Where have all the doctors gone? Migration and attrition of physicians and dentists in Hungary between 2003 and 2011 Júlia Varga

This paper employs a large-scale panel data set at individual level to determine the changes in the probability of outward migration and attrition of Hungarian doctors between 2003 and 2011. The study uses event-history modelling with competing risk models. The results show that the hazard of outward migration of doctors increased first after the EU accession, then after the spring of 2010, and finally after relaxation of the temporary Austrian and German employment limits. They confirm alongside outward migration, there is a severe problem with the attrition of doctors. Exits from the pool of physicians and dentists pool by migration, by transfer to other employment in Hungary, and by becoming inactive are about equally likely.

## University rankings on the basis of applicants' preferences László Csató

Ranking of institutions of higher education on the basis of revealed preferences may avoid some measurement problems, for example, arbitrary choice of criterion weights. When an applicant ranks one educational unit (a college, faculty, program, etc.) over another, the preferred unit "wins" the "tournament". The assumption applied here to a sample of the Hungarian Academy of Sciences' KRTK Felvi databank (applications for higher education in Hungary) from 2013 generates a weighted, directed graph in which the nodes are the objects chosen. The paper analyses the network thoroughly and puts forward some possible methods of addressing the size and composition effects and the global and partial faculty rankings.

## Self-assessment and its effects on applications for tertiary education Tamás Keller

The paper uses the data of the Hungarian Life Course Survey to analyse the applications for tertiary education by a sample of about 4500 students who began secondary education in the 2006–2007 academic year. The subject of analysis is how self-perceived abilities (self-assessment) moderates the impact of grades in terms of applications for tertiary education. The main findings concern how self-

assessment increases the probability of students with lower grades than average submitting such applications.

The scope for analysis of world trade through network theory Ádám Merza, András London, István Márton Kiss, Anita Pelle, József Dombi and Tamás Német

The paper sets out to survey a recent investigation of the world trade system based on graph theory and complex network analysis. It presents several complex network representations of the trade system that are suitable for analysis of its intrinsic properties, and its structural and functional evolution. The authors give an overview of some graph-based concepts applicable to examining the system and set about demonstrating the usage of some network-analysis methods for extracting information from the data set of international trade.