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**Essays on the Economics of Migration
and Social Exclusion**

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1 Introduction

This dissertation is divided in two parts. The focus of the Part I is the Economics of Migration, from the source country perspective. In particular, Chapter 1 considers new *determinants* of individual migration decision, while Chapter 2 analyzes *consequences* of household member migration decision on youth idleness and unemployment.

Part II is about the Economics of Social Exclusion considering *homelessness*, one of the most extreme forms of poverty in well developed countries. The Chapter study labour market participation of homeless people using original micro data we collected during an extensive field work in January 2008.

In Chapter 1 we examine the existing link between foreign media exposure and individual migration decision. In particular, we investigate whether individuals who have been exposed to foreign media are more prone to move abroad and to which extent their location choice depends on the received information.

The relationship between media and migration has been investigated by sociologists. Some studies highlight that images of wealth and a free and relaxed lifestyle in the northern and western economies are commonplace in developing and transition countries. Foreign media system represents an important source of information for potential migrants and somehow it tends to reinforce the idea of migration as a *trip towards El Dorado*. The received information could be more or less precise, complete and accurate, different individual could understand the same information in very different way but, generally speaking, media help potential migrants in constructing images of their future life. No studies are available, up to now, in economics.

Theoretically, individual migration decision is based on a cost-benefit analysis based on differentials in economic conditions between receiving and sending country. Ex – ante, we should expect that received information reduces individual migration costs and increases the probability to move abroad. Individual migration costs typically depends on travel, wages foregone while looking for a job abroad, efforts involved in adapting to another country (learning a new language, adapting to a new culture, making new friends) and to the psychological costs of leaving family and friends. Information received from foreign media directly affects adaptation costs but potentially reduces also the wage loss because potential migrants are more aware of labor market condition in the destination country. Following the sociological approach, we could expect that the image of the destination country received from media artificially creates an higher expected benefit from migration and makes people more optimistic about their future, making them more likely to move. Alternatively, we could argue that being more informed people are less over optimistic and then less prone to move.

However, whether and to which extent foreign media affect individual migration project has not been explored in a systematic way. As far as we know

this is the first attempt to quantify the impact of foreign media in migration decision.

Countries that represent a good benchmark for analysis are the totalitarian ones in which, for years, the free access to information has been forbidden. As a case study for our research question we consider Albania whose history in the last decades is very peculiar. The country experienced one of the most oppressive and isolated communist regimes: both economic and political contacts with the rest of the world, even communist, were absent. International migration was not allowed and severely punished, but also internal mobility was accurately monitored. The country's isolation was exacerbated by the lack of expression freedom and by the control of media and broadcasting system. Although foreign broadcasts were forbidden, starting from the early 1960s Albanians could easily watch Italian television due to the geographical proximity between the two countries. At the beginning only Italian public service television could be received but, with the increase of private broadcast system, all Italian televisions reached Albanian households. It seems that Italian television allowed Albanian to construct an image of the west and to imagine their life after migration. After the collapse of communist regime in 1990, political, economic and social changes lead to massive migratory waves defining one of the most relevant migration flows in the last decade. Starting from this point my research questions are the following. Do foreign media play a role in Albanian migration projects? Does the perceived foreign reality induce people to migrate? Does foreign television attract Albanian?

We investigate these aspects using data from the Living Standard Measurement Study (LSMS) carried out by the World Bank and the Albanian Institute of Statistics (INSTAT) from 2002 to 2004.

In particular, we model individual migration choice through a standard probit model including traditional explanatory variables (individual specific characteristics, household characteristics, geographic characteristics) and a variable capturing the degree of exposure to foreign media. The key identification assumption is the following: the probability to watch foreign television depends on the distance from the nearest foreign television transmitter.

The identification strategy is based on the physics model of electromagnetic and radio wave propagation explaining how radio waves behave when they are transmitted (or propagated) from one point on the earth to another. In free space, all electromagnetic waves follow the inverse squared law which states that the signal's strength is proportional to the inverse of the squared distance from the source. Therefore, for all television transmitters in Italy, we collect data on their location (latitude, longitude, altitude) and using the great-circle formula we compute the shortest distance between Italian transmitters and Albanian cities. For each individual we reconstruct the city of residence before 1990 and we assign the corresponding media exposure measure. Nevertheless, waves propagation is also affected by other factors as climate and weather (temperature, pressure, rain intensity, cloud cover), ground characteristics and presence of obstructions. Because of the diffraction phenomenon, the presence of obstructions does not avoid *per se* the signal reception: signals diffract around the obstacle,

change their trajectory and reach the ground although with a lower strength. To exploit the diffraction of waves around obstacles we consider the topography of the area between the nearest transmitter and the receiver. Therefore, we construct a variable that is the highest altitude of the earth surface between Italian transmitters and Albanian cities. In addition, we include also a variable capturing the transmitter, the receiver and the obstacle altitude given that the degree of diffraction and the strength of the received signal depend crucially on the difference in height between the obstacle and the receiving point.

Econometric results suggest that individuals exposed to foreign media are more likely to migrate internationally: migration probability decreases as the distance from the Italian transmitter increases and as the altitude of the obstacle blocking signal line increases. Our results are robust when controlling for traditional migration costs (distance from the cost / distance from the border).

Finally, we explore whether received information by foreign media affect the choice of the final destination. Results from a multinomial logit specification show that having been exposed to Italian media increases the migration probability *tout court*. Italian television does not attract Albanian only to Italy but induces them to move towards different western countries. These results corroborate the sociological literature on media as a pull factor for migration towards countries with a more developed social framework. These findings may have non negligible policy implications. In very closed social context, television and, more in general, access to foreign media system could play a crucial role in circulating new ideas, different cultural norms or institutions, could stimulate changes and enhance development. Starting from these results it could be interesting to investigate whether foreign media exposure affects other economic outcomes such as entrepreneurship, gender inequality, age of marriage, health outcomes, fertility or attitudes.

In Chapter 2 we investigate the effect of family members' migration and consequent received remittances on youth labor market participation in the home country. To understand the role of received remittances on individual labor market participation is important from a policy perspective, especially in countries in which financial flows from abroad represent a high fraction of annual GDP. If remittances do not substitute internal economic activity they could represent a powerful driving force for development. However, if remittances are used only as a short term device to alleviate household financial constraints and face every day need, they could create dependency for receivers who are stuck in their poverty and only wait for financial help from abroad. In particular, it is crucial to explore the effect on youth, representing the real thrust for economic growth in the long run.

The research question is motivated by two main features common to a lot of developing and transition countries: the huge amount of received remittances and the high unemployment rate. In addition, in developing and transition countries youth unemployment rate is extremely higher than the total adult

unemployment rate. It seems that one answer to the lack of labour market opportunities is international migration. If migrants are drawn from the pool of unemployed, then migration is beneficial not only for the migrants and for household members left behind, but also for the remaining residence population, as it alleviates pressure on the benefit system, and increase wealth of those remaining behind through remittances. In the past five years international remittances received by developing countries have almost doubled. Workers' remittances are an important source of income for many poor families and they potentially represent one of the major channels for development. At first glance, remittances are beneficial because of poverty reduction and increase in consumption opportunities. However, remittances *per se* do not necessarily imply faster growth or development. Their long-run impact on the economic system's pattern could be both positive and negative depending on how they are used. On the one hand, by increasing household income, remittances could ease financial constraints allowing to invest more in education or to engage in new entrepreneurial activities. On the other hand, remittances could also generate a standard neoclassical income effect on labor supply: raising individual reservation wages, received remittances could decrease labor supply especially in countries with low labor demand, where finding a job requires intensive search that is even huge for young persons. If it is the case, remittances have a negative effect on development because families could become remittances dependent, relying on transfer from abroad to satisfy their needs. Overall, the long run impact of remittances on economic growth depends crucially on how they are used.

Previous research in this field were mainly focused on children and school attainment. Differently from previous works, in this contribution, we analyze the existing relation, if any, between receiving remittances and being idle (neither enrolled nor in the labor force). In particular, we study whether the receipt of remittances overcomes any incentive to have a job or look for a job or invest in education in context in which the labor demand is very scarce. Labor market disadvantages of young people are an important policy issue: The delay in the entry into the workforce has severe implications in term of poverty, human and social capital depletion, participation in the informal sector and social stability. It is important to disentangle to which extent youth unemployment is due to lack of opportunities or to a pure income effect reducing the incentive to look actively for a job. The answer to this question has non negligible policy implications.

This Chapter is focused on the identification of the causal influence of remittances on the labour market behavior of young persons and particularly on inactivity with a special focus on gender differences. The analysis uses as a case study one of the South - Eastern European countries, Albania, that around ten years after the beginning of transition and despite evident economic recovery, is still characterized by an extremely high youth unemployment rate and a significant part of GDP represented by remittances from abroad.

The empirical analysis is based on micro data from the Living Standard Measurement Study conducted by the World Bank in Albania in 2002. We model individual labour market participation through a probit model in which the probability to be inactive is a function of traditional individual and household

explanatory variables and a dummy variable capturing whether remittances are received. Results from maximum likelihood estimation suggest the existence of a traditional neoclassical income effect. However, in the basic specification received remittances and the error term could be correlated and therefore estimates could give biased results. We deal with the endogeneity problem using as instrumental variable approach. The identification strategy relies on the co-existence of formal and informal money transfer channels, used to envoy either monetary or in kind transfers, and exploits between region variation as well as between households variation in the exogenously determined number of available Money Transfer Operator and in the distance from the border. Our identifying assumption is that the probability to receive remittances from abroad through formal channels depends positively on the number of available money transfer operator offices, while the probability to receive remittances from abroad through informal channels or *brevi manu*, when relatives temporary returns in their home country, depends negatively on distances from the nearest cross border.

Taking account the potential endogeneity of money transfer and individual inactivity within the labor market, after controlling for individual specific characteristics, for demographic composition and socio - economic status of the household, for cohort and regional variations, we find that, on average, remittances have different effects for men and women depending on the age group they belong to. Remittances may reduce or increase inactivity depending on recipient's gender and age. Traditional income effect reducing labor market participation is found in the whole cohort of young people between 15 and 24 years old and for the sub - sample of very young people (15-18). No effects is at work for people between 19 and 24. By the contrary, we find that inactivity is lower for people aged between 25 and 33 receiving money from relatives abroad.

The Part II of this dissertation is based on the original data collection we made in January 2008 on homeless people in Milan, thanks to a grant we obtained from ERE (Empirical Research in Economics – Riccardo Faini Scholarship for PhD Students in Economics).

This contribution is motivated by the fact that although general standards of living are increasing over time in well developed countries, modern welfare states still face different types of social exclusion because of persistent poverty, long-term unemployment, changes in the family structure, the retrenchment of the welfare state or new migration patterns.

Social exclusion is a relatively new concept defining a very complex and multidimensional phenomenon referred to the relative position of an individual or a group of people in the society. This kind of exclusion can be caused by a variety of disadvantages through different social processes and dimensions of everyday life. There is a causal link between poverty and social exclusion but there is a well developed consensus on other determinants. Among the others, possible main determinants are the lack of affordable housing, low paying jobs, substance

abuse, mental illness, lack of needed services, domestic violence, unemployment, prison release and re-entry into society, changes and cuts in public assistance. Social exclusion seems to be the outcome of a very complex process. Homelessness and housing deprivation are perhaps the most extreme examples of poverty that can lead to social exclusion in well developed economies. Also if they are a well-known economic problem, economic research is very scarce in this field. One reason for that is the lack of reliable data and the difficulties related to data collection on this particular population. In particular, in Italy no official data are available on homeless people. An accurate estimate of the street and shelter homeless population is useful for projections of service needs. In addition, once established a benchmark of the number of people sleeping rough in the City area, it is possible to measure the effectiveness of programs to address chronic homelessness (such as supportive housing and related strategies) by conducting annual or twice yearly street counts.

The goal of this Chapter is twofold. First, it adds a methodological contribution to the existing economic literature by providing the first reliable estimate of the size of homeless people in Milan, the second largest Italian city, and by collecting qualitative micro data on this particular population. During an extensive field work we realized the first census of homeless people in a whole metropolitan area in Italy using the *full area single night approach*. Our reference population includes all persons that in a given night reside in places not meant for human habitation, in emergency shelters and in disused areas/shacks/slums. The survey design and implementation includes two major phases: the count of homeless and the face to face interviews. As a result of the census, the final population in Milan accounted for 3860 homeless adults: 408 in street, 1152 in shelters and about 2300 in disused areas. Based on this reference population, we realized an extensive survey on a final sample of almost 1000 individuals and we collect information on demographic characteristics, individual background, current situation and expectations, original household, work and income, education, network and trust, awareness, health conditions.

Furthermore, it is general opinion that for homeless people, unemployment and non labour market participation aggravate other complex problems. On the one hand, obtaining a job is very difficult if one does not have decent housing but, on the other hand, the general consensus is that the integration into job or training programmes can help people to become reintegrated in society as a whole. From a theoretical perspective, it could be argued that homeless people are out of the labour market because they are no rational agents, being often under the effect of alcohol or drug and having psychic problems. However, up to now no statistical evidence was available. In addition, according to anecdotal evidence a surprisingly large number of homeless people work, but only few homeless persons are able to generate significant earnings from employment alone. Therefore, starting from these stylized facts, the second main contribution of this Chapter is to show whether individual homeless behavior can be defined rational according to traditional economic theory and to compare the results with the ones found for the general population. As a case study we consider the behavior of homeless people in the labor market. In particular, we

examine whether variables affecting homeless people's labour market behavior are in line with the underlying theoretical framework of utility maximization and labour-leisure choice.

Using the collected micro data, we identify crucial factors determining homeless probability to be in the labor force. In addition we also exploit the main determinants of being employed and of committing offenses to obtain income. To identify these factors and to compare them with the ones characterizing the general population seems to be crucial in order to optimally design policies aimed to faster social inclusion. The empirical analysis shows that sex, education level, received financial and in kind help, nationality, civil status (widows/divorced), place of sleeping and previous imprisoning are the most important factors correlated with the probability of being in the labor force although not having a house. Determinants of employment status and of obtaining income from informal sector activities are in line with the rationality hypothesis. These first results suggest that homeless people labor market behavior is related to the set of traditional variables characterizing general population behavior.

Part I

THE ECONOMICS OF MIGRATION

Chapter 1

Dreaming Another Life. The Role of Foreign Media in Migration Decision. Evidence from Albania.

Abstract: Using data from Albanian Panel Living Standard Measurement Survey we examine the effect of exposure to foreign media on individual migration decision. We model the probability to watch foreign television as a function of the distance from the nearest foreign transmitter. The identification strategy is based on the physics model of electromagnetic and radio wave propagation explaining how radio waves behave when they are transmitted (or propagated) from one point on the earth to another. The results suggest that individuals exposed to foreign media are more likely to migrate internationally.

JEL Classification: F22, O15

Keywords: International Migration, Television, Pull and Push Factors

1 Introduction¹

This paper examines the existing link between foreign media exposure and individual migration decision. We investigate whether individuals who have been exposed to foreign media are more prone to move abroad and to which extent their location choice depends on the received information.

We consider one of the most relevant migration flows in the last decade: the Albanian one. The Albanian population have had huge changes during the last 15 years of transition to a market based economy. Migration patters during the 1990s have been critical aspects of this transition period. After the communist regime collapse, due to political and economic changes in the country, controls of people movements were abolished so that people start to move both internally and internationally. According to 2001 Census data external migrants have been estimated to be some 0.6 million in twelve years, but with significant variations from year to year.

Two main literature streams consider migration choice. Starting from Todaro (1969) seminal paper, traditional neoclassical theory explains individual migration decision through a cost-benefit analysis based on differentials in economic conditions between receiving and sending country. From a macro perspective, the main factor driving international migration flows is the geographical difference in the supply and demand for labor in origin and destination countries. From a micro perspective, individuals are rational agents who optimally decide to migrate considering the net return to movement.

The “new economics of migration” extends neoclassical theory modelling individual migration as a household decision not only to maximize expected income gain but also to minimize risks of potential market failures (Stark and Bloom (1985)). Both approaches implicitly assume that potential migrants optimally decide whether to move or not using information on economic conditions and opportunities in destination country. Before migrating individuals gather information from different sources. Relatives and friends, previous migrants or network abroad have been widely analyzed by economic theory. In particular, the findings suggest that wider family and friend networks of previous migrants enhances migration (Massey and Espinosa (1997), Orrenious (1999), Zahniser (1999), Davis and Winters (2001), Munshi (2003)). Providing information on the migration process, on the economic opportunities at destination or helping integration once arrived, migration networks are crucial in individual migration decision. Nevertheless, little attention is given to information sources extremely common nowadays: television, radio, newspapers and internet. In addition, the literature on determinants of migration is mainly focused on elements that

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enhance migration once the very first wave is finished and try to explain why migration continues once it has started. With respect to this literature, the contribution of this paper is to identify a new channel that influences migration decision when no previous migration flows have occurred.

Some economic fields have studied the impact of media on individual choice or behavior. A first strand of literature is focused on the effect of media on political outcomes. Stromberg (2001) uses a simple model to analyze the effect of mass media provision of news on different policy issues such as redistribution, the size of the government sector, rents and corruption, the effectiveness of lobby groups and political business cycles. Considering voters behavior, DellaVigna and Kaplan (2007) find a significant impact of media bias on voting while Boeri and Tabellini (2008) show that individuals are more willing to accept reforms when they are informed about them. Instead, the politicians behavior is studied by Shi and Svensson (2002) showing that a limited access to the media, namely radio, generates larger political business cycles while Strömberg and Snyder (2008) study the effects of news coverage on voter information, politicians' actions and implemented policies. Suphachalasai (2005) investigates the relationship between development, environmental policy determination, and mass media stressing the role of mass media as a channel through which the level of development influence environmental policy making. A second strand of literature examines the effect of media on social outcomes. Using as exogenous source of variation differences topography, Olken (2006) identifies the negative impact of exposure to television and radio on social accumulation measured by participation in social groups, trust, and governance. A positive effect of childhood exposure to television on cognitive development is found by Gentzkow and Shapiro (2006) who exploit variation in the year of introduction of television to U.S. cities. Finally, a third strand of literature considers the relationship between media and individual attitudes. Gentzkow and Shapiro (2005) show that in the Muslim world television viewership influences attitudes towards the West. In subsequent research, Jensen and Oster (2007) estimate a positive impact of the entry of cable television on subjective measures of female autonomy, school enrollment and fertility while a negative effect of television programs supply, in particular soap operas, on fertility choice have been found for Brazil by Chong *et al.* (2008).

The relationship between media and migration has been investigated by sociologists. Some studies highlight that images of wealth and a free and relaxed lifestyle in the northern and western economies are commonplace in developing and transition countries. Foreign media system represents an important source of information for potential migrants and somehow it tends to reinforce the idea of migration as a trip towards El Dorado. No studies are available, up to now, in economics.

The received information could be more or less precise, complete and accurate, different individual could understand the same information in very different way but, generally speaking, media help potential migrants in constructing images of their future life. From a cost - benefit analysis we expect that received information reduces individual migration costs and increases the probability to

move abroad. Individual migration costs typically depends on travel, wages foregone while looking for a job abroad, efforts involved in adapting to another country (learning a new language, adapting to a new culture, making new friends) and to the psychological costs of leaving friends and family. Information received from foreign media directly affects adaptation costs but potentially reduces also the wage loss because potential migrants are more aware of labor market condition in the destination country.

Whether and to which extent foreign media affect individual migration project has not been explored in a systematic way. As far as we know, this is the first attempt to quantify the impact of foreign media in migration decision.

Countries that represent a good benchmark for analysis are the totalitarian ones in which, for years, the free access to information has been forbidden. Among them, the Albanian case is emblematic. From 1941 to the late eighties Albania has been one of the most oppressive and isolated communist regimes: both economic and political contacts with the rest of the world, even communist, were absent. International migration was forbidden and severely punished, but also internal mobility was accurately monitored. The country's isolation was exacerbated by the lack of expression freedom and by the control of media and broadcasting system. Serving the interests of the Communist Party, press was strictly controlled and censorship was extremely strict. The same happened with radio and television. Until 1990, Albanian media system had only one national television channel broadcasting every evening from 6 to 10 p.m., the supply of programmes included only one film per week and a lot of politicized and propagandistic documentaries. Although foreign broadcasts were forbidden, starting from the early 1960s Albanians could easily watch Italian television due to the geographical proximity between the two countries. At the beginning only Italian public service television could be received but, with the increase of private broadcast system, all Italian televisions reached Albanian households.

Italian television allows Albanian to construct an image of the west and to imagine their life after migration. After the collapse of communist regime in 1990, political, economic and social changes lead to massive migratory waves defining one of the most relevant migration flows in the last decade. Do foreign media play a role in Albanian migration projects? Does the perceived foreign reality induce people to migrate? Does foreign television attract Albanian?

We answer these questions using data from the Living Standard Measurement Study (LSMS) carried out by the World Bank and the Albanian Institute of Statistics (INSTAT) from 2002 to 2004. The data set contains a lot of information about individual experience abroad. Complete migration history, both internal and international, from 1990 to 2004 is available: information about migration length, country of destination, occupation in the host country, monetary aids received to migrate, legal/illegal status abroad.

We model individual migration choice through a standard probit model including traditional explanatory variables (individual specific characteristics, household characteristics, geographic characteristics) and a variable capturing the degree of exposure to foreign media. The key identification assumption is the following: the probability to watch foreign television depends on the distance

from the nearest foreign transmitter.

The identification strategy is based on the physics model of electromagnetic and radio wave propagation explaining how radio waves behave when they are transmitted (or propagated) from one point on the earth to another.

In free space, all electromagnetic waves follow the inverse squared law which states that the signal's strength is proportional to the inverse of the squared distance from the source. Therefore, for all television transmitters in Italy, we collect data on their location (latitude, longitude, altitude) and using the great-circle formula we compute the shortest distance between Italian transmitters and Albanian cities. For each individual we reconstruct the place of residence before 1990 and we assign the corresponding media exposure measure.

Nevertheless, waves propagation is also affected by other factors as climate and weather (temperature, pressure, rain intensity, cloud cover), ground characteristics and presence of obstructions. Due to the diffraction phenomenon, the presence of obstructions does not avoid per se the signal reception: signals diffract around the obstacle, change their trajectory and reach the ground although with a lower strength. To exploit the diffraction of waves due to obstacles we consider the topography of the area between the nearest transmitter and the receiver. Therefore, we construct a variable that is the highest altitude of the earth surface between Italian transmitters and Albanian cities. In addition, we consider also a variable capturing the transmitter, the receiver and the obstacle altitude given that the degree of diffraction and the strength of the received signal depends crucially on the difference in height between the obstacle and the receiving point.

The empirical analysis shows that migration probability decreases as the distance from the Italian transmitter increases and as the altitude of the obstacle blocking signal line increases. Foreign media play a crucial role in individual migration decision: people that have been exposed to foreign television are more likely to move.

Other three crucial variables are included in the model: distance from the coast, distance from the nearest border cross and distance from the nearest border cross to Italy and Greece, the main destination countries of Albanian migrants. These variables should be a proxy for migration costs and should allow to check whether the distance from Italian television transmitters does not actually measure individual migration cost. Our media exposure variable remains highly significant in all specifications. Distance from the coast affects positively migration probability capturing the fact that migration flows are higher for internal regions, more depressed and poor. As expected, distance from Italian and Greek frontier captures usual migration cost: individuals living far from the border are less likely to migrate internationally.

In the basic specification only the media exposure variable and regional fixed effects are included while in the more complete one all distance measures are added. The results are robust also including individual and household different controls.

Through a multinomial logit specification, we also test whether exposure to Italian media affects the choice of the destination. Having been exposed to

Italian media increases the migration probability tout court. Italian television does not attract Albanian only to Italy but induces them to move towards different western countries: Italian television was simply a door on the world, a way to know and maybe to idealize a different culture and lifestyle.

The paper is organized as follows. Section 2 gives an overview of Albanian migration phenomenon. Section 3 presents Albanian media and broadcasting system. Section 4 introduces the dataset used for the empirical analysis that is discussed in Section 5. Finally, Section 6 concludes.

2 Migration in the Albanian context

Since 1990 Albania faces the big challenge to become a market economy and a more open society passing from totalitarianism to democracy. Thanks to a cumulative real economic growth of about 40% between 1990 and 2004, the country is among the most successful transition economies. Starting from extremely low income levels and very poor infrastructure, when the communist regime collapsed in 1991 there were a significant decrease in output and a rise in inflation. In the first two years of the transition, between 1990 and 1992, GDP decreased by 39%. In the following years a macroeconomic stabilization program was implemented to reduce inflation and the budget deficit together with the liberalization of prices and foreign trade, the privatization of agricultural land making possible an high average growth rate of 9.3%. The economic growth was led by agricultural sector, the service sector and the construction sector. This recovery period was interrupted in 1997 by the crisis of the pyramid investment scheme. Furthermore, the country suffered from the social and economic shocks accompanying the Kosovo crisis in 1999 when more than half a million of Kosovo - Albanian refugees arrived in the northern regions. Because of the financial crisis, GDP decreased by 7% and with this growth track real GDP in 1999 reached the 1990 level. After some problems in energy supply and bad weather conditions for the agricultural sector, economic growth slowed down to 3.4% again in 2002 but in the last years the real growth rate went up to 6%.

Despite the shocks hitting the economy, starting from a very low income level, Albanian economy has been able to reach a sustained growth, even though it remains one of the poorest countries in Europe (with GDP per capita at around 2,700 US\$). The poverty is high and pervasive: more than ten years after the transition 29.2% of Albanians households was poor and 28.8% was very poor (De Soto *et al.* (2002)). One of the consequences of this transition period has been huge migration flows. However, it is important to underline that Albania has a long history of emigration, migration flows are presents throughout all the centuries in response to political, social or economic events (King *et al.* (2003), Piperno (2002)). In particular, during the 20th century we can observe three different phases: before 1944, from 1945 to 1990 and from 1990 on (UNDP (2000))

In the first wave the main destination countries were US and Latin America and almost all the people left the country because of economic push factors. The problems faced by the industry and agriculture after the war, the absence of modern technology and the inadequate exploitation of natural resources were the main driving force of individual mobility. During this period Albanian governments were almost indifferent towards these migration flows.

In the second wave migration was directed both towards US, Latin America and Australia and towards near countries including Italy, Greece, Bulgaria, Egypt, Romania and Serbia. Albanians left their country for political reasons related to the communist regime, a huge part of emigrants were opponents of the regime. Officially migration was forbidden and punished: political and legal barriers were established, migration was considered a crime.

The third phase started in 1990 after the collapse of the state - socialist regimes in Eastern Europe. All policies and measures restricting the free movement of citizens were removed. Without control on internal and external migrations, single individuals and entire households started to move internally from rural area towards urban area, and internationally. It is possible to identify three regions that drives migration flows. The north (districts of Diber, Mat, Puke, Tropoje) was characterized by both internal and international migration. Internal migration was directed towards central richer regions with the Tirana, Durres, Kruje axis and towards southern regions that although very poor were relatively richer with respect to the north, the poorest part of the country with few employment opportunities, exclusively in agriculture, and low income level. The main destinations for international migration were Italy, Greece, Germany and UK. The Tirana - Durres central area was the main destination for internal migration from all the decentralized Albanian area, but especially from the north, and experienced a significant outflow towards the main international destinations. The central area is the one that also experienced the positive inflow of return migrants. In the south of the country (districts of Vlore, Berat, Korce) three quarters of the migration outflow was directed abroad, mainly to Greece, and one quarter moved internally from poor rural area towards urban centers. This area experienced a huge depopulation in particular in the ethnic Greek regions although in some cases internal migration from the north reduced the problem.



Figure 1: Albanian administrative division

Surely Albania during the 1990s has had one of the largest outflows of people relative to population size in Europe and the migration outflow has increased steadily since 1991 but the exact magnitude of this phenomenon is difficult to be known also because official data sources are scarce and inadequate. According to estimates by the Greek Ministry of Foreign Affairs from 1990 to 1999 migrants towards Greece have increased by four times while towards Italy have doubled (Table A).

Significant is also the magnitude of internal migration from rural towards urban areas and from small urban towns towards big cities. This form of migration is the natural consequence of difficulties faced in the agriculture sector and is often seasonal. The internal mobility phenomenon is not simple to be measured but according to 2001 Census 5,7% of total population in 1989 moved from one region to another, changing place of residence between 1989 to 2001. Internal mobility can be defined as a "one - way" flow: almost 91% of the intra - country movement were directed to the central and coastal districts. In 1989, approximately 60% of migrants lived in the North, 32% in the South and 8%

in the centre and on the coast. As a result, in the decade after the transition, despite the emigration flows central and costal areas experienced a significant population increase (Table B).

Migration had a significant impact on population structure of the country. The sex-age impact of emigration during the 1990s can be easily intuitively quantified considering the age - sex pyramids in 1989 and 2001 from the 2001 Census (Figure 2).

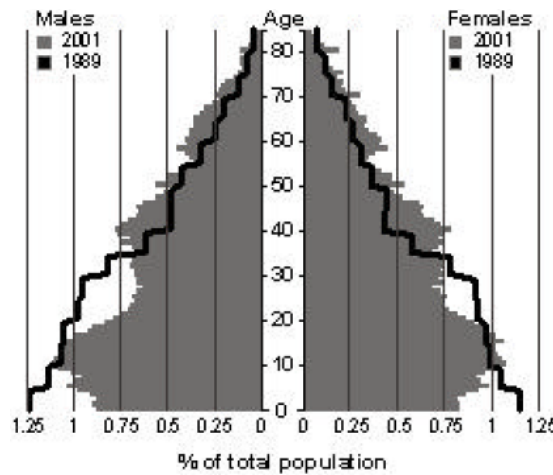


Figure 2: Age - sex pyramid (1989 - 2001)

It is evident that during the 1990s there has been a significant loss of males aged between 15 and 35 and a slightly smaller loss of woman in the age-band 18 – 32. Analyzing the pyramid, it is reasonable to expect that in the following years there will be other significant migration flows of people actually in the age-band 10 – 15 even though in the long run the migration flow should decrease given the 0 – 5 years old low - birth cohort due to lower fertility rates in the last years and to the migration of potential parents.

In these years migration from Albania continues and is transforming from illegal and sporadic to legal and organized. However, once abroad, Albanian migrants tend to work more in sectors that are avoided by the local population. They are used as a regulatory mechanism in the receiving labour market. However there is also intellectual elite that leave the country towards more promising countries, but this migration type presents different features form other emigrating groups.

3 Albanian media system

The Radio Television of Albania was monopolistic until 1995, when a private station started operating. Up to that date for most Albanians electronics media meant the State radio and television network. During the communist regime and until 1990, the Albanian national television had only one channel broadcasting only few hours in the evening, between 6 and 10 p.m.. Both television and radio was used by the communist regime for propaganda purposes. The supply of programmes was very scarce and constantly monitored by the regime. Only one film per week was broadcast, having mainly an educational and pedagogic aim. Films were Albanian or imported from other socialist countries although some of them come from Western and non communist countries if considered ideologically neutral and non harmful for national culture (Dorfles (1991)). The majority of the time was dedicated to documentaries showing the history of the country and to programmes celebrating the successes reached by the Albanian Party of Labour. The regime considered the media system as a way to educate and to give political and patriotic messages to the population, to indoctrinate the audience and to influence its choices having no entertainment aims. As it was the case in East Germany, watching foreign programs was a natural alternative of the communism propaganda. Watching foreign television although not strictly forbidden by the law, was discouraged in order to avoid the influence of western capitalist culture until the early 70s. A different behavior was followed when the dissatisfaction grew in the population for the culture diffused and the economic policies implemented by the regime, so that official campaigns against listening and watching external broadcasts were made (See Logoreci (1977) for more details). Despite what strictly prescribed by the party, Albanians watch foreign television, mainly Italian, Greek and Jugoslave. In particular, the television signal of the first Italian national channel (Rai 1 - VHF) could reach Albanian regions starting from the early 60s thanks to the geographical proximity and the absence of natural obstacles (i.e. mountains). The government made a lot of efforts to curtail the reception of foreign broadcasts and to jam their signals but it became particular difficult when the number of Italian private stations and networks increase in the 80s. Officially an Italian public television transmitter were located of the Dajt mountain over Tirane and it was active only in the evening from 8 to 9 p.m. for the news. In the last years of the regime, although controls became less stringent, watching foreign television or listening radio programmes from abroad were considered a politically seditious activities punishable with a period of reclusion while discussions, both private or public, about foreign programmes were considered activities of subversive propaganda (Dorfles (1991)). Despite all the efforts made by the authorities, foreign culture, especially the Italian one, entered Albanian household through films, game-shows, news and advertisements.

During all the communist period and in the first years of transition Albanian people through foreign televisions were able to have access to a different life style characterized by entertainment and abundance in which freedom of expression was guaranteed (Mai (2004)).

After the collapse of the communist regime, the media sector underwent fundamental and far-reaching changes. Different from the past when there were no private media alternatives to state broadcasting services, after 1991 there was an explosion of electronic and printed media. In Albania, there are at present 54 private radio and 64 TV stations, of which the majority are local and some national. With regard to written media, the data is almost accurate. A large number of newspapers and magazines started publication after 1991.

Three television channels broadcast at national level while others operate at local level. Out of 64 private TV stations available in Albania, only 20 are located in Tirana, while the rest are in districts so that different districts have their local private TV stations. However, the geography of TV stations is not always in harmony with the quality of the programs they offer. Given the television medium's rapid, almost chaotic growth rate and lack of applicable legal framework, electronic piracy is prevalent both within and outside Tirana. The same happens with radio: out of 54 radio stations country wide, 28 are located in Tirana, and the rest in local districts.

During the early 90s in all cities of Albania were installed transmitters with low power to broadcast the programs by Italian Rai and Mediaset channels and some German stations reached some areas. Greece television, both public and private, strongly appears in the south of the country, in Saranda in all Ionian seaside due to geographical proximity with Corfu. Also in Tirana, Greek television broadcast for a while from Dajt Mountain but the transmitter was shortly uninstalled for license absence reasons. In some cities of the south - east, like Gjirokaster, some greek repeaters were installed and some signals from Macedonian television appear in that area.

Regarding other sources of information, the access to the Internet is increasing in the big towns. Private businessmen and state institutions mainly rely on this system of information.

The role of the independent media is tangible for the public at large, providing consumers with various sources of information and a diversity of social viewpoints. All transformations were accompanied by changes in regulation and legislation. In particular, the development of legislation for media has been a focus in recent years. Work on legislation started in 1993 with the law of freedom of the press and the right of press to provide information. In 1997 came the law for private TV and radios. The National Council of Radios and Televisions was born in 1998 as a body that has the competence to license media and protect children from it. After decades in which the free access to information has been forbidden, the 1998 Constitution guarantees freedom of expression, freedom of the press, radio and television, freedom of broadcasting and prior censorship of means of communication is prohibited.

4 The data

The data used for the analysis come from the Living Standard Measurement Study (LSMS) carried out by the World Bank and the Albanian Institute of

Statistics (INSTAT) from 2002 to 2004. The LSMS is part of a bigger strategy aimed to improve the data quality in Albania.

For its history as a communist country data in Albania are few and their quality is quite low. According to recent surveys carried out by INSTAT², it is crucial to have accurate measures of household welfare in line with well accepted standards in order to monitor trends on a regular basis. Following the Poverty Reduction Strategy Paper, the Government of Albania reinforced its commitment to strengthening its ability to collect and analyze, on a regular basis, the information necessary to inform policy - making through the Population and Housing Census, the Living Standard Measurement Study every three year and the annual panel surveys.

The LSMS was established by the World Bank in the 1980 to explore ways of improving the type and quality of household data collected by government statistical offices in developing countries. The objectives of the LSMS were to develop new methods for monitoring progress in raising levels of living, to identify the consequences for households of current and proposed government policies and to improve communications between survey statisticians, analysts and policy makers. Data are collected on many dimensions of household well - being including employment, income, saving, consumption, migration, education, fertility, housing.

The Albanian panel survey sample was selected from households interviewed on the 2002 LSMS. The selected panel component is designed to provide a nationally representative sample of household and individual within Albania and to minimize the variability in households' selection probabilities.

The sample size for the panel is:

- 1,782 interviewed households (891 urban, 850 rural) and 7973 household members including children aged under 15 in Wave 1 (2002);

- 1,780 interviewed households (2,155 selected households, 375 not interviewed), 900 urban and 880 rural, and 8110 household members including children aged under 15 in Wave 2 (2003). The majority of the non interviewed households (348) were due to split - off moves out of the country while the other 4 had moved but could not be traced;

- 1,797 interviewed households and 7,476 household members including children aged under 15 in Wave 3 (2004), of which 7,212 already sampled in Wave 1 or 2 and 264 new members.

The final sample is composed by 23,748 individuals belonging to 5,356 households, 50.29 % are male, 49.71 % are female.

The Albanian Panel Living Standard Measurement Study contains a lot of information about the experience abroad, data are collected for all household's members. For individual present in all waves, complete migration history, both internal and international, from 1990 to 2004 is available. If some migration occurred in the last 20 months we know its length, country of destination, occupation in the host country, monetary aids received to migrate, legal/illegal status abroad. Almost same data are available for migration history from 1990.

²The 1998 Living Condition Survey (LCS) and the 2000 Household Budget Survey (HBS).

In particular we know period, country and length of first migration, total number of migrations and working status abroad.

Given that individual were asked whether they migrated internationally from 1990 to the date of the interview we are able to define a temporary migrants as an individual spending some time abroad and being in Albania at the time of the interview. More than 8 % of individuals is an international temporary migrant, 14.78% of male and only 1.62% of female. This figures are perfectly in line with Albanian patriarchal family structure in which the household head man play a central role. In addition, is clear that Albania is a *relatively young* sending country and therefore is characterized by a huge male outflow. It could be expected that in the future the share of migrants woman would sharply increase for family reunification or similar reasons. Considering the household perspective, temporary migration seems a more pervasive phenomenon hitting around 19% of them (Table 1). On average, migrants are 36 years old: males are relatively younger than females (35.43 against 39.21) Considering age at first migration, males migrate more than 6 years before females. Male temporary migrants are extremely concentrated in the central class of age, while females are more equally distributed across all classes (Table 2).

Education level for migrants is relatively low: more than half only completed primary 8 years school but female are more educated. In particular, while the share of graduated males is 4.23% while the share of female with the same education level is 16.67%.

Migration pattern by year of first migration, in our sample, is completely in line with Albania history³. After the collapse of communist and the invasion of Western embassies in Tirana in summer 1990, a huge migration outflow were registered, both legal (thanks to liberalization of passport issuing) and illegal, steadily increasing up to the end of 90s. Years 1997 and 1998 were characterized by extremely significant migration phenomena due to the collapse of the system of pyramid investment scheme in which around half of Albanian Households had invested⁴. The same dynamics emerges from ALSMS figures: share of first experience temporary migrants increases from 1990 to 1993, is almost constant and slightly declining in the following 3 years when Albanian economy stabilized, is increasing in 1997 and 1998 returning to its previous level in the following years when there was a gradual return to normality (Table 4). Almost all first migration phenomena were due to job reasons, in particular for males while females migrate also for study (3.66%), health reasons (4.71%) or family reunification (7.33%) (Table 5.)

Among migrants, more than 80% find a job during his/her first migration although around two third of them did not enter legally in the host country: their migration motivation was satisfied once abroad. The share of individual who legally worked once migrated is lower any more: less than 20 % found a regular and legal job. The legality share is extremely high for females with

³See King, R. and Vullnetari, J. "*Migration and Development in Albania*" for a detailed review.

⁴According to World Bank estimates the lost of savins was around 1.2 billion US dollar that account for half of the Albanian GDP in 1996 (Olsen, 2002) .

respect both to the entry in the host country and the position in the labour market (Table 6.-8.).

Looking the legality pattern from 1990 on, we observe that the share of legal workers and legal migrants increases over time. While in the first year of market economy only 15% of individuals migrate legally, in 2003 exactly 50% of migrants were legal. As regard migrants position in the receiving labour market, the legality share decreases over time, with only 20% of individuals having their first migration spell in 2003 being legal worker (Table 9). In migrating, individual are helped by friend and family, with a transfer of information about the place where to go to find a work and with a real monetary help (Table 10). Migration network is crucial seem to be crucial in all phases of migration (Carletto *et al.* (2005)). From data presented in Table 11 and 11.1 it emerges that about half of the sample migrated internationally only once, while the rest is composed by cyclical temporary migrants (seasonal workers) but for the both group the main destination country is Greece, followed by Italy and other destination, either in Europe or outside Europe. During the year just before the survey almost 5% of the population went abroad for reasons different from family visits, 8.78% of the male population and 1% of the female one. On average temporary migrants stay abroad 5.1 months, and the length spell for men is relatively longer than for women (5.24 months against 3.98). From 1997 to 2001 almost 6% of surveyed individuals went abroad for at least three months: on average they stay abroad 2.65 months in 1997, 3.23 months in 1998, 3.1 months in 1999, 3.08 months in 2001 and 2.8 months in 2002 (Table 12).

5 Econometric analysis

5.1 Empirical strategy

We model individual migration choice through a standard binary outcome model including a set of variables capturing the degree of exposure to foreign media and, where possible, traditional explanatory variables (individual specific characteristics, household characteristics, geographic characteristics). Our prior is that exposure to foreign media has a direct positive effect on individual migration probability because it reduces the cost of migration thank to received information on potential destination countries.

The empirical analysis proceeds in different steps. In the first step we evaluate the role of foreign media, in particular television, in the first individual migration decision. In the second step we focus on the more recent migration, during the last year, and we consider the effect of different source of information. In the third step we explore whether received information by foreign media affect the choice of the final destination, during the first and the last migration experience.

Formally, in order to study the impact of foreign media on individual migration decision we estimate the following equation:

$$\begin{aligned}
y_i &= \beta_0 + \beta_1 M_i + \beta_2 X_i + \mu_i \\
\text{for } i &= 1, 2, \dots, n.
\end{aligned}
\tag{1}$$

The dependent variable, the vector y_i , is a dichotomous indicator representing the outcome of interest (e.g. either “migrated abroad” or “not migrated abroad”) defined at individual that is assumed to be a function of some observable and unobservable characteristics. In particular, M_i is our foreign media exposure measure, X_i is a vector of exogenous explanatory variables at individual and household level and μ_i is the stochastic error term.

No official data are available about the signals of foreign broadcasting networks in Albania and about their power during the communist regime, therefore we construct our measure of media exposure in an indirect way.

The key identification assumption is the following: the probability to watch foreign television depends on the distance from the nearest foreign transmitter, the electronic device that converts audio and video signals into modulated radio-frequency (rf) energy which can be radiated from an antenna and received by a television receiver. The identification strategy is based on the physics model of electromagnetic and radio wave propagation explaining how radio waves behave when they are transmitted (or propagated) from one point on the earth to another (Barclay, L. (2003), Ellington et al. (1980)). In free space, all electromagnetic waves follow the inverse squared law which states that the signal’s strength is proportional to the inverse of the squared distance from the source so that doubling the distance from the transmitter leads to a reduction in the signal strength to nearly one quarter. If the medium in which they are propagated is the same everywhere, the waves will spread out uniformly in all directions. Nevertheless, electromagnetic and radio waves interact with the objects and the media in which they travel. In particular, waves propagation is also affected by factors as climate and weather (temperature, pressure, rain intensity, cloud cover), ground characteristics and presence of obstructions from point to point. These interactions causes the signals to change direction and to reach areas which would not be possible if the waves travelled in the direct line. Three different phenomena are possible: reflection, refraction and diffraction. For our analysis we focus on the third one. When signals encounter some obstacles they tend to travel around them so that they may be received from a transmitter even though it may be shaded by a large object. Diffraction is more pronounced when the obstacle becomes sharper and more like a knife - edge (we have the so called Knife - edge diffraction). As represented in Figure 3, due to the diffraction phenomenon, the presence of obstructions does not avoid *per se* the signal reception: even though there will be a shadow zone immediately behind the obstacle, signals diffract around it, change their trajectory and reach the ground although with a different strength.

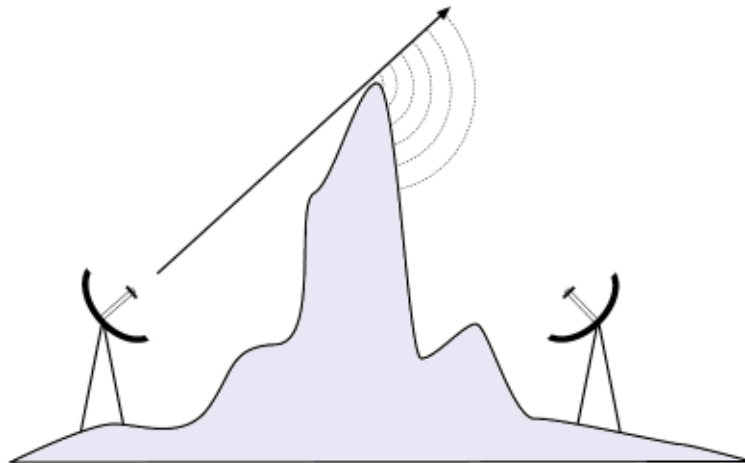


Figure 3: The diffraction phenomenon over an obstacle

The wave propagation model suggests us to consider distance from foreign television transmitters and Albanian topographic characteristics as an exogenous source of variation in exposure to foreign media in order to investigate their causal impact on individual migration decision. In particular we focus on Italian television. Our choice is based on three different considerations. The first one is related to the geographical proximity of the two countries and the absence of natural barriers. Only 150 Km of sea separate Italy's southern regions from Albania's coasts so that programs broadcast from television repeaters located in that area could be easily seen also in Albania. The same does not happen with other neighboring countries having all common borders in mountain areas with few foreign television transmitters faraway. The second reason is related to economic theory explaining individual migration decision. Starting from traditional neoclassical models (Todaro (1969), Harris and Todaro (1970)) migration is modelled as the result of a cost - benefit analysis in which before moving individuals compare the expected income differentials between the home and the receiving country. Among Albanian neighboring countries, the U.E. members (Italy and Greece) are the ones having a significant wage and wealth differential (Table C) and therefore we expect that information received from these countries could significantly influence movement decision. Finally our choice is based on anecdotal evidence and sociological studies (Mai (2004), Mai (2001), Mai and King (2002)) suggesting that Italian television played a crucial role in Albanians migration flows. Interviews to young people, aged between 15 and 30 years, conducted in Albania during a fieldwork in 1998 and 1999, allows Mai (2001) to conclude that Italian media and in particular television helped to construct and to shape their *migration project* in a broad sense. From a sociological point of view, the migration project is not related to the actual geographical

displacement but it refers "to the wider discursive process by means of which Albanians have come to perceive, describe and situate themselves with respect to their wider social and cultural environment - whether this be Albania or Italy⁵".

In order to construct our indirect measure of media exposure we proceed as follows. First, we make a complete list of all television transmitters located in Italy⁶ and then we select the ones placed in the coastal southern regions (Abruzzo, Basilicata, Molise and Puglia). The regional distribution of transmitters is presented in Appendix, Table D. We choose to be parsimonious in constructing our measure and we restrict the sample to the 85 transmitters belonging to both public (RAI 1, RAI2 and RAI 3) and private (Canale 5, Rete 4 and Italia 1) national networks and active in the 80s before the collapse of the communist regime. Although there is anecdotal evidence that also local Italian networks were seen in Albania, national networks have transmitters with greater power than local ones so that we can be sure that their signal can be reached very faraway. For each one we collect data on their geographical location (latitude, longitude, altitude).

In the survey, for each individual, information have been collected on geographical location (city, municipality and district) at the date of the interview but the data set contains also retrospective life history data back to 1990. If an individual has moved to current location in the previous decade, we have information about his/her previous location within the country at district level or abroad. Therefore we are able to recover individual placement in 1990. The idea behind the importance of this information for our analysis is that before that date watching foreign television was officially forbidden and no contact with other countries were allowed, therefore we can actually investigate whether the image of the west received by foreign media affected individual migration decision. In addition, the period 1945-90 was characterised by centrally planned population movements within the country, sometimes very strictly regulated and at other times not so efficiently enforced. From the early 1960s onwards the Albanian authorities implemented a policy of rural retention and minimal urbanisation (Vullnetari (2007)). Because except in very few and special cases regulated by the regime, no internal migration was allowed, if we find any effect of foreign media on migration we can infer that the relation is causal. If internal migration were allowed, in principle people who were interested in hearing the broadcasts themselves or in being closer to others who listened to the broadcasts could have selected into locations closer to the transmitter.

The data set does not include GIS individual data and therefore we recover the geographical coordinates of the 400 locations included in the survey from The U.S. Board on Geographic Names. Then, using the great-circle formula⁷ we compute the shortest distance between Italian transmitters and all Albanian

⁵Mai (2001)

⁶All information on television transmitters are available at www.otgtv.it

⁷Having geographic coordinates of two points A and B on the earth surface (latitudeA, latitudeB, longitudeA, longitudeB) in order to compute the shortest distance between them the formula is $d=3963.0 * \arccos[\sin(\text{lat1}/57.2958) * \sin(\text{lat2}/57.2958) + \cos(\text{lat1}/57.2958) * \cos(\text{lat2}/57.2958) * \cos(\text{lon2}/57.2958 - \text{lon1}/57.2958)]$.

locations. For individual who migrated internally after the 1990, the procedure followed has been more complex. Having only the place of residence disaggregated at district level, it has been necessary to identify the central point of the district, the location that is equally distant from the border and hence we construct an average measure of exposure to foreign media that is the shortest distance from the television transmitter and the centroid of the region ⁸. In geography the centroid is the centre point of a geographic area. The center of mass, of a bounded planar region, is the location at which that region would balance if it were made of a flat material of uniform density. In particular, given a territorial area whose boundary is defined by a set of points Π , whose elements are $P_j = (p_{1j}, p_{2j})$ with $j \in \{1, n\}$, the centroid is the point S such that $S = (s_1, s_2) = (\frac{1}{n} \sum_{i=1}^n p_{1i}, \frac{1}{n} \sum_{i=1}^n p_{2i})$. Detailed summary statistics on the variables used in the regression analysis can be found in Appendix, Table E.

5.2 First migration decision

We begin our analysis evaluating the role of foreign media, in particular television, in the first individual migration decision. In all the specifications, we have computed robust standard errors, clustered at the municipality level.

In the baseline model the dependent variable takes value 1 for those individuals who migrated internationally at least once either in Italy, in Greece or other countries.

The results for the simplest specification are presented in the first column of Table 13. Estimates are in line with our prior and we find that foreign media exposure has a positive effect on individual migration decision: individuals who were located during the communist regime faraway from Italian television transmitter were less likely to watch foreign television and therefore less prone to move, being less informed or having no overoptimistic expectations. In order to check whether the distance from Italian television transmitters does not actually capture migration costs we estimate a more complete model including other three distance variables: distance from the coast, distance from the nearest border cross and distance from the nearest border cross to Italy and Greece, the main destination countries of Albanian migrants (Columns 2 - 4). All the three variables are referred to individual place of residence before migrating that we recover from retrospective information contained in the survey. These variables should be a valid proxy for migration costs and should allow to check whether this information is contained in our variable of interest, the distance from Italian television transmitters. In all specifications our media exposure variable remains highly statistical significant. Distance from the coast affects positively migration probability capturing the fact that migration flows are higher from internal regions, more depressed and poor. As expected, distance from frontier captures usual migration cost and is negatively correlated with the probability to move so that individuals living far from the border are less likely to migrate

⁸Details on geographical features are available at <http://geonames.nga.mil/ggmaviewer/MainFrameSet.asp>

internationally. To account for variations in local market conditions and local economic development the baseline model is extended including regional dummies for coastal regions, central regions, mountain regions and the region where is located Tirana, the capital. Also when controlling for regional characteristics (Columns 5 - 8) our results still hold.

We exploit the diffraction phenomenon of waves due to obstacles, as presented in the previous section, including in our model topographic characteristics of the area between the nearest Italian transmitter and the receiver. The results are shown in Table 14 in which all the presented specifications follow those analyzed for the baseline regression model and the results are very close to those previously found. The direction of all the effects remains unchanged and the coefficients of interest are still significantly different from zero. In particular, as expected, the probability of moving decreases as the elevation of the obstacle increases (variable *altitude_obstacle_90* is the highest altitude of the earth surface between Italian transmitters and Albanian cities constructed using the software Google - Earth) and the difference in altitude between the obstacle and individual place of residence increases (variable *difference_altitude_90*). We include also the interaction between distance and altitude and we find a lightly positive effect on migration decision only controlling for regional characteristics.

Finally, we check the robustness of our hypothesis on the positive correlation between media exposure and migration decision including among our regressors one indicator for television possession in 1990, just before the collapse of the communist regime. The main findings are reported in Table 15. The variable *Television_90* is dichotomous and assumes values 1 for those individuals holding a television in 1990, either color or black and white. According to these estimates, individuals having a television, on average, do not migrate significantly more than individuals without a television but the media exposure measure constructed as the distance from the foreign television transmitter is still statistically significant (column 1). By the contrary, when the dummy for television possession is interacted with the distance from the transmitters, television becomes significant and positive while the interaction term is negatively correlated with the probability to move abroad (column 2). These results are consistent with our theoretical predictions according to which we should expect higher migration among people who had the possibility to have access to information on potential destination countries. Actually, television *per se* does not affect individual migration project but having been exposed to foreign media increase the probability to migrate internationally. Also when we include the orographic characteristic variables the previous findings hold (column 3 and column 4).

5.3 Robustness checks

In our previous specifications we cannot control for district fixed effect given that all measures of media exposure are constructed at that level of disaggregation. We check our results taking advantage of a particular feature of the LSMS

dataset. As stated in subsection 5.1, for individuals who never migrated within the country from 1990 on we can be sure that their current residence is the same of the 1990 one, and therefore individual place of residence is available with a higher disaggregation level (the city/village level). Hence, for this particular sub set of the population, we construct all geographic/orographic variables by the 400 cities/villages contained in the dataset.

First, we run our baseline regression for this sub sample of individuals (Table 16). Also when controlling for district fixed effect, our media exposure variable is highly statistical significant in all specifications and it has a positive effect on individual migration decision. Distance from the coast is always positively correlated with the probability of moving; while, different from previous estimates, when controlling for district fixed effects we find that individuals living faraway from Italian and Greek cross - borders are less likely to move: when distance from the border increases, migration cost increases and individuals are less likely to move. Second, we include in our model also all measures of topographic characteristics and we find that also those variables are highly statistical significant and have the expected sign consistent with our theoretical predictions (Table 17). Finally, in Table 18 we show results for the more complete model in which we also take explicitly into account the possession of television and the results found in previous section are still statistically valid.

We estimate also a more complete model and we include in our specification some time invariant variables to be sure that the added controls do not suffer from reverse causality problem. In particular we consider individual gender, age, family composition and migration network abroad before migration. All the specifications completely follow those presented before and are reported from Table 19 to Table 22. The results are consistent with the one obtained with the more parsimonious specification. In addition, we find that *ceteris paribus*, men are more likely to move, confirming the existence of a patriarchal family structure in Albania making male more likely to move internationally than female family members. On the other hand, looking at age's coefficients, older individuals seem to have an higher probability to move abroad. These results could suggest that the ones who have been exposed to foreign media for a longer period were more likely to migrate when was allowed after the breakdown of the Albanian communist regime. Finally, we observe that having other family members who migrated internationally before makes individuals less likely to migrate suggesting that families who experienced previous migration spells are better off and do not look for additional migration.

Although non shown in the Tables, to circumvent the lack of the regional fixed effect in the district level regressions we add as explanatory variables some regional socio - economic indicators (such as unemployment rate, population density, mortality rate, index of industrial development, indicator for services availability, electricity diffusion) to test whether our distance measure was actually capturing something different from the effect of foreign television. Even including all these controls our media exposure measure is still significant either when included alone or with the interaction with the television possession.

Finally, we check the robustness of the results obtained insofar and we take

seriously the inverse squared law by including the media exposure measure in a non linear fashion using its logarithmic transformation. The previous findings are validated.

5.4 The omitted variable problem

The main concern in identifying the link between the migration choice and the exposure to foreign media is related to the consistency and efficiency of previous estimates due to the fact that we omit individual variables (Wooldridge (2002)).

The omitted variable problem can be easily seen assuming that X is a matrix of included variables and Z is a matrix of variables not included in our analysis. The full model would be:

$$y = X\beta_X + Z\beta_Z + \varepsilon$$

while the estimated model is:

$$\begin{aligned} y &= X\beta_X + \mu \\ \mu &= Z\beta_Z + \varepsilon \end{aligned}$$

The parameter vector estimated when only the variables included in the matrix X are included will be a generic b_X for which:

$$\begin{aligned} E(b_X) &= E[(X'X)^{-1}X'y] \\ &= E[(X'X)^{-1}X'X\beta_X + (X'X)^{-1}X'\mu] \\ &= \beta_X + E[(X'X)^{-1}X'Z\beta_Z] + E[(X'X)^{-1}X'\varepsilon] \\ &= \beta_X + \Omega'_{ZX}\beta_Z \end{aligned}$$

where Ω'_{ZX} is a matrix of coefficients from regression of columns of Z on the observable variables. The bias will depend on the correlation between each observable and unobservable.

Considering an additive effect of the omitted individual factors (as income or employment status before migration decision), our model could be written as:

$$E(y|dist_tv, dist_coast, dist_border, X) = \beta_0 + \beta_1 dist_tv + \beta_2 dist_coast + \beta_3 dist_border + \gamma q \quad (2)$$

where q is the omitted variable that include any unobservable individual characteristic. Equation (2) can be considered a structural model that can be written in error form as:

$$y = \beta_0 + \beta_1 dist_tv + \beta_2 dist_coast + \beta_3 dist_border + \gamma q + \varepsilon \quad (3)$$

$$E(\varepsilon|dist_tv, dist_coast, dist_border, X, q) = 0$$

where ε is the structural error. Being unobservable q can be put into the error term assuming, without loss of generality, $E(q) = 0$ because an intercept is included in our model (3). The error form model becomes:

$$\begin{aligned} y &= \beta_0 + \beta_1 dist_tv + \beta_2 dist_coast + \beta_3 dist_border + \mu \\ \mu &= \gamma q + \varepsilon \end{aligned}$$

For the distribution assumption, ε has zero means and is uncorrelated with $dist_tv, dist_coast, dist_border$ and q . Also q has zero mean, by normalization. Therefore, the zero mean assumption for the error term μ is guaranteed. The orthogonality condition instead, holds if and only if the omitted variable q is uncorrelated with each of the observable regressors. The linear projection of q onto the observable explanatory variables in our model is:

$$q = \delta_0 + \delta_1 dist_tv + \delta_2 dist_coast + \delta_3 dist_border + \eta \quad (4)$$

where by definition $E(\eta) = 0$ and $Cov(dist_tv, \eta) = 0, Cov(dist_coast, \eta) = 0, Cov(dist_border, \eta) = 0$.

Substituting the linear projection (4) into the error form model (3) we obtain:

$$\begin{aligned} y &= (\beta_0 + \gamma\delta_0) + (\beta_1 + \gamma\delta_1)dist_tv + (\beta_2 + \gamma\delta_2)dist_coast + \\ &(\beta_3 + \gamma\delta_3)dist_border + \varepsilon + \gamma\eta \end{aligned}$$

where again the zero mean and the orthogonality conditions hold. Therefore, defining $plim\hat{\beta}_k = \beta_k + \gamma \sum_{j=1}^3 \delta_j$ we can determine the sign and the magnitude of the inconsistency, if any.

Our variable of interest is the distance from foreign transmitters for which we can write:

$$\begin{aligned} plim\hat{\beta}_1 &= \beta_1 + \gamma\delta_1 + \gamma\delta_2 + \gamma\delta_3 \\ &\beta_1 + \gamma \frac{Cov(dist_tv, q)}{Var(dist_tv)} + \gamma \frac{Cov(dist_coast, q)}{Var(dist_coast)} + \gamma \frac{Cov(dist_border, q)}{Var(dist_border)} \end{aligned}$$

By construction, distance from Italian television transmitters represent an exogenous source of variation uncorrelated with individual specific characteristic. The same is true for distance from the coast and from the border. Therefore we can conclude that β_1 is consistently estimated by our regression that omits unobservable individual characteristics.

5.5 Last migration decision

In this section we model individual migration decision in the 12 months before the date of the data collection. Therefore, we can test our hypothesis on determinants of individual migration choice including all observable specific characteristics that can be recovered from the questionnaire of the previous wave of the survey (LSMS 2002).

Table 23 shows the estimates for the baseline specification in which we model the probability to migrate internationally in the previous 12 months following the physics model of electromagnetic and radio wave propagation, with and without district controls. Our measure of media exposure is always highly significant. Compared with results of previous section, the order of magnitude increases. When controlling for regional fixed effects, the probability to migrate decreases by more than 2 percentage point as the distance from Italian television transmitters increases by 1 kilometer. These results are theoretically coherent with our prior: as time elapses after the collapse of the regime as the effect of foreign media decreases, because other new confounding factors are at work and have an effect on individual migration decision. As before, distance from the coast affect positively the migration decision, in almost all the specifications, while other orographic variables, are no more statistical significant. These variables are possibly affected by some measurement errors.

Hence, we estimate a complete model for individual moving decision, including observable individual characteristics (Table 24). In Column 1 we have the baseline model that includes only the distance from the television transmitter. Our analysis suggests that male are more likely to migrate abroad and that the probability of moving decreases as age increases. We also control for the effect of educational differences and we include the number of completed school years. According to our estimates more educated people are less likely to move that can be due to their better ability to take advantages of local market opportunity. As expected, civil status matters and people having no family are less likely to move. Household size *per se* does not influence migration decision while the percentage of children less than 13 years old has a positive effect on migration behavior. Individual coming from urban areas are less prone to move but surprisingly the statistical correlation between household income and migration probability is positive. Our media exposure variable is significant at 10% level but when including other distance measures (Column 2 and 3) it turns out to be significant at 1% level. As in our previous estimates, topographic variable are not significant when all other controls are included.

In Column 4, we include a dummy variable assuming value 1 if the individual had others international migrations in previous years. As expected, on average, the probability to move increases as an individual had other migration experiences. Also controlling from repeated migrations, distance from Italian television repeaters is highly statistical significant. Finally, we include also a dummy for purchasing a television and we find that individuals having a television are less likely to move. This result is not against our theory: what matters for individual migration project is foreign media exposure, as confirmed by

our distance measure that is still highly statistical significant while national television has a negative effect on the probability of moving.

As for the first migration experience we try to understand whether having been exposed to foreign media in the late 80's have an effect on current migration decision. The results are presented in Table 25 and they seem to suggest a slightly significant effect (column 1 and 2) that disappears when all orographic controls are included (column 4).

We directly test our hypothesis estimating a probability model for the probability to move abroad for the first time in 2002. In this specification we include among the regressors a binary indicator variable assuming value one for the regions reached by the signal of foreign television.

Another question we address is whether information received through internet has an impact on migration. In Table 26 we show results from a probability model for migration in which a dummy for the internet use is added among the explanatory variables (the variable *internet* assumes value 1 if in the last year internet has been used). In the whole sample, including both urban and rural area, the internet use is not statistically correlated with migration decision but in urban area it is positively correlated at 1% level. In rural areas instead the access to internet predicts perfectly the probability to move: other things constants, the ones using internet are the ones who migrate. Having a television has a negative effects on migration in all sample and in rural area but has no effect in urban areas.⁹

5.6 Media and destination choice

In the last step of our study we explore whether received information by foreign media affect the choice of the final destination, during the first and the last migration experience.

We analyze determinants of individual choice of migration in Greece, Italy or other Countries versus the non migration choice. Given our depending variable measuring four possible migration outcomes, i.e. migration to Greece, migration to Italy, migration to other countries and, as a benchmark, no migration, our baseline regression analysis uses a multinomial probabilistic dependent variable regression model of the Logit type as the following:

$$P(Y = j|\bar{X}) = \frac{\exp(\beta'_j \bar{X})}{\sum_{j=0}^J \exp(\beta'_j \bar{X})}$$

⁹We recently obtained data on the foreign television signal reception in 2002 at district level and we are trying to test directly our hypothesis on impact of foreign media on individual migration decision and compare it with previous results. The variable of interest is a dichotomous variable indicating if signal strength allowed to see foreign broadcasts in each district. We estimate a model for the probability to migrate internationally for the first time the year before the survey. Preliminary results suggest that foreign media attract immigrants. (I thank the Head of Monitoring Center of Radio Tirana, Drita Cico from these data)

where $P(Y = j|\bar{X})$ is the probability of observing $j \in \{0, J\}$ of the dependent variable Y conditional on the vector \bar{X} of individual, household and regional characteristics, described in the previous sections. β_j is the vector of regression coefficients to be estimated by the Maximum Likelihood method.

In Table 27 and 28 we model destination choice in the first migration episode following the scheme used in the previous sections. Having no other controls than district fixed effect and distances from the coast and cross - borders, exposure to Italian media increases the probability of moving in Greece, decreases the probability of moving in other countries but the effect on migration in Italy is not statistically different from zero. These results seem to suggest that having been exposed to Italian media increases the migration probability *tout court*. Italian television does not attract Albanian only to Italy but induces them to move towards different western countries: Italian television was simply a door on the world, a way to know and maybe to idealize a different culture and lifestyle.

For what concerns migration in the last year, our estimates suggest that Italian media increases the probability of moving both in Greece and in Italy but it has no statistical significant effect on migration towards other destinations (Table 29 and 30).

Finally, we study whether foreign media represent a source of information or of dis information testing the effect of media exposure to the choice of migration period according to labour market conditions. We define a good period for the destination country if the unemployment rate is below the average unemployment rate minus one standard deviation, while a good period if the unemployment rate is higher than the average one plus one standard deviation. As a result a neutral period is the one characterized by an unemployment rate between the average plus or minus one standard deviation. Individual who are more likely to look foreign television are more likely to move in good period or in neutral one (Table 31).

6 Conclusion

Economic theory suggests that potential migrants takes their decision comparing costs and benefits. Potential migrants make conjectures about economic condition in destination counties using available information. Traditional information sources such as relatives and friends, previous migrants or network abroad have been widely analyzed by economic theory. The main contribution of this paper is to shed light on new sources of information extremely diffused nowadays: television and internet. In particular we consider the role played by foreign media (television) in individual migration decision.

We consider Albanian migration towards different countries and we focus on the role played by Italian media in moving decision. Using variation in the position of foreign television transmitters, we model the probability of watching foreign television as a function of distance from the transmitters and topographic/orographic characteristics. Using these measures of exposure to foreign

media we find that migration probability is higher for individuals who are exposed to foreign media. We then show that Italian media are crucial both for the first and the last migration experience.

We also test, through a multinomial logit specification, whether exposure to Italian media affects the choice of the destination. In particular, having been exposed to Italian media increases the migration probability *tout court*. Italian television does not attract Albanian only to Italy but induces them to move towards different western countries: Italian television was simply a door on the world, a way to know and maybe to idealize a different culture and lifestyle. Italian television was an easy way to know *all* the world during the communist period: having been exposed to Italian television increases openness towards other cultures and therefore individual probability to migrate internationally.

These findings may have non negligible policy implications. In very closed social context, television and, more in general, access to foreign media system could play a crucial role in circulating new ideas, different cultural norms or institutions, could stimulate changes and enhance development. Starting from these results it could be interesting to investigate whether foreign media exposure affects other economic outcomes such as entrepreneurship, gender inequality, age of marriage, health outcomes, fertility or attitudes.

References

- [1] Barclay, L. (2003), *Propagation of Radio Waves*, IEE Press, London.
- [2] Boeri, T. and Tabellini, G. (2005), "Does Information Increase Political Support for Pension Reform?", Bocconi University, mimeo.
- [3] Carletto, G., Davis, B. and Stampini, M. (2005), "Familiar Face, Familiar Places: the Role of Family Networks and Previous Experience for Albanian Migration", ESA Working Paper No. 05 - 03.
- [4] Chong, A., Duryea, S., La Ferrara, E. (2008), "Soap Operas and Fertility: Evidence from Brazil", CEPR Discussion Paper No. DP6785.
- [5] DellaVigna, S. and Kaplan, E. (2007), "The Fox News Effect: Media Bias and Voting", *Quarterly Journal of Economics*, 20 (122): 1187-1234.
- [6] De Soto, H., Gordon, P., Gedeshi, I. and Sinoimeri, Z. (2002), "Poverty in Albania: a Qualitative Assessment", World Bank Technical Paper.
- [7] Djajiic, S. and Milbourne, R. (1988), "A General Model of Guest- Worker Migration: A Source Country Perspective", *Journal of International Economics*, 25: 335 - 351.
- [8] Dorfles, P. (1991), "*Guardando all' Italia: Influenza delle TV e delle Radio Italiane sull'Esodo degli Albanesi*", RAI - VQPT, Rome.
- [9] Dustmann, C. (1997), "Return Migration: The European Experience", *Economic Policy*, 22: 215-249.
- [10] Ellington, H.I, Addinall, E. and Hatley, M.C. (1980), "The Physics of Television Broadcasting", *Physics Education*, 15: 222-228.
- [11] Galor, O. and Stark, O. (1991), "The Probability of Return Migration, Migrants' Work Effort, and Migrants' Performance", *Journal of Development Economics*, 35: 339 - 405.
- [12] Galor, O. and Stark, O. (1990), "Migrations' Saving, The Probability of Return Migration, and Migrants' Performance", *International Economic Review*, 31 (2): 463 - 467.
- [13] Gentzkow, M. and Shapiro, J. (2004), "Media, Education and Anti-Americanism in the Muslim World", *Journal of Economic Perspectives*, 18 (3): 117 - 133.
- [14] Harris, J.R. and Todaro, M.P. (1970), "Migration, Unemployment and Development a 2 - Sector Analysis", *American Economic Review*, 60 (1): 126 - 142
- [15] King, R. and Vullnetari, J. (2003), "Migration and Development in Albania", Development Research Centre on Migration, Globalisation and Poverty Working Paper.

- [16] Jensen, R. and E. Oster (2007), "The Power of TV: Cable Television and Women's Status in India", NBER Working Paper 13305.
- [17] Logoreci, A. (1977), *"The Albanians: Europe's Forgotten Survivors"*, Victor Gollancz, London.
- [18] Mai, N. (2004), "'Looking for a More Modern Life...': The Role of Italian Television in the Albanian Migration to Italy", *Westminster Papers in Communication and Culture*, Vol. 1, Issue 1, 3 - 22.
- [19] Mai, N. and King, R. (2002), "Of Myths and Mirrors: Interpretations of the Albanian Migration to Italy.", *Studi Emigrazione*, 39, no. 145: 161-200.
- [20] Mai, N. (2001), "'Italy is Beautiful": The Role of Italian Television in the Albanian Migratory Flow to Italy." In *Media and Migration: Constructions of Mobility and Difference*. Edited by King, R., Wood, N., Routledge, pp. 95-109.
- [21] Massey, D. and Espinosa, K. (1997), "What's Driving Mexico U.S. Migration? A Theoretical, Empirical and Policy Analysis", *American Journal of Sociology*, 102 (4): 939 - 999.
- [22] Munshi, K. (2003), "Identification of Network Effects: Mexican Migrants in the U.S. Labor Market", *Quarterly Journal of Economics*, 118 (2): 549 - 597.
- [23] Olken, B. (2006), "Do Television and Radio Destroy Social Capital? Evidence from Indonesian Villages", NBER Working Paper 12561.
- [24] Olsen, N., (2000), *Albania*, Oxford: Oxfam Country Profile.
- [25] Orrenious, P.M. (1999), "The Role of Family Networks, Coyote Prices and Rural Economy in Migration from Western Mexico: 1965 - 1994", Federal Reserve Bank of Dallas Working Paper 9910.
- [26] Piperno, F. (2002), "From Albania to Italy", CEME - CeSPI Working Paper.
- [27] SOPEMI, (2004), *Continuous Reporting System on Migration*, OECD, Paris.
- [28] Stark, O. and Bloom, D. (1985), "On Migration and Risk in LDCs", *Economic Development and Cultural Change*, 31 (1):191 - 196.
- [29] Strömberg, D. (2001), "Mass media and public policy", *European Economic Review*, 45 (4-6): 652 - 663.
- [30] Strömberg, D. and Snyder, J.M.Jr., (2008), "Press Coverage and Political Accountability", NBER Working Paper 13878.

- [31] Suphachalasai, S. (2005), "Development, Environmental Policy, and Mass Media: Theory and Evidence", Environmental Economy and Policy Research Discussion Paper Series.
- [32] Todaro, M. (1969), "A Model of Labor Migration and Urban Unemployment in Less Developed Countries", *American Economic Review*, 59 (1): 138 - 148
- [33] UNDP (2000), *Albanian Human Development Report*.
- [34] Vullnetari, J. (2007), "Albanian Migration and Development: State of the Art Review", IMISCOE Working Paper 18.
- [35] Wooldridge, J. M. (2002), *Econometric analysis of cross section and panel data*, Massachusetts Institute of Technology.
- [36] Zahniser, S. (1999), *Mexican Migration to the United States: the Role of Migration Networks and Human Capital Accumulation*, Garland Publishing, New York.

APPENDIX

Table A: Emigration from Albania (thousands)

	1991	1992	1993	1994	1995	1996	1997	1998
Greece	121	218	241	208	263	312	379	470
Italy	78	88	90	95	98	110	136	162
Other	44	45	48	50	52	53	55	58
Total	243	351	381	353	413	476	571	690

Source: Greek Ministry of Foreign Affairs

Table B: Intra - country migration flows (1989 - 2001)

		Region of arrival			Total
		North - East	Centre/Coast	South - East	
Region of arrival	North - East	-	107,433	1,465	108,898
	<i>Percent</i>		98.7	1.3	100
	Centre/Coast	2,491	-	11,721	14,212
	<i>Percent</i>	17.5		82.5	100
	South - East	1,273	58,256	-	59,529
	<i>Percent</i>	2.1	97.9		100
	Total	3,764	165,689	13,186	182,639

Source: INSTAT - Census 2001

Table C: GDP per capita, US dollar

year	Albania	Italy	Greece	Serbia Montenegro	Macedonia Former Republic of Yugoslav
1980	686.31	8057.9	5077.8		
1981	770.76	7291.4	4644.4		
1982	777.30	7389.0	4813.9		
1983	769.60	7369.0	4329.8		
1984	744.38	7360.2	4197.6		
1985	744.69	7568.5	4146.6		
1986	807.59	10712.0	4857.0		
1987	785.67	13419.2	5626.1		
1988	759.16	14860.4	6522.9		
1989	817.91	15405.8	6729.3		
1990	642.35	19472.4	8282.0		
1991	385.05	20504.6	8888.9		
1992	248.99	21734.1	9747.2		1201.3
1993	434.36	17438.1	9080.2		1315.1
1994	694.34	17945.2	9658.6		1734.2
1995	835.28	19157.6	11253.7		2267.8
1996	917.82	21487.7	11797.1		2234.7
1997	660.72	20328.6	11416.4		1870.1
1998	813.28	20836.4	11371.6	1708.8	1782.0
1999	1018.20	20546.1	11611.2	1219.8	1817.5
2000	1083.99	18734.5	10451.3	1031.3	1760.9
2001	1194.08	18973.1	10743.5	1389.4	1682.0
2002	1297.95	20708.5	12197.0	1865.9	1837.8
2003	1637.11	25619.1	15811.4	2484.1	2257.9
2004	2131.16	29218.8	18721.5	2893.0	2294.8
2005	2504.37	31873.6	21016.6	3142.1	2404.1
2006	2704.18	33080.6	22273.6	3382.9	2527.5

Source: IMF, *World Economic Outlook*

Table D: Regional distribution of television transmitters in Italian Southern regions

Region	Province	N. Transmitters
Abruzzo	Chieti	33
	L'Aquila	62
	Pescara	14
	Teramo	34
Puglia	Bari	65
	Foggia	44
	Lecce	15
	Taranto	24
Molise	Campobasso	32
	Isernia	28
Basilicata	Matera	31
	Potenza	104

Table E: Definition of orographic variables and descriptive statistics

Variable	Definition	Obs	Mean	S.D.	Min	Max
Migr	Equal to 1 if individual migrated internationally at least once	23745	0.0846	0.2784	0	1
Distance_90	Distance from the nearest foreign television transmitter according to 1990 place of residence (Km) - district level measure	22390	170.9352	40.2740	92.0997	269.4232
Altitude_90	Height of the obstacle between the transmitting and receiving antennas according to 1990 place of residence (mt)	22390	683.8326	701.8945	2	2112
District_altitude_90	Altitude of the district capital (mt)	22390	274.7400	284.4525	7	1108
<i>Based on current place of residence</i>						
Distance	Distance from the nearest foreign television transmitter (Km) - district level measure	22309	168.0972	37.8878	92.0997	269.4232
Distance_coast	Distance from the coast/harbour (Km) - district level measure	22309	42.1505	26.1639	6.9714	103.4975
Distance_border	Distance from the nearest cross-border point (Km) - district level measure	22309	22.9683	12.0509	6.9714	55.0734
Distance_itagre	Distance from the nearest cross-border point with Italy and Greece (Km) - district level measure	22309	36.2246	20.1004	6.9714	80.3973
Altitude	Height of the obstacle between the transmitting and receiving antennas (mt)	22309	603.7548	673.7198	2	2112
District_altitude	Altitude of the district capital (mt)	22309	250.0151	267.3740	7	1108
<i>Based on place of residence before migrating</i>						
Distance_bef	Distance from the nearest foreign television transmitter (Km) - district level measure	22281	170.9655	40.3417	92.0997	269.4232
Distance_coast_bef	Distance from the coast/harbour (Km) - district level measure	22281	44.5117	26.8676	6.9714	103.4975
Distance_border_bef	Distance from the nearest cross-border point (Km) - district level measure	22281	22.5077	11.9545	6.9714	55.0734
Distance_itagre_bef	Distance from the nearest cross-border point with Italy and Greece (Km) - district level measure	22281	37.7083	20.7645	6.9714	80.3973
Altitude_bef	Height of the obstacle between the transmitting and receiving antennas (mt)	22281	686.2449	702.772	2	2112
District_altitude_bef	Altitude of the district capital (mt)	22281	275.0600	284.9266	7	1108
<i>For individuals who do not migrate internally</i>						
Distance_tv	Distance from the nearest foreign television transmitter(Km) - city level measure	20763	168.9848	38.4272	91.9281	275.0518
Dist_coast	Distance from the coast/harbour or individuals (Km) - city level measure	20763	40.9444	26.6624	6.9714	118.4291
Dist_border	Distance from the nearest cross-border point or individuals (Km) - city level measure	20763	30.7896	19.1596	6.9714	118.4291
Dist_itagre	Distance from the nearest cross-border point with Italy and Greece (Km) - city level measure	20763	34.5545	18.9080	6.9714	86.6388
Alt	Height of the obstacle between the transmitting and receiving antennas (mt) - city level measure	20763	580.6686	675.0521	1	2314
City_altitude	Altitude of the city of residence (mt)	20763	252.1042	300.0650	0	1598

TABLES

Table1: Temporary migration experience

	Individual			Household
	Total	Male	Female	Total
Frequency	1,956	1,765	191	1,008
Percent	8.24	14.78	1.62	18.82

Table 2: Temporary migration experience by gender and class of age

Age	Total	Male	Female
0-25	19.63	19.32	22.51
26-35	31.34	32.01	25.13
36-45	31.85	33.14	19.9
46-55	11.81	11.44	15.18
56-65	4.14	3.34	11.52
> 65	1.23	0.74	5.76
Average aç	35.81	35.43	39.21
Migration a	28.79	28.33	33.14

Table 3: Temporary migration experience by gender and education level

Age	Total	Male	Female
None	0.33	0.18	1.61
Primary 8 y	54.05	55.83	38.17
Secondary	19.39	18.79	24.73
Vacational	2.27	2.84	1.61
Vacational	17.76	17.82	17.2
University	5.49	4.23	16.67
Post-gradu	0.27	0.3	-

Table 4: Year of first migration

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Male	Frequency	26	127	168	193	154	136	150	196	211	107	115	65	110	7
	<i>Percent</i>	1.47	7.2	9.52	10.93	8.73	7.71	8.5	11.1	11.95	6.06	6.52	3.68	6.23	0.4
Female	Frequency	1	6	24	9	3	6	14	38	38	9	11	10	21	1
	<i>Percent</i>	0.52	3.14	12.57	4.71	1.57	3.14	7.33	19.9	19.9	4.71	5.76	5.24	10.99	0.52
Total	Frequency	27	133	192	202	157	142	164	234	249	116	126	75	131	8
	<i>Percent</i>	1.38	6.8	9.82	10.33	8.03	7.26	8.38	11.96	12.73	5.93	6.44	3.83	6.7	0.41

Table 5: Migration reason

	Total	Male	Female
To start a new job/business	91.46	94.45	63.87
To look for a better paid job	0.66	0.74	-
Study	1.99	1.18	3.66
Security	0.77	0.34	4.71
Health	1.23	0.85	4.71
Poor quality land	1.07	0.4	7.33
Not enough land	1.38	0.62	8.38
To joint family	1.43	0.79	7.33
Job reasons	94.57	96.21	79.58

Table 6: Occupation during first migration experience

	Total	Male	Female
Frequency	1,508	1,413	97
<i>Percent</i>	<i>83.68</i>	<i>84.11</i>	<i>77.89</i>

Table 7: Occupation during first migration by education level

	Total	Male	Female
None	0.14	0.15	-
Primary 8 years	55.32	56.56	37.63
Secondary general	19.03	18.48	26.88
Vacational 2 Years	2.89	2.87	3.23
Vacational 4/5 Years	17.69	18.1	11.83
University	4.72	6.62	20.43
Post-graduate	0.21	0.23	-

Table 8: Legality

	Total	Male	Female	
Legal migration	Frequency	639	489	141
	Percent	32.67	28.22	73.22
Legal work	Frequency	286	233	53
	Percent	18.97	16.49	55.9

Table 9: Legality by migration year

Year	Enter Legally	Work Legally
1990	14.81	26.09
1991	29.32	17.21
1992	30.73	31.88
1993	26.73	14.19
1994	21.02	17.42
1995	31.69	11.43
1996	28.05	17.19
1997	33.33	18.18
1998	44.98	16.94
1999	30.17	21.74
2000	37.3	11.22
2001	36	31.25
2002	42.75	26.6
2003	50	20

Table 10: Migrating help

Information on how to find work		Monetary help		Help during migration	
Family	15.21	Family	66.35	Family	14.09
Friends	66.76	Friends	11.94	Friends	36.3
Neighbours	3.11	Neighbours	1.59	Acquaintan	32.36
Yourself	14.54	Yourself	17.3	Strangers	3.72
Other	0.93	Other	2.81	Other (NG)	13.19

Table 11: Number of migrations

	Total	Male	Female
1	44.98	42.88	66.46
2	14.18	14.36	12.42
3	10.15	10.49	6.83
4	7.83	7.68	9.32
5-7	14.8	15.99	3.11
8-21	8.05	6.86	1.86

Table 11.1: First migration destination (%)

	Greece	Italy	Other
1990-1993	85.2	13.18	1.62
1994-1996	78.62	20.73	0.65
1997	86.32	12.39	1.28
1998-2000	74.5	25.25	
2001-2003	65.42	30.84	3.37
Total	79.88	19.84	1.18

Table 12: Months abroad in the last 20 months (%)

Number of Months	Total	Male	Female
1	9.7	8.82	16.98
2	9.9	9.28	15.09
3	14.95	14.25	20.75
4	9.9	7.92	18.87
5	20.4	21.72	9.43
6	13.94	15.38	1.89
7	2.42	2.71	
8	5.66	5.66	5.66
9	2.83	2.49	5.66
10	6.06	6.33	3.77
11 - 12	2.83	2.13	1.89
More than 13	2.21	2.5	

Table 13 : First migration decision and exposure to foreign media - district level

	Dependent Variable =1 if an individual migrated internationally for at least three months							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Distance_90	-0.0032** [0.0016]	-0.0073*** [0.0022]	-0.0078*** [0.0014]	-0.0088*** [0.0015]	-0.0046** [0.0021]	-0.0058*** [0.0019]	-0.0066*** [0.0010]	-0.0067*** [0.0011]
Distance_coast		0.0087*** [0.0014]	0.0100*** [0.0010]	0.0092*** [0.0003]		0.0048*** [0.0012]	0.0052*** [0.0014]	0.0054*** [0.0011]
Distance_border			-0.0099*** [0.0036]	-0.0119*** [0.0032]			-0.0088** [0.0037]	-0.0113*** [0.0025]
Distance_itagre				0.0045** [0.0019]				0.0049 [0.0041]
Costal					0.3933*** [0.0988]	0.4214*** [0.0763]	0.2200*** [0.0421]	0.2543*** [0.0329]
Central					0.6948*** [0.1057]	0.5595*** [0.1184]	0.4997*** [0.0942]	0.4334*** [0.1363]
Mountain					0.6463*** [0.1022]	0.5200*** [0.0611]	0.3959*** [0.0496]	0.159 [0.1547]
Constant	-1.8085*** [0.1334]	-1.5152*** [0.2405]	-1.2788*** [0.1498]	-1.1972*** [0.1569]	-2.0841*** [0.3599]	-2.0260*** [0.2985]	-1.6183*** [0.0587]	-1.6839*** [0.0838]
Observations	6673	6673	6673	6673	6673	6673	6673	6673
Pseudo R-squared	0.0022	0.0071	0.0088	0.0094	0.0095	0.0103	0.0112	0.0115

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded region is Tirana.

Table 14: First migration decision and exposure to foreign media - district level altitude variables included

	Dependent Variable =1 if an individual migrated internationally for at least three months	
	(1)	(2)
Distance_90	-0.0085*** [0.0019]	-0.0071*** [0.0015]
Distance_coast	0.0157*** [0.0022]	0.0154*** [0.0022]
Distance_border	-0.007 [0.0065]	0.0025 [0.0046]
Distance_itagre	-0.0011 [0.0036]	-0.0048 [0.0053]
Altitude_obstacle_90	-0.0023** [0.0010]	-0.0036*** [0.0013]
Difference_altitude_90	-0.0025** [0.0010]	-0.0036*** [0.0012]
Altitude*distance_90	0.0069 [0.0051]	0.0125* [0.0069]
Costal		0.4542*** [0.0428]
Central		0.5339** [0.2443]
Mountain		0.5267* [0.2836]
Constant	-1.2669*** [0.2282]	-1.8880*** [0.0932]
Observations	6673	6673
Pseudo R-squared	0.0129	0.0149

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded region is Tirana.

Table 15: First migration decision and Television - district level

	Dependent Variable =1 if an individual migrated internationally for at least three months			
	(1)	(2)	(3)	(4)
Distance_90	-0.0067*** [0.0022]	0.0011 [0.0039]	-0.0070*** [0.0026]	0.0006 [0.0040]
Distance_coast	0.0054* [0.0029]	0.0053* [0.0029]	0.0155*** [0.0045]	0.0154*** [0.0044]
Distance_border	-0.0113** [0.0050]	-0.0109** [0.0050]	0.0027 [0.0065]	0.0033 [0.0065]
Distance_itagre	0.0049 [0.0041]	0.0049 [0.0041]	-0.0047 [0.0058]	-0.0049 [0.0058]
Costal	0.2553 [0.1751]	0.2473 [0.1753]	0.4608** [0.1968]	0.4533** [0.1964]
Central	0.4429*** [0.1500]	0.4436*** [0.1502]	0.5393*** [0.1838]	0.5473*** [0.1847]
Mountain	0.1585 [0.2898]	0.1701 [0.2901]	0.5195 [0.4005]	0.5405 [0.4029]
Television_90	0.1567 [0.1600]	1.6259** [0.7942]	0.1685 [0.1622]	1.6056** [0.7601]
Television_90*Distance_90		-0.0086* [0.0045]		-0.0084** [0.0043]
Altitude_obstacle_90			-0.0036** [0.0014]	-0.0036*** [0.0014]
Difference_altitude_90			-0.0036*** [0.0014]	-0.0037*** [0.0014]
Altitude*distance_90			0.0125* [0.0070]	0.0128* [0.0069]
Constant	-1.8372*** [0.4101]	-3.1765*** [0.7103]	-2.0619*** [0.4536]	-3.3685*** [0.7156]
Observations	6657	6657	6657	6657
Pseudo R-squared	0.0118	0.013	0.0153	0.0165

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded region is Tirana.

Table 16: First migration decision and exposure to foreign media - city level

	Dependent Variable =1 if an individual migrated internationally for at least three months							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Distance_tv	-0.0022*** [0.0008]	-0.0080*** [0.0021]	-0.0077*** [0.0026]	-0.0081** [0.0033]	-0.0058** [0.0023]	-0.0076*** [0.0018]	-0.0072*** [0.0019]	-0.0066*** [0.0022]
Distance_coast		0.0121*** [0.0034]	0.0117*** [0.0040]	0.0116*** [0.0036]		0.0084** [0.0039]	0.0078** [0.0039]	0.0165*** [0.0055]
Distance_border			0.0052 [0.0072]	0.0043 [0.0091]			0.002 [0.0043]	0.0062 [0.0042]
Distance_itagre				0.0015 [0.0038]				-0.0143*** [0.0023]
Berat					0.9775*** [0.0950]	0.9391*** [0.0910]	0.9362*** [0.0966]	0.9492*** [0.0986]
Diber					0.5414*** [0.1442]	0.3367*** [0.1173]	0.3659*** [0.1152]	0.5876*** [0.1022]
Durres					0.1076 [0.1655]	0.1959 [0.1599]	0.2183 [0.1651]	0.1822 [0.1703]
Elbasan					1.1413*** [0.1368]	0.9182*** [0.1585]	0.9143*** [0.1660]	0.9968*** [0.1778]
Fier					0.5674*** [0.1165]	0.5590*** [0.0782]	0.5896*** [0.1133]	0.6041*** [0.1392]
Gjirokaster					0.7114*** [0.0899]	0.4775*** [0.1256]	0.4742*** [0.1351]	0.4814*** [0.1383]
Korce					1.1718*** [0.1398]	0.6254*** [0.2252]	0.6705*** [0.2037]	0.0293 [0.3378]
Kukes					1.2252*** [0.2604]	1.0194*** [0.1492]	1.0379*** [0.1301]	1.2946*** [0.1819]
Lezhe					0.4320*** [0.1167]	0.5346*** [0.1187]	0.5354*** [0.1170]	0.5129*** [0.1183]
Shkroder					0.6503*** [0.1435]	0.5709*** [0.1105]	0.5672*** [0.1161]	0.6372*** [0.1311]
Vlore					0.4282*** [0.1399]	0.4656*** [0.0768]	0.5146*** [0.1574]	0.5258*** [0.1974]
Constant	-1.9555*** [0.2556]	-1.5232*** [0.2258]	-1.6999*** [0.3219]	-1.6647*** [0.3884]	-2.0532*** [0.3561]	-2.0069*** [0.1714]	-2.1128*** [0.3203]	-2.1660*** [0.4172]
Observations	4492	4492	4492	4492	4492	4492	4492	4492
Pseudo R-squared	0.0011	0.0108	0.0113	0.0114	0.0219	0.0228	0.0229	0.0243

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

Table 17: First migration decision and exposure to foreign media - city level altitude variables included

	Dependent Variable =1 if an individual migrated internationally for at least three months	
	(1)	(2)
Distance_tv	-0.0101*** [0.0033]	-0.0074*** [0.0015]
Distance_coast	0.0156*** [0.0033]	0.0163** [0.0073]
Distance_border	0.0076 [0.0068]	0.0079*** [0.0019]
Distance_itagre	-0.0015 [0.0033]	-0.0147*** [0.0032]
Altitude_obstacle	-0.0031*** [0.0008]	-0.0020*** [0.0003]
Difference_altitude	-0.0032*** [0.0009]	-0.0021*** [0.0005]
Altitude*distance	0.0132*** [0.0032]	0.0090*** [0.0016]
Berat		0.8865*** [0.0973]
Diber		0.5753*** [0.1863]
Durres		0.1642 [0.1609]
Elbasan		1.0181*** [0.1534]
Fier		0.5674*** [0.0790]
Gjirokaster		0.5447*** [0.1632]
Korce		0.117 [0.3375]
Kukes		1.0724*** [0.1501]
Lezhe		0.4988*** [0.1161]
Shkroder		0.6512*** [0.1254]
Vlore		0.5431*** [0.1156]
Constant	-1.3737*** [0.3620]	-2.0069*** [0.2110]
Observations	4492	4492
Pseudo R-squared	0.0148	0.0255

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

Table 18: First migration decision and Television - city level

	Dependent Variable =1 if an individual migrated			
	(1)	(2)	(3)	(4)
Distance_tv	-0.0066** [0.0031]	0.0013 [0.0051]	-0.0074** [0.0034]	0.0005 [0.0052]
Distance_coast	0.0165** [0.0074]	0.0160** [0.0074]	0.0163* [0.0087]	0.0163* [0.0088]
Distance_border	0.0062 [0.0069]	0.0063 [0.0069]	0.0079 [0.0071]	0.0079 [0.0071]
Distance_itagre	-0.0143 [0.0093]	-0.014 [0.0094]	-0.0147 [0.0097]	-0.0145 [0.0097]
Berat	0.9502*** [0.1572]	0.9542*** [0.1551]	0.8882*** [0.1680]	0.8866*** [0.1656]
Diber	0.5887 [0.3852]	0.5986 [0.3825]	0.577 [0.4502]	0.602 [0.4469]
Durres	0.184 [0.2701]	0.177 [0.2698]	0.1654 [0.2786]	0.1607 [0.2783]
Elbasan	1.0000*** [0.2486]	1.0067*** [0.2493]	1.0226*** [0.2552]	1.0258*** [0.2573]
Fier	0.6045** [0.2503]	0.6067** [0.2473]	0.5665** [0.2483]	0.5741** [0.2448]
Gjirokaster	0.4974 [0.3214]	0.5347* [0.3248]	0.5663* [0.3391]	0.6002* [0.3413]
Korce	0.0405 [0.5888]	0.0491 [0.5980]	0.1289 [0.6114]	0.1378 [0.6215]
Kukes	1.3016*** [0.4337]	1.2582*** [0.4354]	1.0787** [0.4965]	1.0575** [0.5022]
Lezhe	0.518 [0.3224]	0.5065 [0.3273]	0.5044 [0.3391]	0.496 [0.3439]
Shkroder	0.6370*** [0.2357]	0.6417*** [0.2337]	0.6530** [0.2547]	0.6526*** [0.2505]
Vlore	0.5274 [0.4431]	0.5447 [0.4399]	0.5434 [0.4400]	0.5652 [0.4369]
Television_90	0.0631 [0.1781]	1.5210* [0.8051]	0.0714 [0.1799]	1.5065* [0.8045]
Television_90*Distance_tv		-0.0085* [0.0044]		-0.0084* [0.0044]
Altitude_obstacle			-0.0020* [0.0010]	-0.0019* [0.0010]
Difference_altitude			-0.0021** [0.0010]	-0.0020** [0.0010]
Altitude*distance			0.0091* [0.0053]	0.0083 [0.0051]
Constant	-2.2211*** [0.6106]	-3.5805*** [0.9145]	-2.0633*** [0.6376]	-3.4324*** [0.9155]
Observations	4491	4491	4491	4491
Pseudo R-squared	0.0244	0.0258	0.0255	0.0269

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

Table 19: First migration decision and exposure to foreign media - dist time invariant controls included

	Dependent Variable = 1 if an individual migrated internationally for at least three months	
	(1)	(2)
Distance_90	-0.0080*** [0.0012]	-0.0086*** [0.0011]
Distance_coast	0.0047*** [0.0008]	0.0147*** [0.0034]
Distance_border	-0.0139*** [0.0036]	0.0011 [0.0074]
Distance_itagre	0.0062 [0.0057]	-0.0027 [0.0084]
Sex	2.6506*** [0.2184]	2.6519*** [0.2205]
Age	0.3432*** [0.0291]	0.3433*** [0.0300]
Age2	-0.0047*** [0.0005]	-0.0047*** [0.0005]
Migration network	-0.4060*** [0.1370]	-0.4259*** [0.1379]
Costal	0.3414*** [0.0217]	0.5665*** [0.1118]
Central	0.6974*** [0.2339]	0.7604* [0.3887]
Mountain	0.343 [0.2554]	0.608 [0.5007]
Altitude_obstacle_90		-0.0040* [0.0023]
Difference_altitude_90		-0.0042** [0.0021]
Altitude*distance_90		0.0148 [0.0114]
Constant	-8.4882*** [0.6397]	-8.7018*** [0.7058]
Observations	6673	6673
Pseudo R-squared	0.3152	0.3187

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional control, the excluded region is Tirana

**Table 20 : First migration decision and exposure to foreign media - district level
time invariant controls included**

	Dependent Variable =1 if an individual migrated			
	(1)	(2)	(3)	(4)
Distance_90	-0.0080*** [0.0030]	0.0021 [0.0041]	-0.0086** [0.0036]	0.0012 [0.0043]
Distance_coast	0.0047 [0.0038]	0.0047 [0.0038]	0.0147*** [0.0052]	0.0147*** [0.0052]
Distance_border	-0.0138** [0.0070]	-0.0139** [0.0070]	0.0014 [0.0084]	0.0016 [0.0084]
Distance_itagre	0.0061 [0.0062]	0.0061 [0.0062]	-0.0027 [0.0077]	-0.0027 [0.0078]
Sex	2.6489*** [0.2262]	2.6530*** [0.2267]	2.6503*** [0.2275]	2.6541*** [0.2280]
Age	0.3431*** [0.0318]	0.3445*** [0.0320]	0.3433*** [0.0323]	0.3446*** [0.0325]
Age2	-0.0047*** [0.0005]	-0.0047*** [0.0005]	-0.0047*** [0.0005]	-0.0047*** [0.0005]
Migration network	-0.4053** [0.1720]	-0.4177** [0.1716]	-0.4264** [0.1716]	-0.4404** [0.1716]
Costal	0.3416 [0.2243]	0.3266 [0.2252]	0.5731** [0.2513]	0.5586** [0.2516]
Central	0.7106*** [0.2045]	0.7019*** [0.2059]	0.7665*** [0.2345]	0.7659*** [0.2376]
Mountain	0.3487 [0.4265]	0.3594 [0.4269]	0.6003 [0.5398]	0.6173 [0.5439]
Television_90	0.201 [0.2058]	2.1374** [0.8327]	0.2097 [0.2083]	2.1061** [0.8270]
Television_90*Distance_tv		-0.0114** [0.0047]		-0.0112** [0.0047]
Altitude_obstacle_90			-0.0041** [0.0020]	-0.0042** [0.0020]
Difference_altitude_90			-0.0042** [0.0020]	-0.0043** [0.0020]
Altitude*distance_90			0.0149 [0.0100]	0.0155 [0.0098]
Constant	-8.6734*** [0.8176]	-10.4154*** [0.9663]	-8.9055*** [0.8549]	-10.5966*** [0.9851]
Observations	6657	6657	6657	6657
Pseudo R-squared	0.3147	0.3166	0.3184	0.3202

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded region is Tirana.

**Table 21: First migration decision and exposure to foreign media - city level
time invariant controls included**

	Dependent Variable =1 if an individual	
	(1)	(2)
Distance_tv	-0.0096*** [0.0030]	-0.0098*** [0.0024]
Distance_coast	0.0210** [0.0092]	0.0168 [0.0109]
Distance_border	0.0014 [0.0027]	0.0065*** [0.0009]
Distance_itagre	-0.0185*** [0.0042]	-0.0188*** [0.0047]
Sex	2.6228*** [0.2351]	2.6575*** [0.2506]
Age	0.4385*** [0.0612]	0.4401*** [0.0629]
Age2	-0.0062*** [0.0010]	-0.0062*** [0.0010]
Migration network	-0.4481*** [0.1055]	-0.4698*** [0.1077]
Berat	1.3677*** [0.0523]	1.2519*** [0.1034]
Diber	0.8966*** [0.0642]	0.6954*** [0.1680]
Durres	0.1911 [0.1574]	0.1617 [0.1269]
Elbasan	1.3658*** [0.1409]	1.3924*** [0.1643]
Fier	0.6671*** [0.1185]	0.6601*** [0.0583]
Gjirokaster	0.5822*** [0.1916]	0.5713*** [0.1904]
Korce	0.1069 [0.5425]	0.1478 [0.5352]
Kukes	1.5984*** [0.1909]	1.1200*** [0.1422]
Lezhe	0.7390*** [0.0493]	0.6639*** [0.1865]
Shkroder	1.2999*** [0.1098]	1.2284*** [0.1070]
Vlore	0.4527** [0.1831]	0.5037*** [0.0931]
Altitude_obstacle		-0.0027*** [0.0010]
Difference_altitude		-0.0030** [0.0013]
Altitude*distance		0.0134*** [0.0042]
Constant	-9.9428*** [0.9134]	-9.9275*** [0.9246]
Observations	4492	4492
Pseudo R-squared	0.3697	0.3716

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

**Table 22: First migration decision and exposure to foreign media - district level
time invariant controls included**

	Dependent Variable =1 if an individual migrated			
	(1)	(2)	(3)	(4)
Distance_tv	-0.0096*** [0.0030]	0.0014 [0.0065]	-0.0099*** [0.0023]	0.001 [0.0041]
Distance_coast	0.0212** [0.0091]	0.0203** [0.0085]	0.0169 [0.0109]	0.0166 [0.0107]
Distance_border	0.0015 [0.0026]	0.0015 [0.0026]	0.0066*** [0.0010]	0.0063*** [0.0016]
Distance_itagre	-0.0186*** [0.0039]	-0.0178*** [0.0037]	-0.0190*** [0.0044]	-0.0183*** [0.0042]
Berat	1.3650*** [0.0528]	1.3755*** [0.0505]	1.2504*** [0.1036]	1.2544*** [0.1074]
Diber	0.8941*** [0.0678]	0.9045*** [0.0708]	0.6915*** [0.1673]	0.7169*** [0.1710]
Durres	0.1943 [0.1720]	0.1855 [0.1671]	0.1638 [0.1415]	0.1573 [0.1395]
Elbasan	1.3679*** [0.1530]	1.3790*** [0.1406]	1.3968*** [0.1777]	1.4018*** [0.1739]
Fier	0.6676*** [0.1194]	0.6717*** [0.1233]	0.6580*** [0.0585]	0.6718*** [0.0638]
Gjirokaster	0.5973*** [0.2139]	0.6365*** [0.1810]	0.5958*** [0.2007]	0.6276*** [0.1868]
Korce	0.1192 [0.5674]	0.1463 [0.5315]	0.158 [0.5532]	0.1808 [0.5292]
Kukes	1.6174*** [0.2143]	1.5481*** [0.2529]	1.1339*** [0.1334]	1.0992*** [0.1307]
Lezhe	0.7520*** [0.0595]	0.7396*** [0.0357]	0.6754*** [0.2003]	0.6677*** [0.1714]
Shkroder	1.2944*** [0.1087]	1.2993*** [0.1058]	1.2269*** [0.1050]	1.2209*** [0.0874]
Vlore	0.4676*** [0.1719]	0.5372*** [0.2070]	0.5156*** [0.0860]	0.5897*** [0.1248]
Sex	2.6251*** [0.2279]	2.6296*** [0.2212]	2.6604*** [0.2464]	2.6592*** [0.2432]
Age	0.4393*** [0.0610]	0.4418*** [0.0616]	0.4409*** [0.0628]	0.4426*** [0.0634]
Age2	-0.0062*** [0.0010]	-0.0062*** [0.0010]	-0.0062*** [0.0010]	-0.0062*** [0.0010]
Migration network	-0.4517*** [0.0996]	-0.4696*** [0.1112]	-0.4743*** [0.1026]	-0.4887*** [0.1115]
Television_90	0.2112 [0.2903]	2.2423*** [0.7883]	0.2228 [0.2687]	2.1771*** [0.7048]
Television_90*Distance_tv		-0.0119** [0.0053]		-0.0115** [0.0047]
Altitude_obstacle			-0.0028*** [0.0011]	-0.0026** [0.0012]
Difference_altitude			-0.0031** [0.0014]	-0.0029* [0.0016]
Altitude*distance			0.0138*** [0.0044]	0.0124** [0.0054]
Constant	-10.1406*** [0.8991]	-12.0658*** [1.3721]	-10.1224*** [0.9689]	-12.0108*** [1.1887]
Observations	4492	4492	4492	4492
Pseudo R-squared	0.3701	0.3723	0.372	0.3741

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

Table 23: Migration decision in the last year and exposure to foreign media

	Dependent Variable =1 if an individual migrated internationally for at least three months									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Distance_tv	-0.0029 [0.0020]	-0.0123*** [0.0029]	-0.0114*** [0.0030]	-0.0173*** [0.0031]	-0.0208*** [0.0035]	-0.0113*** [0.0040]	-0.0212*** [0.0056]	-0.0194*** [0.0057]	-0.0201*** [0.0060]	-0.0227*** [0.0061]
Distance_coast		0.0185*** [0.0029]	0.0173*** [0.0030]	0.0141*** [0.0041]	0.0096 [0.0065]		0.0289*** [0.0073]	0.0266*** [0.0081]	0.0207* [0.0114]	0.0144 [0.0128]
Distance_border			0.0153** [0.0063]	-0.0017 [0.0065]	0.0068 [0.0077]			0.0086 [0.0090]	0.0063 [0.0097]	0.011 [0.0108]
Distance_itagre				0.0265*** [0.0058]	0.0250*** [0.0058]				0.009 [0.0121]	0.0098 [0.0123]
Altitude_obstacle					-0.0022 [0.0014]					-0.0018 [0.0018]
Difference_altitude					-0.0023* [0.0014]					-0.0018 [0.0018]
Altitude*distance					0.0000** [0.0000]					0 [0.0000]
Berat						1.0351*** [0.3008]	0.6838** [0.3241]	0.6801** [0.3240]	0.6563** [0.3285]	0.6510* [0.3559]
Diber						2.2993*** [0.3976]	1.7447*** [0.4218]	1.8658*** [0.4574]	1.7565*** [0.4976]	1.5587*** [0.5560]
Durres						0.4977 [0.4155]	0.8290* [0.4241]	0.9443** [0.4540]	0.9609** [0.4559]	0.9283** [0.4536]
Elbasan						1.7728*** [0.2757]	1.0379*** [0.3242]	1.0239*** [0.3234]	0.9769*** [0.3346]	1.0163*** [0.3423]
Fier						0.6746* [0.3515]	0.4713 [0.3617]	0.6156 [0.3873]	0.588 [0.3913]	0.5201 [0.4002]
Gjirokaster						1.2547*** [0.3902]	0.3789 [0.4473]	0.3701 [0.4495]	0.344 [0.4567]	0.3514 [0.5345]
Korce						1.3508*** [0.3554]	-0.4323 [0.5356]	-0.2474 [0.6087]	0.1972 [0.8467]	0.2076 [0.8714]
Kukes						1.8167*** [0.5980]	1.4689** [0.6194]	1.5292** [0.6293]	1.4247** [0.6522]	1.058 [0.8001]
Lezhe						0.9529** [0.4845]	1.3647*** [0.5065]	1.3591*** [0.5051]	1.3793*** [0.5074]	1.3348** [0.5259]
Shkroder						0.3503 [0.7541]	-0.1173 [0.7736]	-0.1899 [0.7894]	-0.2168 [0.7893]	-0.2102 [0.8170]
Vlore						-0.3067 [0.5070]	-0.4285 [0.5350]	-0.196 [0.5784]	-0.2301 [0.5843]	-0.3078 [0.5875]
Constant	-2.6812*** [0.3424]	-1.9379*** [0.3985]	-2.4623*** [0.4522]	-1.8381*** [0.4396]	-1.4018*** [0.4674]	-2.2279*** [0.7039]	-1.4350* [0.8364]	-1.9422** [0.9562]	-1.8439* [0.9817]	-1.4203 [1.0019]
Observations	4790	4790	4790	4790	4790	4790	4790	4790	4790	4790
Pseudo R-squared	0.0013	0.0199	0.0239	0.0374	0.0408	0.0462	0.0543	0.0549	0.0553	0.0575

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

**Table 24: Migration decision in the last year
individual and HH variables included**

	Dependent Variable =1 if an individual migrated internationally during the last year					
	(1)	(2)	(3)	(4)	(5)	(6)
Distance_tv	-0.0169*	-0.0291***	-0.0296***	-0.0262***	-0.0262***	-0.0285***
	[0.0094]	[0.0048]	[0.0065]	[0.0050]	[0.0052]	[0.0041]
Sex	2.7357***	2.7188***	2.7215***	1.6888***	1.6898***	1.6887***
	[0.2973]	[0.2894]	[0.2878]	[0.4292]	[0.4327]	[0.4294]
Age	-0.0621***	-0.0606***	-0.0605***	-0.0384***	-0.0382***	-0.0382***
	[0.0063]	[0.0059]	[0.0058]	[0.0063]	[0.0065]	[0.0063]
Years of school	-0.0734	-0.0678	-0.0687	-0.1164***	-0.1152***	-0.1150***
	[0.0508]	[0.0480]	[0.0480]	[0.0229]	[0.0228]	[0.0228]
No family	-1.3227***	-1.3001***	-1.2990***	-0.1768	-0.1842	-0.1829
	[0.3669]	[0.3438]	[0.3477]	[0.2657]	[0.2609]	[0.2621]
% child <13	0.7417***	0.7639***	0.7488***	0.5584***	0.4966***	0.5009***
	[0.2632]	[0.2164]	[0.2373]	[0.1272]	[0.1119]	[0.1134]
% HH membrs > 64	0.6149	0.7508	0.7579	0.8905	0.8304	0.8322
	[0.7558]	[0.7421]	[0.7350]	[0.6785]	[0.6877]	[0.6461]
HH size	-0.0089	-0.0157	-0.0165	-0.0262	-0.0257	-0.0262
	[0.0586]	[0.0557]	[0.0580]	[0.0877]	[0.0861]	[0.0791]
Migration network	-1.1872***	-1.2107***	-1.2085***	-0.6962***	-0.6861***	-0.6901***
	[0.1772]	[0.1381]	[0.1396]	[0.2652]	[0.2657]	[0.2602]
HH income	0.3347***	0.3990***	0.4083***	0.3298***	0.3393***	0.3338***
	[0.1133]	[0.1349]	[0.1274]	[0.1045]	[0.0998]	[0.0914]
Employed before migration	-0.6102***	-0.6278**	-0.6263**	-0.7144***	-0.7238***	-0.7267***
	[0.2234]	[0.2525]	[0.2625]	[0.2620]	[0.2611]	[0.2689]
Urban area	-1.2034***	-1.2460***	-1.2542***	-0.9149***	-0.9035***	-0.8905***
	[0.2666]	[0.3246]	[0.3410]	[0.3122]	[0.2945]	[0.3221]
Distance_coast		0.0362***	0.0317***	0.0208***	0.0209***	0.0177**
		[0.0062]	[0.0054]	[0.0033]	[0.0031]	[0.0083]
Distance_border			-0.0019	-0.0067	-0.0071	-0.0048
			[0.0124]	[0.0123]	[0.0125]	[0.0176]
Distance_itagre			0.007	0.0194***	0.0187***	0.0192***
			[0.0057]	[0.0063]	[0.0066]	[0.0059]
Other international migration				2.6271***	2.6504***	2.6481***
				[0.4607]	[0.4731]	[0.4603]
Television					-0.8340**	-0.8139**
					[0.3782]	[0.3490]
Altitude_obstacle						-0.0017
						[0.0023]
Difference_altitude						-0.0017
						[0.0023]
Altitude*distance						0.01
						[0.0110]
Constant	-2.8246	-2.5397	-2.5582	-2.9051	-2.1579	-1.7339
	[2.5453]	[2.4623]	[2.6399]	[2.3760]	[2.4063]	[2.1635]
District Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4399	4399	4399	4399	4399	4399
Pseudo R-squared	0.2913	0.3008	0.301	0.4014	0.4028	0.4035

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

**Table 25: Migration decision in the last year
individual and HH variables included**

	Dependent Variable =1 if an individual migrated			
	(1)	(2)	(3)	(4)
Distance_tv	-0.0262*** [0.0052]	-0.0205*** [0.0063]	-0.0285*** [0.0041]	-0.0237*** [0.0072]
Sex	1.6898*** [0.4327]	1.6908*** [0.4325]	1.6887*** [0.4294]	1.6896*** [0.4300]
Age	-0.0382*** [0.0065]	-0.0381*** [0.0065]	-0.0382*** [0.0063]	-0.0381*** [0.0063]
Years of school	-0.1152*** [0.0228]	-0.1151*** [0.0229]	-0.1150*** [0.0228]	-0.1150*** [0.0230]
No family	-0.1842 [0.2609]	-0.1862 [0.2588]	-0.1829 [0.2621]	-0.184 [0.2610]
% child <13	0.4966*** [0.1119]	0.5155*** [0.1171]	0.5009*** [0.1134]	0.5175*** [0.1154]
% HH membrs > 64	0.8304 [0.6877]	0.8046 [0.6782]	0.8322 [0.6461]	0.8101 [0.6331]
HH size	-0.0257 [0.0861]	-0.0244 [0.0873]	-0.0262 [0.0791]	-0.0251 [0.0803]
Migration network	-0.6861*** [0.2657]	-0.6869** [0.2686]	-0.6901*** [0.2602]	-0.6905*** [0.2622]
HH income	0.3393*** [0.0998]	0.3378*** [0.0981]	0.3338*** [0.0914]	0.3326*** [0.0904]
Employed before migration	-0.7238*** [0.2611]	-0.7251*** [0.2609]	-0.7267*** [0.2689]	-0.7266*** [0.2688]
Urban area	-0.9035*** [0.2945]	-0.9031*** [0.2991]	-0.8905*** [0.3221]	-0.8909*** [0.3253]
Distance_coast	0.0209*** [0.0031]	0.0207*** [0.0031]	0.0177** [0.0083]	0.0175** [0.0085]
Distance_border	-0.0071 [0.0125]	-0.0068 [0.0125]	-0.0048 [0.0176]	-0.0045 [0.0179]
Distance_itagre	0.0187*** [0.0066]	0.0184*** [0.0068]	0.0192*** [0.0059]	0.0190*** [0.0059]
Other international migration	2.6504*** [0.4731]	2.6472*** [0.4771]	2.6481*** [0.4603]	2.6452*** [0.4649]
Television_90	-0.8340** [0.3782]	0.1135 [0.7913]	-0.8139** [0.3490]	-0.0348 [0.9080]
Television*Distance_tv		-0.0057* [0.0032]		-0.0047 [0.0041]
Altitude_obstacle			-0.0017 [0.0023]	-0.0016 [0.0024]
Difference_altitude			-0.0017 [0.0023]	-0.0016 [0.0023]
Altitude*distance			0.01 [0.0110]	0.0097 [0.0113]
Constant	-2.1579 [2.4063]	-3.0961 [2.7236]	-1.7339 [2.1635]	-2.5262 [2.6597]
District Dummies	Yes	Yes	Yes	Yes
Observations	4399	4399	4399	4399
Pseudo R-squared	0.4028	0.403	0.4035	0.4036

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 26: Migration decision in the last year and all media

	Dependent Variable =1 if an individual		
	All sample	Urban	Rural
	(1)	(2)	(3)
Distance_tv	-0.0287*** [0.0041]	-0.0434*** [0.0095]	-0.0211*** [0.0047]
Television	-0.8237** [0.3470]	-2.0125 [4.8500]	-0.7985*** [0.2590]
Internet	0.9706 [0.7665]	1.3782*** [0.3149]	
Constant	-1.6448 [2.0784]	-2.2926 [9.6134]	-2.1922 [2.5395]
Individual controls	Yes	Yes	Yes
Regional dummies	Yes	Yes	Yes
Distance controls	Yes	Yes	Yes
Observations	4399	1819	2200
Pseudo R-squared	0.4048	0.3358	0.4356

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 27: First migration decision and media by destination country

	Dependent variable = 0 no migration, 1 migration to Greece, 2 migration to Italy, 3 migration to other countries					
	Greece	Italy	Other	Greece	Italy	Other
Distance_90	-0.012** [0.002]	-0.003 [0.003]	0.010* [0.004]	-0.011** [0.003]	0.003 [0.006]	0.010** [0.003]
Distance_coast	0.015** [0.002]	-0.048** [0.010]	-0.028* [0.015]	0.011** [0.004]	-0.052** [0.004]	-0.029** [0.004]
Distance_border	-0.017** [0.005]	0.007 [0.011]	0.004 [0.013]	-0.013** [0.002]	0.011** [0.003]	-0.030* [0.014]
Distance_itagre	0.004 [0.003]	0.033** [0.012]	0.029* [0.015]	0.003 [0.007]	0.049* [0.025]	0.041** [0.005]
Costal				0.275** [0.025]	1.000** [0.242]	-1.150** [0.346]
Central				0.587* [0.231]	0.345 [0.262]	-0.443** [0.118]
Mountain				0.464* [0.278]	-0.741 [0.640]	-1.548** [0.177]
Constant	-1.063** [0.257]	-3.348** [0.469]	-6.658** [0.780]	-1.488** [0.226]	-5.317** [0.548]	-5.686** [0.704]

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

The base category is "no migration"

For regional controls, the excluded region is Tirana.

Table 28: First migration decision and media by destination country - altitude variables included

	Dependent variable = 0 no migration, 1 migration to Greece, 2 migration to Italy, 3 migration to other countries					
	Greece	Italy	Other	Greece	Italy	Other
Distance_90	-0.011** [0.003]	-0.003 [0.005]	0.015* [0.007]	-0.012** [0.003]	0.003 [0.005]	0.014** [0.005]
Distance_coast	0.016** [0.004]	-0.023** [0.007]	-0.013 [0.021]	0.019** [0.002]	-0.022 [0.021]	-0.021** [0.008]
Distance_border	-0.016* [0.006]	0.012 [0.012]	0.006 [0.016]	-0.001 [0.008]	0.037* [0.016]	-0.023* [0.014]
Distance_itagre	0.002 [0.004]	0.014 [0.009]	0.014 [0.017]	-0.005 [0.012]	0.024 [0.032]	0.039* [0.019]
Altitude_obstacle_90	-0.000 [0.002]	-0.005 [0.006]	-0.001 [0.006]	-0.003 [0.003]	-0.007 [0.009]	-0.000 [0.005]
Difference_altitude_90	-0.001 [0.002]	-0.005 [0.006]	-0.001 [0.006]	-0.003 [0.002]	-0.007 [0.009]	-0.001 [0.005]
Altitude*distance_90	-0.000 [0.009]	0.015 [0.028]	-0.008 [0.027]	0.013 [0.013]	0.027 [0.041]	-0.006 [0.021]
Costal				0.438** [0.063]	1.429** [0.303]	-0.882* [0.469]
Central				0.698 [0.439]	0.546* [0.248]	-0.864* [0.347]
Mountain				0.794 [0.640]	-0.153 [0.628]	-2.186* [0.852]
Constant	-1.170** [0.329]	-3.395** [0.630]	-7.315** [1.119]	-1.577** [0.186]	-5.818** [0.621]	-6.577** [1.439]

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

The base category is "no migration"

For regional controls, the excluded region is Tirana.

Table 29: Migration decision in the last year and media by destination country

	Dependent variable = 0 no migration, 1 migration to Greece, 2 migration to Italy, 3 migration to other countries					
	Greece	Italy	Other	Greece	Italy	Other
Distance_tv	-0.019*	-0.046**	-0.006	-0.024*	-0.066**	-0.006
	[0.010]	[0.004]	[0.008]	[0.011]	[0.008]	[0.006]
Distance_coast	0.030**	0.043**	0.009	0.032**	0.075**	0.019
	[0.006]	[0.009]	[0.026]	[0.011]	[0.015]	[0.065]
Distance_border	0.018**	-0.009**	-0.009	0.010	-0.034**	-0.017
	[0.006]	[0.003]	[0.033]	[0.007]	[0.002]	[0.096]
Sex				2.251**	1.975*	0.138
				[0.601]	[0.778]	[0.632]
Age				-0.064**	0.001	-0.010
				[0.018]	[0.010]	[0.026]
Years of school				-0.122**	-0.087	-0.077
				[0.038]	[0.102]	[0.096]
No family				-0.592	0.493	0.203
				[0.454]	[0.509]	[0.599]
% child <13				1.034**	-1.844**	0.316
				[0.234]	[0.302]	[0.957]
% HH membrs > 64				0.081	-1.848	2.568*
				[0.752]	[2.049]	[1.416]
HH size				0.056	-0.133	-0.120
				[0.117]	[0.140]	[0.173]
Migration network				-0.532**	-34.311**	-0.421
				[0.176]	[0.840]	[0.368]
HH income				0.219	0.707*	1.738**
				[0.159]	[0.275]	[0.629]
Employed before migration				-0.871**	0.269*	-1.288*
				[0.237]	[0.115]	[0.522]
Urban area				-1.148**	-0.396	-0.609
				[0.080]	[0.599]	[0.923]
Other international migration				2.765**	1.733**	3.258**
				[0.475]	[0.219]	[0.862]
Television				-0.740	16.048**	-2.096**
				[0.565]	[3.695]	[0.609]
Constant	-3.553*	0.500	-4.548*	-2.331	-19.480	-19.760**
	[1.497]	[0.509]	[1.895]	[4.303]	[0.000]	[4.199]
District Dummies	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

The base category is "no migration"

Table 30 : Migration decision in the last year and media by destination country - altitude variables included

	Dependent variable = 0 no migration, 1 migration to Greece, 2 migration to Italy, 3 migration to other countries					
	Greece	Italy	Other	Greece	Italy	Other
	Distance_tv	-0.024*	-0.040**	-0.003	-0.029**	-0.055**
	[0.010]	[0.006]	[0.003]	[0.010]	[0.014]	[0.007]
Distance_coast	0.020*	0.075**	0.005	0.026	0.108**	0.028
	[0.009]	[0.016]	[0.020]	[0.018]	[0.028]	[0.030]
Distance_border	0.027**	-0.031*	0.021	0.015	-0.061*	-0.015
	[0.005]	[0.014]	[0.032]	[0.011]	[0.025]	[0.065]
Altitude_obstacle	-0.002	0.005*	-0.009**	-0.003	0.006*	-0.004
	[0.002]	[0.002]	[0.003]	[0.003]	[0.003]	[0.005]
Difference_altitude	-0.002	0.005*	-0.011**	-0.003	0.006*	-0.004
	[0.002]	[0.002]	[0.003]	[0.003]	[0.003]	[0.006]
Altitude*distance	0.018*	-0.042*	0.034**	0.018	-0.054	-0.000
	[0.009]	[0.020]	[0.009]	[0.011]	[0.034]	[0.021]
Sex				2.246**	1.887*	0.174
				[0.591]	[0.748]	[0.689]
Age				-0.065**	-0.001	-0.011
				[0.017]	[0.010]	[0.030]
Years of school				-0.123**	-0.084	-0.066
				[0.034]	[0.099]	[0.096]
No family				-0.604	0.390	0.096
				[0.448]	[0.551]	[0.601]
% child <13				1.033**	-2.025**	0.107
				[0.242]	[0.635]	[1.144]
% HH membrs > 64				0.093	-1.662	2.622
				[0.730]	[2.039]	[1.616]
HH size				0.054	-0.132	-0.150
				[0.101]	[0.143]	[0.191]
Migration network				-0.546**	-37.300**	-0.547*
				[0.171]	[0.833]	[0.329]
HH income				0.210	0.707**	1.891*
				[0.128]	[0.260]	[0.751]
Employed before migration				-0.884**	0.250*	-1.401**
				[0.249]	[0.126]	[0.477]
Urban area				-1.101**	-0.470	-0.761
				[0.115]	[0.703]	[1.021]
Other international migration				2.771**	1.736**	3.366**
				[0.443]	[0.227]	[0.892]
Television				-0.762	16.019**	-3.050**
				[0.488]	[4.516]	[0.878]
Constant	-2.833*	-0.368	-5.389**	-1.400	-20.819	-19.827**
	[1.621]	[1.151]	[1.116]	[3.831]	[0.000]	[5.486]
District Dummies	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

The base category is "no migration"

**Table 31: Migration period and media exposure
altitude variables included**

	Dependent variable = 0 no migration, 1 migration in goog period, 2 migration in bad period, 3 migration in medium period					
	Good	Bad	Medium	Good	Bad	Medium
Distance_tv	-0.005 [0.019]	-0.012** [0.004]	0.005 [0.006]	0.00 [0.024]	-0.011** [0.003]	0.01 [0.004]
Distance_coast	0.04 [0.026]	0.036** [0.011]	0.01 [0.015]	0.046* [0.028]	0.039* [0.016]	0.009 [0.017]
Distance_border	0.024 [0.027]	-0.001 [0.008]	0.007* [0.003]	0.022 [0.017]	-0.003 [0.007]	0.005 [0.004]
Distance_itagre	-0.045** [0.013]	-0.018** [0.007]	-0.01 [0.006]	-0.060** [0.009]	-0.026** [0.010]	-0.014* [0.006]
Altitude_obstacle	-0.005 [0.005]	0 [0.004]	-0.001 [0.001]	-0.007 [0.008]	-0.002 [0.006]	-0.001 [0.001]
Difference_altitude	-0.006 [0.005]	0 [0.004]	-0.001 [0.001]	-0.007 [0.009]	-0.002 [0.005]	-0.002 [0.001]
Altitude*distance	0.022 [0.030]	-0.007 [0.015]	0.006 [0.005]	0.03 [0.042]	0 [0.023]	0.010* [0.004]
Television_90	3.440* [1.963]	-1.686* [0.700]	1.942* [1.157]	4.705** [1.491]	-0.643 [0.421]	2.689** [1.043]
Television_90*Distance_tv	-0.016 [0.011]	0.009* [0.004]	-0.012* [0.007]	-0.023* [0.009]	0.004 [0.003]	-0.015* [0.006]
Sex				3.404** [0.937]	3.918** [0.379]	2.491** [0.195]
Age				0.883** [0.197]	0.532** [0.040]	0.501** [0.034]
Age2				-0.012** [0.003]	-0.008** [0.001]	-0.007** [0.001]
Migration network				-0.981* [0.443]	-0.664* [0.319]	-0.511** [0.099]
Constant	-6.291* [2.704]	-2.996** [0.577]	-4.470** [1.368]	-23.214** [1.824]	-13.927** [0.825]	-13.721** [1.199]
District controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4473	4473	4473	4473	4473	4473

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded region is Tirana.

Chapter 2

When the *Manna* Comes from Abroad. Remittances and Youth Labor Market Behavior in Albania.

Abstract: Using data from Albania, we examine the effect of received remittances on youth labour market participation. The identification strategy relies on the coexistence of formal and informal money transfer channels, used to convey either monetary or in kind transfers, and exploits between region variation as well as between households variation in the exogenously determined number of Money Transfer Operator and in the distance from the border. After controlling for the demographic composition and socio - economic status of the household, for individual specific characteristics and for regional variations, we find that, on average, remittances have different effects for men and women depending on the age group they belong to. Traditional neoclassical income effect is found in the whole cohort of young people (15 - 24 years old) and for the sub - sample of very young people (15 -18 years old). No effects is at work for people between 19 and 24. By the contrary, the finding that inactivity is lower for people aged between 25 and 33 who receive money from relatives abroad, suggests that for that cohort remittances enhance entrepreneurship.

JEL Classification: F22, F24, J13.

Keywords: Remittances, Youth Labor Market Participation.

1 Introduction¹

This paper investigates the role of received remittances in determining individual labor market behavior focusing, in particular, on young people who belong to the cohort between 15 and 24 years.

Two main features are common to a lot of developing and transition countries: huge remittance inflows and high unemployment rate. The increase in migration movements across countries and the development of financial institutions allowed faster and less expensive international money transfers. Throughout the last decade remittances flows have followed a constant upward trend. In the past five years international remittances received by developing countries have almost doubled becoming one of the major sources of development reaching in 2007 \$240 billion, up 107% from 2002 (Dadush, 2008). In many developing countries, remittances are the first source of external financing: recorded remittances account for two-third of foreign direct investments flows to developing countries and are twice official aids (Table1). These figures rely on official data based on annual balance of payments records and they actually underestimate the real size of the monetary flow because they fail to capture all informal transfers. Despite possible measurement errors, workers' remittances represent an increasingly important source of income for many poor families whose relatives have emigrated looking for better employment opportunities.

Developing countries are also characterized by high youth unemployment and idleness rate. In the last decade, youth unemployment has been growing. The highest regional youth unemployment rate is registered in the Middle East and North Africa (25.7%) followed by Central - Eastern Europe (non-EU) and CIS (19.9%), Sub-Saharan Africa (18.1%), Latin America and the Caribbean (16.6%), South East Asia and the Pacific (15.8%) (I.L.O., 2008). In most regions, on average, the youth are nearly three times more likely to be unemployed than adults but, in all regions, the youth have higher shares of inactivity and lower employment shares compared to adults. Although, in many countries school enrollment among people aged 15 - 24 years has increased since 2000, young people who are not in school have exhibited a decrease in labor force participation, leading to an increase in the number of idle youth.

In most developing countries, one possible answer to the lack of labor market opportunities is international migration. If migrants are drawn from the pool of unemployed, then migration is beneficial not only for the migrants but also for household members left behind and for the remaining residence population. In particular, migration can increase wealth of those remaining behind through remittances, alleviate pressure on the benefit system and enhance development through the brain drain. Therefore, at first glance, remittances are beneficial because of poverty reduction and increase in consumption opportunities. How-

¹I wish to thank Tito Boeri and Michele Pellizzari for their continuous support and guidance. I really appreciate comments and discussion from Hillel Rapoport and Antonio Spilimbergo. I am grateful to Alessandro Notarpietro, Max Steinhardt, Joan Roses for useful discussion and participants to Seminar on Child Labor, education and youth employment, Second Riccardo Faini Conference for comments and suggestion. The usual disclaimer applies.

ever, remittances *per se* do not necessarily imply faster growth or development. Their long-run impact on the economic system's pattern could be both positive and negative depending on how they are used. On the one hand, by increasing household income, remittances could ease financial constraints allowing to invest more in education or to engage in new entrepreneurial activities. On the other hand, remittances could also generate a standard neoclassical income effect on labor supply: raising individual reservation wages, remittances could decrease labor supply especially in countries with low labor demand, where finding a job requires intensive search that is even huge for young persons. If it is the case, a negative effect could be at work because families could become remittances dependent, relying on transfer from abroad to satisfy their needs². Overall, the long run impact of remittances on economic growth depends crucially on how they are utilized. Ambiguous empirical results confirm this theoretical ambivalence. For example, Adams and Page (2003) in a cross - section study on 74 low and middle - income developing countries find a strong impact of remittances on poverty reduction, while Chami *et al.* (2003) conduct a study on a panel of 113 developing countries and find statistical evidence that remittances decrease economic growth, both within and between countries.

Our work is related to two main strands of literature. The first one is the literature related to labor market behavior of non migrants household members. In particular, previous works examined the link between remittances and working decision. Lucas (1987) shows that emigration to South African mines from rural area immediately reduces labor supply and decreases agricultural production but through remittances, investments in farm operations increase agricultural productivity. Funkhouser (1992), using two original data sources, finds that in Managua remittances have a negative income effect, reducing individual labor supply but they have a slightly positive effect on self - employment of non - migrants. Rodriguez and Tingson (2001) using household survey data from Manila overseas contract workers find empirical evidence that temporary migration affects both labor participation and hours worked by non - migrants household members: non migrants substitute income for more leisure. Although the magnitude of the effect is different according to the gender, having a migrant in the household reduces the probability to work. Amudeo - Dorantes and Pozo (2006), accounting for the endogeneity of remittances with respect to labor supply, show that in Mexico the effect of remittances varies among females and males and their impact on income is different from urban to rural areas. They do not find that greater remittance income reduce labor effort, but they find that remittances vary the allocation of male labor supply across different types of employment. Instead, in rural areas, the increase in remittances received reduces women labor supply in informal and non - paid activities.

The second strand of the literature related to our paper is the one of the remittances' use. This literature has focused mainly on the impact of remittances on social outcomes such as education and school attainment or health

²In the seminal paper Kritiz (1981) wrote in a very incisive way: "*Do remittances help the development process or, like a drug dependency, does their existence primarily feed the need of further (more) remittances in the future?*"

status. The basic idea is that remittance transfers can potentially alleviate credit constraints and thereby increase educational attainment of children in migrant households. Cox Edwards and Ureta (2003) find that in El Salvador remittances subsidizing school attendance, particularly in poor areas, have a large impact on school attendance and retention, even if parents have low levels of schooling. Lopez-Cordoba (2004) shows for Mexico that the increase in the fraction of households receiving remittances reduces infant mortality and illiteracy, rising school attendance. Some works are focused on the productive use of remittances. For example, considering Mexican migrants, Woodruff and Zenteno (2001) show that remittances represent at least one third of the capital invested in microenterprises throughout urban Mexican households. While the basic idea behind these researches is that remittances could only help by lifting liquidity constraints, an alternative view is that the receipt of remittances being associated with the out-migration of a family member and the disruption of the family actually impedes educational investments. McKenzie and Rapoport (2006) instrumenting current migration in Mexico with historical migration rates find empirical support for a significant negative effect of migration on schooling attendance and attainments of both boys (12 -18 year-old) and girls (16 -18 year-old). Similarly, separating the "migration effect" from the "remittance effect", in a very recent work Amuedo-Dorantes *et al.*(2008) point out that in Haiti remittances raise school attendance for all children in some communities, regardless of whether they have household members abroad or not, while, in other communities, the effect is found only among children living in households that do not experience any family out-migration.

Differently from previous works, in this contribution, we analyze the existing relation, if any, between receiving remittances and being idle (neither enrolled nor in the labor force). In particular, we study whether the receipt of remittances overcomes any incentive to have a job or look for a job or invest in education in context in which the labor demand is very scarce. Labor market disadvantages of young people are an important policy issue: The delay in the entry into the workforce has severe implications in term of poverty, human and social capital depletion, participation in the informal sector and social stability. It is important to disentangle to which extent youth unemployment is due to lack of opportunities or to a pure income effect reducing the incentive to look actively for a job. The answer to this question has non negligible policy implications.

We consider as a case study Albania. The choice of this country draws on two sets of reasons. First, methodologically, the economic changes hitting the country after the collapse of the communist regime creates an exogenous variation in the individual incentive to labor market participation. Second, although the transition is still at work, Albania's performance in terms of social indicators is particularly poor, as well as particularly relevant is the issue of remittances received from relatives abroad. Following the massive post communist emigration of the 1990s, remittances became a significant source of household income throughout the last ten years within the county.

Using data from the Albanian Living Standard measurement Survey, we ex-

amine the incidence of remittances on individual labor market participation. As far as we know, this is the first paper mainly focused on youth labor market behavior consequent to received remittances. The data set contains a lot of information about money received from household members abroad. In addition a complete record on labor is collected for all individuals being at least 15 years old. We model individual labor market status through a standard model for dichotomous dependent variables, including as regressors traditional explanatory variables (individual specific characteristics, household characteristics, geographic characteristics) and a variable capturing whether remittances are received. The potential endogeneity of remittances in the basic specification is solved using as an exogenous source of variation availability of money transfer operators and a proxy for the cost of sending money home. The key identification assumption is the following: the probability to receive remittances from abroad through formal channels depends on the number of money transfer operators available near receiver's place of residence while probability to receive remittances from abroad through informal channels or *brevi manu* when relatives temporary returns in their home country depends on the distance from the nearest cross border. The identification strategy relies on the coexistence of formal and informal money transfer channels, used to envoy either monetary or in kind transfers, and exploits between region variation as well as between households variation in the exogenously determined number of Money Transfer Operator and in the distance from the border.

Taking account the potential endogeneity of money transfer and individual inactivity within the labor market, after controlling for individual specific characteristics, for demographic composition and socio - economic status of the household, for cohort and regional variations, we find that, on average, remittances have different effects for men and women depending on the age group they belong to. Remittances may reduce or increase inactivity depending on recipient's gender and age. Traditional income effect reducing labor market participation is found in the whole cohort of young people between 15 and 24 years old and for the sub - sample of very young people (15-18). No effects is at work for people between 19 and 24. By the contrary, we find that inactivity is lower for people aged between 25 and 33 receiving money from relatives abroad.

The paper is organized as follows. Section 2 discusses alternative theoretical implications of remittances on labor force participation. Section 3 presents some evidence on available money transfer channels. Section 4 gives an overview of remittances and labor market in Albania. Section 5 introduces the dataset used for the empirical analysis that is discussed in Section 6. Finally, Section 7 concludes.

2 Theory and relation to the existing literature

In the traditional neoclassical framework of labor supply, individuals optimally decide how to allocate time to labor and non labor activities maximizing their utility subject to a budget constraint that is a function of the individual mar-

ket wage, time budget and non-labor income. Non labor income includes both individual assets and other household members labor income. It positively affects individual reservation wage, that is the extra earning would require to be induced to give up one unit of leisure, when an individual is not working at all: *ceteris paribus*, as the reservation wage increases, as the probability to be active in the labor market decreases. Therefore, international remittances should lead to a reduction in labor force participation of recipient household members left behind through an income effect.

However, from a theoretical point of view the effect of remittances on youth labor force participation is not so straightforward and it could potentially take both a positive or a negative sign. At a first glance, we should expect a negative relationship through an income effect allowing for higher investment in education. The underlining assumption behind this result is altruism: if parents love their children and are concerned about their future, then they should increase schooling expenditures on children if they are less credit constrained. This hypothesis is confirmed by some studies which found that remittance income lowers education inequality by improving access to education for the poor (Hanson and Woodruff, 2003). A negative effect can also be justified by the fact that migration of household members implies changes in who supervises that children go to school. Typically, in the first migration waves, males are those who move abroad while females are the ones who stay in the home country, take care of the children and make schooling decisions. There is a well established consensus that important gender differences exist in preferences over the welfare of children leading to an increase in investments in child education in households where mothers exercise greater control over the use of household resources.

There are also other mechanisms compatible with altruism that can yield opposite results. In principle, migration and remittances could increase labor force participation for the changes in family structure associated with migration. Although remittances alleviate credit constraints, migration potentially disrupts family life and the lack of available adults could place greater labor demands on school age family members, particularly in home production activities but also in market activities. For example, remittances are almost certainly associated to the absence of one migrating parent. This can raise the opportunity cost of schooling through an increase in youth labor productivity in housework (essentially for girls) or farm work (essentially for boys), which can in turn affect labor market participation in a variety of ways (i.e., they can be substitutes, as one would think intuitively, or complements, as school dropouts can share their time between various types of jobs). In addition, it is also possible that having a migrant parent actually lowers the expected returns to schooling. If for example, once abroad, migrants are employed especially in low - skilled sectors or even in the underground economy or in illegal occupations, having a migrant parent is almost certainly associated with higher migration prospects, and it should act to lower the expected returns to schooling and drive more children out of school in preparation for a migration. Recent papers in a similar context have found such a depressing effect of migration on children educational attain-

ment, which can also translate into more labor force participation (McKenzie and Rapoport (2006) or DeBrauw and Giles (2006)). Another justification of a positive effect on labor force participation depends on the assumption that international migration directly reduces the size of labor force and generates an upward pressure on domestic wage which creates a substitution effect from leisure to labor. Finally, no effect could be found if remittances simply replace the income that the migrant worker would have contributed to the household if he/she had stayed in the home country. If the amount remitted does not differ significantly from the income loss associated with emigration, we should not find any statistical significant difference between remittances receiver and non remittances receiver households.

As from a theoretical point of view results can be different, also the empirical evidence trying to measure the effect of remittances has been mixed. In principle many potentially conflicting effects of migration on youth labor force participation/child labor are at work.

3 Background on remittances and labor market in Albania

Throughout the twentieth century, Albania was one of the poorest and least developed European countries. After the collapse of the communist regime in power for 46 years, Albania faced the challenge to become a market economy and a more open society. The country experienced a sudden and unexpected shift from an autarky and inward - looking economy to an open market economy. Starting from extremely low income levels and very poor infrastructure, the passage from totalitarianism to democracy in 1991 was characterized by a further significant decrease in output, a rise in inflation, accompanied with political and social turmoil. However, after a recession period, the economy has known economic development with an average real GDP growth of 4.3% between 1990 and 2001. In particular, in the first years of transition thanks to foreign aid, especially from Italy, the GDP increased mainly by the agricultural sector. The recovery period was interrupted by a strong recession between 1996-1997, essentially as a result of the crash of pyramid investment schemes. In addition, the country suffered from the social and economic shocks accompanying the Kosovo crisis in 1999 when more than half a million of the Kosovo - Albanian refugees arrived in the northern regions. Despite these shocks, starting from a very low income level, Albanian economy has been able to reach a sustained growth, even though it remains one of the poorest countries in Europe (with GDP per capita at around 1,300 US\$).

3.1 Remittances

A natural consequence of the transition has been huge and massive migration flows, although the country had a long history of emigration stretching back

centuries. During the 20th century the country experienced two main migration periods: from 1945 to 1990 and from 1990 on. From 1940 to the late eighties both economic and political contacts with the rest of the world, even communist, were absent: international and internal migration was accurately monitored by the regime. After 1990, in the absence of migration policies and controls, single individuals and entire households started to move internally, from rural area towards urban area, and internationally. The first migratory wave was experienced in 1992 when the agricultural and industrial production fall significantly and unemployment increased. In addition to the economic crisis, this massive migration is partially explained by the demographic evolution occurred during the socialist period when the population went from 1.1 millions in 1945 to 3.2 millions in 1985 and accumulated a stock of young people with a relative higher level of education. Another significant migratory wave took place at the end of 1996 and beginning of 1997 as a result of deteriorating macro economic indicators. The country experienced both political and social upheaval that turned into a revolt. In the year 2000, 5,000 Albanians obtained the status of political migrants in Italy, France and Germany. It is possible to identify three regions that mainly drove migration flows. First, the north (districts of Diber, Mat, Puke, Tropoje), the poorest part of the country with few employment opportunities, exclusively in agriculture, and low income level. Northern people migrated both internationally and internally, towards central richer regions along the Tirana, Durres, Kruje axis and towards southern regions that although less developed were relatively richer. The main destinations for international migration were Italy, Greece, Germany and UK. Second, the Tirana - Durres central area that was the main destination for internal migration from all the decentralized Albanian area and experienced a significant outflow towards the main international destinations. Finally, in the south of the country (districts of Vlore, Berat, Korce) three quarters of the migration outflow was directed towards Italy and Greece and one quarter moved internally from poor rural areas towards urban centers.

A common feature of Albanian emigrants is their attitude towards saving. On average, yearly savings for long-term emigrants' families were 5,056 euros in 2002, which amounted to approximately 26.9 percent of their yearly income. A significant part of the overseas savings is transferred to the original household and represents the largest source of external funding. Remittances increased significantly during the 1992-96 period, fell by half in 1997, and raised again in the following years. As a whole, the flow of remittances passed from \$500 million in 1994 to \$1,161 million in 2005 (Table 2). Representing between 10 and 16 percent of the country's GDP, they have exceeded by several times the amount of foreign direct investments (FDI) in the country, as well as the amount of aids. At first blush, emigration could potentially become a motor for economic and socio-cultural progress in Albania, by bringing in much-needed money through remittances, and diffusing more open societal and democratic norms. However, Albanian families used received remittances especially to afford their daily primary needs (food and clothing) and to improve quality of life, to construct new houses, to improve the quality of dwellings (move the

toilet indoors, repair/replace roofs/doors/windows, buy furniture) or maintain traditional family ceremonies. As pointed out by De Soto *et al.* (2002) and King (2005), remittances in the Albanian context allowed economic survival and poverty alleviation. Only a small part of them is deposited in the banking system and a little fraction is invested in real estate, production, and the service or agricultural sectors. Additional income coming from remittances helps to alleviate family poverty, but it does not seem to create new job opportunities through investment, which would in turn boost incomes and thereby possibly prevent new migration flows. If remittances are not used as incentives to encourage economic and social development they risk to create dependency. A different path seems to emerge in urban *vs.* rural areas. It has been pointed out that urban households tend to prioritize primary consumption and house repairs instead of education, while rural households use received remittances to reduce debts, to save or invest.

To estimate precisely the flow of remittances is very difficult because a significant part is not sent through banks. Albanian remittance corridors are actually dual, including either formal and informal channels of transfers. Formal channels refer to Money Transfer Operators (MTOs) and the banking system. MTOs are non-bank financial institutions that guarantee a rapid and reliable way for remittance transfers. Once the remitter started a transaction, the money can be collected by the beneficiary in Albania in a few minutes thanks to software platforms and arrangements for settlement of transactions between originator and distributor agents. The M.T.O. dominating the formal market for money transfers to Albania is Western Union followed by Money Gram that in 2004 started to provide its services in the country. The weakness of Albania's banking system (low quality services in bank, lack of banks branches within the country, low exchange rate) together with the geographic proximity of the destination countries, leads remitters to choose very often informal channels. Informal channels refer to all the situations in which emigrants bring money themselves at home or give money to their network of friends and relatives when they come in the origin country. In some cases emigrants use couriers by paying a commission (*havala* system)³.

The choice of the channel depends on several factors (legal *vs.* illegal status of remitter, short *vs.* long term migration, educational level, development and efficiency of the banking system) and it is characterized by a trade-off between speed of transfer and transaction costs (Table 3 -Table 5). According to official statistics, approximately 60 percent of remittance inflows comes from Greece, 30 percent from Italy, and the remaining from the USA, Germany, and other European countries. For example, the Italy-Albania corridor is mainly informal and the physical transfer of cash is the most popular method to send remittances in the home country. According to the Bank of Albania estimates, almost 60 percent of remittance flows is in cash and takes place through informal channels, while the remaining 40 percent of money transfers takes place mainly through money transfer companies and to a limited extent by banks. The Italian south-

³This channel is not used in Albania except in very few cases.

ern region has become an important gateway for Albanian migration thanks to its proximity. It takes less than five hours to reach the city of Bari by ferry from the city of Durres, a lot of ferries and low-cost flights are available between these two countries, therefore it is very likely that migrants travel to their home country more times a year (at least during summer and Christmas holidays) and carry their remittances in cash. These aspects together with liberal regulations on cross-border cash transfers, makes it convenient for migrant workers to carry physical cash out of Italy for relatives back home in Albania. In both Italy and Albania, regulations allows individuals to carry on freely amounts not exceeding 12,500 euros, while amounts in excess of this threshold must be declared⁴.

In general, formal channels are used by legal migrants, long term and more educated migrants, while informal channel are preferred by illegal, short term or less educated migrants. Although both the two channels are used, in recent years there is an increasing tendency to transfer money through formal channels, because of banking sector reforms and the decrease of emigrants' visits to their families in Albania. Figure 1 provides evidence of this trend in money transfer channels used by Albanian emigrants.

3.2 Labor market

The transition towards a market economy had significant effects also on labor market. Like many other transition economies, Albania experienced a huge decline in labor force participation rate (Table 6). In the early 90s economic transformations led to a fall in employment in the whole economy but especially in the public sector. In the public sector the number of employed people decreased by almost 22 percentage points from 1991 to 2002. The major structural change in the labor market was the closure of unproductive public enterprises together with the dismantling of the agricultural cooperatives. The industrial sectors suffering more were extraction of minerals, metallurgy, equipment, chemicals industry, textiles and paper. Only the service sector experienced a slightly positive increase in the number of works. The main beneficiaries of this increase of employment in the service sector were men, while the absolute number of engaged women remained almost constant. The pervasive privatization of the whole economy was accompanied by a self-employment increase and by a significant decrease in the number of people involved in agriculture, even though the agricultural sector is the most important in terms of employment. Besides the construction industry, that is one of the most developed, there are other sectors that have employed and continue to employ a lot of people. Not all these changes numbers are captured by official statistics because in a lot of sectors there is a high level of informality or underground economy.

Although the unemployment rate is higher in urban areas, there is a significant under utilization of the labor force in rural area. In addition, there is a huge gender gap in employment rates. Gender differential is much larger than in the EU and in most other transition economies, it is persistent over time and

⁴Data from Italian *Guardia di Finanza*.

across educational levels. In the cities the female employment rate is particularly low because of limited labor demand. Furthermore, those women who migrate from rural areas have insufficient skills for the limited number of formal jobs available, usually in the public and banking sectors. Compared to previous levels at the beginning of the transition period, unemployment has decreased and followed a downward trend, though it is high when measured against the EU-15 level. Starting from over 22% in the early years of transition, it reaches 14.4 % in 2004 (Figure 2). The gap between rural and urban areas is significant: in rural areas unemployment is more than three times lower than in Tirana and about five times lower than other urban areas. Different from employment rate, there is no significant gender gap in unemployment. A huge disadvantage in the labor market is faced by young people for which employment rates are lower than those of older age groups.

However, it is crucial to highlight that up to now, the country does not conduct complete and standardized surveys on labor force, unemployment rate and labor market. It makes very difficult the real evaluation of the unemployment level and does not reflect the real tensions of the labor market. The statistical data concerning the unemployment rate relates to registered unemployed in the Employment Offices of the National Employment Service. The high level of informality within the labor market, the high level of migration flows from 1991, the high rate of hidden unemployment in agriculture sector, and the high number of unemployed that are not registered in the public employment service, constitute some of the factors that prevent from having a reliable picture of the labor market. In general, according to available data, women constitute about half of the total registered unemployment, unemployment is mainly a long-term phenomenon (66 % of the total registered unemployment) and long term unemployed people are typically men (52%). On average, unemployed people have a low level of school attainment: about 53.6 % of the total number of unemployed registered in the public employment offices have primary education.

4 The data

The empirical analysis uses data from the Albania Living Standard Measurement Study (ALSMS). These data have been collected by the World Bank and the Albanian Institute of Statistics (INSTAT) from 2002 to 2004 and are part of a bigger strategy aimed to improve the data quality in Albania.

For historical reasons (i.e. the communist regime) national data in Albania are few and their quality is quite low. In a survey carried out by INSTAT some years ago ⁵, it has been pointed out that having accurate measures of household welfare in line with well accepted international standards is crucial for monitoring trends and structural changes on a regular basis. Following the Poverty Reduction Strategy Paper, the Government of Albania decided to reinforce its commitment to strengthen its ability to collect and analyze all the information necessary to inform policy - making through the Population and

⁵The 1998 Living Condition Survey (LCS) and the 2000 Household Budget Survey (HBS).

Housing Census, the Living Standard Measurement Study every three year and the annual panel surveys.

The LSMS was established by the World Bank in the 1980 to explore ways of improving the type and quality of household data collected by government statistical offices in developing countries. The objectives of the LSMS were to develop new methods for monitoring progress in raising levels of living, to identify the consequences for households of current and proposed government policies and to improve communications between survey statisticians, analysts and policymakers. Therefore, data are collected on many dimensions of household well - being including employment, income, saving, consumption, migration, education, fertility, housing.

The Albanian panel survey sample was selected from households interviewed on the 2002 LSMS. The selected panel component is designed to provide a nationally representative sample of household and individual within Albania and to minimize the variability in households' selection probabilities.

The final sample is composed by 23,748 individuals (50.29 % are male, 49.71 % are female) belonging to 5,356 households divided as follows:

- Wave 1 (2002): 1,782 interviewed households (891 urban, 850 rural) and 7973 household members including children aged under 15;

- Wave 2 (2003): 1,780 interviewed households (2,155 selected households, 375 not interviewed), 900 urban and 880 rural, and 8110 household members including children aged under 15. The majority of the non interviewed households (348) were due to split - off moves out of the country while the other 4 had moved but could not be traced;

- Wave 3 (2004): 1,797 interviewed households and 7,476 household members including children aged under 15, of which 7,212 already sampled in Wave 1 or 2 and 264 new members.

The ALSMS contains a lot of information about monetary transfers received by relatives who migrated both internationally and internally. In particular, the first wave recovers a complete history of all transfers, both in money and in goods, received in the year before the interview from household members migrated internationally or internally. The most knowledgeable household member is asked whether during the previous 12 months the household received any monetary or in kind transfer from people who do not live in the household. In case of positive answer the questionnaire proceeds by asking information about the relationship with the donor, his/ her residence, since when she/he is migrated, the amount transferred and the reason for the transfer. Therefore we conduct our analysis using the 2002 Albanian Living Standard Measurement Survey, the most complete for the topic we study.

From our sample, we observe that, on average, more than 27% of individuals receive transfers from migrated household members (i.e. household members who migrated internally or internationally) without significant differences between urban and rural areas. However, according to official balance of payments records, workers' remittances are defined as transfers in cash or in kind from migrants (abroad) to resident household in their origin country. Using this definition, in our data set, remittances receivers *strictu sensu* are about 23%, the

percentage is slightly higher in urban areas than in rural areas, while only the 5% of household members gather transfer from relatives who migrate internally (Table 7). As stated in the previous section, Albania experienced a huge migration outflow throughout all the 90s and therefore typically each household has more than one relative abroad. In line with this dynamic, in our sample almost the 41% of individuals receive transfers from more than one household member. On average, each household receives 104,300 Lek (approximately 1,130\$) as monetary transfer, generally speaking, of which 38,250 Lek (approximately 415\$) as remittances, while per capita transfer income amounts to 21,100 Lek (approximately 230\$) and remittance income amounts to 7,830 Lek (approximately 85\$). Monetary remittances account for about one third of household income. Considering also in kind donations, transfers do not vary significantly both at household and per capita level, while remittances increase by 5 percentage points at household level and by 6 percentage points in per capita terms. Financial assistance is especially given by first relatives, such as children and sisters/brothers, whose prevailing residences are Greece and Italy (Table 8 and Table 9).

As presented in the previous section, also in our sample we have evidence that migrants tend to send money home to satisfy a specific need of their household. Transfers are mainly used to purchase consumption goods and to satisfy household's basic necessities, in addition they are spend to afford medical expenses, to increase dwelling quality and only a very little part is invested in enterprises or in human capital formation (Table 10).

For what concerns individual labor market behavior the questionnaire contains information about working experience in the 7 days before the interview. All household members 15 years and older are asked whether they worked for someone who is not a member of their household, worked on a farm owned by their household or worked on their own account. Considering all sample, there is a significant difference between male and female behavior in urban and rural areas. More than 50% of individuals reports a work experience: male are more likely to work both in urban and rural areas, but it seems that urban areas are characterized by a more problematic labor market. On average, in urban areas individuals tend to work more for non household members than for household members, while in the rural areas the opposite happens. Considering young people belonging to the cohort between 14 and 25 years⁶, data show that, on average, they work less especially in urban areas. It could depend on the fact that in urban areas individuals tend to study longer but it could be also the case that there is a lack of adequate work opportunities (Table 11 and Table 12).

We define individual labor market status according to I.L.O. standards so that:

- unemployed are people who are (i) without work, (ii) available for work within the next two weeks and (iii) have been seeking work for the preceding

⁶Considering young people this age group is a widely accepted statistical convention (see I.L.O or UN). In our analysis we will consider also other age spans.

four weeks;

- discouraged are people who are (i) without work, (ii) available for work within the next two weeks but (iii) have not been seeking work for the preceding four weeks;

- inactive are people who are (i) without work but (ii) are not available for work within the next two weeks and (iii) have not been seeking work for the preceding four weeks.

As shown in Table 13, in all the sample the fraction of inactive female is higher than the fraction of inactive male, both in urban and in urban areas, but bigger disadvantages appear in urban areas where more than 42% of individuals are inactive. Focusing on younger cohort, the percentage sharply increases (62% in urban areas and 34% in rural ones). The educational level of inactive people is low: more than two third of people have completed only primary school. The proportion does not change restricting to people that were not enrolled at the time of survey. The data presented in Table 14 suggest that there is only a small increase in young people educational attainment in urban areas.

Remittances are associated with an higher rate of inactivity. Table 15 shows that in the whole sample the fraction of inactive is higher among households having relatives remitting from abroad, however the difference is not so evident among people 15-25 years old and, among them, two opposite patterns appear: inactivity is lower for remittances receivers from 15 to 18, while inactivity is higher from remittances receivers from 19 to 25. The raw data suggest that some years after their entry into labor market, young people seem discouraged and do not put effort to look for a job or to start an activity on their own account.

5 Econometric Analysis

5.1 Empirical Strategy

In the empirical analysis we investigate whether transfer received from abroad affects individual labor market behavior. We model individual labor market status through a standard binary outcome model including a variable capturing whether individuals receive help from household members abroad and a set of traditional explanatory variables at individual, household and local/geographical level. Our prior is that received help has a direct positive effect on individual inactivity probability because of a traditional income effect.

The empirical analysis proceeds in different steps. First we evaluate the role of remittances in affecting individual labor market participation for everyone of working age. In the second step, we focus on young people who belong to the cohort between 15 and 24 years. In the third step, we split this group in two different sub - groups one including people potentially enrolled in high - school and the other including potentially enrolled in university. Finally, we consider a broader definition for youthness including all people up to 32 years old.

Formally, in order to study the effect of received remittances on individual labor market behavior we estimate the following equation:

$$y_i = \beta_0 + \beta_1 R_i + \beta_2 X_i + \mu_i \quad (1)$$

for $i = 1, 2, \dots, n.$

The vector y_i is a binary variable defining individual labor market status, X_i is a vector of exogenous explanatory variables at individual and household level, R_i is the variable capturing the flow of received remittances during the last year and μ_i is the stochastic error term.

Differently on other works in this field that consider the effect of remittances on hours we choose to exploit their impact on labor force participation *tout court* because of the particular structure of Albanian labor market. The economic structure subsequent to the collapse of the communist regime leads to extremely high levels of self-employment (63% of all employment) and it even casts doubt on the mere notion of a labor market. The lack of labor demand led people to start their own income-generating activities, which are often low skilled, low value added and low paid. Formal sector labor demand is very limited and is largely restricted to the public sector and to selected private economic sectors such as banking and, to a certain degree, tourism and construction. Also the supply-side presents deficiencies that are as apparent as the lack of job creation. The education levels of the population are significantly lower than the EU average and the situation is further aggravated by the high migration rate of workers with medium- and high-level skills. Participation rates in education for children and young people remain lower than the averages for the EU and other countries of the region at any educational levels, but in particular at secondary level. Children in rural areas and girls are particularly disadvantaged. Drop-out rates in the final years of basic education are high, and a large percentage of children leave the school system without achieving any qualifications. Therefore, considering all these aspects, we expect that if remittances have an impact on labor supply it should not be along the intensive margin (hours or intensity of work on the job) but along the extensive margin (participation in the labor force).

First of all, as dependent variable we consider the dummy *Inactive*, taking value 1 for those individuals who have no work, both temporary and permanent, are not available for work and did not look for a job. Our variable of interest is individual remittances income and our prior is that the estimated coefficient would be positive. Among the controls X_i we include age, sex, educational level, household size, other family members' income, a dummy indicative of received benefits and social assistance, household dependency ratio (the percentage of household members younger than 15 and older than 64 over the number of household members aged 15-64), relationship to the household head and regional dummies. We estimate the model for different age categories: the first one is the whole sample of individual having potentially completed compulsory education, the second in the sample of young people between 15 and 24, the last two sets of regressions are run in two different subsamples, the one of very young individuals

(15-18) and one including young people (19-24). In all the specifications we control for school enrollment and attendance

In order to estimate equation (1) through maximum likelihood estimation (ML) it is necessary to assume that all systematic differences between remittance-receiving and non remittance - receiving individuals can be explained only by observable individual, household and regional characteristics. However, in the previous equation, received remittances and the error term could be correlated and therefore our estimates could be biased. Remittances could be endogenous for different reasons. First, remittances may be correlated to income and wealth determining individual labor market status so that heterogeneity and omitted variables bias would happen. In addition, in a regression including the amount of received remittances during the last year, the estimation bias could depend on measurement errors just for the way in which data are collected into the questionnaire. In the survey, all individuals were asked to list all monetary transfer received in the previous year from all household members. It is very likely that individuals unintentionally misreported the correct amount due to the temporal gap between the transfer arrive and the survey. Furthermore, individual labor market status could affect migrants' decision to send remittances to their relatives in Albania. If migrants tend to send more money when their relatives in the home country are out of the labor market, a reverse causality problem could arise. It is straightforward that more than one source of endogeneity could be present in our original specification.

We deal with the endogeneity problem using as instrumental variable for remittances, the per - capita number of Money Transfer Operators in each district and the distance from the nearest cross border. Our key identification assumption is that the probability to receive remittances from abroad through formal channels depends positively on the number of available money transfer operator offices while the probability to receive remittances from abroad through informal channels or *brevi manu* when relatives temporary returns in their home country depends negatively on distances from the border.

We decide to use two different instruments given existing evidence about money transfer channels used by Albanian migrants. As presented in Section 3, although the money transfer structure has changed over time, remittances towards Albania follow a dual flow using both formal and informal channels. Starting from the mid 90's, financial flows transferred to the home country through the banking system and other money transfer agencies has been increasing while in 2002 the 44.6% of total remittances flows, while in 1994 formal transfer represented only 7.5% of the total (Bank of Albania, 2003 and Bank of Albania, 2003). In Albania the most diffused formal channels include the two international agencies (Western Union and the Money Gram) and post offices network (Hernandez-Coss and al. (2006)). The role of commercial banks and the postal office in Albanian corridors is limited. MTOs - non-bank financial institutions - offer a reliable and rapid way of making remittance transfers (only few minutes) while, banks require at least 2 business days for the remittance to be received by the beneficiary in Albania. Moreover, unlike banks, MTOs provide services to any person with a valid identification document (ID), regardless

of his legal status. Most banks, on the other hand, only provide money transfer services to account holders. Furthermore, to open a bank account abroad, persons must demonstrate their legal resident status.

Therefore, the first source of exogeneity we use is a proxy for the accessibility to formal money transfer that is the per capita number of available international money transfer offices at district level.

As stated above, formal remittances sector is duopolistic. Western Union offers money transfer services through a large network of agents all around the world, which includes major commercial banks and facilitates transfers of money worldwide from practically any city or major town. In Albania, money can be paid to beneficiaries in at least 200 locations distributed in the main remittance-recipient areas. The Western Union agency started to be active in Albania in 1993 and hereafter open new branches in all districts of the country (in the district of Scutari, only, this agency has 14 offices in the villages and cities). Money Gram – the second largest remittance company in the world after Western Union – started to provide money transfer services to Albania in 2004, after the data used in our analysis have been collected. Therefore we restrict our attention only to Western Union.

In order to construct our instrumental variable, we collect information about the location of all Western Union offices and agencies within Albania. For each agency or office we recover the district they belong to and for each district we collect data on total population according to Albanian 2001 Census. Both for agencies/offices and population we use two years lagged data compared with the ones coming out from the survey in order to avoid reversal causality. Available Western Union Offices seem a valid and reasonable instrument being correlated with the probability of receiving remittances, but uncorrelated with the probability to be inactive. We expect that individuals living in districts characterized by a higher number of per - capita offices are more likely to receive remittances than individuals living in districts with little access to official money transfer operators. In addition, given that formal channels are preferred by more educated people, we interact our first instrument with the fraction of household members having a secondary education level. We account for the potential correlation between the average household educational level and individual labor market status and we test the joint exogeneity of the two excluded restrictions with respect to labor market participation.

As second source of exogeneity we choose a proxy for the cost of sending money through informal channels. In Albania the preferred informal channel is the physical transfer of cash: migrants bring money in cash when they come back to visit relatives in the home country or give money to relatives and/or friends travelling home (Uruci and Gedeshi, 2003). From this evidence, our instrument is the distance from the nearest border cross. For each border cross (we consider both official and unofficial border cross in order to account also for illegal migrants) we collect data on their location (latitude and longitude). The exit points we include in our analysis are the harbour of Durres, Vlore, Apolonte, Sarande and Shengjini used by migrants to Italy and Greece; Kakavje, Kapshtica, Konispol, Palambas, Perat, Gline, Miras and Trestenik through which

it is possible to enter in Greece; Tucep, Gjorice, Rabdisht, Zogaj, Tropoje and Qafe-Thane which allow to enter Macedonia; Hani I Hotit and Ulquini for Montenegro; Morine for Kosovo. We include both official and non official cross border in order to account also illegal migrants.

We then recover geographical coordinates of individual place of residence and using the great-circle formula⁷ we compute the shortest distance between the border and each Albanian location included in our sample. The identification assumption behind the choice of this proxy is that as the distance from the border increases as the cost of sending money home increases and therefore the probability to receive remittances through informal channel decreases.

As a result, we estimate the following instrumental variable model:

$$y_i = \beta_0 + \beta_1 R_i + \beta_2 X_i + \mu_i \quad (2)$$

$$R_i = \alpha_0 + \alpha_1 MTO_i + \alpha_3 MTO_i * Sec_education_hh + \alpha_3 dist_border_i + \alpha_4 X_i + \varepsilon_i \quad (3)$$

$$for\ i = 1, 2, \dots, n.$$

Equation (3) is the first stage for the instrumental variable estimation and the excluded restrictions are the per capita number of formal money transfer operators at district level (MTO_i), the number of money transfer operators interacted with the fraction of individual within the household with secondary education ($MTO_i * Sec_education_hh$) and the shortest distance between individual place of residence and the border cross ($dist_border_i$).

According to our identifying hypothesis, we expect the coefficient α_1 to be positive, as more MTOs increase the probability to receiving remittances from relatives abroad. By contrast, we expect people living faraway from the border to be less likely to receive remittances so that the coefficient α_3 should be negative.

5.2 Econometric Results

Though we expect remittances to be endogenous, we first estimate using maximum likelihood technique a Probit model on the probability of being inactive for the sample of all individuals in working age (15-64). Since our instrument only varies at the district level, we have computed robust standard errors, clustered at the district level to allow for arbitrary correlation in the error structure of individuals within the same district.

The first column of Table 16 shows the results from a baseline specification in which the dependent variables takes values 1 for inactive individuals

⁷Having geographic coordinates of two points A and B on the earth surface (latitudeA, longitudeA, latitudeB, longitudeB) in order to compute the shortest distance between them the formula is $d=3963.0 * \arccos[\sin(\text{lat}1/57.2958) * \sin(\text{lat}2/57.2958) + \cos(\text{lat}1/57.2958) * \cos(\text{lon}2/57.2958 - \text{lon}1/57.2958)]$.

aged between 15 and 64⁸. The main regressor included is a dummy identifying whether individuals receive remittances from relatives abroad. In order to capture gender differences in the individual labor market participation, we control for the sex of each individual and we account for cohort effects including individual age. In addition, to control for the effect of educational differences, we use the household average number of school years completed and individual educational level. We also control for wealth and transfers/benefits proxies including a dummy for any received public transfer or benefit, an index for household dependency ratio and the labor income of other family members but individual *i*. Adding dummies for the actual relation with the head of the household we should control for differences in labor market participation due to cultural and social differences linked to the patriarchal family structure existing in Albania. Furthermore, an indicator for urban areas and a full set of regional dummies are included to account for variations in local labor market conditions and regional specific characteristics.

According to these first estimates, on average, we find no statistically significant differences in labor market participation between remittance-receiving and non remittance - receiving individuals. Men are less likely to be inactive and, looking at age's coefficient, more recent cohorts seem to participate less to the labor market. These results are in line with statistical - descriptive evidence on disadvantages in the labor market faced by younger people and female in Albania. Income effect seems crucial for labor participation decisions: while public assistance and other family labor earnings increase inactivity, when the dependency ratio is higher individuals tend to be more active into the labor market. In addition regional differences are at work. *Ceteris paribus*, living in urban areas increases the probability of being inactive: although labor market transition is extremely difficult in the whole country, people in rural areas could find a work in agriculture, the same does not happen in urban areas. The patriarchal family structure existing in Albania seems important, so that household head are more likely to be active than other family members. As expected, more education increases the probability to be active but by the contrary individuals belonging to households with an average higher education level are more inactive, probably due to the increased incentive to be enrolled for a longer period.

To better investigate the effect of received remittances, in the second column we show the estimates obtained including in the basic specification also a dummy variable taking value 1 for people enrolled in any level of education for the current academic year at the date of the survey. Not surprisingly, people currently enrolled in school do not work nor make any effort to look for a job. Again, we do not find any relevant effect of money received from abroad on inactivity, although living in a more educated household have no more any influence on activity nor being the head of the household.

From column 3 to column 5, the results have been disaggregated by gender. All the specifications presented here follow those analyzed for the baseline

⁸Complete summary statistics on the variables used in the regressions can be found in Appendix, Table A1

model and the results are very close to those previously found. The direction of almost all the effects remains unchanged but some of the coefficients now are significantly different from zero.

The main difference is found in the male sub sample for which remittances positively influence the probability of being inactive, also after controlling for school enrollment. In particular, looking at the marginal effects, remittance receiving men are now 4.8 percentage points more likely to be inactive than remittance non receiving ones and when controlling for enrollment the effect doubles passing to 8.4 percentage points. No effect is found for women in working age.

As argued in the previous section, maximum likelihood estimates could be biased because the potential endogeneity of received remittances with respect to inactivity and therefore we consider the instrumental variable model defined by equations (2) and (3). Finding significant difference between the two sets of coefficients will prove that remittances are truly endogenous and will show the direction and magnitude of the endogeneity bias. Our inactivity regression is characterized by non linearity which requires a special method of instrumental variable meant for dealing with the endogeneity in probit models. Because our dependent variable defining individual labor market participation is binary, the standard two-stage least squares method used to estimate an equation with instrumental variables is not the most appropriate estimation technique. The reason is that the model assumes a linear relationship between the instrumented variable and the dependent variable, when in fact it is not the case. We therefore estimate our model, instrumenting for received remittances, using the method developed by Newey (1987), which allows to recognize the non-linear relationship between the instrumented variable and the dependent variable, and, as a result, provides efficient estimation of the parameters.

Results are presented in Table 17 for both the first-stage and instrumental variable final estimates. Although we do not show in the table individual, household and regional characteristics coefficients, they have been included as controls also in the first-stage. In all the specifications, we consider the first-stage F-statistic of joint significance of the instruments and being well above 10, we can conclude that our instruments satisfy the relevance and validity conditions (Staiger and Stock (1997)). Tests of the overidentifying restrictions reveal that the instruments are uncorrelated with the structural error proving that our instruments are exogenous.

As presented in the second and fourth column, in the all sample, remittances do not statistically influence participation into the labor market and the same happens in the sub sample of female. Remittances positively affect male inactivity but their effect becomes statistically insignificant once we control for enrollment (Column 6 and Column 8).

Having explored our baseline regression, we investigate the effects of received remittances on youth labor market behavior. We start from the basic definition of youth used by I.L.O or UN, and we focus on people aged between 15 and 24. Maximum likelihood estimates are presented in Table 18, while Table 19 presents results obtained with instrumental variables techniques. As for the

complete sample of working age people, remittances have no effect on individual inactivity. The probability of being inactive decreases with age and educational level. A young household head is less likely to be inactive, while spouse are more likely. Differently from our previous results, income effects subsequent to social assistance or household wealth do not seem to have any statistical significant effect on youth labor market participation. The second column shows that also including a control for individual school enrollment in order to check whether inactivity is actually due to higher school enrollment, previous results still hold and remittances seem not to be correlated with youth labor market participation. We exploit whether our result are driven by a different gender pattern and we run our regression separately for men and women. We find that men who receive remittances are more likely to be inactive (Column 3) also after controlling for school enrollment in current academic year, although the magnitude of the coefficient is lower (Column 4). Marginal effects reveal that remittance receiving young men are 2.3 percentage points more likely to be inactive than non receiving ones but the probability increases to 3.3% after controlling for enrollment. No effect is found for women in working age. By the contrary, we do not find any statistical significant correlation between money received from and labor market participation for young women (Column 5 and Column 6).

Aware of the potential endogeneity bias that could drive previous results, we consider the instrumental variable model. The main findings are reported in Table 19. Interestingly, for the youth's cohort significant difference between the two sets of coefficients appears and prove that remittances are truly endogenous. Accounting for endogeneity we find a strong statistical significant positive effect of remittances on individual inactivity (Column 2) also after controlling for school enrollment (Column 4), although the effect is smaller. Transfers from abroad have a higher impact on men inactivity (Column 6 and Column 8) than on women inactivity (Column 10). The effect on women disappears after controlling for school enrollment (Column 12).

Having considered the whole cohort of young people, we split it in two sub-sample, the first one including people between 15 and 18 years old (High school age) and people between 19 and 24 years old (University age). Table 20 presents maximum likelihood estimates for the very young people. In the whole sample we find that money received from abroad reduces inactivity status (Column 1) also controlling for enrollment (Column 2). Receiving remittances, youth experienced a decrease by 1% of the probability of being inactive and the effect augment to 3.3% considering enrollment. These results could suggest that remittances are used in a productive way by young people who so not simply substitute labor and leisure. The results seem to depend on a different gender pattern: we do not find any statistical effect for men (Column 3 and Column 4) but the effect for women is extremely high (Column 5 and Column 6). Controlling for endogeneity (Table 21), remittances have effect in the whole sample (Column 1) but it disappears when we include as regressor individual enrollment status (Column 2). Remittances seem to be uncorrelated with female labor market condition (Column 10 and Column 12) but again they negatively affect labor

force participation of males. For the cohort of older people, aged between 19 and 24, through the probit estimation we find a positive statistical significant effect, both for men and women (Table 22) but according to the IV estimates remittances have no effect on individual labor market inactivity (Table 23).

A recent study on youth employment in Albania conducted by the AGENDA Institute and the World Bank, shows that the country have huge problems in employment related issues especially for the young people aged between 15 and 32 who constitute the majority of the unemployed⁹. In line with these results we use a broader definition of young people than the traditional one used by U.N. and I.L.O.. In Table 24 we present our previous estimates for the 19 - 33 years old cohort. In all the sample remittance are positively correlated with a higher probability of inactivity, the correlation is higher for men than for women. The IV methodology shows that remittances reduces inactivity (Column 4) but, controlling for enrollment, it is not the true any more (Column 4). As before results are related to different gender dynamic: males receiving remittances are less likely to be inactive (Column 6) and the magnitude of the effect increases when we include individual enrollment status (Column 8). No statistical effect seems to be at work for females.

The same behavior is shown for young people who are no more in the schooling age (25 - 33 years old) (Table 25 and Table 26).

6 Conclusions

In this paper we shed light on youth labor market participation subsequent to receiving remittances from relatives migrated internationally. Taking account the potential endogeneity of money transfer and individual inactivity within the labor market, we find different effects for men and women in different age groups. Remittances may reduce or increase inactivity depending on recipient's gender and her/his age. Traditional income effect reducing labor market participation is found in the whole cohort of young people between 15 and 24 years old and for the sub - sample of very young people (15-18). No effects is at work for people between 19 and 24. Interestingly, we find that inactivity is lower for people aged between 25 and 33 receiving money from relatives abroad. It could be useful to explore in a systematic way, how received remittances are used by this group.

These first results suggest to explore more in depth the way in which remittances are used, analyzing for example their effect on young entrepreneurship. There is well diffused consensus that investments by women stimulate virtuous cycles increasing personal empowerment, family well-being as well as social and political status. We therefore plan to study whether remittances have an effect on female entrepreneurship. In addition, although the data could be potentially affected by measurement error, it could be interesting to also analyze the effect on the amount received.

⁹According to the study people born after the 70's are considered as the "lost generation".

To understand the role of received remittances on individual labor market participation is important and have non negligible policy implications especially in countries in which financial flows from abroad represent a high fraction of annual GDP. If remittances do not substitute internal economic activity they could represent a powerful driving force for development. However, if remittances are used only as a short term device to alleviate household financial problems and face every day need, they could create dependency for receivers who are stuck in their situation and only wait for financial help from abroad. In particular, it is crucial to explore the effect on youth, representing the real thrust for economic growth in the long run.

References

- [1] Acosta, P. (2005), "Labor Supply, School Attendance and Remittances from International Migration: the Case of El Salvador ", manuscript, University of Illinois.
- [2] Adams, R. and Page, J. (2003), "International Migration, Remittances and Poverty in Developing Countries", *World Bank Policy Research Working Paper* 3179.
- [3] Amuedo-Dorantes, C., Georges, A., Pozo, S. (2008), "Migration, Remittances and Children's Schooling in Haiti", IZA Discussion Paper No. 3657.
- [4] Amudeo - Dorantes, C. and Pozo, S. (2006), "Migration, Remittances and Male and Female Employment Patterns", *American Economic Review*, 96 (2), 222-226.
- [5] Bank of Albania (2002), *Annual Report 2001*, May 2002.
- [6] Bank of Albania (2003), *Annual Report 2002*, May 2003.
- [7] Chami, R., Connel, F. and Jahjah, S. (2003), "Are Immigrant Remittance Flows a Source of Capital for Development", IMF Working Paper 30/189.
- [8] Cox Edwards, A., Ureta, M. (2003), "International Migration, Remittances and Schooling: Evidence from El Salvador", *Journal of Development Economics*, 72, 2: 429-61
- [9] Dadush, U.B. (2008), *Migration and Remittances Factbook 2008*, World Bank Publications.
- [10] De Soto, H., Gordon, P., Gëdeshi, I. and Sinoimeri, Z. (2002), "Poverty in Albania. A Qualitative Assessment", World Bank, Technical Paper 520.
- [11] Funkhouser, E. (1992), "Migration from Nicaragua: Some Recent Evidence", *World Development*, 20 (8), 1209 -18.
- [12] King, R. (2005) "Albania as a Laboratory for the Study of Migration and Sevelopment", *Journal of Southern Europe and the Balkans*, 7(2): 133-56.
- [13] Kritz , M., Keely, C., Tomasi, S. (1981), *Global Trends in Migration: Theory and Research on International Population Movements*. Centre for Migration Studies, Staten Island, N.Y..
- [14] ILO (2008), *Global Employment Trend*, Geneve: International labor Office.
- [15] ILO (2006), *Global Employment Trends for Youth*, Geneve: International labor Office.
- [16] López-Córdoba, E. (2004) "Globalization, Migration, and Development: The Role of Mexican Migrant Remittances", *Economia*.

- [17] Lucas, R. (1987), " Emigration to South Africa's Mines", *American Economic Review*, 89, 1337 - 57.
- [18] McKenzie, D., Rapoport, H. (2006), "Can Migration Reduce Educational Attainment? Evidence from Mexico", World Bank Policy Research Working Paper 3952.
- [19] Newey, Whitney K. (1987), "Efficient Estimation of Limited Dependent Variable Models with Endogenous Explanatory Variables", *The Journal of Econometrics*, November, 36(3), 231 - 250.
- [20] Rodriguez, E. and Tingson, E. (2001), "Temporary Migration Overseas and Household Labor Supply: Evidence from Urban Philippines", *International Migration Review*, 35(3), 708 - 725.
- [21] Staiger, D. and Stock, J.H. (1997), "Instrumental variables regression with weak instruments", *Econometrica*, 65, 557 - 586.
- [22] Uruci, E. and GedeshI, I. (2003), "*Remittances Management in Albania*", CeSPI Working Paper, 5/2003.
- [23] Woodruff, C. and Zenteno, R. (2001), "*Remittances and Microenterprises in Mexico*", manuscript, UC San Diego.
- [24] Hernandez-Coss, R., Martinez, J., Amatuzio,A. and Lagi,F. (2006), *The Italy - Albania Remittance Corridor. Shifting from the Physical Transfer of Cash to a Formal Money Transfer System*, World Bank

FIGURES

Figure1: Dynamic of money Transfer Channels

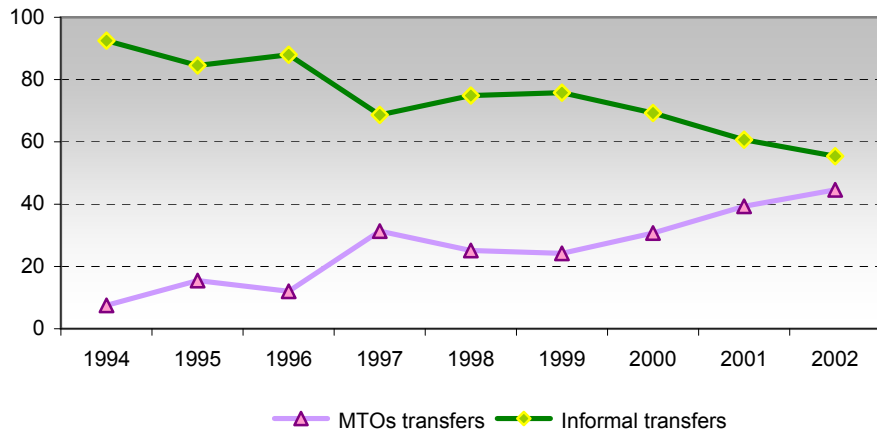
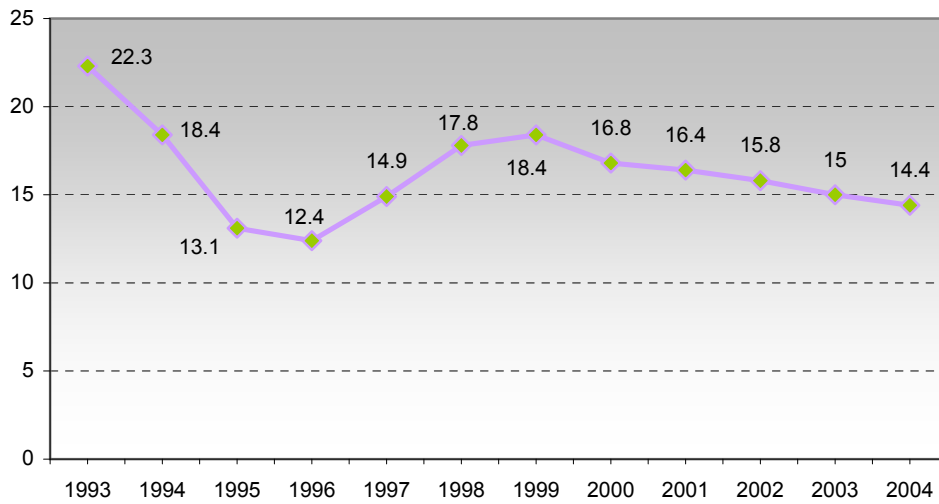


Figure 2: Unemployment rate



TABLES

Table 1. Remittance flows

INFLOWS	2002	2003	2004	2005	2006	2007e	Change 2006-07	Change 2002-07
Developing countries	116	144	161	191	221	240	8%	107%
East Asia and the Pacific	29	35	39	47	53	58	10%	97%
Europe and Central Asia	14	17	21	29	35	39	10%	175%
Latin America and the Caribbean	28	35	41	49	57	60	6%	115%
Middle-East and North Africa	15	20	23	24	27	28	7%	86%
South Asia	24	30	29	33	40	44	10%	81%
Sub-Saharan Africa	5	6	8	9	10	11	5%	116%
Low-income countries	32	39	40	46	56	60	9%	88%
Middle-income countries (MICs)	84	105	121	145	166	179	8%	114%
Lower MICs	55	68	76	90	102	112	10%	103%
Upper MICs	29	37	45	55	63	67	6%	136%
High income OECD countries	53	60	67	68	72	74	3%	40%
High income non-OECD countries	1	2	3	4	4	4	1%	298%
World	170	206	231	263	297	318	7%	87%
OUTFLOWS	2002	2003	2004	2005	2006		Change 2005-06	Change 2002-06
Developing countries	20	24	31	36	44		23%	226%
High income OECD	88	100	113	124	136		10%	64%
High income non-OECD	23	23	22	24	27		15%	20%
World	131	147	166	183	207		13%	74%

Sources: Data through 2006 are authors' calculation based on data from IMF Balance of Payments Statistics Yearbook 2007. Data for 2007 are estimates based on this source and data releases from central banks, national statistical agencies, and World Bank country desks. Remittances are defined as the sum of workers' remittances, compensation of employees, and migrant transfers

Table 2: Trend in Albanian remittances (1996-2005) - million USD

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Current Account Balance	62	254	65	133	163	218	421	407	358	561
Trade Balance	678	535	604	663	821	1,027	1,155	1,336	1,592	1,827
Exports	244	159	208	275	255	305	330	447	603	659
Imports	922	694	812	938	1,076	1,332	1,485	1,783	2,195	2,486
GDP	3,360	2,375	2,768	3,490	3,709	4,114	4,505	5,859	7,549	8,380
Worker's remittances	500	267	452	368	531	615	632	778	1,028	1,161
Remittances to TB (%)	74	50	75	56	65	60	55	58	65	64
Remittances to Imp (%)	54	38	56	39	49	46	43	44	47	47
Remittances to GDP (%)	15	11	16	11	14	15	14	13	14	14

Source: Bank of Albania

Table 3: The Italy - Albania corridor

Provider	Method	Speed of Transfer	Cost for 150€	Cost for 750€
Western Union	Cash transferred electronically (no account needed)	10 minutes/Instant	15.25 €	40.25 €
MoneyGram	Cash transferred electronically (no account needed)	10 minutes/Instant	14.50 €	33 €
Moneybookers.com	Online - transfer from bank account	2 to 5 days	0.50 €	0.50 €
Unicredit Banca	Electronic using SWIFT	up to 6 days	32.45 €	34.25 €
Banca di Roma	Electronic using SWIFT	4 to 5 days	20 €	24 €
Banca Sella	Electronic using SWIFT	3 to 9 days	32 €	45 €
Banca Intesa	Electronic using SWIFT	5 to 10 days	26 €	26 €

Source: Sending Money Home Organization
Data updated at 8 May 2007

Table 4: The Greece - Albania corridor

Provider	Method	Speed of Transfer	Cost for 150€	Cost for 750€
Western Union	Cash transferred electronically (no account needed)	10 minutes/Instant	15.25 €	40.25 €
MoneyGram	Cash transferred electronically (no account needed)	10 minutes/Instant	14.50 €	33 €
Moneybookers.com	Online - transfer from bank account	2 to 5 days	0.50 €	0.50 €
Bank of Piraeus	Electronic using SWIFT	up to 24 hours	32.45 €	34.25 €
Alpha Bank	Online - registration needed	2 days	20 €	24 €
Aspis Bank	Electronic using SWIFT	3 days	32 €	45 €
NBG	Electronic using SWIFT	2 to 5 days	26 €	26 €

Source: Sending Money Home Organization

Data updated at 8 May 2007

Table 5: The Germany - Albania corridor

Provider	Method	Speed of Transfer	Cost for 150€	Cost for 750€
Western Union	Cash transferred electronically (no account needed)	10 minutes/Instant	15.25 €	40.25 €
MoneyGram	Cash transferred electronically (no account needed)	10 minutes/Instant	14.50 €	33 €
Moneybookers.com	Online - transfer from bank account	2 to 5 days	0.50 €	0.50 €
Deutsche Bank AG	Electronic using SWIFT	up to 24 hours	32.45 €	34.25 €
Berliner Volksbank	Telephone banking	2 days	20 €	24 €
Commerzbank	Online - registration needed	3 days	32 €	45 €
Postbank	Electronic using SWIFT	2 to 5 days	26 €	26 €

Source: Sending Money Home Organization

Data updated at 8 May 2007

Table 6: Demographic and labour force indicators (thousand)

	1992	2000	2001	2002	2003	2004
Total population	3190	3401	3069	3069	3103	3135
Female	1600	1724	1539	1539	1556	1573
Working age population	1849	1939	1767	1767	1813	1863
Female	937	968	864	864	888	911
Total labour force	1489	1283	1101	1092	1089	1088
Female	707	529	427	424	424	428
Labour force participation rate	80.5	66.2	62.3	61.8	60.1	58.4
Female	75.4	55	49	49	47.7	47.5

Table 7: Transfer received

		All sample	Urban Areas	Rural Areas
Any Transfer	Frequency	2,176	1,003	1,173
	<i>Percent</i>	<i>27.34</i>	<i>26.61</i>	<i>27.99</i>
Remittances	Frequency	1,802	802	1,000
	<i>Percent</i>	<i>22.64</i>	<i>21.28</i>	<i>23.86</i>
Internal Transfer	Frequency	374	201	173
	<i>Percent</i>	<i>4.70</i>	<i>5.33</i>	<i>4.13</i>

Table 8: Relationship with remitters

	1st Aid	2nd Aid	3rd Aid	4th Aid	5th Aid	6th Aid	7th Aid
Partner	5.51	1.7	-	7.58	-	-	-
Child	50.74	55.38	45.41	30.3	36.84	50	28.57
Grandchild	5.28	5.32	4.59	6.06	-	-	-
Niece / nephew	1.98	0.79	-	-	-	-	-
Father / mother	1.1	0.91	1.83	-	-	-	-
Sister / brother	16.82	19.48	24.31	43.94	42.11	50	28.57
Son / daughter-in-law	1.01	1.25	-	-	-	-	-
Brother / sister-in-law	9.1	9.06	13.3	12.12	21.05	-	-
Father / mother-in-law	2.11	0.45	4.13	-	-	-	-
Other relative	1.7	2.49	2.29	-	-	-	-
Not related	1.1	0.68	2.29	-	-	-	-
Others	3.54	2.5	1.83	-	-	-	-

Table 9: Donor's residence

		1st Aid	2nd Aid	3rd Aid	4th Aid	5th Aid	6th Aid	7th Aid
Abroad	Frequency	1,715	702	149	44	10	5	2
	<i>Percent</i>	<i>81.71</i>	<i>81.53</i>	<i>69.63</i>	<i>66.67</i>	<i>52.63</i>	<i>50</i>	<i>52.63</i>
Country	Greece	38.08	43.73	34.9	61.36	100	100	100
	Italy	41.98	38.6	46.31	29.55	-	-	-
	Germany	1.81	2.56	4.03	-	-	-	-
	Other EU	10.09	8.69	3.36	-	-	-	-
	USA	4.96	4.56	9.4	9.09	-	-	-
	Canada	1.92	0.43	2.01	-	-	-	-
	Other	1.17	1.42	-	-	-	-	-

Table 10: Reason for receiving remittances

	1st Aid	2nd Aid	3rd Aid	4th Aid	5th Aid	6th Aid	7th Aid
Frequency	1,460	559	121	49	10	7	5
<i>Percent</i>	<i>67.1</i>	<i>63.31</i>	<i>55.5</i>	<i>74.24</i>	<i>52.63</i>	<i>70</i>	<i>71.43</i>
Food and basic necessities	51.58	47.23	51.24	46.94	-	-	-
Investment in construction	15.62	15.56	9.09	-	-	-	-
Investment in hh enterprise	1.85	1.07	-	-	-	-	-
Purchase of a durable good	3.9	3.22	4.13	8.16	-	-	-
Educational expenses	-	0.36	3.31	-	-	-	-
Medical expenses	14.73	15.03	10.74	16.33	20	28.57	-
Wedding / funeral	6.99	8.77	14.05	20.41	80	71.43	100
Child support	0.82	2.68	4.13	-	-	-	-
Charity	2.53	2.86	-	-	-	-	-
Other	1.99	3.22	3.31	8.16	-	-	-

Table 11: Working experience in the previous 7 days

		<i>All sample</i>			<i>Urban Areas</i>			<i>Rural Areas</i>		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Any kind of work	Frequency	2,743	1,539	1,204	977	600	377	1,766	939	827
	Percent	51.24	61.12	42.47	37.02	48	27.14	65.07	74.05	57.19
Work for non HH member	Frequency	1,032	688	344	744	446	298	288	242	46
	Percent	19.28	27.32	12.13	28.19	35.68	21.45	10.61	19.09	3.18
Work for HH member	Frequency	1,522	722	800	49	24	25	1,473	698	775
	Percent	28.43	28.67	28.22	1.86	1.92	1.8	54.27	55.05	53.6
Work in own-account	Frequency	305	219	86	199	142	57	106	77	2
	Percent	5.7	8.7	3.03	7.54	11.36	4.1	3.91	6.07	2.01

Table 12: Youth working experience previous 7 days (14-25)

		<i>All sample</i>			<i>Urban Areas</i>			<i>Rural Areas</i>		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Any kind of work	Frequency	536	254	282	107	52	55	429	202	227
	Percent	40.24	42.62	38.32	18.07	18.84	17.41	57.97	63.13	54.05
Work for non HH member	Frequency	129	77	52	87	42	45	42	35	7
	Percent	9.68	12.92	7.07	14.7	15.22	14.24	5.68	10.94	1.67
Work for HH member	Frequency	389	168	221	6	3	3	383	165	218
	Percent	29.2	28.19	30.03	1.01	1.09	0.95	51.76	51.56	51.9
Work in own-account	Frequency	25	14	11	14	7	7	11	7	4
	Percent	1.88	2.35	1.49	2.36	2.54	2.22	1.49	2.19	0.95

Table 13: Inactivity status

		<i>All sample</i>			<i>Urban Areas</i>			<i>Rural Areas</i>		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	Frequency	2,211	574	1,457	1,356	478	878	855	276	579
	Percent	33.74	23.96	42.76	42.79	31.02	53.93	25.26	17.19	32.55
Age 14-25	Frequency	679	276	403	403	175	228	276	101	175
	Percent	46.63	41.75	50.69	61.53	56.82	65.71	34.46	28.61	39.06

Table 14: Educational level (highest diploma) of inactives

		<i>All sample</i>		<i>Urban Areas</i>		<i>Rural Areas</i>	
		Total	Age 14-25	Total	Age 14-25	Total	Age 14-25
All	None	1.83	0.3	1.53	0.51	2.36	-
	Primary	69.05	82.2	59.85	75.7	85.84	91.54
	Secondary	24.43	16.44	31.74	21.99	11.06	7.35
	University	4.7	1.06	6.87	1.79	0.74	-
Not enrolled	None	2.14	0.3	1.79	0.63	2.75	90.34
	Primary	65.7	79.04	54.78	66.46	84.54	9.66
	Secondary	26.67	19.46	35.26	30.38	11.86	-
	University	5.49	1.2	8.17	2.53	0.86	-

Table 15: Percentage of inactive people

	<i>All sample</i>		<i>14 - 24</i>		<i>14 - 18</i>		<i>18 - 24</i>		<i>14 - 33</i>	
	Remittances	No Remittances	Remittances	No Remittances	Remittances	No Remittances	Remittances	No Remittances	Remittances	No Remittances
All	54.37	47.18	63.11	60.49	59.82	70.22	66.37	51.16	57.47	52.59
Men	46.09	37.06	69.41	56.48	70	65.27	68.57	47.41	59.4	47.58
Women	60.59	56.58	59.29	63.97	51.61	74.81	65.38	54.2	56.28	56.69

Table 16: Received remittances and inactivity - working age individuals 15 - 64
Probit estimation

	Dependent variable =1 if an individual is inactive					
	<i>All sample</i>		<i>Male</i>		<i>Female</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
Remittances	0.0915 [0.0670]	0.0858 [0.0713]	0.2147** [0.1064]	0.1824* [0.1039]	-0.0227 [0.0695]	-0.0179 [0.0728]
Sex	-0.4399*** [0.0825]	-0.4030*** [0.0907]				
Age	-0.0123*** [0.0037]	-0.0058 [0.0040]	-0.0168*** [0.0044]	-0.0066 [0.0050]	-0.0104** [0.0042]	-0.007 [0.0043]
HH years of school	0.0478** [0.0215]	0.0268 [0.0209]	0.0217 [0.0192]	-0.0008 [0.0189]	0.0624* [0.0320]	0.0458 [0.0314]
Years of school	-0.1200*** [0.0080]	-0.1075*** [0.0081]	-0.0710*** [0.0124]	-0.0568*** [0.0123]	-0.1580*** [0.0138]	-0.1503*** [0.0150]
Benefit	0.3372*** [0.0606]	0.3540*** [0.0593]	0.4226*** [0.0767]	0.4290*** [0.0712]	0.2577*** [0.0675]	0.2737*** [0.0710]
Dependency ratio	-0.1388** [0.0568]	-0.1285** [0.0570]	-0.3390*** [0.0822]	-0.3132*** [0.0790]	-0.0021 [0.0648]	-0.0087 [0.0645]
Othincome_pcap	0.1433*** [0.0339]	0.0725* [0.0412]	0.2989*** [0.1013]	0.1492 [0.0969]	0.0455 [0.0614]	0.0153 [0.0653]
HH size	-0.0334** [0.0134]	-0.0341** [0.0143]	-0.0411** [0.0192]	-0.0394** [0.0196]	-0.0231 [0.0183]	-0.025 [0.0176]
Head	-0.2611** [0.1313]	-0.1668 [0.1333]	-0.206 [0.1428]	-0.2112 [0.1483]	-0.04 [0.2304]	0.1766 [0.2461]
Spouse	-0.1307 [0.1344]	0.0406 [0.1431]			-0.2224 [0.1648]	0.0278 [0.1946]
Relatives	-0.0583 [0.0996]	0.108 [0.1042]	0.3579*** [0.1166]	0.2609** [0.1016]	-0.1421 [0.1201]	0.1104 [0.1548]
Urban area	0.9486*** [0.1389]	0.9394*** [0.1462]	0.8204*** [0.1406]	0.8269*** [0.1479]	1.1078*** [0.1782]	1.0866*** [0.1838]
Berat	-0.0501 [0.0374]	-0.0913** [0.0366]	0.3419*** [0.0377]	0.2835*** [0.0421]	-0.3494*** [0.0380]	-0.3748*** [0.0338]
Diber	-0.1710** [0.0724]	-0.1456* [0.0782]	0.0392 [0.0621]	0.0931 [0.0752]	-0.3409*** [0.0948]	-0.3103*** [0.0987]
Durres	0.0807** [0.0402]	0.0972** [0.0382]	0.1850*** [0.0337]	0.1811*** [0.0345]	-0.0134 [0.0511]	0.0245 [0.0549]
Elbasan	-0.0854 [0.0552]	-0.0942* [0.0553]	0.0873** [0.0433]	0.0576 [0.0492]	-0.2188*** [0.0751]	-0.2109*** [0.0759]
Fier	-0.1854*** [0.0530]	-0.2133*** [0.0528]	-0.0497 [0.0428]	-0.0739 [0.0486]	-0.2754*** [0.0694]	-0.3038*** [0.0638]
Gjirokaster	0.0941** [0.0469]	0.0331 [0.0476]	0.2181*** [0.0375]	0.1234*** [0.0462]	0.0188 [0.0599]	-0.0084 [0.0584]
Korce	-0.5148*** [0.0389]	-0.5860*** [0.0382]	-0.4917*** [0.0343]	-0.5453*** [0.0420]	-0.5492*** [0.0484]	-0.6195*** [0.0379]
Kukes	0.1735*** [0.0596]	0.1861*** [0.0675]	0.2668*** [0.0695]	0.3029*** [0.0843]	0.0685 [0.0824]	0.0733 [0.0876]
Lezhe	-0.1984*** [0.0386]	-0.2169*** [0.0403]	-0.006 [0.0316]	-0.0635 [0.0401]	-0.3640*** [0.0439]	-0.3489*** [0.0460]
Shkroder	0.1377*** [0.0466]	0.1507*** [0.0492]	0.0019 [0.0285]	-0.0377 [0.0336]	0.2660*** [0.0738]	0.3106*** [0.0817]
Vlore	0.1459*** [0.0407]	0.1336*** [0.0409]	0.0086 [0.0325]	-0.0091 [0.0382]	0.3039*** [0.0613]	0.2889*** [0.0583]
Enrolled in this a.y.		1.4191*** [0.1476]		1.5612*** [0.1852]		1.2704*** [0.2369]
Constant	0.9127*** [0.2907]	0.5546** [0.2785]	0.374 [0.2438]	-0.0218 [0.2270]	1.0789*** [0.3395]	0.7783** [0.3458]
Observations	4602	4602	2177	2177	2425	2425
Pseudo R-squared	0.1756	0.21	0.1798	0.2235	0.1607	0.1864

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

Table 17: Received remittances and inactivity - working age individuals 15 - 64 - Instrumental variable estimation

Dependent variable =1 if an individual is inactive												
	<i>All sample</i>				<i>Male</i>				<i>Female</i>			
	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Remittances		-0.0003 [0.7427]		-0.1534 [0.2757]		1.0731* [0.5879]		-0.3568 [0.6265]		-0.1597 [0.4266]		-0.1832 [0.2415]
MTO per capita	1.8082** [0.7962]		1.8336** [0.7416]		1.1459 [0.7433]		1.7691** [0.7448]		1.8604** [0.8164]		1.8626** [0.8179]	
Distance border	-0.0329*** [0.0127]		-0.0335*** [0.0127]		-0.0276** [0.0122]		-0.0380*** [0.0106]		-0.0300** [0.0147]		-0.0301** [0.0148]	
MTO*secondary educ	-3.1991*** [0.3292]		-3.1814*** [0.3306]		-2.8173*** [0.4964]		-2.9527*** [0.2917]		-3.2660*** [0.4180]		-3.2650*** [0.4133]	
Sex		-0.4489*** [0.0719]		-0.4257*** [0.0885]								
Age		-0.0120*** [0.0031]		-0.005 [0.0036]		-0.0189*** [0.0041]		-0.0041 [0.0047]		-0.0100** [0.0039]		-0.0065 [0.0043]
HH years of school		0.0464** [0.0214]		0.0227 [0.0190]		0.0312 [0.0199]		-0.0087 [0.0231]		0.0597** [0.0288]		0.0424 [0.0281]
Years of school		-0.1199*** [0.0081]		-0.1068*** [0.0082]		-0.0660*** [0.0122]		-0.0562*** [0.0124]		-0.1570*** [0.0128]		-0.1491*** [0.0142]
Benefit		0.3399*** [0.0645]		0.3599*** [0.0596]		0.3741*** [0.0996]		0.4372*** [0.0752]		0.2601*** [0.0677]		0.2765*** [0.0707]
Dependency ratio		-0.1454** [0.0573]		-0.1454*** [0.0488]		-0.2613*** [0.0993]		-0.3477*** [0.0809]		-0.0124 [0.0656]		-0.0211 [0.0600]
Othincome_pcap		0.1376** [0.0684]		0.0567 [0.0504]		0.3348*** [0.0856]		0.1104 [0.1054]		0.036 [0.0797]		0.0036 [0.0739]
HH size		-0.0342** [0.0160]		-0.0360** [0.0154]		-0.0300* [0.0179]		-0.0439* [0.0245]		-0.0237 [0.0182]		-0.0257 [0.0176]
Head		-0.2620** [0.1258]		-0.1683 [0.1277]		-0.1485 [0.1204]		-0.2408* [0.1254]		-0.0161 [0.2582]		0.2057 [0.2344]
Spouse		-0.14 [0.1059]		0.0169 [0.1319]						-0.2303 [0.1558]		0.0184 [0.1945]
Relatives		-0.0607 [0.0928]		0.1018 [0.1016]		0.3855*** [0.1177]		0.2241** [0.1096]		-0.1412 [0.1206]		0.1116 [0.1538]
Urban area		0.9471*** [0.1423]		0.9331*** [0.1506]		0.7790*** [0.1407]		0.8108*** [0.1504]		1.1030*** [0.1827]		1.0804*** [0.1903]
Enrolled in this a.y.				1.4212*** [0.1421]				1.5673*** [0.1740]				1.2709*** [0.2335]
Constant		0.9475** [0.3787]		0.6429** [0.2836]		0.1175 [0.3111]		0.1167 [0.3260]		1.1255*** [0.3441]		0.8341** [0.3412]
District dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4602	4602	4602	4602	2177	2177	2177	2177	2425	2425	2425	2425

 Robust standard errors in brackets. For regional controls, the excluded district is Tirana₁₀₄

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 18: Received remittances and inactivity - young 15 - 24

Probit estimation

	Dependent variable =1 if an individual is inactive					
	<i>All sample</i>		<i>Male</i>		<i>Female</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
Remittances	0.0603 [0.1470]	0.0517 [0.1438]	0.3843** [0.1809]	0.3782** [0.1907]	-0.1542 [0.1671]	-0.1636 [0.1760]
Sex	-0.1674* [0.0936]	-0.1483 [0.1001]				
Age	-0.1290*** [0.0144]	-0.0492*** [0.0155]	-0.1337*** [0.0205]	-0.0394 [0.0259]	-0.1177*** [0.0306]	-0.0478 [0.0333]
HH years of school	0.0864** [0.0382]	0.0412 [0.0352]	0.0820* [0.0454]	0.0023 [0.0536]	0.0916 [0.0567]	0.059 [0.0481]
Years of school	-0.0471* [0.0261]	-0.0830*** [0.0283]	0.0316 [0.0484]	0.0299 [0.0545]	-0.1116*** [0.0357]	-0.1643*** [0.0391]
Benefit	-0.0516 [0.1241]	-0.0771 [0.1041]	0.0107 [0.1550]	-0.0383 [0.1484]	-0.1692 [0.1389]	-0.177 [0.1316]
Dependency ratio	-0.0916 [0.1221]	-0.1663 [0.1422]	-0.142 [0.1567]	-0.3576 [0.2689]	-0.0948 [0.1775]	-0.1246 [0.1906]
Othincome_pcap	0.0804 [0.0812]	0.0129 [0.0732]	0.0541 [0.1577]	-0.0629 [0.1421]	0.1101 [0.1251]	0.1192 [0.1420]
HH size	0.0243 [0.0314]	0.0301 [0.0307]	0.0422 [0.0333]	0.0712* [0.0379]	0.0317 [0.0504]	0.0272 [0.0433]
Head	-1.1083** [0.5621]	-1.1049* [0.5656]	-1.5687** [0.6812]	-1.4693** [0.5867]	-0.2329 [0.6105]	-0.4159 [0.6876]
Spouse	0.6670*** [0.2431]	0.7879*** [0.2559]			0.6056* [0.3237]	0.7200** [0.3193]
Relatives	0.4875*** [0.1479]	0.5842*** [0.1462]	0.4352* [0.2354]	0.3785 [0.2326]	0.5479*** [0.2126]	0.7066*** [0.2260]
Urban area	1.1640*** [0.1660]	1.1260*** [0.1805]	1.2537*** [0.1438]	1.2712*** [0.1626]	1.2276*** [0.2784]	1.1577*** [0.2971]
Berat	-0.1605** [0.0634]	-0.1813*** [0.0581]	0.3118*** [0.0514]	0.1790*** [0.0610]	-0.4832*** [0.0699]	-0.4766*** [0.0595]
Diber	-0.4530*** [0.0734]	-0.3888*** [0.0799]	-0.3812*** [0.0599]	-0.2493*** [0.0693]	-0.5691*** [0.1091]	-0.5214*** [0.1070]
Durres	-0.0799 [0.0705]	0.0248 [0.0721]	-0.0093 [0.0551]	0.07 [0.0572]	-0.2260** [0.0907]	-0.1049 [0.0938]
Elbasan	-0.3905*** [0.0741]	-0.4289*** [0.0701]	-0.1137** [0.0561]	-0.2326*** [0.0735]	-0.6751*** [0.1097]	-0.6991*** [0.0987]
Fier	-0.3177*** [0.0641]	-0.3233*** [0.0653]	-0.1471** [0.0592]	-0.0796 [0.0616]	-0.4874*** [0.1037]	-0.5561*** [0.0878]
Gjirokaster	0.0447 [0.0747]	-0.056 [0.0698]	-0.3574*** [0.0855]	-0.6088*** [0.1058]	0.3654*** [0.1002]	0.3593*** [0.1039]
Korce	-0.7788*** [0.0542]	-0.9375*** [0.0529]	-0.7937*** [0.0456]	-0.9219*** [0.0686]	-0.7250*** [0.0982]	-0.9268*** [0.0733]
Kukes	0.3518*** [0.0687]	0.4076*** [0.0663]	0.6053*** [0.1259]	0.6470*** [0.1156]	0.0727 [0.1063]	0.0868 [0.1195]
Lezhe	-0.1178* [0.0702]	-0.1260* [0.0705]	0.2280** [0.1037]	0.1597 [0.1172]	-0.3071*** [0.0791]	-0.2551*** [0.0760]
Shkroder	0.4224*** [0.0736]	0.5813*** [0.0949]	0.2764*** [0.0510]	0.3317*** [0.0562]	0.5038*** [0.1125]	0.7388*** [0.1538]
Vlore	0.2406*** [0.0881]	0.2502*** [0.0873]	-0.1354** [0.0573]	-0.0223 [0.0814]	0.4245*** [0.1438]	0.3391*** [0.1266]
Enrolled in this a.y.		1.3426*** [0.2160]		1.5206*** [0.2891]		1.3128*** [0.2865]
Constant	1.9885*** [0.5762]	0.8991 [0.6223]	0.9761** [0.4730]	-0.4866 [0.6524]	2.4651*** [0.8047]	1.6263* [0.8314]
Observations	1223	1223	547	547	676	676
Pseudo R-squared	0.2498	0.3195	0.2972	0.379	0.249	0.3139

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

Table 19: Received remittances and inactivity - young 15 - 24 - Instrumental variable estimation

Dependet variable =1 if an individual is inactive												
	<i>All sample</i>				<i>Male</i>				<i>Female</i>			
	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Remittances		1.3618*** [0.1470]		0.6110** [0.3053]		1.8896*** [0.1098]		1.4504*** [0.3638]		1.0046** [0.4103]		0.0496 [0.5869]
MTO per capita	1.9847*** [0.6300]		2.6292*** [0.7843]		1.1531 [0.7179]		2.1485*** [0.7737]		2.1230** [0.8884]		2.5775** [1.0840]	
Distance border	-0.0360** [0.0160]		-0.0435*** [0.0163]		-0.0498*** [0.0115]		-0.0556*** [0.0134]		-0.0314 [0.0274]		-0.0388* [0.0231]	
MTO*secondary educ	-3.2734*** [0.6160]		-4.1195*** [0.5960]		-2.9628*** [0.4518]		-4.1570*** [0.7748]		-3.2576*** [0.7490]		-3.9866*** [0.7809]	
Sex		-0.0454 [0.0862]		-0.1063 [0.0925]								
Age		-0.1152*** [0.0145]		-0.0512*** [0.0155]		-0.0882*** [0.0196]		-0.0287 [0.0238]		-0.1223*** [0.0247]		-0.0513 [0.0376]
HH years of school		0.0795* [0.0407]		0.0443 [0.0359]		0.0804* [0.0482]		0.0178 [0.0534]		0.0823 [0.0603]		0.0594 [0.0498]
Years of school		-0.032 [0.0227]		-0.0774*** [0.0268]		0.0322 [0.0566]		0.0293 [0.0602]		-0.0841** [0.0369]		-0.1607*** [0.0434]
Benefit		-0.0843 [0.1310]		-0.0895 [0.1054]		0.0012 [0.1632]		-0.0613 [0.1449]		-0.1774 [0.1429]		-0.1809 [0.1318]
Dependency ratio		0.1054 [0.1510]		-0.0862 [0.1808]		-0.1284 [0.1981]		-0.2811 [0.2809]		0.1244 [0.2067]		-0.0869 [0.2445]
Othincome_pcap		0.1761** [0.0701]		0.0508 [0.0657]		0.1731 [0.1280]		0.0041 [0.1166]		0.2164 [0.1379]		0.1363 [0.1425]
HH size		0.0327 [0.0414]		0.0342 [0.0351]		0.0769** [0.0355]		0.0861** [0.0385]		0.0318 [0.0587]		0.028 [0.0460]
Head		-0.9386* [0.5597]		-1.0561* [0.5695]		-1.4542** [0.6672]		-1.3691** [0.5894]		-0.375 [0.7148]		-0.4546 [0.6888]
Spouse		0.8264*** [0.2713]		0.8640*** [0.2591]						0.7749** [0.3553]		0.7557** [0.3175]
Relatives		0.4085*** [0.1435]		0.5666*** [0.1558]		0.5700** [0.2307]		0.4885** [0.2428]		0.4791** [0.2032]		0.7028*** [0.2298]
Urban area		0.9899*** [0.1623]		1.1014*** [0.1739]		0.9508*** [0.1694]		1.1420*** [0.1915]		1.0870*** [0.2669]		1.1561*** [0.2993]
Enrolled in this a.y.				1.2948*** [0.2288]				1.3592*** [0.3141]				1.3020*** [0.3114]
Constant		1.2936** [0.5561]		0.7039 [0.6575]		-0.1173 [0.4411]		-0.9795 [0.6181]		2.0362** [0.9273]		1.5904* [0.8226]
District dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1223	1223	1223	1223	547	547	547	547	676	676	676	676

Robust standard errors in brackets. For regional controls, the excluded district is Tirana.

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 20: Received remittances and inactivity - very young people 15 - 18
Probit estimation

	Dependent variable =1 if an individual is inactive					
	All sample		Male		Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Remittances	-0.4889*** [0.1738]	-0.5110** [0.2100]	0.1006 [0.2273]	0.08 [0.2995]	-1.1415*** [0.2771]	-1.0913*** [0.3126]
Sex	-0.3697** [0.1570]	-0.4220*** [0.1608]				
Age	-0.2906*** [0.0647]	-0.0981* [0.0541]	-0.3858*** [0.0831]	-0.1859** [0.0834]	-0.2188*** [0.0801]	-0.0473 [0.0841]
HH years of school	0.1545** [0.0653]	0.0574 [0.0681]	0.1503 [0.0938]	-0.0038 [0.0996]	0.1733* [0.0961]	0.0923 [0.0942]
Years of school	0.0929 [0.0731]	-0.0043 [0.0790]	0.0812 [0.1008]	0.0438 [0.1088]	0.1071 [0.0860]	-0.0298 [0.0904]
Benefit	0.1879 [0.1248]	0.1596 [0.1524]	0.2915 [0.2586]	0.3061 [0.2565]	-0.0199 [0.2113]	-0.1147 [0.2488]
Dependency ratio	-0.1573 [0.1456]	-0.2432 [0.2038]	0.0846 [0.3724]	-0.2352 [0.4090]	-0.3934 [0.2520]	-0.3883 [0.3386]
Othincome_pcap	0.207 [0.1512]	0.1205 [0.1869]	0.4902 [0.3971]	0.3559 [0.4943]	-0.17 [0.3040]	-0.1606 [0.3269]
HH size	0.0399 [0.0507]	0.0423 [0.0592]	0.0171 [0.0733]	0.0993 [0.0791]	0.0515 [0.0664]	0.0053 [0.0630]
Relatives	-0.0726 [0.3829]	0.0097 [0.3911]	0.1364 [0.3803]	-0.1316 [0.3950]	-0.331 [0.3940]	-0.0077 [0.4138]
Urban area	1.3962*** [0.2114]	1.3233*** [0.2737]	1.3663*** [0.1455]	1.3925*** [0.2207]	1.8060*** [0.4777]	1.6267*** [0.5204]
Berat	-0.0049 [0.0779]	-0.0983 [0.0847]	1.1389*** [0.1513]	0.9003*** [0.1445]	-1.2790*** [0.0936]	-1.3050*** [0.1209]
Diber	-0.5105*** [0.0652]	-0.4986*** [0.0915]	-0.4221*** [0.0995]	-0.4634*** [0.1115]	-0.8557*** [0.1053]	-0.8152*** [0.1204]
Durres	0.0268 [0.0475]	0.1372*** [0.0478]	0.2447*** [0.0884]	0.3178*** [0.0995]	-0.4111*** [0.1531]	-0.3014* [0.1737]
Elbasan	-0.3682*** [0.0748]	-0.4676*** [0.0864]	0.1619 [0.1041]	-0.0925 [0.1286]	-1.2085*** [0.1058]	-1.2977*** [0.1326]
Fier	-0.4849*** [0.0631]	-0.5587*** [0.0721]	-0.0397 [0.1027]	0.0928 [0.1234]	-1.3145*** [0.1063]	-1.5309*** [0.1631]
Gjirokaster	0.0389 [0.0784]	-0.1073 [0.1048]	0.2033 [0.1653]	-0.2238 [0.2067]	-0.2412* [0.1454]	-0.1584 [0.1316]
Korce	-1.1401*** [0.0520]	-1.5573*** [0.1244]	-1.0344*** [0.0820]	-1.4635*** [0.2036]	-1.7875*** [0.1308]	-2.1596*** [0.2036]
Kukes	0.1572 [0.1114]	0.1851 [0.1324]	0.6850*** [0.1502]	0.6681*** [0.1358]	-0.4824** [0.1951]	-0.3733* [0.2098]
Lezhe	-0.2796*** [0.0990]	-0.5286*** [0.1061]	0.3457** [0.1442]	0.2834 [0.1782]	-1.2052*** [0.1433]	-1.6223*** [0.2497]
Shkroder	0.5822*** [0.0991]	0.7323*** [0.1341]	0.8814*** [0.2054]	0.7855*** [0.2217]	0.0117 [0.0958]	0.2510** [0.1043]
Vlore	0.2166** [0.1008]	0.0707 [0.1119]	0.2214* [0.1328]	0.5435*** [0.1885]	-0.2338*** [0.0760]	-0.6312*** [0.1286]
Enrolled in this a.y.		1.5237*** [0.2367]		1.8256*** [0.3621]		1.3550*** [0.3402]
Constant	3.0086*** [0.7832]	1.0616 [0.8842]	3.8368*** [1.1289]	1.2153 [1.2082]	2.5216** [1.1076]	1.4084 [1.2436]
Observations	602	602	286	286	316	315
Pseudo R-squared	0.3308	0.4311	0.3615	0.499	0.3941	0.4497

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

Table 21: Received remittances and inactivity - very young 15 - 18 - Instrumental variable estimation

	Dependet variable =1 if an individual is inactive											
	<i>All sample</i>				<i>Male</i>				<i>Female</i>			
	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Remittances		0.5583*		0.4725		1.3401***		1.5953***		-0.3317		-0.4697
		[0.2858]		[0.4377]		[0.2635]		[0.2225]		[0.6635]		[0.8742]
MTO per capita	1.9508		1.8154		1.1598		0.6953		1.8311		1.7859	
	[1.2164]		[1.3079]		[1.1808]		[1.0518]		[1.5987]		[1.7063]	
Distance border	-0.0460**		-0.0464**		-0.0573***		-0.0597***		-0.0551*		-0.0562*	
	[0.0195]		[0.0194]		[0.0195]		[0.0154]		[0.0296]		[0.0290]	
MTO*secondary educ	-4.0757***		-3.9380***		-3.5652**		-3.4596***		-3.2958*		-3.2590*	
	[1.2720]		[1.2728]		[1.5232]		[1.0081]		[1.8615]		[1.9404]	
Sex		-0.3232**		-0.3792***								
		[0.1403]		[0.1399]								
Age		-0.2740***		-0.0996*		-0.2983***		-0.1166*		-0.2368***		-0.0699
		[0.0669]		[0.0536]		[0.0910]		[0.0694]		[0.0813]		[0.0892]
HH years of school		0.1725***		0.0876		0.1681**		0.0435		0.1891**		0.1085
		[0.0591]		[0.0624]		[0.0802]		[0.0866]		[0.0933]		[0.0893]
Years of school		0.0739		-0.0128		0.0436		0.0047		0.1028		-0.0297
		[0.0649]		[0.0715]		[0.0811]		[0.0818]		[0.0825]		[0.0885]
Benefit		0.1092		0.0894		0.2085		0.2071		-0.0665		-0.1429
		[0.1490]		[0.1597]		[0.2311]		[0.2236]		[0.2146]		[0.2275]
Dependency ratio		0.0242		-0.0659		0.1259		-0.0626		-0.2033		-0.2392
		[0.1387]		[0.2012]		[0.3440]		[0.4212]		[0.3266]		[0.4079]
Othincome_pcap		0.2377*		0.1446		0.4703		0.3652		-0.1541		-0.1532
		[0.1303]		[0.1620]		[0.2975]		[0.3568]		[0.3213]		[0.3326]
HH size		0.0645		0.0635		0.052		0.1170**		0.0629		0.0178
		[0.0532]		[0.0579]		[0.0537]		[0.0507]		[0.0728]		[0.0661]
Relatives		0.0057		0.0842		0.3298		0.1318		-0.2592		0.0387
		[0.3653]		[0.3783]		[0.3780]		[0.3870]		[0.3741]		[0.3886]
Urban area		1.2882***		1.2274***		1.1818***		1.1563***		1.7466***		1.5972***
		[0.2068]		[0.3047]		[0.1410]		[0.1744]		[0.5518]		[0.5950]
Enrolled in this a.y.				1.4006***				1.4129***				1.3401***
				[0.2766]				[0.2532]				[0.3713]
Constant		2.3546***		0.5847		2.2317**		-0.1958		2.4061**		1.3895
		[0.6655]		[0.8441]		[1.0673]		[1.2898]		[1.0640]		[1.2364]
District dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	602	602	602	602	286	286	286	286	316	316	316	316

Robust standard errors in brackets. For regional controls, the excluded district is Tirana.

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 22: Received remittances and inactivity - young people 19 - 24
Probit estimation

	Dependent variable =1 if an individual is inactive					
	All sample		Male		Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Remittances	0.4945*** [0.1771]	0.4839*** [0.1697]	0.6288** [0.2681]	0.5905** [0.2968]	0.4031** [0.1985]	0.3709* [0.2020]
Sex	0.0594 [0.1353]	0.1086 [0.1469]				
Age	-0.1011** [0.0406]	-0.0795* [0.0436]	-0.0959 [0.0916]	-0.0816 [0.0832]	-0.0569 [0.0518]	-0.029 [0.0482]
HH years of school	0.041 [0.0448]	0.0392 [0.0464]	0.0574 [0.0533]	0.0074 [0.0586]	0.055 [0.0635]	0.0605 [0.0674]
Years of school	-0.0341 [0.0261]	-0.0732*** [0.0279]	0.0661 [0.0625]	0.0466 [0.0451]	-0.1166*** [0.0394]	-0.1753*** [0.0509]
Benefit	-0.2055 [0.1430]	-0.2069 [0.1348]	-0.1259 [0.1826]	-0.2211 [0.1597]	-0.2352 [0.1987]	-0.2171 [0.1989]
Dependency ratio	-0.0378 [0.2493]	-0.1022 [0.2699]	-0.1794 [0.4753]	-0.3809 [0.5409]	0.0077 [0.2672]	-0.0601 [0.2800]
Othincome_pcap	0.0451 [0.0875]	-0.0099 [0.0985]	-0.1567 [0.1546]	-0.2406* [0.1338]	0.2215 [0.1588]	0.1946 [0.1730]
HH size	0.0229 [0.0348]	0.026 [0.0338]	0.1072* [0.0573]	0.0529 [0.0387]	0.0175 [0.0494]	0.0285 [0.0513]
Head	-1.0938** [0.5504]	-1.0714* [0.5556]	-1.5284*** [0.5557]	-1.5170*** [0.5877]	-0.2266 [0.6977]	-0.3164 [0.8005]
Spouse	0.9000*** [0.2838]	1.0489*** [0.3200]			0.7672** [0.3816]	0.9505** [0.4303]
Relatives	0.7147*** [0.2153]	0.8218*** [0.2342]	0.507 [0.4846]	0.619 [0.4919]	0.7175** [0.2957]	0.8437*** [0.3192]
Urban area	1.0795*** [0.1835]	1.0805*** [0.1906]	1.3339*** [0.2852]	1.2563*** [0.2649]	1.1719*** [0.2290]	1.1923*** [0.2483]
Berat	-0.2832*** [0.0706]	-0.2686*** [0.0680]	-0.1453 [0.1612]	-0.183 [0.1461]	-0.3056*** [0.0760]	-0.3081*** [0.0714]
Diber	-0.4343*** [0.0928]	-0.3719*** [0.0907]	-0.146 [0.1979]	0.0155 [0.1944]	-0.6177*** [0.0788]	-0.5570*** [0.0656]
Durres	-0.1979** [0.1004]	-0.1616* [0.0932]	-0.5733*** [0.2153]	-0.1527 [0.1793]	-0.2535*** [0.0715]	-0.2300*** [0.0615]
Elbasan	-0.4784*** [0.0688]	-0.4648*** [0.0610]	-0.6768*** [0.1178]	-0.3848*** [0.1343]	-0.5650*** [0.0740]	-0.5495*** [0.0716]
Fier	-0.2411*** [0.0769]	-0.2040*** [0.0741]	-0.1644 [0.1418]	-0.1476 [0.1278]	-0.2923*** [0.0949]	-0.2514*** [0.0863]
Gjirokaster	0.1474* [0.0892]	0.0749 [0.0685]	-0.8840*** [0.1141]	-0.9238*** [0.1207]	0.7329*** [0.1299]	0.7001*** [0.1163]
Korce	-0.7359*** [0.0704]	-0.6797*** [0.0670]	-0.8480*** [0.1436]	-0.6680*** [0.0971]	-0.6192*** [0.1038]	-0.5771*** [0.0956]
Kukes	0.4476*** [0.0732]	0.5090*** [0.0685]	0.8447*** [0.2545]	0.7130*** [0.1636]	0.1827 [0.1126]	0.2013* [0.1209]
Lezhe	-0.0024 [0.0831]	0.0779 [0.0954]	0.2286 [0.1833]	0.1231 [0.1931]	-0.0844 [0.0919]	0.1629 [0.1454]
Shkroder	0.4030*** [0.0800]	0.5295*** [0.0975]	-0.2576*** [0.0898]	0.1372 [0.0874]	0.7479*** [0.1325]	0.9475*** [0.1832]
Vlore	0.3573*** [0.0995]	0.4347*** [0.1015]	-1.1994*** [0.0831]	-0.6482*** [0.0682]	0.7831*** [0.1350]	0.8419*** [0.1251]
Enrolled in this a.y.		1.0578*** [0.2571]		0.8912*** [0.3198]		1.2070*** [0.3873]
Constant	1.5505 [1.0288]	1.3149 [1.0147]	-0.0418 [2.2926]	0.5465 [2.0487]	1.2737 [0.9366]	0.9253 [0.7904]
Observations	621	621	224	261	360	360
Pseudo R-squared	0.232	0.2582	0.3121	0.297	0.247	0.2845

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

Table 23: Received remittances and inactivity - young 19 - 24 - Instrumental variable estimation

	Dependent variable =1 if an individual is inactive											
	<i>All sample</i>				<i>Male</i>				<i>Female</i>			
	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Remittances		0.9811 [0.6878]		0.9464 [0.6491]		1.2408 [1.2183]		1.1745 [1.4599]		0.6378 [2.1817]		0.3639 [1.0258]
MTO per capita	3.2236*** [0.5834]		3.3313*** [0.5490]		4.4491** [1.7386]		4.4534** [1.7771]		3.4357*** [1.0191]		3.5870*** [1.0694]	
Distance border	-0.0552*** [0.0174]		-0.0561*** [0.0172]		-0.0670*** [0.0101]		-0.0673*** [0.0102]		-0.0554* [0.0306]		-0.0587** [0.0268]	
MTO*secondary educ	-4.6541*** [0.8080]		-4.5993*** [0.8002]		-4.6784*** [1.4036]		-4.7236*** [1.4738]		-5.7138*** [1.4717]		-5.6502*** [1.0004]	
Sex		0.1206 [0.1708]		0.164 [0.1744]								
Age		-0.1049*** [0.0382]		-0.0842** [0.0413]		-0.0944 [0.0776]		-0.0821 [0.0820]		-0.0607 [0.0587]		-0.0288 [0.0523]
HH years of school		0.0353 [0.0381]		0.0351 [0.0412]		0.0191 [0.0497]		0.0073 [0.0561]		0.0516 [0.0530]		0.0606 [0.0639]
Years of school		-0.0243 [0.0236]		-0.0629** [0.0276]		0.0766* [0.0465]		0.0501 [0.0536]		-0.1106* [0.0590]		-0.1755*** [0.0495]
Benefit		-0.2011 [0.1460]		-0.2017 [0.1365]		-0.1936 [0.1771]		-0.2223 [0.1684]		-0.2282 [0.2155]		-0.2172 [0.1983]
Dependency ratio		0.0177 [0.2588]		-0.046 [0.2876]		-0.198 [0.5657]		-0.3097 [0.6259]		0.0374 [0.3336]		-0.0611 [0.2921]
Othincome_pcap		0.0803 [0.0769]		0.0261 [0.0767]		-0.1197 [0.1216]		-0.2052 [0.1306]		0.2447 [0.1908]		0.194 [0.1405]
HH size		0.0237 [0.0367]		0.0264 [0.0350]		0.0642 [0.0458]		0.0554 [0.0442]		0.0172 [0.0488]		0.0285 [0.0501]
Head		-1.0494* [0.6174]		-1.0346* [0.6076]		-1.5213** [0.6662]		-1.4537** [0.6570]		-0.2648 [0.6135]		-0.315 [0.7063]
Spouse		0.9966*** [0.3418]		1.1314*** [0.3574]						0.8141 [0.6629]		0.9493* [0.5083]
Relatives		0.6960*** [0.2139]		0.8000*** [0.2323]		0.5938 [0.4925]		0.6305 [0.5000]		0.7092** [0.2883]		0.8439*** [0.3130]
Urban area		1.0553*** [0.2045]		1.0587*** [0.2022]		1.1836*** [0.3365]		1.1953*** [0.3631]		1.1649*** [0.2236]		1.1923*** [0.2468]
Enrolled in this a.y.				1.0075*** [0.2532]				0.8915*** [0.3322]				1.2079*** [0.3710]
Constant		1.4519 [1.1557]		1.2301 [1.1214]		0.3636 [1.9920]		0.4704 [2.0421]		1.2504 [1.0835]		0.9255 [0.8006]
District dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	621	621	621	621	261	261	261	261	360	360	360	360

Robust standard errors in brackets For regional controls, the excluded district is Tirana.

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 24: Received remittances and inactivity - young people 19 - 33
Probit estimation

	Dependet variable =1 if an individual is inactive					
	<i>All sample</i>		<i>Male</i>		<i>Female</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
Remittances	0.2884*** [0.1084]	0.2901*** [0.1091]	0.3909* [0.2194]	0.3885* [0.2066]	0.1963* [0.1125]	0.2005* [0.1110]
Sex	-0.0825 [0.1224]	-0.0344 [0.1384]				
Age	-0.0409*** [0.0098]	-0.0293*** [0.0092]	-0.0409*** [0.0156]	-0.0286* [0.0161]	-0.0412*** [0.0116]	-0.0287*** [0.0111]
HH years of school	-0.0053 [0.0270]	-0.0082 [0.0268]	0.0017 [0.0347]	-0.0026 [0.0367]	-0.0102 [0.0345]	-0.0114 [0.0348]
Years of school	-0.0818*** [0.0261]	-0.1031*** [0.0286]	-0.0395 [0.0317]	-0.0549 [0.0340]	-0.1076*** [0.0333]	-0.1370*** [0.0386]
Benefit	-0.0137 [0.1318]	-0.0124 [0.1273]	-0.0223 [0.1522]	-0.0413 [0.1447]	-0.0314 [0.1533]	-0.0168 [0.1504]
Dependency ratio	-0.2245*** [0.0829]	-0.2631*** [0.0909]	-0.265 [0.1630]	-0.3023* [0.1650]	-0.2400* [0.1246]	-0.2930** [0.1254]
Othincome_pcap	0.1216** [0.0598]	0.0661 [0.0646]	0.0171 [0.1358]	-0.0742 [0.1484]	0.1486** [0.0617]	0.1179 [0.0753]
HH size	-0.0122 [0.0210]	-0.0151 [0.0205]	-0.0268 [0.0199]	-0.0330* [0.0195]	0.0018 [0.0279]	0.0026 [0.0266]
Head	-0.1104 [0.2984]	-0.112 [0.2985]	-0.0714 [0.3187]	-0.1018 [0.3150]	-0.3792 [0.5392]	-0.3071 [0.5710]
Spouse	0.5751*** [0.1888]	0.6717*** [0.2068]			0.5674** [0.2353]	0.7086*** [0.2612]
Relatives	0.3673** [0.1586]	0.4692*** [0.1733]	0.2629 [0.3402]	0.3367 [0.3615]	0.3717* [0.1955]	0.5054** [0.2308]
Urban area	1.1133*** [0.1388]	1.1166*** [0.1434]	1.0729*** [0.1976]	1.0733*** [0.1984]	1.1974*** [0.1972]	1.2076*** [0.2017]
Berat	0.1841*** [0.0268]	0.1520*** [0.0264]	0.5613*** [0.0893]	0.4995*** [0.0968]	-0.0518 [0.0481]	-0.0592 [0.0531]
Diber	-0.0411 [0.0573]	-0.014 [0.0588]	0.4534*** [0.0878]	0.4726*** [0.0942]	-0.3258*** [0.0918]	-0.2754*** [0.1027]
Durres	0.2674*** [0.0446]	0.2783*** [0.0423]	0.3506*** [0.0957]	0.3555*** [0.1023]	0.2132*** [0.0694]	0.2403*** [0.0760]
Elbasan	-0.1083*** [0.0368]	-0.1085*** [0.0353]	-0.0427 [0.0893]	-0.0619 [0.0941]	-0.1360** [0.0689]	-0.1111 [0.0757]
Fier	-0.1151** [0.0526]	-0.1221** [0.0496]	0.1103 [0.0850]	0.095 [0.0911]	-0.2721*** [0.0831]	-0.2663*** [0.0790]
Gjirokaster	0.3200*** [0.0465]	0.2871*** [0.0432]	0.4547*** [0.0853]	0.3639*** [0.1018]	0.2913*** [0.0930]	0.3171*** [0.1011]
Korce	-0.5309*** [0.0429]	-0.5150*** [0.0411]	-0.5096*** [0.0809]	-0.4948*** [0.0846]	-0.5078*** [0.0737]	-0.4928*** [0.0746]
Kukes	0.4282*** [0.0672]	0.4610*** [0.0657]	0.4563*** [0.1528]	0.4952*** [0.1571]	0.4377*** [0.0770]	0.4710*** [0.0885]
Lezhe	0.0981*** [0.0295]	0.1126*** [0.0316]	-0.2197*** [0.0380]	-0.3608*** [0.0581]	0.2986*** [0.0568]	0.4082*** [0.0856]
Shkroder	0.2677*** [0.0351]	0.3109*** [0.0419]	-0.1399*** [0.0431]	-0.1256*** [0.0453]	0.5759*** [0.0942]	0.6624*** [0.1199]
Vlore	0.3743*** [0.0526]	0.4155*** [0.0512]	0.2291** [0.1016]	0.2337** [0.0996]	0.4953*** [0.0793]	0.5632*** [0.0815]
Enrolled in this a.y.		1.0025*** [0.2430]		0.9445*** [0.2927]		1.1516*** [0.3532]
Constant	1.2349*** [0.3677]	1.1005*** [0.3389]	0.7451* [0.4200]	0.6628 [0.4153]	1.5001*** [0.4312]	1.3254*** [0.3889]
Observations	1402	1402	587	587	815	815
Pseudo R-squared	0.179	0.195	0.1777	0.19	0.1936	0.2157

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

Table 25: Received remittances and inactivity - young 19 - 33 - Instrumental variable estimation

	Dependent variable =1 if an individual is inactive											
	<i>All sample</i>				<i>Male</i>				<i>Female</i>			
	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Remittances		-0.4794*		-0.4756		-1.3618***		-1.3680***		-0.3688		-0.2781
		[0.2849]		[0.3004]		[0.0796]		[0.0845]		[0.3376]		[0.3105]
MTO per capita	2.4289***		2.4152***		1.9132**		1.8607**		2.1783**		2.1793**	
	[0.7800]		[0.7850]		[0.8076]		[0.8484]		[0.9708]		[0.9760]	
Distance border	-0.0325***		-0.0327***		-0.0362***		-0.0373**		-0.0257		-0.0256	
	[0.0117]		[0.0116]		[0.0139]		[0.0149]		[0.0171]		[0.0174]	
MTO*secondary educ	-3.5156***		-3.5141***		-2.6107***		-2.6068***		-3.6592***		-3.6301***	
	[0.7973]		[0.7989]		[0.3480]		[0.3686]		[1.0697]		[1.0933]	
Sex		-0.1591		-0.1134								
		[0.1515]		[0.1701]								
Age		-0.0380***		-0.0266***		-0.0298***		-0.0198*		-0.0385***		-0.0264**
		[0.0087]		[0.0083]		[0.0108]		[0.0114]		[0.0108]		[0.0104]
HH years of school		-0.0129		-0.0157		-0.0152		-0.0208		-0.0157		-0.0162
		[0.0266]		[0.0265]		[0.0386]		[0.0435]		[0.0350]		[0.0356]
Years of school		-0.0786***		-0.0993***		-0.0301		-0.0422		-0.1045***		-0.1344***
		[0.0273]		[0.0295]		[0.0324]		[0.0326]		[0.0348]		[0.0406]
Benefit		-0.0123		-0.0111		0.0146		-0.0021		-0.0357		-0.0198
		[0.1242]		[0.1203]		[0.1167]		[0.1183]		[0.1487]		[0.1472]
Dependency ratio		-0.2539***		-0.2912***		-0.2993**		-0.3286**		-0.2655**		-0.3152**
		[0.0903]		[0.0963]		[0.1282]		[0.1303]		[0.1351]		[0.1325]
Othincome_pcap		0.0641		0.0081		-0.1028		-0.2039		0.1002		0.0775
		[0.0662]		[0.0719]		[0.1214]		[0.1381]		[0.0797]		[0.0923]
HH size		-0.0115		-0.0143		-0.0147		-0.0232		0.0016		0.0025
		[0.0211]		[0.0215]		[0.0331]		[0.0331]		[0.0253]		[0.0251]
Head		-0.0907		-0.0921		-0.0933		-0.1266		-0.2162		-0.1697
		[0.2692]		[0.2691]		[0.2482]		[0.2463]		[0.4515]		[0.4768]
Spouse		0.4823**		0.5758***						0.5113**		0.6622**
		[0.1991]		[0.2218]						[0.2434]		[0.2754]
Relatives		0.3584**		0.4568**		0.1371		0.1836		0.3794*		0.5120**
		[0.1709]		[0.1872]		[0.1750]		[0.1647]		[0.1984]		[0.2356]
Urban area		1.0638***		1.0665***		0.8718***		0.8727***		1.1559***		1.1743***
		[0.1467]		[0.1526]		[0.1398]		[0.1452]		[0.2177]		[0.2216]
Enrolled in this a.y.				0.9825***				0.8849***				1.1488***
				[0.2327]				[0.3160]				[0.3591]
Constant		1.4495***		1.3183***		0.8586**		0.8299**		1.6485***		1.4530***
		[0.3300]		[0.3112]		[0.4171]		[0.4148]		[0.3887]		[0.3693]
District dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1402	1402	1402	1402	587	587	587	587	815	815	815	815

Robust standard errors in brackets For regional controls, the excluded district is Tirana.

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 26: Received remittances and inactivity - young people 25- 33
Probit estimation

	Dependent variable =1 if an individual is inactive					
	All sample		Male		Female	
	(1)	(2)	(3)	(4)	(5)	(6)
Remittances	0.1799 [0.1464]	0.1862 [0.1464]	0.311 [0.3014]	0.3195 [0.3036]	0.1032 [0.1292]	0.1262 [0.1271]
Sex	-0.2735 [0.2418]	-0.2577 [0.2441]				
Age	-0.0208 [0.0129]	-0.0162 [0.0112]	-0.0188 [0.0313]	-0.0242 [0.0284]	-0.0287 [0.0249]	-0.0209 [0.0260]
HH years of school	-0.0309 [0.0269]	-0.0321 [0.0264]	-0.004 [0.0331]	-0.0017 [0.0337]	-0.0448 [0.0472]	-0.0463 [0.0467]
Years of school	-0.1123*** [0.0361]	-0.1169*** [0.0384]	-0.0948** [0.0425]	-0.0940** [0.0423]	-0.1117*** [0.0410]	-0.1247*** [0.0464]
Benefit	0.1836 [0.1711]	0.1837 [0.1694]	0.2338 [0.2581]	0.2434 [0.2604]	0.1083 [0.1590]	0.1187 [0.1596]
Dependency ratio	-0.3740*** [0.1095]	-0.3790*** [0.1092]	-0.4808** [0.1881]	-0.4767** [0.1894]	-0.3231* [0.1678]	-0.3424** [0.1654]
Othincome_pcap	0.014 [0.1211]	0.0102 [0.1196]	-0.0026 [0.2700]	0.009 [0.2704]	-0.0018 [0.1801]	0.008 [0.1871]
HH size	-0.035 [0.0228]	-0.0387 [0.0249]	-0.0997*** [0.0309]	-0.0954*** [0.0321]	0.0008 [0.0260]	-0.0054 [0.0278]
Head	0.007 [0.3072]	0.0003 [0.3034]	0.0142 [0.3354]	0.0332 [0.3321]	-0.4952 [0.5729]	-0.4438 [0.6056]
Spouse	0.4935*** [0.1861]	0.5140*** [0.1829]			0.3960** [0.1957]	0.4580** [0.1955]
Relatives	0.095 [0.1843]	0.1229 [0.1864]	-0.1309 [0.4429]	-0.1432 [0.4399]	-0.0052 [0.2036]	0.0649 [0.2245]
Urban area	1.1625*** [0.1427]	1.1614*** [0.1423]	0.9194*** [0.2485]	0.9287*** [0.2452]	1.2991*** [0.1694]	1.3048*** [0.1665]
Berat	0.4267*** [0.0421]	0.4027*** [0.0399]	0.8734*** [0.2682]	0.9225*** [0.2877]	0.1034 [0.1059]	0.0963 [0.1089]
Diber	0.1069 [0.0823]	0.1103 [0.0824]	0.6838*** [0.2093]	0.6892*** [0.2109]	-0.1804 [0.1193]	-0.1461 [0.1386]
Durres	0.5656*** [0.0640]	0.5634*** [0.0632]	0.5450** [0.2616]	0.5547** [0.2637]	0.5971*** [0.1088]	0.6163*** [0.1212]
Elbasan	0.0945 [0.0651]	0.0892 [0.0665]	0.0113 [0.2347]	0.0186 [0.2351]	0.2007** [0.0800]	0.2074** [0.0865]
Fier	-0.1057* [0.0575]	-0.1214** [0.0576]	0.1258 [0.1927]	0.1366 [0.1938]	-0.2408** [0.1129]	-0.2656** [0.1058]
Gjirokaster	0.4306*** [0.0549]	0.4161*** [0.0582]	0.9951*** [0.2153]	1.0659*** [0.2559]	0.2188* [0.1172]	0.2579* [0.1353]
Korce	-0.5517*** [0.0922]	-0.5520*** [0.0913]	-0.5221** [0.2515]	-0.5164** [0.2522]	-0.5575*** [0.0978]	-0.5381*** [0.1094]
Kukes	0.4137*** [0.1081]	0.4176*** [0.1068]	-0.041 [0.2983]	-0.0384 [0.2989]	0.6736*** [0.1223]	0.7032*** [0.1376]
Lezhe	0.0778 [0.0477]	0.0727 [0.0465]	-0.8070*** [0.1056]	-0.7808*** [0.1145]	0.4179*** [0.0916]	0.4495*** [0.1087]
Shkroder	0.1645*** [0.0380]	0.1635*** [0.0380]	-0.4754*** [0.0769]	-0.4608*** [0.0873]	0.5750*** [0.0891]	0.6010*** [0.1041]
Vlore	0.4182*** [0.0609]	0.4217*** [0.0599]	0.3721** [0.1855]	0.3851** [0.1868]	0.3942*** [0.0536]	0.4272*** [0.0557]
Enrolled in this a.y.		0.5014 [0.4885]		-0.5304 [1.0323]		0.9438 [0.7128]
Constant	1.3636** [0.5440]	1.2899** [0.5399]	1.0815 [0.8920]	1.1617 [0.8206]	1.5452* [0.8540]	1.4199 [0.8933]
Observations	781	781	326	326	455	455
Pseudo R-squared	0.1778	0.1794	0.1932	0.1944	0.1979	0.2038

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

For regional controls, the excluded district is Tirana.

Table 27: Received remittances and inactivity - young 25 - 33 - Instrumental variable estimation

	Dependent variable =1 if an individual is inactive											
	<i>All sample</i>				<i>Male</i>				<i>Female</i>			
	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV	First stage	IV
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Remittances		-0.7981*		-0.7649*		-1.3919***		-1.3904***		0.1061		0.5316
		[0.4256]		[0.4415]		[0.1756]		[0.1731]		[0.9038]		[0.9357]
MTO per capita	2.0472**		2.0178*		2.2402***		2.2317***		1.3445		1.1512	
	[1.0288]		[1.0543]		[0.6534]		[0.6273]		[1.5555]		[1.6805]	
Distance border	-0.0258*		-0.0254*		-0.0327**		-0.0328**		-0.0091		-0.0041	
	[0.0135]		[0.0138]		[0.0135]		[0.0131]		[0.0204]		[0.0212]	
MTO*secondary educ	-2.8814***		-2.8653***		-2.9920***		-2.9892***		-2.1767*		-1.9946	
	[0.7976]		[0.8267]		[0.5330]		[0.5508]		[1.2315]		[1.3909]	
Sex		-0.3555		-0.3429								
		[0.2519]		[0.2588]								
Age		-0.0210**		-0.0177**		-0.032		-0.0346		-0.0287		-0.0222
		[0.0101]		[0.0079]		[0.0238]		[0.0229]		[0.0242]		[0.0269]
HH years of school		-0.0476**		-0.0480**		-0.0276		-0.0266		-0.0447		-0.039
		[0.0222]		[0.0225]		[0.0343]		[0.0347]		[0.0457]		[0.0491]
Years of school		-0.0977***		-0.1019**		-0.0698*		-0.0692**		-0.1118***		-0.1293***
		[0.0370]		[0.0397]		[0.0357]		[0.0339]		[0.0376]		[0.0433]
Benefit		0.1924		0.1928		0.1771		0.1821		0.1082		0.1039
		[0.1600]		[0.1593]		[0.1558]		[0.1582]		[0.1619]		[0.1637]
Dependency ratio		-0.3907***		-0.3947***		-0.4255***		-0.4236***		-0.3230*		-0.3237*
		[0.1173]		[0.1165]		[0.1549]		[0.1566]		[0.1673]		[0.1738]
Othincome_pcap		-0.0878		-0.0872		-0.4534		-0.4448		-0.0015		0.0423
		[0.1315]		[0.1315]		[0.3647]		[0.3529]		[0.1774]		[0.1863]
HH size		-0.0302		-0.0333		-0.0536		-0.0514		0.0008		-0.0059
		[0.0215]		[0.0246]		[0.0361]		[0.0374]		[0.0258]		[0.0281]
Head		0.0578		0.0514		0.0058		0.0157		-0.4962		-0.5636
		[0.2751]		[0.2732]		[0.2486]		[0.2455]		[0.7246]		[0.7434]
Spouse		0.4182**		0.4364**						0.3960**		0.4586**
		[0.1871]		[0.1922]						[0.1956]		[0.1967]
Relatives		0.0899		0.1109		0.0624		0.057		-0.0054		0.0523
		[0.2009]		[0.2100]		[0.3033]		[0.2992]		[0.2143]		[0.2255]
Urban area		1.0702***		1.0752***		0.7484***		0.7517***		1.2992***		1.3107***
		[0.1647]		[0.1631]		[0.1510]		[0.1461]		[0.1823]		[0.1582]
Enrolled in this a.y.				0.358				-0.2703				1.0096
				[0.5160]				[1.1779]				[0.7221]
Constant		1.7015***		1.6411***		1.7228***		1.7583***		1.5447*		1.3299
		[0.5001]		[0.5023]		[0.6403]		[0.6170]		[0.9107]		[1.0396]
District dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	781	781	781	781	326	326	326	326	455	455	455	455

Robust standard errors in brackets For regional controls, the excluded district is Tirana.

* significant at 10%; ** significant at 5%; *** significant at 1%

Part II

THE ECONOMICS OF SOCIAL EXCLUSION

Chapter 3

Homelessness and Labor Force Participation. Evidence from an Original Data Collection in Milan.

Abstract: Economic research on homeless is very scarce because of the lack of reliable data. This paper adds a methodological contribution in collecting data on homeless population by exploiting the S-Night approach and in providing figures from the first census of homeless people in Milan, the second largest city in Italy. We also present basic results from an extensive survey on a final sample of almost 1000 homeless people.

In addition, homeless people are thought to be no rational agents as a result of their housing status, attitude towards alcohol and drug, physic and psychic condition. Up to now no statistical evidence was available. Using the original data set, we investigate the human capital, demographic and familiar factors influencing homeless people's probability to participate in the labour market, to be employed and to obtain income from illegal activities.

The econometric analysis shows that the variables affecting homeless people's labour market behavior are in line with the underlying theoretical framework of utility maximization and labour-leisure choice. The results suggest that homeless people participation in the labor market is determined by sex, age, education, place of sleeping (the counterpart of residence in the general population), received financial and in kind help, physic and psychic status, non - labor income. Our results support the view that homeless people behavior can be modelled according to the traditional rationality hypothesis. In order to interpret these results in terms of causation and not only correlation further inspections are required to account for potential endogeneity.

JEL classification: J15, I32

Keywords: Homelessness, Social Exclusion, Labor Force Participation

1 Introduction¹

Although general standards of living are increasing over time in well developed countries, modern welfare states still face different types of social exclusion because of persistent poverty, long-term unemployment, changes in the family structure, the retrenchment of the welfare state or new migration patterns (Sorensen (1999)).

Social exclusion is a relatively new concept defining a very complex and multidimensional phenomenon referred to the relative position of an individual or a group of people in the society. This kind of exclusion can be caused by a variety of disadvantages through different social processes and dimensions of everyday life. There is a causal link between poverty and social exclusion but there is a well developed consensus on other determinants. Among the others, possible main determinants are the lack of affordable housing, low paying jobs, substance abuse, mental illness, lack of needed services, domestic violence, unemployment, prison release and re-entry into society, changes and cuts in public assistance. Social exclusion seems to be the outcome of a very complex process. Homelessness and housing deprivation are perhaps the most extreme examples of poverty that can lead to social exclusion in well developed economies. Also if they are a well-known economic problem, economic research is very scarce in this field. One reason for that is the lack of reliable data and the difficulties related to data collection on this particular population.

The goal of this paper is twofold. In Italy no official data are available on homeless people. The first result of this paper is to add a methodological contribution to the existing economic literature by providing the first reliable estimate of the size of homeless people in Milan, the second largest Italian city, and by collecting qualitative micro data on this particular population. An accurate estimate of the street and shelter homeless population is useful for projections of service needs. In addition, once established a benchmark of the number of people sleeping rough in the City area, it is possible to measure the effectiveness of programs to address chronic homelessness (such as supportive housing and related strategies) by conducting annual or twice yearly street counts.

Furthermore, it is general opinion that for homeless people, unemployment and non labour market participation aggravate other complex problems. On the one hand, obtaining a job is very difficult if one does not have decent housing but, on the other hand, the general consensus is that the integration into job or training programmes can help people to become reintegrated in society as a whole. From a theoretical perspective, it could be argued that homeless people are out of the labour market because they are no rational agents, being often under the effect of alcohol or drug and having psychic problems. Physical health problems that limit work or daily activities, in particular, are barriers to

¹I acknowledge funding from Empirical Research in Economics and Fondazione Rodolfo De Benedetti. I wish to thank all volunteers participating to this project and all voluntary/charity associations and the Settore Servizi Sociali Adulti in Difficoltà of Milan for their support in carrying out the survey. The project has been coordinated together with Lucia Corno. The usual disclaimer applies.

employment. Drug and alcohol abuse and dependence are positively associated with lower work level and with higher rates of absenteeism, accidents, illness and mortality, leading to lower labor market participation. It is a well diffused wisdom but no statistical significant evidence is available on that. There are some research studies linking chronic illnesses and labor market outcomes (Chatterji *et al.* 2008) or illegal drug use and employment (De Simone, 2002). Instead, very few works are focused on homelessness and at least none has been done in the fields of economics. According to anecdotal evidence a surprisingly large number of homeless people work, but only few homeless persons are able to generate significant earnings from employment alone. Therefore, starting from these stylized facts, the second aim of this paper is to show whether individual homeless behavior can be defined rational according to traditional economic theory and to compare the results with the ones found for the general population. As a case study we consider the behavior of homeless people in the labor market. In particular, we examine whether variables affecting homeless people's labour market behavior are in line with the underlying theoretical framework of utility maximization and labour-leisure choice.

The empirical analysis is based on micro - data collected by the author in a field work. Our reference population includes all persons that in a given night (14th January 2008) reside in (i) places not meant for human habitation, such as cars, parks, sidewalks, abandoned buildings (street homeless); (ii) emergency shelters (sheltered homeless); (iii) disused areas/shacks/slums. The survey design and implementation includes two major phases: the count of homeless and the face to face interviews. The count has been necessary to have accurate data on the dimension of the reference population and to construct a complete list from which randomly select the sample to be interviewed. The count involved a total of about 350 volunteers in the whole town in one single night. The volunteers have been recruited among people working with homeless people in soup kitchens, shelters and other services, voluntary associations (e.g. Red Cross), tertiary students and private citizens. As a result of the census, the final population in Milan accounted for 3860 homeless adults: 408 in street, 1152 in shelters and about 2300 in disused areas. Based on this reference population we realized an extensive survey on a final sample of almost 1000 individuals and we collect information on demographic characteristics, individual background, current situation and expectations, original household, work and income, education, network and trust, awareness, health conditions. The enumerators and the interviewers have been trained during the weeks before the survey to produce an accurate count of the population and a complete questionnaire, but also on how to approach them and to avoid possible risky situations.

Using the collected data, we identify crucial factors determining homeless probability to be in the labor force. In addition we also exploit the main determinants of being employed and of committing offenses to obtain income. To identify these factors and to compare them with the ones characterizing the general population seems to be crucial in order to optimally design policies aimed to faster social inclusion.

The empirical analysis shows that sex, education level, received financial and

in kind help, nationality, civil status (widows/divorced), place of sleeping and previous imprisoning are the most important factors correlated with the probability of being in the labor force although not having a house. Determinants of employment status and of obtaining income from informal sector activities are in line with the rationality hypothesis. These first results suggest that homeless people labor market behavior is related to the set of traditional variables characterizing general population behavior.

The paper is organized as follows. Section 2 provides evidence on existing data on the homeless population in different countries. Section 3 shows the basic initiatives targeting homelessness in Milan. Section 4 gives an overview of the data collection procedure. Section 5 presents the raw data and basic descriptive statistics. Section 6 shows the empirical analysis and discusses the results. Finally, Section 7 concludes.

2 Homelessness in the developed countries

Homelessness is a public policy issue in many European countries that have developed integrated strategies to significantly reduce it. However, there is a significant lack of reliable data and information on the social characteristics and geographical spread of this population.

As convention it is possible to distinguish between primary homelessness (or rooflessness) and secondary homelessness. The first refers to persons living in the streets without a shelter that would fall within the scope of living quarters (streets, parks, public buildings, parts of the transportation system, vehicles and so on), the second include persons with no place of usual residence who move frequently between various types of accommodations (including dwellings, shelters, institutions for the homeless or other living quarters).

Only few countries have official statistics on homelessness. Among them, US and Australia use conventional census methods to monitor the phenomenon. In particular, they have included the collection of data on homeless people into the general population census and have therefore developed *ad hoc* methodologies and procedures. For the first time during the 1990 Decennial Census, the U.S. Census Bureau undertook a Shelter and Street Enumeration (*S-Night*) on a single night of March 20-21 in five US City (Chicago, Los Angeles, New Orleans, New York and Phoenix) (Martin, 1992). The effort was designed to enumerate people in a predesignated list of emergency shelters (shelters for runaway, neglected, and homeless youth, shelters for abused women), homeless people on the street at visible locations, designated by local officials as known congregating areas for the homeless, and to count all individuals exiting some abandoned buildings. It has been found that approximately 190,000 persons were experiencing homelessness including 168,300 persons in emergency shelters, 11,800 youth in runaway or homeless youth shelters, and 10,300 women in domestic violence shelters. In addition, approximately 50,000 persons were identified in visible street locations. In the following years, the United States used a Service-

based enumeration operation that is a specialized operation conducted at service locations. These service locations include shelters, soup kitchens, regularly scheduled mobile food vans and targeted non-sheltered outdoor locations. On the census day enumerators visit these locations and count people there. The institution that regularly supervises homeless counts in U.S. is the Department of Housing and Urban Development (HUD). In the last years, the HUD requires homeless counts every two years on a national sample of 80 communities in different geographical areas. The HUD's most recent estimates indicate 754,000 persons in US living in emergency shelters, transitional housing, and on the street in any given night there is a fairly stable homeless population at around 0.2 – 0.3 percent of the total population. Considering data disaggregated at state level, it emerges that Nevada registers the highest number of homeless people as a percentage of the total population (0.68%), followed by California and Colorado (0.47%), Oregon (0.45%), Florida (0.34%) and Georgia (0.3%). Finally, most recently, the HUD developed the Homeless Management Information Systems (HMISs), a specific computerized data collection tools designed to capture information over time on the characteristics and service needs of men, women, and children experiencing homelessness.

In Australia, homeless census started in 1996 and takes place every 5 years. To avoid underestimation of the population, the statistics office works together with local service providers who might know where people usually sleep rough in their local area. In some cases, the census forms is handed out at agencies that provide services for street people, such as mobile food vans. Among secondary homelessness, also people living in emergency or transitional accommodation are counted, as well as people residing temporarily with other households because they have no accommodation of their own. They are classified as people with 'no usual address'. According to the last available population census (2001), in Australia houseless people are 99,900. Adults, over 24 years of age, are the 54% of the population. Males are more than females (58% vs 42%) and the 58% are single (58,116) while only the 19% are couples (18,840). On census night in 2001, only 14.25% of people considered by the census to be houseless were staying in services funded through the Supported Accommodation Assistance Program (SAAP), a specific governments program for houseless people around the country.

Up to now, similar countrywide data are not available in Europe where only very few countries collect and publish some national level data. Where the states have a clear responsibility for the collection of data on homelessness or for the preparation of homeless strategies, some specific data collection (but more often estimation) and report on homelessness on a planned and regular basis are available. However, it is worth saying that single states tend to record only information on some specific typology of homeless people (i.e. shelter homeless women, shelter youth homeless) but they do not have a fully comprehensive set of information on that population (Edgar, 2007).

In Italy only two attempts have been made to carry out a systematic and statistically significant survey. The first survey has been lead from the Commissione di Indagine sull'esclusione sociale (Dipartimento per gli Affari Sociali e

Presidenza del Consiglio) and from the Zancan Foundation of Padova to the aim to delineate the characteristics of the persons without dwelling and to estimate their number on the entire national territory. The survey has been simultaneously carried out in the night of 14 March 2000, on a representative sample of different municipalities using the public places method. Final figures account for an estimated population of 17.000 homeless people, with a higher concentration in bigger municipalities. There is a general consensus that these figures underestimate the phenomenon. A local level survey has been instead carried out in the December 10th, 2004 from the University of Padova and the Regional Observatory for the Protection and Promotion of the Person of Padova in the seven cities chief town of province of the Veneto region interviewing 87 persons in 22 shelters and 61 in 22 open places.

Considering the incidence of homelessness over the total population, as reported in Table 1, using the data available up to now, Italy seemed far away from the international context. This result suggests the need for more accurate information in order to disentangle the actual dimension of the phenomenon.

3 Initiatives targeting homeless in Milan

In Italy, although a National Action Plan for social inclusion exists, social policies and institutions targeting homeless people are decentrated and change by town to town. In Milan there are mainly two types of social services: a permanent help centre financed by Milan municipality and located at the central station (Centro Aiuto Stazione Centrale) and the so called "cold emergency". The first one offers general information for all needy people on shelters availability, soup kitchen's location and it sorts homeless towards more specific voluntary organizations, depending on homeless's characteristics (i.e. men or women, Italians or foreigners, immigrants, with or without the permit of stay, etc.). The second is a temporary service and it is aimed to increase shelters' host capacity during winter months. All other services are managed by private organizations and try to satisfy homeless basic needs, such as warm free meals, emergency food, nutrition assistance, bed, clothes, blankets, medicines. All available programmes provide assistance at no or negligible costs.

The homeless have the opportunity to care their personal hygiene in public toilets, that generally cost 0,50 euros and they offer them showers with shampoo, bath foam, toothbrush, toothpaste and a towel. Sick homeless can seek medical cares in some health services in Milan, targeting specific groups of people: for example, immigrants, drug or alcohol addicted. Besides shelters, soup kitchen and health centres, additional "road's services" have the task to help people in emergency situation and especially during night, by providing them blankets and hot drinks. In Milan, there are mainly three organizations specialized in these type of services: the Red Cross, City Angels and S. Egidio Community. Some others organizations targeting homeless people adopted a different approach and they are more oriented towards listening and comprehension of people excluded from the society (Caritas, SOS Exodus).

4 First homeless census in Milan: data collection

4.1 Survey design

One of the first problems you may encounter in counting and interviewing homeless people is the definition of the target population. Our reference population includes all persons who reside in (i) places not meant for human habitation, such as cars, parks, sidewalks, abandoned buildings (unsheltered homeless); (ii) emergency shelters (sheltered homeless); (iii) people living in disused areas/shacks/slums.

Two strategies have been used to collect the data for this study: a point-in-time count and a comprehensive qualitative assessment via trained interviews. This methodology is recommended by the U.S. Department of Housing and Urban Development (HUD), and has been successfully implemented, with some differences, in several US counties.

The point - in time count was aimed to identify all homeless staying in street, shelters and slums during the night of January 14th, 2008. To conduct the counts of unsheltered and sheltered homeless people in the same night is required to avoid double counting of people who are in a shelter one night and on the streets the next. The count was necessary to have a precise idea on the phenomenon's dimension and to construct an homeless census from which randomly select the sample of respondents. Interviews to unsheltered homeless have been done in the following night (January 15th), while we interviewed people who were sleeping in shelters and in disused areas on January 16th and 19th, respectively. The whole data collection has been carried out in one week to minimize sample attrition because of potentially high homeless's mobility within the city.

Because it is easier to count people in shelters than on the street or in other places not meant for human habitation, conducting the count on a night when the shelters are most full will likely lead to the most accurate count. Therefore, the count took place in January when the average daily temperature and precipitations are minimum in Milan (Table 2) and shelters are likely to be at peak capacity. Moreover, counting and interviewing people sleeping in open locations during the winter months may lead to a more realistic picture of chronically unsheltered homeless people, the ones most reluctant to use services. Finally, in order to generate comparable numbers and to increase public awareness on homelessness issues we take the same period of the year in which US estimates take place. In addition, to facilitate the identification of homeless people and to reduce the likelihood that surveyors would be overwhelmed by potential respondents, we pick up a day of the week with less pedestrian traffic (Monday night). Also, by having the count in the middle of the month, the effects of income on housing would be minimized.

The interviews didn't take place at the same day as the count for two reasons. First, it is not feasible to attempt to interview people during one-night count.

During the count, enumerators have checked the presence of homeless by walking in all streets in Milan and there wouldn't be any time left also to select and to interview homeless people. Second, the optimal time for counting is late night after 10 p.m. (from midnight until 3:00 am) when there is a higher probability to find the homeless, while the ideal time for interviews is around 9 p.m. when they are already settled down, but still awake to talk.

The homeless population count and the survey involved each day more than 350 volunteers in the whole town. The volunteers have been recruited among people who worked with homeless people in soup kitchens, shelters and other social services, among voluntary associations (Red Cross) but included also university students and private citizens thanks to the substantial interest received by the project from local media and newspapers. The enumerators have been trained to produce an accurate count of homeless people and a complete questionnaire, but also on how to approach them and to avoid possible risky situations (Braga and Corno (2008)). The volunteers were preassigned to teams of three or four surveyors prior to the training session. The researchers ensured that each team had at least one individual who had experience interviewing or working with homeless individuals. Most volunteers were trained with their team for the training sessions so they could become comfortable with one another prior to count night. Specific training sessions have been devoted to interviewers.

4.2 Homeless Count

Homeless people often move to and from locations depending on the time of day, season of the year, level of police harassment and other factors. The risk to count and to interview the same person more than once is therefore very high in this population.

Starting from the early '80s, different methods have been proposed to count homeless population². Among the more recent ones, there is the capture-recapture method. In a pioneering study, Fisher et al (1994) use this procedure to describe psychiatric morbidity of the homeless population in a given geographical area. The method calculates the total homeless population from the sum of the population actually observed and an estimate of the unobserved population, by calculating the number of people not caught in either sample³. A limitation of this method consists in estimating homeless during an entire time span. Therefore, it assumes that all individuals identified as homeless remain homeless for the full year. Brent 2007 overcome this problem by using a capture-recapture method in one single day to estimate the size of homeless people in Toronto. Having conducted the analysis during the day can bring some problems related to count people not homeless, maybe poor but not sleeping in the street.

²To have a detailed descriptions of methodologies to count homeless people see Berry 2007.

³These methods were originally developed to estimate the size of a closed animal population and it is very common in the epidemiological literature. For further explanations on the capture-recapture technique see LaPorte, 1994.

To ensure people would not be counted twice we applied the so called *S - Night approach (Shelter and Street Night) or "Point in time survey"*, meaning counting all homeless people (sheltered and unsheltered) in one reference night contemporaneously in the whole town. This approach ensures minimal double - counting and allows enumerators to judge whether observed individuals fit the study's definition of homeless (Lee 1991). The point-in-time count is the most commonly used methodology to count homeless people. The count is conducted by teams of volunteers assigned to specific grids over one 4 or 5-hour period. The methodology provides a "snap shot" of the homeless population at the time of the survey and by definition it is unable to capture its dynamics. However, if repeated from time to time, such a snapshot of the homeless population gives also some insights of the trend of the phenomenon over time.

In the most cases, this method is applied in a pre established list of public places so that enumerators do not try to cover the whole city but rather focus on a limited number of locations where homeless people are believed to congregate. Although to follow this procedure is less expensive both in monetary and human terms, it has the major limitation to underestimate the real size of the population because generally the lists of shelters, as well as street locations where the homeless congregate, is incomplete and therefore persons who would not be in the chosen shelters or street locations are missed.

To minimize this bias and to reduce the under - count probability, we choose to realize a full census by mapping the whole city of Milan. Also through the census it is not possible to avoid a second problem, that is the fact that the enumerators' efforts is not complete so that they miss some street locations and shelters and either failed to visit some sites or did not follow the predetermined protocol in counting the number of people. Finally, point-in-time counts have also been criticized for missing homeless hidden from public view during late-night hours (Edin 1992; Martin 1992; Stark 1992; Wright and Devine 1992). We applied some efforts to overcome these criticisms and to have the most reliable census by divided Milan in 65 smaller areas, following the main roads, so that a team of 3-4 enumerators can reasonably cover a single census block during the night of the count in the pre-established time span. Surveyors were asked to walk every street and other public place in their survey area. To facilitate their task, we provided the enumerators teams with enlarged maps of their assigned area, and we define in advance the itinerary to be followed writing down the complete list of all streets in each area in order to reduce the risk of skipping some streets (Figure 1).

We established some criteria for the count: closed tents and closed paper-board have been counted as one homeless, while in the abandoned cars/caravans enumerators tried to understand how many homeless were sleeping there. If only human presence was detected but not its number, we choose the more parsimonious counting method so that we compute only one person.

During this night, besides counting unsheltered homeless people, volunteers had two additional tasks. First, to report homeless localization as precise as possible, by describing the road, the closest civic number but also the sleeping place (i.e. Sarfatti road closed to number 25 on a bench in front of Bocconi

University). They also tried to detect homeless observable characteristics, such as ethnicity, sex and estimated age. Reporting observable features of the individuals found has been useful to cross check this information with the ones collected through questionnaires. Second, volunteers should inform homeless people for the next day interviews by leaving a flier close to their sleeping bag or paperboard. Volunteers join these statistical activities with hot beverages and food distribution.

In the meantime, a team of volunteers collected the lists with same basic demographic characteristics (name, sex, age and nationality) of sheltered homeless people in each of the 25 emergency shelters the city. To be sure enumerators start the count at the same time and to get materials useful for the night (torches, food and beverages and notepad) they met one hour before the count in 5 strategic headquarters in Milan.

The procedure to count people living in slums was not straightforward. Slums in Milan are big stable villages where people (mainly gypsy) are generally monitored by the municipality police. During the three months prior the survey we identified the typology of village (authorized/not authorized), the type of ethnic group and the number of people living in each area, by visiting them. During the pre - field visits, we asked for the permission to interview people in the slums and we announced the date of the survey. In the reference night, enumerators checked dimension and localization emerging from pre-identified disused areas. The average length of the count was about 3 hours.

4.3 Homeless Interviews

Once estimated the total size of homeless population, enumerators interviewed a sample of respondents. We have a total of 75 interviewers over 350 volunteers. To minimize answer bias we shirked the number of interviewer as much as possible and to exploit the learning by doing effect we recruited them for all three nights of the interviews. Enumerators interviewed unsheltered homeless in the night after the count by going back to all the localizations reported during the count. Because of time constraint and in order to maximize the probability to recapture as many unsheltered homeless as possible, we sent the same team in different identified localizations after they finished the first round of interviews. Two additional volunteers/assistants for interviewer were in charge of distributing food and hot tea to unsheltered homeless people, to make them more comfortable during interviews. Sleeping persons were tried to be wakened for an interview, but when impossible they were counted and their age, race, and sex was detected by observation. Sheltered homeless have been randomly selected from the population on the basis of shelter's dimension. We agreed with the responsible of each shelter the best time to run interviews. Four shelters over 25 refused to participate at the survey. Some interviews have been done by shelter's managers directly. Regarding disused area, we stratified the population based on geographic localization, typology and dimension and we selected a total of 12 slums over 56. Within each selected area, we randomly extract respondents.

The first question in the survey was: “Have you slept here *yesterday*⁴ night?”, so that we could check the number of people counted with the number of people interviewed. To avoid time-consuming interviews we distributed vouchers accepted in some restaurants, supermarkets, bars, shops and pharmacy in Milan to all respondents who fully completed the questionnaire. The questionnaire has been translated in Rumanian and in English and the average length was about 30 minutes each (Appendix A).

5 Descriptive statistics

5.1 Number of homeless people in Milan

The final population in Milan accounted for 3860 homeless adults: 408 in street, 1152 in shelters and about 2300 in disused areas.

Among unsheltered homeless people we interviewed the 35%, the 11.5% refused to answer, the 18.4% was already sleeping and the 15% was not found (temporary homeless or people that change place of sleeping each night). We did not send team in the 8.5% of the signaled cases. In shelters, we sampled 500 individuals over 1152 (43.4% of the sheltered homeless population) and we interviewed 424 homeless (80% of the sample). While the 6.4% of the sample was not in the shelter at the day of the interview, the 7.3% of sheltered homeless was not interviewed for lack of time and about the 2% refused to answer. In the disused areas, we sampled 525 homeless over 2300 (15% of the population) and we interviewed 349 (66% of the sample) while we were not able to interview the 33% for lack of time and for safety reasons. Only a negligible part of the population refused to answer. We end up with a sample of 941 homeless (Table 3).

Figure 2 and Figure 3 show respectively the spatial distribution of sheltered and unsheltered homeless in the city. We found a high concentration of unsheltered homeless in the centre of the city, in the train stations (Cadorna Station and Central Station) and in Linate airport where were slept a significant group of people. However, from the inspection on this spatial distribution it emerges that people are almost equally spread within the city. Shelters are mainly located in the suburb area.

5.2 Socio-Demographic Characteristics

The common characteristic of all individuals in our sample is the lack of house, but the three analyzed sub - samples (street, shelter, favelas) are quite different along many relevant dimensions.

Women represent the 27.6% of the sample but the sex composition varies significantly among the three groups. If in slums, females constitute about the half of the population (49%), in street and shelters they represent only a small minority, respectively the 10 and the 16 percent (Table 4).

⁴Yesterday refers to the census night (January 14th, 2008).

The average age of the sample is about 40 years, ranging from 14 to 83 years old. On average older people tend to stay on the street (50.6 years old), confirming anecdotal evidence that as homeless age increases as the propensity to respect shelters' rules decreases. Individuals living in slums are, on average, younger (30.6 years) mainly because this population is composed by households with children. In emergency shelters people are on average 43 years old. On average, males are older (41 years) than females (37.1) in shelters, while the opposite happens for the unsheltered homeless where the average age for women is 55.8 year and the average age for men is 50 years.

On the street and in shelters the population is mainly Italian (57% and 44%), while in slums immigrants represent the 90 percent. By crossing information on age and nationality, we notice that Italians are extremely older than foreigners: among the Italian homeless people the average age is 52 years, while immigrants are on average 35 years old.

From the survey it emerges that unemployment has been the main cause of their homelessness, for about the 31% of immigrants and the 23% of Italians, both because they lost the job or because they cannot find a job. This figure is in line with international results coming from example from the survey conducted in S. Francisco by the HUD in 2007, where the highest number of respondents (43%) faulted a lack of employment for their current spell of homelessness. This result underlines the importance of a welfare state to protect those at risk of losing a job. Family relationship, such as divorce, abuse, violence, is the main cause for the 30% of Italians. The second most widespread reason is immigration (immigrants don't know what to do, the language, where to go to find a job to get the permit of stay). So it seems that for many immigrants, homelessness is an essential step in the destination country, to reach economic goal such as find a house and jobs. Other commonly cited reasons for homelessness included inability to pay rent or to afford mortgage payments. Different from the common opinion about homeless people, only a small fraction of the population states that homelessness has been caused by drug or alcohol abuse (4%) or previous convictions (3%), and only the 3% relates her/his status to physical disabilities/illness.

Considering the level of education, as presented in Table 5, about the 65% of the population has completed compulsory school, but the fraction of people that have no education at all is more than double. On average, more educated people tend to stay in shelters, the relative less educated in street and the least educated in slums: as the level of education increases as people tend to choose a safer place of sleeping. In addition, relatively less educated people tend to stay in places characterized by an higher level of informality.

5.3 Family Background

The fact that family relationship is one of the main determinants of homelessness is confirmed by the figures on marital status (Table 6 Panel A): compared with the Italian general population, the homeless in Milan are characterized by an higher incidence of divorces and singles. This aspect is particularly evident

among street and shelter homeless people where divorced people account for the 28% and single people for the 42%. Quite high is also the fraction of widows/ers, especially on street. The percentage of married individuals increases in shelters and in slums, reaching respectively 21.4 percentage points and 57 percentage points. In the whole sample more than one third of people is married but this results is mainly driven by the disused areas population. The 74 percent of the respondents were already in that marital status when they ended up in homelessness, with no significant differences among the three sub samples. More than half of the respondents has at least one child and the percentage is higher for those living in slums (68%) (Panel B). It is interesting to observe that the children death rate among homeless people is quite high: about the 6 percent reported the death of at least one child in the whole sample but the percentage increases by 3 points among the street homeless. In panel C of Table 6 we report the proportion of individual younger than 51 years old without parents. About the 36 percent of the unsheltered homeless have lost their mother and the 46.7 their father. These percentages are slightly lower for those in shelters and significantly lower for those living in slums.

This descriptive evidence on individual family composition and background, is corroborated by the literature arguing that the family represents a natural source of insurance for their members. For example, in a recent work, Bentolilla and Ichino (2006) study how countries with different family ties (namely Italy and Spain are countries with strong family ties, while the US and the UK have less strong ties) cope with unemployment shocks. Their results suggest that the decrease in consumption after the loss of a job is much lower in Mediterranean Europe, thanks to the insurance mechanism represented by the existing strong family ties.

A specific section of the questionnaire investigates the current relationship homeless people have with their relatives, by asking whether they have spoken to any relatives in the last three months and in the last year. In our sample, the unsheltered homeless are those, more than others, who do not regularly speak with their relatives: only the 47 percent declares to have talked with relatives in the last three months.

5.4 Labor market and income sources

Although loss of employment is among the most cited causes of homelessness, quite surprisingly almost the 45% of the population was working the first time they did not sleep in a house, *strictu sensu*, and the proportion is almost double for male unsheltered homeless while less than 26% of people found in slums had a job when they slept there for the first time (Table 7). As suggested by Table 8, people facing an higher risk of homelessness are those employed in low skilled sectors, such as factory workers, bricklayers, carpenters, electricians, plumbers, cooks and waiters. This is a common feature to the three typology of homelessness.

By the contrary, not surprisingly the reported levels of unemployment at the date of the survey is high. In particular, about the 46% lost the job after

the house and was unable to find a new job. Only a minority of respondents (29.3%) indicated that they were currently employed at the time of the survey and among unemployed people only the 17% worked during the previous month, either occasionally or full - time. People are employed as low skilled workers, especially as factory workers (33%), domestic workers, nannies, cleaners (15.3%), bricklayers, carpenters, electricians, plumbers (9.4%), unskilled service workers (12.9%), cooks/waiters (5.9%). However, being employed *per se* does not mean having a contract nor being employed in the formal sector, especially for this population. Table 9 shows the reported type of contract for people currently employed or employed in the month before the survey. Homeless workers are mainly employed in the informal and temporary sectors: the majority have no contract and are employed in the black market (almost the 51% of the currently working and the 75% of people who worked the month before). On average, the proportion of currently employed individuals not having a labor contract is higher among unsheltered homeless. The fraction of those who did not answer the question regarding the legality of their job and the type of contract they have is fairly high and equal to 16 percent among the street homeless. It could be the case that they wanted to protect personal information and privacy or that they were afraid of revealing the absence of a contract. This hypothesis is partially confirmed by the difference that emerges comparing contractual situation for those currently employed and those who were employed the month before the survey. Among those currently employed the proportion of employment in the underground sector is significantly lower. It is possible to argue that no significant labor market changes in the city occur during a single month, and therefore infer that people are more afraid to say that they are currently working without contract and they tend to hide their present irregular working condition while they feel safer for working experiences that are over. However considering the period in which the survey took place (January), it could be also the case that this difference in answers actually depends on labor market conditions, reflecting the increase in demand for temporary low skill workers, especially in the service sector, that occurs in December, before Christmas.

Compared with the general population, a higher proportion of homeless people is in the labour force (74.39% of the homeless population compared with 63.5% in the general population) but the employment rate is lower, both full and part time, at the day of the survey or in the previous month (29.7% of the homeless population compared with 59.2% of the general population) (Table 9). The participation to the labor market increases as the place where people sleep becomes safer and more stable. In particular, the activity rate is higher in shelters than in disused areas and in street. By definition, in shelters a group of essential needs are satisfied by the structure itself and the same happens in disused areas that although characterized by very low living conditions ensure same basic standards. People can stay in shelters for predetermined short periods, while disused areas represent stable communities. Therefore, it is plausible that people residing in these two places are more likely to put effort in participating actively to the labor market. As for the general population, the rate of activity is lower for females than for males. Also considering the nationality

no differences emerge with respect to the general population. In Milan almost the 40% of the Italian homeless are not participating in the labour force, at any level while, only the 10% of immigrants are neither working nor are they seeking work. The relative proportion is the same of that found in the general population, although the participation rate within the foreign homeless is higher.

Unemployed people look for a job both through informal and formal channels: more than 40 percent searches for a job through friends or acquaintances, direct enquiries to firms or voluntary associations (Table 11). The two main formal routes to employment are the municipality work placement office (15%) and temporary work agencies (19), while a small fraction uses newspaper advertising or internet announcements. Individual reservation wage is 827 euro/month.

The individual labor market status find a direct counter part in the income sources reported in Table 12. While some respondents are able to earn income from employment, others receive income from different sources. In particular, approximately 36% of respondents cited employment as their main income source while a quite low proportion of interviewed receive social assistance (municipality welfare check (6.3%), disability insurance (2.4%), retirement pay (4.39%)) signaling that the rate of participation to government programs is low. The enrolment rate either in government or public programmes in slums are completely negligible: potentially no one receives financial assistance. The average amount earned weekly by the respondents indicating to receive money from government sources specific for homeless people (municipality welfare check) is €54.1, while on average the amount obtained through public assistance (disability benefits or unemployment benefits) is €82.6. Some individuals receive financial help from family/relatives (5%) or friends (4%). A significant part of our sample explicitly declares to make illegal activities to obtain money to survive confirming anecdotal evidence that criminal behavior seems to be more a consequence than a cause of homelessness. Begging for money or food is commonplace among both genders: people beg for money for basic needs more than for items to need satisfactions (food/clothes). On average weekly income is 151 €, it slightly increases in disused areas (164€) with respect to street and shelter (140€ and 145€). The amount earned weekly is not below the relative poverty threshold in Italy that is 246.5€ for a two persons household but it is straightforward that it is completely insufficient to afford house expenditures in a big city like Milan.

Evidence on income and earning is very interesting because it suggests that a non negligible proportion of the homeless population cannot easily be recognized as such being employed or having regular sources of income. They sometimes own cars or vans, are fully functioning members of the society but for different reasons they are unable to secure affordable housing in Milan, one of the most expensive housing markets in Italy.

5.5 Type and sources of helps

The lack of adequate housing together with the absence of sufficient income makes very difficult to satisfy daily needs. The first consequence of living without a stable shelter is the risk of food insecurity that leads to limited or uncertain availability of nutritionally adequate food. Lack of food, clothing, shelter and health care are problems faced by homeless people every day. Public health problems that generally affect the community at large, such as hypertension, diabetes, AIDS and viral diseases are amplified within the homeless community and contribute to push homelessness into a chronic condition. The death rate of homeless people is almost four times greater than that of the general population (O'Connell (2005)). Harsh living conditions leave a homeless people more susceptible to acute illness and traumatic injuries. Frostbite and sun exposure, as well as rape and beatings are common among the homeless. A combination of poor nutrition, poor personal hygiene, and overcrowded shelter situations can contribute to the growing number of communicable diseases in these populations such as HIV/AIDS, hepatitis B, and other sexually-transmitted diseases. Although in general no financial help is given to homeless people, a lot of voluntary associations give in kind help that allows them to daily survive without a house. Numerous nonprofit organizations, state and local agencies, and advocacy groups help those in need with food, clothing, medicines, prescription drug assistance and many other services.

Table 13 shows the percentages of respondents who asked for help. Only the 50 percent of the respondents asked for generic help last year, while the 21 percent received financial help since homelessness. Among those who asked for help for the 33% family's members (parents, children, wife/husband) are the primary source of help, the 24 percent asked for help to voluntary association, about the 20% to friends and only the 7.3% to social services or to public administration (Table 14). The greater part of homeless people in Milan received in kind help (63.41). However, the reception rate of in kind help is not equally spread over homeless people: the distribution of in-kind help among the three sub-sample varies a lot passing from the 78 percent of homeless people receiving help on the street and in shelters to the 40 percent in slums. Immigrants seem to be disadvantaged compared to natives: about three-quarters of Italians receive assistance, while among foreigners only the 58 percent is assisted.

Survey respondents were also asked the following question: "Where do you get most of your food from?" and more than one response was possible. The same question was asked for clothes, medicines and additional in kind help necessary to survive. Table 15 shows the first source of reported in-kind help (food, clothes, sleeping bags/blankets/tents, medicines). Basic assistance is mainly provided by catholic organizations. For example, almost the 26% of all respondents reports using catholic soup kitchen and 30.1% receives food assistance from churches/parish churches; both of them provide free or very cheap meals once or twice a day. Public assistance has a negligible role in satisfying basic and essential needs, such as nutrition or clothing, while it is acknowledged as a provider of health care (11% of the respondents). Among the beneficiaries,

almost all homeless people receive food assistance daily while clothing are obtained monthly or more times during the year, according to specific needs. By the contrary, items necessary for sleeping or medicines are given only few times a year (Table 16). Data confirm anecdotal evidence that charitable or non profit organizations are the most common source of survival for homeless. However, from this first inspection some questions arise about the reasons behind the disadvantages faced by some group of people towards assistance. For example, it is evident that although immigrants and native face similar types of economic difficulties, their ability to face them seems quite different. Probably, immigrants have a worse knowledge of the existent assistance supply and in addition they could have problems to communicate for the inadequate linguistic proficiency. An analogous conclusion can be drawn for the street homeless and the inhabitants of slums. Typically the chronic homeless (more than 1 year) have developed better survival strategies with respect to the very short-term homeless (less than 2 weeks) and the short - term homeless (less than 1 year). The latter resort significantly less to both private and public assistance.

According to these basic statistics it emerges that although homeless people have services available and are entitled to access them, they may be unable to use them. They may be unable to read or write and therefore don't apply for them, or they need assistance to identify and access a range of possible services. It could be useful to target specific initiatives for those groups typically more outside and far away the assistance programmes.

5.6 Social networks and awareness

The role of informal arrangements based on interpersonal relationship has been argued to be particularly important in presence of market failures in developing countries or among the poorest that often can rely only on family or friends as source of help or insurance against income shocks. Different kinds of mechanisms underline network formation among homeless people. For example, members of informal homeless communities share information about jobs, soup kitchens, shelters availability and rules and they benefit from peers who protect themselves against harassment from residents, police and other homeless. Iwata and Karato (2007) examine the effect of homeless networks on geographic concentration in Osaka City by using a spatial autoregressive model. They found that the number of homeless people in a census block is influenced by the number of homeless in neighboring census blocks, suggesting that networks determine homeless concentration. The aim of this section is to investigate the relevance of social networks among homeless, both with the civil society and other homeless friends.

Table 17 reports the statistics for the question: "Can you please tell me the name and surname (or the first three letters of the surname) of the first five homeless friends on whom do you rely on in case of need?". The table shows the distribution of friends. Name and surname of sheltered homeless have been checked with the administrative data provided by shelters' administration for sheltered homeless and by soup kitchen or social services centres for unsheltered

homeless. To find missing surnames of the respondent we crossed information on the name, age, nationality provided during the questionnaire with name, surname, age and nationality coming from administrative data.⁵ About the 49 percent of homeless people do not rely on any friends on the street and this percentage is higher for people who slept in shelters or slums during the night of the count. On average, the number of friends for each individual is 0.74. The 16 percent has one friend and only the 5 percent reports names and surnames of five friends. Almost the 7 percent of the respondents did not answer and this percentage was higher among street homeless.

Homeless people are often thought to be affected by serious physical and mental health problems. Mental health and physical problems can contribute to being homeless, and being homeless can decrease access to many health care facilities. More than half of our sample reported to have suffered from any kind of illness in the month before the survey. But only a very small proportion reported chronic illness. Mental disorders represent a very serious problem preventing people from carrying out essential aspects of daily life, such as self care and interpersonal relationships. If an higher majority of homeless people suffer of mental disorders, the degree of potentially chronicity is higher, since people remain homeless for longer periods of time and have less contact with family and friends. We asked interviewers to report the homeless psychic status. Only a negligible part signal evident psychic problems. In addition we test the internal coherence of answers within each questionnaire and results are in favor of no visible disorder.

In addition we try to test for the degree of knowledge homeless people have on the social context in which they live. They were asked about their reading of newspaper and listening of television and radio news. As presented in Table 18, almost the 60 percent of the population read or heard news the day of the survey and an additional 15 percent during the week before, signaling that they are aware of the social context.

6 Empirical analysis

6.1 Methodology

Descriptive statistics have shown that compared with the general population, a higher proportion of homeless people are in the labour force (74.28% compared with 63.5%) and a lower proportion in employment, both full and part time (29.7% compared with 59.2%). A significant fraction declares to obtain income from illegal activities. In the empirical analysis we investigate the determinants of labor force participation, employment status and the legality of the income sources for homeless people in Milan. Our main aim is to show whether individual homeless behavior can be defined rational according to traditional

⁵In case the respondent cited only the name of a friend, but not her surname, we associated him with his questionnaire only if there was a unique name among the list of name of the respondent.

economic theory and to compare the results with the ones found for the general population.

To study homeless labor market behavior as a conceptual framework we sort individuals first by their labour force participation; then, we distinguish by their employment status (employed full time, employed part time or unemployed) and finally we consider explicitly the legality status of the activity that is reported as the main source of income. We model the determinants of labor market behavior through a multivariate probit model in which the dependent variable is a binary indicator for different individual status within the labor market. Formally, we estimate the following equation:

$$\begin{aligned} y_i &= \beta_0 + \beta_1 X_i + \mu_i \\ \text{for } i &= 1, 2, \dots, n. \end{aligned} \tag{1}$$

The dependent variable, the vector y_i , is a dichotomous indicator representing the outcome of interest (e.g. either “in the labor force” or “out of the labor force”) defined at individual level that is assumed to be a function of some observable and unobservable characteristics. In particular, X_i is a vector of presumably exogenous explanatory variables at individual, household and geographical/spatial level while μ_i is the stochastic error term.

We start by considering traditional basic demographic characteristics. In order to capture gender differences in the attitude of homeless people towards alternative labour market behavior, we control for the sex of each individual and we account for cohort effects considering individual age and its squared. We account for variations in labor market behavior as a result of ethnic and cultural attitudes including a set of dummy variables for individual nationality and for being religious believer or non religious believer. In addition, to control for the effect of educational differences, we include among the regressors individuals level of schooling as the highest completed grade. As for the general population family composition affects each member labor force participation, we try to see if such a mechanism exists also for homeless people. We therefore consider individual civil status: our prior is that being widow, single or married, engaged, divorced changes individual preference for labor market behavior.

Given the near-consensus produced by a set of studies conducted over the last fifteen years about the disincentive effect of insurance and benefit systems on the labor supply of different population groups, we test whether such effect is at work also for the population of homeless people. We therefore include a variable indicating the amount received, if any, through specified social benefits in the past months (municipality welfare check, unemployment benefit or disability insurance). We also control for the existence of other forms of income effects through a indicator for the reception of financial help from relatives or friends.

Individual employment status can intrinsically depend on day-to-day constant struggle to find safe, secure shelter, to generate income and to obtain sufficient food and essential goods. To account for the first effect we include fixed effects for the place of sleeping (street vs. shelter vs. slums) and among slums

we also distinguish between non authorized vs. authorized, according to official municipality classification. The second effect is captured by a variable indicating whether an individual declares to have completely no income (nor from begging or similar activities). The latter mechanism is disentangled by using a set of variables for getting general in kind help, primary in kind help (food/clothes) or secondary in kind help (sleeping bag/tend/blankets/medicines).

In addition, to control for the effect of traumatic events that can also have long-lasting implications, we include an indicator for the death of parents (together and separately) and children and for the occurrence of such event before or after individual lack of house. This indicator could reflect exogenous differences in preferences for idleness.

Finally, we included different measures of individual awareness, degree of information, psychic/cognitive problems and inclusion into the social community. In particular, we have information on individual knowledge of Italian political context (*i.e.* name of Italian prime minister), on his/her familiarity with news items (*i.e.* when was the last time she/he saw television and read a newspaper), on the awareness of the day in which she/he is (*i.e.* day of the week, date, month and year), on previous convictions (*i.e.* imprisoning) and on the number of friends she/he has.

We also try to investigate whether and how much family background affects current status. As a proxy for family background we use parents' level of education, that is included in our specification through a set of educational attainments fixed effect separately for the mother and the father or through the parents's highest educational attainment.

6.2 Results

We start our analysis focusing on labor market participation. We first estimate a multivariate probit model in which the dependent variable is an indicator of being in the labor force, either employed or unemployed *vs.* neither. In all the considered specifications, we used probability weights to account for the survey's sample design and we compute robust standard errors, clustered at the place of sleeping level to allow for arbitrary correlation in the error structure of individuals within the same sleeping place. Estimation results are presented *via* marginal effects computed at the mean of the continuous covariates which show how the baseline probability of participation shifts due to a unit change in the i^{th} covariate holding other covariates constant. For the dummy variables the marginal effect represents the change in the probability of labour force participation due to a discrete change from 0 to 1.

The first column of Table 19 presents the results for the simplest specification in which we only include demographic and ethnic characteristics, educational level, civil status and received assistance, both monetary and in kind. According to these preliminary estimates, women on average are less likely to be in the labor force: the gender difference is about 10 percentage points. The inspection of the age's coefficients shows that homeless people in older cohort are more active, probably because of the lack of any alternative form of household insurance

to survive (i.e. original households/parents) which could potentially decrease incentive to be in the labor market. The effect of age is non linear but concave.

Differently from what found for the general population, an inverse nationality gap appears: the outcomes display that foreign people, on average, are more active than Italian ones. The highest effect is found for Africans and Asians, and is about 15%. These two ethnic groups have a long migration history, they are probably more integrated and have a stronger network that allows to be in the labor market, compared for example with Romanians. In addition, according to these estimates to be faithful does not generate any effect on labor force participation.

In line with the very well known results in the general population, the estimates show that also across homeless people education has a statistical significant effect on the probability to be in the labor market. The highest effect emerges for individuals having completed compulsory school: *ceteris paribus*, having completed compulsory school increases the probability of being active in the labor market by 17 percentage points compared of not having any level of education. An household composition effect is at work as in the general population. As expected, divorced or married homeless people are more likely to be active with respect to widows or single. In particular, the effect is higher for divorced suggesting that this part of the population, also without the house, has the responsibility of children and/or previous spouses.

As in the general population, place of residence affect the probability to be in the labor market. For homeless we consider, as counterpart of residence, place of sleeping. The estimates show that the place where people sleep has a positive effect on the probability to be in the labor market which increases as the place become safer and more stable. In particular, those in shelter are more likely to be active than those in street, and the same happens for individuals in disused areas. By definition, in shelter a group of essential needs are satisfied by the structure itself and the same happens in disused areas, although the majority of them is characterized by insufficient standards of living. People can stay in shelter for predetermined short periods, while disused areas represent stable communities.

A substantial negative income effect seems to exist: people receiving financial help from relatives or friends in the month before the survey are less prone to be active. Having received social assistance in the last month, has a slightly negative impact, although very small. The entitlement to specified social benefits in the past month includes municipality welfare check, unemployment benefit or disability insurance. This result could depend on the fact that typically help from family and friends is bigger than the one received by the welfare state which does not allow people to survive. Symmetrically, receiving in kind help from voluntary/charity association is correlated with lower participation, but essential in kind help (e.g. food, clothes) enhance individual activity. As expected, imprisoning and previous convictions is negatively correlated with labor force participation and the same correlation is shown for having no affective relationships. Previous convictions, summarized by having been in prison, decreases by 10 percentages points the rate of activity, while the occurrence of

traumatic events, such as the death of a child increases the probability to be active.

To better investigate the effect of individual characteristics, in the second column, we include among explanatory variables the length of the period of homelessness which appears to be negatively correlated with labor market participation. The results suggest that as time elapses as homeless people end all alternative sources of income or loose all insurance mechanisms (e.g. previous savings, relationship with original family members, etc.) and therefore increases the probability to be active in the labor market. Having no network in the peer group, or being a homeless in a non continuous way (i.e. sleeping sometimes in a house, renting a room for short periods) have no statistical effect on labor market status.

In Column 3 we include some proxies for physic and psychic status. Individuals who have been sick in the month before the survey participate significantly less to the labor market and the difference is about 5.5 percentages points. As a proxy for psychic disorder we include two dummy indicating if the individual does not know the month and the year in which the interview has been conducted. On average, those who were not aware of the month in which they were, participate less to the labor market and the difference account for 10%. Having drug problems does no statistically influence activity status.

The results shown in Column 4, also include some proxies for individual knowledge of the social context by considering two different variables. The first one assumes value 1 if the considered homeless person has knowledge of the Italian prime minister. The second one is an index capturing the frequency of listening news on TV or radio and of reading newspapers. As the degree of information increases, as the probability of being active increases as well. Being informed about Italian political context does not seem to display any statistical significant effect. The results found from the degree of information suggest that information and awareness of the social context is associated with an higher inclusion into the society.

As explained before, we try to go more in depth with respect to the place in which they sleep and according to the official municipality definition we distinguish between authorized and non authorized disused areas. According to the estimates presented in Column 5, quite surprisingly also people living in non authorized areas are more likely to be active than those sleeping on street, and more interesting the effect is bigger if compared with those sleeping in authorized areas (19% vs. 15%).

Finally in Column 6, we include the individual income from sources different from labor and its effect is positive.

In the second step of our analysis we study determinants of current employment status. Table 20 shows the estimated marginal effects for a probit model in which the dependent variable indicates whether the individual is currently (at the day of the survey and during the previous month) employed. All the specifications follow the framework presented in the previous regression model. According to our estimates the probability to be employed is lower for female than for male, it increases with age but at a deceasing rate. The gender gap

is about 15 percentage point. To be Italian does not represent an advantage compared to Romanian immigrants and immigrants from other European countries, while in all specification Asian are more likely to work than Italian and the opposite holds for African.

In the case of education, the outcomes are perfectly in line with the one found in the general population: education attainment increases individual probability to be employed, and the effect increases with the educational level. Also for homeless people more educated represents a relative advantage for employment opportunities. This result is extremely interesting especially for policy interventions. Although, if employed, homeless people typically do low skilled works for which no specific education attainment is required, in relative term less qualified individuals (or those with a technical background) are disadvantaged. As for labor force participation, being faithful does not generate any statistical significant effect on employment probability and the same happens considering civil status as a proxy of household responsibility. Again, in all specifications we find a negative income effect related to having received money from family members or friends in the last month and the same income effect is related to social assistance. The effect of financial help from family member is now higher: depending on the specification it ranges from 20.9 to 22.5 percentage points while for the labor force participation from 11.6 to 14 percentage points. Except for the first specification (Column 1), in kind help are not associated with a statistical significant different probability to be employed. Homeless duration is no longer correlated with a higher probability to work while doing in and out from homelessness increases the probability to be employed. Symmetrically, the so called "in and out" homeless that is the ones that stay sometimes in street/shelter sometimes in a house are more likely to work. This result can be explained considering that these individuals are more integrated in the society and face less difficulties to find a work. Individual awareness, information level, physic and psychic status, as defined before, present the expected effect on individual probability to be employed.

In the last step of our analysis, we examine the main determinants of illegal activities among homeless people. In particular, we estimate a probit model in which the dependent variable takes value 1 if the respondent declares to obtain income from illegal activities. The results are presented in Table 21. On average, no gender differences appear, except in the last specification where female are less likely to resort to illegal activities to obtain income. Small cohort effects are found depending on the specifications: the older an homeless is, the higher the probability she/he does illegal activities.

No ethnic diversities are found: nationality does not discriminate among legal vs. illegal behavior. *Ceteris paribus*, being faithful significantly decreases the probability to act illegality. As for the general population, the estimates show that also across this particular population, education has a positive effect on legality: the probability to obtain income from illegal sources decreases as education increases but the magnitude of the effect is not linear. Differently from previous estimates and as expected, receiving financial help from social assistance decreases the probability to act illegally but such effects does not

exists considering financial help from family and friends. This result suggest that people receiving institutional financial help are less prone to illegality and better integrated in the society despite their housing condition.

In the case of place of sleeping, the outcomes display that apart from being in shelter no other statistical significant differences emerge. Physic and psychic disorders are not associated with a different criminal behavior. Finally, as expected, drug users are more likely to commit an offense while people who are more linked to the social context through newspaper seems to be less prone toward illegality.

7 Conclusions

Homelessness represents one of the most extreme forms of social exclusion in modern western well developed society. A common wisdom is that the exclusion is exacerbated by their inability to be active in the labor market. Homeless people are thought to be no rational agents as a result of their housing condition, attitude towards alcohol and drug, physic and psychic condition. Up to now no statistical evidence was available.

This paper investigate the human capital, demographic, familiar factors influencing homeless people's probability to participate in the labor market, to be employed and to obtain income from illegal activities. We find that the variables affecting homeless people's labour market behavior are in line with the underlying theoretical framework of utility maximization and labor-leisure choice. This paper shows that according to their labor market behavior homeless people can be defined rational agents.

Gender, education, civil status, health status, non wage income are very relevant variables when explaining this group's participation in the labor force. Other variables such as degree of information, inclusion in the society also show a significant incidence on the group's participation. Determinants of employment status and illegal behavior are in line with the rationality hypothesis. The results suggest that homeless people labor market behavior is related to the set of traditional variables characterizing general population behavior. In order to interpret these results in terms of causation and not only correlation further inspections are required to account for potential endogeneity.

Although, our study is mainly descriptive, it is nonetheless interesting since it represents a first attempt to study economically homeless labor market behavior. After further investigation, which would be necessary in order to check the causal nature of the estimated correlations, the results could be useful to policy makers.

An additional concern is related to data missing. If data are not missing at random or completely at random then they are classified as Missing Not at Random (MNAR). For example, if we are studying mental health and people who have been diagnosed as depressed are less likely than others to report their mental status, the data are not missing at random. Clearly the mean mental status score for the available data will not be an unbiased estimate of the mean that we would have obtained with complete data. The same thing happens when

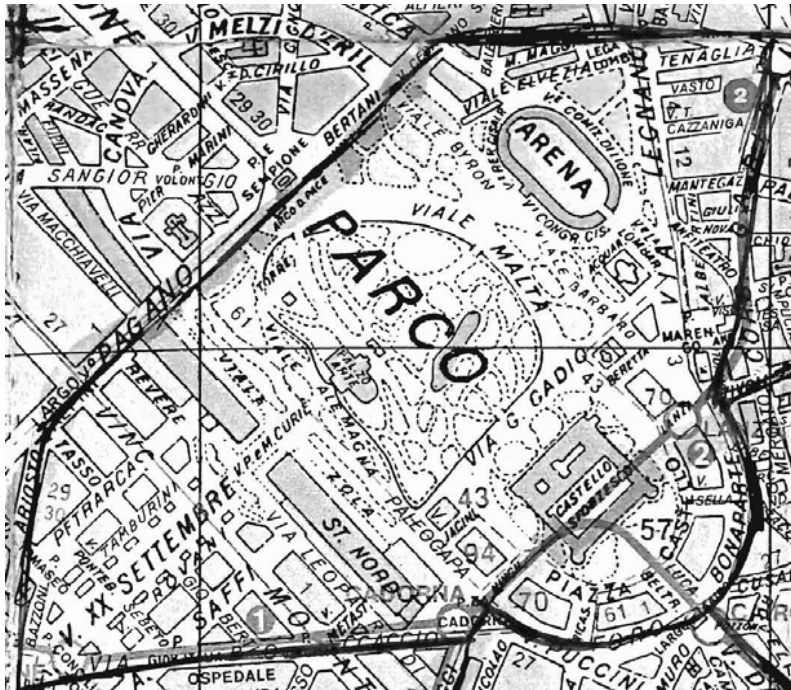
people with low income are less likely to report their income on a data collection form. In our data collection we typically have this kind of problems. When data are MNAR estimates can be biased and the only way to obtain an unbiased estimate of parameters is to model missingness. It could be necessary to write a model that accounts for the missing data model that accounts for the missing data. Then, the model could be incorporated into a more complex model for estimating missing values (Brownstone (1998), Dunning and Freedman (2008)). As a further step, we plan to model data missingness.

References

- [1] Allgood, S., Moore M. L., Warren R. S. (1997), "The Duration of Sheltered Homelessness in a Small City", *Journal of Housing Economics*, 6: 60-80.
- [2] Allgood, S., Warren, R. S. (2003), "The Duration of Homelessness from a National Survey", *Journal of Housing economics*, 12: 273-290.
- [3] Berry, B (2007), "A Repeated Observation Approach for Estimating the Street Homeless Population", *Evaluation Review*, 31(2): 166-199.
- [4] Braga, M. and Corno, L. (2008), "User's guide for the 2008 Milan Homeless Survey (MHS)", mimeo, January 2008.
- [5] Brownstone, D. (1998), "Multiple Imputation Methodology For Missing Data, Non-Random Response, And Panel Attrition." in Gärling, T., Laitila, T., Westin, K. (eds.), *Theoretical Foundations of Travel Choice Modeling*, 421-450, Elsevier.
- [6] Burt, M. (1992), *Over the Edge: The Growth of Homelessness in the 1980s*, Urban Institute Press, Washington DC.
- [7] Chatterji, P., Alegria, M., Lu, M., Takeuchi, D. (2008), *Psychiatric Disorders and Labor Market Outcomes: Evidence from the National Latino and Asian American Study*, NBER working paper 14404.
- [8] Dunning, T. and Freedman, D.A. (2008), "Modeling selection effects", *Social Science Methodology*, 225–31.
- [9] De Simone, J. (2002), "Illegal Drug and Employment", *Journal of Labor Economics*, 20 (4): 952 - 977.
- [10] Early, D. (1998), "The Role of Subsidized Housing in Reducing Homelessness: an Empirical Investigation Using Micro-data", *Journal of Policy Analysis and Management*, 17(4): 687-696.
- [11] Early, D., Olsen, E. O. (2002), "Subsidized Housing, Emergency Shelters, and Homelessness; and Empirical Investigation Using Data from 1990 Census", *Journal of Economic Analysis & Policy*, 2 (1).
- [12] Early, D. (2005), "An Empirical Investigation of the Determinants of Street Homelessness", *Journal of Housing Economics*, 14: 27-47.
- [13] Edgar, B. and Meert, H. (2006), *Fifth Review of Statistics on Homelessness in Europe*, FEANTS, Brussels.
- [14] Fisher, N., Turner, S.W., Pugh, R., Taylor, C. (1994), "Estimated Numbers of Homeless and Homeless Mentally Ill People in North East Westminster by Using Capture-recapture Analysis", *BMJ Journal*, 308 (6920):27-30.

- [15] Glied S., Hoven C. Moore R., Garrett B. A. (1996), "Medicaid and Service Use among Homeless Adults", NBER Working paper 5834.
- [16] Jecks, C. (1994), *The Homeless*, Cambridge University press, Harvard University press
- [17] Honig M., Filer R. K. (1993), "Causes of Intercity Variation in Homelessness", *The American Economic Review*, 83 (1): 248-255.
- [18] La Porte, A. (1994) "Assessing the Human Condition: Capture-recapture Techniques", *BMJ Journal*, 308:5-6.
- [19] Martin E. (1992), *Assessment of S-Night Street Enumeration in the 1990 Census*, US Bureau of the Census, Washington DC.
- [20] Piliavin I., Wright, E. R. B., Mare, D. R., Westerfelt H.,A. (1994), "The Dynamic of Homelessness", *Institute for Research on Poverty, discussion paper* no. 1035.
- [21] Quigley J, Raphael S, Smolensky E. (2001), "Homeless in America, Homeless in California", *The Review of Economics and Statistics*, 83(1): 37-51.
- [22] Quigley J.(1990), "Does Rent Control Cause Homelessness? Taking the Claim Seriously", *Journal of Policy Analysis and Management*, 9: 89-93
- [23] Sorensen, A. (1999), "Family Decline, Poverty, and Social Exclusion: The Mediating Effects of Family Policy", *Comparative Social Research*, 18: 57-78.

Figure 1: Example of a census block



Partire da

P.le Baracca
C.so Magenta
poercorrere il lato sinistro
via Aur. Saffi
P.zza Giovane Italia
C.so Magenta
via Ruffini
P.zza S.M delle Grazie
C.so Magenta
via Caradosso
via Sassi
P.zza Virgilio
via Metastasio
C.so Magenta

girare a sinistra in
tornando controllare
girare a sinistra in
girare a sinistra in
tornando controllare
girare a sinistra in
girare a sinistra in

girare a sinistra in
girare a sinistra in
girare a sinistra in
girare a sinistra in
girare a sinistra in

girare a sinistra in

via Monti
via Carducci
via Leopardi
via Carducci
Pzza Cadorna
via Boccaccio
controllare P.zza Conciliazione
via Bazzoni
percorrerla in ambo i sensi

andare in

P.zza Tommaseo
controllare aiuole panchine
via Petrarca
via Mascheroni
percorrerla in ambo i sensi
via Rovani
via Sebeto
via Mascheroni
via Tamburini
via Tasso
percorrerla in ambo i sensi
via Tamburini
via Pontebba
via Tamburini

tornando girare in
girare a sinistra in
girare a destra in
girare a destra in
tornando girare a destra in

continuare in
tornando girare in
continuare in
tornare in P.zza Conciliazione

via XX Settembre
controllare tutte le corsie con le ai

tornare in P.zza Conciliazione
percorrere il lato mancante di
girare a sinistra in
girare a sinistra in
continuare fino a

via Boccaccio
via Gioberti
via Boccaccio
Piazzale Cadorna
Parco Sempione

Figure 2: Spatial distribution of street homeless people (1 dot = 1 people)

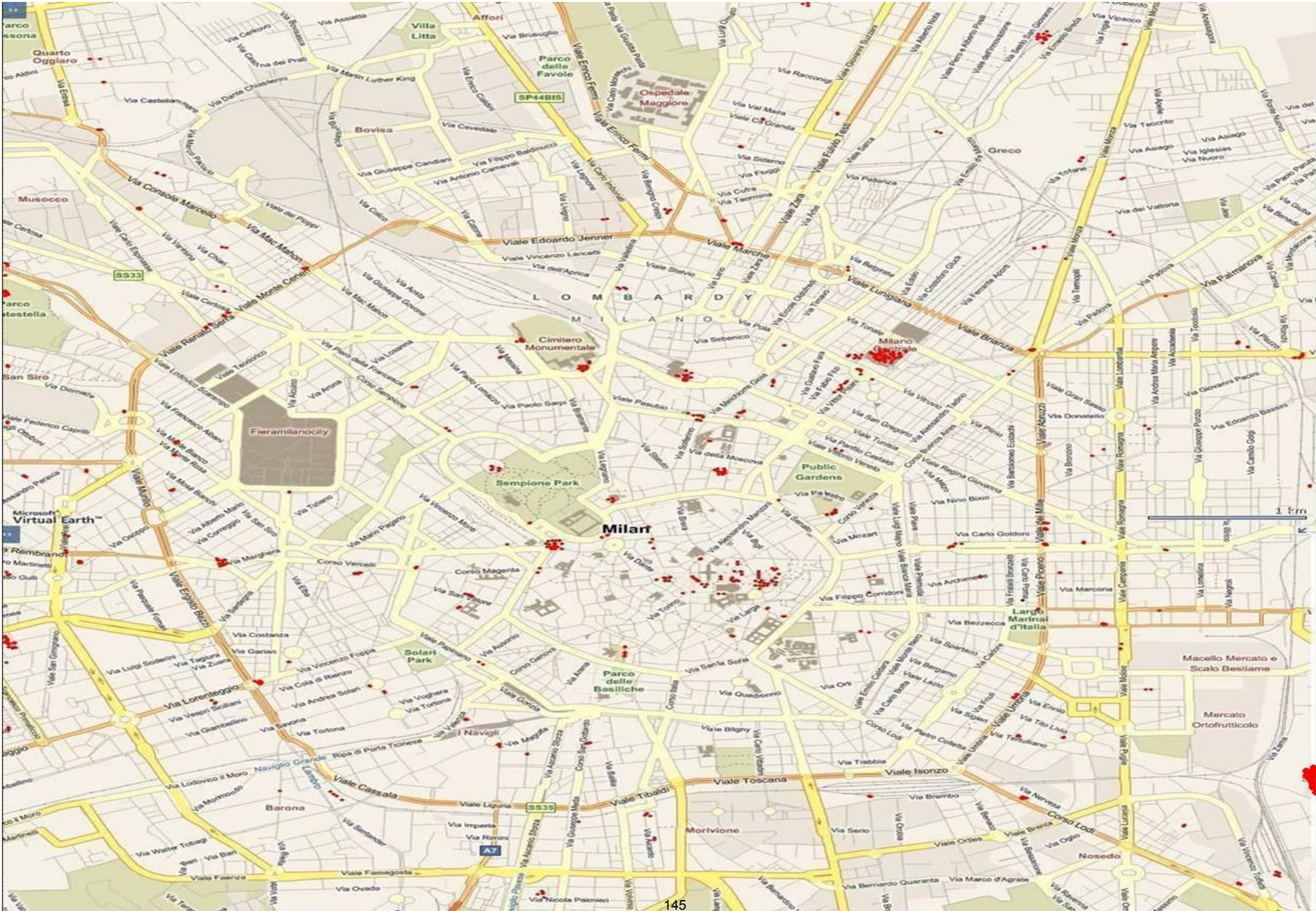


Figure 2: Spatial distribution of sheltered homeless people (1 dot = 10 people)

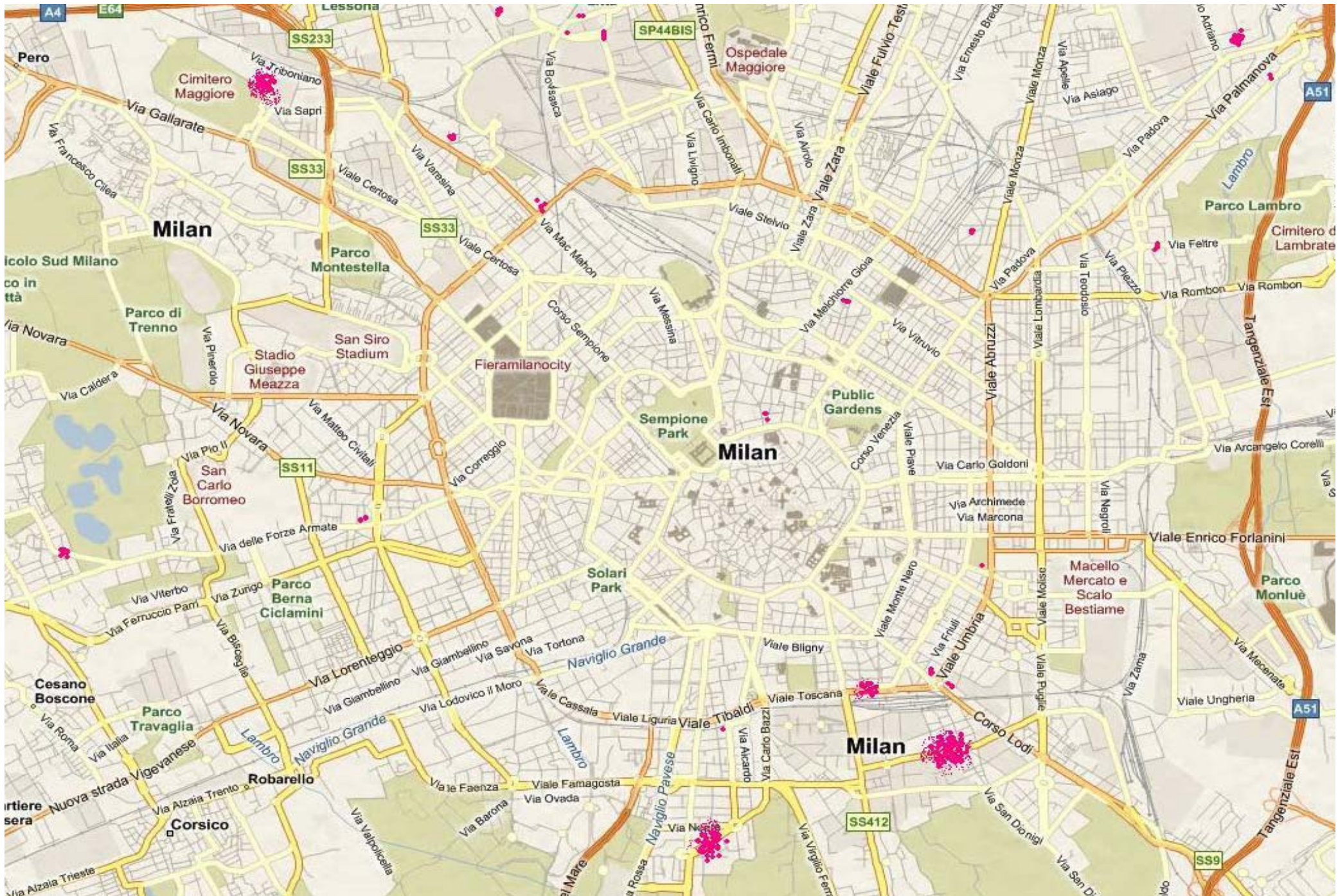


Table 1: Estimated number of homeless

	Total population	Homeless Population	% of the population	Date of the survey	Source
<i>USA</i>	303,824,640	754,000	0.248169	2007	HUD
<i>S. Francisco</i>	744,041	6,377	0.857076	2008	HUD
<i>Australia</i>	19,855,288	99,900	0.503141	2001	Australia Bureau of Statistics
<i>Italy</i>	56,993,742	17,000	0.029828	2000	Zancan Foundation

Table 2: Weather condition in Milan (average 1961-1990)

	Oct	Nov	Dec	Jan	Febr	March	April
Daily Average (°C)	13	7	2	1.5	4	8	12.5
Daily Maximum (°C)	18	10	5	5	8	13	18
Daily Minimum (°C)	8	4	-1	-2	0	3	7
Rain (mm)	100	101	60	64	63	82	82

Table 3: Survey results

	Shelter	Street	Disused area
Counted	1152	408	2300
Sampled	500	408	525
Interviewed	84.0%	34.6%	66.5%
Refusal rate	2.0%	11.5%	
Not found	6.4%	15.0%	
No time	7.3%	12.0%	33.0%
Not send		8.5%	
Sleeping		18.4%	

Table 4: Sex and nationality

	% Females	% Italians
Street	10	56
Shelters	16	40
Disused areas	49	11

Table 5: Highest level of completed education

	All sample	Italian	Foreign	Street	Shelter	Disused areas
None	14.45	8.88	17.11	10.71	6.84	25.5
Elementary school	21.68	29.28	18.05	18.45	17.45	28.37
Middle school	33.16	39.47	30.14	34.52	34.43	30.95
High school	25.19	19.41	27.94	30.36	32.78	13.47
University	5.53	2.96	6.75	5.95	8.49	1.72

Table 6: Civil status and family background

	All sample	Street	Shelter	Slums
<i>Panel A: Marital Status</i>				
Widow/er	4.14	9.52	3.54	2.29
Married	32.41	8.93	21.46	57.02
Separated/Divorced	18.81	28.57	28.3	2.87
Single	35.49	45.24	39.39	25.79
Other	8.09	4.17	6.84	11.46
Don't answer	1.06	3.57	0.47	0.57
<i>Panel B: Children</i>				
Children	56.22	45.83	50	68.77
At least 1 child dead	5.89	9.2	4.2	6.26
<i>Panel C: Parents</i>				
Mother dead ¹	24.21	36.36	28.14	17.7
Father dead ¹	35.3	46.76	44.41	24.22

Note: ¹ For those younger than 51 years

Table 7: Job condition and first experience in the place of sleeping

<i>All sample</i>			
	Total	Male	Female
Yes	44.64	51.21	27.38
No	54.6	47.89	72.22
Don't Answer	0.76	0.9	0.4
<i>Street</i>			
	Total	Male	Female
Yes	80.14	82.68	57.14
No	17.02	14.96	35.71
Don't Answer	2.84	2.36	7.14
<i>Shelter</i>			
	Total	Male	Female
Yes	47.41	48.18	43.28
No	52.59	51.82	56.72
Don't Answer			
<i>Disused areas</i>			
	Total	Male	Female
Yes	26.93	34.83	18.71
No	72.21	63.48	81.29
Don't Answer	0.86	1.59	

Table 8: Job when loosing the house

	All sample	Street	Shelter	Disused Areas
Factory worker	31.79	25	34.33	36.17
Administration	2.09	2.94	1.99	1.06
Skilled employees	3.71	5.88	1.49	5.32
Cook/Waitress/Waiter	7.89	10.29	6.47	7.45
Domestic worker/Nanny/Cleaner	10.9	7.35	13.93	9.57
Gardener / Farmer	3.94	2.94	2.49	8.51
Artisan	6.73	10.29	5.47	4.26
Self - employed	3.71	3.68	3.98	3.19
Driver/Truck - driver	3.48	2.21	4.98	2.13
Artist	0.7	1.47	0.5	
Brickery/Carpenter/Electrician/Plumber	12.53	13.97	11.44	12.77
Unskilled services	6.26	2.94	7.46	8.51
Store keeper / Clerk	1.86	1.47	2.49	1.06
Illegal activities	2.09	3.68	1.99	
Professional soldier	0.7	1.47	0.5	
Other	0.46	0.74	0.5	
Don't answer	1.16	3.68		

Table 9: Job contract

<i>Type of contract for people currently employed</i>	All sample	Street	Shelter	Disused Areas
Permanent contract	16.67	12.9	8.43	25.56
Non permanent contract	25	6.45	36.14	21.11
Don't have a contract/ paid under table	50.98	61.29	51.81	46.67
Don't know	1.47	3.23	1.2	1.11
Don't answer	5.88	16.13	2.41	5.56

<i>Type of contract for people employed in the previous month</i>	All sample	Street	Shelter	Disused Areas
Permanent contract	5		10	
Non permanent contract	16.25	9.09	20	13.79
Don't have a contract/ paid under table	75	72.73	67.5	86.21
Don't know				
Don't answer	3.75	18.18	2.5	

Table 10: Labor force participation

	All	Male	Female	Italian	Foreign
All sample	74.39	76.8	68.08	59.54	81.48
Street	57.14	59.59	40.91	51.58	64.38
Shelter	78.3	79.83	70.15	62.57	88.93
Disused areas	77.94	84.83	70.76	65.79	79.42

Table 11: Channels used to look for a job

	All sample	Street	Shelter	Disused Areas
Friends/relatives	40.57	41.1	34.73	48.21
Work placement office (municipality)	15.28	8.22	16.41	16.41
Temporary work agency	19.06	10.96	24.81	14.36
Voluntary associations	5.66	2.74	5.73	6.67
Asking directly to firms	3.58	4.11	4.2	2.56
Asking to acquaintances	2.64	8.22	2.67	0.51
Newspapers	2.64	5.48	1.53	3.08
Social assistant/Public services	1.13		2.29	
Internet	0.94	2.74	1.15	
Cooperatives	2.45	2.74	3.05	1.54
Don't know	2.83	6.85	1.53	3.07
Don't answer	3.21	6.85	1.91	3.59

Table 12: First source of income

	All sample	Males	Females	Street	Shelter	Disused areas
No income	8.09	9.41	4.62	7.14	14.86	0.29
Welfare check	5.85	6.47	4.23	3.57	11.08	0.57
Unemployment benefit	0.64	0.74	0.38	0.6	0.47	0.86
Disabilities Insurance	2.23	2.79	0.77	2.98	3.77	
Permanent work	10.85	11.47	9.23	6.55	6.84	17.82
Occasional work	22.02	23.82	17.31	17.86	26.18	18.97
Family/Relatives	13.3	7.65	28.08	4.76	5.42	27.01
Friends	4.57	5.29	2.69	8.33	4.48	2.87
Pension	4.04	4.85	1.92	6.55	6.13	0.29
Savings previous job/rent	1.17	1.47	0.38	0.6	1.89	0.57
Shelter subsidy	0.64	0.44	1.15	0.6	1.18	
Church/voluntary association	0.74	0.88	0.38	1.19	1.18	
Illegal activities	7.34	6.47	9.61	10.72	4.25	9.48
Don't know	4.89	4.41	6.15	15.48	2.59	2.59
Don't answer	13.62	13.82	13.08	13.1	9.67	18.68

Table 13: Homeless asking anyone help

	<i>Generic help last year</i>	<i>Financial help ever</i>	<i>In kind help</i>
Yes	50.77	21.87	63.41
No, I haven't asked/received anyone for help	41.65	73.74	35.83
No, I don't need help	5.6		
Don't know	0.44	0.39	
Don't answer	1.54	4	0.76

Table 14: First source of help

<i>Source of help</i>	
Family	35.27
Voluntary associations	24.03
Friends	20.35
Church/parish	8.87
Social Services/Public administration	7.36
Employer/Ex-employer	1.08
Hospital/Doctor/Naga	1.08
Don't answer	1.08
Other	0.87

Table 15: Assistance help giver

<i>Food</i>	
Catholic soup kitchen	26.03
Shelter	16.83
UDS	5.48
Churches/Parish churches	30.14
Relatives/Friends	7.83
Voluntary associations	5.68
People	4.11
Public soup kitchen	1.76
Food delivery	2.15
<i>Clothes</i>	
Catholic clothes delivery	13.46
Shelter	19.23
UDS	5.77
Churches/Parish churches	37.39
Relatives/Friends	11.32
Voluntary associations	5.56
People	5.34
Public clothes delivery	1.92
<i>Sleeping bag, blankets and similar</i>	
Shelter/Catholic services	20.38
UDS	26.11
Churches/Parish churches	31.85
Relatives/Friends	7.64
Voluntary associations	6.37
People	3.18
Public assistance	4.46
<i>Medicines</i>	
Health services for homeless	23.93
Shelter	33.13
UDS	1.23
Churches/Parish churches	18.4
Relatives/Friends	5.52
Voluntary associations	4.91
People	2.45
Public assistance/Hospital	10.43

Table 16: Frequency of received assistance

<i>Frequency of food assistance</i>	
Never	44.21
Daily	39.43
Two or more time a week	6.8
Weekly	3.19
Monthly	2.87
A few times a month	1.17
A few times a year	2.34

<i>Frequency of clothing assistance</i>	
Never	57.07
Daily	2.02
Two or more time a week	4.99
Weekly	4.68
Monthly	17.22
A few times a month	4.99
A few times a year	9.03

<i>Frequency of sleeping items assistance</i>	
Never	85.44
Daily	2.87
Two or more time a week	0.53
Weekly	0.96
Monthly	2.23
A few times a month	0.85
A few times a year	7.12

<i>Frequency of health assistance</i>	
Never	82.15
Daily	3.19
Two or more time a week	1.06
Weekly	1.28
Monthly	3.4
A few times a month	2.66
A few times a year	6.27

Table 17: Number of social links

<i>Distribution of friends</i>	<i>All Sample</i>	<i>Street</i>	<i>Shelters</i>	<i>Slums</i>
	%	%	%	%
0 links	49.34	28.37	38.57	70.77
1 links	16.15	19.86	21.19	8.6
2 links	11.54	16.31	12.38	8.6
3 links	4.73	6.38	5	3.72
4 links	5.38	7.09	5.95	4.01
5 links	5.16	5.67	5.71	4.3
Don't know/Don't answer	7.69	16.31	11.19	0
Mean	1.09	1.53	1.28	0.74

Table 18: Degree of information

<i>Newspaper</i>	All sample	Males	Females	Italian	Foreign	Street	Shelters	Disused Areas
Today	56.22	65.49	31.92	64.59	52.2	66.07	68.63	36.39
1 week ago	14.24	12.04	20	10.49	16.04	7.74	10.38	22.06
1 month ago	3.83	3.38	5	3.93	3.77	2.98	3.3	4.87
6 months ago	0.85	0.88	0.77	1.31	0.63	1.79	0.94	0.29
1 year ago	0.11	0.15		0.33		0.6		
more than 1 year ago	2.44	2.2	3.08	4.26	1.57	2.98	3.3	1.15
Never read a newspaper	14.77	9.84	27.69	9.84	17.14	3.57	10.14	25.5
Don't know	4.99	3.82	8.08	3.28	5.82	4.17	2.36	8.88
Don't answer	2.55	2.2	3.46	1.97	2.83	10.12	0.94	0.86

<i>News on radio or television</i>	All sample	Males	Females	Italian	Foreign	Street	Shelters	Disused Areas
Today	57.39	55.51	62.31	57.24	57.46	28.57	51.65	78.22
1 week ago	13.92	14.54	12.31	12.83	14.44	23.21	15.57	7.45
1 month ago	6.91	7.78	4.62	7.89	6.44	8.93	10.61	1.43
6 months ago	3.61	3.67	3.46	4.28	3.3	5.36	4.95	1.15
1 year ago	1.59	1.32	2.31	2.96	0.94	2.98	1.65	0.86
more than 1 year ago	4.36	5.29	1.92	7.89	2.67	12.5	4.01	0.86
Never read a newspaper	6.91	6.17	8.85	3.29	8.63	8.33	6.6	6.59
Don't know	3.51	3.52	3.46	0.99	4.71	4.76	3.54	2.87
Don't answer	1.81	2.2	0.77	2.63	1.41	5.36	1.42	0.57

Table 19: Determinants of labor force participation (marginal effects)

	Determinants of labor force participation					
	(1)	(2)	(3)	(4)	(5)	(6)
Female	-0.1002***	-0.1170***	-0.1115***	-0.0951***	-0.0959***	-0.0897***
	[0.0095]	[0.0120]	[0.0124]	[0.0109]	[0.0111]	[0.0050]
Age	0.0299***	0.0300***	0.0317***	0.0310***	0.0312***	0.0311***
	[0.0069]	[0.0055]	[0.0050]	[0.0052]	[0.0053]	[0.0039]
Age (squared)	-0.0004***	-0.0004***	-0.0004***	-0.0004***	-0.0004***	-0.0004***
	[0.0001]	[0.0001]	[0.0001]	[0.0001]	[0.0001]	[0.0001]
Romanian	0.0703***	0.0168	0.019	0.0244	0.0222	0.0224
	[0.0200]	[0.0186]	[0.0173]	[0.0167]	[0.0185]	[0.0322]
Other Europe	-0.0033	-0.0228	-0.0297	-0.0299	-0.0279	-0.0444***
	[0.0275]	[0.0369]	[0.0303]	[0.0315]	[0.0308]	[0.0108]
African	0.1557***	0.1364***	0.1332***	0.1371***	0.1383***	0.1281***
	[0.0211]	[0.0237]	[0.0160]	[0.0156]	[0.0166]	[0.0208]
Asian/American and other	0.1527***	0.1521***	0.1450***	0.1456***	0.1458***	0.2024***
	[0.0038]	[0.0098]	[0.0095]	[0.0079]	[0.0079]	[0.0039]
Faith	-0.0202	-0.0373	-0.0372	-0.0397	-0.0396	-0.028
	[0.0886]	[0.0685]	[0.0613]	[0.0610]	[0.0608]	[0.0603]
Primary Edu.Level	0.0923**	0.1042***	0.0894**	0.0821**	0.0812**	0.0659**
	[0.0451]	[0.0307]	[0.0371]	[0.0404]	[0.0411]	[0.0322]
Middle Edu. Level	0.1741***	0.1669***	0.1528***	0.1436***	0.1430***	0.1375***
	[0.0311]	[0.0184]	[0.0227]	[0.0253]	[0.0259]	[0.0232]
Secondary Edu. Level	0.1182***	0.1053***	0.0893**	0.0789**	0.0786**	0.0869**
	[0.0238]	[0.0296]	[0.0352]	[0.0329]	[0.0330]	[0.0344]
Universitary Edu. Level	0.0458	0.0256	0.0047	-0.0139	-0.0154	-0.063
	[0.0767]	[0.0873]	[0.1102]	[0.1104]	[0.1120]	[0.1112]
Married/engaged	0.0693***	0.0676**	0.0678***	0.0658**	0.0663**	0.0569
	[0.0223]	[0.0271]	[0.0256]	[0.0281]	[0.0274]	[0.0433]
Divorced	0.1039***	0.1042***	0.1048***	0.1045***	0.1047***	0.0878***
	[0.0194]	[0.0115]	[0.0149]	[0.0124]	[0.0125]	[0.0085]
Amount received: social assistance	-0.0012***	-0.0012***	-0.0010***	-0.0011***	-0.0011***	-0.0008***
	[0.0005]	[0.0004]	[0.0003]	[0.0003]	[0.0003]	[0.0002]
Received money from family or friends	-0.1263*	-0.1404***	-0.1380***	-0.1392***	-0.1403***	-0.1165***
	[0.0671]	[0.0431]	[0.0413]	[0.0433]	[0.0432]	[0.0443]
Non-financial help	-0.1424**	-0.1171**	-0.1269***	-0.1197***	-0.1232***	-0.1000***
	[0.0583]	[0.0534]	[0.0177]	[0.0105]	[0.0082]	[0.0348]
Essential inkind help	0.2966***	0.2421***	0.2565***	0.2505***	0.2542***	0.2313**
	[0.0210]	[0.0763]	[0.0703]	[0.0773]	[0.0786]	[0.1046]
Additional inkind help	-0.048	-0.0509	-0.0434	-0.0412	-0.0407	-0.0407
	[0.0584]	[0.0519]	[0.0548]	[0.0546]	[0.0551]	[0.0504]
Shelter	0.1106***	0.0748***	0.0664***	0.0626***		
	[0.0122]	[0.0170]	[0.0164]	[0.0155]		
Disused area	0.1792***	0.2194***	0.2121***	0.2052***		
	[0.0685]	[0.0491]	[0.0491]	[0.0521]		
Prison	-0.1004*	-0.1005	-0.0795	-0.0733	-0.0732	-0.0691
	[0.0581]	[0.0624]	[0.0581]	[0.0565]	[0.0567]	[0.0557]
Death of children	0.0162***	0.0174	0.0015	-0.0019	-0.0043	-0.0176**
	[0.0054]	[0.0183]	[0.0046]	[0.0066]	[0.0088]	[0.0074]
No network among homeless		-0.0424	-0.0312	-0.0137	-0.0135	0.0053
		[0.0352]	[0.0429]	[0.0461]	[0.0459]	[0.0405]
In and out		0.0173	0.0094	0.0065	0.0073	0.0052
		[0.0415]	[0.0447]	[0.0457]	[0.0459]	[0.0387]
Duration		-0.0684***	-0.0655***	-0.0664***	-0.0670***	-0.0694***
		[0.0218]	[0.0205]	[0.0183]	[0.0179]	[0.0188]

Sick in the past month				-0.0553**	-0.0557**	-0.0562**	-0.0558**
				[0.0232]	[0.0233]	[0.0228]	[0.0220]
Wrong month				-0.1069***	-0.1030**	-0.1037**	-0.1237
				[0.0404]	[0.0465]	[0.0466]	[0.0757]
Wrong year				0.0328	0.0445	0.0442	0.0882
				[0.0803]	[0.0740]	[0.0737]	[0.0773]
Drug use				-0.0592	-0.057	-0.0566	-0.0433
				[0.0699]	[0.0709]	[0.0705]	[0.0838]
Knowledge of prime minister					0.03	0.0297	0.0194
					[0.0358]	[0.0361]	[0.0308]
Information					0.0246***	0.0245***	0.0154***
					[0.0066]	[0.0066]	[0.0040]
Shelter						0.0626***	0.0613***
						[0.0154]	[0.0130]
Non authorized disused area						0.1977***	0.2180***
						[0.0477]	[0.0351]
Authorized disused area						0.1564***	0.1571***
						[0.0308]	[0.0241]
Total amount of non labor income							0.0004***
							[0.0001]
Observations	925	885	868	868	868	868	794
Pseudo R-squared	0.2292	0.2468	0.2563	0.2587	0.2589	0.2589	0.2716

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 20: Determinants of being employed (marginal effects)

	Employment status					
	(1)	(2)	(3)	(4)	(5)	(6)
Female	-0.1505***	-0.1437***	-0.1267***	-0.1084**	-0.1076**	-0.0295***
	[0.0318]	[0.0356]	[0.0393]	[0.0470]	[0.0488]	[0.0053]
Age	0.0097	0.0079	0.0066	0.0053	0.0049	0.0005
	[0.0080]	[0.0087]	[0.0093]	[0.0091]	[0.0092]	[0.0087]
Age (squared)	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0
	[0.0001]	[0.0001]	[0.0001]	[0.0001]	[0.0001]	[0.0001]
Romanian	-0.0323	-0.0118	-0.0035	0.0034	0.0116	0.0062
	[0.0669]	[0.0572]	[0.0502]	[0.0519]	[0.0590]	[0.0932]
Other Europe	0.0746	0.0512	0.0655	0.0663	0.0639	0.0189
	[0.1202]	[0.1077]	[0.1071]	[0.1104]	[0.1102]	[0.0984]
African	-0.1886**	-0.1847***	-0.1780***	-0.1700***	-0.1741***	-0.1954***
	[0.0765]	[0.0625]	[0.0623]	[0.0604]	[0.0612]	[0.0618]
Asian/American and other	0.1018***	0.1509***	0.1456***	0.1520***	0.1528***	0.2537**
	[0.0392]	[0.0283]	[0.0421]	[0.0391]	[0.0395]	[0.1161]
Faith	0.015	0.0166	0.0297	0.0286	0.0281	0.0395
	[0.0643]	[0.0454]	[0.0568]	[0.0540]	[0.0534]	[0.0720]
Primary Edu.Level	0.1328***	0.1224**	0.1050**	0.0878*	0.0914*	0.1006
	[0.0391]	[0.0591]	[0.0529]	[0.0493]	[0.0527]	[0.0890]
Middle Edu. Level	0.2170***	0.1855***	0.1634***	0.1388***	0.1416***	0.1137***
	[0.0367]	[0.0433]	[0.0390]	[0.0447]	[0.0477]	[0.0428]
Secondary Edu. Level	0.2263***	0.2045***	0.1807***	0.1529***	0.1525***	0.1045***
	[0.0449]	[0.0696]	[0.0496]	[0.0469]	[0.0468]	[0.0339]
Universitary Edu. Level	0.2859***	0.2874***	0.2647***	0.2275***	0.2298***	0.0692
	[0.0913]	[0.0876]	[0.0899]	[0.0847]	[0.0846]	[0.0969]
Married/engaged	0.0499**	0.0576**	0.0588	0.0555	0.058	-0.0337
	[0.0249]	[0.0274]	[0.0403]	[0.0362]	[0.0369]	[0.0244]
Divorced	0.0511	0.0608*	0.061	0.0594	0.0605	0.0029
	[0.0356]	[0.0343]	[0.0434]	[0.0372]	[0.0378]	[0.0096]
Amount received: social assistance	-0.0028**	-0.0028**	-0.0029**	-0.0029**	-0.0029**	-0.0018***
	[0.0012]	[0.0012]	[0.0012]	[0.0013]	[0.0013]	[0.0007]
Received money from family or friends	-0.2094***	-0.2257***	-0.2279***	-0.2285***	-0.2269***	-0.2094***
	[0.0100]	[0.0097]	[0.0135]	[0.0144]	[0.0137]	[0.0179]
Non-financial help	0.1626***	0.0565	0.0662	0.0801	0.0886	0.091
	[0.0604]	[0.0483]	[0.0772]	[0.0923]	[0.0850]	[0.1826]
Essential inkind help	-0.2198***	-0.1261	-0.134	-0.1479	-0.1575	-0.1433
	[0.0786]	[0.0800]	[0.1038]	[0.1220]	[0.1164]	[0.2271]
Additional inkind help	-0.0098	-0.0009	0.0071	0.012	0.0114	0.016
	[0.0406]	[0.0339]	[0.0262]	[0.0258]	[0.0259]	[0.0244]
Shelter	0.0692***	0.0935***	0.0898***	0.0816***		
	[0.0095]	[0.0127]	[0.0133]	[0.0160]		
Disused area	0.1015**	0.1205***	0.1182***	0.1082***		
	[0.0487]	[0.0183]	[0.0285]	[0.0171]		
Prison	-0.0354	-0.038	-0.0372	-0.0301	-0.0314	0.0134
	[0.0428]	[0.0450]	[0.0429]	[0.0421]	[0.0410]	[0.0262]
Death of children	0.1159***	0.1276***	0.1196***	0.1135***	0.1203***	0.1009*
	[0.0268]	[0.0339]	[0.0434]	[0.0421]	[0.0398]	[0.0534]
No network among homeless		-0.1136	-0.1096	-0.0908	-0.0916	-0.1104*
		[0.0766]	[0.0913]	[0.0942]	[0.0937]	[0.0653]
In and out		0.1315***	0.1311***	0.1320***	0.1305***	0.1589***
		[0.0255]	[0.0246]	[0.0191]	[0.0190]	[0.0221]
Duration		0.0155	0.0152	0.0129	0.0161	-0.0129

Sick in the past month		[0.0289]	[0.0325]	[0.0297]	[0.0328]	[0.0360]
			-0.0734**	-0.0716**	-0.0708**	-0.0728***
Wrong month			[0.0329]	[0.0304]	[0.0300]	[0.0219]
			-0.0634	-0.0483	-0.0446	-0.0738
Wrong year			[0.0514]	[0.0491]	[0.0517]	[0.1110]
			-0.0501**	-0.0376	-0.0393	0.0372
Drug use			[0.0240]	[0.0285]	[0.0305]	[0.1015]
			0.0551*	0.0579*	0.0551*	0.0453
Knowledge of prime minister			[0.0285]	[0.0296]	[0.0305]	[0.0398]
				0.0433*	0.0454*	0.032
Information				[0.0259]	[0.0263]	[0.0278]
				0.0436***	0.0433***	0.0622***
Shelter				[0.0051]	[0.0055]	[0.0058]
					0.0826***	0.0956***
Non authorized disused area					[0.0175]	[0.0201]
					0.0778***	0.0908*
Authorized disused area					[0.0297]	[0.0483]
					0.1511***	0.1385***
Total amount of non labor income					[0.0220]	[0.0417]
						0.0018***
						[0.0003]
Observations	925	885	868	868	868	794
Pseudo R-squared	0.13	0.149	0.1558	0.1608	0.1616	0.3049

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 21: Determinants of having illegal sources of income (marginal effects)

	Illegal activities					
	(1)	(2)	(3)	(4)	(5)	(6)
Female	-0.0004 [0.0369]	-0.0023 [0.0391]	-0.0111 [0.0342]	-0.0233 [0.0291]	-0.0232 [0.0289]	-0.0059*** [0.0021]
Age	0.0082 [0.0055]	0.0085* [0.0050]	0.0077 [0.0048]	0.0081* [0.0042]	0.0081* [0.0042]	0.0013*** [0.0002]
Age (squared)	-0.0001 [0.0001]	-0.0001* [0.0001]	-0.0001 [0.0001]	-0.0001* [0.0001]	-0.0001* [0.0001]	-0.0000*** [0.0000]
Romanian	0.0075 [0.0343]	0.0069 [0.0234]	0.0189 [0.0205]	0.0148 [0.0172]	0.0158 [0.0164]	0.0031 [0.0040]
Other Europe	0.0128 [0.0322]	0.0112 [0.0354]	0.0178 [0.0271]	0.0132 [0.0262]	0.0131 [0.0264]	0.0045 [0.0076]
African	0.0243 [0.0290]	0.027 [0.0316]	0.0435 [0.0402]	0.0336 [0.0333]	0.033 [0.0337]	0.0002 [0.0041]
Asian/American and other	-0.0525*** [0.0116]	-0.0457** [0.0180]	-0.0348 [0.0240]	-0.0395** [0.0194]	-0.0395** [0.0193]	-0.0050*** [0.0024]
Faith	-0.0989*** [0.0236]	-0.1006*** [0.0200]	-0.0940*** [0.0295]	-0.0936*** [0.0267]	-0.0935*** [0.0268]	-0.0165* [0.0092]
Primary Edu.Level	-0.0149 [0.0217]	-0.0123 [0.0203]	-0.0055 [0.0170]	0.0016 [0.0132]	0.0018 [0.0133]	0.0030** [0.0012]
Middle Edu. Level	-0.0617*** [0.0224]	-0.0694*** [0.0258]	-0.0648*** [0.0190]	-0.0531*** [0.0165]	-0.0532*** [0.0165]	-0.0052** [0.0026]
Secondary Edu. Level	-0.0749*** [0.0215]	-0.0792*** [0.0235]	-0.0733*** [0.0205]	-0.0636*** [0.0172]	-0.0637*** [0.0171]	-0.0075 [0.0050]
Universitary Edu. Level	-0.0547* [0.0316]	-0.0562* [0.0335]	-0.0465 [0.0305]	-0.0329 [0.0316]	-0.0329 [0.0315]	-0.0021 [0.0066]
Married/engaged	0.0015 [0.0186]	0.0056 [0.0178]	0.0062 [0.0185]	0.0071 [0.0145]	0.0073 [0.0145]	0.0026 [0.0021]
Divorced	-0.0658*** [0.0076]	-0.0651*** [0.0082]	-0.0681*** [0.0159]	-0.0667*** [0.0132]	-0.0667*** [0.0131]	-0.0088*** [0.0017]
Amount received: social assistance	-0.0016*** [0.0004]	-0.0014*** [0.0003]	-0.0014*** [0.0003]	-0.0014*** [0.0004]	-0.0014*** [0.0004]	-0.0003*** [0.0001]
Received money from family or friends	-0.0455** [0.0218]	-0.0426 [0.0262]	-0.0342 [0.0278]	-0.034 [0.0266]	-0.0339 [0.0268]	-0.0078 [0.0061]
Non-financial help	0.0045 [0.0587]	-0.0271 [0.0696]	-0.0097 [0.0592]	-0.0164 [0.0545]	-0.0154 [0.0541]	0.0016 [0.0125]
Essential inkind help	-0.0191 [0.0707]	0.0068 [0.0746]	-0.0094 [0.0680]	-0.002 [0.0652]	-0.0027 [0.0653]	-0.0056 [0.0175]
Additional inkind help	0.0733*** [0.0189]	0.0730*** [0.0184]	0.0617*** [0.0170]	0.0542*** [0.0204]	0.0540*** [0.0204]	0.01 [0.0071]
Shelter	-0.0679*** [0.0078]	-0.0639*** [0.0085]	-0.0648*** [0.0045]	-0.0565*** [0.0005]		
Disused area	-0.0259* [0.0144]	-0.021 [0.0191]	-0.006 [0.0223]	-0.0003 [0.0210]		
Prison	0.0504* [0.0258]	0.0435* [0.0251]	0.0226 [0.0276]	0.0161 [0.0271]	0.016 [0.0271]	0.003 [0.0054]
Death of children	-0.0032 [0.0079]	-0.0091 [0.0105]	-0.0121* [0.0068]	-0.0009 [0.0016]	-0.0004 [0.0020]	0.0012** [0.0006]
No network among homeless		-0.0241 [0.0173]	-0.0170* [0.0096]	-0.0294** [0.0115]	-0.0294** [0.0115]	-0.0049*** [0.0017]
In and out		0.0289 [0.0229]	0.0264 [0.0216]	0.0263 [0.0212]	0.026 [0.0212]	0.0074 [0.0068]
Duration		0.007 [0.0149]	0.0062 [0.0180]	0.0067 [0.0160]	0.0071 [0.0160]	0.0016 [0.0016]

Sick in the past month	0.0292	0.0292	0.0294	0.0038
	[0.0368]	[0.0377]	[0.0378]	[0.0059]
Wrong month	0.028	0.0215	0.0219	0.0025
	[0.0575]	[0.0516]	[0.0513]	[0.0099]
Wrong year	-0.0273	-0.0322*	-0.0324*	-0.0056*
	[0.0187]	[0.0172]	[0.0170]	[0.0032]
Drug use	0.0698***	0.0654***	0.0652***	0.0112***
	[0.0061]	[0.0015]	[0.0016]	[0.0040]
Knowledge of prime minister		0.0015	0.0016	0.0006
		[0.0205]	[0.0206]	[0.0028]
Information		-0.0357**	-0.0357**	-0.005
		[0.0180]	[0.0180]	[0.0035]
Shelter			-0.0563***	-0.0065***
			[0.0004]	[0.0015]
Non authorized disused area			-0.0032	0.0032
			[0.0233]	[0.0058]
Authorized disused area			0.0023	0.0063
			[0.0183]	[0.0070]
Labor				-0.0246***
				[0.0051]
Observations	925	885	859	859
Pseudo R-squared	0.1039	0.1099	0.118	0.1283
			0.1284	0.1951

Robust standard errors in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

HOMELESS SURVEY-STRADA

Buonasera, sono _____ un volontario che sta aiutando l'università in una ricerca al fine di raccogliere testimonianze sulle persone che vivono in condizioni disagiate a Milano. Avremmo bisogno del **suo aiuto** per comprendere meglio le esigenze delle persone senza dimora e stabilire come migliorare i servizi di aiuto e assistenza. Tutte le informazioni **sono riservate e le risposte sono anonime**. Se non se la sente di rispondere ad alcune domande può non farlo. Per ringraziarla del tempo che ci dedica le offriamo un buono che può spendere dove più le piace tra bar, ristoranti, supermercati e farmacie. Possiamo parlare un po' ora mentre beviamo qualcosa di caldo? Posso sedermi qui?

ORA INIZIO INTERVISTA: I _ I _ I _ I _ I

SEZIONE 1: CARATTERISTICHE GENERALI

Q1 Ha dormito **qui** la notte del 14 Gennaio 2007? (*Ieri notte*)

Si	1	=>Q3
No	2	
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q2 Dove ha dormito?

Via/Strada (NOME VIA	1 (_____)
Dormitorio (NOME/VIA)	2 (_____)
Altro (SPECIFICARE)	3 (_____)
No so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q3 Generalmente dorme tutte le sere nello stesso posto?

Si	1
No	2
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q4 Sesso (NON CHIEDERE MA INSERIRE DIRETTAMENTE LA RISPOSTA)

Maschio	1
Femmina	2

Q5 Può dirmi il suo **anno** nascita?

Anno di nascita	I _ I _ I _ I _ I
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q6 Quale è la sua **nazionalità d'origine**?

Italiana	1	
Rumena	2	=>Q8
Russa/Moldava/Ucraina	3	=>Q8
Marocchina/Algerina	4	=>Q8
Sud Americano	5	=>Q8
Altro (SPECIFICARE)	6 (_____)	=>Q8
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q7 In che **provincia** è nato in Italia? (*Inserire nome della provincia di nascita*)

Provincia di		=> Q9
Non so (NON LEGGERE)	9	=> Q9
Non risponde (NON LEGGERE)	99	=> Q9

NOTE

Q8 In che anno è arrivato in Italia la **prima volta**?

MESE (<i>in lettere</i>)	ANNO
I _ I _ I _ I _ I _ I _ I _ I _ I	I _ I _ I _ I _ I
Non so (NON LEGGERE)	9
Non mi ricordo (NON LEGGERE)	99

NOTE

Q9 E' religioso/credente? Se si a quale religione appartiene?

No	0
Cattolico	1
Protestante	2
Cristiano Ortodosso	3
Ebreo	4
Musulmano	5
Induista	6
Buddista	7
Altro (SPECIFICARE)	8 (_____)
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

SEZIONE 2: SITUAZIONE ATTUALE E ASPETTATIVE

Q1	Mi può dire, le ragioni principali per le quali ha iniziato a dormire in “strada”? (<i>non in una casa nel senso tradizionale del termine</i>) (<i>Inserire il numero con cui vengono citate se non risponde leggere le opzioni ad alta voce</i>)
-----------	--

	N. ORDINE
Libera scelta	I_I
Relazioni familiari (separazione/maltrattamenti)	I_I
Perdita di lavoro	I_I
Immigrazione	I_I
Tossicodipendenza / Alcolismo	I_I
Disabilità/malattie	I_I
Precedenti penali	I_I
Gioco d’azzardo	I_I
Altro (SPECIFICARE)	I_I (_____)
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q2	Quando è stata la prima volta che le è capitato di dormire in “strada”? (<i>non in una casa nel senso tradizionale del termine</i>)
-----------	---

*Inserire la risposta
esatta data
dall’intervistato*

Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

--

Q3 Da allora ha sempre dormito in strada?

Si	1	=> Q6
No	2	
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q4 Si ricorda dove ha dormito e per quanto tempo circa? (*Non leggere le opzioni ad alta voce*)

		TEMPO (<i>Specificare giorni/mesi/anni (da...a...)</i>)
Casa mia	1	
Dormitorio/Casa d'accoglienza	2	
Chiesa/parrocchia	3	
Casa di amici/parenti	4	
Area Dimessa/Baraccopoli	5	
Ospedale	6	
Altro (SPECIFICARE)	7 (_____)	
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

NOTE

Q5 Quando è ritornato a dormire in "strada"? (*nel luogo in cui attualmente è*)

<i>Inserire la risposta esatta data dall'intervistato</i>	
---	--

Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q6 Per quanto **tempo prevede** ancora di dormire in strada? (*Leggere le opzioni*)

Meno di un mese	1	
Da 1 a 3 mesi	2	
Da 3 a 6 mesi	3	
Da 6 mesi a un anno	4	
Piu' di un anno	5	
Per sempre	6	=> Q8
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q7 In che modo pensa di uscirne? (*Solo una scelta è possibile*)

Tornando al suo paese di origine	1
Fare domanda per avere una casa comunale	2
Chiedendo ospitalità ad amici/parenti	3
Tornando a casa mia	4
Entrando in comunità per tossicodipendenti/alcolisti	5
Altro (SPECIFICARE)	6 (_____)
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q8 Quanto tempo **pensava di rimanere** in strada quando ci è arrivato?

Meno di un mese	1
Da 1 a 3 mesi	2
Da 3 a 6 mesi	3
Da 6 mesi a un anno	4
Piu' di un anno	5
Per sempre	6
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

SEZIONE 3 : FAMIGLIA

Q1 Nella sua vita **attuale** la _____ è non importante, indifferente o importante?

	Non importante	Indifferente	Importante
Famiglia	1	2	3
Amici	1	2	3
Religione	1	2	3
Lavoro	1	2	3
Politica	1	2	3

Q2 Indichi **quanto è d'accordo con le seguenti affermazioni**, usando una scala da 1 a 3, dove 1 vuol dire non d'accordo, 2 neutrale e 3 d'accordo:

	Non d'accordo	Neutrale	D'accordo
Bisogna sempre rispettare e amare i propri genitori, indipendentemente dai loro pregi e difetti	1	2	3
Il dovere dei genitori è fare il loro meglio per i figli, anche a discapito del loro benessere e felicità	1	2	3
Un figlio ha bisogno di un padre e una madre per crescere felicemente	1	2	3
Il matrimonio è un'istituzione fuori moda	1	2	3

Q3 Attualmente è:

Vedovo/a	1
Sposato	2
Separato/divorziato	3
Single	4
Altro (SPECIFICARE)	5 (_____)
Non risponde (NON LEGGERE)	99

Q4 Era già (INSERIRE RISPOSTA PRECEDENTE) quando è arrivato in strada?

Si	1
No	2
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q5 Ha mai avuto figli? Se si quanti?

<i>Inserire numero di figli</i>	I _ I _ I	
No	0	=>Q7
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

NOTE

Q6 Sono tutti ancora in vita? (*Non leggere le opzioni*)

Si, tutti	0
No, nessuno	1
No, 1 figlio è deceduto	2
No, 2 figli sono deceduti	3
No, 3 figli sono deceduti	4
No, 4 figli sono deceduti	5
No, piu' di 4 sono deceduti	6
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q7 Sua madre è viva?

Si	1	=>Q9
No	2	
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q8 Sua madre era viva quando è arrivato in strada?

Si	1	
No	2	=>Q10
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q9 Sua madre viveva con lei quando è arrivato in strada?

Si	1
No	2
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q10 Suo padre è vivo?

Si	1	=>Q12
No	2	
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q11 Suo padre era vivo quando è arrivato in strada?

Si	1	
No	2	=>Q13
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q12 Suo padre viveva con lei quando è arrivato in strada?

Si	1
No	2
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q13 Ha parlato con un parente negli **ultimi tre mesi**? Se si con chi ha parlato?

No, non ho parlato con nessuno	0
Padre/madre	1
Figlio/figlia	2
Fratello /sorella	3
Parenti di I grado (cugini, zii...)	4
Altro (SPECIFICARE)	5 (_____)
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q14 Ha parlato con un parente nell' **ultimo anno**? Se si con chi ha parlato?

No, non ho parlato con nessuno	0
Padre/madre	1
Figlio/figlia	2
Fratello /sorella	3
Parenti di I grado (cugini, zii...)	4
Altro (SPECIFICARE)	5 (_____)
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

SEZIONE 4 : LAVORO E REDDITO

Q1 Aveva un lavoro la prima volta che ha dormito “in strada”? (*dormitorio/chiesa...i.e. non in una casa nel senso tradizionale del termine*)

Si	1	=> Q5
No	2	
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

NOTE

Q2 Che lavoro faceva? (*Leggere opzioni solo se fatica a rispondere*)

Operaio	1
Impiegato	2
Insegnante	3
Pizzaiolo/Cameriere	4
Domestico/a/Badante/Pulizie	5
Giardiniere	6
Artigiano	7
Lavoro in proprio	8
Camionista	9
Artista	10

Altro (SPECIFICARE)	11 (_____)
Non risponde (NON LEGGERE)	99

NOTE

Q3 Qual era il suo stipendio **mensile**? (*Leggere le alternative solo se fatica a rispondere*)

Inserire lo stipendio I _ I _ I _ I _ I EURO

Meno di 300 euro	1
Da 300 a 500 euro	2
Da 500 a 1000 euro	3
da 1000 a 2000 euro	4
Più di 2000 euro	5
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q4 E' stato il suo ultimo lavoro? (*Vuol dire che ha perso il lavoro e da allora non ha mai più lavorato*)

Si	1	=>Q16
No	2	
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

NOTE

Q5 Attualmente sta lavorando?

Si	1	
No	2	=> Q9
Non risponde (NON LEGGERE)	99	

Q6 Che lavoro fa? (*Leggere opzioni solo se fatica a rispondere*)

Operaio	1
Cameriere	2
Domestico/a/Badante/Pulizie	3
Giardiniere	4
Artigiano	5
Lavoro in proprio	6
Artista	7
Altro (SPECIFICARE)	8 (_____)
Non risponde	99

NOTE

Q7 Qual è il suo stipendio mensile? (*Leggere le alternative solo se fatica a rispondere*)

Inserire lo stipendio

I _ I _ I _ I _ I EURO

Meno di 300 euro	1
Da 300 a 500 euro	2
Da 500 a 1000 euro	3
da 1000 a 2000 euro	4
Più di 2000 euro	5
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q8 Che tipo di contratto ha?

Contratto a tempo indeterminato	1	=>Q19
Contratto a tempo determinato	2	=>Q19
Non ho contratto/Sono in nero	3	=>Q19
Non so (NON LEGGERE)	9	=>Q19
Non risponde (NON LEGGERE)	99	=>Q19

Q9 Ha lavorato nel mese precedente? (*Leggere le opzioni*)

Si, sempre	1	
Si, saltuariamente	2	
No	3	=>Q13
Non risponde (NON LEGGERE)	99	

Q10 Qual era la sua occupazione?

Operaio	1
Pizzaiolo/cameriere	2
Domestico/a/Badante/Pulizie	3
Giardiniere	4
Artigiano	5
Libero professionista	6
Artista	8
Altro (SPECIFICARE)	9 (_____)
Non risponde (NON LEGGERE)	99

NOTE

Q11 Qual era il suo stipendio mensile? (*Leggere le alternative solo se fatica a rispondere*)

Inserire lo stipendio

I _ I _ I _ I _ I EURO

Meno di 300 euro	1
Da 300 a 500 euro	2
Da 500 a 1000 euro	3
da 1000 a 2000 euro	4
Più di 2000 euro	5
Non so (NON LEGGERE)	9

Non risponde (NON LEGGERE)	99
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NOTE

Q12 Che tipo di contratto aveva?

Contratto a tempo indeterminato	1	=>Q16
Contratto a tempo determinato	2	=>Q16
Non ho contratto/Sono in nero	3	=>Q16
Non so (NON LEGGERE)	9	=>Q16
Non risponde (NON LEGGERE)	99	=>Q16

NOTE

Q13 Qual è stata la sua ultima occupazione?

Operaio	1
Pizzaiolo/cameriere	2
Domestico/a/Badante/Pulizie	3
Giardiniere	4
Artigiano	5
Libero professionista	6
Artista	8
Altro (SPECIFICARE)	9 (_____)
Non so (NON LEGGERE)	89
Non risponde (NON LEGGERE)	99

NOTE

Q14 Qual era il suo stipendio mensile? (*Leggere le alternative solo se fatica a rispondere*)

Inserire lo stipendio I _ I _ I _ I _ I EURO

Meno di 300 euro	1
Da 300 a 500 euro	2

Da 500 a 1000 euro	3
da 1000 a 2000 euro	4
Più di 2000 euro	5
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q15 Che tipo di contratto aveva nella sua ultima occupazione?

Contratto a tempo indeterminato	1
Contratto a tempo determinato	2
Non ho contratto/Sono in nero	3
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q16 Sta cercando lavoro?

Si	1	=> Q18
No	2	

NOTE

Q17 Attraverso quali canali sta cercando lavoro?

Amici/Parenti/Familiari	1
Ufficio di collocamento (Comune)	2
Agenzie di lavoro interinale	3
Associazioni di volontariato (Croce Rossa, Caritas..)	4
Altro (SPECIFICARE)	5 (_____)
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q18 Se ci fosse un lavoro disponibile nelle prossime due settimane, qual è lo stipendio **minimo mensile** che potrebbe accettare per iniziare a lavorare?

Inserire la risposta	I _ I _ I _ I _ I EURO
Non accetterei un lavoro nelle prossime due settimane	1
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q19 Quali e quanto sono le sue fonti principali di entrate in denaro (*Da chi riceve soldi?*)
(*Piu' di una risposta è possibile ma non leggere le alternative*)

	TIPO DI ENTRATA	AMMONTARE (Euro)	SETTIMANALE / MENSILE	
			S	M
Sussidio comunale per persone in difficoltà	1	I _ I _ I _ I _ I	S	M
Sussidio di disoccupazione	2	I _ I _ I _ I _ I	S	M
Sussidio di invalidità	3	I _ I _ I _ I _ I	S	M
Lavoro stabile	4	I _ I _ I _ I _ I	S	M
Lavoro occasionale	5	I _ I _ I _ I _ I	S	M
Famiglia/Parenti	6	I _ I _ I _ I _ I	S	M
Amici	7	I _ I _ I _ I _ I	S	M
Pensione	8	I _ I _ I _ I _ I	S	M
Elemosina	9	I _ I _ I _ I _ I	S	M
Altro (SPECIFICARE)	10(_____)	I _ I _ I _ I _ I	S	M
Non so (NON LEGGERE)	9			
Non risponde (NON LEGGERE)	99			

Q20 Riesce a risparmiare qualcosa di quello che riceve?

Si	1
No	2
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q21	Ha ricevuto aiuto finanziario da suoi familiari stretti (genitori, marito/moglie, figli) nell' ultimo mese ?
------------	--

Si	1
No	2
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q22	Riceve aiuti non in denaro (ad.es. cibo, vestiti, oggetti di varia natura...)?
------------	---

Si	1	=>Q25
No	2	
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q23	Quali e con che frequenza? (<i>Elencare le alternative e porre una "X" nelle caselle corrispondenti</i>)
------------	--

TIPO	Tutti i giorni	Piu' volte alla settimana	Una volta settimana	1 volta al mese	Piu' volte al mese	Qualche volta all'anno
Cibo						
Vestiti						
Sacco a pelo/coperta/tenda						
Farmaci						
Non so (NON LEGGERE)						
Non risponde (NON LEGGERE)						

NOTE

Q24 | Da chi? (*Elencare le alternative*)

TIPO	CHI
Cibo	
Vestiti	
Sacco a pelo/coperta/tenda	
Non so (NON LEGGERE)	
Non risponde (NON LEGGERE)	

NOTE

Q25 | Nell'ultima settimana ha acquistato / speso soldi per _____? Quanto ha speso?

TIPO	INSERIRE "X"	QUANTO (EURO)
Acqua/bevande		
Cibo		
Vestiti		
Sacco a pelo/coperta/tenda		
Sigarette		
Vino/Alcolici		
Tessere telefoniche/Ricariche telefoniche		
Cellulare		
Farmaci		
Divertimenti (cinema,svaghi..)		
Spese di viaggio		
Luoghi coperti per dormire (albergo, ostello, dormitorio)		
Gioco (cavalli, lotteria, scommesse)		
Borse/borsone/valigie		
Altro (SPECIFICARE)		
Non so (NON LEGGERE)		
Non risponde (NON LEGGERE)		

NOTE

SEZIONE 5 : ISTRUZIONE

Q1	Sa leggere (nella sua lingua)?
-----------	--------------------------------

Si	1
No	2
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q2	Sa scrivere(nella sua lingua)?
-----------	--------------------------------

Si	1
No	2
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q3	E' mai andato a scuola? Se si, qual è il più alto livello di scuola che ha completato?
-----------	--

Non sono mai andato a scuola	0
Licenza elementare	1
Licenza media	2
Diploma professionale	3
Diploma superiore	4
Diploma universitario/laurea	5
Master/dottorato	6
Non so, non mi ricordo (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q4	Sua mamma è mai andata a scuola? Se si qual è il piu' alto livello di istruzione che ha completato?
-----------	---

Non è mai andata a scuola	0
Licenza elementare	1
Licenza media	2
Diploma professionale	3

Diploma superiore	4
Diploma universitario/laurea	5
Master/dottorato	6
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

Q5 | Suo padre è mai andata a scuola? Se si qual è il piu' alto livello di istruzione che ha completato?

Non è mai andato a scuola	0
Licenza elementare	1
Licenza media	2
Diploma professionale	3
Diploma superiore	4
Diploma universitario/laurea	5
Master/dottorato	6
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

NOTE

SEZIONE 6: CONTATTI E FIDUCIA

Q1 | Conosce delle persone che dormono in strada? Se si, quante? (*Leggere le opzioni*)

No, non conosco nessuno	0	=>Q3
Da 1 a 5	1	
Da 5 a 10	2	
Da 10 a 20	3	
Piu' di 20	4	
Non so (NON LEGGERE)	9	

Q2	Tra queste, mi dice il nome delle prime 5 persone a cui si rivolge se ha bisogno d'aiuto? Da quanto tempo le conosce?
-----------	---

NOME	COGNOME	TEMPO DI CONOSCENZA <i>(Specificare se giorno, mese, anno)</i>
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

NOTE

Q3	Ha un gruppo di persone (1 o piu') con cui generalmente (abituamente) passa la notte? Se si quante?
-----------	--

<i>Inserire la risposta esatta data dall'intervistato</i>	
---	--

Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q4	Si è rivolto a qualcuno perché aveva bisogno d'aiuto nell' ultimo anno ?
-----------	---

Si	1	
No, non mi sono rivolto a nessuno	2	=>Q6
No, non ho avuto bisogno	3	=>Q6
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q5 A chi e quante volte? (Nell'ultimo anno)

		N. VOLTE
A nessuno	0	
Padre/madre	1	
Figlio/figlia	2	
Fratello /sorella	3	
Parenti di I grado (cugini, zii...)	4	
Amici	5	
Chiesa/Parrocchia	6	
Associazioni di volontario	7	
Altro (SPECIFICARE)	8 (_____)	
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q6 In una scala da 1 a 3, dove 1 vuol dire per niente fiducia e 3 vuol dire molta fiducia. Quanta fiducia ha nei confronti di _____? (Leggere le opzioni ad alta voce)

	Per niente fiducia	Indifferente	Molta fiducia
Famiglia	1	2	3
Persone che sono nella sua condizione	1	2	3
Persone di altra nazionalità	1	2	3
Chiese	1	2	3
Ospedali	1	2	3
Associazioni di volontariato (Croce Rossa, F.lli di S.Francesco, OCF, City Angels..)	1	2	3
Polizia	1	2	3
Stato/Governo	1	2	3

Q7 Supponiamo di poter scegliere tra **due situazioni ipotetiche**. Nella prima le viene detto che le vengono dati **subito 800 euro**. Nella seconda le viene detto che se lanciando una moneta in aria esce **TESTA** le danno **200 euro** e se esce **CROCE** le danno **3000 euro**. Quale situazione sceglierebbe?
(Assicurarsi che l'intervistato abbia compreso bene la domanda)

800 EURO subito	1
Lanciare la moneta e vedere cosa esce	2
Non so (NON LEGGERE)	9
Non rispondere (NON LEGGERE)	99

Q8 Supponiamo di poter scegliere tra **due situazioni ipotetiche**. Avere una casa subito o avere 1000 euro ogni mese. Quale situazione sceglierebbe?
(Assicurarsi che l'intervistato abbia compreso bene la domanda)

Casa	1
1000 euro al mese	2
Non so (NON LEGGERE)	9
Non rispondere (NON LEGGERE)	99

SEZIONE 7: CONSAPEVOLEZZA

Q1 Mi sa dire la **data di oggi**? Se sì, qual è?

		Giorno	Mese	Anno
Si	1	I _ I _ I	I _ I _ I _ I _ I _ I _ I _ I	I _ I _ I _ I
No, non so (NON LEGGERE)	2			
Non risponde (NON LEGGERE)	99			

NOTE

Q2 Mi sa dire che giorno della settimana è oggi?

Lunedì	1
Martedì	2
Mercoledì	3
Giovedì	4
Venerdì	5
Sabato	6
Domenica	7
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q3 Quando è stata l'ultima volta che ha letto un giornale (quotidiano)?

Oggi	1
Una settimana fa	2
Un mese fa	3
Sei mesi fa	4
Un anno fa	5
Piu' di un anno fa	6
Mai letto un giornale	7
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q4 Quando è stata l'ultima volta che ha sentito un telegiornale alla televisione o sentito un notiziario alla radio?

Oggi	1
Una settimana fa	2
Un mese fa	3
Sei mesi fa	4
Un anno fa	5
Piu' di un anno fa	6
Mai visto un telegiornale	7
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q5 Chi è il Presidente del Consiglio in Italia? (*Leggere tutte le opzioni prima che l'intervistato risponda*)

Silvio Berlusconi	1
Romano Prodi	2
Giorgio Napolitano	3
Adriano Celentano	4
Gianni Agnelli	5
Non so (NON LEGGERE)	6
Non risponde (NON LEGGERE)	6

NOTE

SEZIONE 8 : SALUTE E ASPETTI GENERALI

Q1	Nel mese precedente è mai stato malato? (<i>Ad esempio ha avuto tosse, raffreddore, diarrea o ferite?</i>)
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No	1	=> Q4
Si	2	
Non so (NON LEGGERE)	9	
Non risponde (NON LEGGERE)	99	

Q2	Che malattia ha avuto?
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<i>Inserire la risposta data</i>	
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Q3	Si è fatto visitare da qualcuno? Dove?
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No, non mi sono fatto visitare	0
Ospedale/pronto soccorso	1
Medico del dormitorio	2
Clinica	3
NAGA	4
Opera San Francesco (FRATI)	5
Altro (specificare)	6 (_____)
Non risponde (NON LEGGERE)	99

NOTE

Q4	Gravi disabilità (NON CHIEDERE MA OSSERVARE E INSERIRE DIRETTAMENTE LA RISPOSTA)
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Si	1
No	2

Q7 Secondo lei da cosa dipende la sua situazione attuale? (*Leggere le opzioni*)

Sfortuna	1
Mancanza di opportunità	2
Scarso merito	4
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Q6 Hai il permesso di soggiorno?

Si	1
No	2
Non risponde (NON LEGGERE)	99

Q7 E' mai stato in carcere?

Si	1	=> Q7.1
No	2	
Non risponde (NON LEGGERE)	99	

Q7.1 Prima o dopo essere arrivato in "strada"?

Prima	1
Dopo	2
Non risponde (NON LEGGERE)	99

Q8 Pensa che la sua vita nell'**ultimo anno** sia _____ ?

Molto migliorata	1
Leggermente migliorata	2
Rimasta uguale	3
Leggermente peggiorata	4
Molto peggiorata	5
Non so (NON LEGGERE)	9
Non risponde (NON LEGGERE)	99

Lucido	0
Consapevole	1
Problematico	2

LINGUA IN CUI E' AVVENUTO IL COLLOQUIO

Italiano	0
Inglese	1
Spagnolo	2
Rumeno	3
Altro (specificare)	4 (_____)

NOTE FINALI
