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Do local officials know something we don't? Decentralization of targeted transfers in Albania

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Abstract

Albania provides a small amount of social assistance to nearly 20% of its population through a system which allows a degree of community discretion in determining distribution. This study indicates that relative to other safety net programs in low-income countries, social assistance in Albania is fairly well targeted to the poor. Moreover, the poverty targeting exceeds that which could be expected on the basis of proxy indicators of targeting alone; communes appear to be using local information unlikely to be obtained on the basis of a questionnaire or formula. This remains the case conditional on the level of funding allocated from the central government. © 2002 Elsevier Science B.V. All rights reserved.

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1. Introduction

An important obstacle to improving the targeting of services and transfers to the poor is the high costs that can be involved in obtaining accurate information on their incomes and their need. One way that has been suggested to reduce the cost is to decentralize the responsibility for monitoring poverty and managing anti-

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poverty programs to local administrators who, it is argued, should be able to do so more accurately and cost-effectively than a central government agency. Local government officials are likely to be better informed about the members of their communities and better able to recognize those who are genuinely poor. Households will be less able to conceal information about their circumstances from locally based authorities than from those at the national level. Moreover, because poverty in one community may be characterized by different indicators than poverty in another community, a decentralized system may also increase efficiency of a safety net program by allowing local authorities to determine the local eligibility criteria.

The relationship of decentralization and poverty alleviation has been reviewed by Bird and Rodriguez (1999) and by Klugman (1997). Coudouel et al. (1998) look at safety nets administered by councils of elders in Uzbekistan, and Ravallion (1998) studies a decentralized poverty program in Argentina. The present study aims to add to that evidence by examining a recent attempt by the Albanian government to devolve responsibility for a social assistance program to local authorities. The data used in this study were from a 1996 household survey that was explicitly designed to assess both the targeting efficiency of the program and its flexibility under different regulations. The study addresses the questions of whether local officials have access to information on household welfare that is unavailable to central authorities and whether they use this information. In order to ground the discussion of the empirical approach the paper first presents a discussion of the specific Albanian social assistance program that is being studied in Section 2 and then outlines the research strategy in Section 3. Section 4 explains the source of the data that were used in the analysis. The results are then presented in Section 5. The final section relates these results to social assistance policy.

2. Social assistance reform in Albania

Key threads in the literature on decentralization include how individuals communicate their interests to governments and how different tiers of government are held accountable by their constituencies and by each other (Inman and Rubinfeld, 1997). For example, if directly accountable to their constituencies, local authorities may be tempted to exaggerate the extent of poverty in their area (knowing that they are unlikely to be found out) in order to increase their share of nationally provided funds. This would particularly be the case if they are not required to provide cofinancing which would give them an incentive to maintain fiscal discipline. The design of decentralized programs often has to seek a structure that provides incentives for the local administration to balance the objectives of the central government with the interests of more local constituencies (Inman and

Rubinfeld, 1996).¹ Indeed, this issue of incentives — more than ideology or a change — was behind the decentralization of social assistance in the particular example being investigated.

As in much of Eastern Europe and the former Soviet Union, the breakdown in central planning in Albania caused an avalanche of closures of industrial enterprises. This led to massive unemployment and a contraction of state revenues with which to finance cash transfers and price subsidies to assist the newly unemployed. In response, the Albanian government undertook significant measures to phase out most consumer subsidies while rationalizing unemployment benefits and social assistance. For example, wheat and bread prices were raised in two major steps in 1992 and 1993, leading to more than an eight-fold nominal price increase and a tripling of the real price of bread. At the same time, the government introduced a new safety net, the *Ndihme Ekonomika* (NE, meaning economic support in Albanian) program. The NE program was designed to support urban families with no other source of income as well as rural families with small landholdings.

Initially, the NE program was intended to be an entitlement conditional on an income criterion determined in the Albanian capital, Tirana. At inception, the government established and publicized minimum and maximum levels for assistance based on landholding and employment. However, in early 1994, the government cut the funds provided to the community by 25% on average because it was afraid that the cost of the program would exceed government resources. While the government considered various objective formula to determine the level of funds that would go to each commune, none had been implemented during the period studied. Local jurisdictions were allowed to appeal these cuts determined by Tirana, but the process resulted in a bias after accounting for population and poverty levels towards urban and politically strategic districts (Case, 2001). This change in the total allocation was accompanied neither by a change in the rules determining eligibility nor in the regulations regarding levels of transfers per recipient. In effect, this change required the communities to face a hard budget constraint and to make ad hoc adjustments to the allocation procedure to accommodate this constraint. Thus, to a fair degree, the 1994 separation of the central funding decision from the local determination of needs can be considered a *de facto* decentralization.

In October 1995, the law governing the NE was further reformed to make the legislation more in keeping with the manner the program was being administered. The reform made regulations more explicitly in keeping with the block grant

¹Moreover, as Broadway et al. (1997) point out, even in a welfare program, which is not decentralized, social workers may have a different objective function than the state. The design of the incentives for these agents and their monitoring are thus considerations for effective program administration.

program that it had become rather than the entitlement program that had originally been planned. While the upper limit on payments per household was retained, the minimum level was eliminated except in the case of a small set of physically disabled individuals. Moreover, local elected officials received the right to retain 50 percent of the difference between the block grant of social assistance money given to them by the Ministry of Labor and Social Protection (MOLSP) and the amount they then allocated to local households. Local authorities were authorized to use these left-over funds to finance community public works projects and to retain the funds (either physically or on account) for a year in order to accumulate the necessary amounts to initiate a project. However, communes could also receive additional funds from the MOLSP (as well as other sources) earmarked for public works and, therefore, had little real incentive to use NE funds for this activity. As communes were not directly responsible for the budget for health or education, they also had little incentive to use NE funds for these services. In August 1996, at the time of the data collection for this study, 145 232 families — about 20 percent of the population — received help from the NE program. As the NE currently is the main means of social assistance in the country the term is used synonymously with social assistance in the rest of this paper.

As currently administered, there are three steps to the commune's allocation process (Case, 1997). First, families apply to the commune's office of social assistance. The program administrator (an official paid by the MOSLP) then draws up a list of eligible recipients and estimates household needs according to its size and landholding, as well as whether household members earn a wage or receive a pension. This formula is a bit atavistic, reflecting the original concept of a household entitlement. In August 1996, the core compensation was calculated as 2150 lek (\$ = 104.5 lek) for the first adult in the household and between 400 and 510 lek for others in different age categories. Any unemployment insurance and pensions received were then subtracted from this amount. An estimate of potential earnings from land owned by a household was also netted out from the compensation. This estimate was based on per capita land ownership times a coefficient that varies by the quality of the land owned. The formula allocation was truncated at zero for those above the eligibility threshold. That is, no one was taxed on the basis of this formula. The formula was also capped with an upper limit that varied according to household size. The highest value in August 1996 was 5375 lek (\$51.43) per household per month.

Finally, the elected commune council determines the actual allocation for each household. The council is free to add or subtract names as well as to adjust the payments per household subject to the available grant from the center. Allocation may change from month to month based both on new information as well as the total received from the center. The procedure for application and screening is basically the same in rural communes (averaging roughly 1500 households) as in cities, which may range from the size of a commune up to over ten times the size of the average commune. Given the mixture of local discretion and the initial

calculation of assistance based on formulas which do not have full funding guaranteed, the program can be viewed as a blend of deconcentration and decentralization, reflecting, in part, ambivalence at the center.

3. Research strategy

The premise that decentralization can improve the delivery of services because local governments have superior access to information goes back at least as far as Oates (1972) and has been applied to a far wider range of services than the provision of social assistance. This postulate is inherently plausible, yet ironically difficult to test directly. For, if it is true that local communities have information that a centralized administration can not obtain, this information is not easily recorded on a survey instrument and, thus, not directly accessible by most researchers. This likely contributes to the relatively modest empirical content of the literature on decentralization and poverty.

Even in the case of a centrally administered program, what are commonly called errors of targeting or tagging are, in fact, a combination of administrative error in determining program eligibility, any misjudgment on the part of a potential applicant regarding whether he or she is entitled to the benefits (or will be able to prove that entitlement in a cost effective manner), as well as any inaccuracy in assessing eligibility on the part of the analyst (Duclos, 1995). All three remain concerns when assessing a decentralized structure. However, there is an additional concern when studying a decentralized program since objective functions may vary across communities; if a community appears out of step with national objectives it may be that it is marching to a different drummer.

The current study does not attempt to recover the objective function of the local agents responsible for administering social assistance. Instead, it attempts to indicate the relationship of the amount of social assistance that a household receives to a set of variables that correlate with the likelihood that it will both seek assistance and receive it. In particular, the amount of assistance a household receives is regressed on a set of observable household characteristics that formed the basis for the allocation by formula in the original entitlement scheme prior to the 1994 budget cuts as well as on household expenditures (a common measure of household welfare). A weak test that the social assistance program is using information not likely to be used by a more centralized program is provided by the coefficient of the expenditure variable since it is a measure of welfare not originally included in the program design.

The study improves upon this test by separating the expenditure variable into that component which could be explained by commonly observable household characteristics (even if they were not explicitly included in the original program application) and a component that could not be explained by these observable

variables. The latter category includes intangibles such as a household's level of effort and luck as well as measurement error in expenditures.

The former element can be considered a form of indicator targeting. Since welfare is not directly observable, often programs use expenditure proxies as a basis for allocating the benefits of means tested social programs. Such indicators can include, for example, the location of a family's dwelling or landholding and its size. Targeting can also be based on weighted combinations of factors such as the education of household members and their housing conditions. This approach often involves collecting data in a household interview. One of the best known examples of a program in which this proxy targeting was used is Chile's Ficha CAS system (Grosh, 1994), although variations of the method have been used in places as diverse as Costa Rica and Armenia.

While this study is rooted in the literature on such proxy measures, it is the magnitude and patterns of the coefficient of the *residual component* that provides the basis of the main finding of this study, that local officials do, indeed, utilize information not generally used for indicator targeting. This tests a behavioral hypothesis; rather than merely indicating its potential use of information, the significance of the coefficient tests that the additional information is used in a manner that furthers poverty targeting.

To reiterate, we test the statistical significance of information additional to that contained in a set of indicators of welfare originally used to determine program eligibility. We do this, first, by including household consumption and, second, by including that component of expenditures that is orthogonal to a comprehensive set of assets. Partitioning the characteristics of the household that are observable by the researcher into X_1 and X_2 where the former denotes those characteristics included in the original entitlement allocation worksheet, we regress the monthly amount of social assistance (NE) received on the former set of assets, a linear combination of all assets, \hat{C} as well as on an idiosyncratic measure of household consumption, (I):

$$NE = \alpha + X_1\beta_1 + \hat{C}\beta_2 + I\varphi \quad (1)$$

where $\hat{C} = X_1\gamma_1 + X_2\gamma_2$ and $I \equiv \text{total expenditures} - \hat{C}$. Our main interest is in the significance of φ ; even if total expenditure and, hence, I is measured with error, φ can indicate if I contains information that is correlated with the allocation of social assistance. The analysis also verifies that the relative magnitude of β_1 and β_2 are not sensitive to alternative definitions of total expenditure and hence of \hat{C} and I .

While the results prove to be robust to the alternative means of determining \hat{C} , all of these formulas are admittedly restrictive. Still, such proxies are useful as a basis of comparison, since many assistance programs including the NE prior to 1994 actually determine levels of assistance with such measures. Thus, estimates using Eq. (1) allow a means of illustrating the impact of the additional information

relative to a feasible targeting on a consumption proxy Nevertheless, we also check whether the key results regarding φ are robust to a less restrictive version of Eq. (1) which substitutes a vector of assets for \hat{C} :

$$NE = \alpha + X_1\beta_3 + X_2\beta_4 + I\varphi \quad (2)$$

Eq. (2) tests the use of information conveyed by household consumption without imposing a rule that combines those assets. While it is not clear that a targeted program would actually be able use the vector of information in such a flexible manner, by estimating Eq. (2), we also address the concern that any test of the significance of φ using Eq. (1), may actually be testing whether we have correctly determined the means by which a commune measures eligibility based on observables. As discussed below, when using Eq. (2), it is possible to use the residual of estimated consumption to indicate that the allocation of social assistance uses information not commonly observed in targeted programs even if communes do not actually seek to target on consumption.

The estimates accommodate the fact that the majority of households do not receive any assistance by employing Tobit regressions using all households as well as by exploring probit regressions that explore program inclusion. Thus, the study includes a decomposition of assistance into the probability of program selection and the amount received conditional upon being in the program. However the study does not assess the full impact of decentralization. The use of funds at the local level is conditional on the magnitude of the grant from the center. Case (2001) and Alderman (2001) present evidence that the allocation of grants from the center is not strongly related to poverty targeting and, thus, is a weak link in the decentralized approach to social assistance. Nevertheless, the results that communities with modest administrative capacity appear to be using their local knowledge in a manner consistent with poverty targeting provides empirical evidence on the potential of decentralized poverty programs.

4. Data

The data for this analysis come from a household survey conducted between August and November 1996 under the auspices of the MOLSP.² The model of the survey was largely that of a multi-purpose, modular, living standards survey following a format utilized in over twenty countries (Grosh and Glewwe, 2000). This basic modular approach was adapted to the specific requirements of the research. Among the data collected in the survey were data on expenditures, using a recall over the last month. In addition, information on labor force participation,

²The MOLSP is responsible for monitoring poverty, although this responsibility is shared with the Institute of Statistics. A private consulting firm, Consulente Albania, carried out the data collection.

the search for employment, public and private transfers, and the stock of housing, consumer durables, land, livestock, and other productive assets was collected.

Monthly expenditures on individual commodities were aggregated to construct total expenditures, the principal indicator of household welfare used in this study. Quantities of goods produced by the household for home consumption were valued at the average unit price for purchases reported in the community. The annual consumption of services of durable goods was valued as a percentage of the reported stock of durables (Hentschel and Lanjouw, 1996). The imputed value of rent for housing was estimated from a hedonic regression of a household's estimate of the rent that could be received for their dwelling regression on qualities of the unit. As a sensitivity analysis, this imputed rent was also calculated using the reported sale value of the unit. The two measures had a correlation coefficient of 0.97. For aggregation purposes, livestock were valued at the average cost over all rural areas for each type of animal, while the value of other assets was based on the reported current resale value. Nevertheless, the analysis reported below also explores the sensitivity of results to the inclusion or exclusion of imputed rent and the imputed flow of services from durable goods. No other imputations were employed in calculating total consumption.³

The mean amount of social assistance per recipient household in the survey data (1280 lek, S.D. of mean=49) is not statistically different from the 1234 lek per rural recipient for August 1996 reported in the MOLSP data. This provides some reassurance that the key variable for the analysis is recorded accurately.

The survey sample was based on a stratified random draw of communes (or — for the urban survey — of cities) and, subsequently, of households. The probability that an administrative unit was chosen was proportional to the number of social assistance recipients in the area.⁴ That is, cluster-based sampling was used, as it often is, to reduce the costs of collecting the data. Cluster-based sampling has an additional advantage in regard to this study. The administrative unit that manages the block grant is the commune (of which there are 315 in Albania). Hence, this is

³Deaton and Grosh (2000) discuss the use of household survey data for the construction of consumption aggregates from expenditure modules. This study uses the terms expenditures and consumption as functional substitutes for each other. While there are some conceptual differences between the measures, the sensitivity tests show that the inclusion of the imputed annual services from durables (less than 2% of rural expenditures and 3% of urban) or housing services (14% in rural and 35% in urban areas) do not affect the results.

⁴The analysis takes into account these sampling weights. As NE recipients are over-represented in the sample, the unweighted results would imply more receipt of assistance (as well as more poverty) than in a representative sample of the country, exclusive of Tirana. While none of the regression conclusions change substantially with weighting, the weighted average level of NE distribution shows that a smaller share of the total population reported receiving social assistance than was indicated by the MOLSP records. Given the uncertainty about the population of the country (not to mention uncertainty about the population per census tract), it is not advisable to use this discrepancy as an indication of administrative leakage.

the obvious choice for defining a cluster in rural areas. Fifty communes were chosen for the survey. The communes' records of local families provided the basis for the sample with an expected draw (without replacement) of 1400 households. No additional stratification within communes was used despite the fact that, on average, each commune has nine or so geographically distinct villages.

However, only 1091 rural interviews were completed. A few of the households that were selected could not be visited due to flooding; in only a few cases, household members refused to be interviewed. The main difference between the potential number of interviews and the actual number conducted was because households listed on the commune records had migrated out of the commune. Because there had been no census in Albania since free movement throughout the country became permitted, the MOLSP was interested in knowing the difference between its census records and actual conditions. The 16.6 percent migration rate from rural areas since 1991 that is implied by the discrepancy between the listing in the commune's census records and the observations of the survey interviewers more or less matches the observed growth of cities during that period.

In urban areas, the first level of stratification for the sample was the bashki, or municipality, of which there are 47. Because a household survey had recently been carried out in Tirana, it was subtracted from the potential draw. Eight bashkis were selected. Maps were then used to divide each city into 16 squares, and two of these were chosen at random from each city. All households residing in these squares, including recent migrants, were then listed in the course of the survey's fieldwork stage, and 30 households were selected by a random draw from each square in the sample. A total of 412 interviews were undertaken, with the majority of the cases where an interview was not completed being due to temporary absence of the household.

5. Results

5.1. *Does the NE reach the poor?*

In order to answer the question of whether the NE reaches the poor, one needs a definition of the poor. However, there is no commonly used poverty line for Albania, nor are there any purchasing power parity conversion factors that would make it possible to use international poverty comparisons. For illustrative purposes [only] this paper uses the highest per capita expenditure of the first [poorest] decile of households (2422 lek per month or US\$23.18) as a low poverty line and the corresponding expenditure of the fourth decile (4183 or US\$40.03) as a high poverty line.

Table 1 indicates that virtually half of the poorest families received some assistance from the NE program at the time of the survey between August and

Table 1
Albania: incidence of distribution of social assistance in Albania, August 1996

Decile	1	2	3	4	5	6	7	8	9	10	All
Ranked in per capita terms — (no scale economies)											
Per capita monthly expenditure (lek) (exclusive of assistance)	1879	2754	3336	3926	4428	5093	5825	6703	8122	11137	5374
Per capita monthly expenditure (lek) (inclusive of assistance)	2079	2834	3419	3987	4475	5162	5848	6716	8134	11648	5432
Percent of households in decile receiving assistance	48.9	25.8	23.9	17.1	9.3	11.9	6.8	3.5	2.2	3.7	15.3
Percent of total assistance received by decile	35.7	16.5	13.6	9.0	7.1	10.3	3.6	1.7	1.1	1.3	100
Percent Urban	10.0	22.9	32.8	38.4	42.7	36.0	38.8	58.0	51.8	60.5	39.2
Ranked in terms of personal expenditures adjusted for scale economics											
Percent of households in decile receiving assistance	50.1	29.5	19.5	18.0	13.7	9.0	3.9	4.1	1.9	3.7	15.3
Percent of total assistance received by decile	35.1	17.5	10.4	11.7	10.0	8.2	1.2	3.2	1.3	1.3	100
Ranked in terms of adult equivalents (no scale economies)											
Percent of households in decile receiving assistance	45.3	26.0	22.4	16.1	14.7	10.6	6.5	3.1	4.7	3.6	15.3
Percent of total assistance received by decile	33.5	16.2	11.8	9.2	10.1	7.3	5.9	2.1	2.6	1.3	100

November 1996. In contrast, relatively few of the comparatively well off households received assistance. When households are ranked in terms of per capita expenditures, as a household's expenditures increase, there is a sharp decline in the probability that it receives assistance. Table 1 also shows that the poorest decile receives 36 percent of total NE expenditures. This observation reflects well on the program since the share going to the poor is among the highest of those reported in the literature on program of price subsidies or food-related transfers in the developing world (Alderman, 1991; Alderman and Lindert, 1998 and Grosh, 1994).

On the other hand, half of the households that fall below the low poverty line did not receive social assistance. If the higher poverty line is used, over 70 percent of the poor are found to be excluded from NE benefits, but the share of expenditures going to the poor rises to three-fourths of all NE expenditures.

The expenditure measure used for these estimates subtracts the transfers related to the NE program from total expenditures. It tacitly assumes that private transfers to a household or the household's work effort are unchanged by the availability of benefits from the NE program. This ex ante expenditure estimate can be regarded as a lower bound of what household welfare would have been if there were no social assistance. Generally, a change in pensions or state transfers is partially compensated by increased private transfers, though this is usually far less than a one for one compensation (Cox et al., 1995). However, if the benefits from the NE program totally substitute for private transfers and work effort, it must be assumed that households gain increased leisure as a result of receiving NE benefits while their non-resident relatives, who would have otherwise sent them money, will have higher consumption.

Even so, the distribution of the NE looks similar to that using ex ante rankings, because few people change from being poor to being non-poor on the basis of receiving NE benefits. Thirteen percent of the households defined as poor by the lower definition are raised above the poverty line by the NE, while only 3.5 percent of poor households as defined by the higher poverty line are raised above the line. The amount of benefit that is transferred is modest relative to the average expenditures of the population. Recipient households in rural areas get, on average, 289 (S.D. = 211) lek per capita per month in NE benefits. While a lower percentage of urban households receive assistance, those that do qualify receive an average of 590 (S.D. = 189) lek per capita per month.

Recent research indicates that poverty rankings may be sensitive to assumptions of scale economies or of adult equivalency (Lanjouw et al., 1998). Thus, Table 1 also includes two alternatives to ranking households by per capita expenditures. To elaborate, let the effective household size be indicated by $[\sum w_i h_i]^\alpha$ where the number of individuals in each age bracket is denoted by h_i and the weight of the bracket is denoted by w_i and α is a parameter of household economies in which a value less than 1 implies that the cost of maintaining a household at a given welfare level increases at a lesser rate than the size. In the adjustment for scale

Table 2
Rural Albania: Tobit regressions explaining distribution of social assistance^a

Model	1	2	3	4	5	6	7
Variable							
Constant	-743.84 (-2.49)	-646.07 (-1.87)	-1041.65 (-3.10)	-413.68 (-1.15)	-1046.86 (-3.13)	-537.51 (-1.00)	-1033.96 (-3.13)
Wage earner (1=Yes)	-1688.41 (-6.72)	-1800.97 (-6.63)	-1830.82 (-6.97)	-1819.69 (-6.69)	-1797.09 (-6.95)	-1919.37 (-6.66)	-1735.81 (-6.81)
Value of poultry (Lek)	-0.120 (2.12)	0.147 (2.40)	0.098 (1.85)	0.161 (2.50)	0.096 (1.85)	0.156 (2.59)	0.095 (1.83)
Value of pigs, goats, sheep (Lek)	0.003 (0.70)	0.003 (0.62)	0.003 (0.67)	0.002 (0.52)	0.003 (0.70)	0.002 (0.42)	0.003 (0.77)
Value of cattle, horse (Lek)	-0.010 (-2.63)	-0.011 (-2.84)	-0.011 (-2.63)	-0.010 (-2.77)	-0.011 (-2.68)	-0.011 (-2.85)	-0.010 (-2.64)
Value of cropland (Lek)	-0.002 (-3.81)	-0.002 (-3.75)	-0.002 (-3.99)	-0.002 (-3.61)	-0.002 (-4.07)	-0.002 (-3.24)	-0.002 (-4.18)
Value of pasture (Lek)	-0.000 (-0.24)	-0.000 (-0.25)	-0.001 (-0.45)	-0.000 (-0.14)	-0.001 (-0.47)	-0.000 (-0.19)	-0.001 (-0.47)
Value of orchards (Lek)	-0.004 (-1.51)	-0.003 (-1.36)	-0.004 (-1.75)	-0.003 (-1.33)	-0.004 (-1.71)	-0.004 (-1.38)	-0.004 (-1.70)
Old age pension (Lek)	-0.58 (-5.43)	-0.59 (-5.16)	-0.60 (-5.51)	-0.57 (-5.04)	-0.60 (-5.52)	-0.56 (-4.54)	-0.61 (-5.66)
Other pensions (Lek)	-0.65 (-3.25)	-0.71 (-3.38)	-0.62 (-3.12)	-0.72 (-3.41)	-0.62 (-3.12)	-0.65 (-3.02)	-0.65 (-3.35)
Number of children 5 and under	376.69 (3.75)	400.37 (4.12)	361.76 (3.72)	405.94 (4.22)	363.43 (3.71)	402.63 (4.12)	360.74 (3.70)
Number of male children 6–15	140.57 (1.15)	195.30 (1.59)	81.04 (0.70)	224.85 (1.71)	82.26 (0.71)	201.38 (1.52)	80.92 (0.71)
Number of female children 6–15	298.13 (3.01)	316.20 (3.12)	268.73 (2.82)	331.02 (3.20)	270.83 (2.85)	319.97 (3.05)	270.19 (2.84)
Number of adult males	112.20 (1.24)	168.45 (1.42)	-26.72 (-0.35)	220.88 (1.75)	-23.65 (-0.31)	185.86 (1.21)	-27.81 (-0.38)

Number of adult females	546.43 (4.15)	622.65 (4.42)	402.42 (3.49)	676.70 (4.83)	407.07 (3.51)	629.79 (4.34)	404.89 (3.51)
Number of elderly males	410.74 (1.81)	513.47 (2.09)	336.28 (1.57)	544.23 (2.16)	345.26 (1.60)	505.43 (2.08)	348.01 (1.60)
Number of elderly females	224.94 (1.16)	280.06 (1.53)	134.05 (0.73)	304.10 (1.63)	137.61 (0.75)	243.39 (1.37)	153.97 (0.83)
Travel time to community office (minutes)	2.07 (1.13)	1.96 (1.04)	2.63 (1.40)	1.76 (0.95)	2.54 (1.38)	2.41 (1.26)	2.19 (1.21)
Observed expenditure less housing and durables	-0.05 (-2.58)						
Predicted expenditure less housing and durables		-0.08 (-2.96)					
Residual of expenditures less housing and durables			-0.05 (-2.18)				
Predicted expenditure less durables				-0.09 (-2.89)			
Residual expenditures less durables					-0.04 (-2.06)		
Predicted total expenditure						-0.08 (-1.55)	
Residual from total expenditures							-0.05 (-2.21)

^a Note: Dependent variable is monthly receipt of social assistance per household August–November 1996. The sample contains 1091 observations, 303 of which had non-zero values for social assistance. Z-statistics (in parentheses) are corrected for cluster sampling.

Table 3
Urban Albania: Tobit regressions explaining distribution of social assistance^a

Model	1	2	3	4	5	6	7
Variable							
Constant	-3750.68 (-3.37)	-2799.33 (-2.23)	-5333.96 (4.25)	-2298.33 (-1.65)	-5452.50 (-4.28)	-2808.75 (-1.76)	5754.43 (-4.45)
Wage earner (1=Yes)	-3638.12 (-4.17)	-4067.47 (-4.45)	-3998.64 (-4.43)	-4065.41 (-4.42)	-3954.70 (-4.42)	-4228.23 (-4.54)	-3888.58 (-4.37)
Value of poultry (Lek)	-17.683 (-0.03)	-21.167 (-0.02)	-17.307 (-0.03)	-18.387 (-0.04)	-19.575 (-0.02)	-20.158 (-0.02)	-18.125 (-0.03)
Value of pigs, goats, sheep (Lek)	0.879 (0.01)	0.818 (0.00)	1.015 (0.03)	0.777 (0.00)	1.022 (0.02)	1.038 (0.01)	0.885 (0.02)
Value of cattle, horse (Lek)	-0.064 (-0.01)	-0.063 (0.00)	1.197 (-0.02)	-0.058 (-0.00)	-0.114 (0.01)	-0.094 (-0.01)	-0.064 (-0.01)
Value of cropland (Lek)	-0.001 (-0.71)	-0.005 (-0.87)	-0.002 (-0.44)	-0.004 (-0.84)	-0.003 (0.56)	-0.004 (-0.75)	-0.004 (-0.67)
Value of pasture (Lek)	-0.859 (-0.01)	-0.922 (0.00)	-0.976 (-0.01)	-0.870 (-0.00)	-0.993 (-0.01)	-1.053 (-0.01)	-0.885 (-0.01)
Value of orchards (Lek)	-0.084 (-0.01)	-0.091 (-0.01)	-0.101 (-0.01)	-0.088 (-0.02)	-0.102 (-0.01)	-0.102 (-0.01)	-0.093 (-0.01)
Old age pension (Lek)	0.12 (0.36)	0.05 (0.15)	0.09 (0.28)	0.10 (0.29)	0.04 (0.13)	0.10 (0.28)	0.05 (0.15)
Other pensions (Lek)	-0.51 (-0.81)	-0.71 (-0.99)	-0.57 (-0.82)	-0.75 (-1.00)	-0.48 (-0.76)	-0.72 (-0.98)	-0.49 (-0.76)
Number of children 5 and under	896.80 (2.27)	1015.85 (2.33)	580.98 (1.45)	997.59 (2.25)	545.03 (1.36)	900.21 (1.98)	459.61 (1.16)
Number of male children 6–15	1549.65 (3.42)	1545.39 (3.17)	1175.46 (2.66)	1560.62 (3.14)	1156.37 (2.61)	1435.52 (2.83)	1134.25 (2.62)
Number of female children 6–15	659.72 (1.63)	668.59 (1.55)	516.61 (1.26)	728.50 (1.66)	495.33 (1.21)	652.88 (1.46)	495.23 (1.24)

Number of adult males	739.31 (1.61)	586.49 (1.21)	149.45 (0.33)	591.22 (1.21)	180.71 (0.40)	419.47 (0.83)	291.56 (0.66)
Number of adult females	921.54 (1.81)	1036.95 (1.85)	327.62 (0.64)	1064.73 (1.85)	305.67 (0.60)	866.42 (1.47)	325.70 (0.66)
Number of Elderly Males	89.91 (0.06)	-32.74 (-0.02)	-434.28 (-0.32)	-92.90 (-0.07)	-193.39 (-0.14)	-227.34 (-0.16)	-86.50 (-0.07)
Number of elderly females	-1488.12 (-1.17)	-1186.72 (-0.91)	-1862.46 (-1.52)	-1056.59 (-0.79)	-1802.73 (-1.48)	-1414.93 (-1.05)	-1857.08 (-1.61)
Travel time to community office (minutes)	112.58 (3.10)	77.76 (2.18)	105.04 (2.85)	71.09 (2.01)	115.27 (3.06)	72.37 (2.03)	120.04 (3.20)
Observed expenditure less housing and durables	-0.23 (-4.18)						
Predicted expenditure less housing and durables		-0.24 (-2.68)					
Residual of expenditures less housing and durables			-0.19 (-3.56)				
Predicted expenditure less durables				-0.21 (-2.45)			
Residual expenditures less durables					-0.18 (-3.73)		
Predicted total expenditure						-0.15 (-1.56)	
Residual from total expenditures							-0.21 (-4.15)

^a Note: Dependent variable is monthly receipt of social assistance per household August–November 1996. The sample contains 412 observations, 47 of which had non-zero values for social assistance. Z-statistics (in parentheses) are corrected for cluster sampling.

Table 4
Alternative specifications for the impact of expenditure on social assistance

Model	Rural							Urban							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Observed expenditure less housing and durables	-	-0.0492 (2.04)	-	-	-	-	-	-	-0.2239 (5.75)	-	-	-	-	-	-
Predicted expenditures less housing and durables	-0.0785 (3.12)	-0.0293 (0.89)	-	-	-0.0368 (1.44)	-	-0.2528 (5.05)	-0.2604 (2.95)	0.0364 (0.41)	-	-	-0.2715 (2.95)	-	0.7572 (1.32)	0.7666 (1.35)
Residual of housing and durables	-0.0492 (2.04)	-	-0.0489 (3.10)	-0.0514 (2.40)	-	-0.0491 (4.02)	-0.0948 (1.49)	-0.2239 (3.75)	-	-0.1828 (3.47)	-0.1948 (3.26)	-	-0.2003 (3.58)	-0.1521 (0.34)	-0.2242 (3.68)
Formula allocation	-	-	0.6427 (5.30)	-	-	-	-	-	-	1.02 (2.32)	-	-	-	-	-
Average of community expenditures per household	-	-	-	-	-	-	-0.0895 (1.88)	-	-	-	-	-	-	0.9938 (1.83)	1.086 (1.87)
Average expenditures interacted with predicted expenditures	-	-	-	-	-	-	1.89 ^{xE-6} (0.60)	-	-	-	-	-	-	-6.1 ^{xE-5} (1.77)	6.1 ^{xE-5} (1.80)
Average expenditures interacted with expenditure residual	-	-	-	-	-	-	1.08 ^{xE-5} (4.59)	-	-	-	-	-	-	-4.18 ^{xE-6} (0.16)	-
Fixed effects	N	N	N	N	Y	Y	N	N	N	N	N	Y	Y	N	N

economies illustrated in Table 1, the parameter of scale economy, α , is set at 0.7 but each individual is given a weight of 1. Table 1 also includes a ranking of households in which the weights for adult equivalency are 0.4 for children 5 and under, 0.7 for children 6–15 years of age, and 1.0 for all others, with no difference by gender. This adjustment for adult equivalency is distinct from adjusting for scale; here it is assumed that there are no scale economies. Neither alternative to ranking households by expenditure per capita makes more than a modest change in the percent of the poorest households receiving social assistance or the share of total assistance going to the poor.

5.2. What are the characteristics of the households which receive social assistance?

The targeting performance of assistance in Albania is encouraging, but not in itself evidence that the community has advantages over a more centralized formula for distribution. To address this one needs to determine what indicators of poverty local governments use to assign NE benefits. Thus, the amount households received from the NE program was regressed against a set of proxy indicators that were the original basis of program eligibility as well as additional variables that may be used by communes to determine allocation. A significant coefficient on a right hand side variable means either that the variables are correlated with the factors on which the commune's allocation decision is based or they are correlated with the household's probability of applying for the program, or both.

Tables 2 and 3 show results of these regressions for rural and urban areas respectively. The coefficient of expenditures in the first column shows that as consumption increases the amount of assistance provided decreases. Moreover, pensions and the presence of a wage earner influences the amount of social assistance received in a manner that differs from the overall effect of total expenditures.⁵ That is, families that receive pensions or have wage earnings are not treated identically to families with equal levels of consumption supported from other sources of income or transfers. The full impact of pension income on social assistance would be its contribution to overall expenditures times the negative impact of such expenditures on the amount of assistance received *plus* the additional impact indicated by the coefficient of pension income. Commune officials may be better able to observe this income than other sources of income, although as yet there are no computerized files that might be used to verify pensions. Similarly, families holding total expenditures constant, households with

⁵As expected, if the expenditure variable is excluded, the coefficients of many of the variables correlated with expenditures — such as pensions and wage earnings — increase as much as 50% in absolute value. Similarly, the exclusion of pension or wage earnings will affect the expenditure variable.

more cropland (but not other land) and owning more large animals receive less assistance.

The direct impact of these variables (excluding their impact on the level of expenditures) is not uniform. Having a wage earner reduces the predicted amount of assistance by more than the average value of assistance *conditional* on having received it. Similarly, since the average value of either pension, conditional on having received any, is over 2000 lek in rural areas (and 4000 in urban) the impact of having a pension recipient is similar to that of having a wage earner. Conversely, although landholding and animal ownership is statistically significant the average impact of either is less than 5% of the value of assistance for those who receive it.

The coefficient of the time it takes for household members to travel to the commune offices to apply for NE benefits is positive although the coefficient is significant only for the urban communities. This implies that households located far from the commune office receive more assistance than those that are located nearby. Since the expenditure measures already account for most differences in earnings or assets, it is unlikely that this time factor is a spurious effect of greater poverty in more remote settlements. The more likely explanation for this finding is that local government officials are less able to observe the assets and earnings of households that are located in remote neighborhoods.

For the measure of predicted expenditures used in column 2, total household expenditures net of NE were regressed on 37 variables including seven age and gender variables for the composition of the household, eight age and gender variables for levels of education, various types of land and livestock holdings, four types of productive capital variables, the value of three types of household durables owned, and an additional seven variables measuring housing quality. The productive and consumer capital variables may be considered as identifying instruments which are jointly significant [$F(14,1053)=19.00$ in rural, $F(14,378)=10.41$ urban]. These predicted variables are, in effect, proxy measures of expenditures using weights that are defined by the data.

Column 3 substitutes the difference between the actual expenditures of the households net of NE benefits and the expenditure that had been predicted using assets and household composition. The coefficient of this expenditure residual is similar to the coefficient of predicted expenditures. To be sure, it is smaller than that for predicted expenditures — possibly reflecting the fact that only the former is subject to attenuation towards zero due to measurement error — but it is nevertheless, significantly different from zero. This result is central to this study and will be discussed further below.

The remainder of Tables 2 and 3 indicates that the coefficients of expenditures and of the expenditure residual are robust to alternative definitions of expenditures. For example, the regressions reported in column 4 and 5 define expenditures as inclusive of the imputed value of housing, adding roughly 13% to total expenditures in rural areas and 32% in urban areas. Since housing is used to construct

expenditures, the prediction equation drops the housing variables from the right hand side [$F(7,1060)=34.03$ rural; $F(7,385)=17.98$ urban]. Similarly, the last two columns, which include the imputed value of durables drop household durables from the predicting [$F(4,1063)=20.15$ rural, $F(4,388)=19.08$ urban]. All three alternative proxy indicators of expenditures significantly explain the observed pattern of NE distribution with only modest differences between the explanatory power or the coefficients of the expenditure measures. Moreover, there is little difference in the coefficients of the predicted variables and of the expenditure residuals.⁶

Table 4 explores these results a bit further. For convenience this Table reports only the coefficients of the expenditure variables, although the same set of asset and household composition variables that are used in Tables 2 and 3 are included here as well. The first and eighth columns conform to Eq. (1) and confirm that the residual is not merely providing the same information as the predicted expenditure, it is providing additional information. A slight reformulation of this regression (columns 2 and 9) conveys the same information but makes an additional point more apparent. This regression substitutes observed expenditures for the expenditure residual yielding one form of the Hausman test for the correlation of errors in variables with the regression residual (Hausman, 1978, equation 2.20). Under this test, the significance of the coefficient for predicted expenditures indicates whether the errors in the regression explaining the distribution of social assistance are correlated with the expenditure variable. The low Z statistic implies that there is no evidence that the two expenditure variables are correlated with the respective error terms in the regressions explaining the allocation of NE benefits to households.

The row marked formula allocation in column 3 presents results which closely parallel the actual procedure for allocation of assistance. In lieu of expenditure, this regression substitutes the estimate of need based on the formula used for calculating social assistance in keeping with the original entitlement concept (discussed above). This regression indicates that for every lek rise in the value of the estimated need, a rural family can expect only an additional 0.64 lek in social assistance. For urban households, however, an increase in the formula (column 10) results in a one for one increase in allocation. However, in both the rural and urban samples, using the formula allocation in the regression in lieu of \hat{C} in Eq. (1) has only a minor impact on the coefficient for the expenditure residual, again indicating the use of local idiosyncratic information.

The regressions in columns 4 and 11 conform to Eq. (2) and include all the assets used to predict expenditures. That is, they add 22 additional variables to those in Table 2 and exclude predicted expenditures. However, as each asset has its independent role in the determination of NE regression this estimate is more

⁶The results are also moderately robust to the exclusion of the asset and household composition variables reported in Tables 2 and 3. For example, if predicted expenditures less housing and durables is included in the rural regression by itself, its coefficient is -0.10 ; the urban counterpart is -0.23 .

Table 5
Decomposition of rural social assistance into probability of assistance and amount received^a

Variable	Rural		Urban	
	Probit (dependent variable = 1 if received assistance)	Conditional OLS (dependent variable = value of assistance)	Probit (dependent variable = 1 if received assistance)	Conditional OLS (dependent variable = value of assistance)
Constant	-0.16 (0.98)	151.9 (0.37)	-0.84 (1.48)	56.2 (0.10)
Wage earner (1=yes)	-1.10 (6.20)	163.65 (0.61)	-1.31 (6.69)	103.8 (1.79)
Value of poultry (100 Lek)	0.01 (2.58)	9.55 (2.00)	-	-
Value of pigs, goats, sheep (100 Lek)	0.00 (0.00)	2.09 (0.64)	-	-
Value of cattle, horse (100+ Lek)	-0.01 (0.87)	4.25 (1.38)	-	-
Value of cropland (100 Lek)	-1.0×10^{-4} (3.67)	-0.004 (0.14)	-1.72×10^{-4} (1.75)	0.89 (3.70)
Value of pasture (100 Lek)	6.7×10^{-6} (0.08)	0.0141 (0.39)	-	-
Value of orchards (100 Lek)	4.8×10^{-5} (0.34)	0.069 (0.67)	-	-
Old age pension (Lek)	-.003 (5.28)	0.051 (0.67)	0.00005 (0.82)	-0.30 (1.71)
Other pension (Lek)	-.004 (3.33)	0.80 (0.60)	0.0002 (1.46)	-0.37 (1.12)
Number of children 5 and under	0.19 (3.64)	48.3 (0.67)	-0.27 (1.40)	443.5 (3.29)

Number of male children 6–15	0.10 (1.45)	62.4 (0.74)	-0.52 (2.88)	308.0 (2.33)
Number of female children 6–15	0.14 (3.06)	65.3 (1.42)	0.20 (1.96)	133.5 (1.37)
Number of adult males	0.20 (2.36)	-51.6 (0.66)	0.20 (1.97)	253.9 (3.24)
Number of adult females	0.38 (4.90)	-54.3 (0.52)	0.34 (1.98)	248.4 (0.83)
Number of elderly males	0.38 (2.23)	-283.8 (2.30)	-0.13 (0.28)	138.4 (2.18)
Number of elderly females	0.12 (0.83)	-55.0 (0.74)	-0.51 (1.04)	746.1 (0.90)
Travel time to community office (minutes)	0.001 (0.72)	0.203 (0.18)	0.023 (1.41)	15.0 (1.52)
Predicted expenditure less housing and durables	-0.000007 (3.76)	0.032 (1.60)	-0.00009 (5.94)	0.39 (1.72)
Expenditure residual	-0.000005 (3.99)	-0.27 (3.06)	-0.00008 (3.36)	0.39 (1.44)
Mills ratio	-	789.30 (2.27)	-	-
Sample size	1091	303	412	47

^a Note: The dependent variable in the OLS regressions is the monthly receipt of social assistance per household August–November 1996. *T*-statistics (in parentheses) are corrected for heteroskedasticity and cluster sampling.

flexible than is the single predicted expenditure proxy. Nevertheless, the magnitude and significance of the idiosyncratic expenditure term is unaffected. Thus, the allocation of assistance uses information that differs from that contained in the 39 indicators obtained through a household survey. This despite the fact that the survey data was based on a household sample and likely contains more information than could be obtained in a cost effective manner using a census or in monitoring an application for public assistance. Moreover, since these assets are also the most likely candidates that would be used to proxy for *either* income or consumption, these results provide supportive evidence that the significance of the residual from consumption is not merely due to the focus on predicted consumption in the analysis. It is possible that the social assistance program allocation is based on the commune's assessment of current income or employment and not consumption per se. Nevertheless, the fact that the coefficient of the consumption residual is unaffected when assets are substituted for predicted consumption is consistent with the residual being uncorrelated with the assets and yet having information that is correlated with the allocation decision.

Columns 5 and 6 (rural) and 12 and 13 (urban) address one further potential drawback. These regressions include commune fixed effects and thus allow for the possibility that the residual expenditures reflect community factors such as land quality or market access and prices that are not included in the regressions. If the Ministry of Labor observes these, they may base the overall allocation to the community on this information, possibly leading to biased results in this investigation. Nevertheless, the expenditure residual retains its significance in both the rural and urban fixed effects regressions while the predicted variable does so only in the urban regressions. Thus, even controlling for the attempts to target grants to poorer communities — that is, conditional on the allocation from the center which is part of the community fixed effects — communities use idiosyncratic information to allocate the funds available. This result also challenges the view that local officials do not distinguish among the needs of community members, preferring instead to allocate equally. This has been observed, for example, in the course of monitoring emergency food aid (Sharp, 1997).

Analogous with some of the studies on proxy targeting, households could be ranked on the basis of their predicted expenditures to see how the information conveyed by the estimation of consumption improves targeting, holding both the average size of grants constant and the number of recipient households in both the rural and urban areas as they were in 1996. However, this approach is not suited for ranking on the expenditure residual since — by construction — ranking on both predicted and idiosyncratic expenditures exactly corresponds to ranking on all household expenditures and, thus, allocates virtually all of social assistance to the poorest decile. Thus, a more apt illustration of the magnitude of improvement with local level use of the information conveyed by the expenditure residual is to note

that expected amount of social assistance going to the poorest decile using the formula allocation as in equations in Table 4 columns 3 and 10 is 12% percent larger than that predicted using the same equations with the idiosyncratic expenditure variable dropped. Similarly, the amount predicted going to the poor is 19% percent larger using the predicted expenditures and idiosyncratic expenditures in Table 4 columns 1 and 8 than it is excluding the residual of expenditures as in Tables 2 and 3, column 2.

5.3. Do richer communities target poverty more effectively?

For the rural sample, this is addressed in the 7th column of Table 4 which includes the average total expenditures in the community (exclusive of imputed housing and durables) as a regressor along with this average interacted with both the predicted and the residual expenditure of the household. The results in column 7 imply that on the average a resident in a poor community receives more social assistance than a resident with similar means in a less poor area [the intercept increases by 9 lek for every *decrease* of 100 lek in the average expenditures in the community]. Moreover, since both interaction terms are positive (albeit only significantly so in the case of the interaction with the expenditure residual), they both imply that the richer the community, the *less* social assistance declines with increased consumption. Stated somewhat differently, the richer the community, the less social assistance is targeted to the poor.

The results for urban neighborhoods differ from that in rural areas in two respects. First, residents of wealthier communities receive on average more, not less, assistance. Second, unlike rural communities, the wealthier cities target the assistance they deliver more effectively towards the households with fewer assets as evident by negative interaction term with the coefficient for predicted expenditures. When an interaction term with residual expenditures was included, neither that term, nor the coefficient for residual expenditures was significant (column 14). Thus, column 15 reports the regression with that interaction term omitted.

5.4. Are the variables that explain program participation different from those that indicate levels of assistance?

In some social assistance programs once a family is deemed eligible the amount of assistance is predetermined. This is not the case with the NE, which has both a threshold for program entry and variation in the amount of assistance received conditional upon entry. Table 5 explores these two issues by decomposing the Tobit regressions into a probit and a regression conditional on the dependent

variable being non-zero using the same right hand side variables as in Table 4 columns 1 and 8. Similar to the discussion above, the probit regression on program participation shows that the magnitude of the residual component of consumption is significant and of a similar magnitude to that predicted element in both the rural and urban regressions. For the rural communities, the residual of consumption retains its significance in the second stage, the regression of the amount of social assistance conditional on participating in the program. Unlike the probit results, however, the presence of a wage earner or of pension income has little impact on the conditional results, in part because there is comparatively little variance in these variables in the sample of households who receive social assistance.

As Duclos (1995) observes, a household may make errors in its assessment of the probability of program selection. Thus, the decomposition provides an additional perspective on the information utilized by program administrators. While the results reported in Tables 2–4 include the decision of a household to apply for the program, the conditional regression would be influenced less by this household choice and, thus, they support the interpretation that local officials are basing their allocation on idiosyncratic information.

Both the coefficients of predicted and residual expenditure are positive but not statistically significant at conventional levels in the regressions conditional upon participation in the urban sample. There are, however, only 47 households who receive social assistance in urban areas. Moreover, given that this two step tobit does not seek to identify the participation probit that is used to calculate the mills ratio the results in conditional regressions are sensitive to the inclusion or exclusion of this variable. Nevertheless, since the question of whether the communes use idiosyncratic information is agnostic as to *whether* the information is used to screen participation or to determine the amount to be granted, the probit regressions for the urban sample and both the probit and conditional regressions for the rural areas are supportive of the hypothesis that communes use local information in the allocation of social assistance.

6. Conclusions

This paper makes three principal observations. The first is that social assistance in Albania is targeted to the poor as effectively as many of the best programs in other developing countries. The observation that half of social assistance is going to the poorest quintile is remarkably close to the proverbial full/empty cup of water; like Case and Deaton (1998) the performance indicates the potential for targeted cash transfers in an economy in which the poor are often not employed in the formal sector yet, at the same time, it highlights the limitations of the current program.

Second, local authorities appear to both have access to information that is not easily captured in household surveys and to use this information (in addition to the type of information normally used in indicator targeting) to allocate program benefits among the households under their jurisdiction. The evidence for this comes from the measured impact of expenditures that differed from those expenditures predicted in regressions using household composition and assets, including, in some regressions, consumer durables and housing. While it is hard to imagine any proxy indicators that would contain as much information as was obtained in the household survey, local government officials do seem to have access to some additional source of information that enables them to improve the targeting of social assistance to the poor. They may not observe expenditures *per se*; nevertheless, they may base their allocations on factors not observable to the researchers which correlate with consumption yet differ from the labor force participation and asset ownership information obtained in the household survey.

For example, local government officials may know that some households have income sources, including transfers and savings, that were not covered by the questionnaire, for example, retained earnings from previous trips abroad by family members. Alternatively or additionally, the officials may know about transitory income shocks such as illness or crop failure that — in the absence of perfect insurance or credit markets — may bring current consumption below expectation conditional on the household's endowment. If this is the case, then local authorities are compensating households with a poorer than predicted draw of income. As few transfer programs are designed to serve this insurance function, this interpretation would be as favorable an interpretation of the use of idiosyncratic information as is the view that local officials are able to observe assets and effort and utilize this information in the allocation process in a manner that improves upon proxy indicators. Whatever the information that local officials are using, the fact that they use it to further the poverty alleviation objectives of the program is supportive of the use of block grants or other forms of financing that promote more local discretion in allocation.

However, at the same time, there are still many poor people who are not covered by social assistance. For one thing, the commune performance is conditional on the allocation from the center. Yet with the center having no direct access to community poverty data nor even independent employment data at the commune level, its allocation is *ad hoc*, based primarily on land holding and employment data reported by the communities themselves. Moreover, as mentioned, in the absence of a transparent allocation procedure, the magnitude of grants reflects voting patterns (Case, 2001). In a companion study (Alderman, 2001) a counterfactual scenario indicates that, holding intra-community allocation as currently observed, and changing the size of grants to reflect the share of national poverty in the community, the percentage of social assistance going to the poorest 10% [20%] would increase by as much as a third [quarter].

Finally, the study shows that poorer jurisdictions may be more likely than richer communities to target poorer households. Ravallion (1998) has observed that whether poverty targeting is enhanced or hindered by providing more resources to the poorest communities is theoretically indeterminate and that, in Argentina, richer communities show greater ability or willingness to target than poor communities. Indeed, the evidence in the urban areas in this study is not dissimilar with that found by Ravallion. However, despite the poverty within the small administrative units that deliver social assistance in rural Albania, they appear to have some capacity to distinguish the relative need among their overall population.

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Appendix A

Table A.1. Means and standard deviation of key variables

Variable	Rural		Urban	
	All	Assistance recipients only	All	Assistance recipients only
Social assistance (Lek/month)	230.09 (612.09)	1280.46 (860.54)	261.04 (781.74)	2326.52 (801.01)
Recipients Y/N	0.18 (0.38)	1 (0)	0.11 (0.32)	1 (0)
Formula allocation (Lek)	1639.64 (1502.34)	2807.04 (1141.92)	2168.88 (1697.27)	3125.75 (1235.69)
Expenditure (Lek/household/month)	21251.29 (11080.35)	16356.13 (9095.66)	23725.29 (10331.58)	18517.78 (8039.57)
Expenditure less durables (Lek/household/month)	20948.45 (10828.81)	16233.84 (9014.68)	23008.55 (9935.13)	18135.12 (7898.67)
Expenditure less housing and durables (Lek/household/month)	18590.93 (10305.82)	14305.87 (8360.92)	17548.27 (9001.68)	13634.78 (6757.69)
household size	4.91 (2.19)	5.12 (2.23)	4.06 (1.47)	4.19 (1.67)

Wage earner (1 = Yes)	0.22 (0.41)	0.06 (0.24)	0.47 (0.50)	0.08 (0.27)
Value of poultry (100 Lek)	14.81 (15.82)	13.91 (12.36)	(73.32) (554.12)	0 (0)
Value of pigs, goats, sheep (100 Lek)	15.10 (28.69)	16.52 (25.19)	529.58 (5576.59)	0 (0)
Value of cattle, horse (100 Lek)	47.44 (40.32)	38.03 (28.86)	30.96 (17.44)	0 (0)
Value of cropland (100 Lek)	41.34 (66.11)	13.29 (23.13)	10.04 (65.53)	30.26 (22.49)
Value of pasture (100 Lek)	20.44 (10.09)	48.50 (49.74)	153.55 (24.77)	0 (0)
Value of orchards (100 Lek)	26.09 (86.86)	65.13 (23.88)	14.40 (11.72)	0 (0)
Old age pension (Lek)	837.56 (1543.68)	225.96 (703.59)	1602.01 (2550.95)	704.70 (1886.07)
Other pensions (Lek)	133.93 (598.42)	46.60 (341.95)	165.66 (874.21)	35.76 (214.91)
Number of children 5 and under	0.68 (0.87)	0.92 (0.95)	0.42 (0.67)	0.57 (0.86)
Number of male children 6–15	0.59 (0.83)	0.73 (0.95)	0.42 (0.67)	0.54 (0.73)
Number of female children 6–15	0.64 (0.84)	0.65 (0.87)	0.47 (0.66)	0.72 (0.72)
Number of adult males	1.36 (0.90)	1.23 (0.77)	1.21 (0.77)	1.07 (0.61)
Number of adult females	1.18 (0.81)	1.23 (0.73)	1.10 (0.67)	1.14 (0.47)
Number of elderly males	0.30 (0.46)	0.21 (0.42)	0.23 (0.43)	0.09 (0.29)
Number of elderly females	0.38 (0.51)	0.24 (0.46)	0.35 (0.50)	0.14 (0.36)
Travel time to commune office	57.57 (48.37)	72.28 (56.14)	13.71 (8.81)	16.34 (8.83)
Grant to commune (Lek)	290.54 (256.52)	487.69 (262.34)	574.25 (186.33)	585.74 (183.57)
Grant to commune as ratio to requirements	0.17 (0.14)	0.23 (0.12)	0.26 (0.06)	0.27 (0.07)

Table A.2. Expenditure prediction equations

Variable	Rural			Urban		
	All expenditures	Expenditures less durables	Expenditures less durables and housing services	All expenditures	Expenditures less durables	Expenditures less durables and housing services
Constant	6197.16 (661.56)	5129.22 (606.84)	1377.72 (784.38)	11655.87 (1298.04)	8930.74 (1242.93)	4693.55 (4316.26)
Number of children 5 and under	370.20 (285.06)	542.38 (258.88)	477.77 (249.09)	1979.44 (630.77)	1938.60 (578.66)	1884.97 (534.70)
Number of male children 6–15	1521.46	1493.72	1196.30	2167.49	2063.17	1732.34

	(308.11)	(279.51)	(270.77)	(674.43)	(621.85)	(573.71)
Number of female children 6–15	630.55 (286.68)	769.14 (260.22)	482.09 (252.19)	1340.11 (624.85)	1192.73 (576.34)	1054.19 (543.32)
Number of adult males	2755.18 (1073.59)	2707.33 (974.33)	2782.05 (929.94)	-438.50 (3088.79)	8.62 (2831.40)	-336.27 (2632.12)
Number of adult females	1037.15 (973.28)	1817.95 (885.70)	1908.30 (845.25)	1106.04 (1908.52)	2134.08 (1756.37)	868.13 (1651.78)
Number of elderly males	1287.90 (938.13)	1557.00 (852.52)	1272.41 (817.27)	-1915.09 (3081.72)	-1187.58 (2827.10)	-1875.30 (2624.42)
Number of elderly females	579.09 (685.60)	1355.40 (624.32)	1305.67 (601.85)	1442.67 (1673.94)	2656.33 (1541.67)	581.56 (1469.17)
Males with primary education	-278.21 (1067.24)	15.76 (968.48)	-295.03 (923.95)	-608.73 (3391.59)	580.09 (3112.20)	885.85 (2936.85)
Females with primary education	1587.18 (900.35)	1493.47 (818.77)	1118.23 (781.95)	3153.46 (1914.15)	1929.05 (1760.24)	2170.63 (1648.48)
Males with middle education	-315.62 (1077.73)	-503.89 (979.04)	-822.98 (934.26)	1170.50 (3072.39)	872.94 (2815.76)	1410.55 (2615.39)
Females with middle education	998.39 (978.43)	396.02 (889.38)	-142.27 (850.08)	1447.69 (1956.65)	102.69 (1806.05)	420.79 (1693.54)
Males with secondary education	574.37 (1084.64)	-272.03 (987.48)	-814.88 (943.50)	3560.31 (3043.40)	2536.82 (2791.30)	2251.75 (2594.00)
Females with secondary education	3297.53 (1080.51)	1991.18 (985.10)	1274.09 (945.28)	2138.75 (1923.56)	785.30 (1774.52)	1164.53 (1671.87)
Males with higher education	2482.95 (1560.80)	1296.92 (1423.83)	525.20 (1362.20)	5167.56 (3188.03)	2934.56 (2932.85)	2715.93 (2734.45)
Females with higher education	-560.72 (1865.84)	-1657.76 (1694.32)	-2060.22 (1617.30)	5362.38 (2156.93)	3636.51 (1988.00)	4309.48 (1844.34)
Old age pension (Lek)	0.68 (0.21)	0.36 (0.19)	0.20 (0.18)	0.39 (0.31)	0.22 (0.29)	0.11 (0.27)
Other pension (Lek)	0.11 (0.42)	-0.46 (0.39)	-0.49 (0.38)	-0.10 (0.44)	-0.07 (0.40)	-0.05 (0.37)
Non-farm vehicles	0.03 (0.01)	0.02 (0.01)	0.02 (0.01)	0.02 (0.00)	0.02 (0.00)	0.01 (0.00)
Non-farm machinery	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01 (0.00)	0.00 (0.00)	0.00 (0.00)
Non-farm inventory	0.03 (0.01)	0.01 (0.01)	0.01 (0.01)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Value of orchards (100 Lek)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-	-	-
Value of pasture (100 Lek)	0.01 (0.00)	0.00 (0.00)	0.00 (0.00)	-	-	-
Value of cropland (100 Lek)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-	-	-
Total value of land	-	-	-	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Farm machinery	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	-0.10 (0.43)	0.08 (0.39)	-0.10 (0.40)
Value of cattle, horse (100 Lek)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	-	-	-
Value of pigs, goats, sheep (100 Lek)	-0.01 (0.01)	-0.00 (0.01)	0.00 (0.01)	-	-	-
Value of poultry (100 Lek)	0.50 (0.19)	0.31 (0.17)	0.35 (0.17)	-	-	-
Total value of animals	-	-	-	0.07 (0.03)	0.05 (0.03)	0.03 (0.03)
Value of household furniture	-	0.12 (0.02)	0.08 (0.02)	-	0.07 (0.01)	0.05 (0.01)
Value of household electronics	-	0.05 (0.01)	0.03 (0.01)	-	0.03 (0.02)	0.02 (0.02)
Value of household vehicles	-	0.04 (0.01)	0.04 (0.01)	-	0.02 (0.01)	0.01 (0.01)
Apartment (Y/N)	-	-	466.30 (919.73)	-	-	-3231.91 (1113.95)
Multiple family unit	-	-	1110.56	-	-	-1850.46

			(608.34)			(1489.88)
Number of rooms	–	–	1447.63	–	–	1346.43
			(291.02)			(533.95)
Flush toilet in dwelling (Y/N)	–	–	1757.31	–	–	3848.23
			(1223.64)			(4214.54)
Building (Y/N)	–	–	87.60	–	–	2488.98
			(574.70)			(4104.52)
Other type of toilet	–	–	–2925.01	–	–	2131.27
			(1064.05)			(8282.65)
Water supply piped inside	–	–	1870.05	–	–	–2314.55
			(1067.37)			(4316.26)
R^2	0.42	0.49	0.49	0.38	0.44	0.44

References

- Alderman, H., 1991. Food subsidies and the poor. In: Psacharopoulos, G. (Ed.), *Essays on Poverty, Equity and Growth*. Pergamon Press, Elmsford, pp. 172–202.
- Alderman, H., 2001. Multi-tier targeting of social assistance: role of inter-governmental transfers. *World Bank Economic Review*. Forthcoming.
- Alderman, H., Lindert, K., 1998. Self-targeting of food subsidies: potential and limitations. *World Bank Research Observer* 13 (2), 213–230.
- Bird, R., Rodriguez, E., 1999. Decentralization and poverty alleviation. International experience and the case of the Philippines. *Public Administration and Development* 19 (3), 299–319.
- Broadway, R., Marceau, N., Sato, M., 1997. An agency model of welfare and disability assistance. Queen's University, Institute of Economic Research. Discussion Paper #949.
- Case, A., 2001. Election goals and income redistribution: recent evidence from Albania. *European Economic Review*. Forthcoming.
- Case, A., 1997. The decentralization of social assistance: evidence from Albania. Princeton University. Mimeo.
- Case, A., Deaton, A., 1998. Large cash transfers to the elderly in South Africa. *Economic Journal* 108 (Sept.), 1330–1361.
- Coudouel, A., Marnie, S., Micklewright, J., 1998. Targeting social assistance in a transition economy: the role of the Mahalla in Uzbekistan. UNICEF Innocenti Occasional Papers #63, Florence.
- Cox, D., Jimenez, E., Jordan, J., 1995. Family safety nets and economic transition. A study of private transfers in Kyrgyzstan. World Bank, mimeo.
- Deaton, A., Grosh, M., 2000. Consumption in Grosh. In: Glewwe, M., Glewwe, P. (Eds.), *Designing Household Survey Questionnaires for Developing Countries: Lessons from Ten Years of LSMS Experience*. Oxford University Press, Oxford.
- Duclos, J.-Y., 1995. Modelling the take-up of state support. *Journal of Public Economics* 58, 391–415.
- Grosh, M., 1994. Administering Targeted Social Programs in Latin America. From Platitudes to Practice. World Bank, Washington DC.
- Grosh, M., Glewwe, P. (Eds.), 2000. *Designing Household Survey Questionnaires for Developing Countries: Lessons from Ten Years of LSMS Experience*. Oxford University Press, Oxford.
- Hausman, J., 1978. Specification tests in econometrics. *Econometrica* 46 (6), 1251–1271.
- Hentschel, J., Lanjouw, P., 1996. Constructing an indicator of consumption for the analysis of poverty. Principles and illustration with reference to Ecuador. World Bank. Living Standards Measurement Study Working Paper No. 124.
- Inman, R., Rubinfeld, D., 1997. The political economy of federalism. In: Mueller, D. (Ed.), *Perspectives on Public Choice*. Cambridge University Press, Cambridge.
- Inman, R., Rubinfeld, D., 1996. Rethinking federalism. *Journal of Economic Perspectives* 11 (4).
- Klugman, J., 1997. Decentralization: a survey from a child welfare perspective. UNICEF Innocenti Occasional Papers #63, Florence.

- Lanjouw, P., Milanovic, B., Paternostro, S., 1998. Poverty and the economic transition: how do changes in economies of scale affect poverty rates for different households? World Bank: Policy Research Working Paper Series #2009.
- Oates, W., 1972. Fiscal Federalism. Harcourt, Brace and Jovanich, New York.
- Ravallion, M., 1998. Reaching poor areas in a federal system. World Bank: Policy Research Working Paper #1955.
- Sharp, K., 1997. Targeting Food Aid in Ethiopia. Save the Children (UK), Addis Ababa.