The Research Centre of the Faculty of Economics cordially invites you to a research seminar on **Wednesday, 15th February 2017** at **1 p.m.** in room **P-119** at the Faculty of Economics, University of Ljubljana

Author: **dr. Danijela Tuljak Suban**, University of Ljubljana, Faculty of Maritime Studies and Transport

will present the article:

**“COMPETITION OR COOPERATION IN A HUB AND SPOKE SHIPPING NETWORK: THE CASE OF THE NORTH ADRIATIC CONTAINER TERMINALS”**

“The transport of goods by containers is growing continuously. The economic global crisis has created a situation whereby ship operators as well as ports have to meet their needs more effectively in order to fall in line with global trends in maritime transportation. It is the goal of the north Adriatic container port system to compete with the major terminal ports of northern Europe. In this, their geographical location certainly increases their competitiveness but not enough to guarantee economic stability. In the past, these ports acted separately and were located in three different countries under different jurisdictions. The consequences of this situation are still visible as even up till today, they have not yet implemented an effective common policy. The hub and spoke system is the most commonly used system worldwide since ships of the greatest capacity deliver to hubs that are connected to small ports through feeder services

In this article, the problem of the competition or cooperation of the container terminals in the north Adriatic hub and spoke system is examined with respect to the leadership position of the ship owners which defines the flow of containers. The problem is defined as a two stage game where the shipping companies act as leaders and the container terminals are the followers. The stages of the game are defined as a multi-objective optimization problem on a graph. The proposed simulations and the results obtained could be a first step in defining a sustainable method of collaboration in the hub and spoke system between the ports and the ship owners.”

You can register for the free seminar by phone (01) 58-92-490, or via e-mail: research.seminars@ef.uni-lj.si by Tuesday, 14th February 2017.

You can find all information regarding future research seminars on following link: [http://www.ef.uni-lj.si/raziskovanje/seminari_in_konference](http://www.ef.uni-lj.si/raziskovanje/seminari_in_konference)

We look forward to seeing you!