances (the treatment and control groups, respectively) have been grouped by propensity scores.

#### *Remittances and household welfare*

Table 32 reports the result of comparing average treatment effects for matched households. For robustness, it also reports results that exclude absent migrant households getting remittances from non-members. In addition, results are compared for households in different types of settlement to capture any differences in the way remittance inflows might influence households in rural and urban areas and in the capital.

**Table 32: Effect of remittances on absent migrant households' expenditures last year**

Outcome Variable	Overall		Omit HH with other remitters		Rural		Tbilisi		Urban	
	ATT	t	ATT	t	ATT	t	ATT	t	ATT	t
Religious activity	13.0***	2.6	11.5**	2.3	16.4**	2.2	30.3**	2.3	0.8	0.1
Personal services	22.6***	2.7	21.6**	2.1	19.5***	3.4	18.9	0.6	1.8	0.1
Clothes	131.5**	2.4	105.0*	1.9	106.1***	3.4	356.3*	1.7	-103.4	-1.0
Kitchen appliances	41.5	1.3	9.5	0.4	7.5	1.6	27.9**	2.2	-9.7	-0.2
Electronic goods	111.7***	3.4	111.1***	3.8	34.7	1.3	409.6***	2.9	55.6***	2.6
Furniture	88.6**	2.4	63.2**	2.4	33.3*	1.9	57.5**	2.3	86.7*	1.9
Rent	43.7*	1.7	47.2**	2.0	-6.4	-0.7	173.8	1.4	36.7	1.5
Water	-58.9	-1.3	-59.2	-1.2	-30.5	-1.2	-216.3	-1.5	-28.7	-0.8
Heating fuel	39.5	1.4	39.5	1.2	-9.0	-0.2	-35.3	-0.4	63.3	1.5
Cooking fuel	-53.9*	-1.9	-54.4	-1.6	-43.9	-1.2	-62.9	-1.3	-133.8***	-2.7
Electricity	-89.9	-1.1	-90.4	-1.0	5.4	0.2	63.0	0.7	-409.9**	-2.0
Medical care	221.4**	3.1	212.5***	3.2	167.8	0.9	404.9	1.5	206.0***	2.9
School fees	25.0	1.4	25.4	1.2	6.4**	2.2	139.9	1.5	-18.3	-0.7
School supplies	20.0	1.3	20.0	1.1	12.6	0.4	71.3**	2.2	9.0	0.4
Other school costs	65.9**	2.0	57.4*	1.9	16.2**	2.0	120.1	0.6	57.5*	1.7
Vehicle	11.6	0.4	7.8	0.2	9.9*	1.8	146.4**	2.5	-88.2	-1.2
Holiday activities	-6.0	-0.9	-6.5	-0.9	5.1**	2.0	-6.2	-0.1	-25.1	-1.4
Leisure items	-0.0	0.0	-0.7	-0.1	-18.0	-1.0	25.6	1.5	2.3	1.6
Leisure activities	-17.6	-0.4	-16.3	-0.5	26.6	0.9	12.8	0.9	-96.9	-1.0
Savings	158.2***	3.7	165.6***	4.0	102.1*	1.9	273.2*	2.0	173.8***	3.1
Debt payments	45.58	1.6	39.6	1.6	5.35	0.3	120.7	1.5	33.6	0.9
Gifts to others	90.1***	4.0	86.0***	3.9	93.4**	2.5	39.9	0.5	47.5	1.4
<b>N treated, controls</b>	<b>329, 119</b>		<b>311, 119</b>		<b>125, 29</b>		<b>44, 20</b>		<b>142, 57</b>	

Note: Kernel matching results (bootstrapped standard errors). \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant

The probability of households receiving remittances is estimated using the model developed in section 3.2. Since this is household level analysis, families that have more than one absent migrant group were dropped, resulting in 451 households. Thus, probability of absent group remitting (which is now the probability of the household receiving remittances from their absent migrant group) has been estimated. Households with and without remittances (treatment and control groups, respectively) have been grouped by propensity scores. Table 32 reports the results of comparing average treatment effects for matched households. For robustness, it also reports results that exclude absent migrant households receiving remittances from non-members. In addition, results are compared for households in different settlements to capture any differences in the way remittance inflows might influence rural, urban and capital city households.

It appears that households that receive remittances significantly increase their expenditures on many expenditure categories. For example, annual spending on religious activities and on personal services (such as haircuts) go up by a small amount (up to 30 GEL per year), and the effect is more pronounced in rural areas and Tbilisi (for spending on religious activities only). A higher increase in spending is observed in categories like clothes (131 GEL overall, 356 GEL for Tbilisi), electronic goods (112 GEL overall, 410 GEL for Tbilisi) and furniture (89 GEL overall, only 33 GEL in rural areas).

Expenditure on medical care goes up (221 GEL overall), and there is a higher level of spending on education costs (66 GEL), which might be capturing the additional fees households pay for higher quality education. Tbilisi residents increase their expenditures on vehicles (146 GEL), while households in rural areas spend more on gifts to others (93 GEL increase). It is important to note that households that receive remittances have higher savings (158 GEL overall), and the effect is robust across all types of settlements, with some variation (102 GEL for rural areas, 273 GEL in Tbilisi). Debt repayment is not affected by remittances.

The only significantly negative impacts are drop in spending on cooking fuel and lighting for urban households. One explanation for this might be that families may dine out more often. Also, some families that receive remittances might have invested in better heating systems (mostly using natural gas) which would result in lower electricity bills.

**Table 33: Effect of remittances on possession of household items (if not possessed 5 years ago)**

Outcome Variable	Overall		Omit HH with other remitters		Rural		Tbilisi		Urban	
	ATT	t	ATT	t	ATT	t	ATT	t	ATT	t
TV	0.18	1.3	0.17	1.6	0.05	0.3	0.16	0.6	0.36	1.4
<b>N treated, controls</b>	148	56	143	56	65	24	13	5	65	22
DVD player	0.18***	2.8	0.17**	2.3	0.07	0.5	0.39***	4.1	0.20***	3.7
<b>N treated, controls</b>	305	109	297	117	116	27	40	19	134	49
Washing machine	0.14*	1.7	0.12	1.6	0.03	0.3	0.22	0.9	0.13*	1.7
<b>N treated, controls</b>	294	106	278	106	120	29	32	15	126	49
Refrigerator	0.26***	3.6	0.24***	2.6	0.24***	3.2	0.67***	5.9	0.07	0.3
<b>N treated, controls</b>	129	52	121	52	43	17	15	2	63	26
Air Conditioner	0.05***	3.6	0.05***	3.8	0.01	1.0	0.11*	1.9	0.06***	3.1
<b>N treated, controls</b>	324	115	307	115	125	29	44	19	138	54
Car	0.00	0.0	0.00	0.0	-0.09	-0.5	0.15**	2.0	0.04	0.9
<b>N treated, controls</b>	282	107	269	107	100	27	37	15	132	53
Cell phone	0.25**	2.4	0.24**	2.0	0.37*	1.7	0.26	1.2	0.12	0.9
<b>N treated, controls</b>	198	86	187	86	80	25	22	13	85	34
Personal computer	0.08	1.3	0.07	1.6	0.03*	1.8	-0.16	-0.8	0.09	1.0
<b>N treated, controls</b>	323	115	305	115	125	29	40	18	140	55

Note: Kernel matching results (bootstrapped standard errors). \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant

Turning then to the effect on asset ownership, it is not surprising given the above results that the positive effect of remittances is also pronounced when looking at the proportion of households that own various household items (taking into account only those households that did not already possess the item 5 years ago). Except for rural settlements, households with remittances are more likely to have a DVD player and an air conditioner. Urban households are more likely to have a washing machine, while households in Tbilisi are more likely to have a car. A much larger number of rural households that receive remittances have cell phones. Remittances have a significant effect on the ownership on a range of household items, presumably significantly improving households' living standards.

The effect of remittances on the proportion of households having businesses, land, internet access, members in poor health, unemployed members and larger houses is reported in Table 34 below.

**Table 34: Effect of remittances on households' economic attributes and possessions**

Outcome Variable	Overall		Omit HH with other remitters		Rural		Tbilisi		Urban	
	ATT	t	ATT	t	ATT	t	ATT	t	ATT	t
Business last year	0.02	0.3	0.00	0.1	0.01	0.1	-0.05	-0.3	0.03**	2.1
Internet access	-0.03	-0.4	-0.03	-0.5	0.00	.	-0.25*	-1.9	0.02	0.2
Land owned	-0.12	-1.6	-0.12*	-1.9	-0.17	-1.6	0.03***	3.0	0.00	-0.1
Number of rooms	0.51	1.5	0.47	1.5	1.26**	2.3	-0.30	-0.5	-0.02	-0.1
Anyone in poor health	-0.04	-0.4	-0.04	-0.5	-0.35**	-2.2	0.38***	2.6	0.09	0.6
Anyone unemployed	-0.02	-0.2	-0.02	-0.2	-0.24	-1.4	0.22	1.1	0.12	1.1
<b>N treated, controls</b>	<b>329, 119</b>		<b>311, 119</b>		<b>125, 29</b>		<b>44, 20</b>		<b>142, 57</b>	

Note: Kernel matching results (bootstrapped standard errors). \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant

When we examined the effects of migration on households' economic attributes and possessions the effects were confined to positive employment impacts. The effects of remittances seem much broader. The overall effect of remittances on business ownership is negligible, but there is a small (3 per cent) increase in the number of households that own business in urban settlements. Internet access seems to be negatively affected by remittances, although the effect is small and in most cases insignificant (except for Tbilisi).

The number of rooms increases in rural areas, perhaps indicating that households from villages use some of their remittances to expand their dwellings (it is often possible to build an additional room or even a floor, since most village families live in private houses and not apartments like in urban areas). This likely improves living standards for the families concerned significantly. Moreover, in Tbilisi there is a small increase in land ownership.

The effect on health is very ambiguous. Households in rural areas that receive remittances are less likely to have members in poor health, while in Tbilisi the effect is exactly the opposite. Interestingly, in the case of remittances there is no significant

impact on the number of unemployed across families with and without remittances – refuting the suggestion which is sometimes made that receiving remittances can make households more ‘picky’ about accepting work and therefore more likely to be unemployed.

## Section 5: Policy discussion and recommendations

### 5.1 Stakeholder interviews and public opinion

One aim of the DOTM project was to identify some of the perceived dangers and benefits of migration processes. Hence, before the survey took place, 22 interviews were conducted with representatives of government ministries, diaspora, academic institutions, NGOs, international organisations and private companies. During the interviews, interviewees were asked to discuss what they saw as the most important aspects of migration and also to complete a survey, which sought their views on several migration-related statements. Below, we assess these alongside some of the opinions expressed by respondents to the national household survey.

11 out of 22 interviewees thought that emigration made life in Georgia 'a bit better' and three thought that it made it 'much better.' Only three of the interviewees thought that emigration made life in Georgia 'much worse,' and two thought that it made it 'a bit worse.' Immigration was not seen as an issue with much relevance for Georgia at this stage with seven interviewees seeing it making life in Georgia 'a bit better' and seven interviewees seeing it as being irrelevant. In general, during the interviews issues that were raised related mostly to emigration, with immigration being mentioned only in passing.

Interestingly, the opinions of the survey respondents are rather different (although the difference in sample size should be taken into account here). In particular, 58.5 per cent thought that emigration negatively affected life in Georgia (with 35.7 per cent thinking that it made life in Georgia 'much worse'). Opinions on immigration were equally divided, with 44.5 per cent of survey respondents thinking that it made life in Georgia worse (23.4 per cent thought it made life 'much worse') and 43.4 per cent thinking that it made life in Georgia better (with 12.2 per cent thinking that it was 'much better'). Overall opinions about emigration and immigration among the Georgian public therefore tend towards being rather negative.

The opinions expressed by stakeholders related primarily to questions around brain drain/gain and remittances. Overall, it was felt that short-term emigration can bring about brain gains, and thus is beneficial for Georgia, while long-term emigration can cause brain drain that is harmful to the country. While a commonly shared concern was that the country is losing its most entrepreneurial and talented individuals to emigration, a few interviewees, notably in the private sector, stated that many of those were either constrained in terms of their career advancement or had no good job prospects in the domestic labour market anyway ('brain waste'), and thus their departure was not harming the domestic economy as much as it may be believed.

Other positive consequences of migration mentioned during the interviews included an easing of pressures on the labour market, the introduction in Georgia of new skills learnt abroad, and the spread of 'new mentality,' that is, of a Western way of doing business and approaching business relations. However, it was also noted that migrants may be getting involved in criminal activities while abroad, which could harm the image both of Georgia and its citizens.

### Box 3: Voices of Migration – Government, Diaspora

- 'The *creation of jobs* in Georgia is the most important thing that that government can do for migrants.' (Female, 26, unemployed, Imereti, a HH with NM).
- 'The *Georgian government should create jobs* and encourage migrants to come back.' (Male, 46, employed, Imereti, a HH with NM).
- 'The government *should make laws in connection to small and medium businesses more loyal*, and encourage [community-driven associations] associations to finance business in Georgia.' (Female, 31, employed, Imereti, a HH with NM).
- 'The representatives of this ministry should find out the *problems that our compatriots have abroad* and try to help solve these troubles.' (Male, unemployed, Imereti, a HH with AM).
- 'The Government should protect interests of migrants; *our consular services should protect Georgia's citizens*.' (Female, 36, Batumi, returned from Russia).
- '*Ninety-five per cent work illegally*, even citizens or are legal migrants work illegally. Employers pay less to illegal than to legal employees, and do not pay taxes, so they prefer to have a cheap labour force.' (Female, Batumi, returned from Russia).
- 'There might be a *very small number of people who work legally*. Even Europe has problems with workplaces and salaries, and it has serious unemployment. I'm not sure that Georgian migrants are well employed.' (Male, 28, Batumi, returned from Germany).
- 'The *organisation of various events for Georgians abroad* is very important. This way they can meet each other, share problems and be closer to their homeland.' (Female, 29, employed, Achara, a HH with RM).
- 'I've heard about the Armenian Diaspora in Los Angeles, which sent money to the Batumi Armenian Church. I have never heard anything similar about Georgians. *Georgians help their own relatives more than any organised structures*.' (Male, Batumi, returned from Germany).
- 'I have heard about [ethnic] Armenians helping their communities, and Jews, but I have *never heard of [ethnic] Georgians doing the same*.' (Female, 35, employed, Achara, a HH with RM).
- 'I *would not give even a cent to such associations*. If I want, I would send money to help people personally. I have no guarantee that such associations would not consume money themselves. I don't want to work as a cleaner abroad and have somebody buy an SUV with the money I earned. If remittances will be used for their target it would be good, but you can't control [the money].' (Female, 65, Tskhaltubo, returned from Turkey).

Stakeholders generally regarded remittances as a benefit, given their contribution to the income and financial stability of recipient households and as a source of investments; a claim that our survey results do not, on the whole, support. 'Moral hazard' issues were barely noted, and thus, were not seen as an issue worth mentioning. However, when the question was posed directly, 9 interviewees agreed and 9 disagreed that remittances may deter recipients from participating in the labour force.

Finally, among the negative effects of emigration, several interviewees mentioned the disruption of family and social networks (with particularly negative consequences for children in families where one or both parents are abroad) and harmful demographic trends, in particular declining birth rates.

When talking about the benefits and costs of migration, 29.4 per cent of the DOTM survey respondents mentioned remittances as being instrumental in alleviating poverty and helping recipients (although only 6.1 per cent believed that they were used for setting up businesses); and 33.6 per cent talked about the negative effects migration had on families and family networks. While 27.4 per cent thought that investment by



immigrants helped to create jobs, 21.7 per cent thought that immigrants deprive Georgian citizens of job opportunities. Finally, 15.4 per cent thought that immigrants bring about new ways of doing business.

It is worth noting that at the time of interviews (late spring and early summer of 2008) government officials believed that migration trends were reversing, with migrants coming back to Georgia; and no well-formulated policy measures were suggested by any of the stakeholders. Meanwhile, 68.9 per cent of survey respondents stated that the government's primary role should be to create more and better paid jobs to diminish the need for emigration. The next most common answer – making it easier to set up businesses – was mentioned by only 18.9 per cent of respondents.

Overall, interviewed stakeholders generally believed that migrants make an important contribution to life in Georgia in a number of ways, including by providing support to the community (such as giving money to schools, or for religious purposes), and by encouraging potential migrants to enrol in educational programmes that they believe will enable them to migrate at some point in the future.

## **5.2 Current migration-related policy framework**

As Abashidze et al (2009) state, based on interviews with several migration experts, Georgia currently has 'neither a migration policy nor legislation to regulate inward and outward movement of citizens.' While this partly reflects capacity constraints and the lack of an appropriate infrastructure, it is also a consequence of liberal economic policies that the Georgian government has embraced.

In terms of migration, this has meant the liberalisation of entry requirements in an attempt to boost tourism and attract foreign businesses. Georgia grants visa-free entrance to citizens of many developed countries and maintains visa-free travel arrangements with Turkey and the majority of the former CIS partners.<sup>13</sup> It also sustains a very liberal visa regime for citizens of other countries, both in terms of visa categories and issuance mechanisms.<sup>14</sup> As IOM (2008) puts it, 'legal migration into Georgia is accessible to such an extent that illegal migration becomes almost a non-issue.' Similarly, there is no explicit emigration policy. However, this has made other countries, in particular the European ones, cautious in terms of their own visa regimes with Georgia, as they fear that the country may become an easy-to-access transit point for illegal migrants.

Among foreign policy actions related to Georgian migrants two are worth mentioning. One of them is the recent Russian blockade that has rapidly evolved from a partial trade embargo to complete suspension of trade, cessation of direct travel across the border, and very limited visa issuances (for chronology of the sanctions see Livny et al 2007).

The second one is European Neighbourhood Policy Action Plan (ENP-AP), endorsed by the EU-Georgia Cooperation Council in November 2006. Among its many priorities is the development of a National Action Plan on Migration and Asylum Issues that calls for

---

<sup>13</sup> Although Georgia left the Commonwealth following the August 2008 war with Russia, the authorities expressed their intentions to maintain certain aspects of the membership, in particular, the visa-free regime.

<sup>14</sup> One of the very few exceptions is prohibition of entering Georgia via territories currently not controlled by the central government.

better monitoring of migration flows and cooperation on the reintegration of returned asylum seekers and illegal migrants. Currently, there are few return and reintegration programmes operated by the IOM and NGOs. Those in existence are relatively new and function on a limited scale (see CRRC 2007: section 4.2).

### **5.3 Policy recommendations**

This study has shown that migration may improve the living conditions of particular individuals and their respective households. In some cases, such as when unemployment is reduced among households with migrants, this may have wider effects on the local and national economy. However, these improvements are not guaranteed and may not be happening to the fullest extent. Given the findings of the study, the policy recommendations of this report are organised along three themes.<sup>15</sup>

- The creation of well-paying jobs appears to be the most crucial issue for retaining potential migrants as well as for encouraging return migration, in particular, for the more educated and skilled migrants. While the general macroeconomic improvement is bound to bring that about, it may take too long, especially given the global financial turmoil and the current environment of political uncertainties at home.
- It emerges that emigrants are often young, well educated, and possess entrepreneurial skills. It seems however that their skills are not always used fully while they are away. This means that migration does not deliver as many benefits for the migrants and their families as it might. It may also lead to their skills eroding over time, limiting their opportunities and contribution if they return to Georgia.
- Finally, our study has shown that remittances are used mostly for financing basic needs rather than for investment purposes, and hence, contribute to economic development only indirectly.

Hence, policymakers should concentrate on improving the functioning of the domestic labour market, helping migrants to utilise their skills and anchoring remittances and channelling them into more productive activities.

It is worth noting here that particular attention needs to be paid to urban (other than Tbilisi) areas and especially rural areas, whether in terms of programmes encouraging employment or in terms of preparing potential migrants for departure. As this report demonstrates, migrants from outside the capital have fewer options when it comes to destination choices, gain less in terms of education, and hence, are likely to remit less. They are also likely to be the least informed about legal ways of migration. At the same time their households back in Georgia are those that are the most in need of assistance.

---

<sup>15</sup> CRRC (2007), IOM (2008) and Abashidze et al (2009) make a number of policy recommendations that, among other things, relate to legal frameworks as well as operational and logistical difficulties encountered by various entities dealing with migration-related issues.

### *Domestic labour market policies*

The functioning of the domestic labour market can be improved by enhancing the mobility of the labour force and disseminating information about opportunities for work. This, however, is complicated by computer illiteracy of many potential beneficiaries and a general lack of technological infrastructure. Moreover, the small size of the country suggests that improvements in labour force mobility may not bring about significant results, except for those residing in remote territories.

The most straightforward step is to facilitate the exchange of information on job opportunities in order to help both returned migrants and potential emigrants. This can be achieved by organising job fairs and by establishing networks/websites with information on employers and potential employees.

The organisation of vocational schools and training programmes is another common suggestion, although the feasibility of such programmes, especially country-wide, will be constrained by the availability of funding. However, given the nature of industries that tend to dominate the Georgian economy outside urban areas – tourism, farming, and food processing – such programmes are likely to be cheaper than, for example, those aiming at computer illiteracy.

The most useful policy innovation would be the promotion of new business ideas and practices. A study conducted in one migrant-sending community (Daba Tianeti) found that residents of this rural area continue to rely on traditional business ideas (such as animal breeding and farming) but that they lack knowledge of modern ways of organising such businesses (Zurabishvili et al 2009). Introducing them to practices used in similar industries abroad as well as new business ideas is likely to be the most valuable.

### *Policies to improve migration information and assistance*

While it does not emerge directly from the results of the DOTM survey, numerous discussions indicate that a large number of Georgian migrants travel abroad illegally (see CRRC 2007). Some of them may choose to do so deliberately, as legal ways of migrating might be either too costly or entirely unavailable, and some may simply not be aware of existing legitimate opportunities. Those travelling illegally are likely not to be aware of any assistance or legal protection they could be entitled to when they find themselves in trouble with the authorities of the host countries. They are also likely to be misinformed about nature of jobs they are being hired for or become victims of trafficking.

While there are examples of assistance programmes by the home countries of illegal migrants (the best known being programmes administered by Mexican state and federal agencies and directed at Mexicans migrating to the United States), these are rather controversial as they are often seen by the populations and governments of destination countries as inducing illegal migration.

The provision of qualified legal assistance to illegal migrants is likely to be very costly both because of the number of potential applicants and high costs of employing lawyers (especially in developed countries). Theoretically such assistance could be provided at lower costs by Georgian embassies; however, it is bound to be ineffective given the number of personnel in the embassies and their limited knowledge of often very complex legal systems in the destination countries. Nevertheless, at the very least, the embassies

should collect and disseminate information on migrant-assistance programmes administered by governments and NGOs in host countries.

The Georgian government should concentrate on collecting and disseminating information on legal migration routes as well as helping to organise pre-migration assistance. This could involve the creation of support centres that would gather information on migration programmes – both those that are unilaterally adopted by destination countries or those based on bilateral or multilateral agreements between Georgia and other countries<sup>16</sup> – and on the structure of labour markets in destination countries (including information about needed skills, geographical locations, seasonality patterns etc.). This is something that could be done in cooperation with NGOs and international organisations fighting trafficking.

Basic language training could also be provided by these centres, as significant language barriers exist for some groups of migrants, as our research has shown, which seem likely to prevent migrants from utilising their skills and education to the fullest extent. Such centres could employ returned migrants who are aware of such programmes, possess language skills, and have knowledge of various other aspects (legal, social, and cultural) of residing abroad.

#### *Policies to maximise the benefits of remittances*

The management of remittances is a third important area for policymakers, given the sheer size of flows (both in terms of aggregate amounts and the number of households that receive them) and given that their volatility can have a dramatic effect on the welfare of many households as well as the general macroeconomic situation of the country. In addition to understanding the factors that drive remittances, it is vital to understand how families manage them. Policymakers should think about helping families use remittance flows more productively as well as offering ways to guard against and manage downturns in amounts sent.

The fact that remittances are mostly spent on basic needs demonstrates that those who send and receive them do not fully believe in existing business opportunities, or are not in a position to capitalize on them. In spite of its dramatic overall improvement in the World Bank's *Doing Business* ranking, Georgia still falls behind in several important categories, in particular, 'closing a business' (92<sup>nd</sup> place) and 'paying taxes' (110<sup>th</sup> place). In terms of 'protecting investors,' Georgia was ranked 38<sup>th</sup> in 2009. While this indicator does not suggest a particular weakness, the protection of property rights has been singled out in one of the stakeholder interviews as a major factor deterring investment by diaspora.

One way to channel existing remittance flows into more productive activities would be by encouraging migrants to pool them in order to raise the capital to open a small or medium enterprise. However, this is likely to be extremely difficult given the different preferences of potential participants, and the lack of trustworthy coordinators or intermediaries. Given the level of trust that the Georgian Orthodox Church enjoys, it might be worth investigating whether the Church could play a role, for example, by

---

<sup>16</sup> Abashidze et al (2009) discuss bilateral migration agreements. They point out that these agreements do not help illegal migrants already abroad and that only agreements driven by political interests, are concluded quickly; yet, those tend to be not very practical.

organising the pooling of remittances among members of parishes. Another possibility would be to utilise and strengthen diaspora organisations, although migrants seem to avoid active participation in such networks beyond social events.

The government could also help with facilitating remittance transfers. Welton (2009) suggests that although the monetary costs of remitting to Georgia are low, compared to other countries, there is scope for reducing inconvenience costs (such as the need to travel long distances to retrieve money from a bank branch). One of the suggested possibilities is promoting the ability to make transfers via mobile phones, although there would be certain logistical difficulties involved in this.

## References

- Abashidze A, Giorgobiani M and Kazmirkevich P (2009) *Labour Migration from Georgia and bilateral migration agreements: Needs and prospects*, available at: [http://cipdd.org/files/40\\_400\\_494205\\_Migr-eng.pdf](http://cipdd.org/files/40_400_494205_Migr-eng.pdf)
- Badurashvili I (2004) *Determinants and consequences of irregular migration in a Society under transition. The case of Georgia, Caucasus*, available at: <http://paa2004.princeton.edu/download.asp?submissionId=41960>
- Becker S and Ichino A (2002) 'Estimation of Average Treatment Effects Based on Propensity Scores', *The Stata Journal*, Volume 2, Number 4, pp. 358-377
- Caucasus Research Resource Center (CRRC) (2007) *Migration and Return in Georgia: Trends, Assessment, and Potential*, available at: [http://migration.ge/files/drc-crrc\\_mig\\_and\\_return.pdf](http://migration.ge/files/drc-crrc_mig_and_return.pdf)
- Erich A, Vacharadze K and Babunashvili G (2009) *Voices of Migration in Georgia*, available at: [http://www.crrccenters.org/upload/DRC-CRRC\\_Voices\\_Migration\\_final\\_JG\\_24MAR2009.pdf](http://www.crrccenters.org/upload/DRC-CRRC_Voices_Migration_final_JG_24MAR2009.pdf)
- IOM (2008) *Review of Migration Management in Georgia*, available at: [http://iom.ge/pdf/Migration\\_Assessment.pdf](http://iom.ge/pdf/Migration_Assessment.pdf)
- Livny E, Ott M and Torosyan K (2007) *Impact of Russian Sanctions on the Georgian Economy*, available at: [http://www.iset.ge/files/russian\\_embargo\\_pdf.pdf](http://www.iset.ge/files/russian_embargo_pdf.pdf)
- Mansoor A and Quillin B (eds.) (2007) *Migration and Remittances: Eastern Europe and the Former Soviet Union*, available at: [http://siteresources.worldbank.org/INTECA/Resources/257896-1167856389505/Migration\\_FullReport.pdf](http://siteresources.worldbank.org/INTECA/Resources/257896-1167856389505/Migration_FullReport.pdf)
- Morgan S (2001) 'Counterfactuals, Casual Effect Heterogeneity, and the Catholic School Effect on Learning', *Sociology of Education*, Volume 74 (October), pp. 341-374
- Murphey J, Baxter R, Eyerman J, Cunningham D and Kennet J (2004) *A System for Detecting Interviewer Falsification*, available at: <http://www.amstat.org/sections/srms/Proceedings/y2004/files/Jsm2004-000517.pdf>
- National Bank of Georgia (2008) *Financial Stability Report*, available at: <http://www.nbg.gov.ge/uploads/publications/finstability/nbg7.4financiaostabilityreport2008eng.pdf>
- Shelburne R and Palacin J (2007) *Remittances in the CIS: Their Economic Implications and a New Estimation Procedure*, UN Economic Commission for Europe Discussion Paper Series No. 2007.5, available at: [http://www.unece.org/oes/disc\\_papers/ECE\\_DP\\_2007-5.pdf](http://www.unece.org/oes/disc_papers/ECE_DP_2007-5.pdf)
- United Press International (2000) 'Russia imposes visa regime on Georgia', December, 5

United Nations (2009) *International Migration Report 2006: A Global Assessment*, available at:  
[http://www.un.org/esa/population/publications/2006\\_MigrationRep/report.htm](http://www.un.org/esa/population/publications/2006_MigrationRep/report.htm)

Welton G (forthcoming 2009) *Feasibility study on the use of mobile phones for facilitating international money transfers to Georgia*, International Organization for Migration, Tbilisi, Georgia

World Bank (2004-9) *Doing Business* report series, available at:  
<http://www.doingbusiness.org/>

Zurabishvili T, Tavberidze G and Zurabishvili T (2009, forthcoming) *Tianeti Household Census 2008 & Tianeti Emigrants To Greece 2008*

## Appendix A: Survey methodology

Instead of using Household Enumerator Areas from the outdated and problematic 2002 Georgian Census, CRRRC used the geographic boundaries of the 2008 Parliamentary elections and the total number of voters in each precinct in order to select electoral precincts as the primary sampling units (PSUs).

Several categories of primary sampling units were omitted from the study: firstly, precincts containing fewer than fifty registered voters; secondly, military precincts, precincts in unreachable mountainous areas, and those occupied by the Russian army at the time of the study; and thirdly, precincts with predominantly (over 50 per cent) Armenian or Azerbaijani population, as many in the communities do not speak Georgian language (our survey was conducted only in Georgian) and hence, would not have been able to participate<sup>17</sup> while ethnic minorities residing in the capital and more heterogeneous communities do tend to speak Georgian.

**Table 35: Categories of Primary Sampling Units**

Type of PSU	Total number of precincts	Percentage of precincts	Total number of voters	Percentage of voters
Military/War affected/ Under 50/Unreachable	136	3.8	31,243	0.9
Ethnic Minority	139	3.9	97,613	2.8
Total not included in the survey	275	7.7	128,856	3.7
Total included in the survey	3,281	92.3	3,328,080	96.3
<b>Total</b>	<b>3,556</b>	<b>100.0</b>	<b>3,456,936</b>	<b>100.0</b>

Once the above-mentioned precincts were omitted from the sampling frame, three strata – rural, urban, and capital – were created. In order to ensure coverage of all three of these types of communities, preliminary explicit stratification was carried out, with the distribution of sample size within each stratum made proportionate to number of voters' in them.

**Table 36: Three strata used in the DOTM study**

Stratum	Population	Percentage of population	Final number of PSUs	Percentage of PSUs
Rural	1,397,372	42.0	18	42.9
Urban	977,630	29.4	12	28.6
Capital	953,078	28.6	12	28.6
<b>Total</b>	<b>3,328,080</b>	<b>100.0</b>	<b>42</b>	<b>100.0</b>

After selecting the PSUs, households within the PSUs were selected. In order to survey enough households in all three categories (with absent and return migrants and without migrants) oversampling of households with migrants was required. To discover the prevalence of migration in selected households, a block listing exercise was chosen as

<sup>17</sup> One should note that these communities have distinct migration patterns, with migrants often heading to Russia and their homelands – Armenia or Azerbaijan. Furthermore, in other CRRRC survey efforts, these groups have appeared wary of answering survey questions, worrying that questions related to migration may be reported to the tax authorities or affect their citizenship status.



the best method for the study, since no migration data for households are available in Georgia and listing was the only realistic option of obtaining such information. Furthermore, given worries that migrants may not be on the voters list, and, given the fact that voters would be difficult, if not impossible, to aggregate into households, listing was deemed imperative for the purpose of the study. Listing was also done to screen areas in order to find out the prevalence of migration, and to allow weighting of the data to make it nationally representative.

Based on block listing results, three types of strata with different types of households were created: 620 households with no migrants; 660 households with currently absent migrants; and 660 households with returned migrants. Households with both returned and current migrants were randomly assigned to the last two strata. Sample sizes within PSUs were distributed proportionally to the distribution of households within each stratum in the given clusters. Information obtained during the block listing did not always turn out to be correct<sup>18</sup> and the response rate was just above 70 per cent. Hence, the resulting sample is: 645 households with no migrants; 493 households with currently absent migrants, and 347 households with returned migrants. Weight coefficients for each type of households were calculated to be used in statistical tests.

During the survey an extra attempt was made to collect information. The idea was to identify if any attempts to pool resources that could benefit the whole community rather than individual households take place among families of migrants. With this aim, interviewers have approached local priests believing that they would be the ones best informed about such projects, as the Georgian Orthodox Church is an institution that enjoys the highest level of trust in the country. The survey was not successful, given respondents' unwillingness to participate; however, the overall feeling emerged that such projects were not taking place.

After the study, some of the returned migrants were personally interviewed and focus groups were organised for households with currently absent or no migrants. The resulting publication, 'Voices of Migration in Georgia,' compliments our dataset, providing insights into real-life experiences.<sup>19</sup>

#### *Quality and Consistency Checks*

The resulting dataset has been checked for consistency with other existing datasets as well as for possible interviewer falsification.

The latter has been done using the response deviation scores method (Murphey et al 2004). The response deviation scores were calculated for the 68 interviewers using responses obtained from household heads for four selected questions. Average responses for each interviewer were compared with the average responses received for the same set of questions in the dataset as a whole. The comparison was stratified by respondents' gender and age in order to control for differences in interviewers' caseloads. One-sample T-tests were used to compare the interviewers' averages for

---

<sup>18</sup> During block-listing each household within selected PSUs was visited and a brief pre-survey was conducted to identify families with or without migrants. When it was not possible to meet with household members, information was collected from their neighbours. As a result, in some cases the migration status of block-listed households was misrepresented.

<sup>19</sup> See Erlich et al 2009. Funding for this follow-up study was provided by the European Commission's Aeneas Programme and the Danish Refugee Council.

each question with the total averages for each question. A response deviation of 50 per cent or more would have been an indication of possible falsification. However, calculations for this dataset revealed no evidence of possible falsification as the scores for all interviewers were within the allowed boundaries.

In order to check for consistency, two already existing datasets were used. The first is the Data Initiative (DI), the single largest coordinated data-gathering effort in the South Caucasus, which covers about 6,500 respondents and has been conducted by the CRRC since 2004. The central component of the DI is a yearly household survey containing over 120 questions related to demography, education, migration, economic activities, health, political activities, social institutions and crime. For the 2007 survey 26 questions on migration trends were added, including on the number and gender of household members that migrated and returned, the duration and reasons for migration, the frequency and amount of remittances received, etc.

The second dataset is the Integrated Household Survey (IHS), implemented by the State Department for Statistics of Georgia. It is a quarterly survey covering the whole territory of Georgia (city of Tbilisi and 9 regions), with the exception of Abkhazia and South Ossetia, the regions currently not controlled by the central government. The IHS samples 3,351 households, is the only available instrument for conducting poverty monitoring of the country, and includes Household Budget Survey, Labour Force Survey, and Health & Education components.

To check the quality of the dataset, some sample statistics were compared with respective measures obtained from the DI-2007 and the IHS-2007.4 surveys<sup>20</sup> Comparative checks were done for the following categories: age, gender, marital status, educational attainment, household size, and settlement type.

Below we report the comparison results between DOTM-DI proportions and DOTM-IHS proportions. Comparison and testing of difference between DI-IHS samples has been also performed, but results are not reported below. In most cases the proportions across these two samples were not significantly different.

First, the samples were split into age groups reflecting educational and job-related lifecycle in Georgia. Table 37 presents the distribution of population among these age groups. Data show that there are some minor discrepancies in the age composition of the three samples. In particular, the DOTM dataset seems to have under-sampled population in the 7-17 age group and over-sampled in the 18-24 age group (compared to both DI and HIS datasets). Also, the 66 and up group is slightly underrepresented in DOTM sample. In all other age groups the proportions are not different across all three samples.

---

<sup>20</sup> The DotM database contains information on 5,799 individuals; the IHS on 10,259 individuals; and the DI database on 3,306 individuals.

**Table 37: Age distribution**

Age group	Proportions in DOTM	Proportions in DI	z-values (DOTM-DI)	Proportions in IHS	z-values (DOTM-IHS)
0 to 6	5.36	5.76	-0.37	6.45	-0.96
7 to 17	10.13	15.53***	-3.61	14.41***	-3.00
18 to 24	18.17	10.35***	4.94	11.45***	3.96
25 to 45	29.77	28.75	0.51	27.98	0.90
46 to 55	14.32	13.6	0.48	14.41	-0.06
56 to 65	9.82	9.7	0.07	9.71	0.08
66 up	11.79	15.33**	-2.29	14.56*	-1.87

Note: z-values are obtained from bootstrapped standard errors for sample proportions; tests of difference in proportions between DOTM and DI and between DOTM and HIS have been performed and are reported in DI and HIS columns respectively ( \* - different at 10% level, \*\* - different at 5% level, \*\*\* - different at 1% level)

Table 38 compares the gender composition of the three samples. The hypothesis that the proportions of males in the samples are the same is rejected for both pairs: DOTM-DI and DOTM-IHS. However, the difference in proportions is rather small (4 per cent) and hence, not very alarming.

**Table 38: Gender composition**

Gender	Proportions in DOTM	Proportions in DI	z-values (DOTM-DI)	Proportions in IHS	z-values (DOTM-IHS)
Male	0.49	0.45**	2.16	0.45**	2.25

Table 39 compares the marital status of NM and RM in the DOTM dataset<sup>21</sup> with that reported in the other datasets. Our dataset over-represents the category of 'married' by some 15 per cent. At the same time the category 'Never married' is under-represented by 15 per cent. A possible explanation is the exclusion of the category of absent migrants, where the share of married people is likely to be lower compared to the rest of population. If, for the purpose of this section only, currently absent migrants for whom the survey reports a partner in Georgia or abroad are included into the category of married, then the dataset suggests a number of 50.2 per cent, which is sufficiently close to that obtained based on the IHS dataset.

<sup>21</sup> Marital status variables for absent migrants have slightly different format and could not be directly mapped into categories of marital status in the other surveys.

**Table 39: Marital status (percentage of respondents)**

Marital Status	Proportions in DOTM	Proportions in DI	z-values (DOTM-DI)	Proportions in IHS	z-values (DOTM-IHS)
Never married	25.27	39.79***	-6.32	39.94***	-6.61
Married	61.84	46.36***	6.76	46.29***	7.49
Divorced	3.1	3.07	0.03	2.91	0.22
Widowed	9.78	10.76	-0.72	10.72	-0.73

Table 40 compares the educational attainment of surveyed individuals aged 17 and older. The survey reports current education level for non-migrants and returned migrants, while for currently absent migrants only their pre-migration level of education is reported. In order to be comparable with IHS education levels, some aggregation of educational groups was necessary for both DOTM and DI datasets.

**Table 40: Educational Attainment (Percentage of Respondents)**

Level of education	Proportions in DOTM	Proportions in DI	z-values (DOTM-DI)	Proportions in IHS	z-values (DOTM-IHS)
Basic	11.63	15.42**	-2.49	1.6***	9.79
Secondary	30.32	35.52***	-3.41	45.05***	-7.98
Secondary technical	14.32	15.2	-0.50	19.34***	-3.09
Higher	41.5	33.27***	4.17	33.59***	3.83
Post-graduate	1.35	0.5*	1.83	0.4**	2.06

Compared to the DI dataset, it appears that our dataset over-represents those with higher (complete or incomplete) and post-graduate education and under-represents those with secondary (complete or incomplete) and basic education. Comparison with the HIS survey is more complicated: it looks like the definition of 'Basic' and 'Secondary' education levels in HIS surveys differs from that of DOTM and DI, making it hard to compare proportions in these brackets.

Table 41 compares distribution of households by their sizes across the three datasets. It appears that the DOTM sample is skewed towards smaller size households compared to both the DI and IHS datasets. Specifically, the DOTM dataset is over-representing 1-3 member households and is under-representing households with 4-7 members. However, households with 8 members are yet again over-represented in the DOTM dataset.

**Table 41: Distribution of households by size (percentage of households)**

HH Size	Proportions in DOTM	Proportions in DI	z-values (DOTM-DI)	Proportions in IHS	z-values (DOTM-IHS)
One	7.08	5.03**	1.96	3.59***	3.29
Two	18.11	11.45***	3.66	12.05***	3.59
Three	19.94	15.93**	2.19	15.08***	2.77
Four	21.76	25.47**	-1.96	22.85	-0.58
Five	13.56	19.47***	-3.57	20.46***	-3.81
Six	9.05	11.54*	-1.88	16.13***	-4.53
Seven	3.27	5.09**	-2.08	5.48**	-2.28
Eight	6.86	2.68***	4.37	2.51***	4.51
<b>Total HH</b>	<b>1,479</b>	<b>3,268</b>		<b>2,757</b>	

Finally, Table 42 shows the distribution of households by settlement type. The share of rural households in the DOTM survey is higher than that of the DI and IHS datasets. Tbilisi household are also over-represented, if compared to DI data. The share of urban households in the DOTM dataset is some 12 per cent less than that in DI dataset.

**Table 42: Distribution of households by settlement types**

Settlement Type	Proportions in DOTM	Proportions in DI	z-values (DOTM-DI)	Proportions in IHS	z-values (DOTM-IHS)
Rural	32.63	25.08***	3.87	22.94***	5.13
Urban	21.78	35.97***	-6.30	77.05	
Capital	45.57	38.93***	2.84		

Overall, there are some discrepancies between the three data sources. While differences exist, in some cases they are not very large. However, in some other situations the differences are sizeable and should be kept in mind. One note of caution is that the tests were done using weights reported for the datasets, and to the extent these weights might not be accurate, the results reported in this section might be distorted.

## Appendix B: Dynamics of remittance inflows from Russia

The evolution of remittance inflows from Russia is traced here as a function of sending and receiving country characteristics. The characteristics of a sending country include unemployment level, GDP per capita, GDP growth rate as these variables reflect work/income opportunities in a sending country at a given time period. Interest rate in sending country is included as a proxy for opportunity cost of converting savings into remittances. Characteristics of a receiving country are reflective of needs of Georgian families (GDP per capita in Georgia) and their opportunity costs of using cash (interest rate in Georgia). In addition a dummy variable is used to control for quarters following the Rose revolution, which took place in November 2003.

Data are quarterly from 2000 to 2007. All variables in the model are tested for a unit root using the Dickey-Fuller test and if unit root process can not be rejected, variables are used in the first difference form. The results are summarised in the equation below. Overall, less than a half of variation in remittance inflows (in first difference) can be explained by the model.

Amongst the most significant factors in the model are increasing GDP level in Georgia, which is associated with lower remittance flows, which seems likely to be related to a decreased need for additional income; and higher GDP per capita in Russia, with which comes higher amounts of money transfers to Georgia, reflective of improved economic climate and better earning opportunities of migrants. Also, the dummy variable for post Rose Revolution periods (PostRev) is highly significant and large in magnitude. It is associated with increased remittance inflows following the revolution. This variable might be capturing the effect of active reformation that started taking place after the Rose revolution, including in the banking sector, making bank transfers much cheaper and more reliable; or it may be related to an anticipated worsening in relations between Russia and Georgia, and thus a desire to repatriate assets.

$$\begin{aligned} \Delta \text{Remittances} = & -21.61 + 10.71 \cdot \text{RuIntRate} - 0.75 \cdot \text{GeIntRate} - 5.29 \cdot \text{GDPgr} - \\ & -2.06 \cdot \text{RuUnemp} + 0.13 \cdot \Delta \text{RuGDPcap} - 0.35 \cdot \Delta \text{GeGDPcap} + 11.40 \cdot \text{PostRev} \\ & \text{(} -0.73 \text{) } \quad \text{(} 2.45 \text{) } \quad \text{(} -0.71 \text{) } \quad \text{(} -1.6 \text{) } \\ & \text{(} -0.92 \text{) } \quad \text{(} 3.16 \text{) } \quad \text{(} -2.39 \text{) } \quad \text{(} 1.89 \text{) } \end{aligned}$$

$n = 30, \quad R^2 = 0.49, \quad \text{Adjusted } R^2 = 0.33$

## Appendix C: Propensity of a household having absent or return migrants

Table 43 below reports the results from a Probit model with PSU fixed effects that estimates the propensity of having an absent migrant in the household as a function of household characteristics as well as some location specific characteristics. To avoid endogeneity issues, the model uses household variables for 5 years ago (property of the household 5 years ago and the main activity for household members 5 years ago are reported in the survey; household composition 5 years ago is reconstructed from household age distribution, information about household members who left the household within the last 5 years, and information about current household members who were not in the household 5 years ago).

The sample of households is limited to non-migrant households and households with absent migrants that migrated within the last 5 years. Households with migrants who left 5 or more years ago are not included in the analysis. The dependent variable is a binary variable taking a value of 1 for households with absent migrants (that left within the last 5 years) and 0 otherwise.

The specification of the model has been checked and has passed the test for the balancing property, which is important for propensity score matching techniques.

**Table 43: Probability of having absent migrants in the household (Probit Model)**

Independent variables (X)	Coefficients		Marginal effects	
	Est.	z	Est.	z
<b>Location Characteristics</b>				
Urban PSU	0.23	0.45	0.08	0.45
Tbilisi PSU	0.69	1.41	0.26	1.37
<b>Household characteristics 5 years ago</b>				
Size of the HH	0.27	1.15	0.09	1.15
Size of the HH, squared	-0.01	-0.58	-0.01	-0.58
Number of males	0.02	0.08	0.01	0.08
Number of males, squared	-0.06	-1.18	-0.02	-1.18
Number of children 1-6 years	-0.57**	-1.99	-0.20**	-1.99
Number of children 1-6 years, squared	0.24	1.59	0.08	1.59
Number of HH members 18-24 years, squared	0.36***	2.96	0.12***	2.97
Number of HH members 18-24 years, cube	-0.07*	-1.68	-0.02*	-1.69
Number of HH members 25-65 years	0.32	1.14	0.11	1.14
Number of HH members 25-65 years, squared	0.01	0.21	0.00	0.21
Number of HH members 66 and up	-0.08	-0.23	-0.03	-0.23
Number of HH members 66 and up, squared	0.11	0.51	0.04	0.51
Number of employed HH members	0.26	1.57	0.09	1.57
Number of employed HH members, squared	-0.09	-1.48	-0.03	-1.48
Number of unemployed HH members	0.49***	3.05	0.17***	3.05
Number of unemployed HH members, squared	-0.07	-1.14	-0.02	-1.14
Number of students	0.10	0.56	0.04	0.56

Number of students, squared	-0.02	-0.28	-0.01	-0.28
Highest level of education in the HH	-0.20	-0.36	-0.07	-0.36
Highest level of education squared	0.00	0.08	0.00	0.08
Highest number of languages spoken by HH members	-0.24**	-2.32	-0.08**	-2.32
Respondent speaks Russian	0.18	1.35	0.06	1.37
Pays rent	0.06	0.20	0.02	0.19
Has land	0.32*	1.77	0.11*	1.75
Constant	-2.22	-1.45		
<b>N</b>	<b>746</b>			
<b>log-likelihood</b>	<b>-365.27</b>			
<b>Pseudo-R2</b>	<b>0.24</b>			

Note: \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant.

Based on these results, it appears that households with young children are less likely to have absent migrants (each child under 6 years old decreases of probability of having an absent migrant by 20 per cent). Having household members in the 18-24 age group has a non-linear effect on probability of having AMs. Even though the number of household members in this age group varies between 0 and 4, most households have either 0 (68 per cent of HHs) or 1 (22 per cent of HHs) members. The marginal effect of having 1 member in this age group is about 10 per cent. The number of household members who were unemployed 5 years ago increases the probability of subsequent migration from the household by 17 per cent. Having land also increases the likelihood of having absent migrants by some 11 per cent.

To control for language skills at the household level, the model includes two variables that capture the language abilities of the household. Based on the dataset, information about the languages spoken by individuals (but not absent migrants) has been collected. The maximum number of foreign languages (excluding Russian) spoken by a household member is used to control for household language abilities. Also, a variable 'Respondent speaks Russian is defined' to control for the fact that the household is Russian speaking (unlike for other foreign languages, knowledge of Russian by one adult household member in most cases indicates the ability of the entire household to speak Russian). The model results indicate that foreign language skills are associated with lower rates of outwards migration: each additional language spoken by the most multilingual household member lowers the probability of the household having an absent migrant by 8 per cent. However, knowledge of Russian has a positive effect on emigration, although this is only significant at the 20 per cent level.

We turn now from examining the effect of having an absent migrant in the household to look at the role that returned migrants appear to play. A similar model to the one applied to estimate the probability of having an absent migrant in the household was used to estimate the likelihood of having return migrants. The model has been estimated for the sample of non-migrant households and households with return migrants, excluding households with currently absent migrants. Results of the estimation are reported in Table 44. 684 households with complete data were used to obtain the results. The specification has been selected so that it satisfies the balancing property required for propensity score matching procedure.



**Table 44: Probability of having return migrants in the household (Probit Model)**

Independent variables (X)	Coefficients		Marginal effects	
	Est.	z	Est.	z
<b>Location Characteristics</b>				
Urban PSU	0.05	0.08	0.01	0.08
Tbilisi PSU	-0.03	-0.04	-0.01	-0.04
<b>Household characteristics 5 years ago</b>				
Size of the HH	-0.40	-1.51	-0.11	-1.52
Size of the HH, squared	0.08***	2.62	0.02***	2.64
Number of males	0.36	1.51	0.10	1.52
Number of males, squared	-0.12**	-2.05	-0.03**	-2.07
Number of children 1-6 years	0.05	0.11	0.01	0.11
Number of children 1-6 years, squared	-0.29	-1.20	-0.08	-1.20
Number of HH members 18-24 years	0.24**	1.97	0.07**	1.97
Number of HH members 25-65 years	-0.08	-0.28	-0.02	-0.28
Number of HH members 25-65 years, squared	0.03	0.49	0.01	0.49
Number of HH members 66 and up	-0.93**	-2.04	-0.26**	-2.05
Number of HH members 66 and up, squared	0.28	0.96	0.08	0.97
Number of employed HH members	-0.09	-0.47	-0.03	-0.47
Number of employed HH members, squared	-0.07	-1.03	-0.02	-1.03
Number of unemployed HH members	0.27	1.30	0.08	1.30
Number of unemployed HH members, squared	-0.13	-1.32	-0.04	-1.32
Number of students	0.24	1.09	0.07	1.09
Number of students, squared	-0.14*	-1.70	-0.04*	-1.70
Highest level of education in the HH	-0.77*	-1.69	-0.21*	-1.69
Highest level of education squared	0.07*	1.71	0.02*	1.71
Highest number of languages spoken by HH members	0.08	0.40	0.02	0.40
Highest number of languages, squared	-0.02	-0.17	0.00	-0.17
Respondent speaks Russian	0.48***	3.15	0.12***	3.36
Pays rent	-0.62*	-1.84	-0.13***	-2.59
Has land	0.47***	2.61	0.14**	2.56
Constant	0.89	0.68		
<b>N</b>	<b>684</b>			
<b>log-likelihood</b>	<b>-293.38</b>			
<b>Pseudo-R2</b>	<b>0.26</b>			

Note: \*- 10% significant, \*\*- 5% significant, \*\*\*- 1% significant.

The number of young adults (aged 18-24 years old) in the household has a positive effect on having return migrants. The number of older household members also significantly increases (by 26 per cent) the probability of having a return migrant. Higher levels of education are associated with lower probabilities of having return migrants, while the highest number of foreign languages (excluding Russian) spoken by the most

multilingual household member has no significant effect. However, knowledge of Russian does increase the probability of having return migrants. Finally, households that own land are more likely to have return migrants.