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To: CERGE-EI Global Development Network

**Re: Non-technical Summary** 

Project: The Propensity to Emigrate and Optimal Migration Duration from the Perspective of the Home Country – a Comparison over Time between two **Kosovan Data Sets** (RRC X-15)

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Non-technical Summary

The aim of this research is to analyse the stability over time of migration behaviour as modelled in Kotorri (2010). For this purpose, this research replicates the analysis in that paper by deploying probit to estimate the model of the propensity to emigrate using a 2008 data set. Both of these data sets, the 2007 and the 2008, were based on the same sampling framework (see Kotorri, 2010 for details). An important political change occurred during this period, but the time difference between the two samples is very short, only 1 year. The independence of Kosova was declared in February 2008 just before the second survey was conducted, thus the 2007 sample is from the period before the Declaration of the Independence, while the 2008 sample is from the period after. Therefore, some differences between the two years may be anticipated in households' attitudes towards the future economic situation resulting from the resolving of the political status of Kosova. However, as will be explained in the following paragraphs, a variable that captures the effect of households' expectations was included in the model of the propensity to emigrate developed in that paper.

The model in Kotorri (2010) deploys an expected utility maximisation framework to model household decision-making behaviour regarding migration using the same broad assumptions. There, the households are modelled as maximising utility from current and future consumption, including in their choices the possibility of a) sending at least one or one additional member abroad, or b) not sending any or any further members abroad. This is conditional on the household income constraint. The households as the decision-making unit are assumed only to choose to send members abroad if the resulting positive effects offset the negative effects.

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Households are considered to be forward-looking and to discount future utility. Given this assumption, the model included an attitudinal variable, modelled as a series of dummies, based on a question that asked the household's current view of its economic situation compared to one year ago. The answer to this question may be considered to be a forward-looking opinion (of the near future) if expectations are adaptive. The dummy variable for whether the household head perceived the household economic situation to have worsened compared to the previous year was significant in the estimations presented there. Given that any changes in households' perceptions regarding their economic situation, measured in this way, are controlled for in the relationship, the hypothesis of stability over time of the model is tested.

As will be elaborated in Section 2, it is important to note that the performance of the economic fundamentals in Kosova was mixed during the period under investigation. Real economic GDP increased, mostly following an increase in public investment. This, however, was accompanied by an increase in inflation and in the trade deficit given the strong reliance on imports. Remittances and foreign assistance, though, have remained stable. A brief statistical analysis of sample variances and means of the variables to be used suggests mixed results too.

In the literature reviewed in Kotorri (2010) and to the best of my knowledge, the stability of this aspect of migration behaviour has not previously been considered for any country. Therefore, the analysis presented in this research is the first to examine the stability over time of this relationship. Although admittedly a period of some political but mixed economic change in Kosova, the time between the data collection was very short and if the structural relationship is not found to be stable this raises the question of whether such instability in the determinants of emigration behaviour are also a feature in other countries.

The approach in Demaris (2004), which is an analog to the Chow test used in linear models, is applied to test the overall time stability of the model. The results provide lack of support for the overall stability over time of households' migration behaviour. Additionally, the original results in Kotorri (2010) provide mixed support for the household view. Therefore, in Section 6, a variant of this model is used to further investigate the degree of stability over time of the emigration decision and consider whether the lack of support is due to a particular specification. The results indicate that irrespective of model specification the relationship is not stable over time. The new specification is, if anything, slightly less stable than the original specification.

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The overall time stability analysis does not provide any information on whether the differential between the two years is due to differences in observable characteristics or coefficient estimates. To do so, the decomposition for nonlinear models developed in Sinning et al. (2008) is deployed to all model specifications. This is an alternative to the Blinder-Oaxaca decomposition (Blinder, 1973, and Oaxaca, 1973) which is not applicable to nonlinear models. The results from this technique indicate that the overall differential is relatively small and insignificant, that is, the model is stable over time. Additionally, both the characteristics effect and the coefficients effect are statistically insignificant providing support for the time stability. Given the mixed results of the statistical analysis of the sample means of the variables it is surprising that the differential due to observable characteristics is insignificant.

A detailed decomposition showing the contributions of single variables separately for nonlinear models has not yet been developed, but is expected in the future (Sinning et al., 2008). Therefore, in addition to the comparison by variable, in section 8 the interaction dummy variables technique is deployed to investigate whether and which of the slope coefficients are different between the two years and whether the intercept is different too. Again, the results provide mixed support for the stability of the structural relationship. An interesting finding here is that the variable controlling for education, whether the household head perceives the economic situation of the household to have worsened, and regional unemployment rate have all statistically equal sample means, but their interaction terms are statistically significant and their estimated coefficients are different in terms of statistical significance when the model is estimated separately for the two years. This suggests that the estimated coefficients on these variables have changed over time.

The rest of this research is structured as follows: section 2 examines the argument that there is an a priori case that the model in Kotorri (2010) may be appropriate in examining the stability over time of the propensity to emigrate, given the change in the political situation during the period 2007-2008. Section 3 provides a summary of the sampling technique and is followed by a section which provides a descriptive analysis of migration characteristics of the households for the two data sets. The empirical analysis of time stability is elaborated in section 5. The following sections further investigate the time stability by respecifying the model and using different techniques. The last section concludes.