ANALYSIS OF THE RELATIONSHIP BETWEEN NET INTER PROVINCIAL MIGRATION AND SOCIO-ECONOMIC DEVELOPMENT IN TURKEY IN THE BEGINNING OF THE 21ST CENTURY BY USING GEOGRAPHICALLY WEIGHTED REGRESSION ANALYSIS

In addition to global changes, the developments which have taken place in the economic, political and social areas in Turkey in the beginning of the 21st century have had major impacts on internal migration in Turkey starting with its dimensions. In addition to migration, short term location changes are increasing in Turkey which is verified by inter-provincial migration in Turkey which approaches 2.2 million annually as well as the approximately 15 million Turkish citizens who travel abroad annually.

The aim of the study was to determine and model the affiliation between net inter-provincial migration in Turkey and socio-economic development levels by using Ordinary Least Squares (OLS) and Geographically Weighted Regression (GWR) analyses. The data sources of the study consist of annual migration related data (2007-2011) obtained from the Address-based Population Registry System (ABPRS) and the values given in the publication ‘Socio-Economic Development Ranking of Provinces (SEGE 2011)’ which was prepared by the Ministry of Development and consists of the socio-economic development index (SEGE) values for provinces. Due to the multi-component structure of migration it is possible to define numerous independent variables in explaining net migration between provinces. However, it is a known fact in migration related literature that differences in the development levels of provinces or regions generates migration. Today, development indexes with multiple variables are used to measure the development level instead of depending on one variable. In this study it was considered more appropriate to use the SEGE which is the single summarized value of multiple variables determining the development levels of provinces as an independent variable to explain net migration between provinces. The data established for the provinces were analyzed with the use of SPSS 11.5 and ArcGIS 9.3 programs. The executed OLS analysis revealed results of \( R=0.80 \), \( R^2=0.64 \) and the established regression equation \( (F<0.001) \) was found to be statistically significant. This signifies that there is a strong positive correlation between inter-provincial net migration and the economic development levels of provinces and that 64% of net migration are determined by the socio-economic development levels of provinces \( R^2=0.81 \) (Adjusted 0.79) was obtained as a result of the GWR analysis of the same variables. While the distribution of local \( R^2 \)'s reveals that the Marmara Region and its periphery have the highest net migration with the highest socio-economic development level among provinces, this affiliation grows weaker in the eastern and southeastern parts of Turkey.