

Rationality as a Barrier to Peace: Micro-evidence from Kosovo

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Abstract: Despite a significant expansion of the literature on conflicts and fragility of states, only a few systematic attempts have been made to link the theoretical literature on social conflicts to the available micro-level information about the people who are involved in these conflicts. We address this lacuna in the literature using a household-level data set from Kosovo. Our analysis suggests that it is individually rational for competing ethnic communities, Kosovo Albanians and Kosovo Serbs, to resist a quick agreement on a social contract to share the region's resources.

Keywords: conflict, individual rationality, economic deprivation, micro-evidence, Balkans, Kosovo

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1. Introduction

Economists have often viewed social conflict as an outcome of competition to control natural resources (Hirshleifer, 1995), in contexts where collective action is costly or infeasible. Others have argued that such competition does not necessarily explain the existence of armed conflicts, given that armed conflicts inflict significant damage on all parties involved. If, however, there is a breakdown of the social contract involving redistribution of resources among different groups of individuals using fiscal mechanisms, and if this breakdown results in increasing uncertainty about the share of these competing groups in the country or society's resources, armed conflict may be an outcome (Skarperdas, 1992; Azam and Mesnard, 2003). The intensity of the conflict is exacerbated in an environment where past grievances are well entrenched within one or more of the competing groups (Collier and Hoeffler, 1999). On the other hand, if the gains from the absence of conflict are clearly observable, for example, in a period of economic growth, there is a significant reduction in the likelihood of social (or civil) conflict (Miguel, Satyanath and Sergenti, 2004).

Addision and Murshed (2001) argue that even though elimination of conflict is socially optimal, it is often not a feasible option because it is in the interest of one or more of the parties involved in the conflict to renege on a peace agreement. The final outcome depends on factors like the payoff to these parties on account of the conflict, and the extent to which they discount the future. Esteban and Ray (2001, 2006) demonstrate that a conflict can be aggravated by, among others, an increase in within-group inequality. Relatively affluent sections of the groups are then in a position to induce members of the relatively poor sections to join the conflict somewhat inexpensively, given that the poorer people in these groups have low opportunity costs of time. In their framework, an increase in the average income of one group relative to the other, however, has an ambiguous impact on the extent of the conflict. On the one hand, the group whose income increases is in a better position to bear the

monetary cost of intensifying the conflict. On the other hand, to the extent that this increase in income is across the board within the group, there is an increase in the opportunity cost of the group members such that fewer among them might want to get involved in the conflict. However, others have argued that between-group (or “horizontal”) inequality may also be an important source of conflict, especially if the groups are formed along ethnic lines (Stewart, 2002).

While social scientists have examined the rationale for and economic cost of social conflicts (e.g., Azar, Jureidini and McLaurin, 1978; Coletta and Cullen, 2000; Abadie and Gardiezabal, 2001), there have been few systematic attempts to link the above theoretical literature on social conflicts to the available micro-level information about the people who are involved in these conflicts, if any. Much of the empirical analysis has involved the use of cross-country data to identify covariates of civil war and the impact of such wars on macroeconomic variables like capital stock and gross domestic product (Collier and Hoeffler, 1998; Collier, 1999). This lacuna in the literature possibly owes its origin to the paucity of detailed individual or household-level data in most contexts of active civil conflict. Yet, to the extent that at least some of the conflicts are a consequence of optimal decisions of individuals and/or socio-economic groups, often resulting in failure of rival groups to arrive at a mutually acceptable bargaining outcome, it is necessary to understand the factors that influence the reservation payoffs of these individuals or groups during conflicts. In this paper, we address this lacuna using micro-level data from a context where pre-conditions for conflict like grievance and failure of social contract exists, such that an externally enforced peace contract is fragile, and yet for which the relevant data are available.

We use household-level data from the conflict ridden UN protectorate of Kosovo to attempt to reconcile some of the theories associated with social conflict with the empirical evidence. Further, we use stylised econometric techniques to examine how household

characteristics affect the per capita consumption of average households belonging to the ethnic groups – Albanians and Serbs – differently. On the basis of our findings, we comment on the likelihood of a resolution of the conflict in Kosovo in the foreseeable future.

Our results indicate that comparable levels of intra-group inequality and poverty are found among Serb and Albanian households. As Serbs constitute a very small proportion of the overall population, the comparability of inequality and poverty outcomes should be firm groundwork for conflict resolution. However, analysis of intra- and inter-group variations in consumption indicate that much of the variation within and between groups is not easily accountable for by observable factors, making it difficult to target policies aimed at reducing poverty and inter-group differences in living standards. This makes it plausible for both ethnic groups to stake a claim to victimisation and unfair treatment, such that the neutrality of the UNMIK is brought into question. Finally, while Serb households have a good reason to prefer the *status quo* under UNMIK governance over an Albanian-dominated independent Kosovo, the Albanians have an equally good reason to not make the magnanimous gestures involving resource transfers that might elicit a peace-oriented response from the Serbs. In view of the analysis, we remain pessimistic about a political resolution of the Kosovo conflict in the immediate future.

The rest of the paper is organised as follows: In Section 2, we briefly outline the nature of the conflict in Kosovo. The data and the issues concerning within-group and between-group heterogeneity in consumption are discussed in Section 3. The empirical analysis used to estimate the (different) impact of household-level characteristics on the per capita consumption of Albanian and Serb households are reported in Section 4. In Section 5, we discuss the policy implications, and conclude.

2. Kosovo

Kosovo is a small landlocked territory that is part of the Balkan peninsula. The political strife in Kosovo involving the Serbs and Albanians can be traced back to 1948 (Artisien, 1984). While the shared political ideology between Yugoslavia and Albania pre-empted an Albanian response to Yugoslavia's re-annexation of Kosovo in 1945, in 1948, after Yugoslavia's expulsion from the Cominform, the Albanian government raised the issue of Kosovo's "unsettled" status, presumably with Soviet backing. The Kosovo issue was put on a backburner after Rankovic's departure in 1968, and, over time, the Yugoslav government granted the autonomous province of Kosovo two major concessions: the borders of the autonomous province could not be changed without the consent of the residents of the province, and, by 1974, the province had the same rights as the republics of the Yugoslav Federation.

The hostilities resumed after the death of Tito, and both the Serbs and Albanians hardened their positions, even as the province witnessed significant out-migration of Serbs (and Montenegrins) to other parts of Yugoslavia. The hostilities reached a peak in 1989, as the Milosevic government started removing Kosovo's rights of autonomy. In 1990, Kosovo Albanians declared independence from Serbia, and Albania recognized Kosovo's independent status in 1991. The resultant armed conflict lasted until 1999, with NATO intervening militarily to persuade Milosevic to withdraw Serb forces from Kosovo. Since 1999, Kosovo has been a protectorate under the guidelines of UN Security Council Resolution number 1244.

Even prior to the changes in Central and Eastern Europe (CEE), people in Kosovo were poor by the standards of the region. In the year before Kosovo's autonomous status was revoked, i.e., 1988, per-capita output in Kosovo was only 28% of average per-capita output in

Yugoslavia. The economic crisis in Kosovo was aggravated during the period from 1991 to 1999 period because of ethnic conflict and the resultant civil war. The civil war reduced the number of able-bodied people of working age, damaged the housing stock and the utilities such as power and telecommunication, and disrupted the flow of commerce. A reconstruction boom financed by international donors significantly aided the recovery of the economy soon after the end to the war. By the second half of 2000, agricultural output was estimated to have reached 75% of its pre-conflict level, the investment–GDP ratio had climbed to almost 40%, and per-capita GDP stood at 759 U.S. dollars. This recovery was marked by two major distortions, namely, total domestic consumption in 2000 was 146% of GDP and imports accounted for approximately 80% of GDP.

The UN Mission in Kosovo (UNMIK) is responsible for Kosovo’s administration and has established institutions to support the process of economic re-invigoration. The UNMIK helped to create a Central Fiscal Authority (CSA); this authority implements tax policy and formulates an independent budget for Kosovo that is non-overlapping with the budgets of (former state of) Serbia and Montenegro. Together the UNMIK and CSA established a new tax system and a tax administration to replace both the old system inherited from Yugoslavia and the parallel tax systems that had emerged during the conflict. The import regime was simplified and deregulated; no quantitative restrictions remain and the new tariff rate is a flat 10% for all goods and services. A Department of Reconstruction was created to coordinate donor assistance with public investments. Finally, the jobs of overseeing the payments system and domestic banks were entrusted to the newly created Banking and Payments Authority of Kosovo (BPAK).

The economic recovery continued through 2001 with Kosovo’s 2001 per-capita GDP growing at a rate of 18.4%. However, earlier imbalances persisted. For example, total consumption in 2001 was 121% of GDP, which is clearly unsustainable in the long run from

a macroeconomic perspective. Moreover, despite the high consumption-to-GDP ratio, most Serbs and Albanians lived in poverty. Importantly, most of inter-household variation in consumption within the Albanian and Serb communities, and also the inter-community differences in average consumption were explained by non-economic (and hence unobserved) characteristics of households (Bhaumik, Gang and Yun, 2006). This has serious implications for political rapprochement between the two communities that is a pre-condition for a sustainable peace contract. Specifically, in the absence of specific policy targets that can be used by the UNMIK in a transparent manner to bring about economic parity between the two ethnic groups, each can refuse to enter into a lasting peace negotiation on grounds of unfair or unequal treatment.¹ The inability of even the outside force to address the problem of between-group disparity also reduces the credibility of any commitment that either ethnic group might make regarding a “fair” distribution of Kosovo’s resources should it be in a position of power in post-peace agreement Kosovo.²

3. Data

To better assess the economic well-being of the population in Kosovo, including the width, depth, and correlates of poverty, the World Bank organized a Living Standards Measurement Survey (LSMS). The survey, which was carried out between September and December of 2000, collected data from 2880 households and is statistically representative of both the Albanians and Serbs in Kosovo. After accounting for missing values, the survey provides information on 2101 Albanian households and 416 Serbian households.³ Table 1 reports the extent of within-group poverty and inequality. While the Serbs have a noticeably higher headcount ratio than the Albanians – 57% as opposed to 46%⁴ – differences in the P_α poverty measures that take into account the depth of poverty are smaller.⁵ The measures of inequality indicate that both ethnic groups have comparable levels of inequality, with a Gini of about

0.28. In other word, while the between-group differences in living standards are not remarkably high, the high level of within-group income inequality is possibly and indication as to why hostilities in Kosovo persist nearly seven years after NATO's intervention (c.i.f., Esteban and Ray, 2006).

INSERT Table 1 about here.

The kernel distributions of the per capita household expenditure (i.e., consumption) are reported in Figure 1.⁶ It is evident that for both Serb and Albanian households there are very few households in the upper tail of the distributions, with per capita consumption exceeding 400DM per month. This is consistent with the overall economic status of the region. It can also be seen that a greater proportion of the Serb households have relatively low levels of per capita consumption of 100DM or less, in comparison with the Albanian households. Correspondingly, a greater proportion of the Albanian households have per capita consumption in the middle range, between 100DM and 250DM, in comparison with the Serb households. This, in turn, is consistent with the lower Albanian headcount ratio.

INSERT Figure 1 about here.

The nature of the between-group differences in income distribution is reported in Table 2. It can be seen from Table 2 that Serbs are over-represented in lower income deciles, while Albanians are over-represented in upper income deciles. For example, 80% of the households in the bottom income decile are Albanians, and 20% are Serbs. On the other hand, 88% of the households in the top income decile are Albanians, while 12% are Serbs. This is consistent with the distribution of household level per capita consumption reported in Figure

1. Between-group difference in income is a consequence of income differences at the bottom and at the top of the income distributions. In the middle income deciles the between-group differences are virtually non-existent.

INSERT Table 2 about here.

The average per capita consumption of Serb households (111.23DM) is 86.2% of the average per capita consumption of all Albanian households (128.98DM). Figure 2 reports these consumption levels for the two ethnic groups at the tenth through ninetieth deciles of the overall distribution. It is easily seen that even in the upper third of the distribution, where there are a disproportionately greater number of Albanian households and, correspondingly, a disproportionately fewer Serb households, average per capita consumption of the latter was rarely less than 85% of the average per capita consumption of the former. For the lowest deciles, the average for Serb households is as high as 93% of the average for Albanian households.

INSERT Figure 2 about here.

Overall, the data suggest the following: (a) while headcount poverty is more among Serbs than among Albanians, the depth adjusted measures of poverty are comparable for the two ethnic groups; (b) within-group inequality of Serbs and Albanians are almost the same, (Gini \approx 0.28);⁷ and (c) Serb households are over-represented in lower income deciles and under-represented in upper income deciles, but intra-decile differences in mean incomes of Serbs and Albanians are negligible. In other words, neither inter-group nor intra-group heterogeneity of per capita consumption is large enough to foment or sustain the level of the

(covert) conflict that we have observed since NATO intervention in 1999. Persistence of overt or latent hostilities, therefore, has to be explained in terms of existing grievances as well as perceptions about unfair treatment vis-à-vis the benchmark ethnic group.

While grievances based on past experiences are difficult to address, external forces – including the UNMIK – that are attempting to maintain peace and broker a long term political solution to the conflict would have to ensure that existing differences in per capita consumption levels are not perceived as discrimination (i.e., unfair) by either group. If, for example, households belonging to one of the ethnic groups have lower consumption than a rival group, on average, despite the working age household members of the former having higher human capital than those of the latter, it may be perceived as a sign of discrimination. Further, if consumption at the time of conflict is significantly determined by factors that are not adversely affected by the conflict itself, it may be possible for each group to hold out for concessions from the other group that may not be forthcoming. In the next section, therefore, we undertake a detailed analysis of the relationship between household characteristics and per capita consumption of Serb and Albanian households at different points of the distribution of such consumption.

4. Determinants of per capita consumption

Factors responsible for per capita consumption, a measure of living standard, are well-characterized in the literature. For example, a household's per-capita expenditure may decrease with its youth and old age dependency ratios, i.e., the proportion of household members in the age groups from 0 to 15 and greater than 65. The presence of young children and elderly people, whose employability and earning abilities are low, reduces the overall labor power of the household and, in some cases, working-age household members are not able to participate fully in the labor market because they are required to care for their children

and the elderly members of the household, as Pezzin and Schone (1998) discuss. Even among working-age adults, the ability to participate effectively in the labor market may depend on age and gender, as Scott et al. (1995) and Stanley and Jarrell (1998) suggest. In addition, households with female heads are likely to have lower incomes and expenditure levels, as Bhaumik and Nugent (1998) suggest, so that these households have a greater likelihood of being in poverty. Hence, we consider the average age of adults in the household and the proportion of working-age household members who are male to be important factors in determining the living standards of households.

The literature suggests that both employability and the returns on education can be significantly different for individuals having different levels of education, e.g., Grubb (1993) and Arum and Shavit (1995). To capture this effect, we include the proportion of working-age household members having different levels and types of education, namely, no formal education, primary education, general secondary education, vocational training, and tertiary or university education. Along with these characteristics of households, we consider the average number of weeks of labor or employment per household member per year, the proportion of adults in the households who are employed, and the proportion of households that have a working head. To the extent that the head of a household can transform his or her capabilities into employment and income, an unemployed head of a household reduces the return on the household's labor supply and, hence, the impact of the latter variable. In addition, in poorly performing economies, employment on family-owned farms and businesses may be an indication of disguised unemployment rather than entrepreneurship. Hence, a positive correlation may exist between employment on a family farm or business and per-capita expenditure or poverty status, as Mckinley and Alarcon (1995) suggest. Thus, we also consider the proportion of households that have working-age members employed in a family farm or business.

The wealth of a household may be an important determinant of its income and expenditure. In Kosovo, we measure the tangible wealth of households by the extent of their land ownership and the value of their livestock. These stocks are particularly relevant in a geographic region where markets were either disturbed or non-existent due to the prolonged military conflict because land and livestock contribute directly towards expenditure. Furthermore, we take into account social capital in the form of extended families and networks of friends who also contribute towards the economic well-being of a household. The literature on inter vivos transfers argues that such social capital plays a crucial role in expenditure smoothing both in developing and developed economies, as Bhaumik and Nugent (2000) discuss. Therefore, the proportion of households that receive private transfers from friends and extended family is an important factor to consider. In the same vein, public transfers may add to the well-being of the households but these two types of transfers should be treated differently because their marginal impacts on the expenditure of a household are different according to Maitra and Ray (2003). Hence, we also take account of the proportion of households that receives public support because of the disabilities of their adult members. However, the ownership of a disability card may reflect more the failing health of one or more adult household members, i.e., the health related capabilities of the households, rather than public transfers per se.

In Kosovo, the location of and whether or not it was uprooted from its place of origin may contribute significantly to its economic well-being or its economic deprivation. Geographical displacement brought about by war does not lead only to job loss and, subsequently, long term unemployment, but it can also disrupt established social networks. Because of the war, migration may not have been voluntary and migrants might have lost wealth. In addition, emigration out of the country may not have been distributed evenly among all income classes. Therefore, we include the proportion of households living in urban

areas as well as proportion of households reporting having had to migrate from their place of origin after the disintegration of Yugoslavia. Considering all of these factors in our empirical analysis, we expect to find the following relationships. The per-capita expenditure of a household is likely to be higher if its youth dependency and old age dependency ratios are low, if the proportion of males among working-age adults is high, if the household head is male, if the proportion of educated working age adults is high, if the household has a relatively large endowment of land and livestock,⁸ if the household receives public or private monetary or quasi-monetary transfers, if the household does not have a history of migration across regions, and if the household is located in an urban area.

We adopt the stylized regression specification of Bhaumik, Gang and Yun (2006) that takes into consideration these likely influences of household characteristics on per capita consumption. The specific measures of the variables included in the specification are reported in Table 4. Our analysis proceeds in two stages. First we estimate the following model:

$$(\text{Log}) \text{ Per capita consumption} = \beta_0 + \sum_i \beta_i X_i + \gamma(\text{Serb}) + \text{error} \quad [1]$$

when X_i are various household characteristics discussed above, and *Serb* is a dummy variable that takes the value unity for Serb households and zero for Albanian households. In order to see whether the disparity of per capita expenditure between Serbs and Albanians, captured by the coefficients of the dummy variable *Serb*, depends on the location of the household within the consumption distribution, we estimate this regression model using the quantile regression methodology. The coefficients of the *Serb* dummy variable (i.e., γ) for a number of deciles are reported in Table 3. The coefficients are negative and statistically significant at the 1% level, and indicate that throughout the relevant distribution Serb households have lower per capita consumption, on average, than Albanian households, by 0.19-0.27 log points. This is consistent with the unconditional differences between per capita consumption of these two ethnic groups at the corresponding percentiles, as reported in Figure 2. Further, tests not

reported here indicate that the coefficients of the *Serb* dummy are not significantly different from each other at the ten percentiles reported in Table 3. Since this implies that the absolute difference in the (log) per capita consumption of Serb and Albanian households is (roughly) the same throughout the distribution of per capita consumption, the difference as a percentage of the per capita consumption of Serb households was higher for the poorer households than for the richer households.

INSERT Table 3 about here.

Next, we estimate the regression model separately for Serbs and Albanians at the twentieth, fortieth, sixtieth and eightieth percentiles of the overall distribution of per capita expenditure, thereby allowing differential impacts on the returns to household characteristics between the two ethnic groups.⁹ In order to compare the relationship between household characteristics and per capita consumption of Serb and Albanian households at the same living standard, we estimate the quantile regression models at the percentiles of their respective distributions of per capita expenditure that coincide with the living standard of the above four percentiles. For example, the per capita expenditure associated with the twentieth percentile of the overall sample is equal to the per capita expenditures of the Serb and Albanian households at percentiles 19.3 and 23.7, respectively. Therefore, we estimate the returns of each group's characteristics at a given household per capita expenditure determined by pooled distribution of both ethnic groups. The other figures reported within parentheses in the header of Table 4 can be similarly interpreted.

INSERT Table 4 about here.

The following are evident from the coefficient estimates: (i) youth dependency, especially children in the 0-15 age group are a much greater impediment to consumption of Albanian households than of Serb households; (ii) returns to education are much higher for Serb households than for Albanian households, and the contrast is especially stark for tertiary education; and (iii) the impact of private transfers on per capita consumption is much higher for Serbs than for Albanians. Since the number of children, and the extent to which they limit an adult's mobility are determined largely by child-preference and social capital within communities, especially in a country where formal institutions for child care are largely absent, it is difficult to attribute the negative impact of youth dependency on per capita consumption to discrimination. Similarly, private transfers are a consequence of optimisation programmes involving extended families that have little to do with discrimination vis-à-vis peer groups (Bhaumik and Nugent, 2000). Further, while the marginal impact on private transfers on per capita consumption is higher for Serb households than for Albanian households, the latter have vastly better access to such transfers than the former. Indeed, while 44% of all Albanian households report receiving private transfers, most of them from children and other relatives living outside Kosovo, only 4% of Serb households report receiving such transfers.

In other words, UNMIK faces the following conundrum: Since the returns to education of Serb households are significantly higher than those of the Albanian households, and since the difference is higher at lower percentiles than for higher percentiles of the distribution of per capita consumption, Albanians can claim unfair treatment and discrimination in the labour market. On the other hand, since Serbs are worse off, on average, and also all along the aforementioned distribution, despite having higher returns to education and despite having benefited from factors non-negative impact of youth and old-age dependency, they can claim unobserved discrimination favouring Albanian households. In a

region where information is strictly asymmetric, and where grievances are strong and persistent, such perceptions would make it difficult to ensure cooperation from either ethnic group in the context of a peace contract. Indeed, each ethnic group is likely to find any assurance of *ex post* fairness from the other group as also the mediator non-credible, and this is very likely the basis for the continued conflict in Kosovo.

5. Concluding remarks

The resolution of any conflict requires that all parties involved in the conflict feel that in the absence of the conflict they would be better off than in the *status quo*. In other words, *ceteris paribus*, the likelihood of a settlement is likely when the parties negotiating about the nature of the post-conflict social contract have relatively low reservation utility. In addition, to reduce uncertainty about the sanctity of the negotiated contract, any third-party arbiter has to be viewed as neutral and fair by the rival parties. Finally, as noted by Esteban and Ray (2006), the likelihood of conflict increases if there is significant intra-group inequality, and if the sizes of the rival groups are significantly large.

In Kosovo, inequality among both Albanian and Serb households are similar to those in neighbouring Central and East European countries, and is much lower than inequality in countries like Colombia that are witnessing a prolonged and serious conflict. Further, the Serbs account for only about 7% of a relatively small population and, in the absence of explicit military support from a much-weakened Serbia, it is unlikely that they would have an appetite for overt conflict. Moreover, while the headcount ratio for the Albanians is much lower than that for the Serbs, once depth of poverty is taken into account, the difference in the incidence of poverty between the two ethnic groups is not significant. Yet, paradoxically, a political settlement seems unlikely in the foreseeable future.

Part of this paradox can be explained by the absence of trust between the Albanians and the Serbs, and the strong sense of grievance that exists on both sides of the divide. In addition, as argued earlier, inter-ethnic differences in living standards and returns to household characteristics like human capital of working age members, however small, help fuel a sense of injustice. Since the Albanians are at the receiving end of returns to observable household characteristics like education of working age members, and the Serbs have lower living standards despite having favourable returns on these characteristics, both ethnic communities can stake a claim to discrimination and unfair treatment. Moreover intra-group variance in living standards as well as the inter-group difference in average per capita consumption are largely explained by unobserved factors, and hence the ability of the UNMIK to address these perceptions of discrimination and unfair treatment using targeted policy measures is somewhat limited, bringing into question their neutrality in the collective minds of both the ethnic groups.

A full understanding of the paradox of continuing (albeit covert) hostilities would not be possible without taking into consideration the determinants of per capita consumption of the two communities. Across the distribution, education of working age members has a much greater impact on the consumption of Serb households than that of the Albanian households. In other words, the labour market conditions in a UNMIK governed Kosovo favour the Serbs, and there is no guarantee whatsoever that this advantage would persist in an independent Albanian-dominated Kosovo. Hence, Serbs in Kosovo have reason to choose a UNMIK governance structure as a second-best outcome over an independent Kosovo that is the minimum political demand of the Kosovo Albanians. Further, there is evidence to suggest that the Serbian government continues to subsidise the Kosovar Serb households, in a bid to prevent further out-migration of Serbs which would undermine Serbia's political claim over Kosovo (Kostovicova and Bechev, 2004). Arguably, Serb households in Kosovo would lose

this support if Kosovo becomes independent, thereby removing the political rationale for the subsidy. It is easy to see why the Serb population in Kosovo might prefer the *status quo* to a political settlement that is likely to eliminate some sources of external support and, at the same time, make their economic future hostage to political forces over which they will have little control.

That brings us to the question as to why the Kosovar Albanians, who have much more to gain from a political settlement that might lead to the independence of Kosovo, might not be magnanimous during the negotiation, trading off constitutionally guaranteed economic rights to the Serb minority – even educational and job quotas of some sort – for their ultimate political objective. The urgency with which the Albanian community is likely to pursue this line of action would depend on their current economic condition; if the current consumption level is deemed adequate relative to some minimum threshold and is sustainable without a political settlement, it would be rational for the Albanians to hold on to the option of making the aforementioned magnanimous gestures. The analysis of consumption of Albanian households indicates that their higher standard of living relative to the Serbs is largely a consequence of private transfers, much of it from members of the extended household who live outside Kosovo. Indeed, Bhaumik, Gang and Yun (2006) demonstrate that differences in the rates of incidence of private transfers among Albanian and Serb households explain most of the difference in their per capita consumption. Further, the impact of private transfers on per capita consumption is much stronger for households in lower consumption percentiles than households in higher consumption percentiles, indicating that private transfers are a poverty-ameliorating phenomenon for the Albanian community. To the extent that this source of livelihood is unaffected by the political and economic scenario within Kosovo, therefore, it will enable the Albanians to enjoy consumption beyond their income, and thereby provide them with the ability to resist magnanimous political gestures indefinitely.

It is evident from our analysis that both the Serbs and Albanians in Kosovo are rational in remaining entrenched in their respective positions, and that a political solution would be feasible only if both parties view the potential gains from a peace agreement to be significant, so as to compensate for the uncertainty that such an agreement might cause for the Serbs, and for the lump-sum transfer of resources that the Albanians might have to promise their Serb rivals. In addition, the sovereign states of Serbia and Albania would have to be convinced that such a settlement is also in their own interests. Since the only potential reward that is likely to convince all these parties about the merits of a lasting peace agreement is simultaneous induction into the European Union, with attendant benefits like reconstruction subsidies, a settlement of the Kosovo problem is likely to remain, at best, a challenge for the international community.

References

- Abadie, A. and J. Gardiezabal (2001). The economic costs of conflict: A case-control study of the Basque country. Working paper no. 8478, National Bureau of Economic Research, Cambridge, Massachusetts.
- Acemoglu, D. (2003). Why not a political Coase theorem? Social conflict, commitment, and politics. *Journal of Comparative Economics*, **31**, 620-652.
- Addison, T. and S.M. Murshed (2001). From conflict to reconstruction: Reviving the social contract. Discussion paper no. 2001/48. WIDER – United Nations University, Helsinki.
- Artisien, P.F.R. (1984). A note on Kosovo and the future of Yugoslav-Albanian relations: A Balkan perspective. *Soviet Studies*, **36**:2, 267-276.
- Arum, R. and Y. Shavit (1995). Secondary vocational education and the transition from school to work. *Sociology of Education*, **68**, 187-204.
- Azam, J.P. and A. Mesnard (2001). Civil war and social contract. *Public Choice*, **115**, 455-475.
- Azar, E.E., P. Jureidini and R. McLaurin (1978) Protracted social conflict: Theory and practice in the Middle East. *Journal of Palestine Studies*, **8**:1, 41-60.
- Bhaumik, S.K. and J.B. Nugent (2000). Wealth accumulation, fertility, and transfers to elderly households in Peru. In: A. Mason and G. Tapinos (Eds.) *Sharing the Wealth*, Oxford University Press, New York, pp. 256-281.
- Bhaumik, S.K., I.N. Gang and M.S. Yun (2006). Ethnic conflict and economic disparity: Serbians and Albanians in Kosovo. *Journal of Comparative Economics*, **34**, 754-773.
- Buvinic, M. and G.R. Gupta (2001). Female-headed households and female-maintained families: Are they worth targeting to reduce poverty in developing countries. *Economic Development and Cultural Change*, **45**, 259-280.
- Colletta, N.J. and M.L. Cullen (2000). Violent conflict and the transformation of social capital: Lessons from Cambodia, Rwanda, Guatemala and Somalia. World Bank, Washington, D.C.
- Collier, P. and A. Hoeffler (1998). On economic causes of civil war. *Oxford Economic Papers*, **50**:4, 563-573.
- Collier, Paul (1999). On the economic consequences of civil war. *Oxford Economic Papers*, **51**:1, 168-183.
- Collier, P. and A. Hoeffler (1999). Justice-seeking and loot-seeking in a civil war. Unpublished manuscript, The World Bank, Washington, D.C. (<http://www.worldbank.org/research/conflict/papers/paulnew2.pdf>).
- Esteban, J. and D. Ray (2001). Conflict and distribution. *Journal of Economic Theory*, **87**, 379-415.

- Esteban, J. and D. Ray (2006). A model of ethnic conflict. Mimeo, New York University and Instituto de Analisis Economico.
- Falk, A., E. Fehr and U. Fischbacher (2003). Reasons for conflict: Lessons from bargaining experiments. *Journal of Institutional and Theoretical Economics*, **159**, 171-187.
- Grubb, W.N. (1993). The varied economic returns to post-secondary education: New evidence from the class of 1972. *Journal of Human Resources*, **28**, 365-382.
- Hirshleifer, J. (1995). Anarchy and its breakdown. *Journal of Political Economy*, **103**, 26-52.
- Kostovicova, D.D. and D. Bechev (2004). Kosovo: Successes and failures of international civil and military involvement. Discussion paper no. 31, Centre for the Study of Global Governance, London School of Economics and Political Science, London, UK.
- Maitra, P. and R. Ray (2003). The effect of transfers on household expenditure patterns and poverty in South Africa. *Journal of Development Economics*, **71**, 23-49.
- McKinley, T. and D. Alarcon (1995). The prevalence of rural poverty in Mexico. *World Development*, **23**, 1575-1585.
- Moene, K. (1992). Poverty and landownership. *American Economic Review*, **82**, 52-64.
- Miguel, E., S. Satyanath and E. Sergenti (2004). Economic shocks and civil conflict: An instrumental variables approach. *Journal of Political Economy*, **112**:4, 725-752.
- Pezzin, L.E. and B.S. Schone (1998). Intergenerational household formation, female labour supply and informal care giving. *Journal of Human Resources*, **34**, 475-503.
- Scott, F.A., M.C. Berger and J.E. Garen (1995). Do health insurance and pension costs reduce the job opportunities of older workers? *Industrial and Labour Relations Review*, **48**, 775-791.
- Skarperdas, S. (1992). Cooperation, conflict and power in the absence of property rights. *American Economic Review*, **82**, 720-739.
- Stanley, T.D. and S.B. Jarrell (1998). Gender wage discrimination bias? A meta-regression analysis. *Journal of Human Resources*, **33**, 947-973.
- Stewart, F. 2001. Horizontal inequalities as a source of conflict. In: F. Hampson, and D. Malone (Eds.) *From Reaction to Prevention*. Lynne Rienner Publishers, London.
- World Bank (2001). Kosovo: Poverty assessments, 2 volumes. Report no. 23390-KOS, Washington, D.C.

Table 1
Poverty and inequality in Kosovo

	P_α measures			Inequality measures			
	α = 0	α = 1	α = 2	C.V.	Gini	Kakwani	Theil entropy
Albanian	0.46	0.14	0.06	0.57	0.28	0.07	0.14
Serb	0.57	0.18	0.08	0.60	0.29	0.07	0.15
Overall	0.48	0.14	0.06	0.58	0.29	0.07	0.14

Figure 2

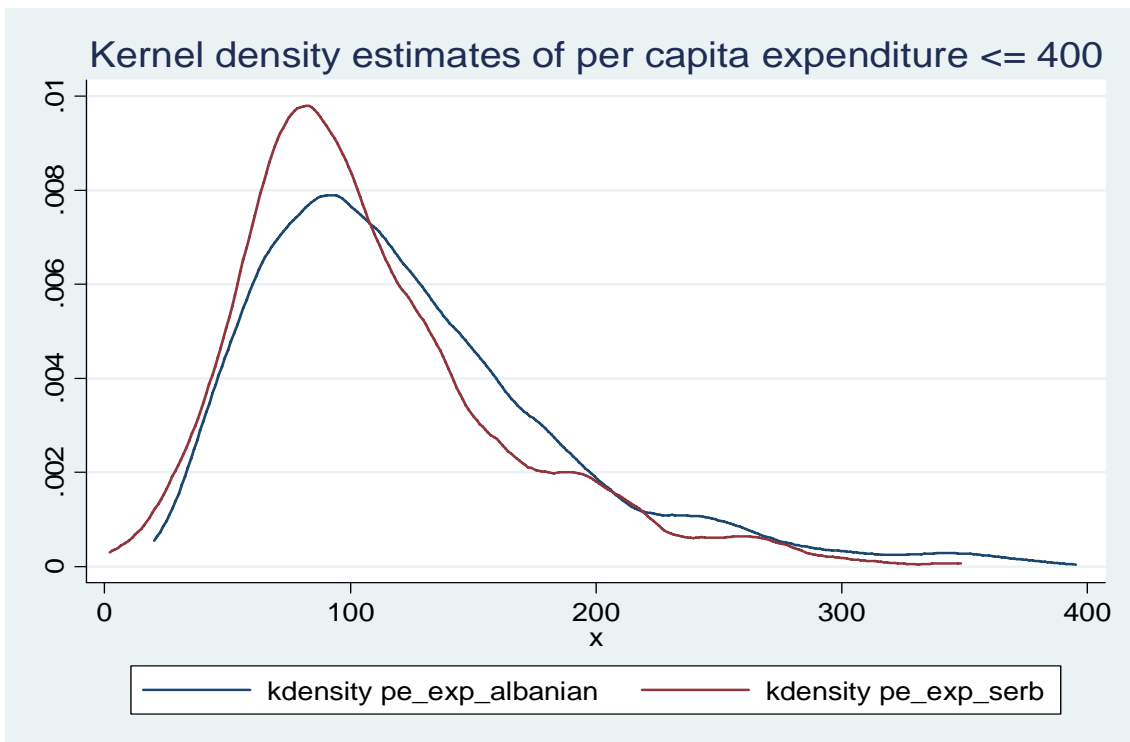
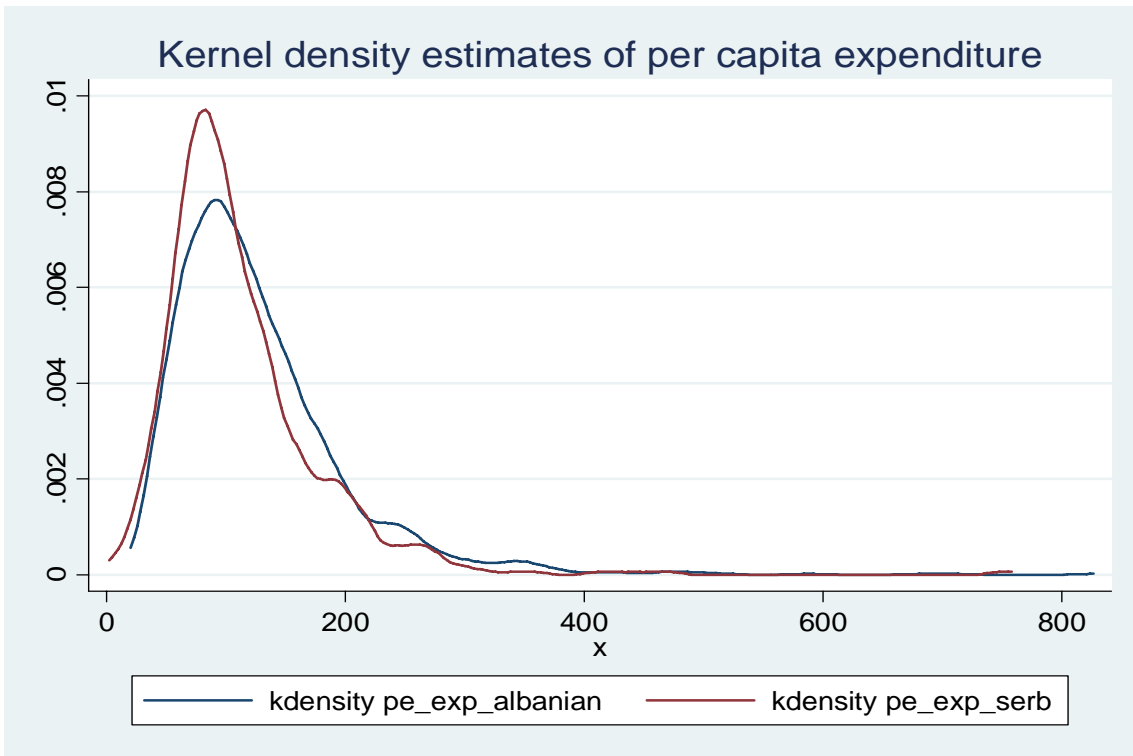


Table 2
Distribution of ethnic groups across the income distribution

Income groups	Proportion		Mean income (DM)		
	Albanian	Serb	Albanian	Serb	All
0-10	80	20	45.13	40.88	44.29
10-20	81	19	63.66	64.46	63.81
20-30	76	24	77.35	77.67	77.43
30-40	80	20	88.96	89.22	89.01
40-50	86	14	101.63	101.63	101.63
50-60	82	18	115.20	115.69	115.29
60-70	87	13	131.73	131.58	131.72
70-80	88	12	152.40	150.77	152.21
80-90	87	13	183.01	185.34	183.31
90-100	88	12	281.15	274.43	280.32
Overall	83	17	126.23	112.02	123.88

Note: The “income” groups are created on the basis of estimated per capita expenditure.

Figure 2

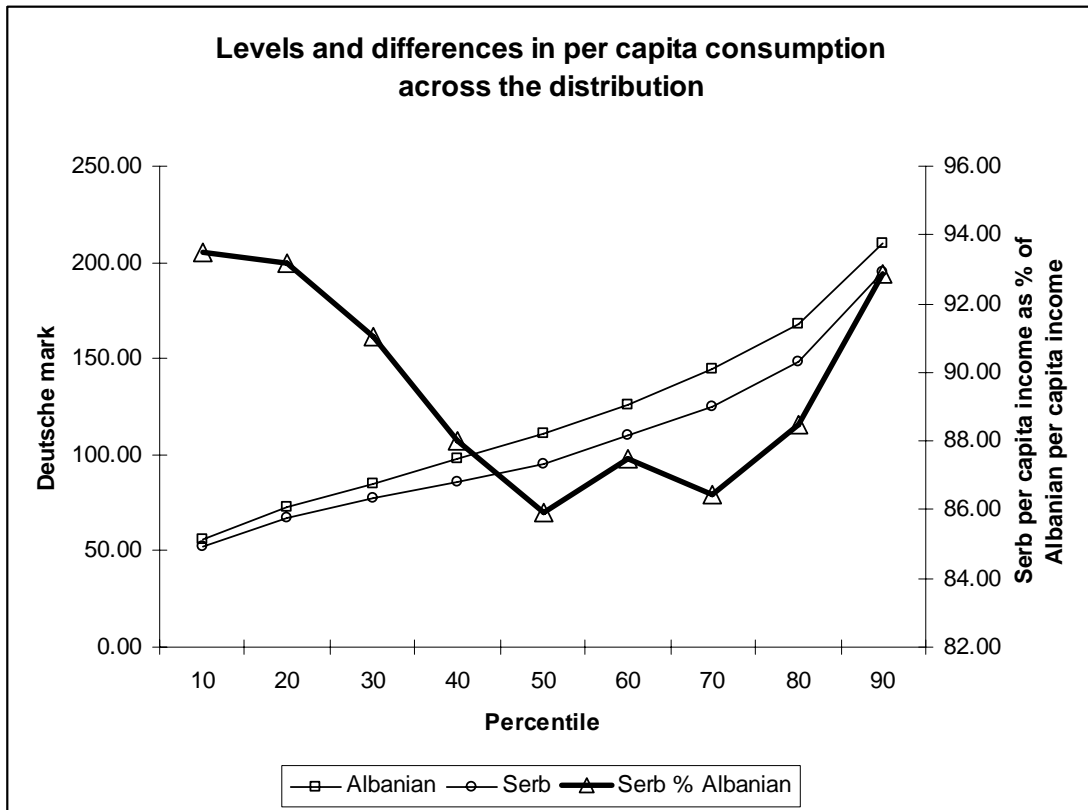


Table 3
Estimates of ethnic (Serb) dummy across the income distribution

Percentile	Estimate	Std. Err.
10	-0.19	0.05
20	-0.24	0.05
30	-0.27	0.04
40	-0.27	0.03
50	-0.25	0.03
60	-0.25	0.04
70	-0.25	0.04
80	-0.24	0.06
90	-0.26	0.06

Note: All estimates are significant at 1% level.

Table 4
Quantile regression estimates

	20 th percentile		40 th percentile		60 th percentile		80 th percentile	
	Albanian (19.3)	Serb (23.7)	Albanian (38)	Serb (50.1)	Albanian (58)	Serb (69.5)	Albanian (79.1)	Serb (84.52)
Constant	3.94*** (0.16)	3.54*** (0.41)	4.29*** (0.13)	3.66*** (0.32)	4.32*** (0.15)	3.98*** (0.34)	4.82*** (0.16)	4.43*** (0.41)
Proportion of people below 15	- 0.59*** (0.14)	- 0.20 (0.33)	- 0.72*** (0.14)	- 0.14 (0.31)	- 0.58*** (0.11)	- 0.41 (0.33)	- 0.58*** (0.13)	- 0.52 (0.33)
Proportion of people 16-25	- 0.23** (0.11)	- 0.13 (0.28)	- 0.26*** (0.09)	- 0.01 (0.24)	- 0.20** (0.10)	- 0.05 (0.27)	- 0.12 (0.12)	- 0.20 (0.30)
Proportion of people 36-45	0.09 (0.13)	- 0.07 (0.24)	- 0.07 (0.10)	0.29 (0.20)	- 0.08 (0.09)	0.23 (0.25)	0.05 (0.12)	0.09 (0.28)
Proportion of people 46-55	0.20 (0.14)	- 0.06 (0.25)	0.03 (0.13)	- 0.03 (0.21)	0.06 (0.11)	- 0.15 (0.24)	0.21 (0.14)	- 0.17 (0.34)
Proportion of people 56-65	0.23* (0.13)	- 0.13 (0.25)	- 0.06 (0.12)	0.02 (0.25)	0.03 (0.13)	- 0.04 (0.23)	0.17 (0.16)	- 0.15 (0.28)
Proportion of people over 65	0.09 (0.18)	- 0.10 (0.24)	- 0.17 (0.16)	- 0.12 (0.28)	- 0.02 (0.18)	- 0.26 (0.21)	- 0.12 (0.18)	- 0.23 (0.28)
Proportion of male adult members	0.04 (0.12)	0.31 (0.24)	- 0.06 (0.12)	0.31 (0.19)	0.08 (0.07)	0.18 (0.20)	0.08 (0.12)	0.09 (0.23)
Dummy = 1 when head is male	- 0.10 (0.07)	- 0.11 (0.13)	- 0.01 (0.05)	0.07 (0.10)	0.00 (0.08)	0.03 (0.12)	- 0.21*** (0.08)	- 0.07 (0.15)
Proportion of adults with primary education	0.16 (0.10)	0.32 (0.40)	0.18** (0.08)	0.28 (0.27)	0.25*** (0.09)	0.45 (0.28)	0.22* (0.12)	0.24 (0.32)
Proportion of adults with secondary education	0.60*** (0.11)	0.94** (0.42)	0.53*** (0.09)	0.83*** (0.30)	0.60*** (0.09)	0.90*** (0.29)	0.50*** (0.13)	0.77** (0.31)
Proportion of adults with vocational education	0.43*** (0.13)	0.77* (0.47)	0.47*** (0.11)	0.74** (0.31)	0.66*** (0.14)	0.80** (0.32)	0.71*** (0.17)	0.89** (0.40)
Proportion of adults with tertiary education	0.71*** (0.12)	1.46*** (0.44)	0.68*** (0.12)	1.43*** (0.31)	0.78*** (0.10)	1.25*** (0.29)	0.70*** (0.16)	1.23*** (0.37)
Average number of weeks of employment for household adults	0.00 (0.00)	0.00 (0.00)	0.01** (0.00)	0.00 (0.01)	0.00 (0.00)	0.00 (0.01)	0.00 (0.00)	0.00 (0.01)

Proportion of working adults	0.10 (0.14)	- 0.27 (0.34)	0.05 (0.11)	- 0.37 (0.38)	0.03 (0.14)	- 0.23 (0.39)	0.08 (0.14)	- 0.23 (0.37)
Dummy = 1 when head is employed	0.11*** (0.04)	0.09 (0.12)	0.04 (0.03)	0.05 (0.11)	0.06* (0.03)	- 0.01 (0.09)	0.07** (0.03)	- 0.03 (0.13)
Proportion of households with members working in family farms & businesses	- 0.01 (0.10)	0.18 (0.25)	0.11 (0.07)	0.14 (0.20)	0.14* (0.08)	0.05 (0.21)	0.18** (0.08)	0.20 (0.22)
Land ownership (in 1000 acres)	0.44* (0.25)	0.03 (0.16)	0.25 (0.16)	0.00 (0.14)	0.15 (0.17)	- 0.01 (0.10)	- 0.15 (0.24)	- 0.02 (0.16)
Value of animals household owns (1000 DM)	0.04 (0.03)	0.06 (0.05)	0.02 (0.02)	- 0.01 (0.05)	0.04 (0.03)	0.06 (0.06)	0.04 (0.02)	0.04 (0.05)
Dummy = 1 if at least one household member has a disability card	0.02 (0.01)	- 0.12** (0.05)	0.01 (0.01)	- 0.05 (0.09)	0.00 (0.01)	- 0.04 (0.08)	0.02 (0.02)	- 0.08 (0.10)
Dummy = 1 if household receives private transfers	0.13*** (0.03)	0.35** (0.17)	0.11*** (0.03)	0.26* (0.14)	0.06** (0.03)	0.24 (0.21)	0.05 (0.03)	0.42* (0.23)
Dummy = 1 if household migrated during the past decade	0.01 (0.04)	- 0.11 (0.10)	- 0.01 (0.03)	- 0.23* (0.14)	- 0.01 (0.03)	- 0.08 (0.13)	- 0.03 (0.04)	- 0.06 (0.14)
Dummy = 1 if household resides in an urban area	- 0.02 (0.05)	- 0.02 (0.10)	0.05 (0.04)	- 0.01 (0.08)	0.03 (0.04)	0.02 (0.07)	- 0.00 (0.04)	0.04 (0.09)
Pseudo R-square	0.14	0.21	0.14	0.20	0.14	0.20	0.13	0.22

Notes: We have also controlled for the sectors of employment of the household members.

Numbers of observations are 2101 for Albanians and 416 for Serbians.

For this quantile regression, we first find cutoff per capita income for 20, 40, 60 and 80 percentile of the pooled sample; find out percentiles in each ethnicity corresponding to the cutoffs of per capita income, and then estimate quantile regression models using these percentiles.

The symbols *, ** and *** indicate significance at the 10%, 5% and 1% levels, respectively. The corresponding t values have been generated on the basis of bootstrapped standard errors.

¹ Falk, Fehr and Fischbacher (2003) argue that the perception about fair treatment is an important determinant of conflict. The importance of this perception is likely to be especially high in a context where each the rival parties involves nurse a sense of grievance about their treatment by the other or competing parties.

² Acemoglu (2003) demonstrates that societies often choose inefficient institutions because it is not possible for the politicians with different vested interests to credibly commit to a social contract in the event they gain power through the ballot or otherwise, especially in the context of sovereign nations where there is typically no impartial outside observer to enforce all commitments relatively inexpensively.

³ The survey over-samples Serbian households. In a sample containing only these two ethnic groups in Kosovo, Serbs should account for 7.4% and Albanians 92.6% of the observations. In our data, 83% of the households are Albanians and the rest are Serbs. We use weights to account for this difference between the population and the sample.

⁴ Correspondingly, Albanian households have higher per-capita expenditure at 128.98DM, per month, versus 111.23DM for Serbian households.

⁵ The data were used to construct monthly and daily expenditure per adult equivalence for each household. This estimate was compared with the poverty line of 3.499DM per adult per day given in World Bank (2001). Using this poverty line, our data show that 56.7% of Serbian households and 45.9% of Albanian households live in poverty.

⁶ Throughout this paper, per capita expenditure is measured as per adult equivalent household expenditure per month.

⁷ This value of Gini is comparable to those of the second wave EU accession countries like Bulgaria (0.26) and Romania (0.28), as well as other parts of the former Yugoslav Federation like Bosnia and Herzegovina that have witnessed ethnic or sectarian conflict (0.26). By contrast, the Gini for some other conflict ridden countries like Colombia (0.58) and Somalia (0.40) is much higher.

⁸ The impact of landownership on the measurement of poverty is ambiguous. Buvinic and Gupta (2001) provide evidence suggesting that the degree of poverty acuteness, or consumption deprivation, among female-headed households may be less than expected due to self-consumption of production from the family land holdings. In contrast, Moene (1992) argues that, under certain circumstances, the redistribution of land from large landholders to landless laborers increases poverty.

⁹ We used interquantile regression models to verify whether indeed there are differences in the relationship between per capita consumption and the explanatory variables at the different percentile levels. The estimates of these models, not reported in the paper, indicate that, for both the Serb and Albanian samples, there are indeed statistically significant differences between the aforementioned relationship at any two successive percentile levels.