

Report No. 40071-AL

Albania

Urban Growth, Migration and Poverty Reduction

A Poverty Assessment

December 3, 2007

Poverty Reduction and Economic Management Unit
Europe and Central Asia Region



Document of the World Bank

CURRENCY AND EQUIVALENT UNITS
Exchange Rate Effective as of December 3, 2007
Currency Unit = Albanian Lek
US\$1 = 92.63

ABBREVIATIONS

DPD	Directorate of Planning and Development	MOLSA	Ministry of Labor and Social Affairs
ECA	Europe and Central Asia	MOF	Ministry of Finance
EU	European Union	NE	Ndihma Ekonomike
EWQ	Economic Welfare Question	OLS	Ordinary Least Squares
GDP	Gross Domestic Product	SSS	State Social Services
GNI	Gross National Income	TFP	Total Factor Productivity
ILO	International Labor Organization	WDI	World Development Indicators
IMF	International Monetary Fund		
INSTAT	Institute of Statistics		
IPS	Integrated Planning System		
IV	Instrumental Variable		
LITS	Life in Transition Survey		
LSMS	Living Standard Measurement Survey		
MIGA	Multilateral Investment Guarantee Agency		
MOES	Ministry of Education and Science		

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ACKNOWLEDGEMENT

This report was prepared by a team from the World Bank led by Andrew Dabalen (Task Team Leader), drawing from background papers and contributions prepared by a team consisting of Alia Moubayed and Erjon Luci (Macroeconomic Analysis), Juna Miluka and Sara Savastano (Rural poverty and productivity), Gero Carleto, Carlo Azzarri, and Juna Miluka (Migration and welfare), and Lorena Kostallari, Talip Kilic and Waly Wane (Ndihma Ekonomike).

The team wishes to thank the Albanian government for its open cooperation. The team would like to thank especially the Institute of Statistics (INSTAT), Ministry of Labor and Social Affairs (MOLSA), Ministry of Education and Science (MOES), and Department of Strategy and Donor Coordination, Council of Ministers for sharing data and ideas that informed the content of this report. The report has benefited from the support of UK's Department for International Development (FDID) which has generously funded the Trust Fund to support the capacity building and analytic activities of the Western Balkan Programmatic Poverty work.

This report relies heavily on the Living Standard Measurement Surveys (LSMS), especially those conducted in 2002 and 2005. These complex surveys are rich with information for monitoring and analyzing policy outcomes and will be invaluable for many Albanian and international researchers. The team would like to convey its gratitude to INSTAT for sharing the data, for their collaborative spirit and dedication to duty and professionalism.

The report was prepared under the overall guidance of Asad Alam, Cheryl Gray, Orsalia Kalantzopoulos, and Nadir Mohammed. Elena Glinskaya and Peter Lanjouw are the peer reviewers of the report. The production of this report has been made possible by Susana Padilla's patience, and invaluable support in editing and processing.

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EXECUTIVE SUMMARY

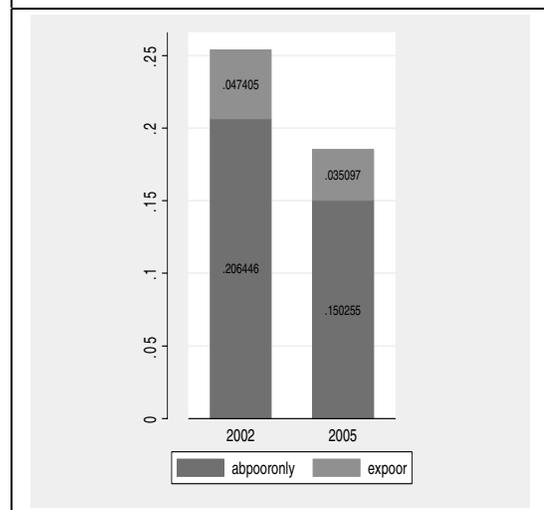
The fraction of the population below the poverty line of US\$50 per person per month (4891 Lek in 2002 prices) fell from 25.4 to 18.5 percent between 2002 and 2005 on account of strong economic growth and large inflows of remittances. However, the distribution of benefits was uneven. Real per capita consumption growth in urban areas was twice as high as that in rural areas. As a result the gap in poverty rates between urban and rural areas widened in absolute and relative terms. The evidence shows that low productivity of small family farms partially explain the slowdown in poverty reduction in rural areas and without the large inflows of remittances, the living conditions would almost certainly be worse.

Improvements in living standards have been impressive

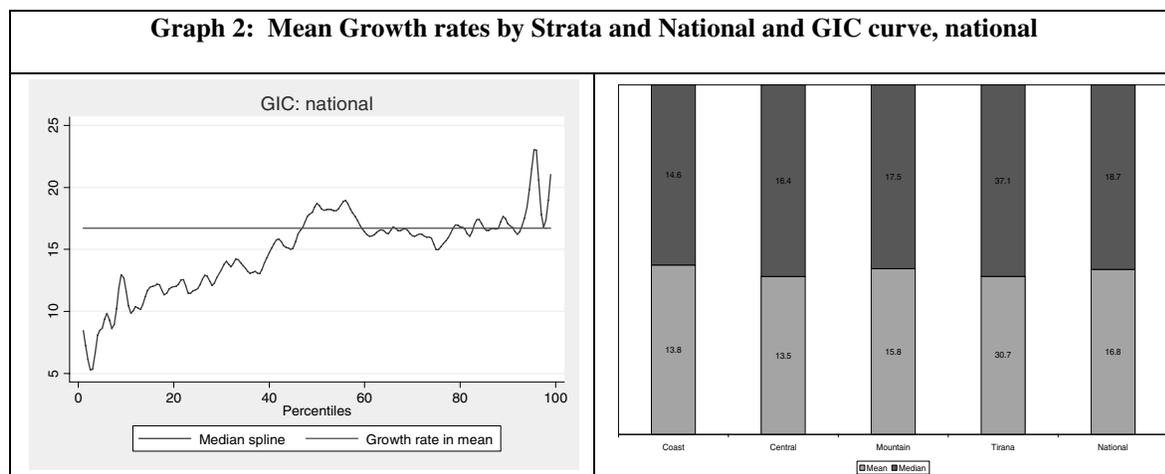
1. **There was massive reduction in poverty.** The fraction of the population whose real consumption per person per month is below US\$50¹ (Or Lek 4891 in 2002 prices) fell from 25.4 percent in 2002 to 18.5 percent in 2005. This means that roughly 235,000 out of about 800,000 poor people in 2002 were lifted out of poverty. Extremely poor population, defined as those unable to raise more than US\$31 (Or 3047 Lek) per person per month (also valued at 2002 prices), decreased from about 5 percent to 3.5 percent (Graph 1).

2. **Growth in real per capita consumption rose sharply between 2002 and 2005.** The average real per capita consumption in 2005 was 17 percent higher than the average in 2002, while the median was 19 percent higher in 2005 than in 2002. A visual inspection of the distribution of the gains shows that the growth was higher for some percentiles than for others. In particular, those in the lower half of the distribution saw consumption gains that were lower than the average gain for the whole population, while those in the upper half of the distribution received about the average gain (Graph 2). However, while the gains were not evenly shared the positive growth rates across the entire distribution mean that households at each percentile rank of the distribution of 2005 improved their consumption level over similarly ranked household in 2002. Had the gains been reversed, that is the poorer households gained more than the better off, poverty reduction would have been even larger. Other measures of poverty also fell sharply. The poverty gap (sometimes referred to as depth of poverty), which takes into consideration the contribution of a poor individual to overall poverty and the severity of poverty, which in addition is sensitive to inequality among the poor, fell from 5.7 and 2 percent in 2002 to 4.0 and 1.3 percent, respectively, in 2005.

Graph 1: Absolute and Extreme Poverty

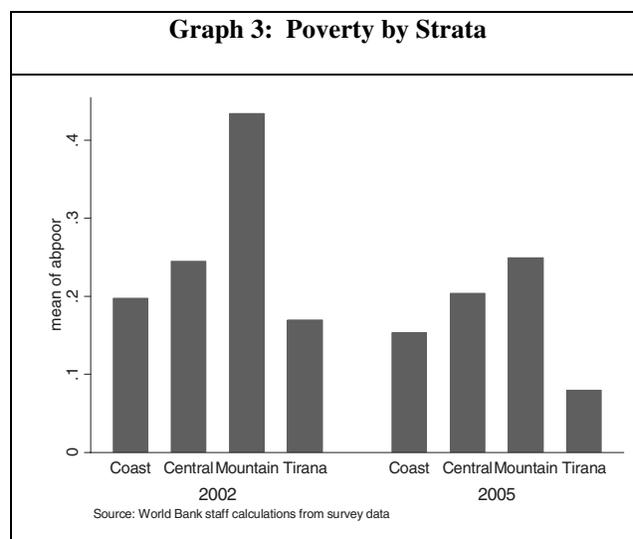


¹ Using an exchange rate of 1US=97.85Lek



3. **Massive poverty reduction has been accompanied by significant regional convergence.** Differences in poverty rates across broadly defined agro-ecological regions have narrowed substantially compared to what they were in 2002. Poverty rates in the Mountain areas were 76 percent higher than the national poverty rate in 2002, but are now only 36 percent higher. Similarly, rural poverty rates in Coast, Central and Mountain are converging. In fact, rural poverty rates for each region in 2005 are only within 4 percentage points higher or lower than the national rural poverty rate compared to 2002 when there was a wider spread (e.g. they ranged from 20 percentage point higher to 8 percentage point lower). A sharp reduction in poverty in the Mountain areas, combined with a relatively sluggish reduction in poverty in the rural parts of the Coast and Central areas is one of the key drivers of this convergence story (Graph 3)

4. **Migration explains, in part, the observed changes in poverty rates in Albania.** First, there is clear evidence that Tirana and the Mountain rural regions are the areas where we see the largest increases in the share of households receiving remittances. Second, not only did the fraction of households receiving remittances increase, but the amount of remittances also increased substantially. Specifically, the flows to Tirana more than doubled while those to the Mountain region increased in the order of 50 percent. Third, the Mountain area has witnessed the strongest pace of poverty reduction in no small part because it is the only region whose outflow of new permanent international migrants continues to grow.



5. **There have been significant improvements in access to essential services, but quality problems persist.** Net enrollment in primary education was already high and has remained high. Substantial improvements are observed in net enrollment in secondary and tertiary education, and the gains are observed in urban and rural areas and for male and female children. Access to tap water inside the dwelling has also improved. On health and energy, the status quo remains. Self-reported days lost to chronic illnesses have dropped, but the fraction of the population using a number of health facilities (public outpatient, private outpatient, and nurse) and the number of visits to these facilities has changed little between 2002 and 2005. Same conclusion holds for energy.

6. Within these positive developments, there are three problems that continue to plague all these essential services. First, quality problems, especially in water and supply of electricity remain persistent. Second, there are large inequalities of access in all these services between the poor and the better off households. Finally, rural areas lag urban areas in access and quality in all areas.

7. **However, while rural poverty rates have come down, the gap between urban and rural has widened in absolute and relative terms.** While real per capita consumption of the urban poor – the 19 percent who were poor in 2002 – grew by 19 percent during the period, the growth for the rural poor was only 6 percent. Furthermore, consumption growth for even the lowest percentile rank of the urban population was higher than the growth for the highest percentile rank in rural areas. As a result, poverty rates in rural areas declined much more slowly than in urban areas. As a result in 2002, rural poverty rates were 50 percent higher than urban poverty rates but 118 higher in 2005. The share of rural poor has risen from 2 in 3 in 2002 to 3 in 4 in 2005 at the same time that the share of rural population has declined from 58 percent to 55 percent in the same period (Table 4.1).

Table 4.1: Poverty Rates by Area

Growth rates in / at	National	Urban	Rural
Mean	16.8	23.9	9.1
Median	18.7	22.1	10.6
Mean percentile	14.9	22.2	8.7
Percentile poor in 2002	25.0	19.0	29.0
Corresponding pro-poor percentile growth	10.7	19.4	6.3
Poverty line	4891	4891	4891

8. **In addition, there was a modest growth in inequality.** There are several ways in which the observed changes in consumption could lead to observed changes in inequality. First, gains in real consumption per capita in urban areas were substantially higher than in rural areas. Second, overall and especially in Tirana and Central areas, the population at the top half of the distribution gained more than those at the bottom half. Third, and offsetting these developments, was the large increase in consumption per capita for the population in the lower tail of the distribution relative to those at the upper tail in Mountain areas. Given the concentration of the population in Tirana and Central areas, relative to the Mountain areas, we would expect to see a slight increase in inequality. Inequality in Albania is considered low, and by the standard of the most commonly used measure, Gini, it remains low. The Gini coefficient increased from 28 percent to about 30 percent overall during the period. Rural inequality remained unchanged, while a slight increase is observed in urban areas, as expected on the basis of the reported changes in consumption. Stable patterns of inequality are also observed in the regions, except in the Mountain region where there was a decline in inequality.

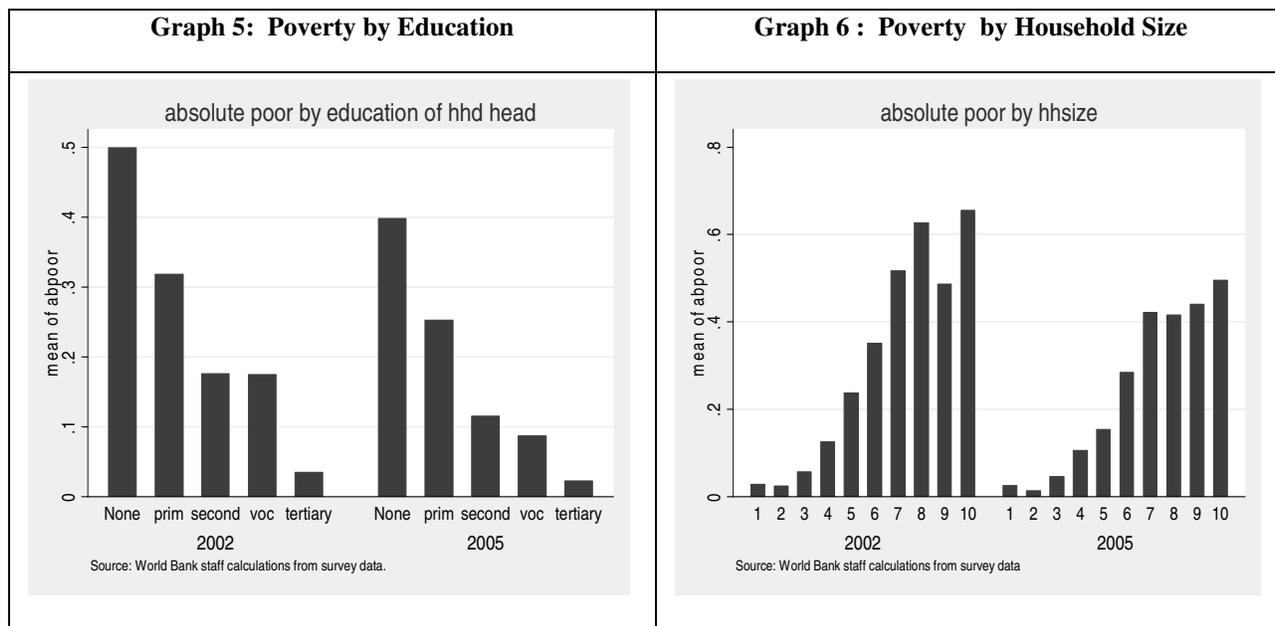
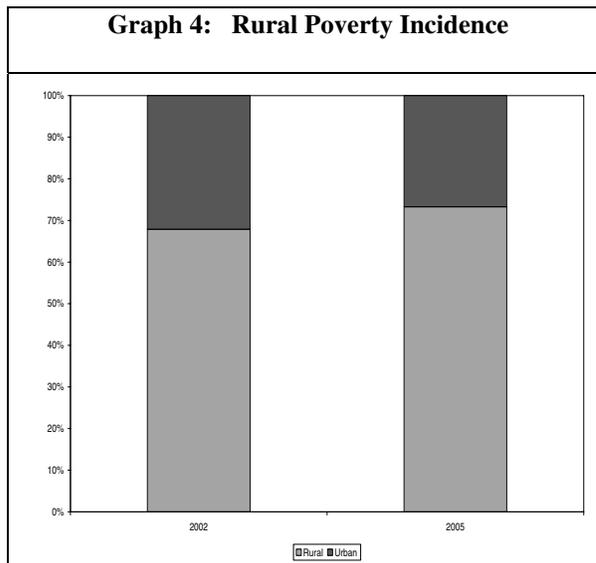
The poor are concentrated in rural areas, among the less educated and large families

9. **The majority of the poor continue to live in rural areas.** In rural areas, extreme poverty fell from 5.2 to 4.5 percent, a reduction of 15 percent, between 2002 and 2005 compared to a 43 percent reduction in urban areas, where only 2.7 percent of the population can be considered extremely poor. We find that rural households who have more irrigated land, grow vegetables, and own more livestock on

average, have higher consumption. Of particular mention is the observation that the incidence of poverty for vegetable growers is 10 percentage points lower.

10. The risk of poverty is much higher for households headed by less educated individuals.

About 75 percent of all poor are headed by individuals who completed 8 or less years of education, even though they are about 55 percent of all households. The poverty risk for heads of households with only primary education was about 32 percent in 2002, but 25 percent in 2005. While the reduction in the poverty incidence for heads of households with primary education is an impressive 28 percent, it compares poorly to the reduction in the risk of poverty for those with vocational or general secondary education. On the whole, while it is not surprising that those with more skills will stand to gain more in the context of high growth, the difficulty of the less skilled to gain ground even in such a favorable contexts is worrisome (Graph 5).



11. Large households have much higher incidence of poverty. About 48 percent of the population of Albania lives in households with about 4 to 5 people compared to households with 8 or more members who make up only 8 percent of the population. Yet, 21 and 17 percent of all the poor in 2002 and 2005, respectively, lived in such large households. The poverty incidence for households with more than 8 members was about 50 percent in 2002 and while it has declined by 2005, the risk remains higher compared to smaller households (Graph 6).

12. **Households headed by females have lower incidence of poverty.** Surprisingly, female headed households do not show higher risk of falling into poverty than male headed households. Households whose head is a male have at least a 5 percentage point higher incidence of poverty. Female headed households are only about 12 percent of all households in Albania, but they were only about 8 percent of all poor in both years. Part of the explanation may be that these female-headed households live in households with migrants whose remittances improve their income position.

13. **The incidence of poverty is rising for the younger heads of households.** In 2002, differences in the likelihood of being poor were not large over the life cycle. While this risk has actually declined for heads of households older than 30, it has increased for those who are younger. Also, it is worth noting that older heads of households with pensions had one of the lowest incidences of poverty in 2005.

14. **Not surprisingly, the unemployed have higher poverty risk, although their contribution is small.** Households whose head is unemployed face a 34 percent chance of being poor, and this has only marginally declined, to 32 percent, by 2005 compared to poverty incidence of 14 percent for households headed by someone who is employed. However, households with unemployed heads comprise less than 5 percent of the population, so they made up only 6 percent of all the poor. By comparison, the self-employed who include the own account farm households have the second highest poverty incidence but highest contribution: about 46 percent of all the poor were classified as self-employed in 2005.

15. The scale and depth of welfare changes in Albania in the early part of the 2000 rivals some of the most dramatic examples of poverty reduction elsewhere. The brief review of the trends in changes in poverty and the profile of the poor show that poverty declined substantially in urban areas and more slowly in rural areas. It also shows that increasingly the poor are concentrated in rural areas, large families, and among the least skilled. To understand these changes, the report takes a look at the roles of growth, migration, and organization of rural production

Recent growth conditions drove this massive poverty reduction

16. **Albania's recent growth since the transition has been impressive.** GDP grew at a robust 6.6 percent per year from the start of the stabilization program in 1992 to 1997, when there was an abrupt and massive interruption of economic activity because of the collapse of the pyramid savings schemes. Growth resumed soon after as evidenced by the 7 percent annual real GDP growth between 1998 and 2006. Much of this economic growth has been underpinned by sustained reduction in deficit financing, low and stable prices (inflation), total factor productivity growth and strong demand buoyed in no less part by the growth of remittances. In addition, labor market conditions appear to have improved, notably in urban areas as evident from a decline in unemployment rate, an increase in adult employment and the declining trend in external migration.

17. **The evidence suggests that growth accounts for nearly all the reduction in poverty.** Changes in poverty can come from increases in average incomes in a stable inequality environment, or through a re-distribution to the lower tail of the distribution even when there is no change in average mean incomes, or an interaction of the two. Such an accounting procedure shows that much of the recent poverty reduction in Albania is due to the growth in mean incomes in a fairly stable inequality context. This is true for all broadly defined agro-ecological regions of the country and for urban and rural areas. The exceptions are in the Coastal and Central areas where a higher than average increase in inequality led to a halving of the potential poverty reduction that could have come from growth alone. Overall, the fraction of the population below the poverty line would have declined by 9 percentage points (rather than the observed 7 percentage points) except for a slight increase in redistribution to the upper parts of the distribution that offset poverty reduction by 2 percentage points. Similarly, changes in the depth and severity of poverty also suggest that the growth component dominates (Graph 7). As in the headcount

measure, the reduction in the depth and severity of poverty measures would have been higher if there was no change in inequality that offset some of the gains.

18. The consumption growth that explains the declining poverty rates is partly explained by the growth in incomes from domestic activities. However, there is little doubt that in the context of Albania, a fair share of this growth in consumption is also due to migration. The large pool of migrants and the remittances they send have contributed to consumption growth by reducing family sizes, financing consumption directly and providing working capital for business start-ups.

Migration and remittances accelerated the momentum

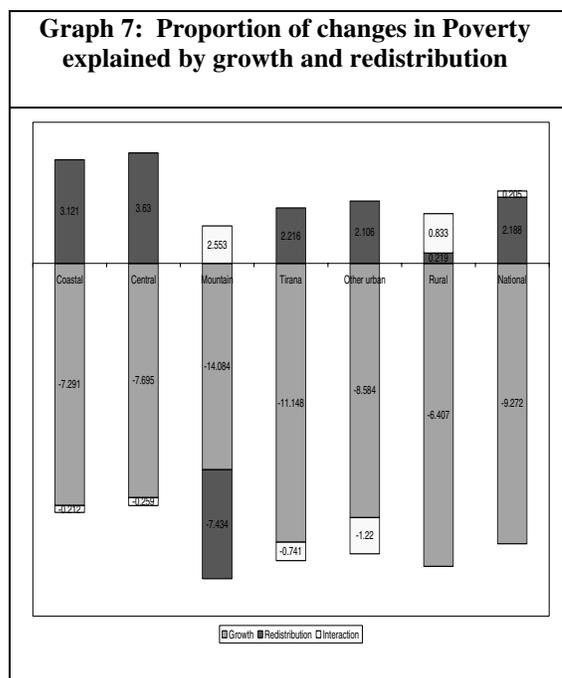
19. **Both internal and international migrations have been massive.** Over 20 percent of adults have moved internally. This means that about 450,000 individuals currently reside in a place different from where they were in 1990. If we count the movers since birth, then nearly 1 in 3 adults have moved internally, so that about 16 percent of households nationwide are headed by individuals who have moved since 1990. In addition, 34 percent of households have at least one former member currently living abroad, and 50 percent of these households have multiple members abroad. There are three points to note about these recent migration flows.

20. First, the majority of migrants, internal and international, originate from rural areas. Nearly 2 in 3 internal migrants and about 55 percent of all international migrants, originate from rural areas. Until recently, the flows of the internal rural migrants have headed, in equal shares, to other rural areas, Tirana and other urban areas. However, since 2002, disproportionately more are moving to Tirana.

21. Second, since 2002, the flow of internal and international migration has slowed down considerably, and is showing signs of decline. This is because of a number of reasons. One reason is that since the collapse of the command economy, economic conditions have improved considerably as evidenced by the robust GDP growth rates. Another is that no major shock, equal in severity and scale like the pyramid scheme, which appears to have been the single largest driver of recent migration has happened. Finally, immigration laws in Greece and Italy, which are the two main destination countries for international migrants, have tightened considerably.

22. Third, the exception to this declining trend is the flow of migrants from the Mountain areas. Almost 30 percent of internal migrants come from this area, even though it has only 11 percent of the country's population. A quarter of people born in the Mountain have moved internally and half of them live in or within the vicinity of Tirana. While the flow of international migrants has declined in all the other parts of the country, it has continued to rise for the Mountain areas. At the end of the 2004, the stock of international migrants from these areas is approaching those from the Coastal areas.

23. **Migration has had a significant impact on many measures of welfare, but not all positively.** A straight forward comparison between households with migrants and those without indicates large differences in consumption and poverty. Both temporary and permanent international migrations have a



positive impact on consumption, but the impact is larger for permanent migration. For instance, 1 additional year of temporary migration is associated with a 5 percent increase in consumption. It is 50 percent higher for households with permanent migrants, although this is higher than expected. Self-reported welfare ranking also indicates that households with migrants experienced positive improvements over time while households without migrants reported no changes. Finally, migration appears to promote higher occupational mobility.

24. The downside is that there is no evidence of a skill upgrade for the country on the basis of the demographic and skill composition of return migrants. Returnees' average years of education has clearly been decreasing since 1995 and at a steeper rate than the downward trend observed in the education level of new migrants. Second, while there is a strong and positive relationship between return migration and business ownership, the evidence also shows that they are of low-productivity type, suggesting that perhaps these reflect failure to succeed abroad, thus making it a less likely catalyst of growth. Of course this could all be temporary. It may reflect the early stages of a general trend towards more returning, including more skilled and more entrepreneurial types, eventually. Third, and more worrisome, there is evidence that migration has a negative impact on the households' enrollment rates, especially for female and secondary age children in rural areas.

Low agricultural productivity explains, in part, the lag in rural welfare

25. **Most of the family farms are subsistence-oriented.** First, the ratio between quantity of crop sold and harvested is very low. Only 28 percent of farmers sell their production on the market and, on average only 9 percent of the crops harvested is sold by farmers. Second, there is very little use of hired labor in family farms. The evidence shows that hired labor is almost non-existent for small family farms. Only 8 percent of all farms hired labor, though this rises to about 17 percent for those who rented-in land. The share of hired labor in total input cost is only about 3 percent for all farms. This suggests that farmers rely on family labor or unpaid workers (relatives or exchanged labor from neighbors). Finally, most farms are characterized by low technology. Only about one-third of households report owning any type of equipment and at most 3 percent of all farm households own a tractor. However, although the majority of farmers use pesticides and modern seeds, the share of costs of pesticides is more than half the cost of all purchased inputs, and this may hint at the possibility that the price of this crucial input may be relatively high, especially for the farmers who are likely to participate in the market (those who rent-in).

26. **The empirical evidence shows that productivity is low because most farmers face multiple constraints.** Overall, the efficiency – that is allocation of inputs to the most productive use – of farmers is low and this is true for farmers of all land size classes. The average farmer is operating at only one-third the distance to the potential. There are three major sources of inefficiency. First, too many families have access to insufficient land. The average household cultivates only 0.8 hectares, much of it split into many plots. Yet a 10 percent increase in land available to a farmer will increase agricultural production by 4.4 percent. Second, many farmers are not served adequately by agricultural institutions for input management, irrigation, and property rights. For instance, few farmers receive or are served by extension services on seeds, crops, pest control, and fertilizer and livestock breeding, even though the evidence points to the fact that farmers who received advice on soil quality and ways to improve it are significantly more efficient than those who did not. Third, credit availability within the communities seems to preclude efficiency gains. The evidence shows that if someone in the community needed a loan to start a business, then people in only 35 percent of communities could have obtained it from a government or a private bank. Finally, massive out-migration adds to the constraints by reducing available supply of crucial inputs like labor, effort of the remaining households on account of receiving remittances, and overall investment in agriculture.

Efforts to reach the poor through NE has had modest success

27. **Targeting performance improved slightly on account of faster improvements in coverage relative to a worsening of leakage.** In 2005, the program reached about 1 in 3 poor families, which is an improvement from 2002 when it reached only 1 in 4 families. Much of the improvement has come from a relatively faster expansion of coverage of the poor in rural areas compared to urban and in Central areas compared to Coastal and Mountain areas. Still, a higher fraction of the households in poorer Mountain areas participate in the program. An assessment of the sources of the targeting performance indicates that much is owed to the efforts of the local officials to reach their poor, except in rural areas where the efforts of the center and local officials contribute equally.

28. The program appears to screen well on the basis of the administrative guidelines. However, the variables used have low predictive power with regard to the poverty status of a household. Only 29 percent of the poor would be predicted as poor by these “guideline” variables. At most, only 34 percent of the poor would be predicted as poor on the basis of these screening variables, and this happens to be in the Mountain area. By comparison, a model that is built on easily verifiable and hard to manipulate observables of a household such as access to running water, modern toilet, or assets such as a vehicle, satellite dish, gas stove and so on increases the prediction by 12 percentage points. While the proportion of the poor predicted as poor with these variables is still only 41 percent for overall poverty, it predicts close to 50 percent of the poor correctly and is a considerable improvement than the guideline variables.

Challenges and opportunities in sustaining poverty reduction

29. In the past 15 years, Albania has undertaken substantial structural reforms, consolidated its gains from the transition and enjoyed high and sustained growth. The result has been an impressive structural transformation of the economy. As summarized above, much has been achieved in terms of improved living standards. Poverty rates have fallen across the land and inequality has risen only slightly. However, the story also suggests that the widespread gains have not been shared equally, as evident in the widening gap between rural and urban areas. The report makes the case that low productivity of small family farms explains, partially, the increasing gap in living conditions between urban and rural. It attributes the low productivity to numerous hurdles to obtaining necessary inputs, inadequate market infrastructure, low technology and insufficient institutional response, all made worse by massive out migration, itself a response to low productivity in rural areas.

30. The objective of this report has been to present the linkages between rural stagnation, widespread migration and urban growth as one of the defining narratives of emerging Albania. So as the country looks ahead, it confronts two challenges. One is to consolidate and maintain the high growth path. The other, and related challenge, is to reduce the widening distance in welfare outcomes between urban and rural areas

31. **First, it is essential to maintain the growth momentum.** At the center of the recent reduction in poverty has been impressive growth that has been sustained over long stretches of time. Maintaining such growth will remain crucial. In the future, as in the past, this involves commitment to sound macroeconomic policies. In addition, it will mean tackling some of the emerging micro-economic constraints to growth such as a) low investment in infrastructure, b) reforming public utilities, primarily power, in order to transfer efficiency gains there to the firms and households, c) removing anti-competition hurdles through fair tax reforms and strengthening regulatory institutions to prevent capture.

32. **Second, to improve rural incomes and, therefore, living standards, it will be crucial to expand rural non-farm activities, in addition to raising agricultural productivity of small scale farmers.** Already a radical transformation of rural areas is underway. Many individuals and families,

particularly in rural areas, have moved internally or outside the country to escape low income prospects in these areas. Therefore, one solution to reducing rural poverty would be to facilitate, may be even accelerate, rural to urban migration. Such a strategy shifts the attention towards developing and modernizing urban infrastructure and services. Effectively, the solution to accelerated rural growth is urban growth. The exit of a large fraction of the rural population from these areas has the potential to increase land sizes, make land consolidation easier, and increase rural productivity, especially if those who exit are those less successful at farming. In addition, the impressive rate of poverty reduction was achieved in part through substantial growth in rural non-farm income. This means that expanding the opportunities for rural non-farm activities, especially in agro-processing, will have to serve as a crucial part of the strategy. However, even if such a strategy worked perfectly, it is unlikely that all the possible gains from it will sweep away rural problems. Remaining farmers will still need support in order to sustain their productivity and incomes. The report identified three main obstacles to improving productivity of family farms – insufficient land, credit availability, and inadequate institutions. Therefore, making progress in these areas may provide the foundations for future rural growth. In particular, it will be crucial to facilitate access to land for the productive farmers by making land markets more active by establishing secure land rights. Additional productivity gains could be achieved by expanding the irrigation network, the reach of extension services, especially when coupled with monitoring of input quality, and promoting organic farming, high value crops and value-adding post-harvest activities.

33. **Third, improve the targeting performance of the NE.** As a share of GDP or social protection expenditures, NE is a small program. However, as the main instrument for direct income support that reaches 15 percent of households, its potential as an anti-poverty program is either underutilized or underestimated. For instance, at present, Albania is undertaking pricing reforms in the water, power and health sectors which could potentially have negative impact on the welfare of the poor. But if NE reached all or most of the poor, it can serve as the instrument to mitigate the potentially negative effect of these reforms on the poor. Unfortunately, NE reaches a small fraction of the poor and guidelines used to screen households have weak correlations with poverty status. That said, an attractive feature of the program design is its decentralized nature. Therefore, to improve the targeting performance of NE and to utilize fully its potential, three improvements are needed: a) improve the efforts of the central government to allocate funds to communes by considering a formula that takes into account the poverty status of a commune such as a poverty map, b) screen on the basis of a short list of variables that are clearly observable, are harder to hide, and have high correlation with poverty. This will also simplify the application and information verification process, and c) continue to use local information and discretion.

Conclusion

34. In the three years between 2002 and 2005 alone, almost 235,000 people have moved out of poverty in Albania. Strong economic growth and large inflow of remittances are at the center of this impressive achievement. However, low productivity of predominantly small family farms has put a drag on rural growth prospects. Moreover, NE program, the means-tested income support program is small in scale, and has a low coverage so that it has had only a modest impact on poverty reduction. As a result of these developments, the poor are mostly rural residents, low skilled (measured as years of schooling completed) and large families. The main conclusion of this report is that as Albania looks ahead it faces the challenges of consolidating and sustaining these improvements in living conditions and narrow the widening rural and urban differences. To tackle these challenges, Albania needs to maintain the high growth path, raise rural productivity and improve the targeting performance of its NE program.

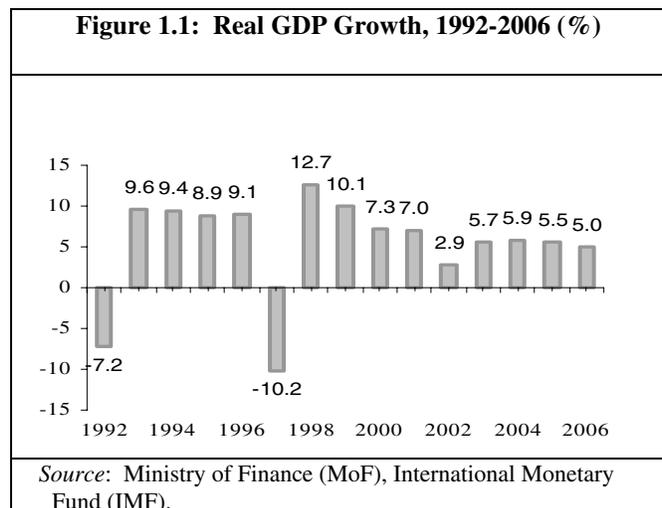
CHAPTER 1.

GROWTH, POVERTY AND INEQUALITY

In the past 15 years Albania's growth has averaged almost 7 percent per year except in 1997 when there was a sudden interruption due to the collapse of the pyramid savings schemes. The high and sustained growth has led to massive improvements in welfare. The fraction of the population below the poverty line dropped from 25.4 to 18.5 percent. This was accompanied by regional convergence and improvements in access to essential services. However, rural and urban differences in poverty also widened in absolute and relative terms, so that the poor now appear more concentrated in rural areas.

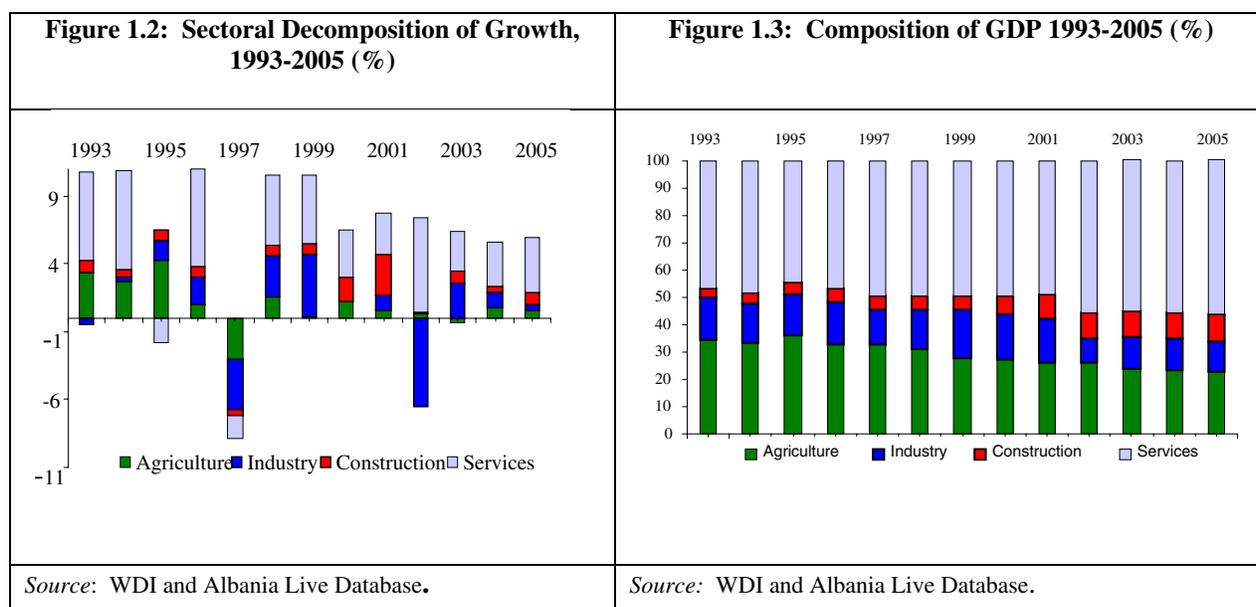
A. GROWTH EXPERIENCE

1.1 Albania's growth since the transition has been impressive. Unlike some Former Soviet Union and CEE countries that started the liberalization of the economy in the 1980s, Albania did not undertake any pre-transition reform before 1991. During 1991-1992 the economy experienced a sharp decline in output and high levels of unemployment and inflation. The adverse economic situation led to mass migration of the work force abroad, especially to Italy and Greece. From the beginning of the stabilization program in 1992 output grew rapidly until 1997 when it was abruptly interrupted by the collapse of the pyramid schemes. But it rebounded quickly and achieved high positive growth rates, owing to the policies of economic stabilization and a period of political stability. Between 1998 and 2006 real GDP has averaged almost 7% annually. Inflation record has also been impressive, diverging not far from 3 percent target of the central bank in more than 8 years now (Figure 1.1). The relatively high and sustained growth led to an estimated GNI per capita of almost US\$3,000 in 2006 upgrading Albania to the group of middle income countries.



1.2 Strong domestic demand supported by total factor productivity improvements and remittances has sustained high growth rates during this transition phase. Since transition, Albania's growth has been driven primarily by improvements in the allocation of resources from low-productivity sectors, firms, and activities to high-productivity ones. As a result, total factor productivity (TFP) growth explains almost all growth in the 1993-2003 period that is 6.1 percent of the annual average of GDP growth of 6.3 percent. Meanwhile, the contribution of factor mobilization and accumulation of both labor and capital has only picked up modestly and faces constraints. Investment rates rose after the financial crisis of 1997, but, after 1999, have declined and stagnated. This reflects, in part, sluggish foreign direct investment, which at 3.7 percent of GDP, is low compared to other transition and high growth economies. With consumption persistently high, domestic savings have declined after 2001. Both the migration of young workers and the low savings rate will continue to limit the growth of factors of production, and confirm the need for finding new sources of TFP growth.

1.3 The initial rapid pace of growth was mainly observed in those sectors of the economy where market liberalization proceeded quickly like agriculture and services. Later on construction emerged as a key sector in sustaining growth, compensating for the slowdown in agriculture and industry oscillation. After an initial slump in early 1990s, Albanian agriculture witnessed a prolonged expansion, which was sustained by changes in incentives (from collective farms to private holdings), diversification, especially into livestock and vegetables, and growth in agro-processing. However, as structural transformation of the economy took hold, remaining constraints in agriculture-- small land sizes, limited use of modern inputs, poor infrastructure and low market access, weak processing capacity, and absence of proper land market – led to a slowdown in agricultural growth to about 3 percent per annum. The slowdown in agricultural growth and the surge in the output of other sectors had narrowed its share of GDP to 21 percent from its high of 35 percent in 1995 (Figure 1.3). However, it still remains the main source of income for nearly 40 percent of the population. In the last ten years, ‘non-tradable’ sectors such as construction and services have been major contributors to Albanian growth. Together they now count for more than two-third of the GDP.



1.4 Much of this economic performance has been underpinned by sustained fiscal consolidation and macroeconomic stability. The fiscal stance has continuously improved, owing to significant fiscal adjustments in the recent years. The size of budget deficit (including grants) was reduced from 13 percent of GDP in 1997 to 3.2 percent in 2006, while the primary deficit declined from 8 to 0.5 percent of GDP during the same period. There has also been further tightening of fiscal policy, partly as a result of revenue over-performance and partly as a result of under-execution of capital investment projects.

1.5 Ongoing reforms to enhance the efficiency of tax administration combined with a concerted effort to reduce the size of the informal economy, which is estimated to be one of the highest in the region, is expected to increase tax revenues further. Lower public sector borrowing requirements resulting from fiscal consolidation sustained the downward trend in interest rates. Inflation, although slightly higher towards the end of 2006 compared to a year earlier, stayed within the Bank of Albania’s target range of 2-4 percent (Figure 1.4). The consolidation efforts have also reduced debt-to-GDP ratios and created a virtuous circle on the path of public finance sustainability. But the debt, which is largely domestic, has a short maturity profile and a narrow investor holder base, creating rollover risks and exacerbating expenditure rigidities.

1.6 Sustained growth rates have led to modest job creation. The rate of unemployment using the standard ILO definition fell from 10 percent to about 7 percent in 2005. An alternative definition of unemployment, which includes discouraged workers, also shows a similar pattern of reduction, even though the initial rate of unemployment is estimated to be higher with this method (

1.7 Table 1.1, row 3). Some of the reduction in unemployment is due to a reduction in active job search, as evident in a large number of working age inactive people especially housekeepers and from the relatively low working age employment rate. In addition, a rising enrollment rate, especially at the secondary level possibly in rural areas, may account partially for a declining labor force participation rate. But these trends notwithstanding, the data clearly shows that there is a slight increase in employment between 2002 and 2005 for urban areas and for adult populations (Table 1.1 and Figure A. 3).

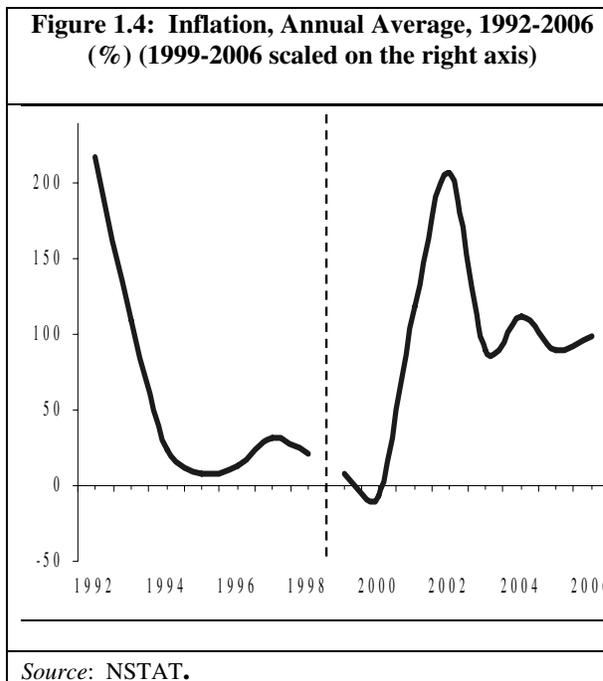


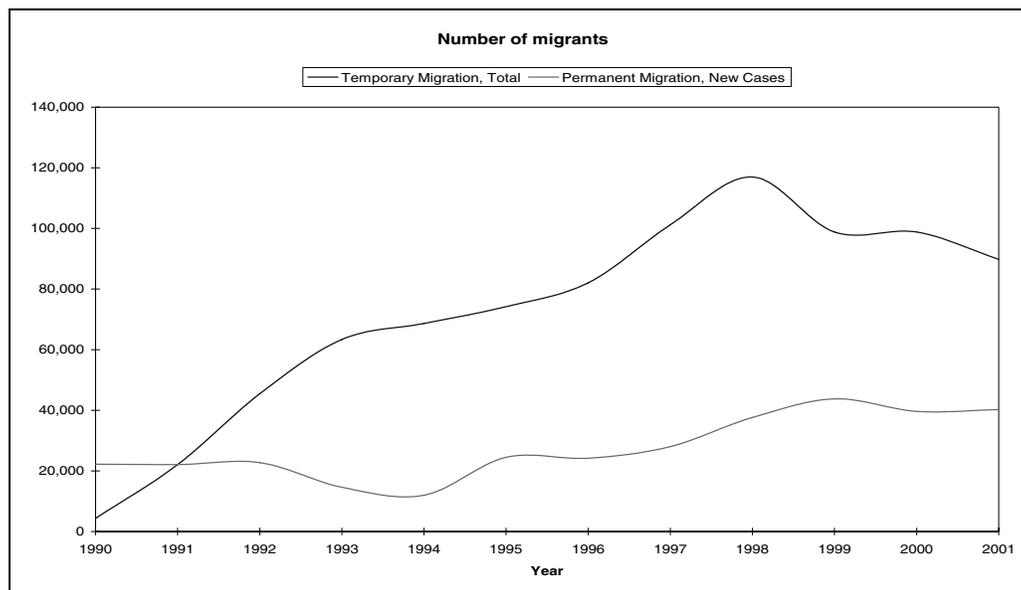
Table 1.1: Main Labor Market Indicators, 2002-2004

	2002			2005		
	Urban	Rural	Total	Urban	Rural	Total
Labor force participation rate (relaxed)	62.0	77.2	70.6	60.0	69.6	65.3
Labor force participation rate (standard)	55.1	74.2	65.9	54.1	67.1	61.2
Unemployment rate (relaxed)	31.1	7.3	16.4	21.8	6.0	12.6
Unemployment rate (standard)	22.5	3.4	10.3	13.3	2.4	6.8
Employment rate	42.7	71.6	59.1	46.9	65.4	57.0

Note: Calculations for population of 15-64 year olds. Also see World Bank, 2005.

1.8 But, not enough jobs are being created, especially in the formal sector. Only 15 percent of the unemployed in 2002 made the transition to formal sector employment by 2004. Only 10 percent of those who were out of the labor force in 2002 made a similar transition. By contrast 38 percent of the unemployed found jobs in the informal wage employment (World Bank, 2005). Rising levels of external migration provide the strongest evidence of inadequate job creation. The flow of permanent and temporary migrants rose sharply throughout the 1990s (Figure 1.5); Carletto et al., 2004 and 2005), to neighboring Greece and Italy. About 90 percent of the migrants left in search of employment. Nonetheless, as Figure 1.5 shows, there is a slow-down in migration flows after 1998 as the economy recovered from the disruptions brought by the pyramid scheme.

Figure 1.5: Flows of Temporary and Permanent External Migration, 1990-2001



Source: Carletto et al (2005).

1.9 While cheap labor costs may have been an attractive feature of the Albanian economy, upward pressures on wages are mounting as indicated by increased earnings. Albania still has some of the lowest wages in the region, despite their strong growth after 1997 (Table 1.2). However, alternative views maintain that real private sector wages are underreported and the actual wages are not as competitive as they seem.

Table 1.2: Annual Gross Salary or Wages for Various Labor Categories, by Country (in US\$)

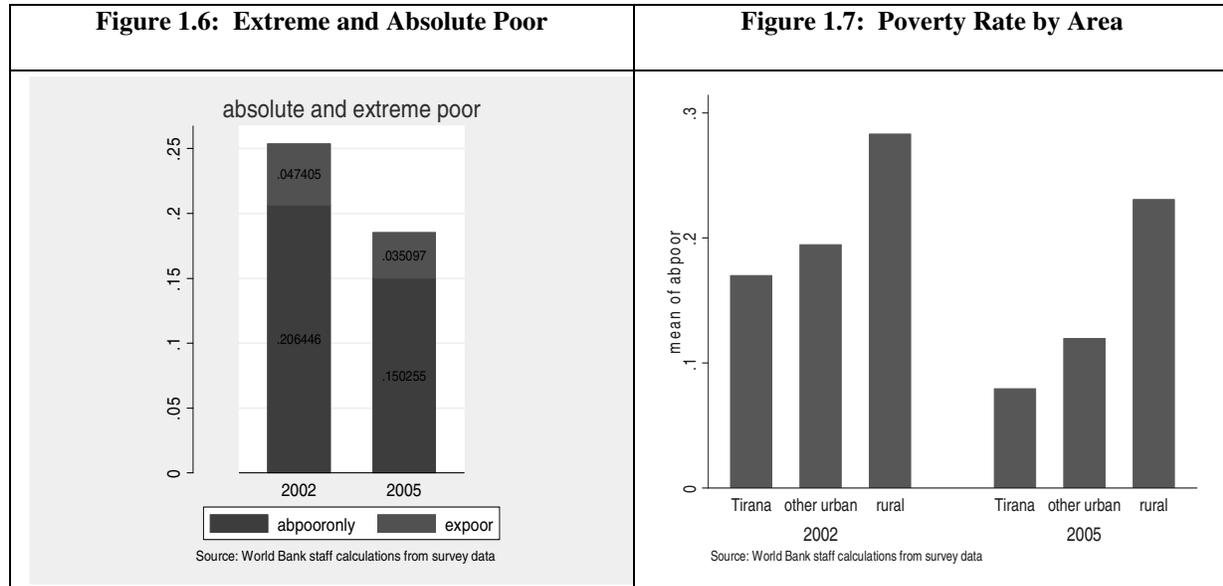
	Management	Professional	Technical	Skilled Labor	Unskilled Labor
Albania	13,538	8,123	6,497	3,569	2,215
Bosnia & Herzegovina	22,521	14,250	12,600	7,667	5,467
Croatia	35,383	22,317	12,600	11,408	7,714
Macedonia	26,251	14,214	6,445	5,701	4,079
Serbia & Montenegro	NA	10,649	3,878	5,715	4,293
Czech Rep.	21,193	NA	6,031	9,389	6,583
Hungary	37,170	NA	16,862	8,744	7,618
Slovakia	21,189	NA	10,797	5,152	3,699

Source: Investments Horizons: Western Balkans; MIGA, World Bank 2006.

B. POVERTY AND INEQUALITY TRENDS

1.10 High GDP growth rates have been accompanied by a massive reduction in poverty. The fraction of the population whose real per capita monthly consumption is below Lek 4891 (in 2002 prices), fell

from 25.4 percent in 2002 to 18.5 percent in 2005. This means that roughly 235,000 out of about 800,000 poor people in 2002 were lifted out of poverty. Extremely poor population, defined as those with difficulty meeting basic nutritional needs, decreased from about 5 percent to 3.5 percent. In urban areas, only 2.7 percent of the population can be considered extremely poor (see Figure 1.6 and Figure 1.7).



Source: World Bank staff estimates from survey data.

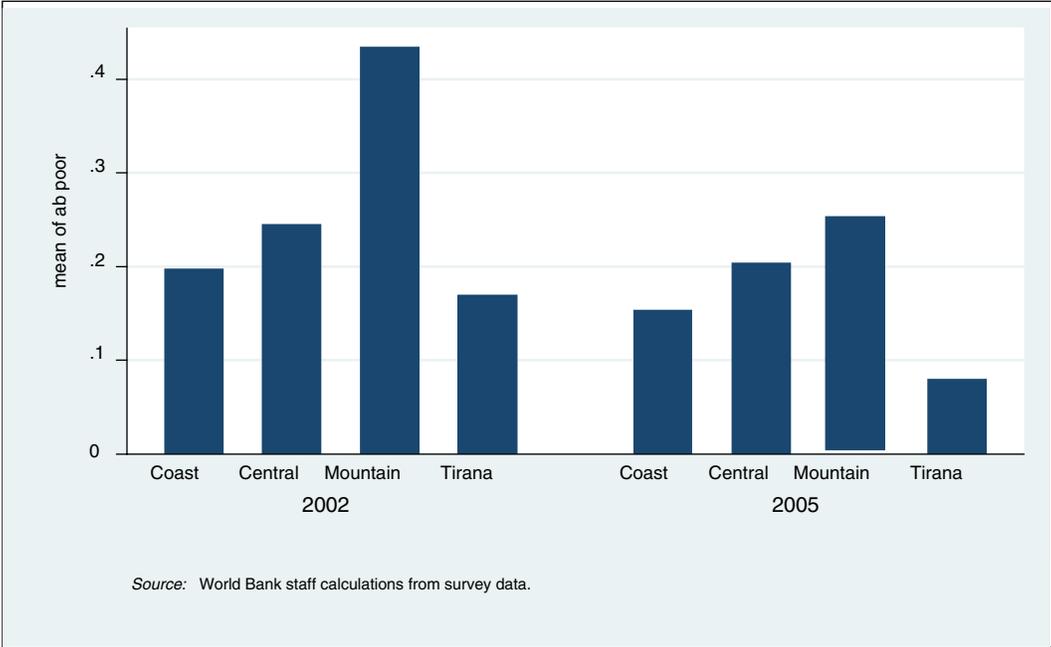
1.11 Other measures of poverty also fell sharply. Two alternative measures to headcount ratio are the poverty gap and severity of poverty. The poverty gap (sometimes referred to as depth of poverty), is obtained by dividing the sum of the consumption gaps of the poor (that is, poverty line less consumption) for all the poor by the overall population, and expressing it a percent of the poverty line. So a poverty gap of 5 percent means that the total amount the poor are below the poverty line is equal to the population multiplied by 5 percent of the poverty line. The main advantage of the poverty gap is that the contribution of a poor individual to overall poverty is larger the poorer is that individual. The second alternative measure to headcount is the severity of poverty, whose main advantage is that it is sensitive to inequality among the poor. Table A. 8 shows that the poverty gap fell from 5.7 percent in 2002 to 4.0 percent in 2005, while severity of poverty fell from 2 percent to 1.3 percent in the same period.

1.12 Massive poverty reduction has been accompanied by significant regional convergence. Differences in poverty rates across broadly defined regions² have narrowed substantially compared to what they were in 2002. For instance, the Mountain areas, where poverty rates were significantly higher in 2002, have narrowed their distance with Coast, Central and Tirana regions. More specifically, while Mountain region's rural poverty rate was 67 percent higher than the national rural rate, it is now only 14 percent higher (Figure 1.8 and Table A. 8). Similarly, rural poverty rates across regions are closer in 2005 than in 2002. In fact, rural poverty rates for each region in 2005 are only within 4 percentage points higher or lower than the national rural poverty rate compared to 2002 when there was a wider spread (e.g. they ranged from 20 percentage point higher to 8 percentage point lower). A sharp reduction in poverty

² It is important to bear in mind that these broadly defined regions are not the same as administrative regions – commonly referred to as prefectures. Rather, these are areas that have been grouped together because they share similar geographic contiguity and endowments. There are four such areas defined for survey purposes, while there are 12 prefectures.

in the Mountain areas, combined with a relatively sluggish reduction in poverty in the rural parts of the Coast and Central areas is one of the key drivers of this convergence story.

Figure 1.8: Poverty Rate by Stratum

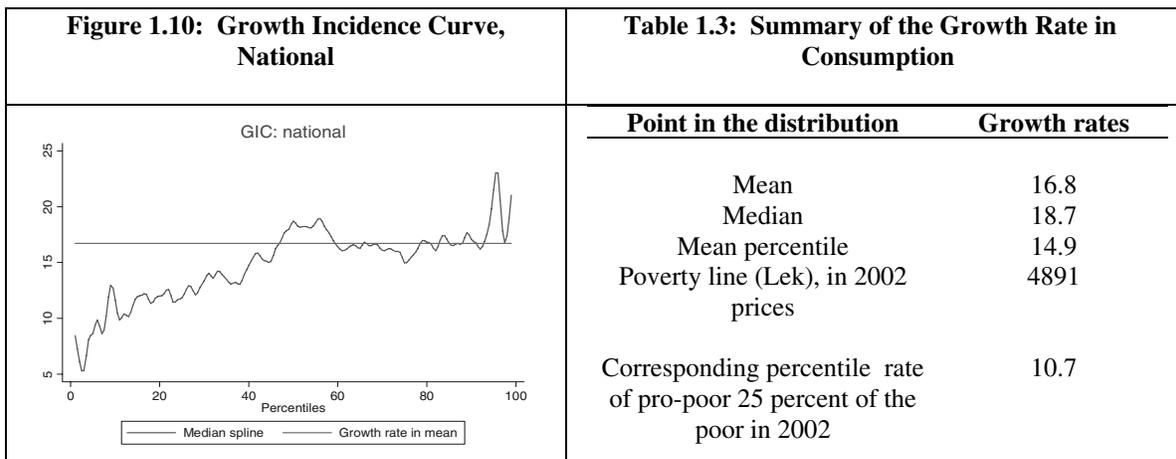
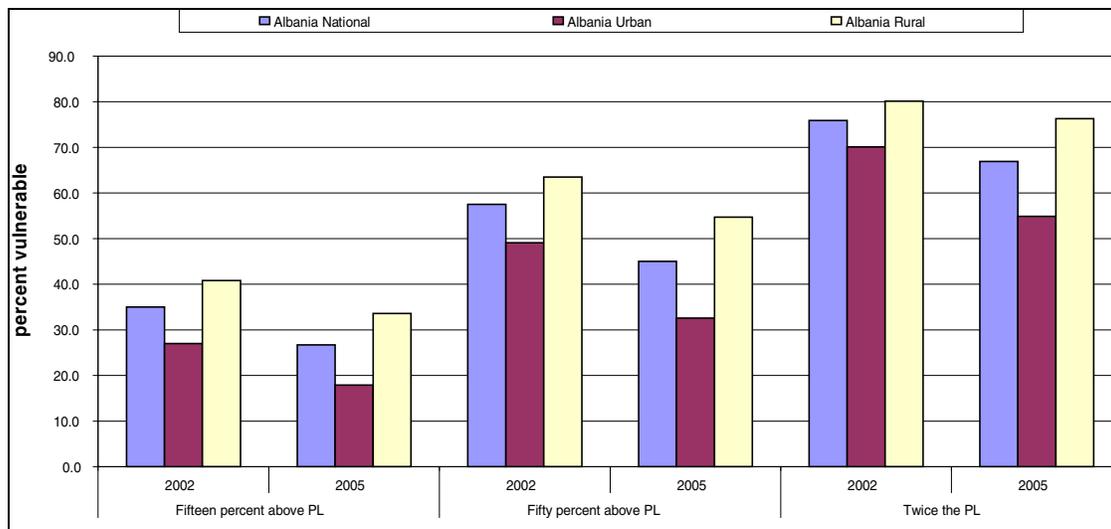


1.13 Vulnerability to poverty, much like poverty is declining. Vulnerability is the net effect of shocks, household endowments and their coping networks. Rigorous measures of vulnerability require observing changes in these variables over time. Although we do not observe shocks we can consider how many will be poor in a situation where a shock reduces income by some specified percentage below estimates the proportion of population that would be made poor if a shock reduced income by 50 percent. Alternatively, the numbers show what fraction of the population will fall below the poverty line if the latter was increased by 50 percent (from Lek 4891 to Lek 7337). Such a situation would mean an increase in absolute poverty from 18.5 percent to 45 percent in 2005. With the relative poverty line, the vulnerability would be even higher. An alternative is to consider what would be a reasonable magnitude of income shortfall from a non-catastrophic shock? For instance, if most people in an economy are workers, they face the risk of unemployment, which if realized would decrease wages and therefore incomes by some proportion. So one can set a vulnerability-to-poverty-threshold for unemployment shock. In Albania, consumption shortfall of the unemployed head as discussed below (Table A. 31 to Table A. 34) ranges from a high of 22 percent in urban areas to a low of 12 percent in rural areas. Assuming an average shortfall of 15 percent, we find that 8 percent of the population are vulnerable (poverty rises from 18.5 percent to 26.7 percent). More importantly, Figure 1.9 shows that vulnerability has fallen between 2002 and 2005, whatever the poverty line used, suggesting an additional benefit of growth.

1.14 Growth in real per capita consumption was high and positive for the majority of the population. Overall, real consumption per capita in 2005 was significantly higher than in 2002 for nearly every percentile of the population, as shown by the positive growth rates across the entire distribution (Figure 1.10 see also Figure A. 4 – A8). The figure plots the growth rate of real consumption per capita at each

percentile of the distribution. It indicates that the mean in 2005 was 17 percent higher than the mean in 2002, while the median in 2005 was 19 percent higher than the median in 2002.

Figure 1.9: Vulnerability to Poverty



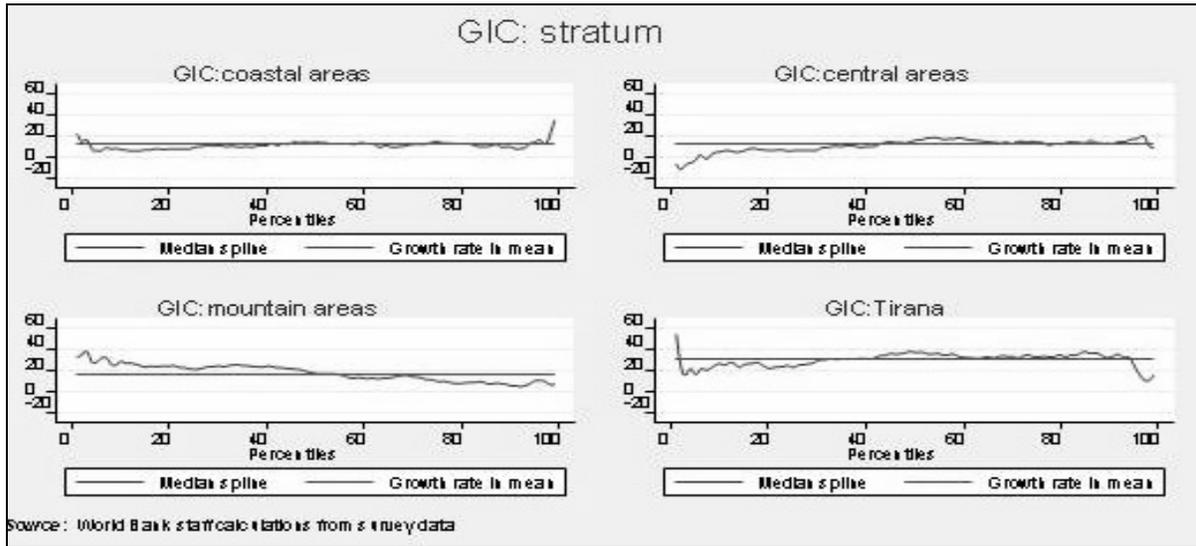
Source: World Bank staff estimates from survey data.

1.15 However, the gains were not evenly distributed. Among the broad agro-ecological divisions of the country, the Coast areas show even gains across the entire distribution. Almost every percentile is estimated to have a consumption gain that is around the mean estimated for the Coast. By contrast, in the Mountain areas, those in the lower half of the distribution gain substantially more compared to those in the upper half of the distribution, who in fact obtained less than the average for the area (Figure 1.11).

1.16 **The evidence suggests that growth accounts for all the reduction in poverty.** Changes in poverty can be decomposed into components due to growth, redistribution and residual. For instance, if inequality worsens holding mean incomes the same, the size of the poor may increase. By contrast, if inequality remains the same but mean incomes for each percentile rises – that is, the growth in incomes is shared broadly – the number of the poor would decline. How much of the poverty reduction is accounted

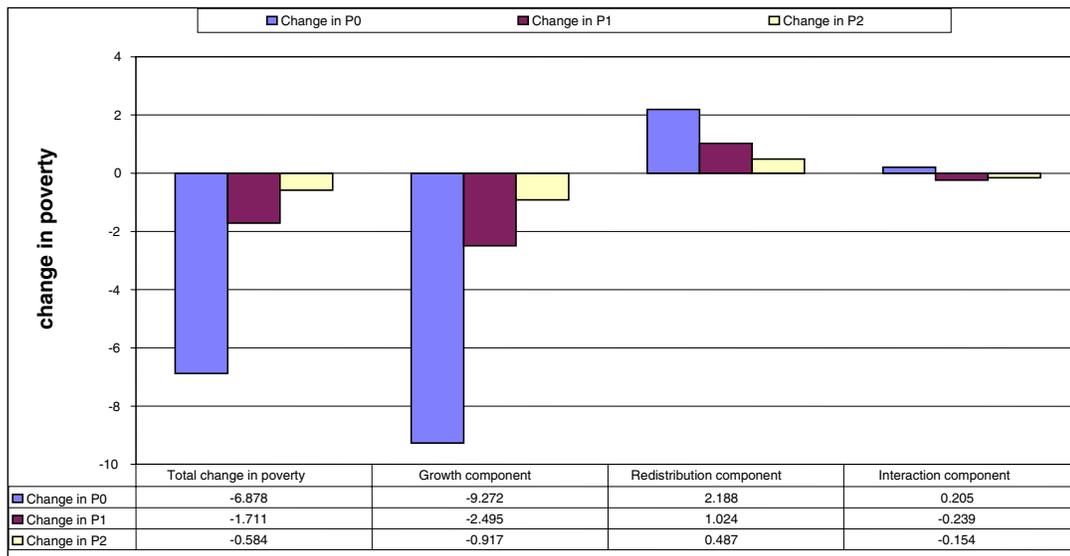
for by growth, redistribution (that is inequality) and residual components is shown in Figure 1.12. The decomposition predicts that growth component would have reduced headcount poverty (P0) by 9 percentage points (that is the headcount of the poor would have declined from 25.4 percent in 2002 to 16 percent in 2005) if the shape of income distribution remained the same as in 2002.

Figure 1.11: Growth Incidence Curves, 2002-2005: By Stratum



1.17 By contrast, if the mean income remained the same in 2002 and 2005, but the shape of the distribution changed, headcount poverty would have increased by 2 percentage points. The net effect is a 7 percentage point reduction in the fraction of the poor, since the residual component played only a negligible role. Overall, changes in the depth and severity of poverty also suggest that the growth component dominates. As in the headcount measure, the reduction in the depth and severity of poverty measures would have been higher if there was no change in inequality that offset some of the gains.

Figure 1.12: Accounting for Changes in Poverty



1.18 While the important role of growth in the measured poverty reduction is general, redistribution reduced almost by half the potential reduction in poverty in Coast and Central areas. Both in the Coast and Central parts of the country, overall headcount poverty declined by about 4 percentage points. However, headcount poverty would have declined by 7 to 8 percentage points, respectively, if more than average increase in inequality did not increase poverty by 3 to 4 percentage points, respectively. By contrast, the Mountain area had a double dividend. First income growth led to a huge reduction in headcount poverty, but inequality also declined so that the poverty reduction was even higher than would have been predicted by growth alone. In Tirana, the increase in inequality was about the same as the national average, so the net headcount poverty declined by 9.7 percentage points rather than 11.2. A similar tale can be told about other urban areas, excluding Tirana. A look at rural areas shows that there was hardly any change in the shape of the rural income distribution, so that the net decrease in rural poverty is close to the component accounted for by growth alone. The important role of growth in accounting for nearly all of headcount poverty reduction is repeated for other measures of poverty such as the depth or severity of poverty (Table A. 13-Table A. 22)

1.19 Throughout the period, changes in inequality remained modest. There are several ways in which the observed changes in consumption could lead to observed changes in inequality. First, gains in real consumption per capita in urban areas were substantially higher than in rural areas. Second, overall and especially in Tirana and Central areas, the population at the top half of the distribution gained more than those at the bottom half. Third, and offsetting these developments, was the large increase in consumption per capita for the population in the lower tail of the distribution relative to those at the upper tail in Mountain areas. Given the concentration of the population in Tirana and Central areas, relative to the Mountain areas, we would expect to see a slight increase in inequality.

1.20 Inequality in Albania is considered low and several measures of inequality indicate that there was only a modest increase in Table 1.4, so that by the standard of the most commonly used measure, Gini, it remains low. The Gini coefficient increased from 28 percent to about 30 percent overall during the period. Theil's entropy measures show also negligible increases. The gap between those at the top of the distribution to those at the bottom, measured as the 90th/10th percentile ratio increased by less than 1 percent (Table 1.4, last row). Rural inequality remained unchanged, while a slight increase is observed in urban areas, as expected on the basis of the reported consumption changes. Stable patterns of inequality are observed in the regions, except in the Mountain region where there was a decline in inequality (see also Table A. 23-Table A. 24).

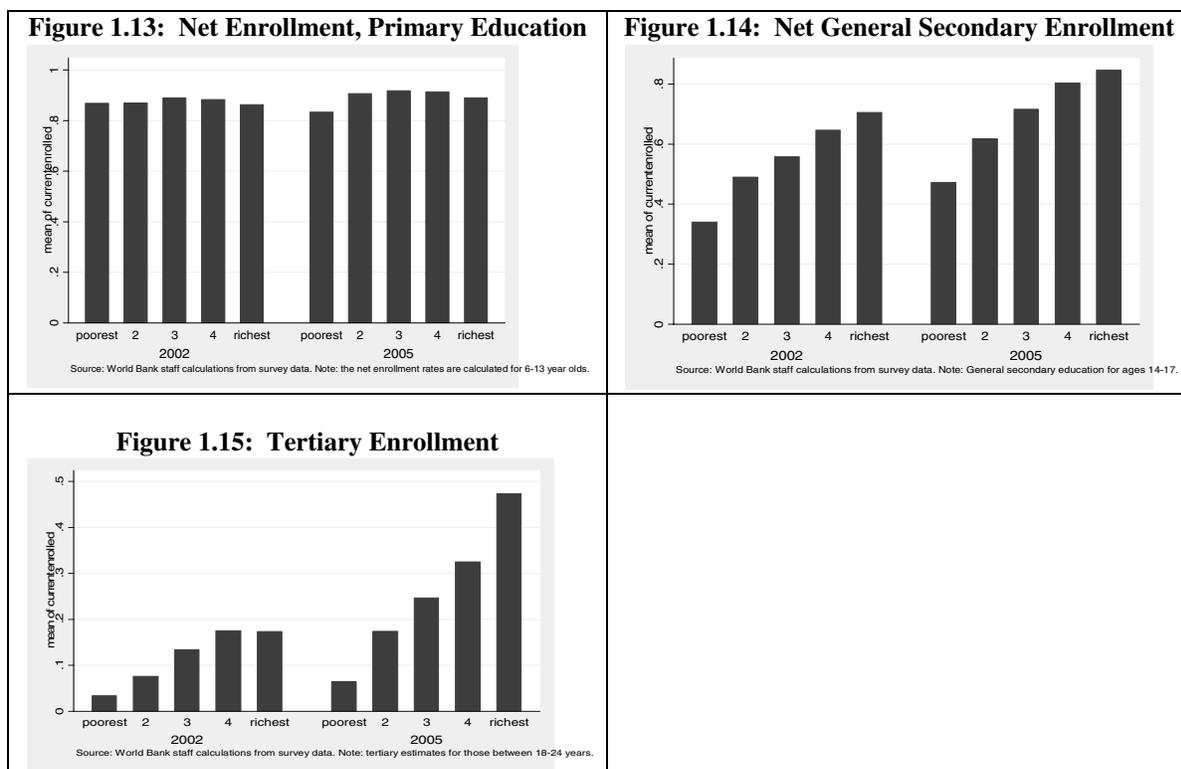
Table 1.4: Inequality Measures, National, Urban and Rural, LSMS 2002-2005

	National		Rural		Urban	
	2002	2005	2002	2005	2002	2005
Relative mean deviation	20.2	21.1	19.5	19.5	20.4	21.1
Coefficient of variation	55.9	62.3	53.0	53.8	56.9	63.4
Standard deviation of logs	50.0	52.7	47.7	48.8	51.6	53.3
Gini coefficient	28.2	29.6	27.1	27.3	28.5	29.7
Mehran measure	38.4	40.2	37.0	37.5	39.0	40.3
Piesch measure	23.1	24.3	22.2	22.2	23.3	24.4
Kakwani measure	7.1	7.9	6.6	6.7	7.4	8.0
Theil entropy measure	13.2	15.1	12.1	12.4	13.7	15.4
Theil mean log deviation measure	12.9	14.4	11.8	12.1	13.4	14.7
Ratio of 90 th /10 th percentile (in logs)	1.155	1.159				

Source: World Bank staff estimates from survey data.

C. TRENDS IN NON-INCOME MEASURES OF WELFARE

1.21 Access to a number of essential services has improved between 2002 and 2005. Net enrollment in primary education was already high and has remained so. But the largest improvements have come in secondary and tertiary education. As shown in Figure 1.13 and Figure 1.14, net enrollment rates for all quintiles of per capita consumption rose in secondary and higher education. The positive trends are observed also for males and females (Figure 1.16 and Figure 1.18). In addition, those living in a dwelling with tap water inside rose from 49 to 53 percent during the period, while the proportion of households with tap water outside the dwelling stayed the same (see Figure A. 9 and Table A. 25).



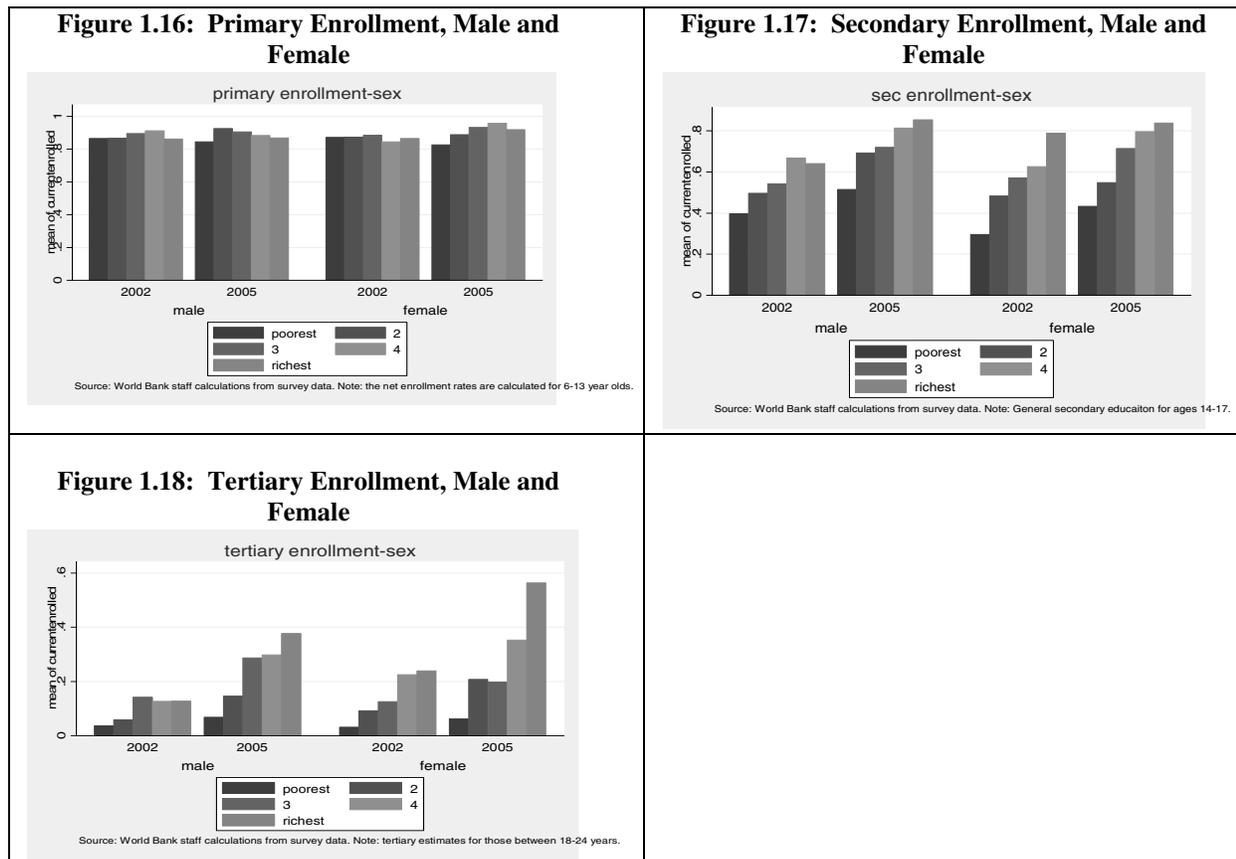
Source: World Bank Staff estimates using survey data.

1.22 **The exceptions are health and energy services.** On health, both access to primary health facilities (that is, public outpatient facilities, nurses, private doctors, and so on) and the average number of visits, show no signs of improvement (Figure 1.15). The good news is that self-reported days lost to chronic illnesses (disability) have declined, so perhaps people are getting healthier. On energy, households were asked to report their main source of heating. Table A. 27 shows the distribution of the responses. Focusing on access to two forms of relatively cleaner energy, electricity and gas, we noticed that hardly much has changed between 2002 and 2005. In 2002, about 36 percent of households reported using electricity or gas as their main source of heating. In 2005, the fraction is 37 percent.

1.23 **Even where services have improved inequities remain.** There are three sources of inequities – income, rural/urban and gender. We begin with income. In education the main differences emerge in secondary and tertiary. For example, in secondary education, net enrollment is about 50 percent for the poorest quintile compared to near-universal net enrollment for the richest quintile. In tertiary, the disparities have widened over time. The enrollment rate for the poorest quintile remained below 10 percent while for the richest it increased from around 18 percent to about 46 percent (Figure 1.15).

1.24 **These large differences also show up when we look at secondary and tertiary enrollment rates for boys and girls separately.** The differences are especially noticeable for the lower three quintiles, but not for the top two quintiles (Figure 1.17 and Figure 1.18). For water, only one-third of the households in the poorest quintile lived in a dwelling with indoor tap water, while two-thirds of the richest did (Table A. 25). On energy, more than 75 percent of the households in the poorest quintile say that their main source of heating is wood compared to only 40 percent of the households in the richest quintile.

1.25 **Large differences exist also between urban and rural areas.** More than 60 percent of poor households have access to indoor water tap, compared to only 40 percent of the richest in rural areas. In education, over 60 percent of the children in the poorest fifth in urban areas are enrolled in secondary education but only 40 percent of children of the poorest in rural areas are enrolled.



Source: World Bank Staff estimates using survey data.

1.26 **And quality problems persist, although there are observed improvements.** In particular, many households report experiencing frequent interruptions in electricity and rate water quality as poor. Specifically, households were asked to report how often electricity was interrupted in their area. In 2005 almost 40 percent of households in urban and rural areas reported experiencing daily interruptions of electricity. Only less than 40 percent of households did not experience any interruptions at all. However, this is an improvement over 2002 when about 50 percent of urban and almost 80 percent of all rural households, experienced daily interruptions (Figure 1.19 to Figure 1.22).

Figure 1.19: Electricity Interruptions - Daily

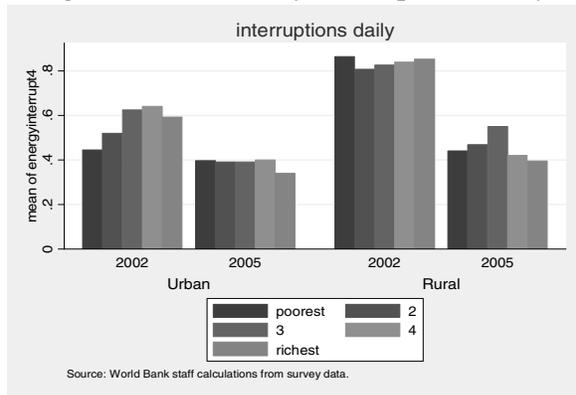


Figure 1.20: Electricity Interruptions - Several Times a Week

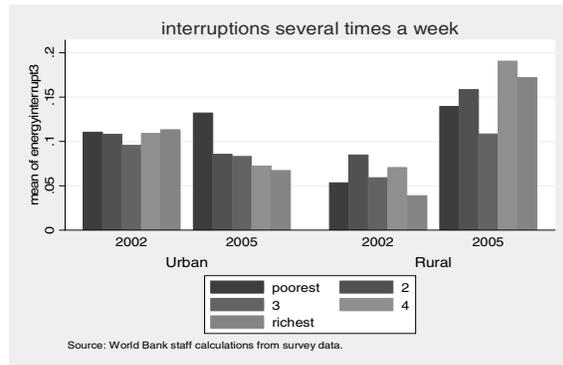


Figure 1.21: Electricity Interruptions - Several Times a Month

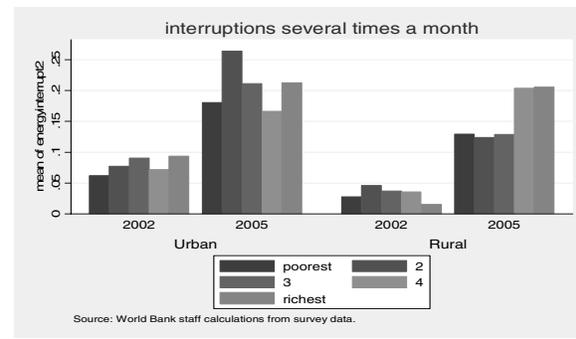
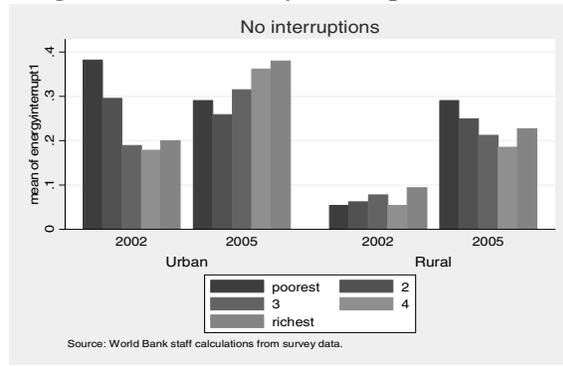


Figure 1.22: Electricity Interruptions - Never



Source: World Bank staff estimates from survey data.

1.27 Turning to water, when households were asked to rate whether the main source of water is good for drinking, more than 20 percent of the urban and a bit fewer in rural said that it is not good in 2005. Once again, this is an improvement over 2002, when at least 30 percent of urban and slightly less than 20 percent of rural households rated their main source of water as not good (Figure 1.23 and Figure 1.24).

Figure 1.23: Quality of Water - Good

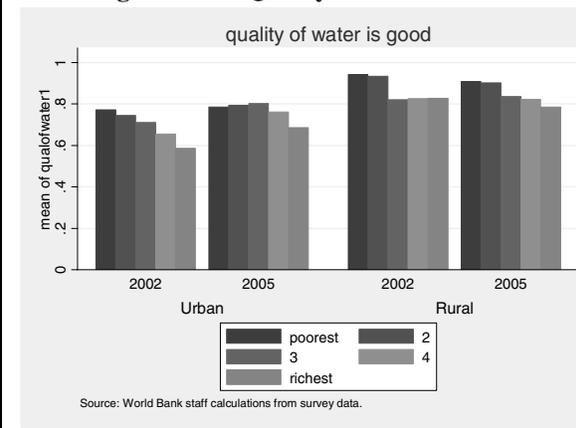
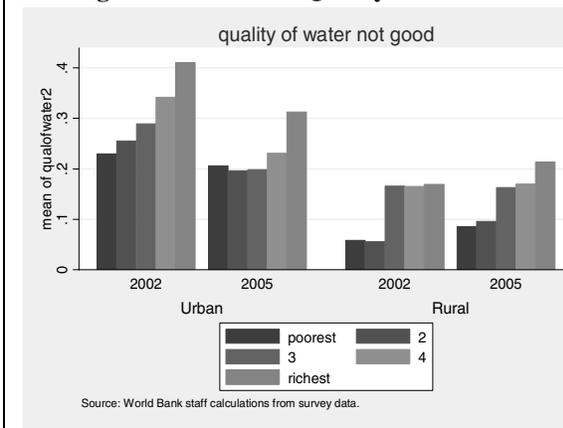


Figure 1.24: Water Quality - is not Good

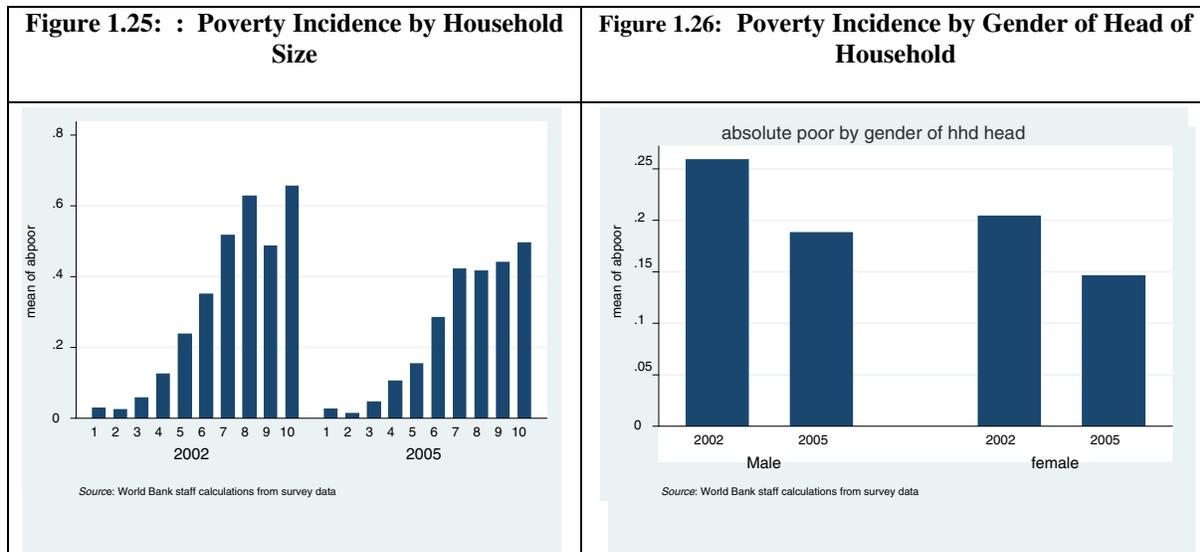


Source: World Bank staff calculations from survey data.

D. POVERTY PROFILE AND RISK OF POVERTY

1.28 Knowledge of the characteristics of the poor is important because it can inform policy. We can look at the characteristics of the poor by looking at the incidence of poverty – that is, by looking at geographic concentration or demographic and education profile of the poor. Alternatively, or in addition, we can compute the probability of being poor given certain characteristics, such as geographic location, household demographic and education profile. Yet another option is to look at the consumption shortfall of households who share certain observable characteristics. A look at consumption shortfall tells us that if consumption is used to rank household welfare, and some types of households are observed to have significantly lower consumption (they have large negative shortfall), then it implies that, on average, they would rank lower and are more likely to be poor. In principle all these methods should lead to similar conclusions. We first present poverty incidence or poverty risk and then focus on the consumption model because variation in consumption across households is more informative than a binary model (correlates of poverty using a probability model). The models look at differences in consumption after controlling for household demographics (number of children and gender of household head), human capital (education level of the household head), labor market status, isolation, health shocks and in rural areas, size of land available for cultivation. The list of controls and the models estimated are contained in. But first we summarize a profile of the poor.

1.29 Large households have much higher incidence of poverty. The typical household in Albania has about 4 to 5 people. Together, 4 and 5 member households make up almost 48 percent of the population. By comparison, households with 8 or more members add up to about 8 percent of the population. Yet, 21 and 17 percent of all the poor in 2002 and 2005, respectively, lived in such households. The poverty incidence for households with more than 8 members was about 50 percent in 2002 and while it has declined by 2005, the risk remains higher compared to smaller households (Figure 1.25).

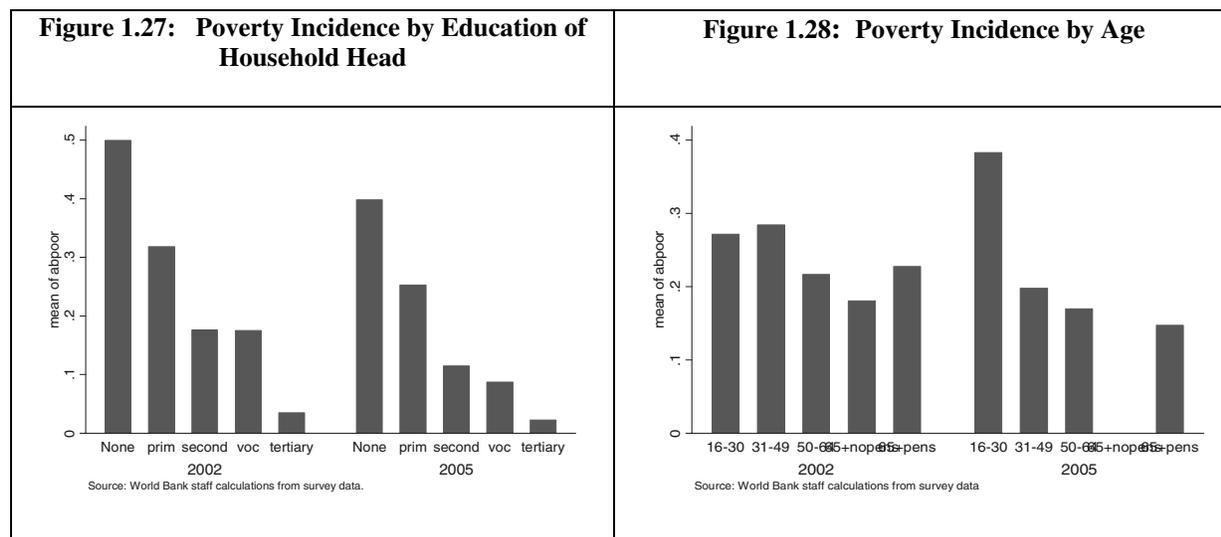


1.30 There is a possibility that the higher poverty risk for larger households is exaggerated because it does not account for economies of scale. The idea is that since many consumption goods like food, utilities and housing are shared, estimates that do not account for the sharing bias the results against the larger households who are the most to gain from the sharing. To explore the potential presence of the economies of scale, we look at food demand. Following the model of Gibson (2002), we estimate the relationship between food share and household size controlling for the demographic structure of the

household and per capita total consumption. The results of the estimation are in Table A. 30. The result of interest is the ratio of the coefficient of household size to total per capita consumption. As shown, the ratio ranges from 0.5 to almost 1, depending on the year of estimation. This means that the model cannot reject the possible existence of economies of scale in these data. Therefore, we also report the incidence of poverty for different economies of size parameters. The results in Figure A. 12 show these results depending on the number of children living in the household, while the results in Figure A. 13 display similar results for elderly and female headed households. There are two points to note regarding the patterns of poverty incidence observed. First, the poverty incidence does not vary with economy of size assumptions when households are classified on the basis of composition of children. However, the poverty incidence for female headed and elderly households rise with higher parameters of economies of size assumptions. Second, the poverty incidence ranking does not change. There are no easy and credible ways to test for the existence of the economies of size. Furthermore, these data show no conclusive evidence of the existence of the economies of size. Therefore, to simplify the discussion, we shall report per capita results.

1.31 Households headed by females have lower incidence of poverty. Surprisingly, female headed households do not show higher risk of falling into poverty than male headed households, although the discussion above would imply that their poverty rates would be substantially higher for higher economies of size assumptions. Figure 1.27 shows that household whose head is a male have at least a 5 percentage point higher incidence of poverty. Female headed households are only about 12 percent of all households in Albania, but they were only about 8 percent of all poor in both years. Part of the explanation may be that these female-headed households live in households with migrants who boost household incomes through remittances.

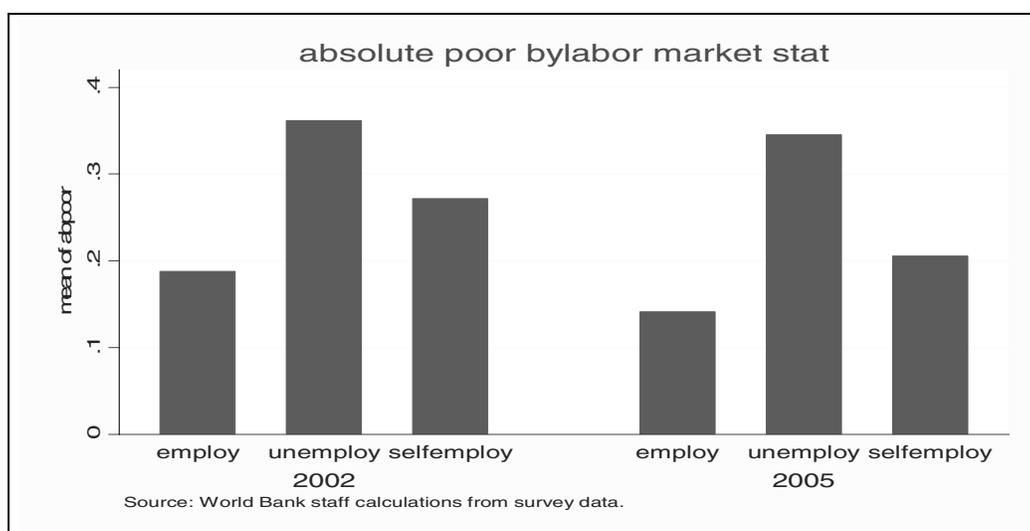
1.32 The risk of poverty is also much lower with more education. Heads of households with only primary education, that is those who completed either 4 or 8 years of schooling, make up about 75 percent of all poor, even though they are about 55 percent of all households. Figure 1.27 shows that the poverty risk for heads of households with only primary education was about 32 percent in 2002, but 25 percent in 2005. The biggest drop in the poverty incidence is observed for those with vocational education. In fact, while the reduction in the poverty incidence for heads of households with primary education is an impressive 28 percent, it compares poorly to the reduction in the risk of poverty for those with vocational or general secondary education. On the whole, while it is not surprising that those with more skills will stand to gain more in the context of high growth, the difficulty of the less skilled to gain ground even in such a favorable contexts is worrisome.



1.33 **The incidence of poverty is rising for the younger heads of households.** In 2002, differences in the likelihood of being poor were not large over the life cycle. As shown in Figure 1.28 while this risk has actually declined for heads of households older than 30, it has increased for those who are younger. It is also worth noting that older heads of households with pensions had one of the lowest incidences of poverty in 2005.

1.34 **Not surprisingly, the unemployed have higher poverty risk, although their contribution is small.** Households whose head is unemployed face a 34 percent chance of being poor, and this has only marginally declined, to 32 percent, by 2005 compared to poverty incidence of 14 percent for households headed by someone who is employed. However, households with unemployed heads comprise less than 5 percent of the population, so they made up only 6 percent of all the poor. By comparison, the self-employed who include the own account farm households have the second highest poverty incidence but highest contribution: about 46 percent of all the poor were classified as self-employed in 2005.

Figure 1.29: Poverty Risk by Labor Market Status



E. WHAT EXPLAINS DIFFERENCES IN WELFARE STATUS ACROSS GROUPS

1.35 The brief description of the poverty risks for households defined along a single dimension such as education, or labor market status, or age, should only be the starting point for doing more forensic work regarding the determinants of differences in welfare across groups. This is so especially since for any given household multiple factors interact to determine its welfare. This section explores the patterns of differences in consumption with a multiple regression framework. The goal is to isolate the factors which stand out as really disadvantages after other observable characteristics have been taken into account. For instance, we shall try to find out the measured difference in real per capita consumption between the average rural and urban household if we account for education differences, regional location, gender, age, and so on. Below we highlight only a few results (see Table A. 31 to Table A. 34). The average person had about 11 percent higher real per capita consumption in 2005 than in 2002, after controlling for demographics and human capital characteristics, health shocks and labor market status of households. The coefficient remains the same even after adding region specific effects³.

³ When the dependent variable is in logarithm and the independent variable is a dummy (takes the value 1 or 0), we obtain the percentage shortfall using the following formula: percent shortfall= $(\exp(d)+V(d)/2)-1$, where d is the coefficient of the dummy variable and V is the variance of the estimate.

1.36 **Large and young families have lower consumption, especially in urban areas.** A household with three children below ages 15 has 21 percent less consumption per capita, on average. This deficit has remained about the same whether one looks at the pooled sample or separate samples for each year. The per capita consumption gap has declined slightly in 2005, but remains high. When we examine differences in consumption per capita for urban and rural populations separately, we find that the gap remains negative and large. The shortfall is especially high for urban households, although it has come down substantially, from a 28 percent shortfall in 2002 to 20 percent in 2005. By contrast, households with more adults than dependents (captured by the variable “low dependency ratio”) have significantly high per capita consumption. Female headed households have higher per capita consumption than male headed households, which explains the lower incidence poverty observed in the previous section.

1.37 **Households with an unemployed head also have significantly lower per capita consumption.** The shortfall is higher in urban areas than in rural areas, perhaps because the unemployed in rural areas have stronger ties to mutual insurance networks than urban residents. The gap, which ranges from 20 percent less in urban areas to 12 percent less in rural areas, has remained fairly the same across years. In comparison, such a large per capita consumption differential is not observed for households whose head is inactive (that is, those out of the labor force). While unemployment shock is associated with such high shortfalls in consumption, we find no associated gap with health shocks, measured as the number of days not worked due to illness.

1.38 The average rural resident had about 14 percent less per capita consumption compared to the average urban resident. This is true after controlling for region specific effects (Table A. 31). It is about 16 percent when regional effects are not accounted for. However, it is important to note that over time this gap has remained the same, suggesting that the average rural resident gained as much from the recent economic growth as the average urban resident. The fact that rural poverty rates declined less than urban poverty rates must then imply that rural residents in the lower tail of the rural distribution must have gained less from growth compared to urban residents in the lower end of the urban distribution. Surprisingly, rural residents devoting more land (square meters) to annual or tree crops appear to have lower per capita consumption than the average rural resident, even though the gap is really small. And equally surprising, having more irrigated plots does not appear to confer any advantages in consumption among rural residents. Part of the explanation has to do with spatial distribution of irrigation networks. Most are found in the Mountain areas, because water availability is higher. However, farmers in the area lack complementary inputs and access to markets due to poor infrastructure. Moreover, the number of plots available for irrigation may say something about availability but nothing about their functionality and quality, especially since after 1990, maintenance of most irrigation systems declined. In addition, irrigation systems require electricity, which is not available several hours a day (Gero Carletto, personal conversation).

1.39 Isolated households also have lower per capita consumption, although that disadvantage may be disappearing. The definition of isolation here means households that are far away from social services. In particular, we measure it by the distance (in kms) from the nearest school. By this measure, a 1 percent increase in the distance to the nearest school implies a shortfall of 0.4 percent in per capita consumption. This gap was 0.7 percent less in 2002, but has disappeared completely in 2005.

1.40 There are large differences in per capita consumption across regions. Looking at the pooled sample, the average resident in the Mountain area has 12 percent less per capita real consumption than the average resident in Tirana. By contrast, residents in Central area have 5 percent lower while Coast residents have 4 percent higher per capita consumption than Tirana. But the pooled sample masks some major developments over time. In 2002, only the Mountain area had lower per capita consumption, by 9 percent, than Tirana. By comparison the average Coast resident had 11 percent higher and the average Central area resident had about the same per capita consumption as the average resident in Tirana. By

2005, the average resident in Tirana had the same or higher per capita consumption than the average resident in all the other areas. Viewed within the broader picture of rising welfare, this is a story of just how remarkably well Tirana has done, and NOT how badly other regions have done. Table A. 31 shows that the average rural Coast resident has 17 percent and 34 percent higher per capita consumption than the average Central and Mountain rural resident, respectively.

Conclusion

1.41 To summarize, Albania's impressive growth performance was accompanied by an equally impressive improvements in living standards. Real consumption rose by double digits, extreme and absolute poverty declined sharply, poorer areas closed the distance between themselves and their better off neighbors and access to some essential services improved, albeit slowly. At the same time, urban growth rates surged much further than rural growth rates and led to a widening of the urban and rural gaps in welfare. Moreover, the Gini measure of inequality, already low, increased modestly and stayed around 30 percent. The profile of the poor shows that the poor are mainly those who live in large households, in rural areas and possess low skills, measured as years of schooling completed.

CHAPTER 2.

GEOGRAPHY OF THE POOR: RURAL PRODUCTIVITY AND POVERTY

Rural poverty declined much more slowly than urban poverty, except in rural Mountain areas, where some of the fastest reductions in poverty occurred. The evidence shows that small scale farmers are generally inefficient, since current production is only one-third what it could be. The low productivity is a result of the fact that Albanian farmers face too many constraints on the input side, have no access to credit and are not adequately served by institutions for agricultural growth. In addition, massive outmigration from rural areas exacerbates these problems. To reduce rural poverty and close the widening gap with urban areas, raising productivity of small farms will have to play a role.

2.1 The benefits of Albania's impressive growth were felt by all groups in the population. The general decline in poverty was observed in rural as well as urban areas and in all the four agro-ecological regions of the country. However, the majority of the poor continue to live in rural areas. Differences in the rate of poverty reduction has meant that over time the share of the poor living in rural has actually increased, not decline. This chapter takes a brief look at the trends in rural poor, the characteristics of the poor, and some of the reasons for slow income growth in rural areas.

A. RURAL POVERTY AND INEQUALITY TRENDS

2.2 Although there was a substantial reduction in poverty across the board, rural poverty rates declined more slowly than urban poverty rates. Table 2.1 shows that while rural poverty declined by about 24 percent, urban poverty went down by 41 percent, so that the headcount measure of urban poverty decreased from 19.5 percent in 2002 to 11.2 percent in 2005, while rural headcount fell from 29.6 percent to 24.2 percent. One consequence of this differential reduction in poverty is more concentration of the poor in rural areas (Figure 2.1). In particular, whereas rural poor were 66 percent of total poor in 2002, they constitute 75 percent of total poor in 2005.

2.3 Not only are urban poverty rates lower and falling faster, but the evidence also suggests that urban poverty is much shallower than rural poverty. The poverty gap (depth of poverty) measure for urban areas was only 2.3 percent in 2005, compared to 5.3 percent in rural areas. For urban areas, this is a reduction of 49 percent from the 2002 level, while for rural areas it was a reduction of only 20 percent.

2.4 **However, some of the most dramatic reductions in poverty were observed among the rural population in the Mountain areas.** Overall rural poverty declined by 5 percentage points compared to a 22 percentage point reduction in the rural population of Mountain areas. Rural areas in other strata – Coast and Central – saw only modest reductions. For instance, Figure 2.2 shows that rural Coast and Central areas had about 1 to 3 percentage point reduction in absolute poverty. Such a large reduction in poverty has allowed the rural Mountain areas to catch up with other rural areas, but it is worth noting that the poverty rate there is still higher than the other areas. As we shall see in the next chapter, part of this massive difference in observed poverty outcomes may be driven by the emerging trends in migration patterns from these areas.

Figure 2.1: Trends in Absolute Poverty Rural Areas

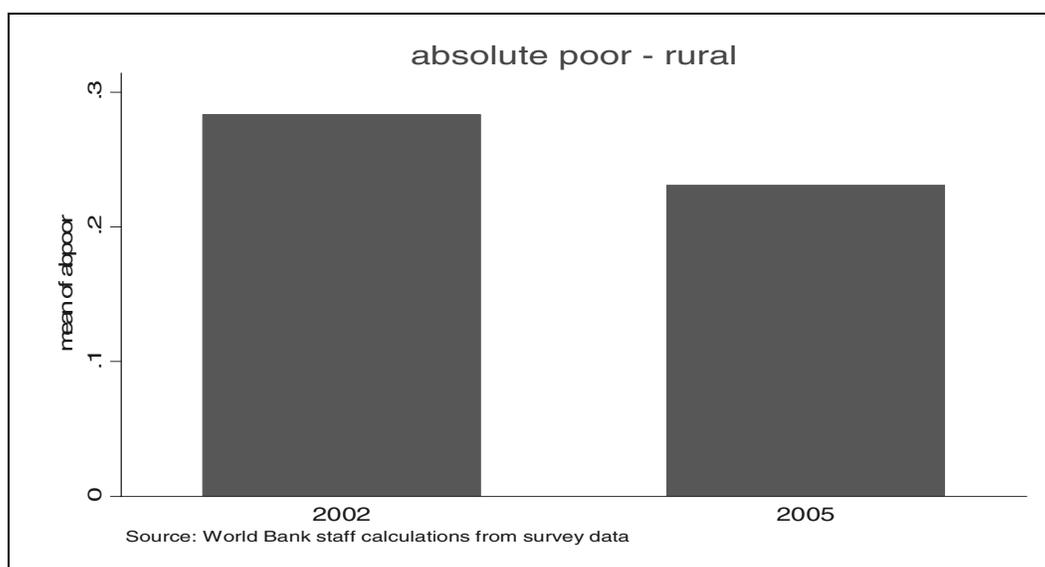


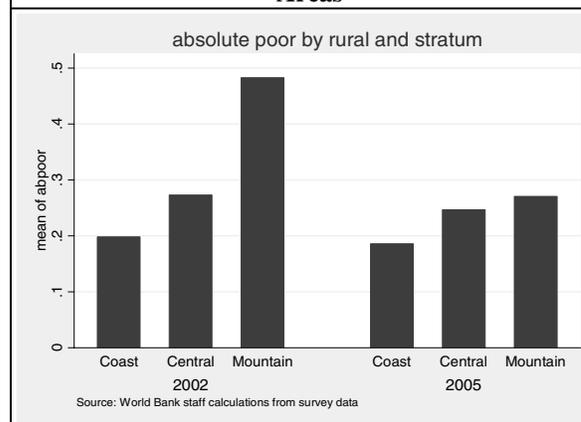
Table 2.1: Rates of Poverty Reduction in Rural and Urban Areas

Poverty by Rural/ Urban	Change in Poverty			
	2002	2005	No. of Persons	Percent Change
Total population in poverty	813,196	575,659	-237,537	-29.2103
Urban	257,690	151,811	-105,879	-41.08774
Rural	555,506	423,848	-131,658	-23.70055

Source: World Bank staff estimates using survey data.

2.5 Real per capita consumption growth in rural areas lagged the growth in urban areas but was more egalitarian. First, growth at each percentile was significantly lower than the growth measured for urban population. For instance, while the mean growth for each percentile in urban areas was 22 percent, it was just about 9 percent for the rural population. Second, the growth of real per capita consumption for the rural poor was much lower than the growth for the urban poor between 2002 and 2005. A plot of real per capita consumption growth shows that the growth in consumption for the 19 percentile of the urban population who were classified as poor in 2002 was 19.4 percent between 2002 and 2005. By comparison, the growth in real per capita consumption for the 29 percentile of the rural population who were poor in 2002 was only 6.3 percent (Table 2.2).

Figure 2.2: Poverty Trends by Stratum, Rural Areas



2.6 But unlike the urban population, there was less disparity in consumption growth across the entire distribution in rural population. In rural areas only the bottom fifth of the population received increases in consumption that were lower than the estimated average gain for rural areas, while all those above the 20th

percentile saw gains in consumption that are around the mean (for rural areas). In urban areas, around 40 percent of the urban population had gains that were less than the average for urban areas, while the rest saw increases around the mean. There was a higher growth in consumption for the median rural household than even those at the top end of the distribution. In fact, the mean percentile growth for the 20th through the 90th percentiles of the rural population appear to be around 10 percent, while it is more dispersed for the urban households, suggesting that rural growth, while lower was more egalitarian. However, the average consumption gain in urban areas was much higher than in rural areas for each percentile group, so that even the bottom two-fifth of the urban population on average received gains that were higher than the average gain in rural areas (Figure 2.3 and Figure 2.4).

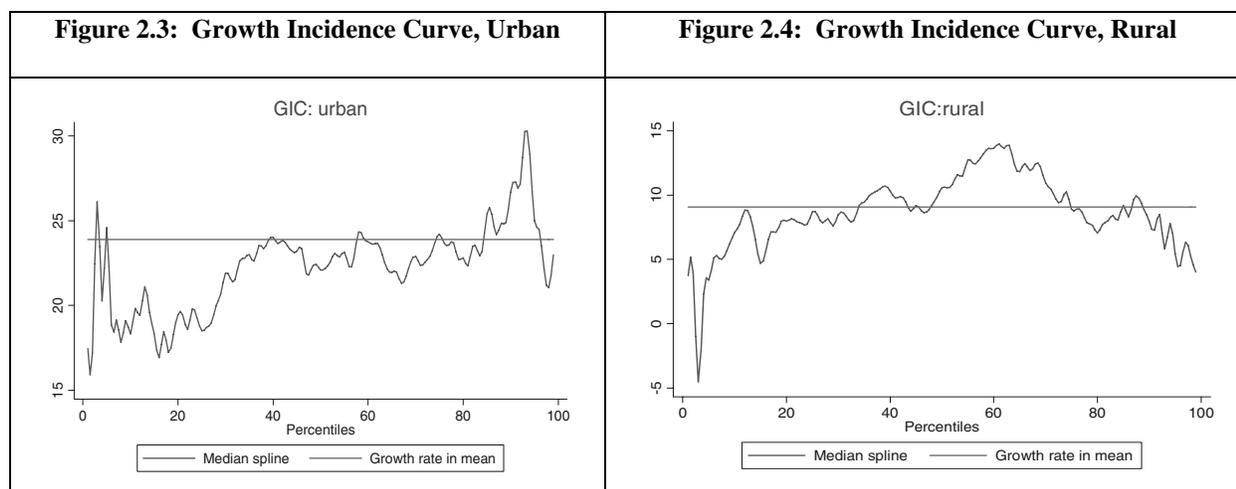
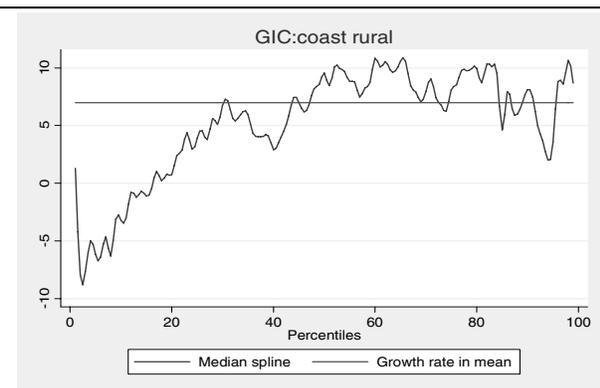
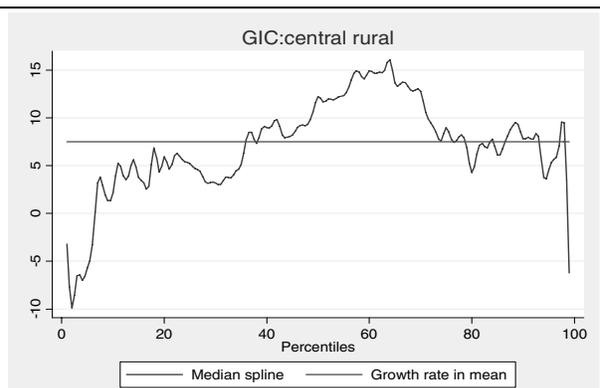
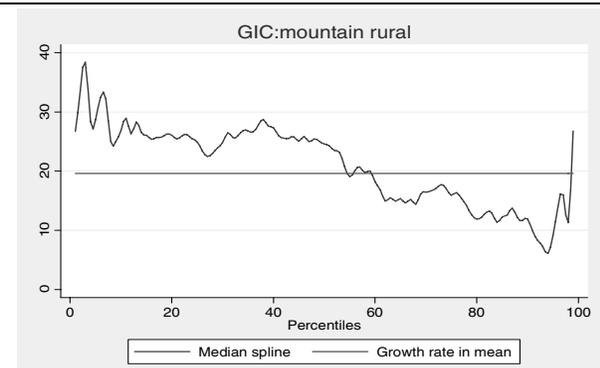


Table 2.2: Growth Rates of Consumption, Rural and Urban

Growth rates in / at	Urban percent	Rural percent
Mean	23.9	9.1
Median	22.1	10.6
Mean percentile	22.2	8.7
Percentile poor in 2002	19.0	29.0
Corresponding pro-poor percentile growth	19.4	6.3
Poverty line	4891	4891

2.7 Unlike urban areas, real per capita consumption in some rural areas declined. The bottom fifth of the rural residents in the Coast had either no gain or negative growth in per capita consumption. In rural Central the lowest one-tenth had a similar experience. But in the rural Mountain areas, real per capita consumption growth was dramatic. Moreover, the largest gains were captured by those in the bottom half of the distribution. Two additional points to note about rural Mountain areas are that growth in real per capita consumption in its rural areas exceeds the same growth in its urban areas, and it is the only rural part where consumption growth compares or exceeds growth seen in urban areas (Figure 2.5 to Figure 2.7).

Figure 2.5: Growth Incidence Curve, Rural Coast**Figure 2.6: Growth Incidence Curve, Rural Central****Figure 2.7: Growth Incidence Curve, Rural Mountain**

Source: World Bank staff estimates from survey data.

2.8 Redistribution played a larger role in the observed patterns of poverty reduction in rural areas. Nearly all the measured 7 percentage point reduction in overall absolute poverty was accounted for by growth. In rural areas the experience is not that clear. In rural Mountain areas, growth propelled much of the observed reduction in consumption and redistribution to the lower tail of the distribution added to that momentum. However, in rural Coastal areas, if the distribution remained the same between 2002 and 2005, growth alone would have led to almost 6 percentage point reduction in poverty. Instead, redistribution to the upper tail of the distribution offset 2 percentage points of the potential reduction and interaction of growth and redistribution factors nullified an additional 2 percentage. In rural Central areas, a stable distribution would have meant a potential 4 percentage point reduction in the fraction below the poverty line. However, redistribution to the upper parts of the distribution offset 3 percentage points. The observed 2.6 percentage point reduction comes from unexplained factors that led to an additional 1.6 gain towards poverty reduction.

2.9 The pattern of changes in consumption implied little changes in rural inequality. First, the gains across the distribution were more evenly distributed. In the Coast and Central areas, only the bottom fifth and bottom one-tenth, respectively, had negative consumption growth. But little separated the measured changes in consumption across the rest of the groups. Second, in rural Mountain areas, where consumption growth was substantially higher than all the other rural areas, those in the lower half of the distribution gained relatively more than those located in the upper tail of the distribution. The

result is stable inequality. The Gini coefficient was about 27 percent in both years. Other measures of inequality also remained stable.

B. CORRELATES OF POVERTY IN RURAL AREAS

2.10 There are three points to note with regard to the observed patterns of non-income measures of welfare in rural areas. First, inequality of access to essential services across income groups and gender remain a problem as they do at the national level (Figure B. 1 - Figure B. 6). Second, in almost every service, problems of access and quality are worse in rural areas than they are in urban areas. Third, the progress in reducing these differences has been slower in rural areas than it has been in urban areas.

2.11 On the profile, the same patterns observed at the national levels are also observed for the rural areas. The results of the correlates of consumption and the likelihood of being poor are presented in Table B. 1. The results for the probability model (last column) are the marginal effects, so the coefficient is the percentage point increase or decrease in the probability of being poor. The results of both models tell us a similar story. In particular, poverty is positively correlated with household size and negatively correlated with age, better labor market outcomes and education. Moreover, female headed households are not more likely to be poor, as we found when looking at the incidence of poverty. In addition, we find that rural households with access to better services such as tap water and toilet inside dwellings are less likely to be poor. So are households with asset holdings that are proxies for potential income, such as gas stove, satellite dish, vehicles and motorbikes.

2.12 With regard to participation in specific agricultural activities, the results show that households with more land devoted to vegetables are 10 percentage points less likely to be poor. We also find that households with more fruit trees, on average consume more, but that advantage does not seem to suggest that they have better or worse incremental likelihood of being poor. Similar conclusions can be reached for the number of heads of livestock held or hectares of irrigated land owned.

2.13 The decomposition of changes in poverty between 2002 and 2005 indicate that rural poverty reduction has been slower than urban in part because rural growth has lagged behind. After growing at double digits in the 1990s, agricultural growth has slowed down to about 3 percent per year. Since the aggregate agricultural growth story includes larger farms that exploit potential economies of scale and lucrative export markets, it is quite possible that the growth from small farmers is even lower than the estimated 3 percent growth. Considering that about 50 percent of the population still lives in rural areas and depends on small farms for a living, improving agricultural productivity for this class of farmers is crucial for reducing rural poverty. The following sections explore the constraints to productivity growth in small farms.

C. TRENDS IN THE PARTICIPATION OF INCOME GENERATING ACTIVITIES

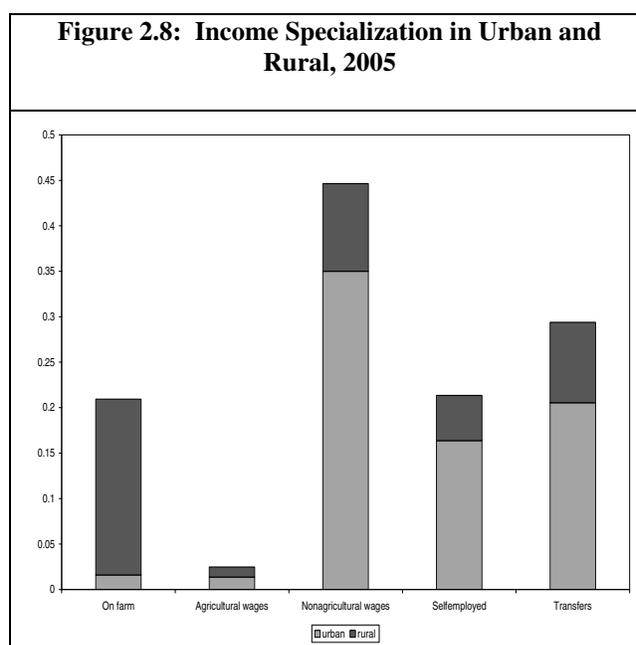
2.14 **Incomes in rural areas have increased between 2002 and 2005, but the growth is from non-farm activities.** Average rural income rose from USD2790 in 2002 to USD 4400⁴. During this period average livestock income fell and average crop income remained stable so that the share of on-farm activities in total income declined from 54 percent in 2002 to 45 percent in 2005. A notable observation

⁴ Assumes an exchange rate of 1USD=100 Albanian Lek. The income module for the LSMS 2005 has undergone changes that were designed to capture more accurately information about incomes compared to 2002. In particular modules on own business and agricultural activities and crops and livestock kept has been expanded. In addition, for the agricultural module, the 2002 data was collected in June while the 2005 was collected in October during the peak harvest periods. So it is quite likely that income in 2002 is underreported relative to 2005. That said, enough effort has been put into constructing a comparable income aggregate so that the general trends (if not the magnitudes) are considered credible.

is the increasing reliance of the rural population on off-farm activities⁵. In particular, the mean of nonagricultural wage more than doubled to a level where it now constitutes the second highest (to livestock) source of income for rural populations. The increase in the share of nonagricultural income ranks the highest during the period, and is rivaled only by the increase in the share of off farm businesses (self-employment).

2.15 Rural income portfolios are, on average, more diversified. Using the LSMS 2005, a household is defined as specialized if more than 75 percent of its total net income comes from a single source. As shown in Figure 2.8 the fraction of households who specialize in any of the five main income sources is smaller in rural than in urban areas. For example, only 46 percent of rural households specialize in any of the 5 main sources of income. By comparison, 75 percent of urban households specialize in one of three income sources. As expected the largest fraction of rural households in rural areas, at 19 percent, specialized in on-farm activities, followed by nonagricultural wages and transfers in that order.

2.16 The poor rural residents are more likely to specialize in on-farm activities. There are three points to note about the incomes of rural poor. First, they are more reliant on crop and livestock income, two sources whose shares in net total income are declining in Albania. The share of total agricultural activities in total net income declined from 57 percent in 2002 to 51 percent for the poor in 2005. At the same time it declined from 52 to 42 percent for the non-poor. In fact the share of crop income increased from 16 to 19 percent for the poor while it remained the same for the non-poor. Second, in all the areas where there is substantial income growth, they lag behind. These include non-agricultural incomes and off-farm businesses. Third, the poor are more reliant on public transfers than private (remittances). Transfers – private and public – account for about one-fourth of the incomes of the rural households. For the non-poor the share from public and private transfers is almost equally split, while for the poor, almost 75 percent of transfer income comes from public and only 25 percent from private.



2.17 A lower proportion of the poor depend on non-agricultural wages. In general few households participate in agricultural wages. Overall, only about 5 percent of the rural population participates in agricultural wages. In 2005, the fraction of the poorest fifth who participated in agricultural wages was about the national average (5 percent). However, about 37 percent of the richest quintile participated in non-agricultural wages, compared to only 18 percent of the poorest. Moreover, the average nonagricultural wages received by the poorest fifth were 43 percent lower than the average wage received by the second poorest quintile, suggesting perhaps that not only are the poor participating less in nonagricultural wages, but that their returns are much lower.

⁵ In this and subsequent paragraphs, the report makes use of incomes reported from household surveys. It is important to note that other sources of income, such as farm statistics data, show an increase in gross income from crop and livestock between 2003 and 2006.

D. AGRICULTURAL PRODUCTION IS INEFFICIENT

2.18 **Most of the family farms are subsistence-oriented.** First, the ratio between quantity of crop harvested and sold is very low. Only 28 percent of farmers sell their production on the market and, on average only 9 percent of the crops harvested is sold by farmers. In addition, only 14 percent of the farmers sold the crop harvested in a market outside the community. The evidence also shows that the share of crop harvested that is sold on the market is twice as large for larger farmers, described as those with between 1.16 and 11 hectares, compared to smaller farmers (Table 2.3). This suggests that land fragmentation, which is a key feature of Albanian agriculture, is not likely to improve market integration.

2.19 By comparison, development of land rental markets, especially if it leads to land consolidation could reduce the subsistence orientation of the family farms. As shown in Table 2.3, the ratio of quantity sold to harvested increases to 14 percent among farmers that rent in. Moreover, the share of farmers who sold their crop output to markets outside the community reached 22 percent for this group of farmers.

2.20 Second, there is very little use of hired labor in family farms. The LSMS 2005 did not collect the number of workers hired. Instead, it has information on the cost of hired labor. Therefore, we calculate the share of the cost of hired labor in total cost of inputs used. These shares are shown in the last column of Table 2.4. Note that since the cost of input used in production for own consumption is also not available, the computed ratio is in fact an upper bound (the denominator is lower than it should be). The main conclusion is that hired labor is almost non-existent for small family farms. Only 8 percent of all farms hired labor, though this rises to about 17 percent for those who rented-in land. The share of hired labor in total input cost is only about 3 percent for all farms. Not surprisingly, it is higher for those who rent in land, but even then it is no more than 5 percent of total input cost. This suggests that farmers rely on family labor or unpaid workers (relatives or exchanged labor from neighbors).

Table 2.3: Ratio of Quantity of Crop Production Sold on the Market to Crop Harvested

Type of Farms	Ratio (percent)
All farms	9
Rent in	14
Rent out	4
Land class	
0 – 0.25 ha	5.3
0.25 – 0.6 ha	7.6
0.6 – 1.16 ha	9
1.16 – 11 ha	10.3

Source: World Bank staff estimates from survey data.

2.21 Finally, we look at the level of technology of the farms. Ideally, it would be useful to compare the fraction of farms that use modern inputs – say modern machinery, ploughs, hybrid seeds, and fertilizers – to those that rely more on traditional inputs. Unfortunately, the data on agricultural machinery and assets is not very complete. For instance, we find that only about one-third of households report owning any type of equipment and at most 3 percent of all farm households own a tractor. However, ownership is a poor indicator of use of machinery since it is also true that many farmers lease farm machinery. By comparison, the majority of farmers use pesticides and modern seeds (Table 2.4). But, the share of costs of pesticides is more than half the cost of all purchased inputs, and this may hint at the possibility that the price of this crucial input may be relatively high, especially for the farmers who are likely to participate in the market (those who rent-in).

2.22 **The empirical evidence shows that productivity is low because most farms are inefficiently utilized.** Over 46 percent of all the observed variation in the output of farmers is attributed to the differences in technical efficiency (Table B. 2). On average technical efficiency of small farmers is only 28 percent. This means that the average farmer is operating at only one-third closer to the potential. The surprising result is that this low efficiency is general in the sense that it does not vary much by land class. A visual representation of the link between efficiency and size of land owned is shown in Figure 2.9

(Panel A). The scatter plot indicates that for any given size of land, there is significant heterogeneity in the measured levels of farmer efficiency. The huge heterogeneity means that the average farmer in the lowest quartile of the land size owned is not that different in efficiency from the average farmer in the top quartile. More specifically, the average efficiency for farmers with less than 0.25 hectares is 21 percent, while the average efficiency for farmers in the top quartile (those with between 1.16 and 11.5 hectares) is only 33 percent (see Table B. 3).

Table 2.4: Share of Input Costs and Fraction of Households Using Modern Seeds and Pesticides

Type of farms	Share of seed expenses to total inputs purchased	Share of pesticides expenses to total inputs purchased	Share of hired labor expenses to total inputs purchased
All farms	22.7	58.3	2.8
Rent out	8.5	47.2	0.6
Autarchy	23.5	58.2	2.8
Rent in	20.6	65.2	4.6

Land Class	Share of households who used seeds	Share of households who used pesticides	Share of households who used hired labor
All farms	57.5	85.2	7.7
Rent out	25.4	59.7	3.0
Autarchy	57.3	85.5	7.3
Rent in	79.1	96.5	16.5

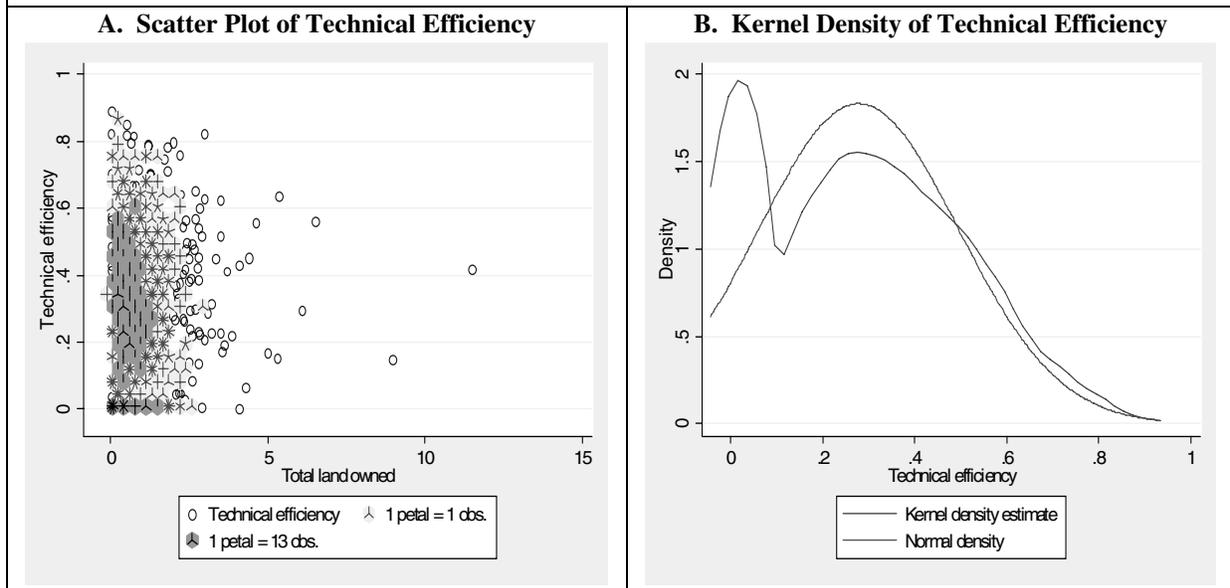
Source: World Bank staff estimates from survey data.

2.23 A closer look at the distribution of technical efficiency shows a bi-modal distribution (Figure 2.9, Panel B). Therefore, we divided households into three levels of technical efficiency: below 20 percent, between 21 and 50 and greater than 50 percent. Only 23 percent of households have a technical efficiency more than halfway to the highest possible production possibility frontier, while 41 percent are less than 20 percent efficient. Table B. 5 shows the mean values of observable endowments for the groups separated by technical efficiency levels. There are three areas where the main differences occur. One is that area of irrigated land matters. Farmers that have a higher efficiency score, report on average, twice as many hectares of irrigated land than those in the lowest efficiency level. Another observation is that the most efficient farmers have higher levels of inputs (hired labor and purchased inputs) and finally, the least efficient farmers have higher shares of income obtained from transfers. This simplified look at the mean differences lead us to a look at the determinants of technical efficiency whose results are shown in Table B. 2. The results lead to three main conclusions.

2.24 **First, a major source of inefficiency is that many families have access to insufficient land.** In a more general sense, it can be argued that lack of access to sufficient land constitutes the biggest drag on agricultural growth and therefore rural incomes in Albania⁶. The average household cultivates only about 0.8 hectares. Furthermore, much of this land is split into many plots. The many ways in which land fragmentation undermines agricultural productivity are well-known: too many plots of very small sizes lead to large transactions costs, inefficient allocation of inputs, and difficulties in adoption of technologies with scale economies. So a reasonable conclusion is that land fragmentation imposes severe hurdles to improving efficient farming.

⁶ The idea made here - that small farms are inefficient – need to be nuanced. There is an extensive literature which has shown that small farms are just as efficient, and in some contexts, more efficient than large farms. In this report, the analysis is not a comparison of small farms to large farms, since large farms in Albania were not part of the survey. Rather, the measured inefficiency is a technical one, a comparison of the observed operating levels to a potential.

Figure 2.9: Distribution of Technical Efficiency

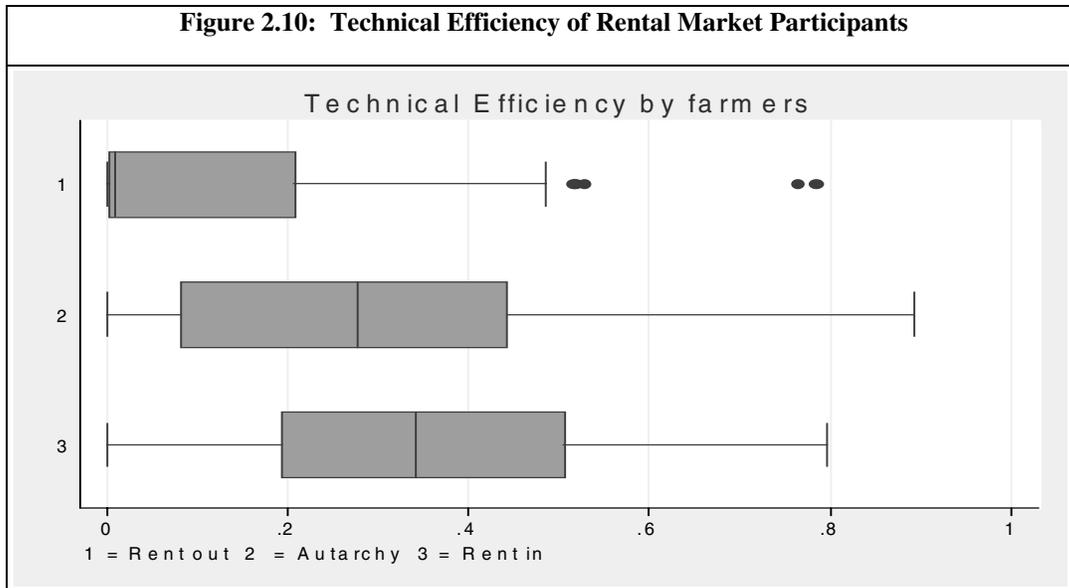


Note: A petal is a number of line segments of equal length that radiate from a central point. There are two varieties of petals: light and dark. Each petal of a light sunflower represents one observation. Each petal of a dark sunflower represents a number of observations. Dark and light sunflowers represent high- and medium-density regions of the data, and marker symbols represent individual observations in low-density regions.

2.25 Yet, the empirical evidence in Albania suggests that access to land is more of a constraint than land fragmentation. The average household has 3 plots. In fact, about 75 percent of small scale farmers have more than 2 plots (Table B. 3). The average efficiency of households with more than 5 plots is 35 percent compared to the average efficiency of 24 percent for households with 2 or less plots (Table B. 3). In general the higher the number of plots, the higher the average efficiency score (Table B. 6). Because the dependent variable is the inefficiency score, a negative coefficient implies that the variable decreases inefficiency (increases efficiency). Notice that the results suggest that an increase in the number of plots a farmer has access to increases efficiency. That is, it gets such a farmer closer to the highest production potential. If the drawbacks of fragmentation dominated, we would see a positive coefficient.

2.26 To see the scale of the benefits of having more land, Table B. 6 shows that a 10 percent increase in the land available to farmers will increase the value of agricultural production by 4.4 percent⁷. Additional evidence shows that those who are observed to have actually obtained more land, that is those who rent-in, are outperforming others in several areas. First, they are more efficient (see Figure 2.10). The average efficiency of those who rent-in land is 37 percent and is higher than the 13 percent for those who rent out or 28 percent for those who do not participate in the rental market (autarky). Second, they are also more profitable. Total profits for those who rent-in are twice as high as the average profits for all the farmers (Table B. 7). Only 21 percent of households who rent-in had negative profits while 42 percent of those who rent out did. Finally, they use more modern inputs, such as machinery, inputs for livestock and so on, perhaps to exploit the potential economies of scale that may become possible with tilling more land.

⁷ The fact that there is no constant return to scale in land is not a surprising. The estimated coefficient may reflect variation in land quality, which we cannot control for, or lack of other complementary inputs.



Source: World Bank staff estimates from survey data.

2.27 Second, another source of inefficiency is inadequate agricultural institutions. One such institution is the extension advice. Table B. 2 shows that farmers who received advice on soil quality and ways to improve it from an agricultural extension officer were more efficient than farmers who did not. Yet, few households use or are served by extension services on seeds, crops, and pests and fewer still by input programs (fertilizers) and artificial insemination (livestock programs). The results also show that institutions that provide secure property rights are efficiency improving. For instance, farmers who have land title deeds from the 1991 land reforms are on average more efficient. In addition, those who have inherited the land, which is a proxy for secure property rights within the family, also demonstrate higher efficiencies. Secure property rights is important because while more than 90 percent of households claim to own their land, the share of households with proper rights to the land vary substantially across land size. Table 2.5 shows that the share of households with legal title to land declines with declining land size.

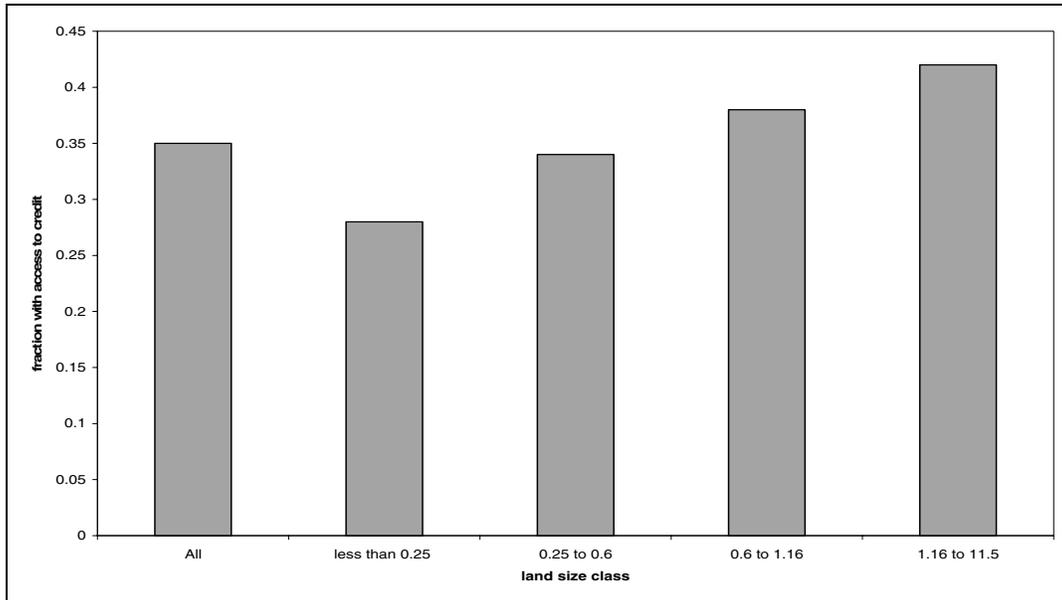
Table 2.5: Land Ownership and Title to Land by Land Size

Land class	Ownership of land Share of hh (percent)	Have a legal title for land (percent)
0-0.25 Ha	87	47
0.25-0.6 ha	98	69
0.60-1.16 ha	99	88
1.16-11.5 ha	99	92

Source: World Bank staff estimates from survey data.

2.28 Finally, a 10 percent increase in the area of land irrigated increases the value of agricultural production by 0.42 percent (Table B. 6). Only 40 percent of all plots have access to irrigation and there is common knowledge that many of the systems are not operating at optimum. The results in Table B. 2 also provide some support that participation in irrigation increases efficiency, as the coefficient is statistically significant and has the right sign. Taken together, this means that there is probably more potential in improving agricultural output using more irrigation than has been exploited to date. This is particularly the case if irrigation is complementary to other inputs, such as fertilizer and pesticides.

Figure 2.11: Access to Credit by Land Size Class



2.29 **Third credit constraints are a major source of inefficiency.** Just a little over a one-third of all farm households in the communities report having access to credit from a government or private bank if they were to ask for a small loan to start a business. Within a community, such a loan is available to only 36 percent of households, at an interest of about 11 percent. Figure 2.11 shows that ability to obtain credit diminishes the smaller the landholding. Only 28 percent of households in the lowest quartile of land size have access to this type of credit compared to 42 percent in the top quartile. Further evidence of credit constraint can be seen in Table B. 2.

2.30 The results from the analysis of the determinants of technical efficiency show that a joint effort which would reduce isolation (reduce the distance to banks) and provide credit (through private banks or government) would reduce inefficiency. The results also show that the source of credit matters. While access to credit from private banks and government is associated with increasing efficiency, access to credit within the community - that is borrowing from local lenders - reduces efficiency (although the coefficient is not statistically significant, its sign indicates that efficiency is reduced). One reason that availability of credit in the community may be associated with increased inefficiencies could be if it is offered on the basis of local patronage and not to the more efficient and yet credit-constrained farmer. Another possibility could be that the interest rates charged may be so high that many good farmers do not seek such credit and those who do are mostly those likely to have low effort and therefore would default (adverse selection).

2.31 Low levels of credit availability preclude households from undertaking intensive margin activities or activities that have high risk and high return. In a recent study, McCarthy et al (2006) found that households which have migrants abroad have more livestock holdings and allocate more land to forage and pasture, which are complementary activities. They can do this because on one hand migrant members reduce household labor, so households are less likely to engage in labor intensive activities. On the other hand, migrant members send remittances which reduce liquidity constraint and enable these households to choose more risky, but more profitable and less labor intensive activities. Indeed the study finds that such households had higher agricultural and total income.

2.32 **Finally, migration introduces additional constraints to agricultural production.** Migration of a member abroad has a negative effect on the household total and per capita labor effort in agriculture. An additional member abroad reduces total household agricultural labor and per capita labor by 640 and 118 hours per year, respectively (McCarthy et al. 2007). The findings apply to both male and female labor effort, although the decrease is larger for male workers. Furthermore, households with international migrants invest less in productivity-enhancing and time-saving technologies such as chemical inputs and equipment rentals. The post-migration labor endowment of households with migrants and the trade-offs between risks and returns in crops and livestock activities has also led to a move away from crop and fruit tree production to livestock activities and its complementary activities such as forage and pasture for households with migrants (Miluka et al. 2007; McCarthy et al. 2007).

2.33 It would be useful, of course, to understand in detail sectors where households with migrants abroad invest their effort now that they spend less time in agriculture. Absent this information, there are several possibilities. In agriculture, where we have some information, we have already seen that they shift their effort to livestock production because the higher income from remittances allows them to bear more risk (livestock production is deemed riskier than crop), but to obtain higher returns as well. It is also quite possible that improved income position leads these households to enjoy more leisure. But if what they do in agriculture is any guide, they may be pursuing off-farm activities such as starting family businesses or engaging in nonagricultural wage activities, both of which are riskier but have higher returns and potentially welfare-improving. Whatever the case may be, the findings suggest that there is a general movement out of agriculture by households, and migration is making that divestiture easier.

2.34 **The consequences are a doubled-edged.** Withdrawal from agricultural activities adds to the constraints that already limit the productivity growth from agriculture, including scarcity of inputs such as labor⁸. But the exit of many households could also have positive dividends and improve agricultural productivity if it leads to consolidation of land, reduce fragmentation and transfer land to the more productive families.

Conclusion

2.35 To improve rural incomes and, therefore, living standards, it will be crucial to raise agricultural productivity. But as the preceding discussion noted, there are a number of obstacles to achieving these goals. Albanian farmers face too many constraints on the input side, have no access to credit and are insufficiently served by agricultural institutions. Yet, any progress must begin by relaxing some of these major constraints. First, facilitating access to more land through land rental market for the more productive farmers has large upside potential. As noted above, the empirical evidence points to the fact that having more land to farm is more crucial to improving efficiency than consolidation. This is not to say that consolidation is not important or that it should not be a priority. Rather it shows that the benefits of providing access to more land to the more productive farmers have not been fully exploited. It is not clear what the specific role of public policy should be to increase the activity in this market, but proper titling of all land would certainly help. This matters because the evidence suggests that significantly more households who participate in renting land out received the title deed to land compared to households who do not participate (Table B. 10). Second, making credit available to more farmers would also increase rural productivity.

⁸ The debate over whether agricultural labor input is abundant or scarce in Albania is controversial. The large rural population, relatively large families and small farm sizes would suggest excess labor in agriculture. However, empirically, there is very little hired labor and most families rely, predominantly, on household labor. The absence of hired labor and the over-reliance on household's labor, can be attributed to either presence of massive moral hazard, lack of credit to pay for hired help or scarcity of labor. Since farms are not large and many families do get remittances to relieve credit constraints, moral hazard and credit problems appear to be obstacles that can be overcome. That they are not, suggest the possibility of scarcity of labor.

2.36 Finally, there is a need to build strong institutions for agricultural growth. Having an efficient and pro-active extension service can add a lot of value. We have noted that institutions that provide rights to land and protect those rights hold a lot of promise. But even more crucial will be the ability for these institutions to respond to the needs of farmers who are taking up new activities. Two such growth areas are livestock and fruit production. On account of relaxed liquidity constraints and shortage of labor many Albanian farmers are turning to raising livestock and producing for the complementary by-products, in order to improve agricultural and total income. In fact, livestock production and by-products accounted for almost 80 percent of total value of agricultural output of households (Table B. 9). In 2005, fruit production accounted for about 6 percent of the total value of agricultural production, but it is growing. However, participation in fruit tree production has increased significantly from 54 percent of households in 2002 to 83 percent in 2005. Fruit tree sales also increased from 14 percent to 18 percent in the same period. The rise in the participation of fruit tree and livestock production and sales indicates that such activities have provided profitable opportunities for agricultural households in rural Albania. We find that both agricultural crop income and total income for agricultural households is positively and significantly associated with the area of land cultivated with fruit trees and ownership of livestock. For Albania to exploit its comparative advantage in these areas, complementary institutions in food safety and technology transfers are essential.

CHAPTER 3.

MIGRATION AND WELFARE OR MOVING OUT OF POVERTY

Albania is, literally, a country on the move. Its internal and international migration in the past 15 years, have been massive in scale and impact. About 20 percent of adults have moved internally, and one in three households has a migrant abroad. More than 65 percent of these households receive remittances, which has had substantial impact on consumption, labor supply, and investments. Households with international migrants report improved living condition on the basis of a subjective assessment of poverty status, have higher consumption, and are more likely to invest in starting own businesses. For instance, an additional year of temporary international migration is associated with a 5 percent increase in real consumption per capita, and the impact is larger still for permanent international migration. The evidence presented shows that migration explains in part the observed poverty changes. But massive out migration appears to have had some negative consequences as well in that migrant households appear to invest less in education and work less. This impact is especially noticeable in rural areas.

3.1 As widely documented in previous studies, Albania is a country on the move, with massive levels of both internal and international migration. Substantial internal movements are mostly from rural to urban areas, while international migration has traditionally been to nearby countries such as Greece and Italy. Furthermore, a more recent flow has emerged towards more distant but more desirable destinations, either in Europe or North America. In view of the extremely dynamic nature of the phenomenon, the main objective of this chapter is to update our knowledge and understanding of migration in Albania using the most recent household survey. Specifically, the analysis will try to answer some lingering questions in the current policy dialogue on migration in Albania. Is the demographic and socio-economic make-up of migrants changing over time? Is migration, and remittance flow, tapering off? Is a new phenomenon of returnees taking root, and what is its composition? What is the impact of different types of migration on welfare? Given the sizable steps in poverty reduction of the last few years, what is the role of migration in this process and is migration supporting some catching-up by the poorest regions?

A. SIZE AND PATTERN OF MIGRATION

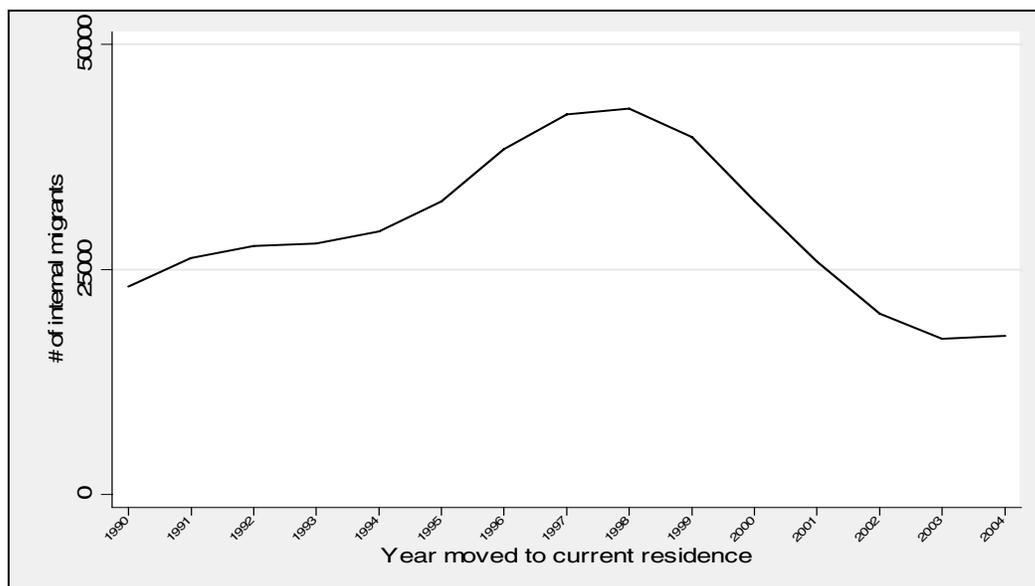
Internal Migration

3.2 Over the past 15 years, about 20 percent of adults have moved internally. This means that about 450,000 individuals currently reside in a place different from where they were in 1990. If we count the movers since birth, then nearly 1 in 3 adults have moved internally. Unless otherwise stated, the main results in the rest of the chapter will look at migration flows observed since 1990, because prior to that year, migration was either tightly regulated or prohibited completely, and virtually non-existent. About 16 percent of households nationwide are headed by individuals who have moved since 1990. In the majority of cases, it is individuals and not entire families, who move. As an example only 5 percent of households moved together in the same year between 1990 and 2004.

3.3 The trends show that internal migration rose between 1990 and 1998, and then declined thereafter. The peak years correspond to the years immediately following the collapse of the pyramid scheme – with proportionately more people moving to Tirana – perhaps reflecting the increased use of

internal migration as a coping strategy in response to the shock caused by the collapse of the saving scheme. Since the 1998, the flow has decreased sharply, and appears to be stabilizing at approximately 20,000 individuals per year (Figure 3.1)

Figure 3.1: Flow of Internal Migrants by Year

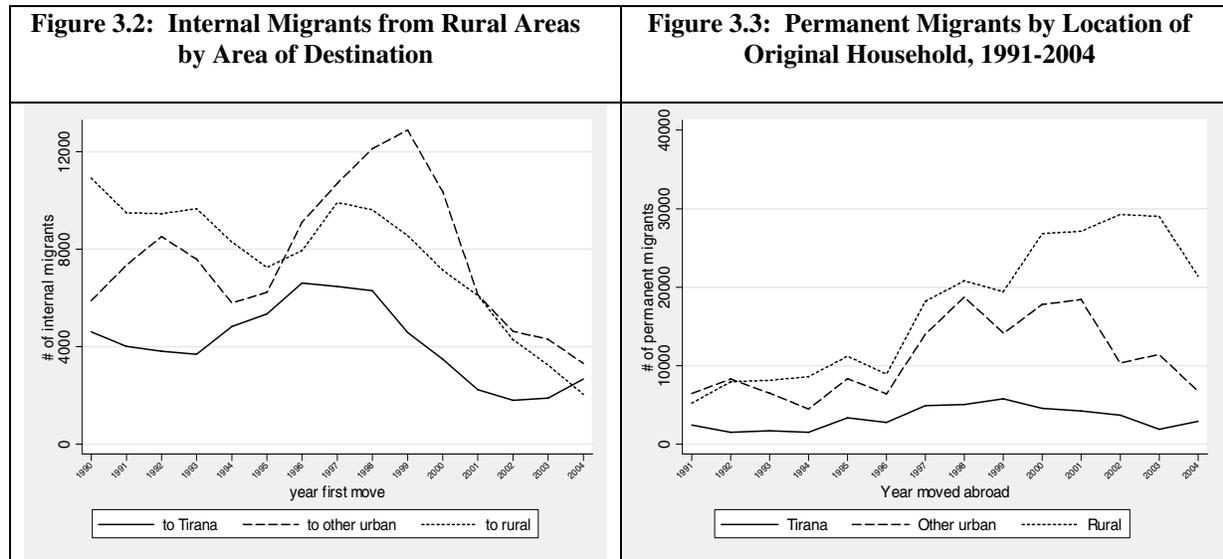


3.4 Not surprisingly, the majority of internal migrants since 1990 originate from rural areas. About 2 in 3 migrants (65.3 percent or 291,000 individuals) have moved from rural areas, even though rural population was about 56 percent and falling (it stood at 52 percent in 2005) during the period. However, surprisingly, about 40 percent of those individuals have relocated within rural areas, often across regions (Table 3.1). In terms of destination, the flows are equally distributed, with about one third of total migration going to Tirana, other cities or rural areas, respectively. In recent years, the share of internal migrants moving to Tirana has further increased. Between 2002 and 2004, almost 4 out of 10 internal migrants have moved to the municipality of Tirana.

Table 3.1: Internal Migration by Location of Origin (FROM) and Destination (TO); 1990-2005

	TO			
	Tirana	Other urban	Rural	Total
FROM Tirana	0.4	0.1	0.1	0.6
Other urban	19.4	7.8	6.9	34.1
Rural	13.9	26.0	25.4	65.3
Total	33.7	34.0	32.4	100

3.5 **Tirana has not always remained the favored destination of most internal rural migrants.** Figure 3.2 shows destination of internal migrants over time. First, there is a secular decline of migrants from rural to rural. Second, prior to the collapse of the pyramid schemes, most rural migrants went to either other urban areas or other rural destinations, not to Tirana. These other urban areas were favored by about 50 percent of internal migrants as recently as 1999. Third, since then internal migration from rural to urban areas in general has declined sharply. In addition, the destination to other urban and rural areas has declined much more (to about 2,000 individuals per year), so that Tirana is now the destination for more than one-third of internal migrants.



3.6 A look at the internal flows across regions⁹ shows that although lower in absolute numbers, disproportionately more internal migrants come from the poorer, more remote Mountain region. The Mountain region represents only 11 percent of total population, but it accounted for almost 30 percent of total internal migration since 1990. About one quarter of individuals born in the Mountain region report having moved internally, with more than half currently residing in Tirana or in the rural areas of the Central region, presumably concentrating nearby Tirana (Table C. 2). It is worth noticing, that in the period following the pyramid collapse, an even higher proportion of internal migrants (35.1 percent) came from the Mountain region. Conversely, and not surprisingly, the probability of internal migration from the better-off Coastal region and Tirana is significantly lower (Table C. 4). In sheer numbers, the rural areas of the Central region is the origin of the largest flow of internal migrants (about one third), with the vast majority moving within the same region, either to cities or other rural areas.

International Migration

3.7 To characterize the pattern of international migration, a distinction is made between *permanent* and *temporary* migration, where permanent migrants are all former household members who currently live abroad - that is, no longer live in the household¹⁰. For these individuals, information was elicited through a proxy respondent currently living in the household, and includes basic demographic and socio-

⁹ For sampling purposes, the country is stratified into four regions, drawn along agro-climatic and socio-economic lines, namely Coastal, Central and Mountain region, plus Tirana municipality.

¹⁰ The survey collected information on all sons and daughters of the household head and/or the spouse older than 15, as well as the spouse if he/she is no longer living in the household and residing abroad. The vast majority of these split-offs belong to the first category, with sons and daughters accounting for about 98 percent of the total number.

economic characteristics of the migrant as well as information on current and past migration episodes. Conversely, temporary migrants are all current household members who have been abroad for at least 1 month since 1990, but have returned and now live in the household.

3.8 In the past 15 years, permanent international migration out of Albania has been massive. Almost 1 in 3 households (34 percent) have at least one former member currently living abroad, and about 1 in 2 (50 percent) of these households have more than one (Table 3.2). The large share of households with more than one migrant suggests the existence of household network effect, as the migration of a sibling facilitate further migration within the remaining household members. Of the almost one million individuals who have split off from the original sample households since 1990, about one half is currently living abroad. Of these, about 80 percent are equally divided between Greece and Italy, while the remaining 20 percent have migrated to other European destinations, or further a field to North America (Table 3.3).

Table 3.2: Shares of Households by Number of Migrants Abroad

	# of households	%	cum.
0	483,517	65.9	65.9
1	128,271	17.5	83.4
2	73,937	10.1	93.4
3+	48,135	6.6	100
Total	733,860	100	

Table 3.3: Destination of Split-offs leaving Original Households

	# of individuals	%	cum.
Albania	522,692	53.7	53.7
Greece	197,381	20.3	74.0
Italy	179,587	18.4	92.4
Beyond	74,069	7.6	100
Total	973,729	100	

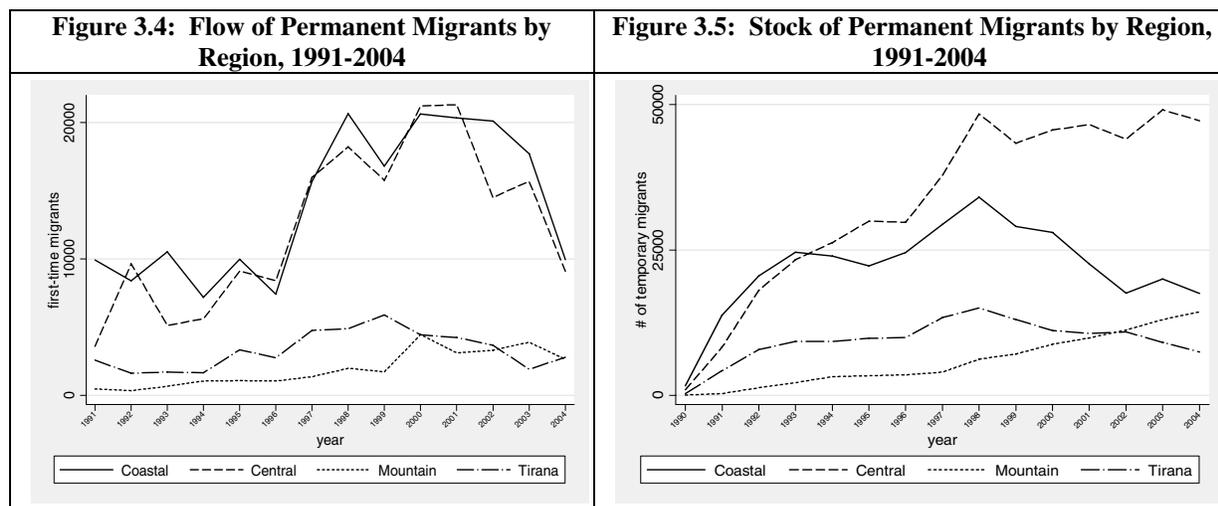
3.9 The pattern of international migration is similar to that observed for internal migration. Specifically, there was a surge of international migration after the collapse of the pyramid schemes, but that this had began to decline by 2000. As shown in Figure 3.3 permanent international migrants more than doubled in the aftermath of the collapse of the pyramid scheme, peaking in 2000 at about 50,000 new migrants per year, and steadily decreasing after that¹¹. As expected, the main destination of international migrants is to Greece and Italy. Table 3.3 shows that 46 percent of all permanent migrants relocate abroad and nearly 83 percent (39 of 46 percent) go to either Greece or Italy. Particularly revealing is the large increase of migration to Greece in the 2 years preceding the first regularization program in 1998 – and coinciding with the years immediately following the collapse of the pyramid scheme – followed by a drastic drop in 1999, when the proportion of migration to Italy and beyond was at its highest (Figure C. 3). For individuals moving out of Tirana, one in four will choose a destination other than Greece and Italy. Conversely, 1 migrant in 4 from other urban centers have moved to Italy.

¹¹ In this and in the following figures, the year indicates the year of first migration of permanent migrants. Thus, in case of multiple events prior to settling abroad, we are using the timing of the first of such events. However, in the majority of cases, permanent migrants only reported one migration episode. Also, the lower numbers in the early 1990s reflect the fact that a higher number of these early migrants have now returned and settled back in Albania, as reflected in the high numbers of temporary migrants in these early years of transition (see next section).

As expected, a higher share of migrants to Italy comes from Coastal cities such as Vlore and Durres. Among the permanent migrants from urban areas in the Mountain region, a higher percentage has moved to Italy than to Greece. However, it must be noted that, as shown in the previous table, the absolute number of migrants from urban centers in the Mountain region is rather small. Finally, over 70 percent of split-offs from the rural mountain region have stayed within Albania.

3.10 Over 55 percent of permanent international migrants hail from rural households. In more recent years, this ratio has increased, so that by 2002, migration from rural areas accounted for about two third of total migration (see Figure 3.4). The largest share of the permanent international migrants originated from the Coastal region (44.3 percent), closely followed by the Central region (39 percent). Only 6 percent of the total permanent migrants since 1990 came from the Mountain region, while the remaining 10 percent came from Tirana¹². Although representing more than half of total migrants, rural adults have a lower propensity to migrate internationally on a permanent basis compared to their urban counterparts (42 vs. about 53 percent; last column in Table C. 8). Among all split-offs, individuals from the urban areas of the Coastal region have the highest incidence to migrate internationally (as opposed to leave the household but remain in Albania), while rural people from the poorer Mountain region have the lowest, with an incidence of 28 percent.

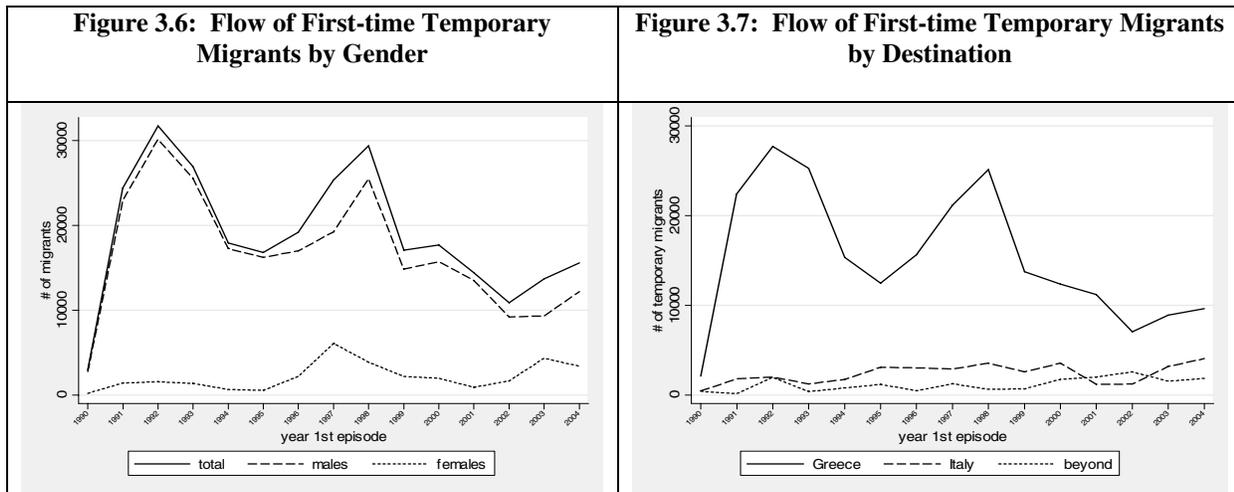
3.11 Although the number of migrants has dropped considerably since the end of 1990s, the flow of new migrants from the Mountain areas has increased considerably since 2000. Figure 3.5 shows the trends in the stock of permanent migrants. Note that the Mountain stratum is the only part of the country where we observe a consistently upward trend, becoming steeper over the past several years and reaching stock levels comparable with the ones from the Coastal region. Overall, despite the downward trend of recent years following a peak migration in 1999, proportionately more people are now migrating to destinations other than Italy and Greece, such as the United Kingdom and Germany, as well as North America. Presumably, following the establishment of migrant networks abroad, migration becomes less onerous, allowing people to travel further distance to more preferred destinations and settled there (Table C. 2).



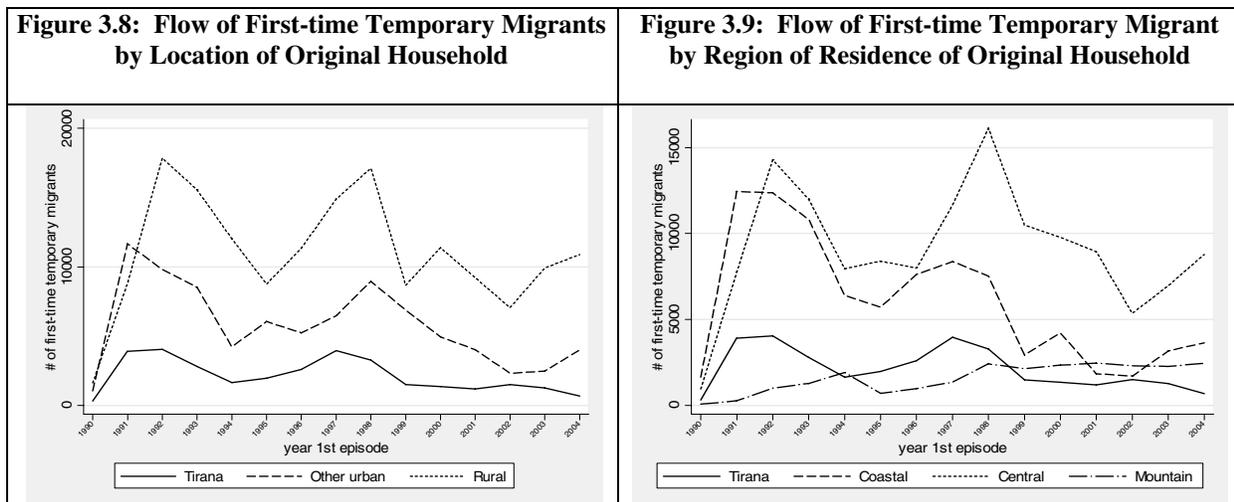
3.12 Unlike permanent migration, the pattern of temporary migration is bi-modal, while the destination is almost exclusively Greece. Approximately 13 percent of adult individuals reported having spent at least one month abroad during the last 14 years, of which about half (53%) are household

¹² As no information on the actual residence at the time of departure is available, we use the current residence of the original household to determine the place of origin of the migration event.

heads (Table C. 11). At the household level, about 1 in 3 households in Albania have had at least one episode of temporary migration since 1990 (Table C. 12a-b). The vast majority of these households (82%) have had only 1 member abroad. This suggests that, contrary to permanent migration, temporary migration is generally taken up by only one household member, mostly the male household head. Unlike the permanent migration, temporary migration is characterized by two peaks. The first surge corresponds to the period immediately following the opening of the borders. The second surge corresponds to the immediate collapse of the pyramid schemes. After each episode, a huge outflow was followed by substantial number of returnees. In addition, the majority of these temporary migrants went to Greece (Figure 3.6). Also, in contrast with permanent migration, temporary migrants are almost exclusively male, capturing both the male-dominated nature of the first wave of migration in the early 1990s and of seasonal/circular work migration, mainly to nearby Greece.



3.13 The larger share of temporary migrants originated in rural areas, mostly from the Central region closer to the Greek borders. All areas experienced increases in outflows in the periods after the opening of the borders and the collapse of the pyramid scheme. This last peak also coincides with the 1998 regularization program in Greece, which may account for part of the increase in 1997-98. In fact, we observe that most of the 1998 flow originated in the rural areas of the Central region, the primary reservoir of migration to Greece (Figure 3.8 and Figure 3.9).

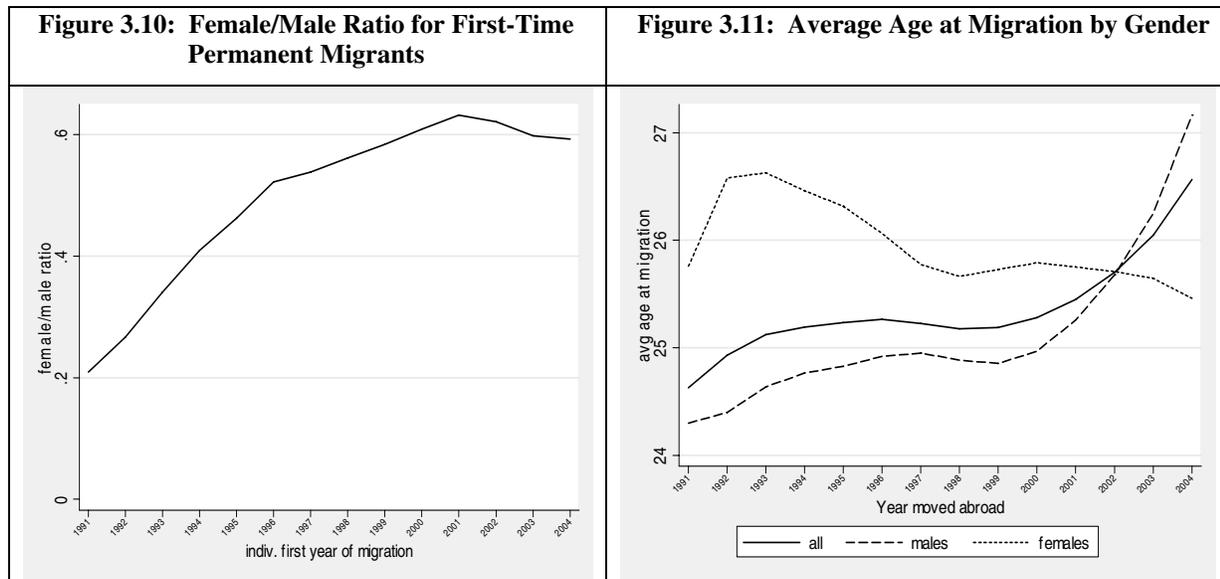


B. CHARACTERISTICS OF MIGRANTS

3.14 **Internal migrants tend to be younger and more educated.** Internal migrants are on average 5 years younger than non-migrants. They are also significantly more educated and mostly female (Table C. 13). Heads of households who have moved internally since 1990 are less poor, more educated and more likely to be married. Perhaps not surprisingly, they are also more likely to be unemployed, reflecting the fact that they might have abandoned a condition of underemployment in agriculture for the (unfulfilled) prospect of finding a better job at destination.

3.15 Permanent international migrants are also younger and more educated but are being joined in more recent years by older individuals and women. As shown in Figure 3.10 and Figure 3.11 permanent migrants are generally younger, male and slightly more educated than the average adult left behind. They are also more likely to come from female- and single-headed households¹³. As expected, migrants come from larger households (in 1990) which, also as a result of migration, are now significantly smaller. Similarly, households with migrants are on average less educated, partly as a result of the migration of the more educated members in the household. Also, migrant households are significantly older, partly as a result of the migration of the younger members in the family. Finally, households with a migrant are also wealthier, as illustrated by the different poverty indicators (Table C. 14).

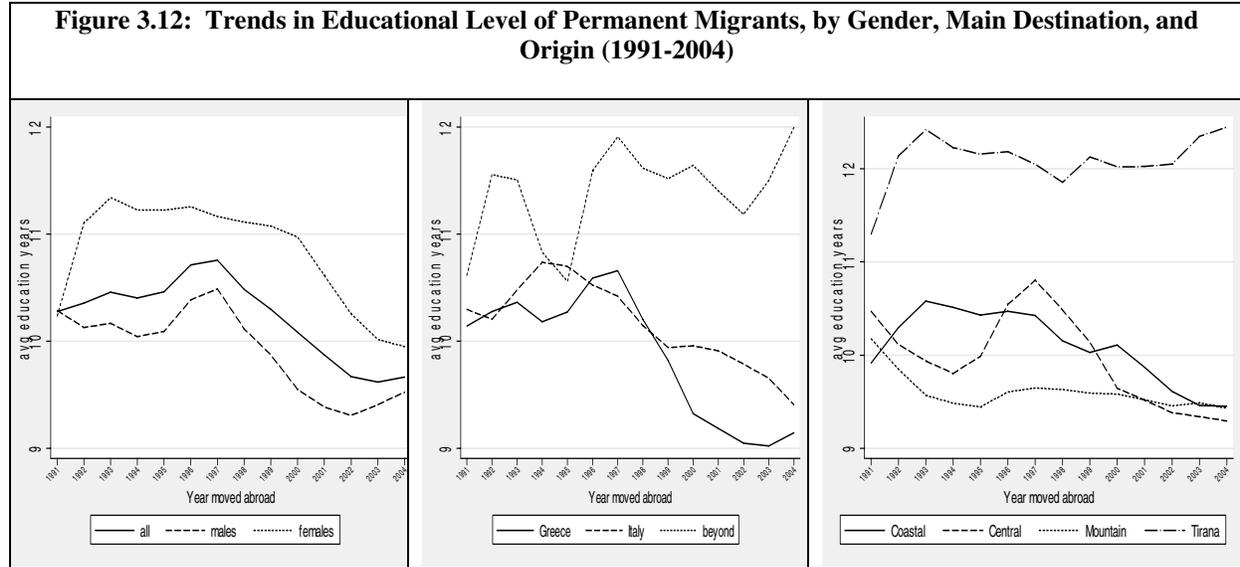
3.16 **However, in more recent years, older individuals and more women are migrating.** Both trends may have substantial implications in terms of future flow of remittances as a consequence of the lower earning potential of these groups. A possible explanation of these trends is the increasing flow of migrants for family reunification purposes following recent regularization programs in the main destination countries.



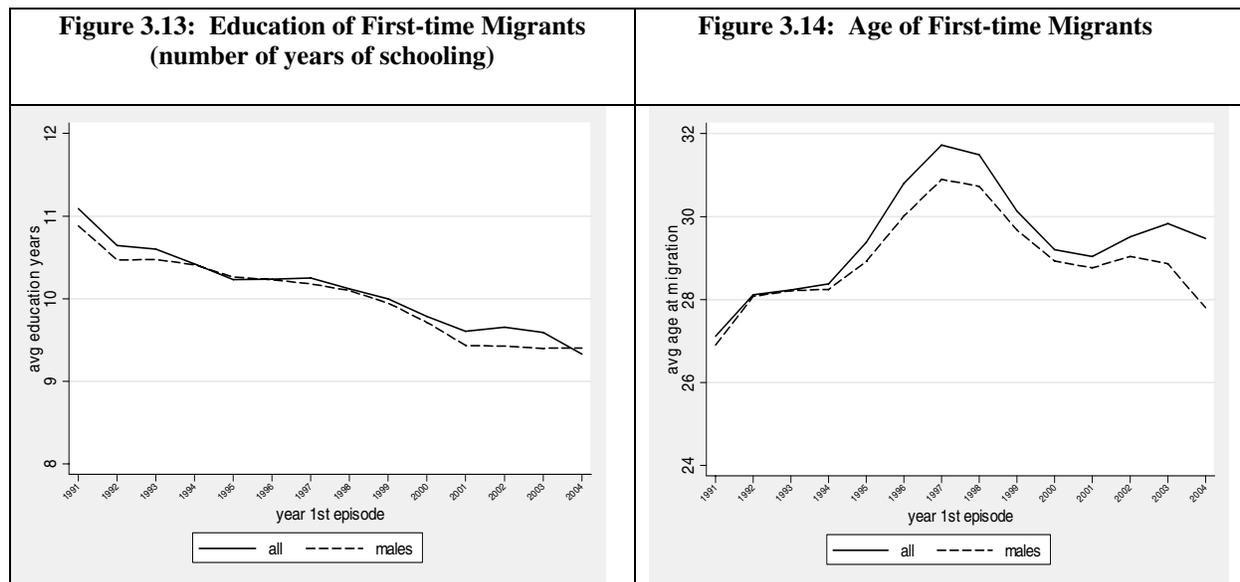
3.17 In addition, larger numbers of less educated individuals are migrating permanently in recent years. The last two panels of Figure 3.12 display educational attainment of permanent migrants by their destination. The decline in education levels does not concern the flow of permanent migrants moving

¹³ If we only consider sons and daughters abroad to classify migrant households, as expected the proportion of female headed households drops to 13 percent, compared with 18 percent in the table above which also consider migrant spouses.

from Tirana and going to destinations beyond Greece and Italy. For this, and only this, particular flow, educational levels of migrants have remained stable over the years, at levels significantly above the rest of the lot going to Greece and Italy. Interestingly, female migrants are on average more educated than men, particularly in the 1990s (Figure 3.12 panel 1).



3.18 Similar to what is observed for permanent flows education levels of temporary migrants have been deteriorating overtime, while the average age of migrants has increased. The age of temporary migrants peaked at the years immediately following the collapse of the pyramid saving schemes, suggesting an intensification of push factors, inducing migration of atypical candidates. Though the trends over time indicate an aging and less educated cohort, on average the temporary, short-term migrants are mainly younger male, married, slightly more educated individuals from male-headed and larger households (Table C. 15 and Figure 3.13-Figure 3.14). On average, they have migrated about 4 times in a 14 year period for a total of 26 months.



3.19 The preceding sections have revealed several facts about Albanian migration. The first is that migration flows since 1990 have been massive. The second is that the process has been extremely dynamic in the sense that the observed trends have been the result of changing push and pull factors which in the short span of a little over a decade have dramatically altered the demographic profile of the country. From a policy perspective, it is useful to understand not only factors that influence the decision to migrate but the impact of migration on a host of outcomes such as welfare, human capital formation and so on. This section takes a look at the decision to migrate, and eventually return, using conditional hazard function model (Box 3.1). It arrives at three conclusions.

Box 3.1: Conditional Hazard Models

In this framework, the decision to migrate (or to return) at time is conditional on past occurrences and affected by changing conditions overtime. This framework allows one to model the role played by changing conditions on the spreading, or tapering off, of migration among individuals with certain characteristics. The individual's decision to migrate abroad can be modeled as a single-spell duration model with time-varying covariates based on a log-logistic hazard function. In this context, the spell is identified as the number of years between the first year of the individual's exposure to the "risk of migration" and the actual year of migration. Individuals who have not yet migrated by 2005 are treated as right-censored, indicating that they are still at risk of migration, and their pre-migration spell may end at some unobserved future date.

Three separate models are estimated: first, a model where no distinction is made between types of migration is estimated. Then the spells for permanent and temporary migrants are separated to test the hypothesis that the processes are driven by different factors. Of particular interest in Albania are a number of variables that, given their time-variant nature, make the estimations distinctive. Specifically, the models include two time-variant variables measuring the build-up of the migrant networks at each year since 1990 in Greece or in Italy and beyond. The assumption is that decision to migrate each year will depend on the specific network in each country at that time, with larger networks making migration more likely to occur. Also included are a number of time-variant variables indicating the household's exposure to various types of shocks. The specific shocks include the pyramid scheme collapse, the loss of property, loss of job of a breadwinner, and illness and death in the family. The model also introduces an epoch dummy for the period 1999-2004 to capture the effect of various regularization programs in Greece and Italy. Finally, a number of demographic and socio-economic features at the individual and household level are controlled for. To test the robustness of the estimation to the functional specification, the same models are estimated assuming a Weibull hazard function. Differently from the Weibull specification, the log-logistic is a more flexible form as it does not impose a monotonic hazard rate. Only the estimates of the more flexible log-logistic specification are reported. However, the Weibull results are qualitatively similar both in terms of sign and magnitude of the coefficients.

In a similar fashion, for migrants only, a second model where the spell equals the number of years between the first (departure) and the last (return) migration episodes is estimated. As such, the spell is a measure of the individual's migration cycle. Again, some migrants are still abroad and may decide to return at some unobservable future date. Therefore, these observations are treated as censored. Similar variables as in the first model are used with the exception of the following. On the one hand, the country of destination is now explicitly accounted for, as each country present different pull factors. Finally, the migrant's occupation during the last migration episode is included, with being unemployed as the reference group. Presumably, employed in better jobs can be assumed to be better integrated in the host country and thus less likely to return.

C. DETERMINANTS OF INTERNATIONAL MIGRATION

3.20 First, households specialize on the type of migration on the basis of well-established networks and demographic profile of households. The larger the network of migrants in the receiving country, the higher the probability and the shorter the time to migrate. This is especially true for permanent international migration. However, the coefficient on Italian destination for the temporary migration model suggests that households with well-established networks in Italy are less likely to send temporary migrants to Greece. The specialization is also regional. Individuals from the Coastal and Central regions, particularly if from urban areas, are the most likely to migrate permanently, while individuals from the Mountain region are less likely to migrate compared to individuals from Tirana, the reference stratum (Table C. 16).

3.21 Not surprisingly, older females from the Mountain region are among the least likely to migrate, whether temporarily or permanently. Availability of working-age males makes permanent migration significantly more likely, while the presence of children in the household tends to delay it. On the contrary, the impact on temporary migration is virtually the opposite. This, again, could be suggesting that permanent and temporary migrations are substitute income strategies, and the household's pre-migration composition partly contributes to the decision on the type of migration to be pursued. Finally, individuals who started being "at risk" later than 1990 (that is to say younger individuals) are more likely to migrate permanently, and less likely to migrate temporarily, than individuals who were exposed to the possibility of migration as early as 1990.

3.22 **Second, the effect of the pyramid scheme was both large and temporary.** Households were asked whether or not they were affected by a number of shocks and four of these (pyramid scheme, property loss, job loss and illness/death of a household member) were included in the estimation. As expected the effect of the immediate loss of savings and therefore loss in permanent income from the pyramid schemes was to induce mass exodus and quicken the time to migrate. However, note that this sudden and possibly unexpected shock is statistically significant only for the temporary migration. Job loss induces both temporary and permanent migration. The opposite signs suggest that some households respond to a job loss by accelerating the time to migrate (temporary migration), while others delay time to migrate (permanent migration) perhaps because of liquidity constraints.

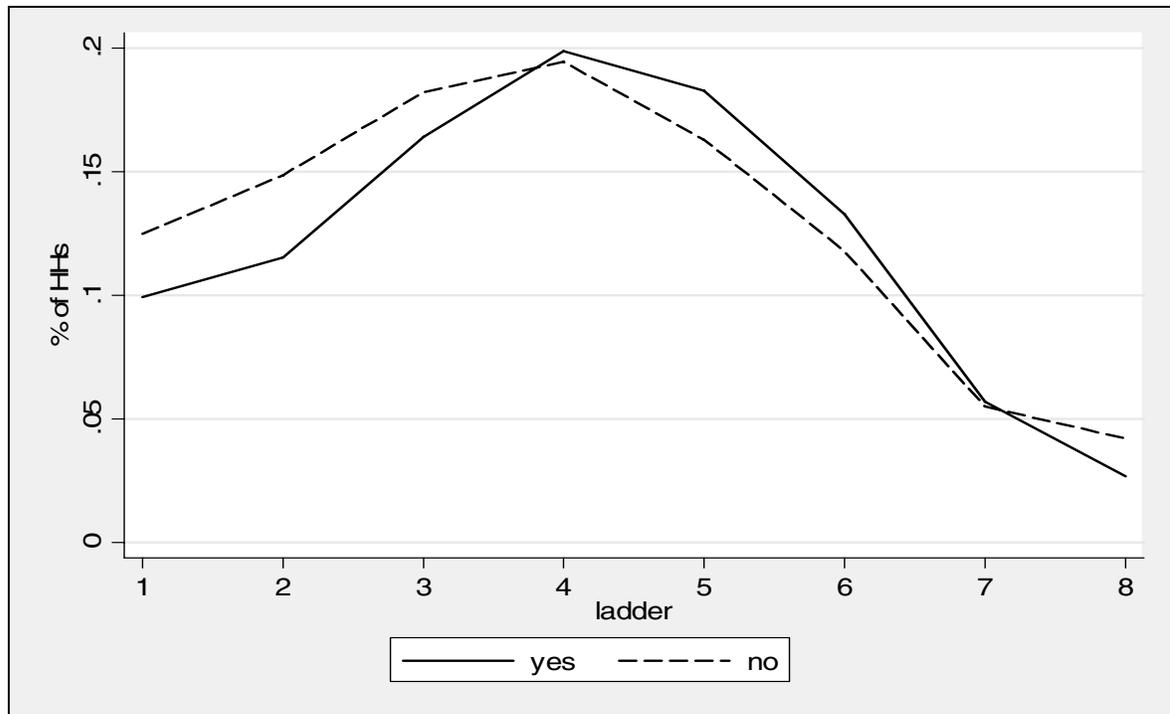
3.23 **Third, the most highly educated and individuals in skilled occupations are the least likely to ever return.** In general, having a job delays return but, as expected, the type of occupation also affects the spell, with people in agriculture the most likely, and white collars and professional the least likely, to return to Albania compared with all other occupations. The implication in terms of brain drain, and lost brain gain, are obvious and potentially very damaging to future development. Regularization programs tend to discourage new migration but they favor longer migration spells among migrants. But contrary to the results of the migration model, where women were less likely to migrate, once they migrate they are also more likely to have longer migration spells or remain abroad permanently. Late migrants are more likely to return. This may be an indication of more restrictive migration policies in recent years, making permanent residence less likely. Conversely, it can also be an indication of the fact that late migrants, particularly if the first migration episodes occurred in the past few years, have had insufficient time to complete their "migration cycle" or, conversely, to decide to settle abroad (see Table C. 16).

3.24 Albanian migrants tracked in Greece confirm that those who intend to return tend to be less skilled and having been less successful in the destination country. The survey was carried out on a pilot basis on a small sample of migrants (Box 3.2). Table C. 19 compares the two groups of migrants based on their intention to return (we exclude the category of undecided) in order to explore systematic differences between the group of more likely returnees and individuals who are more likely to stay in

Greece. The group of likely returnees is formed by males with shorter stays in Greece, who have been less successful in securing a steady job in the host country. A higher share of these individuals also report having acquired new skills while in Greece, which is likely more an indication of their low pre-migration skill levels. They are also slightly poorer and less educated than the individuals in the group of likely “stayers”. These findings are in line with the evidence presented when looking at patterns of migration where temporary migrants appear to be negatively selected. As expected, a higher proportion of individuals who plan to return to Albania in the future send remittances, although on average they tend to remit similar amounts. Not surprisingly, migrants who plan to return to Albania have the highest share of investments in the origin country and, by far, the highest saving ratio. The overwhelming majority of likely stayers also report to planning to remain in Greece permanently.

Some difference can also be detected in terms of self-reported welfare levels between those who intend to return and those who intend to stay. Figure 3.5 graphs the responses to a question in which respondents were asked to rank their financial position on a scale from 1 to 10, with 1 indicating poorest and 10 richest¹⁴. With the exception of the top rung, those individuals who intend to return to Albania feel better-off than their counterparts who plan to stay in Greece. This finding is somewhat in contrast with the descriptive statistics (Table C. 18), based on more objective measures, where we observe that potential returnees appear on average worse off than likely stayers.

Figure 3.15: Subjective Poverty Ladder by Intention to Return



¹⁴ The top three rungs were combined due to the limited number of observations in each rung.

Box 3.2: Tracking Survey of Albanian Migrants in Greece

Although compared with similar surveys the LSMS 2005 provides quite detailed information on permanent migrants, there is a limit to the amount of information that can be collected through proxy respondents. In order to complement the available data on permanent migrants, a complementary survey of migrants to Greece was carried out following the LSMS 2005 by tracking a small sample of permanent migrants who, based on the contact information provided by the household in Albania, resided in Greece at the time of the survey. The emphasis of the tracking survey was to deepen our understanding of Albanian migrants' attitude towards returning to Albania and their investment and remittance behavior.

Contact information for approximately 400 migrants living in Greece was obtained from families in Albania. As typical of this type of surveys, attrition at the various stages of selection was a problem. Only about one half of the household with migrants to Greece provided valid contact information, in the form of a telephone number and/or address. Of the 400 migrants one half were excluded because of cost considerations, given the high dispersion and remoteness of their current residence. For the remaining 200 migrants with valid contact information who lived concentrated mostly in the Athens and Thessaloniki areas, a total of 127 interviews were conducted. Given the extremely high attrition, the results should be interpreted with caution.

Since partial information on all migrants to Greece is available from the LSMS 2005, prior to analyzing the traced sample of migrants, we are able to compare this group with those individuals which we were not able to trace as to have some idea on the nature of the potential bias. We also compare characteristics of the original households for these two groups to also explore the existence of systematic differences which may affect the direct comparison. Traced migrants are more likely to be older and male. They are also more likely to be working legally and to speak Greek. Furthermore, they are more likely to be married to an Albanian and to have sent remittances. Among the sub-sample of traced migrants, about one third of respondents reported having no plans to go back to Albania, while about 40 percent have definite plans to return. A large number also reported not knowing yet

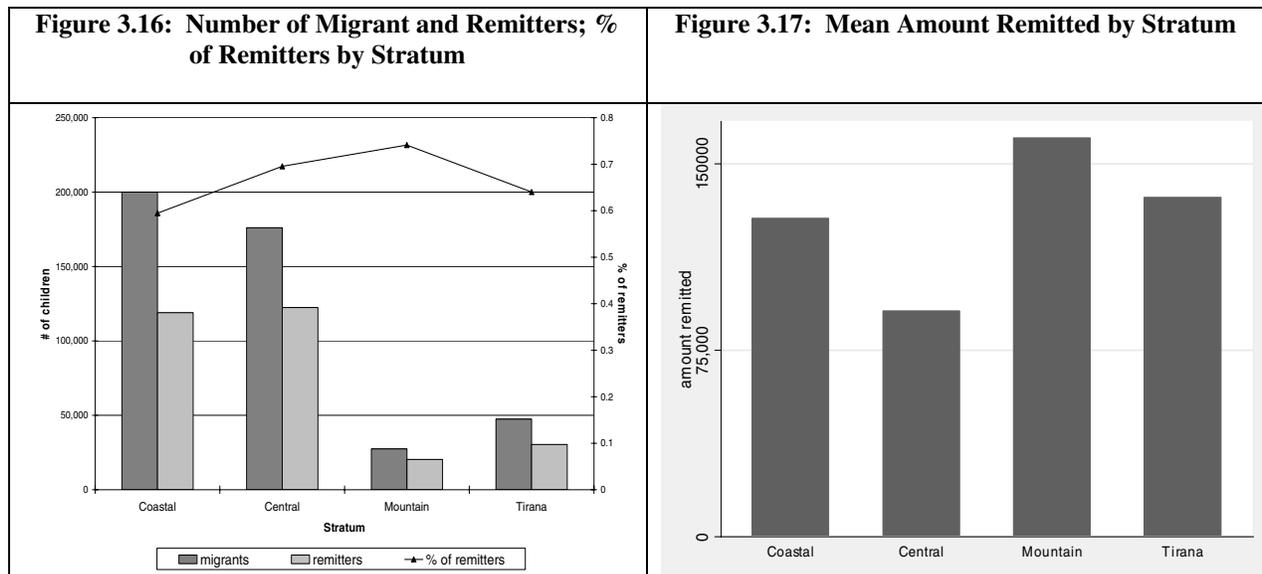
D. SIZE AND DISTRIBUTION OF REMITTANCES

3.25 It is widely acknowledged that remittances have emerged as one of the key components of households' livelihood strategies in Albania. IMF estimates that remittances represented 14 percent of GDP in 2005. They amounted to about 13 percent of household income. While the impact of migration on households left behind is larger than what remittances can buy, it is nonetheless obvious that remittances play a central role in affecting household welfare in so far as they become the key mediating instrument to expand the income and opportunity set of migrant households. Therefore, in this section, we take a brief look at the size and distribution of remittances, before turning to the larger question of how migration affects household welfare.

3.26 About 65 percent of the members of the nuclear family, who are currently abroad sent remittances (cash and in-kind) the year prior to the survey. This is estimated to be about 451,000 split-off migrants, defined as the members of a family who left the household since 1990 and now live abroad. On average, they sent USD 1,179, for a total of more than 340 million USD in a 12 month period. This represents approximately 87 percent of total remittances received by all households in the same period. The remaining share was sent by other distant relatives and friends. Overall, a total of approximately USD 400 million was received by Albanian households over a period of one year. These flows are clearly a gross underestimation of total remittances as they do not include all foreign earnings

and savings brought back in person by migrants. Overall, a higher percentage of households are receiving remittances in 2005 compared to 2002. Moreover, the total flow of remittances has increased by about 11 percent in 2005 compared to 2002. However, on average households received less in 2005 compared to 2002 (see Table C. 22).

3.27 Proportionately more split-offs from the Mountain region send remittances, although in absolute numbers, more households in the Coastal and Central regions – two of the larger sources of most permanent migration –receive more remittances. While 60 percent of migrants from the Coastal areas send remittances, 74 percent of migrants from the Mountain region do. Furthermore, migrants from the poorer Mountain region send on average almost twice as much as migrants from the Central region. Thus, proportionately more and larger remittances are flowing into the poorer Mountain region compared with other richer areas of the countries. These findings, combined with the upward trend of international migration out of poorer Mountain regions, points to a potentially increasing role of migration and remittances for poverty reduction in these more remote areas which, until recently, appeared to have been cut off from the main migration flows towards international destinations (Figure 3.16).



3.28 As expected, the length of migration has a notable impact both on the share of remitters and the value remitted by migrants. Although less in numbers, a higher share of early migrants is still sending remittances. Based on the first year of migration, the share of migrants that sent remittances increased up to 1997, after which it began to decline steadily. Only about 50 percent of the most recent migrants are still sending remittances compared to more than 70 percent among split-offs that left in the mid-1990s. However, the more recent migrants are sending more on average - about USD 300 more in the year preceding the survey. This finding suggests that a very large share of migrants maintain strong links with the sending households even after more than a decade, and they still send a steady, although on average smaller, stream of resources¹⁵. Conversely, a larger share of new migrants may find it difficult to start remitting right away, given the high initial costs of settlement into the host country. However, those who do remit are able to send more, on average (Figure 3.18-Figure 3.19).

¹⁵ This is not surprising given the composition of the split-off group being analyzed, which is entirely constituted by immediate household members. The remittance behavior of remaining remitters may indeed be rather different.

Figure 3.18: Number of Migrants and Remitters; % of Remitters by Year of Migration

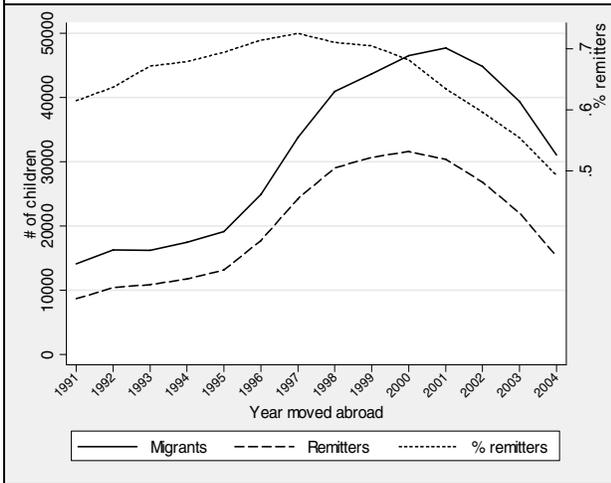
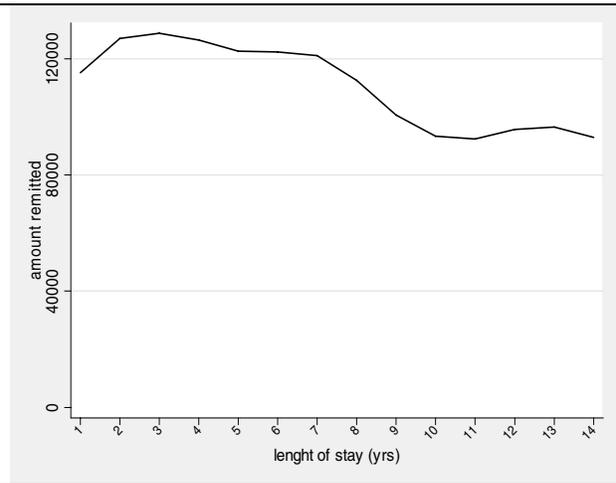


Figure 3.19: Mean Amount Remitted from Split-offs by Length of Stay



3.29 A significantly higher share of households in the top quintiles, have migrants abroad and receive remittances compared with their counterparts in the lower quintiles. As shown in Figure 3.20, the number of split-off migrants and remitters are strongly, positively correlated with welfare measured by quintile of per-capita expenditure. However, the overall trend between welfare level and the share of migrants sending remittances in each quintile is virtually flat. Also, there is no difference across welfare quintiles in the average amount sent by split-off migrants (Figure 3.21).

Figure 3.20: Number of Migrants and Remitters, % of Remitters by Quintile

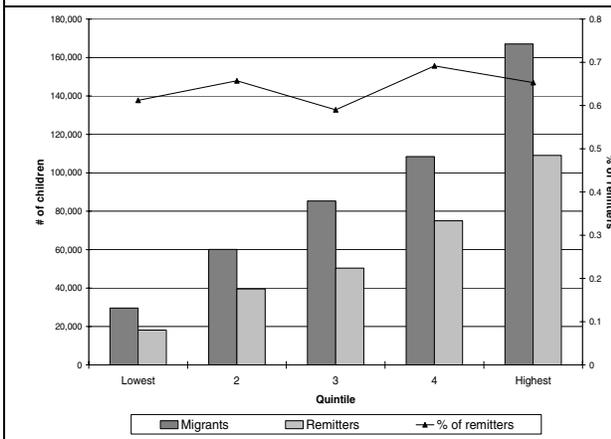
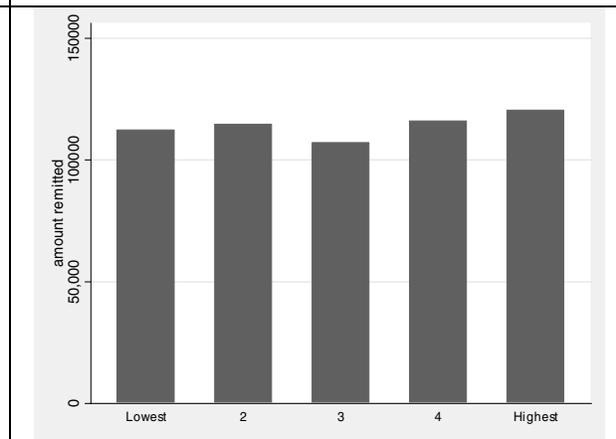
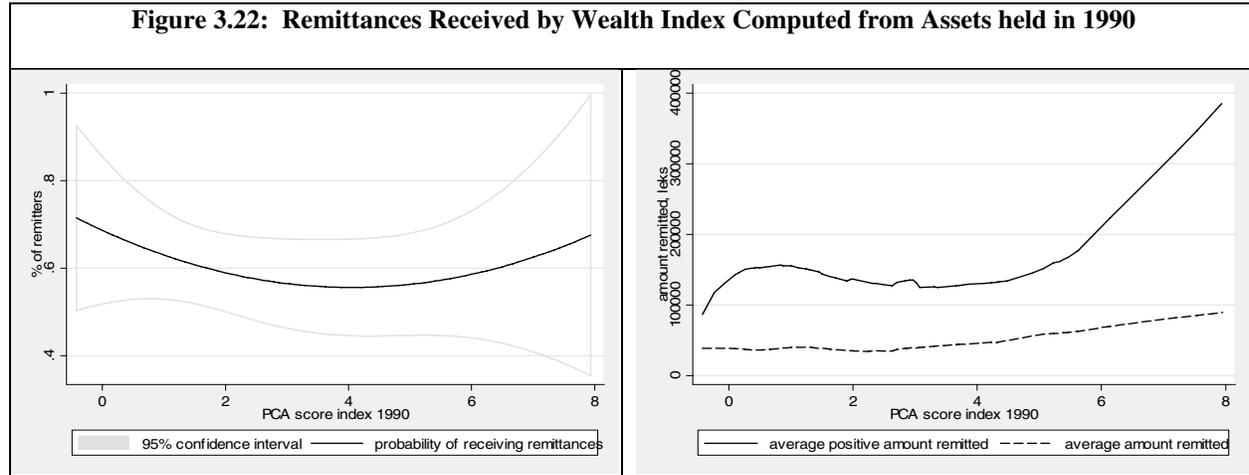


Figure 3.21: Mean Amount Remitted by Quintile

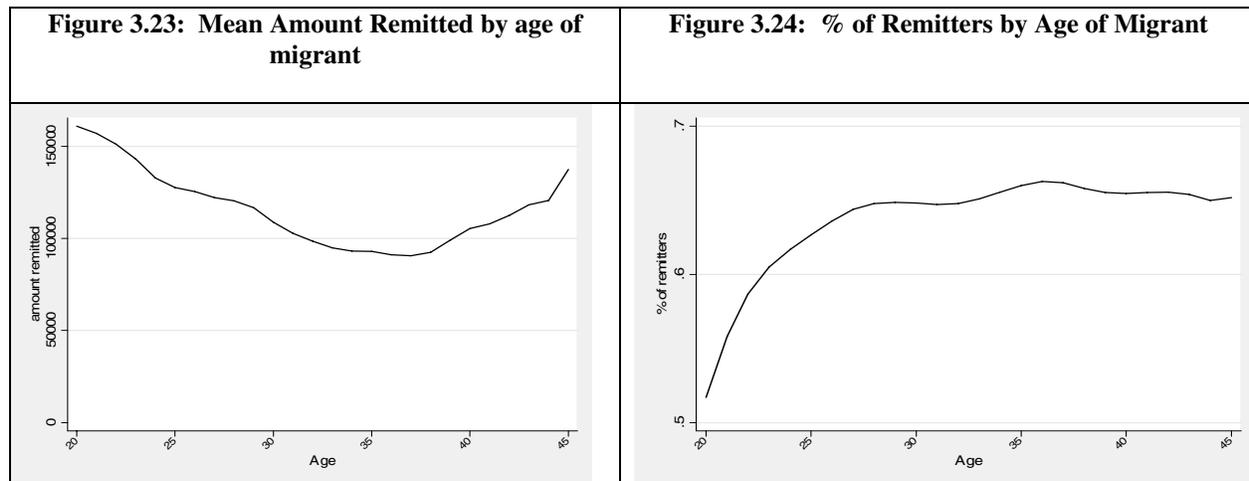


3.30 Clearly, in these figures, the consumption levels, and thus the quintiles, are affected by the level of remittances received. So, while not ideal, we look at percent of remitters and fraction of migrants for quintiles of per capita consumption net of remittances. The results are shown in Figure C. 7. They indicate that while the pattern holds, most of the migrants and remitters now come from the fourth quintile. This suggest that relatively richer households send more migrants and receive relatively more remittances and in the process move up the rank.

3.31 To avoid the difficulty of separating wealth position and remittances, we reconstruct the same type of graphs but based on the household asset position in 1990¹⁶. Although an incomplete proxy of household income, the index used for ranking households is not contaminated by the value of the remittances received by the household as is the case in the per capita consumption ranking. The results show that households in the middle of the asset distribution are the least likely to receive remittances. Households who are better off in 1990 are also, on average, receiving substantially more remittances (Figure 3.22).



3.32 **Younger and older migrants send higher levels of remittances.** Figure 3.23 shows the relation between the amount of remittances and age of the migrant. The relationship is U-shaped, meaning that migrants between the ages of 30-35 send less compared to those younger and those older. Surprisingly, on average, migrants in the early twenties are the ones remitting the highest amounts. However, this is also the group with the lowest share of remitters (Figure 3.24). For the remaining ages, the propensity to remit is virtually identical at around 65 percent. Thus, overall, the propensity to transfer money to members of the original households appear to be affected more by the number of years spent abroad, and location of the household, but less so by the age of the migrant (apart from the youngest, who have the lowest propensity to remit).



¹⁶ In index, computed using principal component analysis, is based on the household's ownership of eight durable goods in 1990.

E. IMPACT OF MIGRATION ON POVERTY

3.33 A straight comparison between households with migrants and those without indicates large differences in consumption and poverty. Table 3.4 shows differences in per capita consumption and two measures of poverty outcomes between households with migrants, separated by the type of migration a household chose, and households without migrants. The results show sizable differences in the consumption levels, as well as poverty incidence and depth, between households with a permanent migrant abroad, and those without. However, there appears to be no measured differences in these outcomes between households who rely on temporary migration and those without migrants.

Table 3.4: Poverty Indicators and Migration

	Permanent migration			Temporary migration			Total
	no	yes	Δ	no	yes	Δ	
Per-capita consumption*	8,813	9,856	1,043***	9,202	8,943	-259	9,109
Poverty headcount	21.2	11.8	-9.4***	18.6	18.4	-0.1	18.5
Poverty gap	4.7	2.2	-2.5***	4.0	4.0	0.0	4.0
Number of observations	2,486	1,154		2,544	1,096		3,640

* Computed at the individual level

*** Significant at 99% level

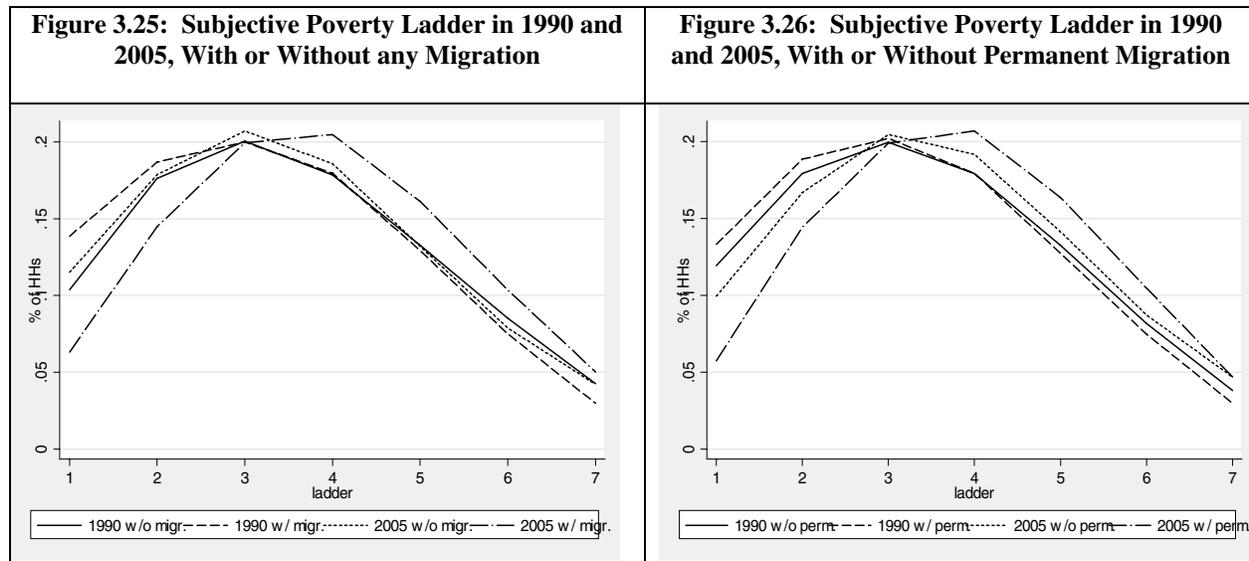
3.34 It may be tempting to conclude that permanent migration improves welfare while temporary migration, as measured, does not. However, this would be misleading, because it could be the case, for example, that permanent migrants had higher consumption levels even before migration, or that household with temporary migrants had significantly lower consumption levels prior to migration compared with comparable households without migrants. To get an accurate estimate of the impact of migration on welfare, we have to account for self-selection of migrants - that is, non-random nature of migrant status. While there are many ways to control for the bias that arises from this self-selection of migrants, the results of this report use the instrumental variable (IV) approach. First, the probability of migrating is estimated using several characteristics that are believed to influence migration decision. Then the difference in consumption is estimated for households controlling for observable characteristics and propensity to migrate.

3.35 **Both temporary and permanent migrations have a positive impact on consumption, but the impact is larger for permanent migration.** The estimated IV coefficient of the instrumented temporary migration variable indicates that 1 additional year of international migration is associated with a 5 percent increase in consumption. This impact is somewhat larger than the one implied by the ordinary least squares (OLS) coefficient, suggesting a negative bias in the temporary migration process. The impact of permanent migration on consumption is also positive and significant. Although the large magnitude of the IV coefficient is somewhat suspicious, both estimations are indicative of a strong causality between having a permanent migrant living abroad and the household consumption levels. Having a migrant abroad is associated with an increase in consumption of about 50 percent (Table C. 23).

3.36 Self-reported welfare ranking also indicates that households with migrants experienced positive improvements over time while households without migrants reported no changes. The LSMS 2005 contained a module on subjective poverty, in which a respondent per household - generally the

household head - was asked about her perception of own welfare at different points in time since 1990. Based on this information and the migration exposure by the households, we draw a number of graphs to visually describe the relation between migration and changes in welfare, as perceived by the respondent. To map the relation, we use the responses to a question referred in the literature as the Economic Welfare Question (EWQ) in which respondents were to place themselves into a 10-rung ladder, with rung 1 corresponding to the poorest and rung 10 to the richest group¹⁷. The respondent was asked to assess the household's financial situation both in 1990 and in 2005.

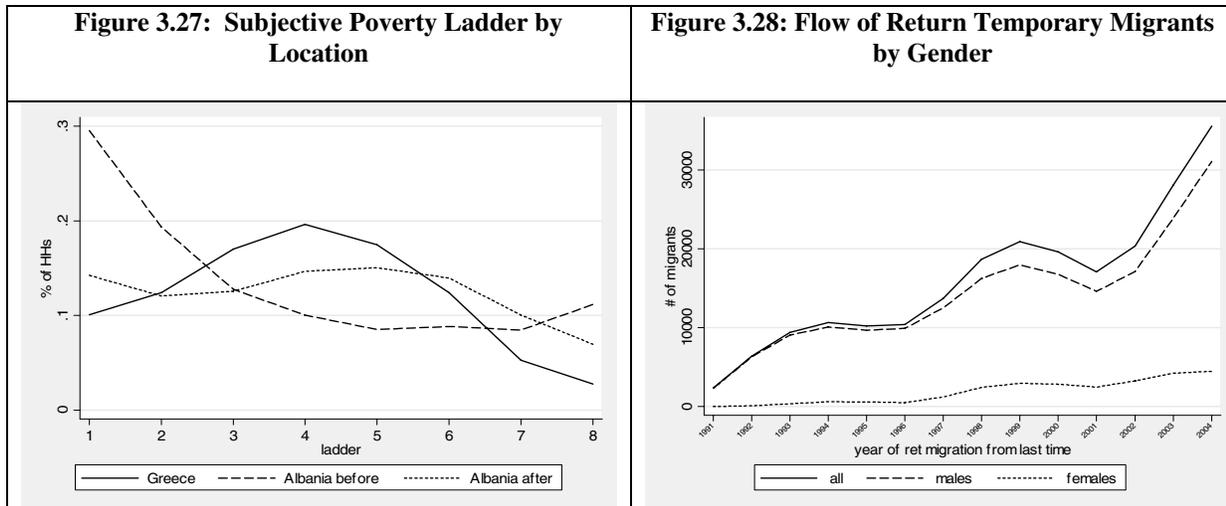
3.37 The solid curve of Figure 3.25 indicates the self-reported condition in 1990 by households without international migrants. The second curve (in the legend) refers to the situation in 1990 of households with any type of international migration (temporary and permanent). The third and fourth curves show distribution of rankings for the same two groups in 2005, respectively. Based on respondents' perception, no sizable differences existed in 1990 between households with migrants and those without migrants. However, by 2005, there is a marked shift to the right in the distribution of rankings reported by households with migrants, while little change in the distribution of ranking is observed for households without migrants. Clearly, this suggests that households with migrants perceive that they have done better than their neighbors who had no migrants. Similar conclusions can be drawn by considering permanent migration only, indicating that much of the perceived improvement come from this type of migration and not from temporary migration (See Figure 3.26). When perceived ranking of households with permanent migration is split by destination country, we find that while households with migrants to Greece perceived their situation somewhat improved, the largest shift is for household with migrants to Italy and beyond (see Figure C. 5). This may reflect the potentially higher returns and status associated with the latter type of migration, although, as observed earlier, migrants in these countries are not remitting significantly more than their counterparts in Greece.



3.38 **A group of Albanian migrants tracked in Greece also report that migration has improved their condition.** A group of migrants traced in Greece were asked to self report their perceived financial situation prior to migration (in Albania), now (in Greece) and hypothetically upon return. The results indicate that migrants consider their situation to have improved considerably now compared to their condition in Albania prior to migrating. However, fewer people consider themselves very well off in

¹⁷ Because of the low number of observations in the top rungs, we group the responses of the top four rungs.

Greece (Figure 3.27, rung 8+ of the solid line), as their reference population is considerably better off than in Albania. But, they still consider that their situation in Albania upon return would be a radical improvement with respect to their pre-migration condition, and still somewhat improved with respect to their current condition in Greece.



3.39 Migration and remittances partially explain the large reduction in poverty and the observed regional convergence. As shown in Chapter 1 (see also Table A. 8), poverty rates in Albania have dropped substantially in a span of only 3 years. Headcount poverty declined by 7 percentage points between 2002 and 2005, from 25.4 percent in 2002 to 18.5 percent in 2005. Furthermore, the evidence suggests that even sharper reductions in poverty were observed in urban, especially Tirana, and Mountain areas.

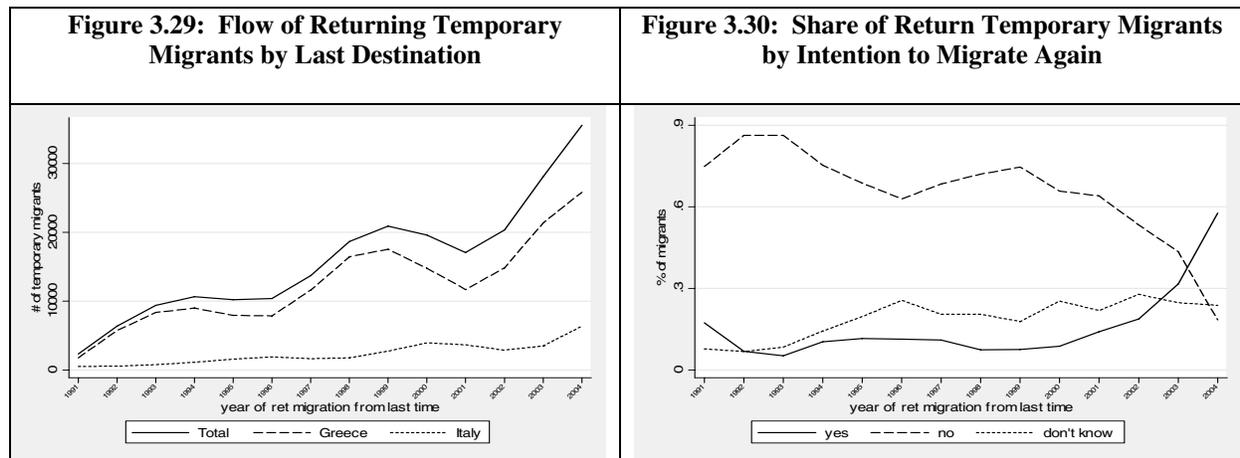
3.40 There are four pieces of evidence that support the potentially significant role that migration plays in the observed patterns of poverty changes in Albania. First, there is clear evidence that Tirana and the Mountain rural regions are the areas where we see the largest increases in the share of households receiving remittances. Second, not only did the fraction of households receiving remittances increase, but the amount of remittances also increased substantially. Specifically, the flows to Tirana more than doubled while those to the Mountain region increased in the order of 50 percent (Table C. 22). Third, as noted above, the mountain region is the only region in which the flow of new permanent migrants has been increasing steadily over the past several years. This is in contrast to all other regions, for which a downward trend is clearly emerging. Finally, it must be noted that the higher purchasing power of a dollar of remittances to the Mountain region, compared with other regions, may potentially amplify the impact of transfers in terms of poverty reduction. Although only descriptive and by no means conclusive, this evidence seems to suggest some possible link between migration and remittances on the one hand and the large improvements in poverty reduction observed in the Mountain region over the past few years on the other.

F. MIGRATION AND HUMAN CAPITAL ACCUMULATION

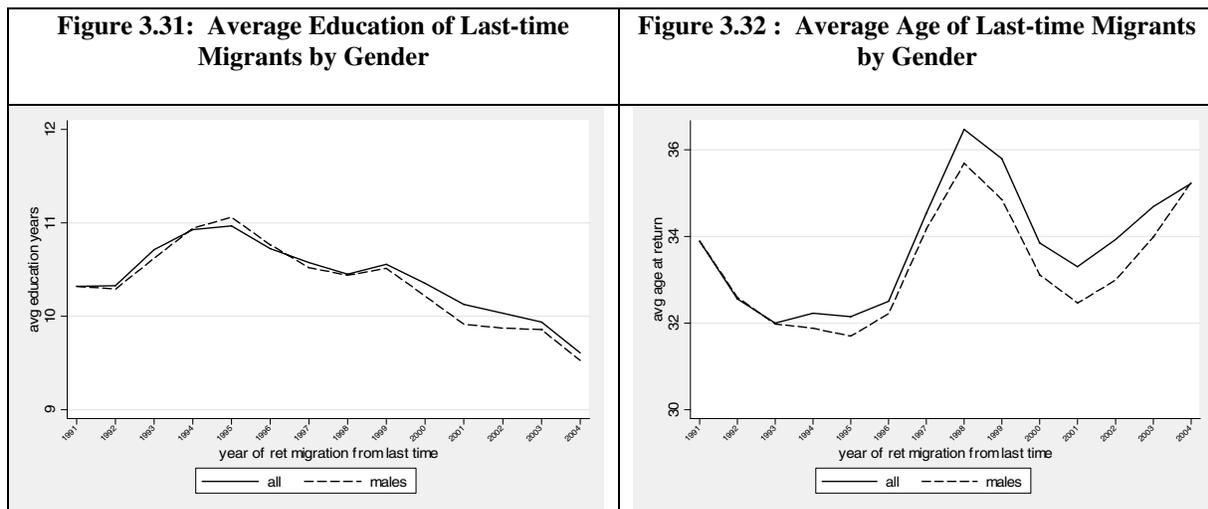
3.41 To date, much more emphasis has been given in the Albanian migration discourse to the analysis of out-migration, mostly of young household members who, driven by economic hardship, are being lured to wealthier neighboring countries. Little attention has been paid, both in policymaking and in research, to the impact of return migration which is becoming increasingly important as the migration process matures and the impact of migration on human capital outcomes in Albania. This section summarizes some recent findings in these two areas. As expected, the time-pattern of return migrants is

increasing at an impressive rate, and it is male-dominated (Figure 3.28). Moreover, a large fraction of the returnees are from Greece (Figure 3.29).

3.42 Clearly, the most recent returnees are more likely not to have completed their “migration” cycle and, as shown in Figure 3.30 are more likely to migrate again in the immediate future. Consequently, at a minimum the figure for 2004 should be taken as an overestimation of the actual flow of returnees (Figure 3.28). However, even if we consider the peak in 2004 a statistical artifact, the upward trend is unequivocal and its potential impact is likely to be non-negligible. Being in part the mirror image of what we have considered so far as temporary migration, it is not surprising that return migrants are mostly men, returning from nearby Greece.



3.43 **The evidence on demographic and skill composition of return migrants does not point to a “brain gain”.** Returnees’ average years of education has clearly been decreasing since 1995 and at a steeper rate than the downward trend observed in the education level of new migrants. Furthermore, although the peak in the average age of returnees around 1999 could be expected in view of the massive flows of older migrants following the 1996 pyramid scheme crisis, the spike in most recent years may be a matter of concern (Figure 3.32).



3.44 There is a strong and positive relationship between return migration and business ownership, but the evidence also shows that they are of low-productivity type. An increasing proportion of temporary migrants are returning to either Tirana or other urban centers despite having originated from rural areas, although the spike in return migration to rural areas observed in the 2 years prior to the survey is somewhat counterintuitive (Figure C. 6). A fair share of these returnees use (some of) their foreign earnings to set up family businesses, often small replicas of the businesses they were exposed to while abroad (Labrianidis and Hatziprokopiou, 2006). The probability of establishing such small enterprises increases with the time they spent abroad (Kule et al., 2002). Other studies also find evidence of a positive and strong relation between return migration and business ownership and that the likelihood of being involved in own businesses is highest among households returning from countries other than Greece (Kilic et al., 2007). However, as also pointed out by the authors, in most cases these businesses are small, low-return, and informal family endeavors in the service sector, suggesting poor entrepreneurial skills on the part of the returnees.

3.45 **Even more disturbing are the trends in terms of welfare.** In recent years, returnees are coming back to poorer households compared with earlier years. All these trends combined are suggestive of some negative selection among migrants, with increasingly older, less educated individuals returning to poorer households. As such, and as put forth anecdotally by Barjaba (2000), return migration may reflect failure to succeed abroad, thus making it a less likely catalyst of growth at home.

3.46 **However migration appears to promote higher occupational mobility.** The LSMS 2005 collected information on individual occupation at different times since 1990. For household members who are currently abroad (permanent migrants) the survey asked for the occupation in 1990, at the time of migration and the current occupation in the destination country. Household members were asked their occupation in 1990, during each migration episode for migrants, and at the time of the survey. Based on this information, we are able to analyze the occupational mobility of individuals since the beginning of transition, and for migrants explore the nexus between migration and social mobility. The analysis is purely descriptive, and by no means implies causality between migration and occupational changes. Nonetheless, it provides some evidence of changes in occupational choice between return migrants and those who did not migrate.

3.47 Although little mobility is observed among non-migrants, both groups of migrants display very high mobility, mostly driven by dramatic changes in unemployment. As indicated in Table 3.5 migration is associated with lower participation in agriculture, both in Albania and abroad. Prior to migrating, about one half of migrants were working in agriculture, but the share goes down to one third upon return. The drop is even larger among permanent migrants. Although about one half were involved with agriculture while in Albania, only about one fifth are still working in agriculture abroad. For temporary migrants, the largest changes are observed in the construction (part of crafts) and service sectors. Between 1990 and 2005, the share of individuals in these two sectors almost doubled (from 12.6 to 21.3 percent).¹⁸ A similar pattern but even more pronounced, is observed among permanent migrants, with the share in crafts going up more than six-fold (from 6.3 to 40.1 percent) and the share of blue collars more than tripling (from 4.1 to 15.9 percent). Not surprisingly, permanent migration is a successful vehicle to find employment (abroad).

¹⁸ Part of the increase derives from individuals who in 1990 were not working; some may have been too young in 1990 to be in the labor force.

Table 3.5: Individuals' Occupation Over Time by Migration Status (whole sample)

	Non-migrants		Temporary migrants		Permanent migrants	
	1990	2005	1990	2005	1990	2005
Agriculture	27.2	24.5	26.9	26.9	17.4	12
Crafts	6.9	7.3	12.6	21.3	6.3	40.1
Service	1.5	4.9	1.6	7.5	1.7	8
White collar	7.9	8.3	7.7	9.3	5.7	4.2
Blue collar	7.4	5.9	7.4	9.6	4.1	15.9
Other	1.1	0.3	1.0	0.5	0.7	1.3
Not working	48	48.7	42.7	24.9	64.1	18.6
Total	100	100	100	100	100	100

3.48 A look at the occupational choice upon return of a sub-sample of temporary migrants with at least two migration episodes abroad, lead to several observations. First, among this sub-sample a considerably higher percentage was and remains in agriculture, suggesting that repeated migration may be an indication of seasonal migration linked to agricultural idle season. The majority of working individuals are employed in agriculture while abroad, more so during their first migration episode. Second, overtime, only few are able to move into other sectors. Jobs in construction appear to be one of the main forms of occupation abroad for this subgroup. Third, very few individuals with a white collar occupation while in Albania are able to keep a similar type of job while abroad, indicating some form of downward mobility, although this is temporary. Finally, a significantly larger share of individuals are involved in the service sector in 2005, compared to 1990 or while abroad, supporting the observation that migrants and their families probably use remittances and savings from abroad to establish small, family businesses in the service sector upon return (Table C. 26). Further exploration of occupational mobility across migration episodes for temporary migrants with multiple migration episodes, shows very little observed mobility across migration episodes. The only observable change is the shift into services for about one quarter of individuals who were working in agriculture during their first migration episode (Table C. 27).

3.49 **Permanent international migration has a negative impact on the household's school enrollment rates for female children.** Table C. 36 shows the results of restricting the analysis to households that have children between the ages of 6 to 22 years. The estimates control for factors such as distance to school, education of household head, social capital and regional effects that have a bearing on enrollment rates. The surprising result is that households with permanent international migrants have, on average, lower enrollment rates than households without international migrants. When separate estimates are made for the enrollment of male and female children, the results indicate that the negative effect is statistically significant only for female children. The same estimates were made by separating households into rural and urban areas. In both areas, the evidence continues to point to lower enrollment rates for households with permanent international migration compared to those without. However, in rural areas, this is true only for enrollment of female children, while in urban areas the differences are not statistically significant.

3.50 **The effect is stronger for enrollment in secondary education in rural areas.** Limiting the analysis to secondary education leads to the same conclusion, but the results are large and statistically significant only in rural areas. Table C. 34 and Table C. 31 suggest that the large and statistically significant effect of female enrollment is entirely a rural problem. There is no measured difference in enrollment rates for male and female children in urban areas between households with and without permanent international migration.

3.51 Similarly, households with permanent international migrants who have positive expenditures on education, spend less on education. Analysis of spending on education for the same households was also conducted using a two part model, in which the decision to have any educational expenditure for children is separated from the decision of how much to spend once there is positive educational expenditure. The first panel of Table C. 34 and Table C. 36 suggest that on average households with permanent international migrants have a lower probability of spending on education. Among those who have positive expenditures, households with permanent international migrants spend less than households without permanent international migrants. The effect is negative and statistically significant for male and female children, but much larger for male children. One explanation for this outcome could be that the education expenditures for many migrant households such as transportation to school, clothes and so on are in kind and therefore not reported. For instance, may be a child in a migrant household is driven to school or that the clothes are sent from Greece or Italy.

3.52 Taken together, these findings linking migration decisions and schooling outcomes are surprising because one would think that the combination of higher incomes from remittances, which relaxes any existing liquidity constraints and the exposure to migrants on the returns to schooling in destination countries will provide a powerful basis for investing in education in Albania. The fact that we observe the opposite suggest three possible avenues that offset these forces. The first is that permanent international migration may have disruptive effect on family structure, organization, and leadership. For example, the absence of the household head may lead to less parental inputs to education, structure and control in the household, thus negatively affecting children's school enrollment, performance and continuation of education (McKenzie, 2006). Indeed, our data reveals that the percentage of female headed household among migrant households is more than two times that of non-migrant households. Furthermore, the preferences of the migrant household member and the decision maker among those remaining may not be aligned. This is especially so in cases where migrants, who are often young males and relatively more educated may value education and want to invest in it, but the decision maker who may be an older male who is less educated may not share such goals (Commander, Kangasniemi and Winters, 2004)

3.53 The second is that exposure to information and migration networks increases the likelihood of migration in the future, making migration and school enrollment competing forces. Although children might not migrate today, the expectation of migrating in the future shapes the expected returns to education. When the opportunity cost of staying at school increases due to higher earning potential abroad, children from migrant households may leave school earlier. Where employment opportunities are higher for low skill jobs obtainable through mostly illegal immigration, especially towards Greece, the children's incentives to enroll in school would be reduced. The effect would be stronger for children from households with migrants abroad who can count on networks and reduce the cost of migrating. As shown in the first part of this chapter, many international migrants from Albania go to Greece. Nearly 51 percent of the households with international migrants currently have a migrants in Greece, and the highest education of the households with migrants that do not incur any educational expenditures is lower (9.8 years) than that of the households with migrants that have positive educational expenditures on their children (10.5 years). We would expect this effect to be stronger in the rural areas, where economic conditions are worse than those in the urban areas and in which migration strongly emerges as a way out of hardship as indeed confirmed by the results of the estimation. The coefficient of migration on school enrollment rates in rural areas (-0.68) is larger (meaning worse) than that of the urban areas (-0.04) (Table C. 34 and Table C. 33).

3.54 Finally, migration might have a negative effect on enrollment rates if children from households with migrants have opportunities whose returns are higher than those to education. In particular, if households with migrants use remittances to engage in higher return activities, and these provide

alternative avenues for skill formation and higher returns than staying in school, then children from households with migrants may stop schooling investments earlier.

Conclusion

3.55 To summarize, Albania's recent migration, both internal and international has been unprecedented in scale and impact on the country. Most of the internal migrants hail from rural areas, the isolated Mountain area, and are overwhelmingly female. International migration has added to the intensity of these relocations. The impact on the population has been substantial and multi-dimensional. First, the pattern and scale of migration has reshaped the spatial distribution of population in the country. Second, welfare changes have been considerable. Households with migrants, on average, perceive their welfare to be better after the migration of a member, have higher consumption and lower poverty rates. In addition, they are more likely to invest in starting own businesses. Migration also appears to improve occupational mobility, although on the evidence of the return migrants, the country does not appear to be gaining superior skills yet. Finally, against the backdrop of these positive effects of migration are a few drawbacks seen mostly in the fact that migrant households invest less in education, especially of female children in rural areas and put in less effort in agricultural activities.

CHAPTER 4.

REACHING THE POOR THROUGH NDIHMA EKONOMIKE (NE) PROGRAM

The NE program, which is the only means-tested anti-poverty program in Albania, has low coverage although this has improved between 2002 and 2005 on account of big gains in the Mountain, Tirana and rural areas. At the same time, the non-participation of the non-poor has increased so that leakage has worsened. A decomposition of the targeting performance shows that most of the gains in coverage are attributable to the efforts of the local officials to find and reach their poor. Finally, we find that while the broad administrative guidelines to screen and select households appear to be followed fairly well, they are weakly correlated with the poverty status of households compared to a list of households' observables that are easier to verify.

4.1 Albania spent about 7 percent of GDP on social protection – a combination of social insurance, income targeted and labor market programs – in 2005. The largest share of the expenditures, at 5.4 percent of GDP went to social insurance programs comprising pensions (urban, rural and veteran) and maternity benefits. Labor market programs including unemployment benefits, vocational training and employment promotion claimed another 0.4 percent of GDP. The remainder went to programs explicitly designed to support the incomes of the poor or vulnerable. Collectively, these income support programs are referred to as social assistance, and include disability benefits, social care institutions, and Ndihma Ekonomike (NE). Disability benefits which absorbed 0.6 percent of GDP or 10 percent of all social protection expenditures in 2005, is the largest social assistance program. However, the most well-known and the one that targets poor households directly is the NE.

4.2 A balanced review of the social protection programs was recently completed under the public expenditure review (World Bank, 2006). Therefore, in this chapter, we focus only on the one program which was designed to assist poor households, that is NE. The chapter will look at the evolution of NE benefits, its ability to reach the poor, and its targeting performance. Of particular interest will be an assessment of how the decentralized nature of NE program affects its targeting performance.

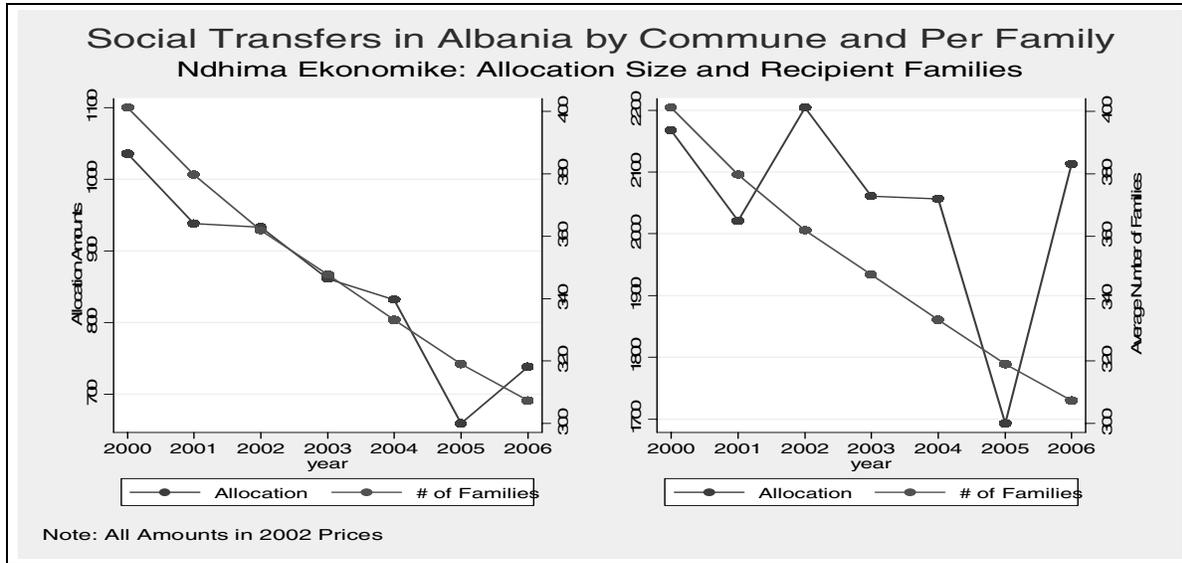
A. TRENDS IN NE ALLOCATIONS

4.3 **Average NE allocations per commune or municipality declined steadily between 2000 and 2006.** The average allocation (in 2002 prices) to a commune or municipality was about one million Lek in 2000, but this declined to about 740,000 Lek in 2006, which is a 29 percent real drop in the size of allocations. The level of allocation in 2006 is a recovery from a surprisingly sharp drop in 2005, which reduced real average allocation by 21 percent between 2004 and 2005 (Figure 4.1). Across strata, large decreases are especially evident in Tirana and Coastal areas, where average commune allocations dropped 41 and 35 percent in real terms over the six years, while the decline was less severe in Mountain areas, which experienced a cumulative decline of 16 percent.

4.4 The average number of recipient families in a commune or municipality also declined. But the decrease here was smooth and gradual. As shown in Figure 4.1, almost 400 families would have received NE, on average, in a commune or municipality in 2000. But this declined to 310, or a 22 percent reduction, by 2006. As a consequence, the total number of recipient families decreased from about 150,000 in 2000 to about 112,000 in 2006. The observed reduction in the NE rolls appears to have applied equally to full and partial NE recipients. The visual display in Figure 4.2, indicates that both full and partial list of participants declined at the same rate. The trends show that the highest exit rates from

the participant list were observed in Tirana and Coastal areas and much less so in the Mountain and Central areas.

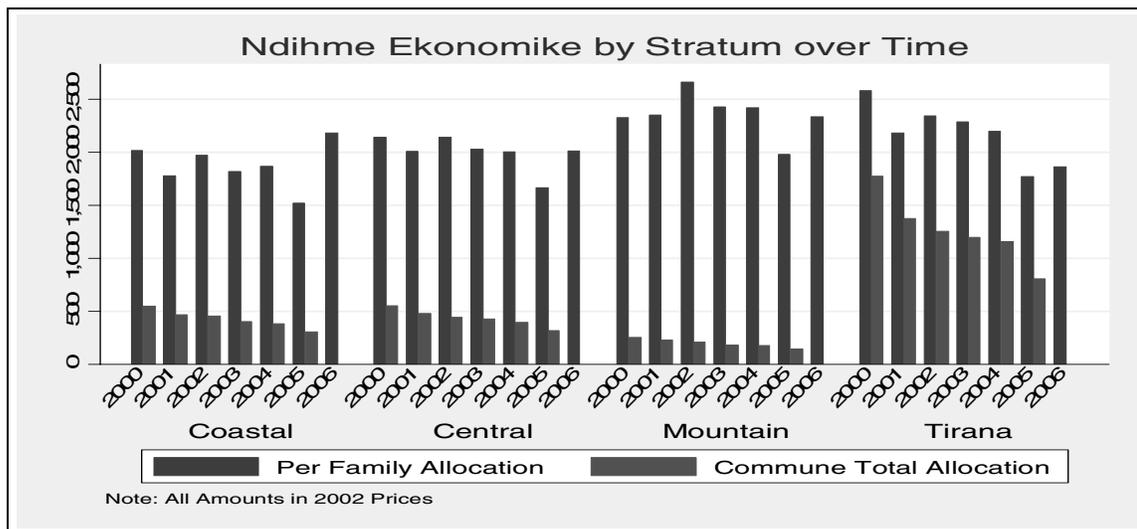
Figure 4.1: Trends in Average NE Allocations and Number of Recipients



Source: Ministry of Labor and Social Affairs (MOLSA).

4.5 **There are large differences in average allocations per recipient family across strata.** The average allocation per recipient family in Tirana is by far the largest. Throughout the six years, the average benefit level per recipient household in Tirana was three times larger than the average allocation per family in Coastal, two times larger than per family in Central and almost 70 percent higher than the average allocation to the Mountain areas, the second highest per recipient household.

Figure 4.2: Average Allocation per Commune/Municipality and per Recipient Family, by Stratum Over Time



Source: Ministry of Labor and Social Affairs (MOLSA).

4.6 **However, the value of NE per recipient family has declined more slowly over time.** The benefit level per recipient family decreased from about 2170 Lek per month in 2000 to about 2113 Lek per month in 2006, which is only a cumulative 3 percent drop in 6 years. This is partly a compensation of a 25 percent increase in average allocation between 2005 and 2006. These rates of decline are slightly higher than the pace of benefit reduction per family obtained using the household surveys. According to the administrative data, the benefit levels per recipient household between 2002 and 2005, the two years for which we have survey data, decreased by about 23 percent. Using the survey data, we find that the decline was only half that rate. Furthermore, if one looks not at per family but real per capita reductions in NE benefit levels the decrease is only about 11 percent, or half the rates (Table 4.1). Both the administrative and the survey data also show that the fastest declines were in Tirana and Coastal areas, when the trends are viewed across strata, while urban levels declined faster than rural areas, where per capita benefit levels increased slightly.

Table 4.1: Trends in the Value of NE Benefits, Real Per Capita and Per Recipient Family

	Benefits per Family, Adjusted for CPI only			Benefits per Capita, Adjusted for CPI and Regional Price Differences		
	2002	2005	Δ%	2002	2005	Δ%
Coastal	2806.56	2146.87	-23.5	742.1	652	-12.1
Central	2439.21	2231.62	-8.5	577.3	546.1	-5.4
Mountain	2053.00	1988.20	-3.2	427.4	394.8	-7.6
Tirana	3219.85	2146.53	-33.3	883.7	569.3	-35.6
Urban	3031.22	2609.68	-13.9	775.4	707.5	-8.8
Rural	1928.43	1948.51	1.0	410.2	429.6	4.7
Total	2408.30	2161.03	-10.3	2389.899	2116.491	-11.4

Source: World Bank staff estimates from survey data.

4.7 At a first read, these huge reductions in the size of allocations and number of participants in a program designed to assist the poor seem troubling in a country where poverty rates are still relatively high. However, in a context of reasonably high growth, sustained over many years, and substantial poverty reduction, it is to be expected that the list of NE participants will decline. The pace of the decline may also be reasonable given the shallow nature of measured poverty in 2002. The question going forward is whether the program has made any gains in terms of reaching and targeting the poor, to which we turn.

B. COVERAGE AND TARGETING PERFORMANCE OF NE

4.8 **The coverage of the poor has improved between 2002 and 2005.** Table D. 6 shows the fraction of households receiving NE between 2002 and 2005. Overall, about 11 percent of the households received NE and this increased only marginally to 13 percent in 2005. However, the fraction of poor households reached by the program in the same period has increased by about 7 percentage points, from 24.6 to 32.5 percent. This is a substantial improvement given that poverty in general fell. Participation across deciles of real per capita consumption reveals two observations. First, coverage of the two lowest deciles, basically all the poor in 2005, increased by 3 percentage points. Second, coverage declines the higher the deciles, but rate of decline is stronger after the middle decile (that is the 5th). For instance, for every 10 participants in the poorest tenth of the households, about 1 in each of the top 2 deciles participates (Table D. 7 and Table D. 8).

Table 4.2: Fraction Receiving NE by Strata and Urban /Rural

	2002			2005		
	Poor	Non Poor	All	Poor	Non Poor	All
Coastal	0.158	0.040	0.058	0.097	0.028	0.036
Central	0.238	0.090	0.119	0.416	0.130	0.179
Mountain	0.463	0.271	0.340	0.450	0.299	0.329
Tirana	0.082	0.022	0.029	0.197	0.020	0.030
Urban	0.263	0.079	0.105	0.329	0.063	0.085
Rural	0.237	0.077	0.115	0.324	0.127	0.165
Albania	0.246	0.078	0.110	0.325	0.095	0.127

Source: World Bank staff estimates from survey data.

4.9 An additional positive feature of the program is the observation that a higher fraction of the households in poorer areas participate in the program. The Mountain areas are generally known to be poorer than the other areas of the country, while the Coast and Tirana are considered the better off areas. In 2005, poverty rates in the Mountain areas were about three times as high as Tirana's and about 58 percent higher than in the Coastal areas. The results in Table D. 6 show that a little more than one-third of all households in the Mountain areas participate in the program, while only 3 percent of households in Tirana and 4 percent in the Coast participate in 2005. Furthermore, almost half of all households classified as poor in the Mountain areas are covered by NE compared to 10 and 20 percent in the Coast and Tirana, respectively.

4.10 Moreover, over time, coverage in rural areas, where more than two-thirds of the poor live, has improved faster than in urban areas. In 2002, about 11 percent of all households in urban and rural areas were reached by the program. By 2005, the coverage rates in rural areas, at about 17 percent, were almost twice as high as the urban rates (9 percent). Unfortunately not all the improvements measured in the rural areas stem from reaching only the rural poor. As Table D. 6 shows improvements in the participation of the poor in urban and rural areas were of the same order of magnitude, but while the coverage of the non-poor declined in urban areas, it expanded in rural areas.

4.11 Coverage of extremely poor is even higher. Table D. 6 and Table D. 4 show trends in the coverage of NE for extremely poor, poor and non-poor households. The poor were split into extreme and non-extreme poor, so as to see more clearly the progress made in covering the extreme poor. The gains in the coverage of the poor excluding the extremely poor remains the same as those presented in Table D. 6. However, the gains in covering the extreme poor have been much larger. Overall, the program reaches about 50 percent of the extreme poor, which is a significant improvement from 2002 when it reached only 30 percent of the extremely poor. In the Mountain and Central areas, the efforts to reach the extreme poor appear to have led to a doubling of the coverage rates. In these areas, about 60 percent of all the extreme poor were reached by the program in 2005 compared to 2002, when only one-third were covered (Table D. 4).

4.12 Amidst the progress is the knowledge that coverage rates remain low and leakage has increased. Only one-third of the poor are participating in the program (Table 4.3). It is lower in some areas, notably the Coast, where only 10 percent of the poor who live in that area are reached by NE. Even in the areas where there has been better success at reaching the poor, such as the Mountain and Central, participation of the poor is at most 45 percent. At the same time, participation of the non-poor in the program has increased. Overall, 8 percent of non-poor households in 2002 were covered, but that has risen to 10 percent in 2005. This increase is observed in rural, Mountain and Central areas. In rural areas, the fraction of the non-poor households who receive benefits increased from 8 percent in 2002 to 13 percent

in 2005, while in Mountain areas it rose from 27 to 30 percent. But in urban and Coastal areas, the coverage of the non-poor declined, while in Tirana it remained the same.

4.13 A look at just NE beneficiaries shows that the fraction of non-poor households who received benefits (“leakage”) has increased between 2002 and 2005 from 57 percent to 64 percent. Across regions, the share of the non-poor households who received benefits increased substantially in the Mountain and Coastal areas, stayed the same in Central and declined marginally in Tirana. An increase in leakage is also observed in the rural areas, where the fraction of non-poor among the beneficiaries increased from 52 to 64 percent.

Table 4.3: Share of the Non-poor Households in the Ndhma Ekonomike Program

	2002	2005
Coastal	57.31	68.89
Central	60.94	60.36
Mountain	50.76	72.32
Tirana	64.59	62.95
Urban	64.75	67.83
Rural	51.62	62.43
Albania	57.33	64.17

Source: World Bank staff estimates from survey data.

C. DECOMPOSING THE TARGETING PERFORMANCE

4.14 The NE is a decentralized program. As currently administered, the NE follows two step allocation process. First, as part of the budget process, the parliament determines total allocations to each commune and municipality on the basis of submissions sent by MOLSA, which themselves are based on the requests and community information submitted by elected councils of communes and municipalities. Once the allocations have been determined, the local government determines eligible households, the transfer amount to each household and whether any conditions (such as a work requirement) are to be met by the household in order to receive benefits (Box 4.1). Therefore, it is easy to see that the decentralized nature of the program affects the overall targeting effectiveness of the program. For instance if the central government allocates most of the funds to the poorer municipalities and the local governments find the poor households in their jurisdiction, the program is likely to reach a higher fraction of the poor and the targeting performance will be higher. By contrast, if most of the funds are allocated to the less poor municipalities or communes, we would expect the targeting performance to be lower even if the local officials put the best effort to find the poor. Similarly, if local officials make no effort to reach the poor or worse, use the funds for patronage, by giving the benefits to the well-connected but not necessarily poor households the targeting will also be low, even if the central allocations are made fairly. Therefore, we decompose the targeting performance to explore how much of the program’s performance in reaching poor families stems from the center’s efforts to reach poor communes (inter-commune component) versus the efforts of the communes to reach their own poor population (intra-commune component). We reach three main conclusions.

Box 4.1: The Ndihma Ekonomike Allocation Process

The Ndihma Ekonomike program was introduced in 1993 in response to persistent unemployment and rising social unrest after the collapse of centrally planned economy, in order to support urban families without any other income source and rural households with small landholdings. At inception, the central government administered funds through local ministry offices. However, in 1995 the program was decentralized as it became clear that the centralized system provided little incentives to local officials to verify eligibility or maintain fiscal discipline.

As currently administered, the elected councils of municipalities and communes assess the needs of their households with respect to several socio-economic indicators and submit their requests for NE funds to the State Social Services (SSS) Administration. The SSS and the MOLSA then submit an overall budget request to the central government for consideration. The National Parliament decides the allocations on the basis of national budget priorities. Once determined, the State Social Services then submits the allotted funds to the Directorate for Programming and Development (DPD) in the Ministry of Labor and Social Affairs, which evaluates priorities at a national level and decides on the final allocation to each commune. Subsequent to the decision of the DPD and the allocation of NE funds to municipalities and communes, the local officials select the recipient households and the benefit level on the basis of broad guidelines provided by the center. The selection of beneficiary household involves three steps.

First, the head of the household applies for NE at the local office and undergoes an interview with a social administrator. Filing of applications for NE occurs monthly whereas the interview by the social administrator is renewed annually. Monthly application requires the head of the household to re-state the income sources of the household as well as any updates regarding the employment status of household members or household property ownership. Second, the social administrator verifies the required information and proposes a list of eligible recipients and estimates the need of each recipient. Third, the elected local council determines the actual benefits for each household. The council has the authority to condition benefits on part-time or full-time participation in community projects.

4.15 **First, the targeting performance is low but has improved over time.** One way to assess the targeting performance is to define the targeting coefficient (TC) as the difference between the share of the poor participating in the program (coverage) and the share of the non-poor participating in the program (leakage) (see Gallaso and Ravallion, 2005). The coefficient lies between -1 and 1. A program which is perfectly targeted to the poor - that is none of the non-poor benefit - and covers all the poor, would have a value of 1, while a program that is perfectly targeted to the non-poor, will have a value of -1 since all of the non-poor would participate in the program, and no poor participates. Finally, the coefficient would be equal to 0 in case of coverage being equal to leakage. As shown in Table 4.4 the targeting coefficient in 2002, at 16.8 percent is low, but that has improved to 23 percent by 2005. The targeting coefficient increased during the period on account of improved coverage of the poor and a much more circumscribed increase in leakage. A similar targeting performance evaluation using transfer values instead shows no significant improvement over time (Table D. 3 and Table D. 16).

Table 4.4: Decomposing Targeting Performance Using Participation Ratios of Poor and Non-Poor

	2002			2005		
	Overall	Intra-commune	Inter-commune	Overall	Intra-commune	Inter-commune
Central	0.147	0.115	0.033	0.286	0.182	0.104
Coastal	0.118	0.084	0.034	0.069	0.066	0.003
Mountain	0.192	0.161	0.031	0.151	0.159	-0.007
Tirana	0.06	0.06	0	0.177	0.172	0.005
Urban	0.184	0.164	0.02	0.266	0.234	0.032
Rural	0.16	0.073	0.087	0.197	0.1	0.097
National	0.168	0.105	0.062	0.23	0.144	0.086

Source: World Bank staff estimates from survey data.

4.16 Second, intra-commune component, or the effort of the communes and municipalities to reach their own poor, explains more than two thirds of the targeting performance. The decomposition of the targeting coefficient shows that at least two-thirds of the targeting performance at the national level is attributable to the efforts of the local officials to identify and reach the poor. Furthermore, over time, this local effort has improved in the Coastal and Mountain areas and remained the same in Tirana. In Central areas, the targeting performance almost doubled – the coefficient increased from 0.15 to 0.29. However, over three-fourth of the performance was attributable to local effort, while about two-third can be explained by local effort in 2005 (Table D. 9).

4.17 **Finally, targeting performance in urban areas improved faster compared to rural areas.** The targeting coefficients in urban and rural areas, measured as 18 and 16 percent, respectively, were separated by little in 2002. But by 2005, the targeting performance in urban areas had improved by 50 percent, from 18 to 27 percent, while rural performance increased by half as much, that is 25 percent. This has happened within a context where there were large reductions in allocations to the urban areas, especially Tirana, relative to rural areas. The decomposition of the targeting performance shows that local efforts explain almost all the measured performance in urban areas, while in rural areas, local efforts explain just about half of the measured targeting performance. In fact, only in rural areas does the center’s effort appear to explain as much as the local effort, in the targeting performance, as measured. That said, the decompositions also show that the fraction of the performance explained by the local effort has improved, albeit slowly (Table 4.4).

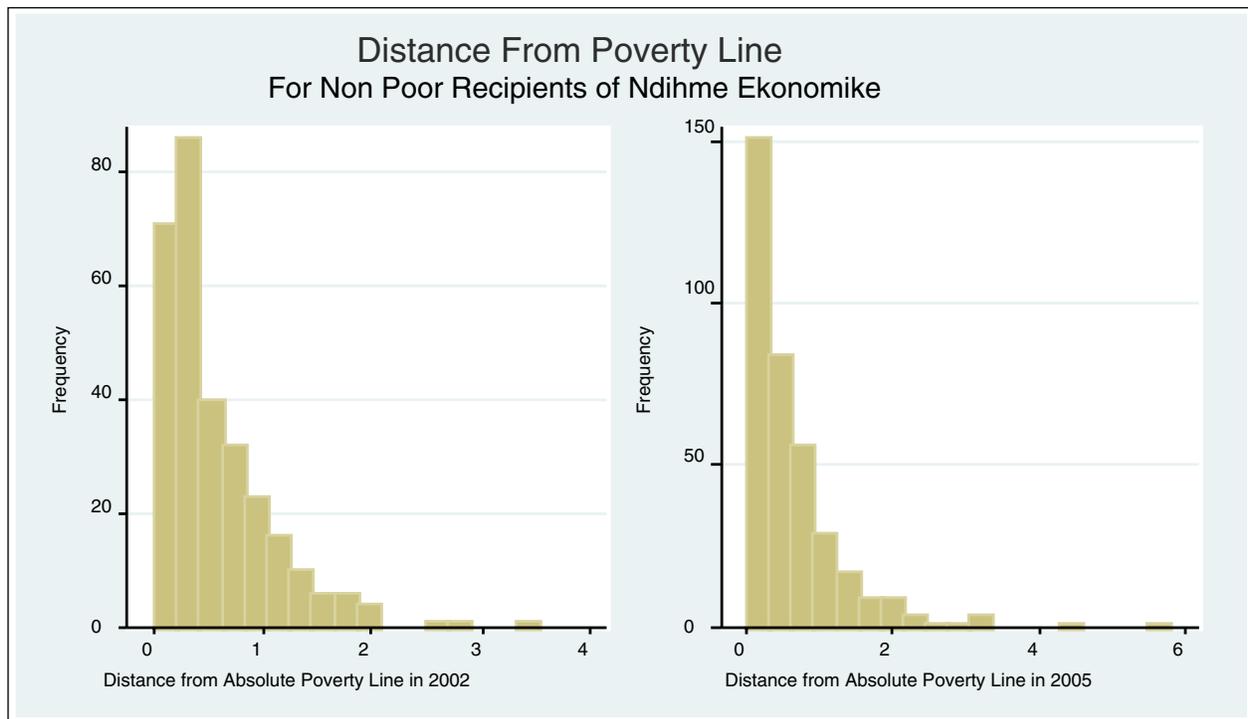
D. DETERMINANTS OF PARTICIPATION AND BENEFITS

4.18 To recap, the evidence suggests that coverage is low but has improved, and the improvement is even more pronounced for the extreme poor, between 2002 and 2005. Moreover, the larger gains have been recorded in areas, such as rural and Mountain, where majority of the poor live. However, as the evidence shows, not only do many non-poor households remain in the program, but their share among the beneficiaries has increased during the same period.

4.19 One reason for the continued presence of the non-poor in the list of participants could be just inertia. That is, in the context of a major structural transformation and poor information technology to monitor households’ changing welfare status, local administrators may be just a step behind in identifying those who should exit the program. Alternatively, the non-poor remain on the list because there is perhaps something that local officials know about the true welfare conditions of these households that is missed by an impartial instrument like consumption aggregate. This could be true especially if many of

the households who would be considered non-poor on the basis of their reported consumption and poverty line are vulnerable and the local officials judge them as poor anyway. In fact, the evidence shows that 60 percent of the non-poor who receive benefits are on average 25 percent above the poverty line (Table D. 30 see also Table D. 29), which fits precisely the definition of vulnerability adopted in this report. This leads us to an exploration of the determinants of participation and benefit levels.

Figure 4.3: Distribution of the Non-poor Participants in NE by Distance of Real Per Capita Consumption from the Poverty Line



4.20 We start by looking at some variables which are used as guidelines by local officials for using eligibility for NE. Then we extend the analysis to include a larger set of variables including shocks, NE allocations as a way to capture some of the local information that local officials may be using, in addition to the guidelines, to include households. We contrast these models with one where only household observables are used. In both cases we also try and estimate how well the two models predict poverty. We summarize the results below.

4.21 **First, the program appears to screen well on the basis of the administrative guidelines.** This observation is based solely on the fact that nearly all the variables which are supposed to be used by the local officials to determine eligibility do indeed determine eligibility – that is, the coefficients have the right signs and nearly all are statistically significant. For example, households where there is a pension recipient, which have larger land holdings and where there are more workers and/or the head of the household works are all less likely to participate in the program as would be expected. Similarly, households with a divorced/separated head, with more children or live in the Mountain areas are more likely to participate Box 4.1 and (Table D. 25).

Box 4.2 : Screening Guidelines and Benefit Levels

Screening guidelines and benefit levels: Currently, a household is ineligible for NE if they have at least one member that (i) owns stakes/shares of any kind other than the dwelling and agricultural land; (ii) is economically active (employer, employee, or self-employed), (iii) is abroad for any reason other than education, medical treatment, diplomatic work, or assignment at an international organization, (iv) is not registered as unemployed jobseekers, with the exception of members of agricultural households, labor invalids, the disabled, paraplegics, and tetraplegics, (v) refuses to take up employment offers by the employment office and/or do not participate in community works organized by the municipality or in vocational training courses when unemployed, able and of working age; (vi) does not withdraw the NE amount approved by the municipality/commune council within 6 working days of funds becoming available at the bank; and (vii) takes purposeful actions to benefit unmerited NE. It should also be noted that agricultural households with land holdings are only entitled to partial social assistance.

Once a household is found to be eligible, the potential monthly compensation consists of the following: for each eligible member (i) 2600 Lek for the head of the household, (ii) 2600 Lek each household member above working age (18+), (iii) 600 Lek for each household member of working age, and (iv) 700 Lek for each household member under working age. In any case, the potential monthly NE, regardless of household composition, cannot exceed 7000 Lek. To calculate the household's actual monthly NE benefit, the social administrator first calculates the earnings of a NE eligible household. These earnings include revenues from (i) non-farm economic activities, (ii) different schemes of social protection, and (iii) any type of capital, land production, and livestock. The social administrator then subtracts the actual earnings from the potential monthly NE to determine the actual level of NE that an eligible household may receive.

4.22 **Second, local information matters.** Other variables that are not in the guidelines, but which matter to household welfare, are found to be relevant for program participation. Key among these are, shocks such as loss of a job or illness. This is as it should be. It is one of the strengths of the program. The statistically significant results in Table D. 27 suggest that both these shocks appear to be taken into consideration by local officials. Because these are marginal effects, the results suggest that an exogenous shock that leads to a loss of a job increases the probability of being included in NE by 6 percentage points. The likelihood of participation is 3 percentage points higher for a health shock (illness).

4.23 **Third, history of participation is associated with higher benefit levels.** Those who have remained longer on the list of participants appear to receive higher benefit levels. An additional month longer as an NE participant is associated with 47 Lek per month more in benefits (using the pooled results). And while this has declined from 57 to 39 Lek per month between 2002 and 2005, the fact remains that it is positive and statistically significant. The main reason to be concerned about this result is that paying higher benefits to staying longer in the program might lead to less effort to find alternative sources of income – that is, there is a potential that it creates incentives that keep households from engaging in more productive and remunerative activities such as nonagricultural wage participation. Preliminary evidence suggests that those who receive NE depend on NE for most of their social protection (Table D. 21 and Table D. 22) and supply less labor. Otherwise, the other determinants of benefit levels are consistent with expectations. Benefit levels are higher for families that have dissolved (divorced or separated) and live in Mountain and Central area (compared to Coastal area), while they decline with increasing decile rank. They also decrease for households with bigger pensions, more workers in the household, a working head of household, and those living in Tirana.

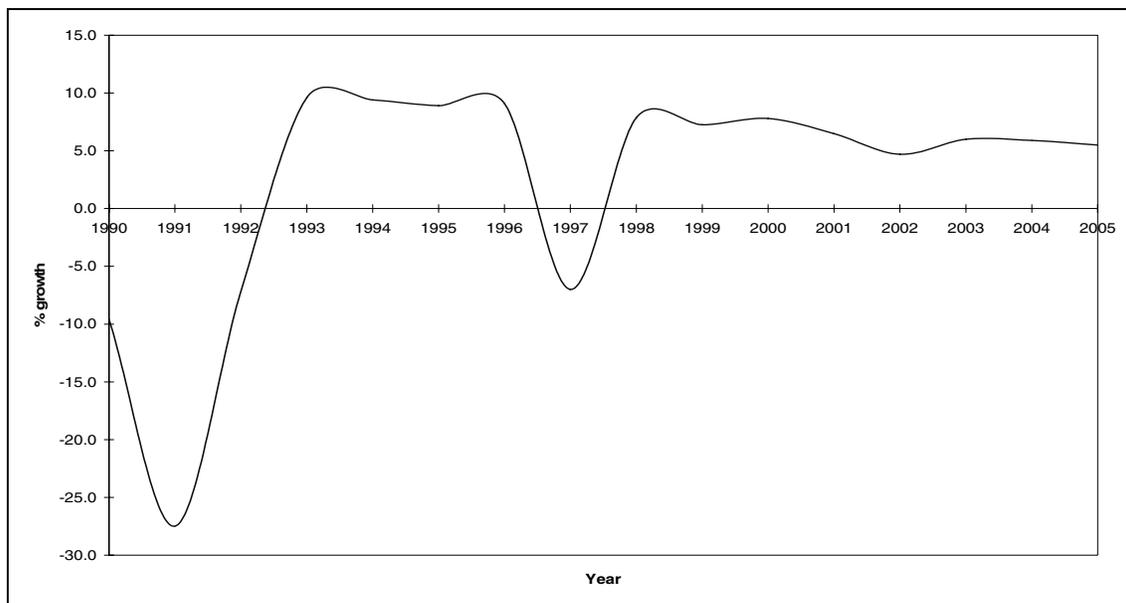
4.24 **Finally, the variables used as guidelines to include or exclude households in NE have low predictive power with regard to poverty status.** Table D. 28 uses the same variables that are used as guideline by local officials to determine eligibility for the NE to predict the poverty status of households. In other words, we ask how well these variables would predict the poverty status of households obtained from the LSMS 2005. The results show that only 29 percent of the poor would be predicted as poor by these variables. The prediction is a bit better in Mountain areas where 34 percent of the poor would be predicted as such, but performs badly in areas like Tirana, where only 16 percent of the poor would be predicted as poor. By comparison a model that relies on easily observable and verifiable household information is shown to do better. Using observable dwelling characteristics such as whether or not household has running water, modern toilet, or assets such as a vehicle, satellite dish, gas stove and so on increases the prediction by 38 percent (Table D. 29). That is, a model using only household level assets or dwellings would predict 40 percent of poor as poor compared to 29 percent using “guideline” variables. In some cases, such as Tirana, it more than doubles the predicted value (the expected number of the poor). Furthermore, the results from such a model are less volatile than the results of “guideline” variables.

Conclusion

4.25 The NE program is small. In 2005, it absorbed only 0.4 percent of GDP and just 6 percent of all social protection spending. However it covers 15 percent of households and as the main mechanism to reach the poor, its role may be more important than implied by the budget shares. In recent years, NE allocations to communes and the number of participating families have dropped significantly. So have levels of benefit per family. On the positive side, coverage of the poor has improved, although it remains low. The improvements have come partly from the large reduction in poverty, but perhaps also from the efforts to identify the poor in the poorer places such as the Mountain and Rural areas. Unfortunately, the participation of the non-poor has also increased at the same time. An attractive feature of the program is its decentralized nature and the evidence here suggests that most of the gain in improving better coverage of the poor is attributable to the efforts of the local officials to reach the poor under their administration.

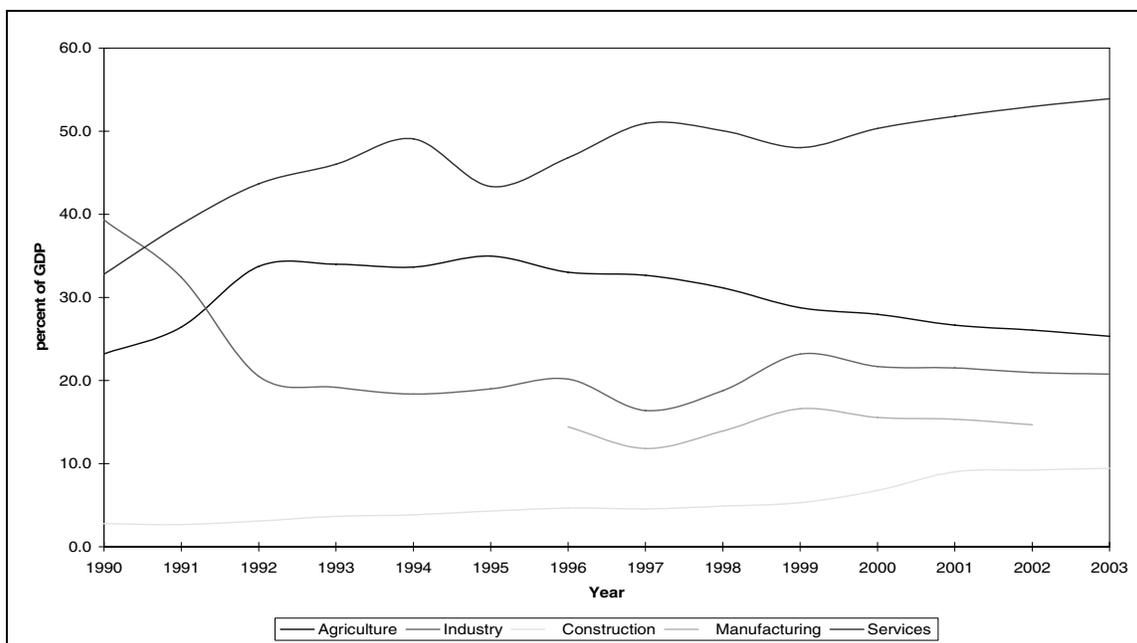
ANNEX A: GROWTH, POVERTY AND INEQUALITY

Figure A. 1: GDP Growth Rates



Source: WDI and Albania Live Database.

Figure A. 2: Sectoral Composition of GDP



Source: WDI and Albania Live Database.

Figure A. 3: Employment Rate by Age-Groups; 2002, 2005

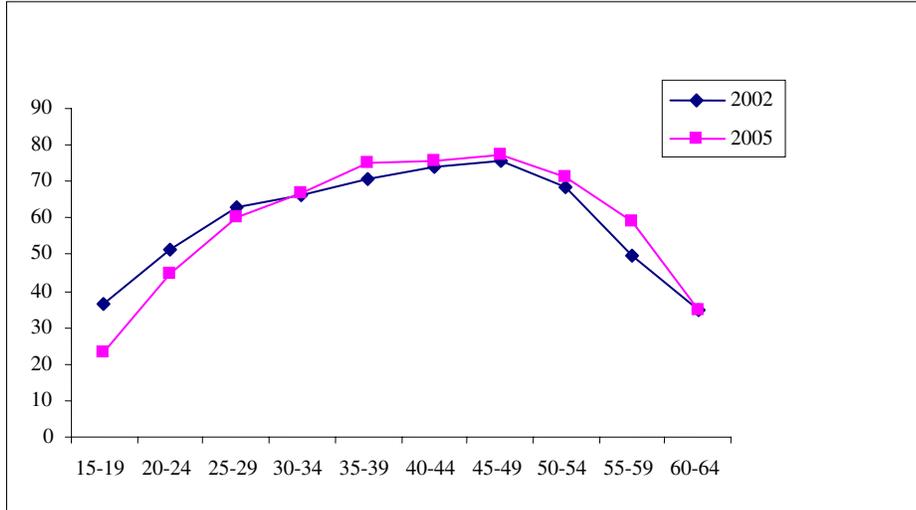


Figure A. 4: Cumulative Density Functions-National, Rural and Urban: 2002-2005

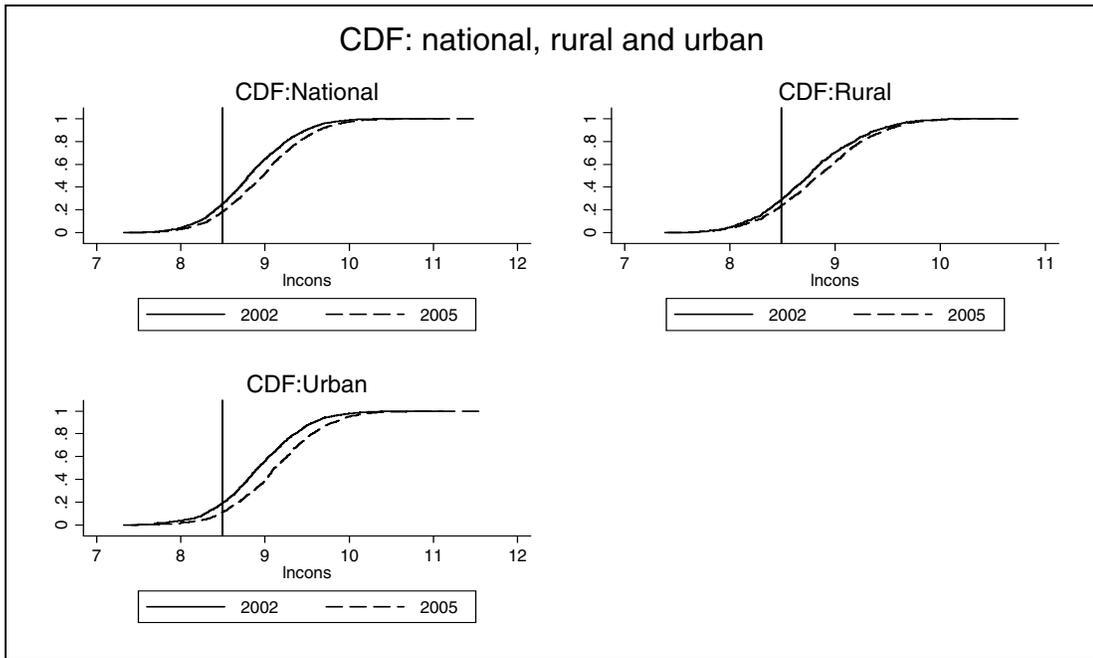


Figure A. 5: Cumulative Density Functions-Tirana and Other Urban: 2002-2005

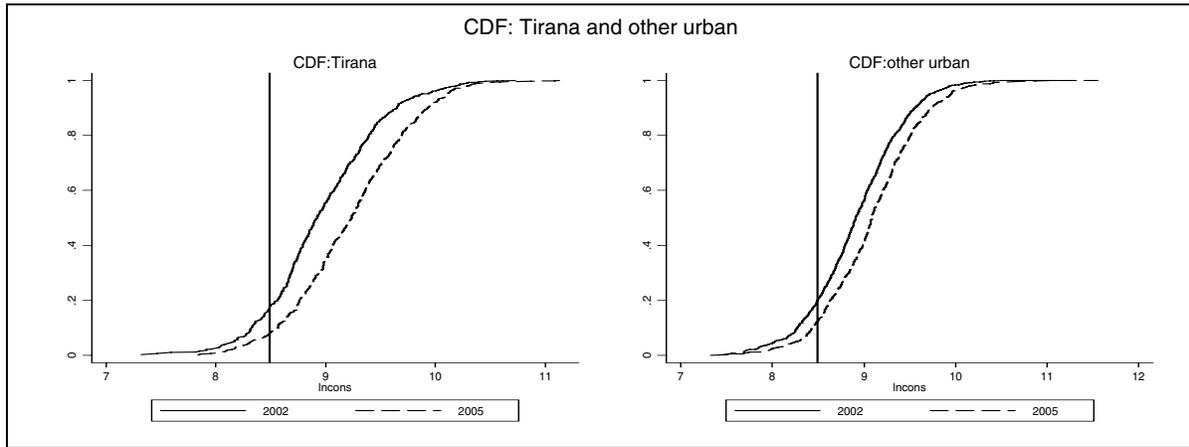


Figure A. 6: Cumulative Density Functions-Coast Area: 2002-2005

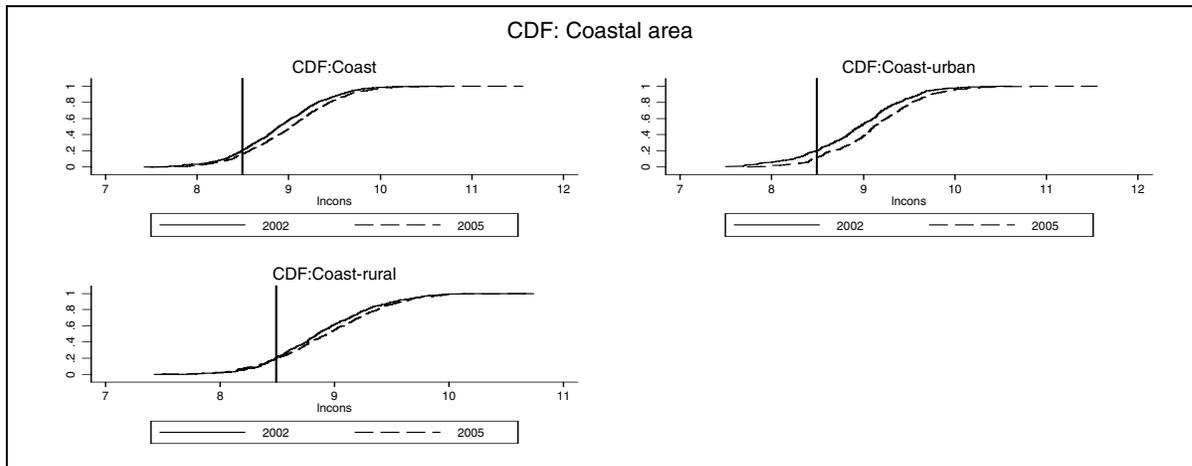


Figure A. 7: Cumulative Density Functions-Central Area: 2002-2005

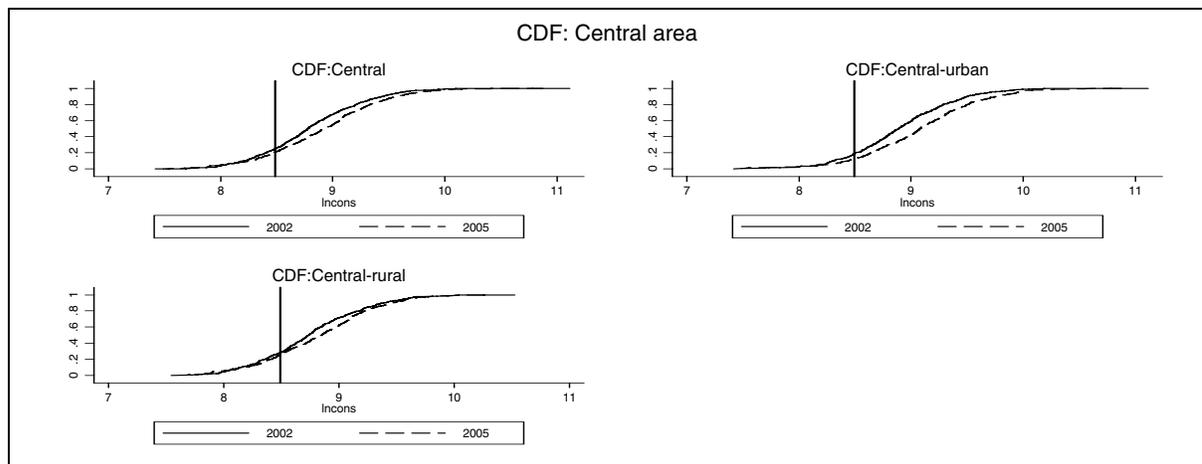


Figure A. 8: Cumulative Density Functions-Mountain Area: 2002-2005

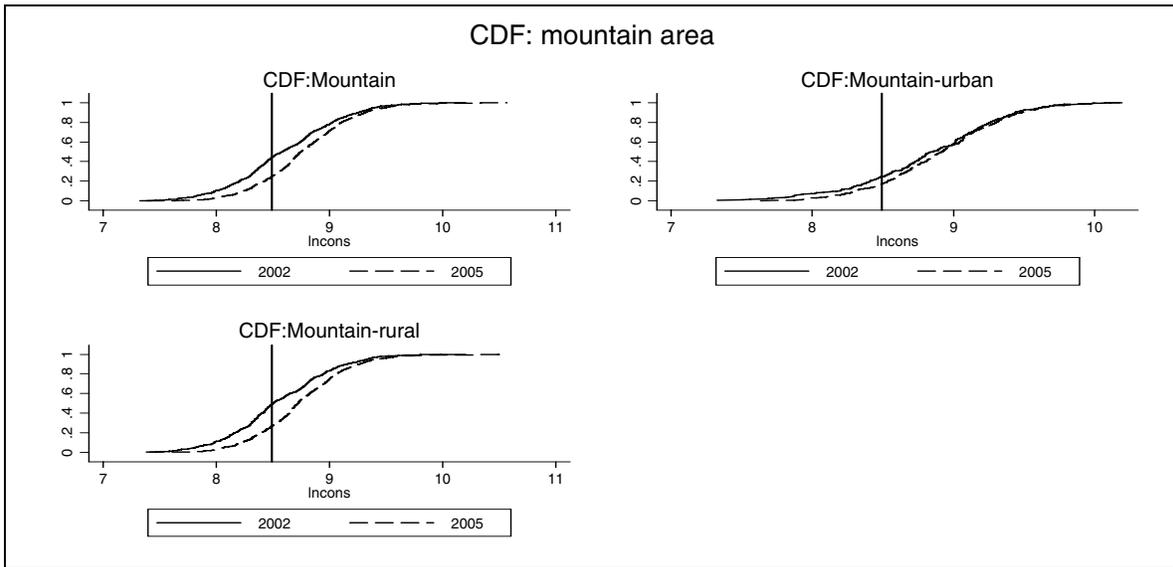


Figure A. 9: Proportion of People Living in Dwelling with Tap Water Inside

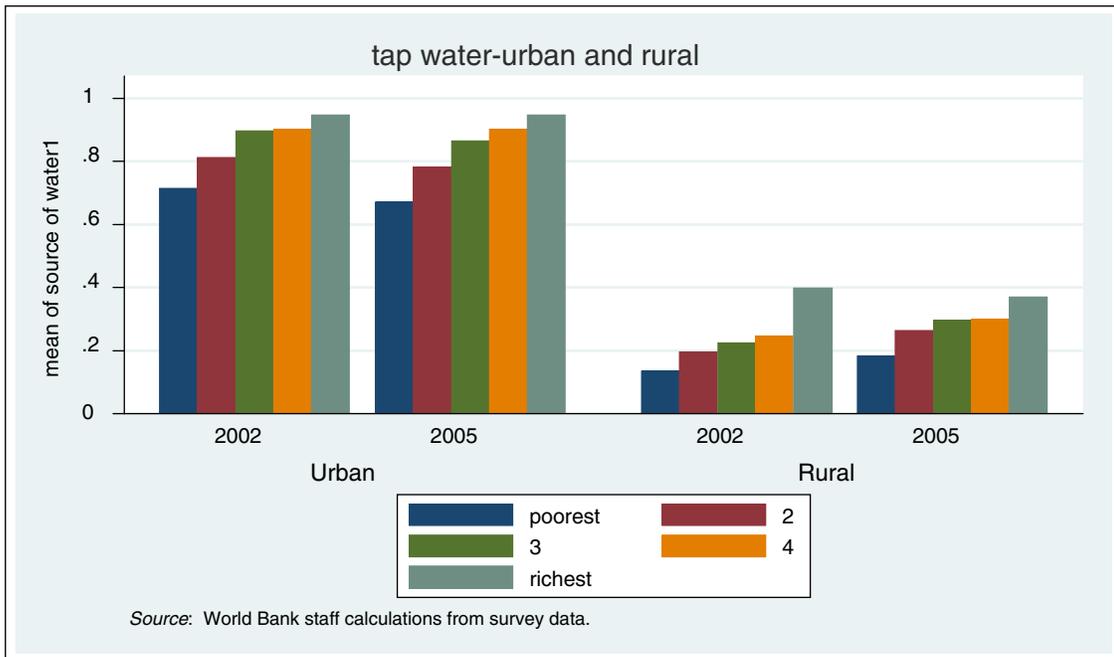


Figure A. 10: Proportion of People Living in Dwelling with Tap Water Inside, Urban

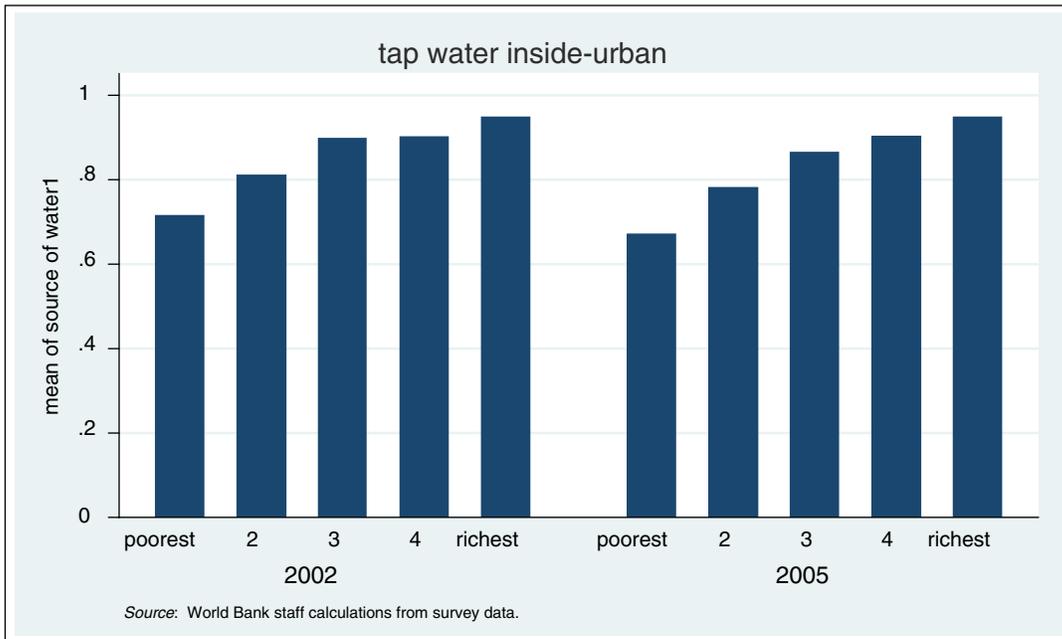


Figure A. 11: Proportion of People with Tap Water Inside Dwelling, Rural

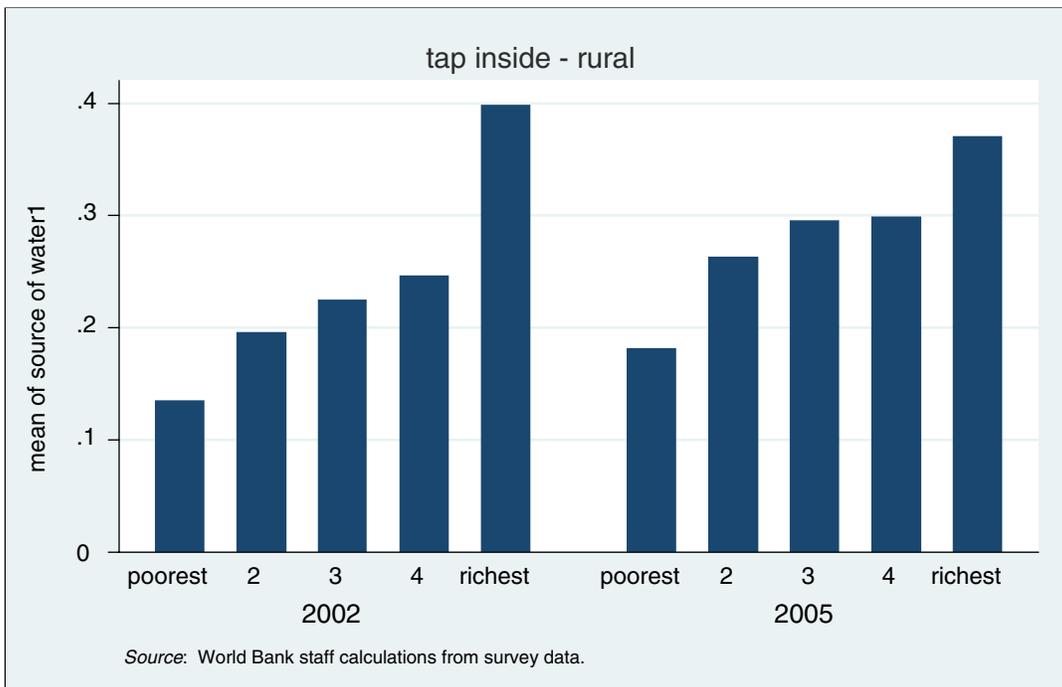


Figure A. 12: Poverty Incidence for Different Economies of Size Parameters, 2005

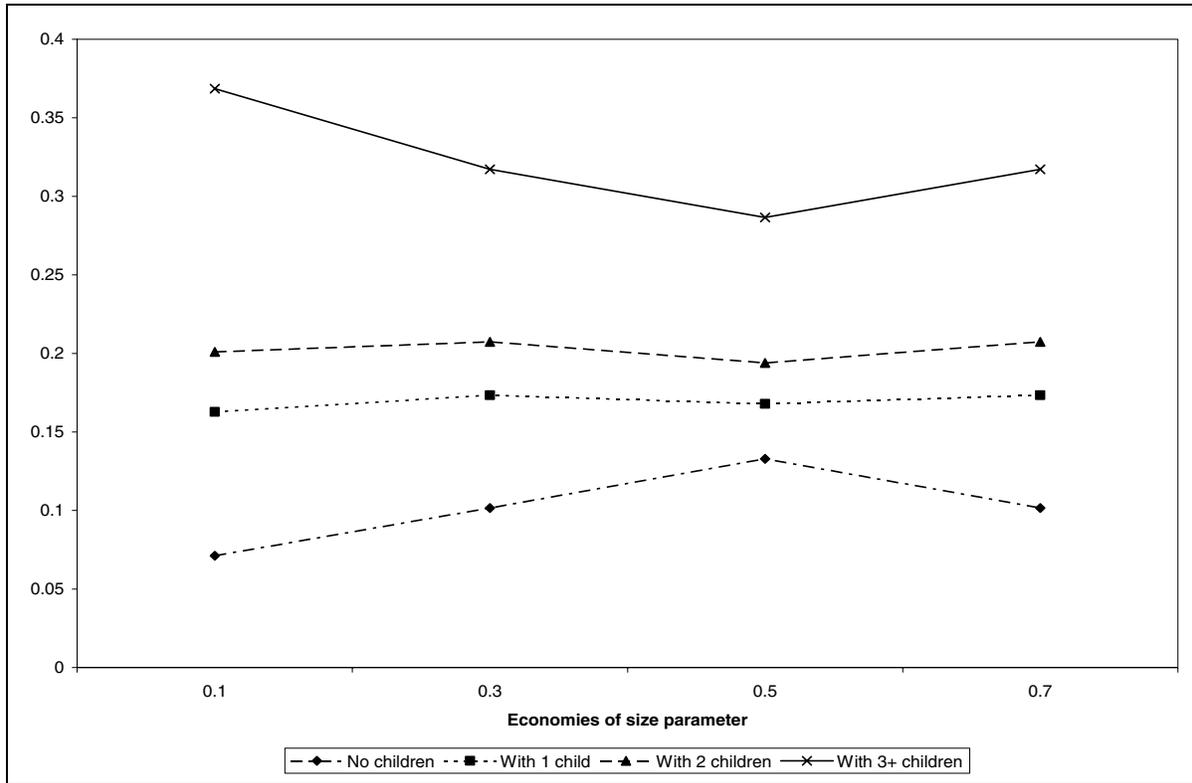


Figure A. 13: Poverty Incidence Different Economies of Size Parameters, 2005

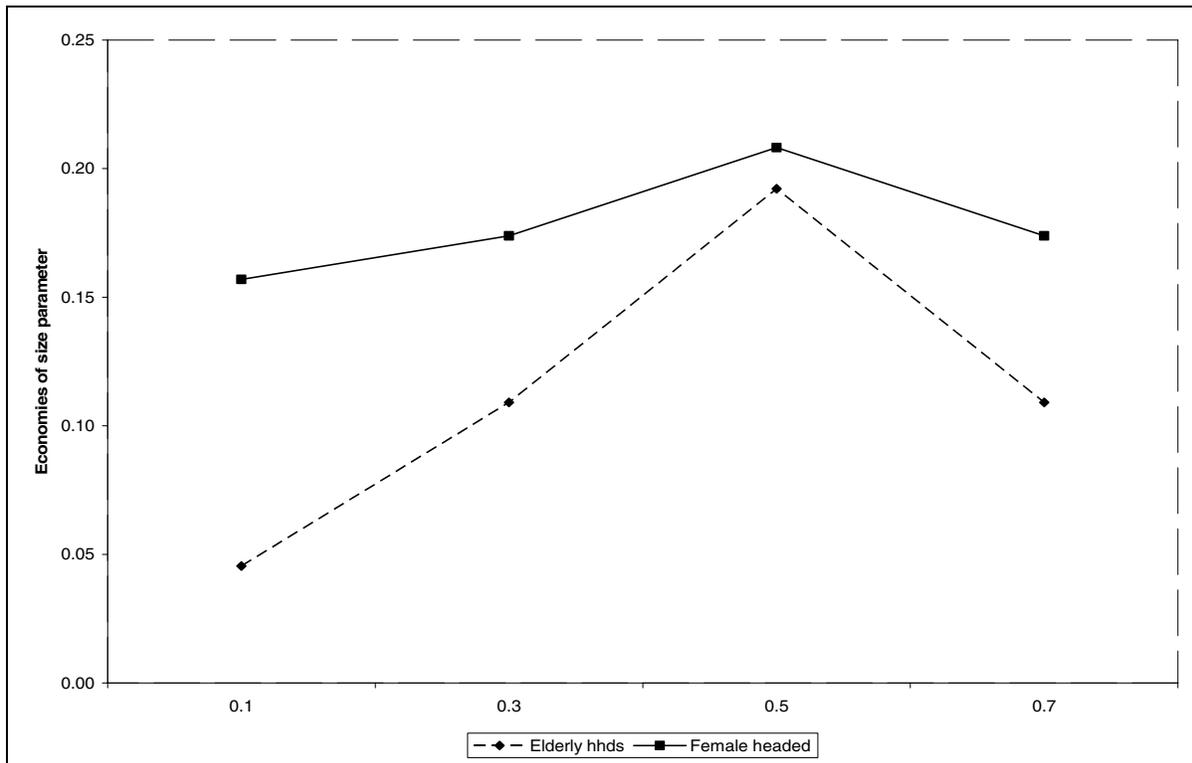


Table A. 1: Albania: Trends in Real GDP and Sectoral Growth

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Sector share																
Agriculture	23.2	26.4	33.7	34.0	33.7	35.0	33.0	32.7	31.1	28.8	28.0	26.7	26.1	25.3		
Industry	39.3	32.4	20.5	19.2	18.4	19.0	20.2	16.4	18.8	23.2	21.7	21.5	21.0	20.8		
Construction	2.8	2.7	3.1	3.7	3.8	4.3	4.7	4.6	4.9	5.3	6.8	9.0	9.2	9.4		
Manufacturing							14.4	11.8	13.9	16.6	15.5	15.3	14.7			
Services	32.8	38.8	43.7	46.0	49.1	43.4	46.8	50.9	50.1	48.0	50.3	51.8	53.0	53.9		
Percent growth																
GDP	-9.6	-27.5	-7.2	9.6	9.4	8.9	9.1	-7.0	7.9	7.3	7.8	6.5	4.7	6.0	5.9	5.5
Agriculture	3.6	-17.4	18.5	10.4	8.3	13.2	3.0	-9.7	4.9	0.4	4.5	3.0	2.3	3.0		
Industry	-6.0	-40.2	-41.3	2.5	4.7	12.6	15.9	-25.8	26.1	34.2	0.5	7.2	2.0	5.0		
Construction		-29.9	7.0	30.0	15.0	21.2	18.4	-10.5	18.0	17.8	37.2	43.9	7.1	8.5		
Manufacturing								-25.1	29.5	29.6	0.7	6.5	0.3			
Services	-35.2	-14.1	4.4	15.5	16.6	-3.8	17.8	-0.6	8.1	4.3	12.7	11.1	7.1	7.9		

Source: WDI 2003 for GDP growth rates. Albania Live Database for sectoral composition and sectoral growth rates.

Table A. 2: Summary of Key Variables

Variable	2002		2005		Test of difference in means
	Mean	Standard error	Mean	Standard error	P-values
Total consumption	7801	82.5	9105	105.1	0.001
Food	4906	51.4	5159	53.1	0.001
Nonfood	1655	30.9	2457	48.9	0.001
Education	177	7.5	275	12.6	0.001
Utilities	958	12.4	1087	13.4	0.001
Durables	105	3.1	128	34.2	0.67
Household size	4.3	1.8	4.2	1.7	
Extreme poverty line	3047.0		3047.0		
Absolute poverty line	4891.0		4891.0		
One dollar a day	1888.0		1888.0		
Two dollars a day	3775.0		3775.0		
Four dollars a day	7549.0		7549.0		
Relative poverty line	7671.4		8683.0		

Note: Total consumption, food, nonfood, education, utilities and durables are all in per capita and in 2002 prices. The standard errors presented account for stratification and are computed using the svymean command of STATA. Note that the hypothesis of equal means in expenditures in both years is rejected in all cases, except for durables.

Table A. 3: Expenditure Shares of Food Components

Variable	2002	2005
Bread and pastries	7.1	6.0
Cereals, flour and pasta	9.6	10.6
Meat	20	19.4
Fish	1.2	1.2
Milk and dairy products	21.3	22.1
Oil	7.1	6.1
Fruits	4.3	4.7
Vegetables and legumes	14.7	18.2
Conserved and frozen vegetables	1.9	0.0
Sugar and confectionaries	3.7	3.4
Condiment and spices	0.5	0.7
Non-alcoholic beverages, tea and coffee	3.6	2.8
Miscellaneous	0.3	0.1
Food eaten out	4.5	4.7

Table A. 4: Shares of Real Per Capita Consumption

Consumption component	2002	2005
Food	64.5	59.2
Non-food	19.4	24.8
Utilities	12.6	12.6
Education	2.3	2.4
Durables	1.2	0.9

Table A. 5: Growth in Real Per Capita Consumption, by Stratum, 2002-2005

Stratum	2002			2005			Consumption Growth rate		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Coast	8809.9	8122.5	8419.3	10750.5	8693.9	9580.5	1.22	1.07	1.14
Central	8264.6	7136.6	7496.1	10088.5	7670.8	8510.6	1.22	1.07	1.14
Mountain	7795.9	5759.5	6168.3	8159.2	6888.1	7140.6	1.05	1.20	1.16
Tirana	9042.6		9042.6	11812.5		11812.5	1.31		1.31
Total	8624.2	7211.6	7800.8	10690.1	7867.7	9108.0	1.24	1.09	1.17

Table A. 6: Trends in Extreme Poverty, by Stratum: 2002-2005

Stratum	Poverty measure	2002			2005		
		Urban	Rural	Total	Urban	Rural	Total
Coast	Headcount	5.9	1.8	3.6	1.8	2.5	2.2
	Depth	1.2	0.3	0.7	0.2	0.4	0.3
	Severity	0.3	0.1	0.2	0.0	0.1	0.1
Central	Headcount	3.4	5.1	4.6	3.5	6.0	5.2
	Depth	0.5	0.5	0.5	0.8	0.9	0.9
	Severity	0.2	0.1	0.1	0.3	0.2	0.2
Mountain	Headcount	7.8	11.6	10.8	2.6	3.4	3.2
	Depth	1.6	2.1	2.0	0.3	0.4	0.4
	Severity	0.5	0.5	0.5	0.0	0.1	0.1
Tirana	Headcount	2.3		2.3	1.0		1.0
	Depth	0.6		0.6	0.1		0.1
	Severity	0.2		0.2	0.0		0.0
Total	Headcount	4.1	5.2	4.7	2.2	4.5	3.5
	Depth	0.8	0.7	0.8	0.4	0.7	0.5
	Severity	0.2	0.2	0.2	0.1	0.1	0.1

Table A. 7: Trends in Extreme Poverty by Urban and Rural: 2002-2005

Area	Poverty measure	2002	2005
Tirana	Headcount	2.3	1.0
	Depth	0.6	0.1
	Severity	0.2	0.0
Other urban	Headcount	4.8	2.7
	Depth	0.9	0.5
	Severity	0.2	0.1
Rural	Headcount	5.2	4.5
	Depth	0.7	0.7
	Severity	0.2	0.1
Total	Headcount	4.7	3.5
	Depth	0.8	0.5
	Severity	0.2	0.1

Table A. 8: Trends in Absolute Poverty by Stratum: 2002-2005

Stratum	Poverty measure	2002			2005		
		Urban	Rural	Total	Urban	Rural	Total
Coast	Headcount	20.2	20.9	20.6	11.6	19.7	16.2
	Depth	5.4	3.6	4.4	2.0	4.1	3.2
	Severity	2.1	1.0	1.5	0.6	1.3	1.0
Central	Headcount	19.3	28.5	25.6	12.5	25.9	21.2
	Depth	3.8	6.5	5.7	3.0	6.0	5.0
	Severity	1.2	2.1	1.8	1.2	2.1	1.8
Mountain	Headcount	24.7	49.5	44.5	17.1	27.7	25.6
	Depth	6.5	12.3	11.1	3.6	5.5	5.1
	Severity	2.6	4.4	4.1	1.1	1.7	1.5
Tirana	Headcount	17.8		17.8	8.1		8.1
	Depth	3.8		3.8	1.6		1.6
	Severity	1.3		1.3	0.5		0.5
Total	Headcount	19.5	29.6	25.4	11.2	24.2	18.5
	Depth	4.5	6.6	5.7	2.3	5.3	4.0
	Severity	1.6	2.1	1.9	0.8	1.8	1.3

Table A. 9: Trends in Absolute Poverty by Urban and Rural: 2002-2005

Area	Poverty measure	2002	2005
Tirana	Headcount	17.8	8.1
	Depth	3.8	1.6
	Severity	1.3	0.5
Other urban	Headcount	20.1	12.4
	Depth	4.7	2.6
	Severity	1.7	0.9
Rural	Headcount	29.6	24.2
	Depth	6.6	5.3
	Severity	2.1	1.8
Total	Headcount	25.4	18.5
	Depth	5.7	4.0
	Severity	1.9	1.3

Table A. 10: Two Dollars-a-day Poverty Rates by Stratum: 2002-2005

Stratum		2002			2005		
		Urban	Rural	Total	Urban	Rural	Total
Coast	Headcount	9.7	6.8	8.1	3.6	8.1	6.2
	Depth	2.5	1.0	1.7	0.6	1.3	1.0
	Severity	0.8	0.3	0.5	0.1	0.4	0.3
Central	Headcount	5.9	13.2	10.9	5.2	11.7	9.5
	Depth	1.3	2.3	1.9	1.4	2.4	2.1
	Severity	0.4	0.5	0.5	0.6	0.7	0.6
Mountain	Headcount	12.0	24.4	21.9	7.3	10.2	9.6
	Depth	3.1	5.1	4.7	1.1	1.7	1.6
	Severity	1.2	1.6	1.5	0.3	0.4	0.4
Tirana	Headcount	6.7		6.7	3.5		3.5
	Depth	1.4		1.4	0.5		0.5
	Severity	0.5		0.5	0.1		0.1
Total	Headcount	7.7	13.1	10.8	4.4	10.3	7.7
	Depth	1.8	2.3	2.1	0.9	1.9	1.5
	Severity	0.6	0.6	0.6	0.3	0.5	0.4

Table A. 11: Four Dollars-a-day Poverty Rates: 2002-2005

Stratum		2002			2005		
		Urban	Rural	Total	Urban	Rural	Total
Coast	Headcount	47.9	55.7	52.3	33.3	49.5	42.6
	Depth	15.4	16.1	15.8	9.2	14.9	12.4
	Severity	7.0	6.2	6.5	3.5	6.1	5.0
Central	Headcount	53.6	66.6	62.5	36.8	56.5	49.7
	Depth	15.2	21.6	19.6	10.8	18.7	15.9
	Severity	6.0	9.1	8.1	4.5	8.2	6.9
Mountain	Headcount	54.5	78.9	74.0	50.9	68.9	65.3
	Depth	18.4	30.9	28.4	14.6	21.1	19.8
	Severity	8.4	14.9	13.6	5.7	8.5	7.9
Tirana	Headcount	50.5		50.5	29.5		29.5
	Depth	14.5		14.5	7.5		7.5
	Severity	5.8		5.8	2.8		2.8
Total	Headcount	51.0	65.3	59.3	34.4	56.3	46.7
	Depth	15.3	21.4	18.9	9.5	17.9	14.2
	Severity	6.4	9.2	8.0	3.7	7.6	5.9

Table A. 12: Relative Poverty Line, OECD Scale, Relative Poverty Line on Real Per Capita Consumption

Stratum		2002			2005		
		Urban	Rural	Total	Urban	Rural	Total
Coast	Headcount	13.2	10.0	11.3	9.8	17.3	14.1
	Depth	3.1	1.5	2.2	1.6	3.0	2.4
	Severity	1.0	0.4	0.7	0.4	0.8	0.7
Central	Headcount	9.0	16.8	14.3	12.0	24.3	20.0
	Depth	1.7	3.1	2.6	2.8	5.0	4.3
	Severity	0.5	0.8	0.7	1.1	1.6	1.4
Mountain	Headcount	12.9	26.6	23.9	15.5	21.6	20.4
	Depth	3.3	5.4	5.0	2.5	3.7	3.5
	Severity	1.2	1.7	1.6	0.7	1.0	0.9
Tirana	Headcount	9.1		9.1	7.5		7.5
	Depth	1.9		1.9	1.4		1.4
	Severity	0.7		0.7	0.4		0.4
Total	Headcount	10.6	16.3	13.9	10.2	21.6	16.6
	Depth	2.3	3.0	2.7	2.0	4.2	3.2
	Severity	0.8	0.8	0.8	0.7	1.2	1.0

Table A. 13: Decomposition of Changes in Poverty 2002-2005: National

	Total change in poverty	Growth component	Redistribution component	Interaction component
Change in P0	-6.878	-9.272	2.188	0.205
Change in P1	-1.711	-2.495	1.024	-0.239
Change in P2	-0.584	-0.917	0.487	-0.154

Source: World Bank staff calculations from survey data.

Table A. 14: Decomposition of Changes in Poverty 2002-2005: Coast

	Total change in poverty	Growth component	Redistribution component	Interaction component
Change in P0	-4.382	-7.291	3.121	-0.212
Change in P1	-1.241	-1.711	0.766	-0.296
Change in P2	-0.518	-0.599	0.205	-0.124

Source: World Bank staff calculations from survey data.

Table A. 15: Decomposition of changes in Poverty 2002-2005: Central

	Total change in poverty	Growth component	Redistribution component	Interaction component
Change in P0	-4.324	-7.695	3.63	-0.259
Change in P1	-0.718	-2.163	1.707	-0.262
Change in P2	-0.04	-0.802	0.945	-0.183

Source: World Bank staff calculations from survey data.

Table A. 16: Decomposition of Changes in Poverty 2002-2005: Mountain

	Total change in poverty	Growth component	Redistribution component	Interaction component
Change in P0	-18.965	-14.084	-7.434	2.553
Change in P1	-6.01	-4.2	-2.495	0.685
Change in P2	-2.509	-1.69	-1.158	0.34

Source: World Bank staff calculations from survey data.

Table A. 17: Decomposition of Changes in Poverty 2002-2005: Tirana

	Total change in poverty	Growth component	Redistribution component	Interaction component
Change in P0	-9.673	-11.148	2.216	-0.741
Change in P1	-2.118	-2.423	0.616	-0.311
Change in P2	-0.808	-0.829	0.215	-0.194

Source: World Bank staff calculations from survey data.

Table A. 18: Decomposition of Changes in Poverty 2002-2005: Other Urban Areas (excluding Tirana)

	Total change in poverty	Growth component	Redistribution component	Interaction component
Change in P0	-7.699	-8.584	2.106	-1.22
Change in P1	-2.134	-2.254	0.423	-0.303
Change in P2	-0.792	-0.86	0.126	-0.058

Source: World Bank staff calculations from survey data.

Table A. 19: Decomposition of Changes in Poverty 2002-2005: Rural Areas

	Total change in poverty	Growth component	Redistribution component	Interaction component
Change in P0	-5.355	-6.407	0.219	0.833
Change in P1	-1.285	-1.808	0.531	-0.008
Change in P2	-0.39	-0.674	0.323	-0.039

Source: World Bank staff calculations from survey data.

Table A. 20: Decomposition of Changes in Poverty 2002-2005: Coastal Rural Areas

	Total change in poverty	Growth component	Redistribution component	Interaction component
Change in P0	-1.092	-5.504	2.195	2.217
Change in P1	0.478	-1.005	1.612	-0.129
Change in P2	0.28	-0.299	0.703	-0.123

Source: World Bank staff calculations from survey data.

Table A. 21: Decomposition of Changes in Poverty 2002-2005: Central Rural Areas

	Total change in poverty	Growth component	Redistribution component	Interaction component
Change in P0	-2.607	-3.972	3.101	-1.736
Change in P1	-0.538	-1.491	1.037	-0.084
Change in P2	-0.005	-0.58	0.629	-0.055

Source: World Bank staff calculations from survey data.

Table A. 22: Decomposition of Changes in Poverty 2002-2005: Mountain Rural Areas

	Total change in poverty	Growth component	Redistribution component	Interaction component
Change in P0	-21.851	-18.953	-5.087	2.189
Change in P1	-6.796	-5.516	-1.987	0.708
Change in P2	-2.761	-2.191	-0.89	0.32

Source: World Bank staff calculations from survey data.

Table A. 23: Trends in Inequality by National, Urban and Rural: 2002-2005

	National		Rural		Urban	
	2002	2005	2002	2005	2002	2005
Relative mean deviation	20.2	21.1	19.5	19.5	20.4	21.1
Coefficient of variation	55.9	62.3	53.0	53.8	56.9	63.4
Standard deviation of logs	50.0	52.7	47.7	48.8	51.6	53.3
Gini coefficient	28.2	29.6	27.1	27.3	28.5	29.7
Mehran measure	38.4	40.2	37.0	37.5	39.0	40.3
Piesch measure	23.1	24.3	22.2	22.2	23.3	24.4
Kakwani measure	7.1	7.9	6.6	6.7	7.4	7.9
Theil entropy measure	13.2	15.1	12.1	12.4	13.7	15.3
Theil mean log deviation measure	12.9	14.4	11.8	12.1	13.4	14.7

Table A. 24: Trends in Inequality by Stratum: 2002-2005

	Coast		Central		Mountain		Tirana	
	2002	2005	2002	2005	2002	2005	2002	2005
Relative mean deviation	20.0	20.8	19.3	20.3	19.6	17.3	21.5	21.4
Coefficient of variation	54.5	65.9	53.1	56.5	52.3	51.0	60.4	59.8
Standard deviation of logs	50.2	52.0	47.3	52.0	48.2	42.9	52.8	53.6
Gini coefficient	27.9	29.4	26.9	28.6	27.1	24.4	29.8	29.8
Mehran measure	38.3	39.8	36.6	39.3	37.2	33.4	40.0	40.7
Piesch measure	22.7	24.2	22.0	23.3	22.1	19.9	24.7	24.4
Kakwani measure	7.0	7.8	6.5	7.4	6.6	5.5	8.0	8.0
Theil entropy measure	12.9	15.5	12.0	13.6	12.0	10.5	15.0	14.9
Theil mean log deviation measure	12.7	14.3	11.6	13.6	11.8	9.8	14.5	14.6

Table A. 25: Sources of Water by Quintile of Real Per Capita Consumption

Source of water	2002 Quintiles					2005 Quintiles				
	1	2	3	4	5	1	2	3	4	5
Tap inside	0.32	0.42	0.49	0.56	0.71	0.31	0.45	0.55	0.61	0.73
Tap outside	0.24	0.20	0.15	0.15	0.10	0.30	0.19	0.16	0.11	0.06
Truck	0.01	0.01	0.01	0.00	0.00	0.11	0.07	0.05	0.04	0.04
Public tap	0.14	0.10	0.10	0.09	0.04	0.01	0.00	0.01	0.00	0.00
Spring or well	0.25	0.26	0.24	0.19	0.15	0.27	0.28	0.24	0.24	0.17
River, lake	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00

Source: World Bank staff estimates from survey data.

Table A. 26: Access and Visit to Health Services

Variable	2002		2005	
	Mean	Std. Dev.	Mean	Std. Dev.
Duration of chronic illness	1.45	5.31	1.30	4.66
Days lost to disability	7.18	10.04	4.19	8.19
Proportion visiting public outpatient facilities	0.13	0.33	0.09	0.28
Number of visits (to outpatient public health facilities)	1.50	1.02	1.32	0.74
Fraction visiting private outpatient services	0.01	0.12	0.01	0.11
Number of visits (to private doctor)	1.43	0.73	1.24	0.57
Fraction visiting a nurse	0.03	0.17	0.01	0.11
Number of visits to a nurse	5.10	5.57	3.54	3.05
Proportion using alternative medicine	0.00	0.05	0.00	0.06
Number of visits to alternative medicine	1.79	1.03	1.30	0.72

Table A. 27: Main Source of Heat: National

Main Source of Heat	Quintiles in 2002					Quintiles in 2002				
	1	2	3	4	5	1	2	3	4	5
Electricity	0.08	0.11	0.09	0.11	0.20	0.05	0.06	0.08	0.11	0.21
Wood	0.78	0.68	0.64	0.59	0.40	0.83	0.74	0.61	0.51	0.33
Gas	0.12	0.19	0.25	0.28	0.37	0.09	0.18	0.28	0.35	0.43
Oil/petrol	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01
Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No heating	0.02	0.02	0.02	0.02	0.01	0.04	0.02	0.03	0.03	0.02

Source: World Bank staff estimates from survey data.

Table A. 28: Main Source of Heat: Urban

Main Source of Heat	Quintiles in 2002					Quintiles in 2002				
	1	2	3	4	5	1	2	3	4	5
Electricity	0.22	0.22	0.18	0.18	0.31	0.16	0.14	0.16	0.19	0.31
Wood	0.49	0.40	0.34	0.34	0.18	0.52	0.50	0.33	0.26	0.15
Gas	0.24	0.34	0.44	0.43	0.46	0.24	0.33	0.46	0.51	0.51
Oil/petrol	0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01
Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No heating	0.03	0.03	0.04	0.03	0.02	0.08	0.04	0.04	0.04	0.02

Source: World Bank staff estimates from survey data.

Table A. 29: Main Source of Heat: Rural

Main Source of Heat	Quintiles in 2002					Quintiles in 2002				
	1	2	3	4	5	1	2	3	4	5
Electricity	0.01	0.04	0.03	0.03	0.06	0.00	0.02	0.01	0.02	0.04
Wood	0.92	0.84	0.84	0.80	0.68	0.95	0.87	0.84	0.77	0.65
Gas	0.06	0.11	0.13	0.15	0.25	0.03	0.09	0.14	0.19	0.29
Oil/petrol	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
No heating	0.01	0.01	0.00	0.01	0.00	0.02	0.02	0.01	0.01	0.02

Table A. 30: Testing for Economies of Scale, Engel Method

Dependent variable: share of food	2002	2005
Log of real per capita consumption	-0.059 (8.23)**	-0.087 (13.76)**
Log of household size	-0.035 (4.13)**	-0.083 (11.47)**
Proportion of male children ages 0-5	-0.014 (0.55)	0.039 (1.53)
Proportion of male children ages 6-14	0.013 (0.57)	-0.063 (3.18)**
Proportion of female children ages 0-5	0.031 (1.04)	0.029 (1.00)
Proportion of female children ages 6-14	-0.024 (1.02)	-0.035 (1.82)
Proportion of male adults	-0.037 (2.20)*	-0.009 (0.83)
Proportion of female adults	-0.038 (2.41)*	-0.048 (4.23)**
Proportion of male elderly	-0.007 (0.34)	0.01 (0.62)
Labor market statistics ==2	-0.011 (1.20)	0.002 (0.16)
Labor market statistics ==3	0.028 (4.15)**	0.023 (3.81)**
Labor market statistics ==4	0.142 (2.70)**	-0.019 (1.37)
Labor market statistics ==5	0.028 (1.97)*	0.038 (2.14)*
Labor market statistics ==6	0.019 (2.65)**	0.022 (3.19)**
Labor market statistics ==7	0.042 (2.58)*	0.05 (3.38)**
Single family home	0.024 (4.04)**	0.059 (8.90)**
Number of rooms family occupies	-0.01 (3.99)**	-0.01 (4.35)**
Constant	1.222 (17.59)**	1.486 (23.53)**
Observations	3432	3468
R-squared	0.10	0.22
Robust t statistics in parentheses		
* significant at 5%; ** significant at 1%		

Note: World Bank staff estimates from survey data. The ratio of elderly female is the omitted demographic variable. The economies of scale parameter is the ratio of the coefficient of log (household size) to log (per capita real consumption).

Table A. 31: Correlates of Consumption, Pooled 2002-2005 Sample

Dependent variable: log of real consumption	Without Regional Controls		With Regional Controls	
	Estimated shortfall	t-statistics	Estimated shortfall	t-statistics
One child	-0.088	-6.42	-0.088	-6.53
Three children	-0.235	-12.98	-0.219	-12.08
Low dependency ratio	0.173	13.61	0.167	13.22
Female headed	0.158	8.82	0.152	8.48
Household head, primary	-0.014	-0.67	-0.014	-0.71
Household head, secondary	0.141	5.89	0.146	6.15
Household head, vocational	0.172	7.78	0.167	7.64
Household head, higher education	0.400	15.71	0.395	15.64
Numbers of days lost to illness (in logs)	0.016	1.62	0.022	2.33
Head of household is unemployed	-0.196	-23.19	-0.186	-21.84
Head of household in inactive	-0.017	-2.98	-0.013	-2.44
Rural resident	-0.167	-13.85	-0.145	-11.43
Distance to school in kilometers (in logs)	-0.040	-5.45	-0.035	-4.88
Year dummy (2005==1)	0.108	9.88	0.109	10.07
Coast			0.041	2.31
Central			-0.045	-2.54
Mountain			-0.131	-7.37
Constant	8.960	384.89	8.981	346.22
N	7237		7237	
R-squared	0.255		0.27	

Note: All the variables with t-value greater than 2 are statistically significant, and all the ones with t-values less than 2 are not statistically significant. That is, in the first case, the variation in consumption associated with the variable is not due to chance, while in the latter it may be due to chance.

Table A. 32: Correlates of Consumption, by Year

Dependent variable: log of real consumption	2002		2005		2002		2005	
	Estimated shortfall	t-statistics						
One child	-0.052	-2.73	-0.119	-6.09	-0.058	-3.03	-0.114	-5.92
Three children	-0.246	-10.23	-0.212	-7.78	-0.230	-9.59	-0.197	-7.18
Low dependency ratio	0.151	8.34	0.194	10.8	0.144	8.08	0.189	10.61
Female headed	0.137	5.75	0.183	6.81	0.130	5.46	0.179	6.7
Household head, primary	0.019	0.74	-0.054	-1.58	0.020	0.8	-0.064	-1.89
Household head, secondary	0.141	4.61	0.134	3.46	0.153	5.04	0.125	3.22
Household head, vocational	0.171	6.22	0.168	4.54	0.172	6.34	0.149	4.04
Household head, higher education	0.385	12.27	0.419	9.95	0.394	12.56	0.395	9.44
Numbers of days lost to illness (in logs)	0.019	1.66	0.006	0.34	0.029	2.45	0.004	0.24
Head of household is unemployed	-0.192	-17.69	-0.198	-14.33	-0.184	-16.79	-0.184	13.46
Head of household in inactive	-0.005	-0.59	-0.030	-3.75	-0.001	-0.1	-0.027	-3.43
Rural resident	-0.151	-8.55	-0.179	-10.74	-0.144	-7.92	-0.143	-8.02
Distance to school in kilometers (in logs)	-0.075	-6.2	-0.015	-1.59	-0.068	-5.66	-0.012	-1.29
Coast					0.105	4.13	-0.017	-0.71
Central					0.022	0.88	-0.110	-4.4
Mountain					-0.085	-3.29	-0.170	-7.02
Constant								233.7
	8.948	308.68	9.085	253.92	8.922	267.39	9.155	5
N	3599		3638		3599		3638	
R-squared	0.235		0.263		0.253		0.278	

Note: All the variables with t-value greater than 2 are statistically significant, and all the ones with t-values less than 2 are not statistically significant. That is, in the first case, the variation in consumption associated with the variable is not due to chance, while in the latter it may be due to chance.

Table A. 33: Correlates of Consumption by Year, Urban Areas

Dependent variable: log of real consumption	2002		2005		2002		2005	
	Estimated shortfall	t- statistics	Estimated shortfall	t- statistics	Estimated shortfall	t- statistics	Estimated shortfall	t- statistics
One child	-0.081	-3.3	-0.142	-5.33	-0.081	-3.31	-0.136	-5.17
Three children	-0.330	-9.54	-0.261	-5.7	-0.326	-9.35	-0.241	-5.24
Low dependency ratio	0.179	7.83	0.241	10.24	0.179	7.82	0.234	10.01
Female headed	0.149	4.96	0.125	3.98	0.151	5	0.128	4.06
Household head, primary	0.026	0.58	-0.083	-1.36	0.026	0.6	-0.090	-1.48
Household head, secondary	0.121	2.48	0.093	1.45	0.127	2.57	0.092	1.43
Household head, vocational	0.159	3.57	0.108	1.73	0.162	3.63	0.097	1.55
Household head, higher education	0.368	8.15	0.380	5.84	0.377	8.32	0.364	5.59
Numbers of days lost to illness (in logs)	0.025	1.48	0.011	0.56	0.026	1.5	0.008	0.39
Head of household is unemployed	-0.222	-18.3	-0.225	-13.68	-0.220	-18.13	-0.210	-13
Head of household in inactive	-0.048	-4.8	-0.062	-5.7	-0.046	-4.6	-0.058	-5.27
Distance to school in kilometers (in logs)	-0.043	-2.76	-0.009	-0.74	-0.043	-2.75	-0.005	-0.39
Coast					0.053	1.89	-0.024	-0.86
Central					0.018	0.68	-0.072	-2.55
Mountain					0.005	0.18	-0.182	-6.79
Constant	8.998	195.8	9.152	151.12	8.972	182.8	9.209	145.37
N	1959		1999		1959		1999	
R-squared	0.287		0.28		0.288		0.295	

Note: All the variables with t-value greater than 2 are statistically significant, and all the ones with t-values less than 2 are not statistically significant. That is, in the first case, the variation in consumption associated with the variable is not due to chance, while in the latter it may be due to chance.

Table A. 34: Correlates of Consumption by Year, Rural Areas

Dependent variable: log of real consumption	2002		2005		2002		2005	
	Estimated shortfall	t- statistics	Estimated shortfall	t- statistics	Estimated shortfall	t- statistics	Estimated shortfall	t- statistics
One child	-0.022	-0.72	-0.075	-2.61	-0.039	-1.28	-0.072	-2.58
Three children	-0.149	-4.27	-0.168	-4.92	-0.131	-3.89	-0.155	-4.53
Low dependency ratio	0.150	4.96	0.133	4.84	0.139	4.84	0.132	4.85
Female headed	0.122	3.09	0.235	4.51	0.090	2.33	0.215	4.12
Household head, primary	0.026	0.8	-0.040	-0.95	0.023	0.75	-0.048	-1.15
Household head, secondary	0.156	3.47	0.146	2.73	0.172	3.93	0.129	2.42
Household head, vocational	0.188	4.99	0.208	4.22	0.177	4.91	0.185	3.8
Household head, higher education	0.329	4.87	0.266	3.22	0.306	4.72	0.245	2.9
Numbers of days lost to illness (in logs)	0.010	0.61	-0.011	-0.39	0.026	1.58	-0.010	-0.34
Head of household is unemployed	-0.134	-5.38	-0.134	-5.75	-0.121	-4.61	-0.126	-5.25
Head of household in inactive	0.046	3.56	0.010	0.89	0.048	3.92	0.010	0.94
Land cultivated in square meters (in logs)	-0.028	-4.01	-0.024	-3.72	-0.038	-5.21	-0.024	-3.56
Number of irrigated plots	-0.006	-1.3	0.030	3.95	-0.009	-2.09	0.024	3.09
Distance to school in kilometers (in logs)	-0.099	-5.15	-0.027	-1.78	-0.076	-4.2	-0.025	-1.7
Central					-0.165	-5.36	-0.134	-4.51
Mountain					-0.340	-11.08	-0.173	-6.18
Constant	9.022	125.47	9.006	133.87	9.309	118.15	9.133	127.61
N	1472		1547		1472		1547	
R-squared	0.144		0.144		0.215		0.166	

Note: All the variables with t-value greater than 2 are statistically significant, and all the ones with t-values less than 2 are not statistically significant. That is, in the first case, the variation in consumption associated with the variable is not due to chance, while in the latter it may be due to chance.

ANNEX B: RURAL PRODUCTIVITY AND POVERTY

Figure B. 1: Primary Enrollment, Urban and Rural

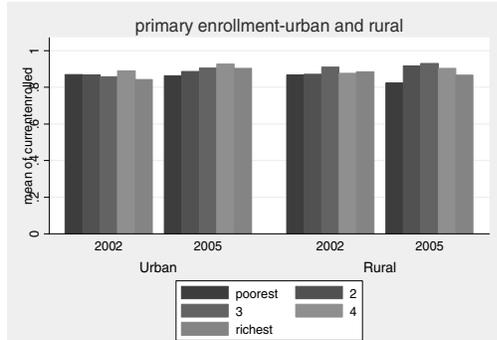


Figure B. 2: Tertiary Enrollment, Urban and Rural

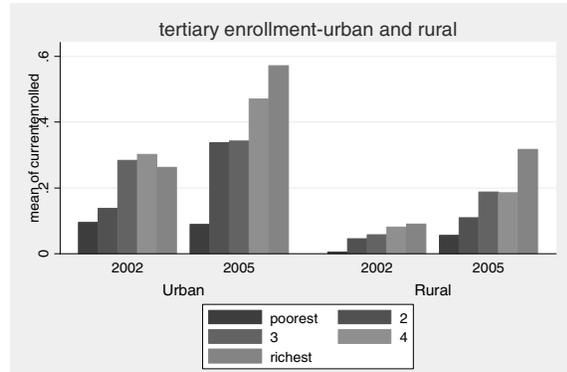


Figure B. 3: Male and Female Net Primary Enrollment in Rural Areas

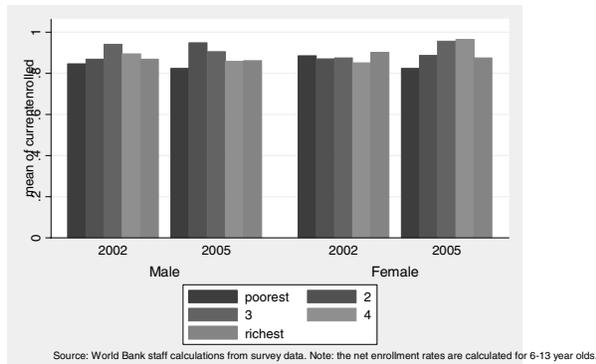


Figure B. 4: Male and Female Secondary Enrollment in Rural Areas

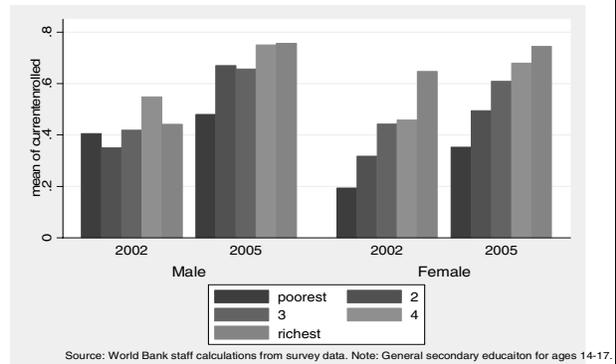


Figure B. 5: Male and Female Tertiary Enrollment in Rural Areas

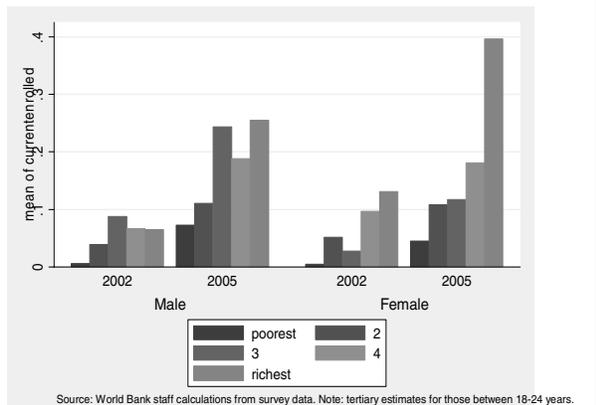


Figure B. 6: Access to Tap Water Inside Dwelling

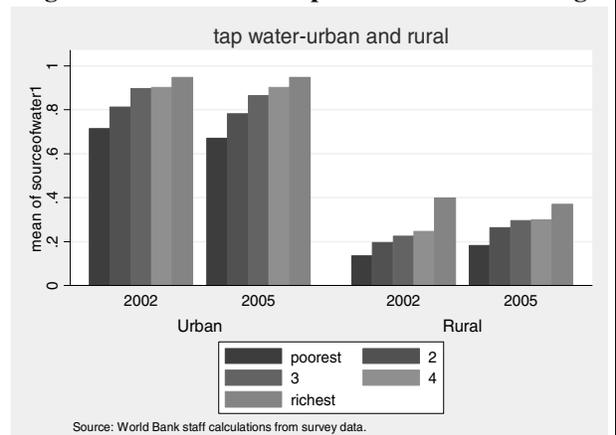


Table B. 1: Correlates of Consumption and Poverty, Rural Areas

	Log of Real per Capita Consumption	Marginal Probability of Being Poor
Age head of household	0.003 (4.20)**	-0.002 (3.76)**
Female headed household	0.051 (1.15)	0.019 (0.44)
Single head of household	-0.012 (0.31)	-0.015 (0.41)
Household male labor age>14 but <60	0.007 (0.68)	-0.02 (2.09)*
Household female labor age>14 but <60	0.009 (0.78)	-0.011 (1.09)
Number of people in the household	-0.147 (22.90)**	0.088 (14.23)**
Highest years of education in household	0.016 (5.55)**	-0.014 (4.98)**
Dummy=1 if brick home	0.006 (0.32)	0.003 (0.15)
Dummy=1 if toilet	0.002 (0.12)	-0.012 (0.71)
Dummy=1 if run water	0.03 (1.45)	-0.029 (1.41)
Dummy=1 if electrometer	-0.049 (2.47)*	0.018 (1.00)
Number of livestock	0.001 (2.05)*	0 (0.09)
Household cereals	0.016 (1.51)	-0.012 (0.54)
Household vegetables	0.164 (2.12)*	-0.104 (1.34)
Number of fruit trees	0 (4.38)**	0 (1.92)
Irrigated land owned, hectares	0 (2.00)*	0 (1.69)
Own television	0.143 (5.79)**	-0.083 (3.57)**
Own gas stove	0.132 (6.97)**	-0.066 (3.80)**
Own computer	0.096 (0.57)	0.117 (0.77)
Own satellite	0.095 (4.35)**	-0.078 (3.53)**
Own motorbike	0.177 (4.06)**	-0.027 (0.61)
Own vehicle	0.365 (12.86)**	-0.136 (4.81)**
Central	-0.02 (0.95)	0.017 (0.79)
Mountain	-0.004	0.006

	(0.20)	(0.30)
Labor market statistics==2	-0.168	0.113
	(3.17)**	(1.80)
Labor market statistics==3	-0.081	0.049
	(3.10)**	(1.89)
Labor market statistics==4	-0.004	0.025
	(0.08)	(0.51)
Labor market statistics==5	-0.024	0.008
	(0.65)	(0.22)
Labor market statistics==6	-0.059	0.055
	(1.79)	(1.56)
Labor market statistics==7	-0.076	0.088
	(1.62)	(1.88)
Labor market statistics==8	-0.069	-0.058
	(0.95)	(0.51)
Dum yr	-0.061	0.042
	(3.19)**	(2.30)*
Constant	9.113	
	(143.35)**	
Observations	2166	2167
R-squared	0.46	

Robust t statistics in parentheses

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

Source: World Bank staff estimates from survey data.

Table B. 2: Determinants of Technical INEFFICIENCY of Total Agricultural Production Using Village Fixed Effects (A negative sign of the coefficient increases farmer's efficiency)

	Coef.	Std. Err.	z	P> z
Number of plots	-0.206	0.023	-9.010	0.000
Highest years of education in household	0.042	0.012	3.620	0.000
Age of the head	-0.008	0.003	-3.040	0.002
Household size	-0.041	0.019	-2.080	0.037
Dummy has participated to an irrigation program	-0.445	0.249	-1.790	0.073
Dummy has received soil advices	-0.650	0.166	-3.900	0.000
Share transfer from total income	1.001	0.125	8.010	0.000
Number. of years since land was acquired	0.004	0.004	0.870	0.386
Dummy has deed from land since 1991	-0.130	0.098	-1.330	0.184
Dummy land is inherited	-0.427	0.088	-4.840	0.000
Community level variables				
Interaction between distance to bank and access to credit from government and private bank	-0.017	0.005	-3.670	0.000
Interest rate for getting a loan to start a small business at the community level	0.003	0.006	0.560	0.574
Dummy source of credit within the community	0.120	0.088	1.360	0.173
Constant	2.905	0.233	12.460	0.000

Source: World Bank staff estimates from Survey data.

Table B. 3: Summary of Efficiency Parameters

	Technical Efficiency	Share of Households
All household	28%	100%
Rent out	13%	3.6%
Autarchy	28%	90.2%
Rent in	37%	6.2%
Sale land	20%	1.6%
Autarchy	29%	91.8%
Purchase land	19%	6.7%
Land class 0-0.25 Ha	22%	25.7%
Land class 0.25-0.6 ha	27%	25.6%
Land class 0.60-1.16 ha	30%	23.7%
Land class 1.16-11.5 ha	33%	24.9%
Household with <=2 plots	24%	45%
Household with 3 plots	29%	22%
Household with 4 plots	30%	16%
Household with >5 plots	35%	17%

Source: World Bank staff estimates from Survey data.

Table B. 4: Technical: Efficiency in Rental Market

	Rent out		Autarchy		Rent in		ALL HOUSEHOLDS	
	Average Technical Efficiency	Share of Household						
Technical Efficiency <=20%	2.4%	76.12%	6.5%	40.91%	6.6%	22.61%	6.3%	41%
Technical Efficiency between 20 and 50%	29.6%	10.45%	34.0%	36.71%	34%	46.09%	34%	36%
Technical Efficiency >50%	62%	13.43%	62.5%	22.38%	63%	31.30%	63%	23%
Average Technical Efficiency	13%	3.6%	28%	90.2%	37%	6.2%	28%	100%

Source: World Bank staff estimates from Survey data.

Table B. 5: Household Characteristics According to Technical Efficiency Group

	Unit	Technical Efficiency <=20%	Technical Efficiency between 20 and 50	Technical Efficiency >50%
Total value of agricultural output/hectare	US\$/hectare	552	1901	3914
Total land owned	hectare	0.69	0.95	0.79
Area of irrigated land (hectare)	hectare	0.19	0.38	0.37
Cost of hired labor	US\$	3	6	18
No. of family member working on farm	number	1.1	1.5	1.2
Cost of inputs (except labor)	US\$	195	370	415
No. of plots	number	2.6	3.3	3.3
Highest years of education in household	number	9.9	9.8	9.8
Age head of household	years	51.7	52.3	53.0
Household size	number	4.5	4.7	4.7
Distance from community to bank	kilometer	3.2	4.6	3.8
Share transfer from total income	%	33.8%	25.1%	24.0%

Source: World Bank staff estimates from Survey data.

Table B. 6: Stochastic Frontier Estimate on Gross Value of Total Agriculture Production

Stochastic Frontier	
	Log Total Value of Agriculture Production
Log hectare of land owned	0.440*** (3.41)
Log area of land irrigated	0.019** (2.02)
Log value of hired labor	0.050 (1.57)
Log number of family members working on farm	0.330*** (4.53)
Log cost of total inputs except hired labor)	0.491*** (18.58)
Number of machine	.096 (1.83)
Dummy has water pump	0.050 (0.44)
Constant	4.866*** (21.52)
Observations	1796
Sigma v	46%

Source: World Bank staff estimates from survey data.

Dummies for districts estimated but not reported Absolute value of z statistics in parentheses * significant at 10%; ** significant at 5%; *** significant.

Table B. 7: Agriculture Production

	Unit	All	Rent in	Autarchy	Rent out	Purchase Land	Autarchy	Sale Land
Share of households	%	100	6.22	90.16	3.62	6.65	91.78	1.57
Land cultivated	Ha	0.81	1.24	0.77	1.06	0.43	0.83	0.90
Number of plots	Nb	2.9	3.8	2.8	3.2	1.9	3.0	3.1
Total Agriculture. Output	US\$	975	2261	912	330	765	998	472
Total Agriculture output/hectare	US\$/Ha	1802	2157	1839	276	3124	1725	715
Total profit (excluding household labor)	US\$	628	1217	607	149	442	649	189
Total profit/Hectare	US\$/Ha	1243	1308	1284	162	2036	1202	195
Share with negative profits	%	24.0%	20.9%	23.5%	41.8%	56.9%	21.4%	34.5%
Value of total inputs	US\$	346	1044	305	181	324	349	283
Value of total inputs/hectare	US\$/Ha	612	849	616	114	1087	578	546
Value of inputs for crop/Hectare	US\$/Ha	303	487	299	65	420	293	362
Value of inputs for crops	US\$	226	723	198	86	101	236	207
Value of inputs for livestock	US\$	90	150	89	16	218	81	61
Value of inputs: machinery use	US\$	23	145	12	77	0	25	10
Value of inputs: land rent	US\$	4	11	3	1	2	4	3
Value of other inputs	US\$	4	16	3	1	2	4	1

Table B. 8: Land Titling

	Unit	All	Rent in	Autarchy	Rent out	Purchase Land	Autarchy	Sale Land
Share of households	%	100	6.22	90.16	3.62	6.65	91.78	1.57
Share of household with								
Deed from land since 1991	%	75.1%	84.5%	73.6%	95.5%	20.3%	79.0%	89.3%
Deed from land since 1946	%	21.3%	8.7%	22.6%	9.0%	1.6%	22.9%	10.7%
A will for land	%	1.4%	0.0%	1.4%	1.5%	1.6%	1.4%	0.0%
A sales receipt for land	%	6.8%	3.9%	7.0%	7.5%	95.1%	0.2%	0.0%
A tribunal document for land	%	0.1%	0.0%	0.1%	1.5%	0.0%	0.1%	0.0%
Other legal document for land	%	0.5%	2.9%	0.3%	0.0%	0.8%	0.4%	0.0%
No legal document for land	%	3.2%	4.9%	3.2%	0.0%	3.3%	3.2%	3.6%

Source: World Bank staff estimates from survey data.

Table B. 9: Composition of Total Agriculture Output

	Unit	All	Rent in	Autarchy	Rent Out	Purchase land	Autarchy	Sale Land
Value total agriculture output composition								
Crop production	%	14.1%	17.4%	13.8%	18.3%	23.8%	13.6%	24.3%
Tree crop production	%	5.8%	5.2%	5.6%	17.6%	5.2%	5.5%	24.1%
Livestock production	%	48.3%	43.2%	49.2%	24.3%	40.6%	49.0%	27.8%
Livestock product production	%	31.7%	34.1%	31.4%	39.7%	30.4%	31.9%	23.8%

Source: World Bank staff estimates from survey data.

Table B. 10: Results of the Multinomial Logit on Rental Market Participation

Multinomial Logit on Land Rental Market		
	Rent out	Rent in
Technical Efficiency	-2.467*** (2.97)	1.291** (2.54)
Total land owned	0.742*** (4.49)	0.480*** (4.38)
Area of irrigated cultivated land is square meter	-2.387*** (2.90)	0.047 (0.41)
Household size	-0.121 (1.31)	0.040 (0.66)
Age head of household	0.005 (0.37)	-0.038*** (4.18)
Highest years of education in household	0.083* (1.79)	-0.004 (0.09)
Number of family member working on farm	-1.206*** (4.95)	0.204** (2.17)
Log value of hired labor	-0.327 (1.36)	0.256*** (3.19)
Dummy has deed from land since 1991	1.997*** (3.20)	-0.349 (1.32)
Kilometer from community to nearest bank	-0.042* (1.69)	-0.035** (1.98)
Dummy source of credit within the community	0.605 (1.02)	0.376 (0.74)
Number. of years since land was acquired	-0.023 (0.98)	-0.064*** (2.93)
Share transfer from total income	1.387*** (2.91)	-0.028 (0.06)
Agricultural wealth index	0.036 (0.25)	0.160* (1.78)
Infrastructure index	0.336** (2.09)	-0.058 (0.45)
Ratio kilogram of crop production sold to kilogram of crop production harvested	-0.594 (0.72)	0.755* (1.66)
Constant	-5.870*** (3.93)	-2.210** (1.291**)
Observations	1796	1796
Log likelihood =		331

Note: Dummies for municipalities estimated but not reported.

Source: World Bank staff estimates from survey data.

Table B. 11: Results of the Multinomial Logit on Sale Market Participation

Multinomial Logit on Land Sale Market		
	Sale land	Purchase land
Technical Efficiency	-2.621** (2.32)	-1.325* (1.85)
Number of plots owned	-0.760** (2.10)	-0.382 (1.15)
Square plots owned	0.097*** (2.59)	0.050 (1.20)
Household size	0.262** (2.34)	-0.005 (0.06)
Age head of household	0.014 (0.87)	0.009 (0.75)
Highest years of education in household	-0.062 (0.81)	-0.083 (1.53)
Number of family member working on farm	-0.091 (0.47)	-0.254 (1.62)
Log value of hired labor	-0.554 (1.62)	-0.223 (1.04)
Dummy has deed from land since 1991	0.548 (0.64)	-4.827*** (11.98)
Has deed from land since 1946	-0.607 (0.73)	-5.769*** (7.46)
Kilometer from community to nearest bank	-0.028 (0.64)	-0.202* (1.81)
Dummy source of credit within the community	1.617* (1.76)	-0.186 (0.28)
Share non agricultural wage from total income	-0.093 (0.14)	0.681 (1.52)
Agricultural wealth index	0.221 (1.55)	-0.082 (0.36)
Infrastructure index	0.614*** (2.78)	0.197 (1.03)
Ratio kilogram of crop production sold to kilogram of crop production harvested	1.778** (2.32)	-0.155 (0.19)
Constant	-5.091*** (2.70)	1.930 (1.41)
Observations	1796	1796
Log likelihood =	595	

Source: World Bank staff estimates from survey data.

ANNEX C: MIGRATION

Figure C. 1: Flow of Permanent Migrants, by Year of Migration

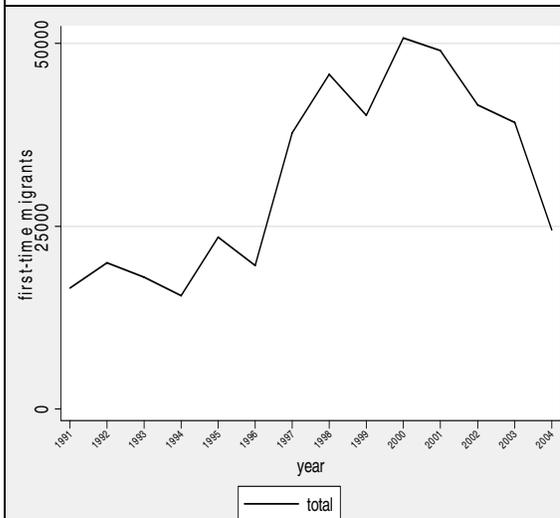


Figure C. 2: Current Residence of Split-offs, by Year in which they left

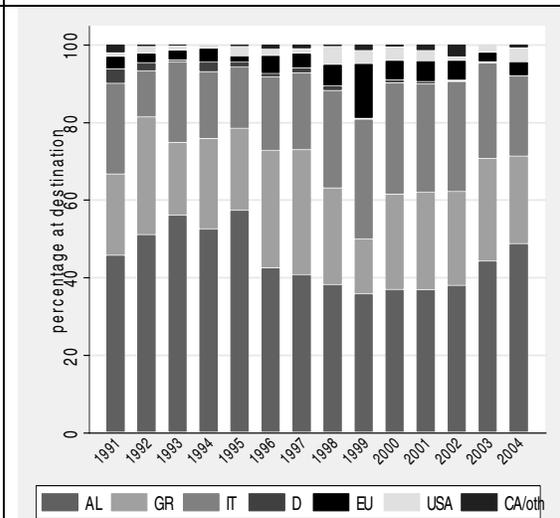


Figure C. 3: Destination of Current Migrants

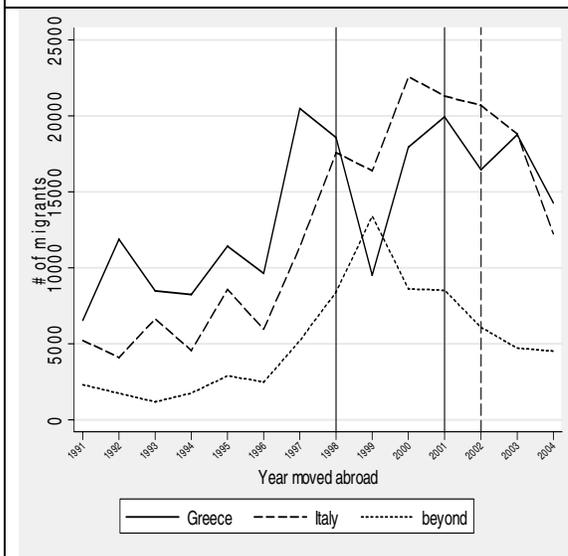


Figure C. 4: Stock of Temporary Migration by Destination

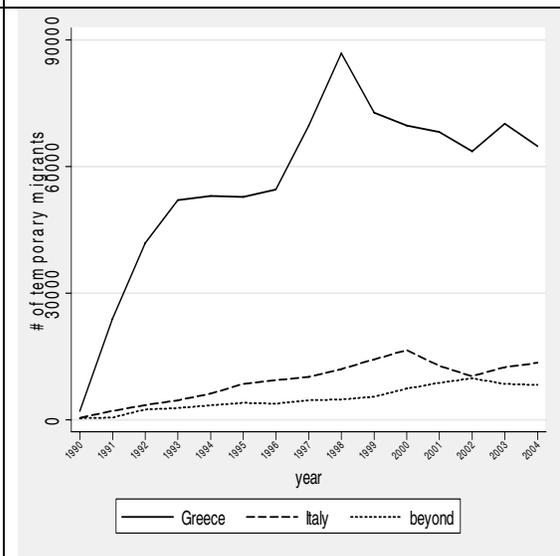


Figure C. 5: Subjective Poverty Ladder in 1990 and 2005, With or Without Permanent Migration by Destination Country

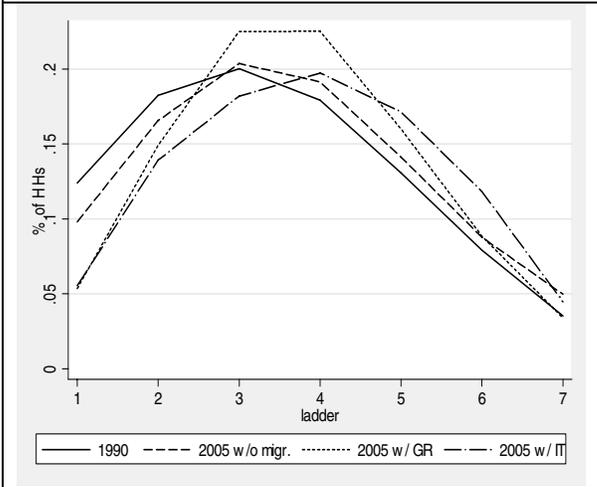


Figure C. 6: Flow of Return Temporary Migrants by Family Residence Area

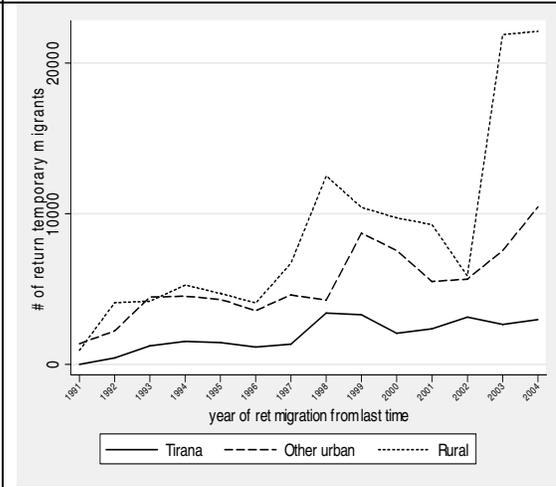


Figure C. 7: Number of Migrants and Remitters, and % of Remitters by Quintile (per capita expenditure net of remittances)

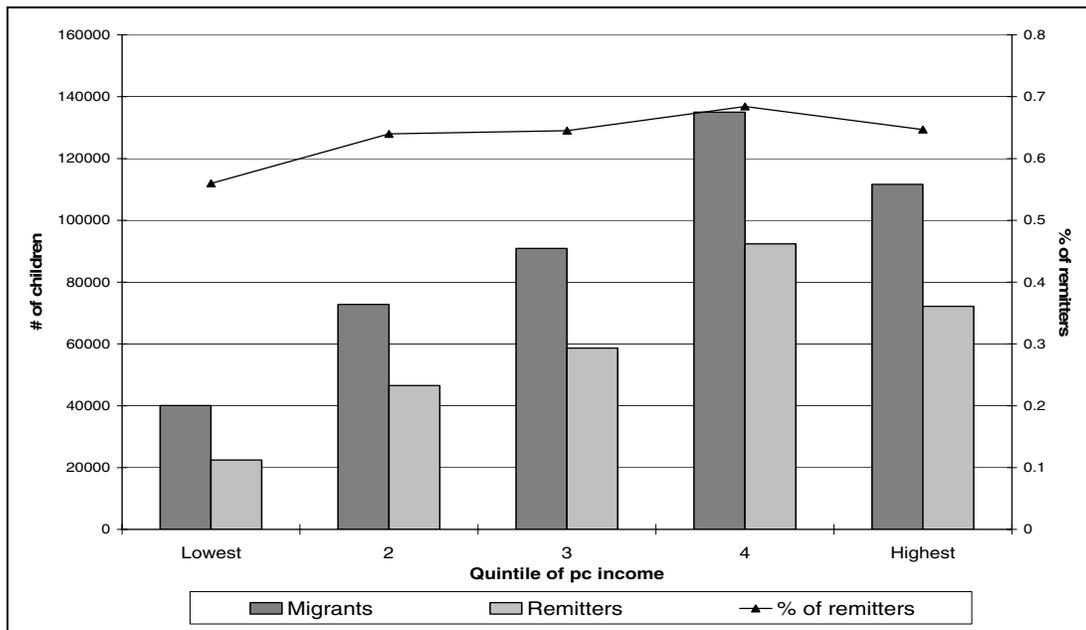


Table C. 1: Population by Region of Current Residence and First Migration since 1990

Region of First Migration Since 1990 (FROM)	Population		Internal Migrants	
	Frequency	%	Frequency	%
Tirana	389,452	12.7	2,572	0.6
Other urban	959,715	31.3	152,163	34.1
Coast	412,678	13.5	35,696	8.0
Central	477,876	15.6	81,368	18.2
Mountain	69,160	2.3	35,098	7.9
Rural	1,720,097	56.0	291,363	65.3
Coast	544,820	17.8	58,415	13.1
Central	896,242	29.2	138,429	31.0
Mountain	279,035	9.1	94,519	21.2
Total	3,069,263	100	446,098	100

Source: World Bank staff estimates form survey data.

Table C. 2: Distribution of Region Born/Current for Internal Migrants

Region of Birth (FROM)	Region of Current Residence (TO)							Total
	Tirana	Coast urban	Coast rural	Central urban	Central rural	Mountain urban	Mountain rural	
Tirana	0.4	0.1	0.0	0.2	0.1	0.0	0.0	0.8
Coast urban	2.6	3.1	1.0	0.6	0.5	0.0	0.0	7.7
Coast rural	1.1	6.5	8.1	0.5	0.9	0.0	0.0	17.2
Central urban	6.8	2.3	1.1	2.8	2.0	0.1	0.1	15.1
Central rural	4.9	3.9	3.6	10.2	11.9	0.2	0.3	35.0
Mountain urban	3.1	0.8	0.2	0.5	1.3	0.1	0.1	6.2
Mountain rural	4.3	1.2	1.4	0.7	4.2	2.6	3.8	18.1
Total	23.1	17.8	15.3	15.5	20.9	3.1	4.4	100

Source: World Bank staff estimates form survey data.

Table C. 3: Distribution of Region First Migration Since 1990-Current Residence

Region First Migration Since 1990 (FROM)	Region of Current Residence (TO)							Total
	Tirana	Coast urban	Coast rural	Central urban	Central rural	Mountain urban	Mountain rural	
Tirana	0.4	0.0	0.0	0.1	0.1	0.0	0.0	0.6
Coast urban	3.7	2.6	0.5	0.6	0.6	0.0	0.0	8.0
Coast rural	1.6	6.5	4.5	0.0	0.5	0.0	0.0	13.1
Central urban	10.8	2.5	1.1	1.2	2.6	0.0	0.0	18.2
Central rural	5.7	4.9	3.3	9.6	7.2	0.1	0.2	31.0
Mountain urban	4.9	0.7	0.2	0.3	1.7	0.1	0.0	7.9
Mountain rural	6.6	1.7	1.7	0.7	5.6	2.5	2.5	21.2
Total	33.7	18.8	11.2	12.4	18.4	2.8	2.8	100

Table C. 4: Distribution of Region First Migration since 1990-Current Residence (1997-1998 only)

Region first migration since 1990 (FROM)	Region of current residence (TO)							Total
	Tirana	Coast urban	Coast rural	Central urban	Central rural	Mountain urban	Mountain rural	
Tirana	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Coast urban	3.7	3.3	0.0	0.0	0.0	0.0	0.0	7.0
Coast rural	2.8	7.3	1.7	0.1	0.0	0.0	0.0	11.8
Central urban	15.3	3.5	0.4	0.4	3.3	0.0	0.0	22.9
Central rural	4.7	4.1	1.2	6.0	6.2	0.2	0.0	22.4
Mountain urban	5.5	0.0	0.0	0.6	2.4	0.0	0.0	8.5
Mountain rural	7.8	1.1	0.3	1.6	11.6	2.5	2.0	26.8
Total	40.3	19.3	3.6	8.7	23.4	2.7	2.0	100

Source: World Bank staff estimates form survey data.

Table C. 5: Distribution of Region First Migration Since 1990-Current Residence (2002-2004 only)

Region first migration since 1990 (FROM)	Region of current residence (TO)							Total
	Tirana	Coast urban	Coast rural	Central urban	Central rural	Mountain urban	Mountain rural	
Tirana	0	0	0	0	0	0	0.1	0.1
Coast urban	7.1	3.5	1.2	1.1	1.0	0	0.2	14.0
Coast rural	0.9	3.6	3.5	0	0.5	0	0	8.5
Central urban	14.3	3.2	0.4	0.5	2.2	0	0.2	20.8
Central rural	4.8	7.0	0.6	8.5	9.6	0.2	0.5	31.1
Mountain urban	4.6	1.3	0	0	1.5	0.1	0	7.4
Mountain rural	6.0	3.7	1.0	0.5	1.0	1.7	4.2	18.1
Total	37.7	22.2	6.6	10.6	15.8	2.0	5.2	100

Source: World Bank staff estimates form survey data.

Table C. 6: Characteristics of Adult Individuals by Internal Migration Status

	Total	Migration status		Significance
		no	yes	
% of females	0.52	0.50	0.61	***
Age	41.3	42.2	37.5	***
Years of education	8.9	8.8	9.4	

*** significant at 1%

Table C. 7: Permanent Migrants by Country of Destination and Residence of Original Household (2000-2004)

		Country of Destination				
		Albania	Greece	Italy	Beyond	Total
Residence of household in Albania	Tirana	46.8	9.3	15.1	28.8	100
	Other urban	34.7	19.2	35.8	10.4	100
	Rural	41.1	29.3	24.3	5.3	100
	Total	40.0	24.9	26.4	8.7	100

Source: World Bank staff estimates form survey data.

Table C. 8: Prevalence of Migration by Residence of Original household

	Permanent migrants		All split-offs		Prevalence*
	#	%	#	%	
Tirana	47,489	10.5	92,965	9.6	0.511
Other urban	154,711	34.3	293,891	30.2	0.526
Rural	248,837	55.2	586,873	60.3	0.424
Tirana	47,489	10.5	92,965	9.6	0.511
Coast urban	85,801	19.0	148,780	15.3	0.577
Coast rural	114,214	25.3	242,692	24.9	0.471
Central urban	62,857	13.9	131,734	13.5	0.477
Central rural	113,242	25.1	268,739	27.6	0.421
Mountain urban	6,053	1.3	13,377	1.4	0.452
Mountain rural	21,381	4.7	75,442	7.8	0.283
Total	451,037	100	973,729	100	0.463

Note: Prevalence is computed as the ratio between the total number of migrants and the total number of split-off individuals. *Source:* World Bank staff estimates form survey data.

Table C. 9: Permanent Migrants by Country of Destination and Residence of Original Household (1990-2004)

		Country of Destination				
		Albania	Greece	Italy	Beyond	Total
	53.7	20.3	18.4	7.6	100	100
	Other urban	47.4	21.1	23.6	8.0	100
	Rural	57.6	21.1	16.8	4.5	100
	Tirana	48.9	12.6	12.4	26.1	100
	Coast urban	42.3	18.6	31.5	7.5	100
	Coast rural	52.9	18.1	25.6	3.3	100
	Central urban	52.3	24.6	15.0	8.1	100
	Central rural	57.9	26.0	11.1	5.1	100
	Mountain urban	54.8	13.4	19.7	12.2	100
	Mountain rural	71.7	13.1	9.0	6.2	100
Total						

Source: World Bank staff estimates form survey data.

Table C. 10: Percentage of Adult Individuals Temporarily Abroad (1990-2004)

	Freq.	%	Cum.
No	2,009,666	87.3	87.3
Yes	291,759	12.7	100
Total	2,301,425	100	

Table C. 11: Composition of Temporary Migrants

	Freq.	%	Cum.
Spouse	22,065	7.6	7.6
Head	155,344	53.2	60.8
Child	114,351	39.2	100
Total	291,759	100	

Source: World Bank staff estimates form survey data.

Table C. 12 a-b: Percentage of Households with Members Temporarily Abroad and Breakdown by Number of Members Abroad, 1990-2004

	Freq.	%	Cum.
No	494,178	67.3	67.3
Yes	239,682	32.7	100
Total	733,860	100	

# of Members Abroad	# of Members		
	Freq.	%	Cum.
1	196,492	82.0	82.0
2	34,960	14.6	96.6
3	7,573	3.2	99.7
4	657	0.3	100
Total	239,682	100	

Table C. 13: Household's Characteristics by Internal Move

	Total	Not-moved	Moved
Poverty headcount	0.19	0.19	0.16
Poverty gap	4.00	4.19	3.07
Severe poverty	1.33	1.41	0.97
Unemployment ratio	0.10	0.09	0.13
Unemployment ratio (relaxed definition)	0.15	0.14	0.17
Dependency ratio	0.83	0.82	0.86
Household size	4.18	4.15	4.34
Number of adults (age>=15)	3.14	3.14	3.11
Female headed household	0.11	0.11	0.10
Average years of education	8.9	8.8	9.6
Maximum # of years of education	10.75	10.64	11.32
Head unemployed	0.04	0.04	0.07
Head married	0.88	0.87	0.92
Head widower	0.09	0.10	0.06
Head single	0.12	0.13	0.08

*Shaded cells indicate significance at the 5 percent level, or lower.

Source: World Bank staff estimates form survey data.

Table C. 14: Characteristics of Permanent Migrants and their Household of Origin

	Not migrant *	Migrant	Total
<i>Individual characteristics</i>			
Percent of females	0.69	0.35	0.53
Age	36.6	31.5	34.22
Years of schooling	9.8	10.1	9.96
<i>Household characteristics</i>			
Poverty headcount	0.21	0.12	0.19
Severe poverty	1.62	0.61	1.33
Poverty gap	4.7	2.2	4
Dependency ratio	0.84	0.81	0.83
Household size	4.54	3.48	4.18
Household size in 1990	5.07	6.36	5.51
Number of adults (age>=15)	3.24	2.93	3.14
Number of adults in 1990	3.76	5.81	4.46
Head is female	0.08	0.18	0.11
Average adult years of education	9.23	8.36	8.93
Max adult years of education	11.08	10.12	10.75
Head is unemployed	0.05	0.04	0.04
Head is married	0.90	0.84	0.88
Head is widower	0.07	0.15	0.09
Head is single	0.10	0.16	0.12
Age of household head	48.5	59.3	52.14
Average age of adults in household	39.7	46.3	41.95

* Shaded cells indicate significance at the 5 percent level, or lower.

Source: World Bank staff estimates from survey data.

Table C. 15: Characteristics of Temporary Migrants and their Families

	No migrants*	Migrants	Total
Percent of females	0.58	0.12	0.52
Age	41.8	37.8	41.26
Years of education	8.7	10.1	8.92
Poverty headcount	0.18	0.19	0.19
Severe poverty	1.32	1.35	1.33
Poverty gap	3.98	4.04	4
Unemployment ratio, last week	0.11	0.09	0.1
Dependency ratio	0.82	0.84	0.83
Household size	3.93	4.71	4.18
Number of adults (age>=15)	2.98	3.45	3.14
Head is female	0.14	0.06	0.11
Average adult years of education	8.82	9.17	8.93
Max adult years of education	10.58	11.11	10.75
Head is unemployed	0.05	0.04	0.04
Head is married	0.86	0.92	0.88
Head is widow/er	0.11	0.07	0.09
Head is single	0.14	0.08	0.12

*Shaded cells indicate difference significant at 5 percent, or lower.

Source: World Bank staff estimates from survey data.

Table C. 16: Maximum Likelihood Migration Duration Models (log-logistic hazard function)

	Any migration		Perm migration only		Temp migration only	
	Coef	Rob.sd	Coef	Rob.sd	Coef	Rob.sd
Origin of spell	-0.008**	0.004	-0.016***	0.005	0.029***	0.01
Gender (female=1)	0.673***	0.025	0.283***	0.025	1.562***	0.067
Coastal region	-0.197***	0.033	-0.221***	0.039	-0.132	0.082
Central region	-0.071**	0.034	-0.091**	0.041	-0.046	0.081
Mountain region	0.114***	0.035	0.057	0.042	0.204**	0.082
Urban areas	-0.024	0.021	-0.090***	0.026	0.102*	0.053
Age (in years)	0.049***	0.001	0.052***	0.002	0.046***	0.003
Years of education	-0.123***	0.018	-0.095***	0.02	-0.162***	0.046
Years of education squared	0.005***	0.001	0.004***	0.001	0.007***	0.002
No. of household members age 0-14	0.013*	0.008	0.039***	0.01	-0.035**	0.017
No. of males in household age 15-35	-0.006	0.009	-0.099***	0.011	0.124***	0.028
No. of females in household age 15-35	-0.050***	0.012	-0.016	0.015	-0.060*	0.035
No. of males in household age 36-55	-0.118***	0.013	-0.298***	0.018	0.224***	0.03
No. of household members age >55	-0.095***	0.016	-0.235***	0.021	0.313***	0.045
Migrant network in Greece	-0.322***	0.022	-0.240***	0.021	-0.245***	0.067
Migrant network in Italy and beyond	-0.234***	0.019	-0.235***	0.019	0.175***	0.062
Household-level shocks						
Pyramid collapse	0.007	0.056	0.054	0.063	-0.375***	0.126
Property loss	-0.002	0.05	-0.016	0.061	0.026	0.126
Job loss	0.001	0.019	0.086***	0.023	-0.139***	0.042
Illness/death of household member	0.029**	0.014	0.021	0.015	0.046	0.048
Wealth index in 1990	-0.018***	0.005	-0.006	0.007	-0.041***	0.013
Regularization programs (epoch dummy >1998)	0.180***	0.026	0.174***	0.03		
Constant	2.099***	0.115	2.624***	0.129	2.570***	0.299
Logarithm of gamma	-0.996***	0.019	-1.052***	0.028	-0.533***	0.026
Gamma		0.369		0.349		0.587
No. of subjects		12,753		12,753		12,753
No. of failures		2,955		1,971		984
Total time at risk		147,757		155,428		158,298
Log-likelihood		-6,041		-4,304		-3,400
Chi2		4,916		3,664		1,036
P		0		0		0

Note: .01 - ***; .05 - **; .1 - *

Source: World Bank staff estimates from survey data.

Table C. 17: Maximum Likelihood Return Duration Models (log-logistic hazard function)

	Coefficient	Rob. sd
Origin of spell	-0.137***	0.076
Gender (female=1)	0.310***	0.077
Spouse is abroad with migrant	0.897***	0.085
Coastal region	0.036	0.085
Central region	0.055	0.094
Mountain region	0.133	0.060
Urban areas	-0.158***	0.003
Age (in years)	-0.023***	0.135
Years of education	0.240*	0.012
Years of education squared	-0.025**	0.000
Years of education cube	0.001*	0.022
No. of household members age 0-14	-0.085***	0.031
No. of males in household age 15-35	0.125***	0.037
No. of females in household age 15-35	-0.080**	0.037
No. of males in household age 36-55	0.320***	0.041
No. of household members age >55	0.351***	0.032
Migrant network in Greece	0.105***	0.044
Migrants network in Italy and beyond	0.170***	0.001
Minimum distance to border crossing	0.001	0.073
Regularization programs (epoch dummy >1998)	0.440***	
Country of destination		
Greece	0.629***	0.074
Italy	0.432***	0.087
Occupation while abroad		
Agriculture	0.138	0.099
Crafts	0.493***	0.093
Service	0.480***	0.113
Blue collars	0.415***	0.100
White collar	0.993***	0.185
Other	0.232	0.244
Constant	1.608***	0.515
Logarithm of gamma	-0.672***	0.028
Gamma		0.511
No. of subjects		2,955
No. of failures		984
Total time at risk		16,736
Log-likelihood		-1,912
Chi2		1,285
P		0.000

Note: .01 - ***; .05 - **; .1 - *

Source: World Bank staff estimates form survey data.

Table C. 18: Characteristics of Migrants to Greece*

	Traced-migrant to Greece	Non-traced migrants in Greece	Total
Age	33.5	31.6	31.89
% of females	0.27	0.37	0.35
Years of education	9.98	9.68	9.73
Entered legally into Greece	0.5	0.53	0.53
Has legal residence in Greece	0.9	0.89	0.89
Spoke Greek in 1990	0.12	0.1	0.1
Speaks Greek now	0.97	0.91	0.92
Year moved to Greece	1998	1999	1998
Working when left Albania	0.5	0.39	0.41
Currently working in Greece	0.93	0.87	0.88
Working legally	0.84	0.75	0.76
Spouse is Albanian	0.77	0.66	0.68
Remitted in cash last year	0.67	0.54	0.56

*Shaded cell indicate significance at 95% level or higher.

Source: World Bank staff estimates form survey data.

Table C. 19: Characteristics and Distribution of Migrants According to their Intention to Return

	Yes	No	Total
Age	35.4	34.9	35.2
Share of female	0.16	0.38	0.25
Share with family	0.92	0.93	0.92
Share married	0.84	0.8	0.82
Share w/ primary school	0.53	0.33	0.44
Share w/ secondary school	0.31	0.4	0.35
Share w/ vocational school	0.08	0.2	0.13
Share w/ university	0.06	0.07	0.07
Share of urban	0.47	0.57	0.52
Total years in Greece	8.75	9.88	9.24
Year first come to Greece	1995	1995	1995
No. of months in Albania in the last 2 years	2.35	1.85	2.13
No. of places in Greece	2.88	2.1	2.54
Percent willing to migrate to another country	0.37	0.3	0.34
Tried to be back to Albania	0.16	0.05	0.11
Percent of 1st time legal entry	0.27	0.3	0.29
Percent obtained legal residence	0.94	0.95	0.95
No. of months of unemployment (past 12 months)	10	9.64	9.88
Average working days per month	19.88	22.65	21.07
Percent of acquired new skills in Greece	0.94	0.8	0.88
Percent of currently insured	0.8	0.7	0.76
How many stamps received	89	95	91
Average monthly individual income	767	721	747
Average monthly household income	1,201	1,303	1,246
Percent of sending money to Albania	0.67	0.55	0.62
Mean amount remitted to Albania	2,029	2,068	2,045
Percent of remittances spent in consumption	0.43	0.4	0.42
More or same remittances than 2004	0.51	0.42	0.47
Less remittances than 2004	0.16	0.13	0.14

More or same remittances than 2005	0.33	0.33	0.33
Less remittances than 2005	0.04	0.1	0.07
Percent of planning to remain in Greece permanently	0.13	0.94	0.47
Percent of investors in Albania	0.59	0.33	0.47
Percent of money savers in 2005	0.79	0.49	0.66
N	51	40	91
Percent	56	44	100

*Shaded cell indicate significance at 95% level or higher.

Source: World Bank staff estimates form survey data.

Table C. 20: Remittances by Country of Destination and Region of Residence of Original Household

Stratum	% of households receiving remittances from			Average amount remitted to household (at 2005 prices, leks)		
	Greece	Italy	Beyond	Greece	Italy	Beyond
Coastal	0.08	0.13	0.04	177,359	169,902	139,025
Central	0.1	0.05	0.04	145,910	148,956	182,782
Mountain	0.07	0.05	0.03	198,771	243,796	217,775
Tirana	0.02	0.04	0.09	239,100	150,299	187,398
Total	0.08	0.08	0.04	164,144	166,538	175,552

Source: World Bank staff estimates form survey data.

Table C. 21: Poverty 2002-2005 by Region

Region	Poverty headcount			Poverty gap		
	2002	2005	Δ	2002	2005	Δ
Tirana	0.18	0.08	-9.7	3.77	1.65	-2.1
Coast urban	0.20	0.17	-8.6	5.43	1.99	-3.4
Coast rural	0.21	0.20	-1.2	3.62	4.06	0.4
Central urban	0.19	0.13	-6.8	3.82	2.99	-0.8
Central rural	0.29	0.26	-2.6	6.55	6.01	-0.5
Mountain urban	0.25	0.17	-7.6	6.52	3.61	-2.9
Mountain rural	0.50	0.28	-21.8	12.3	5.50	-6.8
Total	0.25	0.19	-6.9	5.71	4.00	-1.7

Source: World Bank staff estimates form survey data.

Table C. 22: Migrants and Remittances 2002-2005 by Region

Region	% of households receiving remittances			Average amount remitted to household (at 2005 prices, leks)			Total amount remitted to household (at 2005 prices, billion leks)		
	2002	2005	Δ	2002	2005	Δ	2002	2005	Δ
Tirana	0.158	0.310	15.2	160,537	181,715	13.2	2.3	5.8	152.2
Coast urban	0.351	0.397	4.6	133,837	161,305	20.5	4.9	6.9	40.8
Coast rural	0.302	0.387	8.5	208,922	196,807	-5.8	7.9	9.6	21.5
Central urban	0.318	0.293	-2.5	116,385	113,668	-2.3	4.4	4.2	-4.5
Central rural	0.310	0.333	2.3	193,539	136,055	-29.7	13.0	9.2	-29.2
Mountain urban	0.117	0.210	9.3	230,604	194,195	-15.8	0.4	0.7	47.7
Mountain rural	0.150	0.249	9.9	213,191	212,011	-0.6	1.8	2.8	55.6
Total	0.28	0.33	5.3	170,155	160,154	-5.9	35.0	39.0	11.4

Source: World Bank staff estimates from survey data.

Table C. 23: Log per-capita Consumption Estimations: Measuring the Impact of Migration

	Temporary migration		Permanent migration	
	OLS	IV	OLS	IV
(District dummies omitted)				
No. of children <=5 yrs old	-0.087*** [0.012]	-0.098*** [0.014]	-0.086*** [0.013]	-0.124*** [0.019]
Household size	-0.253*** [0.013]	-0.255*** [0.016]	-0.242*** [0.013]	-0.130*** [0.037]
Household size squared	0.014*** [0.001]	0.014*** [0.002]	0.014*** [0.001]	0.008*** [0.002]
Age of household head	0.001 [0.004]	0.002 [0.004]	-0.003 [0.004]	-0.036*** [0.010]
Age of household head squared	0 [0.000]	0 [0.000]	0 [0.000]	0.000*** [0.000]
Head is female	-0.021 [0.024]	-0.019 [0.024]	-0.021 [0.024]	-0.009 [0.033]
Average adult years of education	0.051*** [0.003]	0.049*** [0.003]	0.053*** [0.003]	0.065*** [0.005]
PCA score index 1990	0.049*** [0.006]	0.046*** [0.006]	0.049*** [0.006]	0.044*** [0.008]
Unemployment rate in 2002 (at the district level)	-0.006*** [0.002]	-0.006*** [0.002]	-0.007*** [0.002]	-0.011*** [0.003]
Household Distant Index	-0.035*** [0.009]	-0.036*** [0.010]	-0.035*** [0.009]	-0.034*** [0.009]
Household Social Capital Index	-0.038*** [0.008]	-0.038*** [0.008]	-0.037*** [0.008]	-0.039*** [0.010]
Total # of months abroad 90-04 in household	0.001*** [0.000]	0.005** [0.002]		
No. of individuals living abroad in household			0.034*** [0.008]	0.409*** [0.105]
Constant	9.445*** [0.114]	9.403*** [0.119]	9.505*** [0.116]	9.964*** [0.188]
Observations	3638	3638	3638	3638
Adjusted R-squared	0.48	0.45	0.48	0.10
F test of excluded instruments		11.45		15.68

Anderson-Rubin chi-squared test of endogenous regressors	7.90	36.30
P-value	0.02	0.00
Cragg-Donald F-stat	39.14	22.25
Cragg-Donald chi-squared	79.32	45.10
P-value	0.00	0.00
Hansen J-statistic	0.21	2.30
P-value	0.65	0.13
Anderson canonical correlation LR chi-squared test	78.47	44.82
P-value	0.00	0.00
Robust standard errors in brackets		
* significant at 10%; ** significant at 5%; *** significant at 1%		
Excluded instruments		
For temporary: anyone in household spoke Greek in '90; household had relatives or family friends living abroad in '90		
For permanent: % of males 20-39 by municipality; anyone in household spoke Italian or Greek in 1990		
Source: World Bank staff estimates form survey data.		

Table C. 24: Selected Descriptive Statistics by Temporary Migration Status

Variable	Without Temporary Migration	With Temporary Migration	Total	Significance
Per-capita consumption	9,202	8,943	9,109	
Tirana	0.16	0.10	0.14	***
Coast urban	0.15	0.15	0.15	
Coast rural	0.17	0.18	0.17	
Central urban	0.18	0.15	0.17	***
Central rural	0.25	0.33	0.28	***
Mountain urban	0.02	0.02	0.02	*
Mountain rural	0.07	0.07	0.07	
No. of children <=5 yrs old	0.25	0.50	0.33	***
Household size	3.94	4.70	4.18	***
Age of household head	53	50	52	***
Head is female	0.14	0.06	0.11	***
Average adult years of education	8.8	9.2	8.9	***
Unemployment rate 2002 (at the district level)	13.2	12.5	13.0	***
PCA score index 1990	0.05	0.13	0.08	
Household Distant Index	-0.01	0.03	0	
Household Social Capital Index	0.02	-0.04	0	
Total no. of months abroad 90-04 in household	0.00	31.30	10.06	***
Anyone spoke Greek in 90	0.04	0.11	0.06	***
Household had family friends or relatives abroad in 90	0.07	0.10	0.08	***
Number of individuals living abroad in household	0.69	0.46	0.61	***
% of males 20-39 by municipality	13.71	14.04	13.82	***
Dummy anyone spoke Greek or Italian in 90	0.2	0.2	0.2	*
N	2,470	1,170	3640	
%	68	32	100	

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

Source: World Bank staff estimates form survey data.

Table C. 25: Selected Descriptive Statistics by Permanent Migration Status

Variable	Without Permanent Migration	With Permanent Migration	Total	Significance
Per-capita consumption	8,813	9,856	9,109	***
Tirana	0.15	0.12	0.14	***
Coast urban	0.13	0.18	0.15	***
Coast rural	0.14	0.24	0.17	***
Central urban	0.18	0.15	0.17	**
Central rural	0.30	0.24	0.28	***
Mountain urban	0.03	0.02	0.02	*
Mountain rural	0.08	0.05	0.07	***
No. of children <=5 yrs old	0.40	0.19	0.33	***
Household size	4.54	3.48	4.18	***
Age of household head	48	59	52	***
Head is female	0.08	0.18	0.11	***
Average adult years of education	9.2	8.4	8.9	***
Unemployment rate 2002 (at the district level)	12.79	13.29	12.96	**
PCA score index 1990	-0.03	0.28	0.08	***
Household Distant Index	0.02	-0.02	0	
Household Social Capital Index	-0.01	0.02	0	
Total number of months abroad 90-04 in household	10.55	9.11	10.06	
Anyone spoke Greek in 90	0.1	0.1	0.1	***
Household had family friends or relatives abroad in 90	0.08	0.08	0.08	
Number of individuals living abroad in household	0.00	1.80	0.61	***
% of males 20-39 by municipality	13.96	13.54	13.82	***
Dummy anyone spoke Greek or Italian in 90	0.1	0.3	0.2	***
N	2,400	1,240	3640	
%	66	34	100	

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

Source: World Bank staff estimates from survey data.

Table C. 26: Individuals' Occupation Over Time by Migration Status (whole sample)

	1990	First Migration Episode	Last Migration Episode	2005
Agriculture	32.0	48.7	40.0	35.6
Crafts	10.5	33.0	40.5	22.8
Service	2.3	2.1	3.1	5.9
White collar	5.3	1.0	0.7	6.0
Blue collar	6.5	5.6	5.8	7.0
Other	1.1	0.0	0.5	0.2
Not working	42.5	9.6	9.4	22.6
Total	100	100	100	100

Source: World Bank staff estimates from survey data.

Table C. 27: Migrants Occupation in First and Last Migration Episode

Occupation in First Migration	Occupation in last Migration							Total
	Agriculture	Craft	Service	White Collar	Blue Collar	Other	Not Working	
Agriculture	34.1	11.5	0.5	0	1.1	0.2	1.3	48.7
Craft	3.0	25.5	0.3	0.1	1.1	0.1	2.9	33.0
Service	0	0.4	1.6	0	0	0	0.1	2.1
White collar	0.4	0	0	0.6	0	0	0	1.0
Blue collar	0.6	0.8	0.2	0	3.3	0.1	0.5	5.6
Other	0	0.0	0	0	0	0	0	0.0
Not working	1.9	2.2	0.5	0	0.3	0.2	4.6	9.6
Total	40.0	40.5	3.1	0.7	5.8	0.5	9.4	100

Source: World Bank staff estimates from survey data.

Table C. 28: Effect of Migration on Enrollment Rate, 6-22 year olds

	Enrollment Rate All Household	Male Enrollment Rate	Female Enrollment Rate
Household has international migrant	-0.572 (3.76)**	-0.165 (0.97)	-0.764 (4.40)**
Log of per capita consumption	0.12 (6.60)**	0.118 (5.94)**	0.139 (5.36)**
Log of household size	-0.117 (2.20)*	0.032 (0.53)	-0.194 (3.00)**
Members age 0 to 5	-0.154 (1.20)	0.12 (0.79)	-0.348 (1.87)
Members age 6 to 9	0.422 (3.07)**	0.504 (3.50)**	0.361 (1.89)
Members age 10 to 13	0.194 (1.51)	0.397 (2.91)**	0.034 (0.19)
Members 14 to 17	-0.141 (1.24)	-0.032 (0.26)	-0.201 (1.24)
Members 18 to 22	-0.96 (8.32)**	-0.837 (6.71)**	-0.893 (5.48)**
Members 23 to 25	-0.666 (4.56)**	-0.567 (3.49)**	-0.776 (3.72)**
Members 26 to 65	-0.192 (1.82)	-0.111 (0.89)	-0.293 (1.86)
Age of head of household	0.007 (0.90)	0.001 (0.07)	0.011 (1.00)
Age of head of household 2	0 (0.02)	0 (0.29)	0 (0.20)
Education of head of household	0.017 (5.14)**	0.016 (4.23)**	0.014 (3.20)**
Female head of household	0.108 (2.76)**	0.064 (1.35)	0.106 (1.99)*
Distance index	-0.021 (2.42)*	-0.025 (2.69)**	-0.011 (0.90)
Number of household plots	-0.009 (1.69)	-0.007 (1.06)	-0.023 (3.30)**
Land area	0 (0.64)	0 (0.78)	0 (0.07)
Social capital Index	0.005 (0.58)	0.008 (0.92)	-0.001 (0.13)
Coastal	0.077 (2.56)*	0.047 (1.49)	0.116 (2.78)**
Central	0.031 (1.23)	0.035 (1.20)	0.065 (1.81)
Mountain	0.018 (0.72)	0.024 (0.87)	0.026 (0.74)
Constant	-0.392 (1.47)	-0.492 (1.66)	-0.437 (1.15)
Observations	2262	1652	1596
F-Stat	12.60	13.93	13.92
Sargan P-Value	0.17	0.86	0.216

Absolute value of z statistics in parentheses

*Significant at 5%; ** significant at 1%

Source: World Bank staff estimates from survey data.

Table C. 29: Effect of Migration on Enrollment Rates (Rural), 6-22 year olds

	Enrollment Rate All Household	Male Enrollment Rate	Female Enrollment Rate
Household has an international migrant	-0.637 (3.41)**	0.063 (0.51)	-0.719 (3.92)**
Log of per capita consumption	0.129 (3.87)**	0.114 (3.73)**	0.151 (3.50)**
Log of household size	-0.122 (1.72)	0.094 (1.53)	-0.163 (1.85)
Members age 0 to 5	-0.327 (1.63)	0.109 (0.52)	-0.272 (1.06)
Members age 6 to 9	0.588 (2.75)**	0.688 (3.48)**	0.699 (2.59)**
Members 10 to 13	0.172 (0.83)	0.533 (2.88)**	0.153 (0.58)
Members 14 to 17	-0.278 (1.60)	-0.136 (0.82)	-0.101 (0.45)
Members 18 to 22	-1.3 (6.73)**	-0.894 (5.14)**	-1.164 (4.85)**
Members 23 to 25	-0.774 (3.35)**	-0.631 (2.78)**	-0.706 (2.29)*
Members 26 to 65	-0.162 (1.04)	-0.005 (0.03)	-0.226 (1.01)
Age of head of household	0.024 (1.50)	-0.011 (0.86)	0.02 (1.12)
Age of head of household 2	0 (1.15)	0 (0.99)	0 (0.71)
Education of head of household	0.017 (3.19)**	0.018 (3.56)**	0.014 (2.03)*
Female head of household	0.143 (2.26)*	0.016 (0.27)	0.063 (0.79)
Distance index	-0.015 (1.54)	-0.019 (1.83)	-0.008 (0.60)
# of household plots	0.001 (0.08)	0.001 (0.18)	-0.013 (1.26)
Land area	0 (0.41)	0 (1.55)	0 (0.23)
Social capital index	0.008 (0.60)	0.007 (0.58)	0 (0.03)
Central	-0.086 (2.30)*	-0.021 (0.61)	-0.09 (1.91)
Mountain	-0.097 (2.80)**	-0.031 (0.97)	-0.15 (3.34)**
Constant	-0.744 (1.49)	-0.303 (0.69)	-0.745 (1.19)
Observations	1070	822	774
Female Statistics	13.29	15.90	12.19
Sargan P-Value	0.62	0.11	0.23

Absolute value of z statistics in parentheses

*Significant at 5%; ** significant at 1%

Source: World Bank staff estimates from survey data.

Table C. 30: Effect of Migration on Enrollment Rates (Urban), 6-22 year olds

	Enrollment Rate All Household	Male Enrollment Rate	Female Enrollment Rate
Household has an international migrant	0.08 (0.96)	0.087 (0.75)	0.142 (1.35)
Log of per capita consumption	0.123 (6.30)**	0.109 (4.33)**	0.116 (4.46)**
Log of household size	0.063 (1.29)	0.112 (1.50)	0.003 (0.05)
Members age 0 to 5	-0.091 (0.58)	0.123 (0.56)	-0.321 (1.48)
Members age 6 to 9	0.423 (2.78)**	0.482 (2.41)*	0.287 (1.36)
Members age 10 to 13	0.328 (2.37)*	0.458 (2.54)*	0.155 (0.80)
Members age 14 to 17	0.054 (0.41)	0.149 (0.85)	-0.051 (0.27)
Members age 18 to 22	-0.716 (5.49)**	-0.689 (3.95)**	-0.685 (3.76)**
Members age 23 to 25	-0.453 (2.84)**	-0.433 (1.98)*	-0.668 (2.98)**
Members age 26 to 65	-0.285 (2.23)*	-0.216 (1.20)	-0.393 (2.19)*
Age of head of household	-0.005 (0.72)	0 (0.03)	-0.007 (0.80)
Age of head of household2	0 (0.47)	0 (0.10)	0 (0.52)
Education of head of household	0.019 (6.27)**	0.019 (4.53)**	0.018 (4.38)**
Female head of household	0.003 (0.09)	0.011 (0.23)	-0.025 (0.52)
Distance index	-0.056 (2.75)**	-0.047 (1.83)	-0.057 (2.11)*
Social capital index	0.005 (0.54)	0.009 (0.76)	0.002 (0.15)
Coastal	0.002 (0.07)	0.023 (0.75)	-0.01 (0.31)
Central	0.054 (2.29)*	0.064 (2.02)*	0.074 (2.30)*
Mountain	0.023 (0.94)	0.028 (0.88)	0.035 (1.03)
Constant	-0.329 (1.20)	-0.492 (1.30)	0.011 (0.03)
Observations	1192	830	822
FemaleStatistics	34.55	23.06	27.91
Sargan P-Value	0.40	0.71	0.27

Absolute value of z statistics in parentheses

*Significant at 5%; ** significant at 1%

Source: World Bank staff estimates form survey data.

Table C. 31: Effects of Migration on Enrollment, 14-17 year olds

	Enrollment Rate All Household	Male Enrollment Rate	Female Enrollment Rate
Household has an international migran	-0.578 (3.04)**	-0.02 (0.14)	-0.931 (3.29)**
Log of per capita consumption	0.157 (5.08)**	0.171 (4.66)**	0.173 (3.41)**
Log of household size	-0.026 (0.27)	0.083 (0.73)	0.119 (0.83)
Members age 0 to 5	-0.587 (1.97)*	-0.668 (1.86)	-0.897 (1.75)
Members age 6 to 9	0.008 (0.03)	0.314 (1.03)	-0.731 (1.69)
Members age 10 to 13	-0.613 (2.64)**	-0.149 (0.58)	-1.05 (2.60)**
Members age 14 to 17	-0.363 (1.56)	-0.211 (0.83)	-0.732 (1.87)
Members age 18 to 22	-0.418 (1.84)	-0.034 (0.14)	-0.942 (2.21)*
Members age 23 to 25	0.113 (0.42)	-0.206 (0.63)	0.378 (0.86)
Members age 26 to 65	0.03 (0.12)	-0.011 (0.04)	0.178 (0.41)
Age of head of household	0.006 (0.33)	-0.034 (1.78)	0.04 (1.20)
Age of head of household 2	0 (0.12)	0 (1.86)	0 (0.90)
Education of head of household	0.019 (3.42)**	0.014 (2.33)*	0.02 (2.08)*
Female head of household	0.124 (1.56)	0.032 (0.38)	0.254 (1.90)
Distance index	-0.064 (4.09)**	-0.051 (2.73)**	-0.073 (3.04)**
Number of household plots	-0.018 (1.86)	-0.021 (1.62)	-0.01 (0.63)
Land area	0 (0.49)	0 (0.73)	0 (0.57)
Social capital index	0.024 (1.79)	0.015 (0.93)	0.026 (1.15)
Coastal	0.097 (2.04)*	-0.015 (0.27)	0.202 (2.70)**
Central	0.061 (1.36)	0.04 (0.70)	0.13 (1.88)
Mountain	0.058 (1.30)	0.042 (0.75)	0.088 (1.25)
Constant	-0.886 (1.49)	-0.031 (0.05)	-2.099 (1.98)*
Observations	1087	603	589
Female-Statistics	11.38	16.70	10.32
Sargan P-Value	0.94	0.97	0.81
Absolute value of z statistics in parentheses			
*Significant at 5%; ** Significant at 1%			

Table C. 32: Effect of Migration on Enrollment Rates, 14-17 year olds (Rural)

	Enrollment Rate All Household	Male Enrollment Rate	Female Enrollment Rate
Household has an international migrant	-0.677 (2.61)**	-0.151 (0.65)	-1.335 (2.78)**
Log of per capita consumption	0.254 (4.52)**	0.265 (3.97)**	0.297 (2.86)**
Log of household size	0.044 (0.30)	0.071 (0.41)	0.144 (0.52)
Members age 0 to 5	-0.782 (1.70)	-0.994 (1.93)	-0.793 (0.86)
Members age 6 to 9	0.223 (0.58)	0.398 (0.86)	-0.646 (0.81)
Members age 10 to 13	-0.779 (2.08)*	-0.493 (1.22)	-1.306 (1.66)
Members age 14 to 17	-0.091 (0.25)	-0.223 (0.55)	-0.4 (0.58)
Members age 18 to 22	-0.345 (0.93)	-0.052 (0.13)	-1.056 (1.30)
Members age 23 to 25	0.053 (0.12)	-0.466 (0.83)	0.423 (0.53)
Members age 26 to 65	-0.018 (0.04)	-0.269 (0.57)	-0.296 (0.32)
Age of head of household	0.027 (0.73)	-0.038 (0.88)	0.102 (1.50)
Age of head of household 2	0 (0.45)	0 (1.07)	-0.001 (1.29)
Education of head of household	0.025 (2.80)**	0.013 (1.19)	0.031 (1.96)*
Female head of household	0.081 (0.54)	-0.081 (0.47)	0.462 (1.63)
Distance index	-0.053 (2.59)**	-0.041 (1.73)	-0.062 (1.71)
# of household plots	-0.005 (0.35)	-0.021 (1.18)	0.018 (0.72)
Land area	0 (0.43)	0 (0.58)	0 (0.35)
Social capital index	0.015 (0.67)	0.007 (0.28)	0.018 (0.42)
Central	-0.071 (1.13)	0.026 (0.38)	-0.174 (1.53)
Mountain	-0.102 (1.67)	0.016 (0.24)	-0.302 (2.72)**
Constant	-2.481 (2.06)*	-0.64 (0.42)	-4.803 (2.27)*
Observations	545	315	297
Female Statistics	11.50	7.44	5.89
Sargan P-Value	0.61	0.80	0.60
Absolute value of z statistics in parentheses			
* significant at 5%; ** significant at 1%			

Table C. 33: Effect of Migration on Enrollment, 14-17 year olds (Urban)

	Enrollment Rate All Household	Male Enrollment Rate	Female Enrollment Rate
Household has an international migrant	-0.036 (0.28)	-0.027 (0.13)	-0.041 (0.20)
Log of per capita consumption	0.103 (3.39)**	0.108 (2.55)*	0.099 (2.34)*
Log of household size	0.055 (0.51)	0.087 (0.51)	0.068 (0.51)
Members age 0 to 5	-0.41 (1.22)	-0.309 (0.62)	-0.926 (1.95)
Members age 6 to 9	-0.194 (0.72)	0.178 (0.46)	-0.783 (1.99)*
Members age 10 to 13	-0.3 (1.29)	0.002 0.00	-0.804 (2.34)*
Members age 14 to 17	-0.366 (1.40)	-0.213 (0.62)	-0.716 (1.96)
Members age 18 to 22	-0.335 (1.51)	-0.241 (0.81)	-0.712 (2.07)*
Members age 23 to 25	-0.147 (0.52)	-0.071 (0.18)	-0.367 (0.85)
Members age 26 to 65	-0.052 (0.20)	0.096 (0.27)	-0.324 (0.78)
Age of head of household	-0.01 (0.65)	-0.013 (0.64)	0 (0.02)
Age of head of household 2	0 (0.65)	0 (0.49)	0 (0.14)
Education of head of household	0.019 (3.70)**	0.016 (2.23)*	0.022 (2.58)**
Female head oh household	0.063 (0.99)	0.105 (1.16)	0.033 (0.35)
Distance index	-0.089 (2.67)**	-0.046 (0.89)	-0.113 (2.73)**
Social capital index	0.029 (2.12)*	0.019 (1.02)	0.047 (2.46)*
Coastal	0.014 (0.38)	-0.05 (0.94)	0.087 (1.71)
Central	0.068 (1.78)	0.022 (0.36)	0.117 (2.37)*
Mountain	0.086 (2.21)*	0.052 (0.94)	0.15 (2.60)**
Constant	0.017 (0.03)	-0.007 (0.01)	-0.012 (0.01)
Observations	542	288	292
Female Statistics	15.82	11.03	9.57
Sargan P-Value	0.49	0.37	0.52
Absolute value of z statistics in parentheses			
* significant at 5%; ** significant at 1%			

Table C. 34: Effect of Migration on Educational Expenditures, IV Probit (marginal effects)

	Any Educational Expenditures	Any Educational Expenditures for Males	Any Educational Expenditures for Females
Household has an international migrant	-0.351 (1.45)	-0.099 (0.47)	-0.716 (10.23)**
Log of per capita consumption	0.041 (1.85)*	0.097 (4.76)**	0.138 (5.54)**
Log of household size	0.035 (2.33)*	0.062 (1.25)	-0.032 (0.51)
Members age 0 to 5	-0.139 (1.55)	0.071 (0.48)	-0.386 (2.09)*
Members age 6 to 9	0.944 (2.32)*	0.870 (5.98)**	0.987 (4.25)**
Members age 10 to 13	0.492 (2.34)*	0.552 (4.52)	0.432 (2.20)*
Members age 14 to 17	0.195 (2.11)*	0.146 (1.34)	0.052 (0.33)
Members age 18 to 22	-0.010 (0.21)	-0.292 (2.59)**	-0.396 (2.52)**
Members age 23 to 25	-0.042 (0.66)	-0.140 (1.08)	-0.346 (1.83)*
Members age 26 to 65	-0.003 (0.07)	-0.059 (0.55)	-0.123 (0.82)
Age of head of household	0.004 (0.84)	-0.001 (0.15)	0.013 (1.21)
Age of head of household 2	0.000 (0.50)	0.000 (0.47)	0.000 (0.51)
Education of head of household	0.005 (2.57)**	0.014 (4.57)**	0.009 (1.96)*
Female head of household	0.024 (1.17)	0.037 (1.14)	0.085 (2.13)*
Distance index	-0.007 (1.17)	-0.018 (2.21)*	-0.005 (0.43)
No. of household plots	0.00011 (0.05)	-0.003 (0.50)	-0.019 (2.60)**
Land area	-0.000001 (1.70)	0.000 (1.40)	0.000 (0.14)
Social capital index	0.005 (1.19)	0.009 (1.11)	-0.006 (0.52)
Coastal	0.013 (0.82)	0.019 (0.73)	0.098 (2.83)*
Central	0.009 (0.93)	0.036 (1.62)	0.070 (2.17)*
Mountain	-0.001 (0.12)	0.021 (0.88)	0.029 (0.85)
Observations	2262	1652	1596
Female Statistics	15.81	13.93	18.60
Sargan P-Value	0.64	0.47	0.96

Absolute value of z statistics in parentheses
* significant at 5%; ** significant at 1%

Table C. 35: Effect of Migration on Educational Expenditures, Conditional OLS

	Ln Educational Exp	Ln Educational Exp for Males	Ln Educational Exp for Females
Household has an international migrant	-4.943 (4.03)**	-0.117 (0.30)	0.19 (0.46)
Log of per capita consumption	1.384 (11.76)**	1.072 (13.44)**	1.167 (13.92)**
Log of household size	0.072 (0.21)	0.184 (0.89)	0.766 (3.96)**
Members age 0 to 5	-2.059 (2.56)*	-2.868 (4.74)**	-1.687 (2.71)**
Members age 6 to 9	-1.874 (2.21)*	-2.37 (4.20)**	-1.566 (2.55)*
Members age 10 to 13	-1.409 (1.77)	-1.978 (3.80)**	-1.147 (1.99)*
Members age 14 to 17	-0.061 (0.09)	-1.244 (2.46)*	0.174 (0.32)
Members age 18 to 22	0.717 (0.99)	0.148 (0.29)	1.616 (2.98)**
Members age 23 to 25	-0.496 (0.53)	-0.72 (0.99)	0.584 (0.78)
Members age 26 to 65	0.259 (0.35)	-0.624 (1.14)	0.468 (0.80)
Age of head of household	0.184 (3.40)**	0.055 (1.78)	0.004 (0.13)
Age of head of household 2	-0.001 (2.61)**	0 (1.51)	0 (0.07)
Education of head of household	0.005 (0.21)	0.051 (3.89)**	0.069 (5.14)**
Female head of household	0.942 (2.87)**	-0.157 (0.97)	-0.004 (0.02)
Distance index	-0.019 (0.33)	0.015 (0.37)	-0.032 (0.77)
# of household plots	0.033 (0.79)	-0.03 (1.30)	-0.063 (2.57)*
Land area	0 (0.32)	0 (0.82)	0 (0.77)
Social capital index	0.061 (1.22)	0.015 (0.44)	0.028 (0.76)
Coastal	0.623 (3.19)**	0.135 (1.16)	-0.119 (0.94)
Central	-0.231 (1.48)	-0.262 (2.24)*	-0.411 (3.53)**
Mountain	-0.017 (0.10)	-0.203 (1.81)	-0.41 (3.52)**
Constant	-11.193 (6.11)**	-4.724 (4.09)**	-5.906 (4.76)**
Observations	1905	1348	1235
Female-Stat	10.47	41.18	26.10
Sargan P-Value	0.99	0.26	0.29

Absolute value of z statistics in parentheses
* significant at 5%; ** significant at 1%

**Table C. 36: Effect of Migration on Educational Expenditures, 14-17 year olds
(IV PROBIT)**

	Any Educational Expenditures	Any Educational Expenditures for Males	Any Educational Expenditures for Females
Household has an international migrant	-0.602 (4.30)**	-0.029 (0.14)	-0.758 (18.25)**
Log of per capita consumption	0.165 (5.14)**	0.184 (4.53)**	0.174 (3.71)**
Log of household size	0.158 (1.65)	0.150 (1.27)	0.171 (1.30)
Members age 0 to 5	-0.480 (1.71)	-0.608 (1.72)	-0.837 (1.88)
Members age 6 to 9	-0.003 (0.01)	0.283 (0.84)	-0.710 (1.95)
Members age 10 to 13	-0.538 (2.46)**	-0.217 (0.78)	-0.948 (2.82)
Members age 14 to 17	0.453 (1.85)*	0.011 (0.04)	-0.447 (1.31)
Members age 18 to 22	-0.360 (1.66)	-0.066 (0.26)	-0.927 (2.81)**
Members age 23 to 25	0.044 (0.17)	-0.359 (1.08)	0.233 (0.59)
Members age 26 to 65	-0.009 (0.04)	-0.026 (0.09)	-0.007 (0.02)
Age of head of household	0.012 (0.68)	-0.018 (0.86)	0.041 (1.62)
Age of head of household 2	0.000 (0.26)	0.000 (0.90)	0.000 (1.23)
Education of head of household	0.020 (3.16)**	0.016 (2.42)**	0.018 (1.66)
Female head of household	0.098 (1.71)	0.061 (0.81)	0.187 (2.74)**
Distant	-0.039 (2.71)**	-0.033 (1.85)*	-0.044 (2.02)*
No. of household plots	-0.015 (1.55)	-0.020 (1.58)	-0.007 (0.51)
Land area	-0.000001 (0.55)	-0.000002 (0.74)	-0.000001 (0.64)
Social capital index	0.021 (1.58)	0.013 (0.79)	0.017 (0.84)
Coastal	0.063 (1.37)	-0.011 (0.16)	0.158 (2.83)**
Central	0.059 (1.30)	0.060 (1.00)	0.127 (2.14)*
Mountain	0.041 (0.91)	0.056 (0.93)	0.084 (1.42)
Observations	1087	603	589
Female-Stat	15.11	16.71	10.42
Sargan P-Value	0.52	0.87	0.47
Absolute value of z statistics in parentheses			
* significant at 5%; ** significant at 1%			

**Table C. 37: Effect of migration on educational expenditures, 14-17 year olds
(Conditional OLS)**

	Ln Educational Expenditures	Ln Educational Expenditures for Males	Ln Educational Expenditures for Females
Household has an international migrant	-0.433 (0.84)	-0.965 (1.54)	0.238 (0.36)
Log of per capita consumption	0.988 (10.33)**	0.792 (6.11)**	1.096 (8.00)**
Log of household saee3asize	0.705 (2.40)*	0.475 (1.12)	0.629 (1.60)
Members age 0 to 5	-1.652 (1.69)	-1.322 (0.95)	-1.884 (1.32)
Members age 6 to 9	-0.725 (0.94)	-1.141 (1.03)	0.521 (0.46)
Members age 10 to 13	-0.682 (0.96)	-0.969 (1.07)	-0.266 (0.25)
Members age 14 to 17	0.561 (0.79)	-0.588 (0.64)	-0.624 (0.61)
Members age 18 to 22	-1.028 (1.54)	-1.009 (1.21)	-0.994 (0.93)
Members age 23 to 25	-0.413 (0.49)	-0.289 (0.24)	-0.751 (0.63)
Members age 26 to 65	0.884 (1.08)	0.784 (0.71)	1.773 (1.48)
Age of head of household	0.02 (0.35)	0.17 (2.45)*	-0.131 (1.49)
Age of head of household 2	0 (0.11)	-0.001 (2.28)*	0.001 (1.65)
Education of head of household	0.034 (2.06)*	0.031 (1.47)	0.054 (2.08)*
Female of head of household	0.065 (0.27)	0.473 (1.48)	-0.286 (0.84)
Distance index	-0.021 (0.36)	-0.045 (0.56)	0.031 (0.36)
No. of household plots	-0.013 (0.47)	0.045 (0.90)	-0.046 (1.19)
Land area	0 (1.07)	0 (0.07)	0 (1.42)
Social capital index	0.027 (0.63)	0.021 (0.37)	-0.026 (0.41)
Coastal	0.115 (0.82)	0.339 (1.82)	-0.226 (1.17)
Central	-0.27 (2.03)*	-0.28 (1.43)	-0.381 (2.13)*
Mountain	-0.078 (0.58)	0.06 (0.31)	-0.332 (1.68)
Constant	-4.864 (2.65)**	-6.69 (2.87)**	-1.723 (0.61)
Observations	841	475	424
Female Statistics	18.03	12.29	10.80
Sargan P-Value	0.52	0.95	0.80

Absolute value of z statistics in parentheses

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

Table C. 38: Descriptive Statistics by Migration Status

Variables	Non-Migrant	Migrant	Total	P-Value
Dependent Variables				
Rate enrolled	0.76	0.60	0.72	0.000
Rate male enrolled	0.77	0.70	0.76	0.007
Rate Female enrolled	0.76	0.54	0.71	0.000
Educational Expenditure	2630	1806	2409	0.006
Educational Expenditure for Enrolled	3022	2548	2913	0.232
Educational Expenditure for Males	1588	1255	1508	0.263
Educational Expenditure for Females	1992	1410	1843	0.056
Educational Exp for Males Enrolled	1911	1698	1864	0.584
Educational Exp for Females Enrolled	2461	2318	2432	0.753
For Children Between 14 to 17 Years				
Rate enrolled	0.752	0.642	0.724	0.003
Rate male enrolled	0.763	0.746	0.759	0.717
Rate female enrolled	0.734	0.544	0.684	0.000
Educational Expenditure*	1461	802	1291	0.000
Educational Expenditure for Enrolled	1860	1179	1702	0.002
Educational Expenditure for Males	1210	803	1105	0.043
Educational Expenditure for Females	1453	653	1243	0.000
Educational Exp for Males Enrolled	1550	1057	1426	0.051
Educational Exp for Females Enrolled	1928	1145	1762	0.008
Independent Variables				
Household Size	4.935	4.463	4.808	0.00
Female Headed Household	4.94%	12.94%	7.08%	0.00
PC Consumption	10101	10363	10171	0.39
Head's Education	9.98	8.04	9.46	0.00
Distance Index	0.01	0.09	0.03	0.22
Social Capital Index	0.03	0.01	0.03	0.72
Migrants in Greece			51.00%	
Migrants in Italy			41.29%	
Migrant Household			26.80%	
Enrolled and Non-Enrolled Migrant Household				
	Non-Enrolled	Enrolled	Total	P-Value
Female Headed Households	6.14%	15.75%	12.94%	0.001
Household has Migrants in Greece	54.07%	49.73%	51.00%	0.412
Household has Migrants in Italy	41.64%	41.15%	41.29%	0.925
Household has Migrant in US	4.07%	6.66%	5.91%	0.236
Household Lives in Rural Area	65.32%	60.26%	61.74%	0.308
Household Lives in Urban Area	34.68%	39.74%	38.26%	0.308
Average Education of Migrants	9.19	9.91	9.70	0.000
Highest Education of Migrants	9.80	10.50	10.29	0.008

* Educational Expenditures are in monthly Albanian new lek.

Table C. 39: Reasons for Non-Enrollment (Migrant Household)

Reason Not Enrolled	Percent
Too Expensive	1.52
No Interest	16.41
Agricultural Work	1.01
Other Work	1.52
School Too Far	6.82
Poor Facilities	0.25
Own Illness	0.76
Family Illness-Death	0.25
Moved	0.76
Safety	0.76
Got Married	1.01
Completed Studies	66.16
Other	2.78
Total	100
Observations	396

Table C. 40: Reasons for Non-Enrollment (Non-Migrant Household)

Reason Not Enrolled	Percent
Too Expensive	1.50
No Interest	16.29
Agricultural Work	1.00
Other Work	1.50
School Too Far	6.77
Poor Facilities	0.25
Own Illness	0.75
Family Illness-Death	0.25
Moved	0.75
Safety	0.75
Got Married	1.00
Completed Studies	66.42
Other	2.76

Table C. 41: Age of Completion for Non-Enrolled (Migrant Household)

Age	Percent
10	1.01
11	1.26
12	1.26
13	1.26
14	51.01
15	21.46
16	5.05
17	1.26
18	13.89
19	2.02
20	0.25
22	0.25
Observations	396

ANNEX D: REACHING THE POOR THROUGH NDIHMA EKONOMIKE

Figure A. 14: Ratios of Program Participation in Household Per Capita Consumption Deciles Relative to 1st Decile

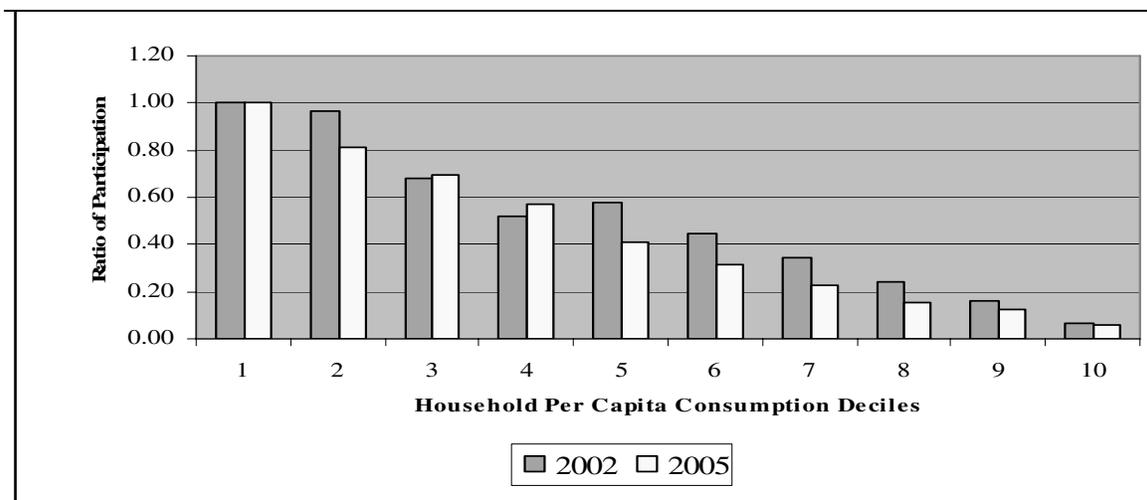


Table D. 1: Amounts of Ndhma Ekonomike Received per Family (Adjusted for Consumer Price Index only)

	Non-Poor			Poor			Ratio Poor to Non-Poor	
	2002	2005	Δ%	2002	2005	Δ%	2002	2005
Coastal	3007.53	2014.46	-33.0	2536.75	2440.09	-3.8	0.84	1.21
Central	2257.00	2319.17	2.8	2723.47	2098.33	-23.0	1.21	0.90
Mountain	1910.41	1973.29	3.3	2199.98	2027.15	-7.9	1.15	1.03
Tirana	3058.30	2104.11	-31.2	3514.50	2218.60	-36.9	1.15	1.05
Urban	2861.24	2580.93	-9.8	3343.37	2670.28	-20.1	1.17	1.03
Rural	1793.84	1983.51	10.6	2072.03	1890.35	-8.8	1.16	0.95
Total	2318.37	2186.49	-5.7	2529.13	2115.44	-16.4	1.09	0.97

Table D. 2: Amounts of Ndhma Ekonomike Received (adjusted for consumer price index, regional price differences and in per capita terms)

	Non-Poor			Poor			Ratio Poor to Non-Poor	
	2002	2005	Δ%	2002	2005	Δ%	2002	2005
Coastal	874.4	709	-18.9	564.6	525.7	-6.9	0.65	0.74
Central	607.7	620	2.0	529.9	433.6	-18.2	0.87	0.70
Mountain	484.1	426.1	-12.0	368.9	313.3	-15.1	0.76	0.74
Tirana	934.1	517.7	-44.6	791.7	656.9	-17.0	0.85	1.27
Urban	819.1	754	-7.9	695.3	609.5	-12.3	0.85	0.81
Rural	449.3	477.2	6.2	368.5	350.7	-4.8	0.82	0.73
Total	2308.608	2139.164	-7.3	2499.13	2075.892	-16.9	1.08	0.97

Table D. 3: Average Commune Allocation and Average per Family, by Strata

Year	Total Commune Allocation ('000)					Average Per Family Allocation				
	Coastal	Central	Mountain	Tirana	Total	Coastal	Central	Mountain	Tirana	Total
2000	672.0	1052.1	1170.3	2323.9	1035.5	2018.3	2144.2	2328.5	2582.8	2167.1
2001	582.2	958.3	1145.6	1879.3	938.0	1780.9	2008.5	2353.0	2184.1	2020.8
2002	572.6	927.9	1235.7	1791.5	933.3	1972.3	2140.8	2664.7	2343.1	2204.6
2003	518.3	876.4	1089.3	1706.0	861.3	1820.4	2028.7	2427.3	2287.3	2060.7
2004	502.0	835.5	1072.4	1673.7	832.1	1867.5	2005.3	2420.5	2197.4	2056.3
2005	406.8	662.5	868.0	1204.1	659.3	1522.8	1668.0	1979.8	1771.7	1692.9
2006	437.0	747.2	981.3	1369.1	738.6	2183.3	2012.1	2334.9	1863.0	2112.7
Total	527.2	865.8	1080.4	1706.8	856.9	1880.8	2001.1	2358.4	2175.6	2045.0

Table D. 4: Changes in Average Commune Allocation and per Family, by Strata

	Total Commune Allocation ('000)					Average Per Family Allocation				
	Coastal	Central	Mountain	Tirana	Total	Coastal	Central	Mountain	Tirana	Total
2000-01	-0.134	-0.089	-0.021	-0.191	-0.094	-0.118	-0.063	0.011	-0.154	-0.068
2001-02	-0.016	-0.032	0.079	-0.047	-0.005	0.107	0.066	0.132	0.073	0.091
2002-03	-0.095	-0.055	-0.118	-0.048	-0.077	-0.077	-0.052	-0.089	-0.024	-0.065
2003-04	-0.031	-0.047	-0.016	-0.019	-0.034	0.026	-0.012	-0.003	-0.039	-0.002
2004-05	-0.190	-0.207	-0.191	-0.281	-0.208	-0.185	-0.168	-0.182	-0.194	-0.177
2005-06	0.074	0.128	0.130	0.137	0.120	0.434	0.206	0.179	0.052	0.248
2000-06	-0.350	-0.290	-0.162	-0.411	-0.287	0.082	-0.062	0.003	-0.279	-0.025

Table D. 5: Fraction Receiving Ndihma Ekonomike by Poverty Status, Poor includes Extreme poor

	2002				2005			
	Ext. Poor	Poor	Non Poor	All	Ext. Poor	Poor	Non Poor	All
Coastal	0.212	0.158	0.040	0.058	0.123	0.097	0.028	0.036
Central	0.362	0.238	0.090	0.119	0.602	0.416	0.130	0.179
Mountain	0.359	0.463	0.271	0.340	0.607	0.450	0.299	0.329
Tirana	0.108	0.082	0.022	0.029	0.425	0.197	0.020	0.030
Urban	0.333	0.263	0.079	0.105	0.524	0.329	0.063	0.085
Rural	0.301	0.237	0.077	0.115	0.500	0.324	0.127	0.165
Albania	0.312	0.246	0.078	0.110	0.507	0.325	0.095	0.127

Table D. 6: Probability of Receiving Ndhima Ekonomike by Poverty Status, poor excludes extreme poor

	2002				2005			
	Ext. Poor	Poor	Non Poor	All	Ext. Poor	Poor	Non Poor	All
Coastal	0.212	0.149	0.040	0.058	0.123	0.094	0.028	0.036
Central	0.362	0.213	0.090	0.119	0.602	0.364	0.130	0.179
Mountain	0.359	0.492	0.271	0.340	0.607	0.429	0.299	0.329
Tirana	0.108	0.079	0.022	0.029	0.425	0.160	0.020	0.030
Urban	0.333	0.249	0.079	0.105	0.524	0.286	0.063	0.085
Rural	0.301	0.226	0.077	0.115	0.500	0.286	0.127	0.165
Albania	0.312	0.233	0.078	0.110	0.507	0.286	0.095	0.127

Table D. 7: Ndhima Ekonomike Participation by Household Per Capita Consumption Deciles

Deciles	2002				
	Program Coverage	Mean Per Capita Consumption	Mean NE Transfer	Presence of Wage Earner	Urban
1	32.97	2967	908	50.92	35.90
2	31.96	4110	815	50.52	40.21
3	22.37	4859	588	52.63	42.43
4	17.17	5623	431	59.93	51.85
5	19.12	6351	464	61.44	48.59
6	14.63	7127	348	63.58	56.42
7	11.40	8212	276	61.66	57.25
8	8.01	9627	193	64.32	62.38
9	5.25	11671	131	62.18	63.66
10	2.17	18107	50	61.07	66.40
Deciles	2005				
Deciles	Program Coverage	Mean Per Capita Consumption*	Mean NE Transfer	Presence of Wage Earner	Urban
1	38.64	3612	903	50.76	35.61
2	31.47	4946	719	66.08	36.71
3	26.84	5925	612	68.44	43.36
4	21.99	6881	487	68.98	42.47
5	15.73	7960	376	67.42	49.16
6	12.02	9055	297	71.85	55.72
7	8.66	10286	218	70.34	56.43
8	5.97	12050	140	72.32	65.63
9	4.79	14741	89	72.15	65.53
10	2.28	23390	77	77.39	76.76

Note: * 2005 per capita consumption figures are in real terms.

Table D. 8: Decile-Specific Ratios of Program Participation Relative to 1st Decile

Decile	2002		2005	
	Program Coverage	Ratio of Participation	Program Coverage	Ratio of Participation
1	32.97	1.00	38.64	1.00
2	31.96	0.97	31.47	0.81
3	22.37	0.68	26.84	0.69
4	17.17	0.52	21.99	0.57
5	19.12	0.58	15.73	0.41
6	14.63	0.44	12.02	0.31
7	11.40	0.35	8.66	0.22
8	8.01	0.24	5.97	0.15
9	5.25	0.16	4.79	0.12
10	2.17	0.07	2.28	0.06

Table D. 9: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Population Shares in 2002 (National, Rural and Urban)

	National	Urban	Rural
Percentage of Poor in NE	0.246	0.263	0.237
Percentage of Non-poor in NE	0.078	0.079	0.077
Targeting Coefficient	0.168	0.184	0.160
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	0.105 (62.8%)	0.164 (89.1%)	0.073 (45.8%)
Inter-Commune Component	0.062 (37.2%)	0.020 (10.9%)	0.087 (54.2%)
χ^2 Test of Independence (P-Value)	0.000	0.000	0.000

Table D. 10: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Population Shares in 2005 (National, Rural and Urban)

	National	Urban	Rural
Percentage of Poor in NE	0.325	0.329	0.324
Percentage of Non-poor in NE	0.095	0.063	0.127
Targeting Coefficient	0.230	0.266	0.197
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	0.144 (62.6%)	0.234 (88.0%)	0.100 (50.8%)
Inter-Commune Component	0.086 (37.4%)	0.032 (12.0%)	0.097 (49.3%)
χ^2 Test of Independence (P-Value)	0.000	0.000	0.000

Table D. 11: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Population Shares in 2002 (Strata)

	Central	Coastal	Mountain	Tirana
Percentage of Poor in NE	0.238	0.158	0.463	0.082
Percentage of Non-poor in NE	0.090	0.040	0.271	0.022
Targeting Coefficient	0.147	0.118	0.192	0.060
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	0.115 (77.7%)	0.084 (71.2%)	0.161 (83.6%)	0.060 (100.0%)
Inter-Commune Component	0.033 (22.3%)	0.034 (28.8%)	0.031 (16.4%)	0.000 (0.0%)
χ^2 Test of Independence (P-Value)	0.000	0.000	0.000	0.000

Table D. 12: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Population Shares in 2005 (Strata)

	Central	Coastal	Mountain	Tirana
Percentage of Poor in NE	0.416	0.097	0.450	0.197
Percentage of Non-poor in NE	0.130	0.028	0.299	0.020
Targeting Coefficient	0.286	0.069	0.151	0.177
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	0.182 (63.6%)	0.066 (95.7%)	0.159 (105.3%)	0.172 (97.2%)
Inter-Commune Component	0.104 (36.4%)	0.003 (4.3%)	-0.007 (-4.6%)	0.005 (2.6%)
χ^2 Test of Independence (P-Value)	0.000	0.000	0.000	0.000

Table D. 13: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Transfer Values in 2002 (National, Rural and Urban)

	National	Urban	Rural
Average NE Transfer to the Poor	636.98	869.86	519.09
Average NE Transfer to the Non-Poor	187.52	228.98	148.58
Targeting Differential	449.47	640.88	370.51
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	323.37 (71.9%)	585.71 (91.4%)	147.15 (39.7%)
Inter-Commune Component	126.10 (28.1%)	55.17 (8.6%)	223.35 (60.3%)

Table D. 14: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Transfer Values in 2005 (National, Rural and Urban)

	National	Urban	Rural
Average NE Transfer to the Poor	730.48	948.49	643.48
Average NE Transfer to the Non-Poor	219.32	178.28	262.17
Targeting Differential	511.16	770.20	381.32
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	381.88 (74.7%)	687.21 (89.2%)	234.87 (61.6%)
Inter-Commune Component	129.28 (25.3%)	82.99 (10.8%)	146.45 (38.4%)

Table D. 15: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Transfer Values in 2002 (Strata)

	Central	Coastal	Mountain	Tirana
Average NE Transfer to the Poor	631.37	402.93	1121.33	308.39
Average NE Transfer to the Non-Poor	200.30	122.36	591.96	69.94
Targeting Differential	431.07	280.56	529.37	238.45
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	379.94 (88.1%)	219.47 (78.2%)	441.24 (83.4%)	238.45 (100.0%)
Inter-Commune Component	51.13 (11.9%)	61.10 (21.8%)	88.13 (16.6%)	0.00 (0.0%)

Table D. 16: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Transfer Values in 2005 (Strata)

	Central	Coastal	Mountain	Tirana
Average NE Transfer to the Poor	918.84	251.83	979.06	514.88
Average NE Transfer to the Non-Poor	311.28	61.08	654.44	48.95
Targeting Differential	607.56	190.75	324.63	465.93
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	485.22 (79.9%)	188.24 (98.7%)	377.27 (116.2%)	459.84 (98.7%)
Inter-Commune Component	122.35 (20.1%)	2.51 (1.3%)	-52.65 (-16.2%)	6.09 (1.3%)

Table D. 17: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Extreme Poverty & Population Shares in 2002 (National, Rural and Urban)

	National	Urban	Rural
Percentage of Poor in NE	0.312	0.333	0.301
Percentage of Non-poor in NE	0.104	0.100	0.108
Targeting Coefficient	0.208	0.233	0.193
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	0.162	0.215	0.132
Inter-Commune Component	0.047	0.018	0.062
χ^2 Test of Untargeted Transfers (P-Value)	0.000	0.000	0.000

Table D. 18: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Extreme Poverty & Population Shares in 2005 National, Rural and Urban)

	National	Urban	Rural
Percentage of Poor in NE	0.507	0.524	0.500
Percentage of Non-poor in NE	0.117	0.079	0.153
Targeting Coefficient	0.390	0.445	0.347
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	0.290	0.386	0.234
Inter-Commune Component	0.101	0.060	0.114
χ^2 Test of Untargeted Transfers (P-Value)	0.000	0.000	0.000

Table D. 19: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Extreme Poverty & Population Shares in 2002 (Strata)

	Central	Coastal	Mountain	Tirana
Percentage of Poor in NE	0.362	0.212	0.359	0.108
Percentage of Non-poor in NE	0.111	0.055	0.339	0.028
Targeting Coefficient	0.251	0.157	0.020	0.080
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	0.203	0.143	0.127	0.080
Inter-Commune Component	0.048	0.014	-0.107	0.000
χ^2 Test of Untargeted Transfers (P-Value)	0.000	0.000	0.000	0.000

Table D. 20: Evaluation of the Decentralized Targeting of Ndihma Ekonomike Based on Extreme Poverty & Population Shares in 2005 (Strata)

	Central	Coastal	Mountain	Tirana
Percentage of Poor in NE	0.602	0.123	0.607	0.425
Percentage of Non-poor in NE	0.162	0.034	0.323	0.027
Targeting Coefficient	0.439	0.088	0.285	0.398
	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>	<i>Decomposition</i>
Intra-Commune Component	0.336	0.090	0.318	0.395
Inter-Commune Component	0.104	-0.001	-0.034	0.003
χ^2 Test of Untargeted Transfers (P-Value)	0.000	0.000	0.000	0.000

Table D. 21: Trends in Total Allocation of Social Protection (Real terms), Household Level

	2002				2005			
	NE as % of Total				NE as % of Total			
	Total Social Protection	NE	Soc. Pro.	Consumption	Total Social Protection	NE	Soc. Pro.	Consumption
Non-Poor	3863.24	181.54	12.18	0.67	4359.49	206.82	13.89	0.70
Poor	3262.34	622.60	32.21	3.31	4114.55	688.48	37.21	3.97
Coastal	3373.33	163.27	9.97	0.75	4297.05	76.60	5.62	0.35
Central	3864.30	290.21	16.97	1.28	4296.16	398.94	24.72	1.77
Mountain	3428.08	698.98	40.39	2.89	4244.72	654.68	36.35	2.16
Tirana	4514.03	94.95	5.24	0.52	4538.74	64.64	4.57	0.34
Urban	4588.74	319.50	15.73	1.46	4955.94	222.71	12.98	1.01
Rural	3043.83	221.11	17.04	0.94	3748.47	321.07	22.24	1.29
Albania	3748.22	265.97	16.44	1.18	4325.29	274.08	18.07	1.16

NE as a share of total social assistance is conditional on receiving any kind of social assistance.

Table D. 22: Trends in Total Social Protection Receipts (real per capita receipts) for Ndihma Ekonomike Participants (household level)

	2002				2005			
	NE as % of Total				NE as % of Total			
	Total Social Protection	NE	Social Protection	Consumption	Total Social Protection	NE	Social Protection	Consumption
Non-Poor	3439.94	2318.37	86.52	8.60	4310.34	2186.49	78.50	7.39
Poor	4064.00	2529.13	83.05	13.44	3712.07	2115.44	82.15	12.20
Coastal	4049.52	2806.56	86.77	12.90	4064.75	2146.87	80.01	9.72
Central	3836.05	2439.21	85.25	10.79	4042.97	2231.62	81.71	9.92
Mountain	3324.33	2053.00	82.55	8.48	4082.86	1988.20	75.52	6.56
Tirana	3592.82	3219.85	95.98	17.49	5289.52	2146.53	75.22	11.25
Urban	4758.31	3031.22	85.46	13.84	5042.67	2609.68	80.39	11.89
Rural	2895.72	1928.43	84.72	8.22	3647.50	1948.51	79.54	7.80
Albania	3706.21	2408.30	85.04	10.66	4095.95	2161.03	79.81	9.12

Table D. 23: Determinants of Ndihma Ekonomike Receipt Using Deciles of Per Capita Consumption – Probit Marginal Effects

	2002	2005	Pooled
	(1)	(2)	(3)
Year			0.002
			-0.73
Household size	-0.007 (2.40)**	0.001 -0.41	-0.003 -1.42
Amount urban pension	-0.043 (6.80)***	-0.036 (4.90)***	-0.04 (7.27)***
Amount rural pension	-0.136 (4.88)***	-0.058 (4.80)***	-0.081 (6.70)***
Central	0.065 (3.83)***	0.149 (6.79)***	0.104 (7.17)***
Mountain	0.165 (8.59)***	0.218 (9.13)***	0.192 (11.56)***
Tirana	-0.042 (2.60)***	-0.005 -0.22	-0.027 (1.99)**
2 nd Poorest decile	0.003 -0.16	-0.02 -1.33	-0.009 -0.84
3 rd Poorest decile	-0.027 (1.94)*	-0.034 (2.35)**	-0.031 (3.01)***
4 th decile	-0.036 (2.65)***	-0.046 (3.52)***	-0.043 (4.50)***
5 th decile	-0.032 (2.32)**	-0.06 (4.93)***	-0.049 (5.45)***
6 th decile	-0.046 (3.52)***	-0.067 (5.70)***	-0.058 (6.55)***
7 th decile	-0.057 (4.94)***	-0.076 (6.89)***	-0.069 (8.19)***
3 rd Richest decile	-0.065 (5.41)***	-0.083 (7.18)***	-0.077 (8.78)***
2 nd Richest decile	-0.077 (6.77)***	-0.086 (7.49)***	-0.085 (10.12)***
Richest decile	-0.091 (8.37)***	-0.096 (7.50)***	-0.097 (11.37)***
Observations	3599	3638	7237

Robust z-statistics in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Table D. 24: Determinants of Ndihma Ekonomike Receipts, Using Deciles

	2002	2005	Pooled	2005 with shocks
(Mean) actual household size	-0.01 (2.40)**	0 (0.41)	0 (1.43)	
Real urban pension	0 (6.80)***	0 (4.90)***	0 (7.23)***	
Real rural pension	0 (4.88)***	0 (4.80)***	0 (6.58)***	
Stratum==2	0.07 (3.83)***	0.15 (6.79)***	0.11 (7.17)***	0.16 (6.58)***
Stratum==3	0.17 (8.59)***	0.22 (9.13)***	0.19 (11.56)***	0.21 (8.60)***
Stratum==4	-0.04 (2.60)***	-0.01 (0.22)	-0.03 (1.99)**	-0.03 (1.30)
Decile==2	0 (0.16)	-0.02 (1.33)	-0.01 (0.83)	
Decile==3	-0.03 (1.94)*	-0.03 (2.35)**	-0.03 (2.99)***	
Decile==4	-0.04 (2.65)***	-0.05 (3.52)***	-0.04 (4.48)***	
Decile==5	-0.03 (2.32)**	-0.06 (4.93)***	-0.05 (5.43)***	
Decile==6	-0.05 (3.52)***	-0.07 (5.70)***	-0.06 (6.55)***	
Decile==7	-0.06 (4.94)***	-0.08 (6.89)***	-0.07 (8.19)***	
Decile==8	-0.07 (5.41)***	-0.08 (7.18)***	-0.08 (8.76)***	
Decile==9	-0.08 (6.77)***	-0.09 (7.49)***	-0.09 (10.12)***	
Decile==10	-0.09 (8.37)***	-0.1 (7.50)***	-0.1 (11.36)***	
Death of income earner				0 (0.19)
Serious illness				0.03 (1.88)*
Job loss				0.06 (4.59)***
Victims of pyramid scheme				-0.06 (5.79)***
Sex				-0.02 (0.94)
Age - Years				0 (3.42)***
Male statistics==2				0.26 (4.23)***
Male statistics==3				0.1 (2.01)**
Male statistics==4				0.03 (1.13)
Male statistics==5				0.12 (2.62)***

No. of individual wkage				0.03 (4.38)***
No. of individual awkage				0.03 (2.37)**
No. of individual wkage				0.01 (2.83)***
No. of kids in household				0.01 (1.75)*
No. of workers in household				-0.01 (1.24)
Urban Old-age pension				0 (6.38)***
Rural Old-age pension				0 (2.80)***
Total size of land holdings				0 (0.97)
Head of household works				-0.05 (3.77)***
Year				
Observations	3599	3638	7237	3638

Robust z-statistics in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Table D. 25: Determinants of NE Receipts Using Admin Variables

	2002	2005	Pooled	Pooled with shocks
(Mean) actual household size				0 (0.26)
Real urban pension				0 (5.10)***
Real rural pension				0 (4.52)***
Stratum==2	0.08 (4.12)***	0.18 (7.07)***	0.13 (7.83)***	0.13 (6.41)***
Stratum==3	0.18 (8.34)***	0.23 (8.93)***	0.2 (11.48)***	0.2 (8.77)***
Stratum==4	-0.06 (3.21)***	-0.02 (1.01)	-0.05 (2.96)***	-0.01 (0.68)
Decile==2				-0.02 (1.37)
Decile==3				-0.03 (2.35)**
Decile==4				-0.04 (3.41)***
Decile==5				-0.06 (4.88)***
Decile==6				-0.06 (5.64)***
Decile==7				-0.07 (6.66)***
Decile==8				-0.08 (6.97)***

Decile==9				-0.08 (7.22)***
Decile==10				-0.09 (7.34)***
Death of income earner				0.01 (0.64)
Serious illness				0.03 (1.90)*
Job loss				0.07 (6.03)***
Victims of pyramid scheme				-0.05 (5.16)***
Sex	-0.02 (1.09)	-0.03 (1.23)	-0.03 (1.51)	
Age - Years	0 (4.06)***	0 (3.39)***	0 (5.50)***	
Male statistics==2	0.17 (2.39)**	0.33 (5.23)***	0.24 (4.98)***	
Male statistics==3	0.25 (1.12)	0.11 (1.62)	0.14 (1.65)*	
Male statistics==4	0.04 (1.71)*	0.04 (1.27)	0.04 (1.84)*	
Male statistics==5	0.04 (1.06)	0.15 (2.96)***	0.09 (2.80)***	
No. of individual uwkage	0.03 (4.55)***	0.03 (4.30)***	0.03 (6.10)***	
No. of individual awkage	0.02 (1.50)	0.03 (2.49)**	0.02 (2.70)***	
No. of individual wkage	0.02 (3.53)***	0.02 (3.16)***	0.02 (4.66)***	
No. of kids in household	0 (0.49)	0.01 (2.08)**	0.01 (1.96)**	
No. of workers in household	-0.02 (2.59)***	-0.01 (1.78)*	-0.02 (3.50)***	
Urban Old-age pension	0 (6.89)***	0 (6.55)***	0 (9.26)***	
Rural Old-age pension	0 (3.63)***	0 (3.05)***	0 (4.48)***	
Total size of land holdings	0 (2.70)***	0 (0.96)	0 (1.75)*	
Head of household works	-0.06 (4.08)***	-0.06 (4.02)***	-0.06 (6.31)***	
Year			0.01 (1.99)**	
Observations	3599	3638	7237	3638

Table D. 26: Determinants of NE Receipt Using Administrative Criteria Variables and Observed Household Characteristics – Probit Marginal Effects

	Observable Household Characteristics	Administrative Variables	Both Administrative and Household Variables
	Household is Poor	Household is Poor	Household is Poor
Household Members Age<7	0.05 (10.91)***		0.09 (2.03)**
Household Members 6<Age<15	0.03 (7.74)***		0.07 (1.65)*
Household Members 14<Age<61	0.03 (10.58)***		0.02 (3.40)***
Female Headed Household	-0.01 -0.66		0.8 (7.92)***
No. of ITEM Owned by Household	-0.05 (2.70)***		-0.04 (4.04)***
No. of ITEM Owned by Household	-0.02 -1.05		-0.02 -1.24
No. of ITEM Owned by Household	-0.01 -1.03		-0.03 (5.39)***
No. of ITEM Owned by Household	0.01 -1.25		-0.03 (3.03)***
No. of ITEM Owned by Household	-0.03 (2.89)***		-0.01 (2.63)***
No. of ITEM Owned by Household	-0.03 (4.10)***		-0.02 -0.84
No. of ITEM Owned by Household	0.02 (1.72)*		-0.09 (3.05)***
No. of ITEM Owned by Household	-0.03 (1.72)*		-0.01 (1.66)*
No. of ITEM Owned by Household	-0.04 -1.36		-0.06 -1.38
No. of ITEM Owned by Household	-0.01 -0.58		-0.01 -1.39
No. of ITEM Owned by Household	-0.03 (2.55)**		0.01 -0.96
No. of ITEM Owned by Household	-0.06 -1.5		-0.05 (2.49)**
No. of ITEM Owned by Household	-0.04 (2.69)***		0.01 -1.49
No. of ITEM Owned by Household	-0.01 -0.83		-0.02 -0.71
No. of ITEM Owned by Household	-0.02 -0.81		-0.04 -1.22
No. of ITEM Owned by Household	-0.09 (5.56)***		-0.03 (1.66)*
Whether Household Hectares ...	-0.01 -0.93		0.01 (2.24)**
Whether Household Hectares ...	0.01 -1.19		-0.01 -0.53
Whether Household Hectares ...	0 -0.43		-0.02 -0.9
Whether Household Hectares ...	-0.01 -0.82		-0.01 -0.9

Whether Household Hectares ...	-0.02		-0.01
	(2.40)**		-1.29
Current Migrant Household	0.02		0.01
	-0.96		-0.6
Number of Household Current Migrants in Greece	-0.01		-0.01
	-1.16		-1.4
Number of Household Current Migrants in Italy and Beyond	-0.03		-0.03
	(2.31)**		(2.38)**
Household Land Area in Hectares	-0.02		-0.01
	(1.89)*		-1.48
Household Land Area Squared in Hectares	0		0
	(1.82)*		(1.65)*
Stratum==2	-0.01	0.05	0
	-0.52	(2.64)***	-0.26
Stratum==3	-0.03	0.02	-0.03
	(2.35)**	-0.87	(2.41)**
Stratum==4	-0.02	-0.04	-0.02
	-1.09	(1.97)**	-1.15
Sex		-0.03	-0.29
		-0.88	(10.09)***
Age - Years		0	0
		(3.58)***	-0.99
Male statistics==2		0.14	0.04
		(1.75)*	-0.88
Male statistics==3		0	0.01
		-0.11	-0.3
Male statistics==4		0.01	-0.02
		-0.24	-0.81
Male statistics==5		-0.01	-0.02
		-0.2	-0.89
No. of individual uwkage		0.05	-0.04
		(6.54)***	-0.95
No. of individual awkage		0.04	0.02
		(3.08)***	(3.38)***
No. of individual wkage		0.02	0.01
		(4.13)***	(1.90)*
No. of kids in household		0.02	0
		(2.25)**	-0.63
No. of workers in household		0.01	0
		-1.55	-0.64
Real urban pension		0	0
		(2.65)***	-0.04
Real rural pension		0	0
		-0.46	-0.61
Total size of land holdings		0	0
		-0.72	-0.6
Head of household works		-0.08	-0.02
		(4.93)***	(2.02)**
Observations	3638	3638	3638

Robust z-statistics in parentheses

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

Table D. 27: Predicted Probability of Being Poor Using Household Level Variables

	Non poor	Poor	Total
Coastal	0.10	0.35	0.14
Central	0.15	0.43	0.21
Mountain	0.20	0.42	0.26
Tirana	0.07	0.32	0.09
Urban	0.08	0.33	0.10
Rural	0.18	0.43	0.24
Total	0.13	0.40	0.18

Table D. 28: Predicted Probability of Being Poor Using Administrative Variables

	Non poor	Poor	Total
1	0.12	0.26	0.14
2	0.18	0.30	0.21
3	0.21	0.34	0.25
4	0.08	0.16	0.09
Urban	0.11	0.23	0.13
Rural	0.19	0.31	0.22
Total	0.15	0.29	0.18

Table D. 29: Predicted Probability of Being Poor Using Administrative Variables and Household Variables

	Non poor	Poor	Total
Coastal	0.104	0.363	0.146
Central	0.151	0.439	0.212
Mountain	0.203	0.436	0.263
Tirana	0.072	0.333	0.093
Urban	0.075	0.344	0.106
Rural	0.180	0.436	0.242
Total	0.130	0.412	0.182

Table D. 30: Distribution of the Non-Poor Recipients of Ndhma Ekonomike by Quintiles of the Distance to the Poverty Line

Distance to poverty line	Mean	Frequency	Observation	Mean	Frequency	Observation
1	0.08	9251	58	0.06	11960	66
2	0.26	9220	61	0.21	11930	79
3	0.41	9291	59	0.41	12003	73
4	0.65	9249	52	0.74	12002	81
5	1.32	9012	67	1.65	11791	68
Total	0.540	46022	297	0.610	59686	367

REFERENCES

- BALDWIN-EDWARDS M. (2002): "Southern European Labour Markets and Immigration: A Structural and Functional Analysis, MMO Working Paper No. 5, Panteion University, Athens, Greece.
- BARJABA K. (2000): "Contemporary Patterns in Albanian Migration", *South-East Europe Review*, 3(2): 57-64.
- CARLETTO G., DAVIS B and STAMPINI M. (2005): "Familiar Faces, Familiar Places: The Role of Family Networks and Previous Experience for Albanian Migrants." ESA Working Paper. No. 05-03, FAO, Rome.
- CARLETTO C., DAVIS B., STAMPINI M., TRENTO S. and ZEZZA A. (2004): "Internal mobility and external migration in Albania", ESA Working Paper No. 04-13, Rome, FAO.
- DE ZWAGER N., GEDESHI I., GERMENJI E., and NIKAS C. (2005): "Competing for Remittances", IOM, Tirana.
- GALASSO E and RAVALLION M. (2005): "Decentralized Targeting of an Anti-Poverty Program." *Journal of Public Economics*, 89(4): 705-727
- GIBSON J. (2002): "Why Does the Engel Method Work? Food Demand, Economies of Size and Household Survey Methods." *Oxford Bulletin of Economics and Statistics*. 64 (4): 342-359.
- HAHN J. and HAUSMAN J. (2002): "A New Specification Test for the Validity of Instrumental Variables", *Econometrica*, 70, pp. 163-189.
- IMF (2006): "Albania: Poverty Reduction Strategy", Annual Progress Report, IMF, Washington, DC.
- KILIC T., CARLETTO C., DAVIS B., and ZEZZA A. (2007): "Investing Back Home: Return Migration and Business Ownership in Albania", ESA Working Paper No. 07-08, FAO. Rome
- KING R. and VULLNETARI J. (2003): "Migration and Development in Albania", Working Paper C5, Development Research Center, Sussex Centre for Migration Research, University of Sussex, UK.
- KULE D., MANCELLARI A., PAPAPANAGOS H., QIRICI S., and SANFEY P. (2002): "The Causes and Consequences of Albanian Emigration during Transition: Evidence from Micro Data", *International Migration Review*, Vol. 36, No. 1, pp. 229-239
- LABRIANIDIS L. and HATZIPROKOPIOU P. (2006): "The Albanian Migration Cycle: migrants tend to return to their country of origin after all", in *The New Albanian Migration*, edited by R. King, N. Mai and S. Schwandner-Sievers, Sussex Academic Press: Brighton, UK.
- LABRIANIDIS L. and KAZAZI B. (2006): "Albanian Return-migrants from Greece and Italy: Their Impact upon Spatial Disparities within Albania", *European Urban and Regional Studies*, Vol. 13, No. 1, 59-74.
- MCCARTHY N., CARLETTO G., DAVIS B., MALTSOGLU I. (2007): "Assessing the Impact of Massive Out-migration on Albanian Agriculture." Draft.

MILUKA J., CARLETTO G., DAVIS B. and ZEZZA A. (2007): “The Vanishing Farm? The Impact of International Migration on Albanian Family Farming.” Draft. ESA Working Paper. FAO. Rome

NICHOLSON B. (2001): “From migrant to micro-entrepreneur: Do-it-yourself development in Albania”, *South-East Europe Review*, 4(3):39-41.

SMITH J. P. and DUNCAN T. (2003): “Remembrances of things past: test-retest reliability of retrospective migration histories”, *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 166 (1), 23–49.

STAMPINI M., CARLETTO C. and DAVIS B. (forthcoming): “International Migration from Albania: the Role of Family Networks and Previous Experience”, *Eastern European Economics*.

STEIGER D. and STOCK J. H. (1997): “Instrumental Variables Regression with Weak Instruments”, *Econometrica*, 65(3): 557–586.

World Bank. 2006. *Albania: Restructuring Public Expenditure to Sustain Growth. Volume II*. Washington D.C.

World Bank. 2005. *Albania: Labor Market Assessment*. Report No. 34597-AL. Washington D.C.

World Bank. 2004. *Albania: Sustain Growth Beyond the Transition. A World Bank Country Economic Memorandum*. Report No. 29257-AL. Washington D.C

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