The relationship between spatial focusing and migration intensity – Hungarian county level evidence

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We analyze the relationship between different dimensions of the internal migration, mainly the intensity of the flows and the concentration of those (spatial focusing) by applying an advanced time-series method (VAR model) on the county level data between 1980–2012. The study of long-term processes suggests some conclusion regarding the evolution of internal migration in Hungary after the transition from communism to democracy. Plane and Mulligan (1996: 1-2) defined spatial focus as an aspect of migration connectivity: "... mean the inequality that exists in the relative volumes of a set of origin-destination-specific migration flows. A high degree of a spatial focusing means that most migrants are moving selectively to only a few destinations and that most out-migrants are leaving only a few origins. A low degree of spatial focusing means that migrants are moving among all possible origins and destinations in relatively equal numbers". There are more possible solutions to evaluate the concentration of migration. Plane and Mulligan (1996, 1997) suggested Gini indices, while Rogers and Sweeney (1998) created less complicated and less computational intensive coefficient of variation (ACV) measurements. We developed a package in R (Daróczi and Bálint, 2013) to calculate different spatial focusing measurements. According to our experiences, the row- and column-based Gini and the ACV indices consider the system-wide differences similarly. We found that indices on spatial focusing were able to point out the changes in migration's spatial structure, although it should emphasize that the Hungarian migration system exhibits considerable inertia and stability despite of eruptive societal changes. We also found that the increase in the intensity of migration is associated with more focused spatial streams. One possible explanation would be that the financial crisis reduced the opportunities all over the country. So migration intensity decreased, just like the concentration of movements.