

Im Rahmen der öffentlichen Vortragsreihe

Economic Theory and Policy

der Forschungsgruppe Ökonomie
am Institut für Stochastik und Wirtschaftsmathematik der TU Wien

hält

Frau Mag. Gizem Yildirim

einen Vortrag

mit dem Titel

The Dynamics of Europe's Political Economy: a game theoretic analysis

Abstract:

The process of coalition formation is the point of departure of this research.

In my work, the focus is on the emergence and evolution of coalitions and issues of potential enlargement with the application of clustering methods borrowed from high energy physics. A game-theoretical coalition formation model is used and tailored to the EU and international coalitions in general. The aim is establishing links between the theoretical model and the formation of coalitions and thereby getting a better understanding of the dynamics of the coalition formation process. For this purpose, a sequential procedure is used in which players iteratively form subcoalitions. Two points are important when designing such a coalition formation game: (i) determining the players' preferences and (ii) the procedure. The first point is addressed by defining a distance measure. The distance between countries is measured by a distance function containing geometrical and non-geometrical elements. It is defined as a product of distance in population, GDP and political regime space and the distance in physical space. The second point is addressed by using a sequential clustering algorithm. The sequential algorithm for country clustering is inspired by the study of jets in high energy physics were also used for experiments conducted at CERN. To illustrate the predictions made by this model, the formation of the European Coal and Steel Community is examined. In the presented research, three common aspects are considered necessary for studying coalition formation processes: geographic, economic and social elements. Interdisciplinary work can provide a new perspective and deeper understanding of technical matters such as defining a distance function and reducing the complexity of the solution method.

Zeit: Montag, 3.04.2017, 16:00 Uhr

Ort: TU Wien, Sem.R. DB gelb 04
(Wiedner Hauptstraße 8, gelber Bereich, 4. Stock)