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Advanced Microeconomics

Game Theory

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Introduction

This complex title refers to the agreement with the KU Leuven about joint degrees. The Belgian university insisted that we teach microeconomics with particular emphasis on game theory. A separate part of Advanced Microeconomics was devoted to Computable General Equilibrium. Specific syllabi were adopted. I think that some of the topics of the Game Theory are too technical for young economists, but if they were considered a prerequisite for the degree appreciated by the students, the lecture was delivered many times.

COVID pandemics forced the University of Warsaw to switch to the online regime. This lecture was delivered online in 2020/2021. I did not like this system, since I prefer contact with my students. Looking at them, asking questions or responding to their queries make me feel that they understand the topic. The year I lacked direct contact with them resulted in preparing written outlines of my lectures. I have always used powerpoint presentations. In the online system they were controlled by me, and displayed on students' tablet or laptop screens. Both the vision and my narrative were recorded and made available for students. Nevertheless I felt that a written (perhaps simplified) version of my talks can be useful too.

The entire cycle consists of fifteen 90-minute lectures. They are accompanied by sets of open-ended questions and answers where I contain additional information important for better understanding of the problem.

List of topics

- 1 – Preliminaries
- 2 – Risk aversion
- 3 – Return-Risk Comparisons
- 4 – Strategic form games I
- 5 – Strategic form games II
- 6 – Bayesian games
- 7 – Mechanism design
- 8 – Extensive form games
- 9 – Subgame perfection
- 10 – Repeated games I
- 11 – Repeated games II
- 12 – Coalitions I
- 13 – Coalitions II
- 14 – Axiomatic bargaining
- 15 – Evolutionary game theory