



Facultatea de Stiințe Economice și Gestiunea Afacerilor

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Ceremony of awarding

the title of

Doctor Honoris Causa

To His Excellency

Professor Eric Maskin

Department of Economics, Harvard University

Laudatio

Dear Professor Eric Maskin, Professor Ioan Aurel Pop, Rector of the Babeş-Bolyai University, Professor Ioan Chirilă, President of the Babeş-Bolyai University Senate, Dear Guests,

It is a great honor for me to write and present this **Laudatio**. And I have to admit, is was also a difficult job. My area of expertise is the study of business, hence, this experience was a new lesson and an amazing journey through the contributions of Professor Eric Maskin to the field of economics. However, the major difficulty in writing this **Laudatio** is due to the temptation of putting on paper only the following sentence.

Eric Maskin, Adams Professor at Harvard University was one of the recipients of the 2007 Swedish National Bank's Prize in Economic Sciences in Memory of Alfred Nobel. This prize, which is commonly referred to as the Nobel Prize in Economics, was given to Prof Maskin "for having laid the foundations of mechanism design theory". To cite from Professor Gârleanu and Professor Bejan, who wrote the letters of support to our Senate, "in light of this immensely prestigious award I find it very hard to provide meaningful additional information".

However, for the next few minutes, I will try to share with that part of the audience which is maybe as neophyte as I was, what I have read or learnt from the discussions with my game theorist colleagues, about the overwhelming contributions of Professor Maskin to the field of economics.

Mechanism design starts from a desired outcome which is what is "given" in such problems, while the "unknown" is the economic mechanism itself. That is, a set of incentives such that players, acting rationally and strategically, implement in equilibrium the social choice function represented by the desired outcome. Mechanism design is like reverse game theory and it is opposing to the traditional economic theory, which is typically devoted to the analysis of the performance of a given mechanism.

The 2007 Nobel Memorial Prize in Economic Sciences was awarded to Leonid Hurwicz, Eric Maskin, and Roger Myerson "for having laid the foundations of mechanism design theory".

As pointed out by Jörgen Weibull, chairman of the Economics Prize Committee, in his presentation speech, the research of Hurwicz, Maskin and Myerson "enabled economists not only to study the performance of existing economic institutions but also to suggest how these can be improved, and to identify the theoretical limits to what can be achieved when we take into account the constraints that emanate from individuals' incentives and private information".

In the past decades, mechanism design theory represented the fundamental background for the applied research in many areas of economics and political science, with huge practical implications: auction design, pollution control, privatization, electoral systems etc.

Of course, to find myself in the position to emphasize the contributions of Professor Eric Maskin to mechanism design theory is a *daunting*, *overwhelming task*, a feeling also expressed by Camelia Bejan in her letter of support to the Babeş-Bolyai Senate.

However, I have understood from discussions and my readings that Professor Maskin, with his mathematical rigorousness, built upon Professor's Hurwicz ideas about creating mechanisms to achieve social goals. He identified which social goals are implementable and which are the mechanisms to achieve the implementation. He established that the property known today as "Maskin monotonicity" was necessary and sufficient condition for the implementation of the identified social goals (see the article "Nash Equilibrium and Welfare Optimality", in **Review of Economic Studies**, 1999). This paper represented the main motivation for a large string of subsequent studies.

A vast literature on implementation theory emerged and evolved with applications in several areas of economic theory, like social choice and incomplete contracts.

For his research Professor Maskin has been continuously returning to the field of game theory, as starting point and theoretical background. Nevertheless, the contribution to the field of game theory is by itself remarkable and under the auspices of excellence. In the journey through economic theory occasioned by this **Laudatio**, I have also learnt about the "Folk Theorem".

This asserts that any feasible and individually rational outcome can arise as equilibrium in infinitely repeated games in which players are sufficiently patient. Moreover, in repeated long-term interactions, the fear of vengeance may lead to cooperation outcomes that would not occur in short-term interactions.

In one of his famous paper in game theory ("The Folk Theorem in Repeated Games with Discounting or with Incomplete Information", in **Econometrica**, 1986, with Drew Fudenberg), Professor Maskin formalized the "Folk Theorem". The authors gave a qualified "yes" to the question of whether the "Folk Theorem" holds with discounting. After all, agents in many games of economic interest are not completely patient.

Moreover, Fudenberg and Maskin prove, in simple or more complex approach, that any payoff which Pareto dominates a (one-shot) Nash equilibrium can be sustained in equilibrium of finitely repeated games with incomplete information. After all, although the theory of infinitely repeated games offers an explanation of cooperation in ongoing relationships, economic agents often have finite lives.

Results like the ones mentioned before have been very influential in several fields, not only in economics. They offered insights into sensitive issues such as: the sustainability of long-term contracts between countries, the types of behavior that can be sustained by social norms etc. etc.

In addition to mechanism design, Professor Maskin has contributions to many other areas of economic theory. In auction theory he studied the equilibrium properties for different types of auctions, being interested in the efficiency of such mechanisms. In contract theory he is credited as one of the pioneers of studying the implications of adverse selection.

He also approached the field of social inequalities, being interested in the causes, and emphasizing the role of the education in such social phenomena. His current research focuses on the theory of coalition formation and comparison of different voting systems. Professor Maskin is actively involved in public debates on what should be the voting systems which most efficiently promote the principle of democracy.

We shall have the delight to listen to him talking about similar issues in his Keynote speech at the ERMAS 2017 conference.

The diversity of his contributions is advocated by the list of 127 published articles, all in top journals. Google Scholar is crediting him with an impressive number of 29,000 citations, demonstrating the huge impact of his research. He had academic position only at top universities such as Cambridge University, MIT, Harvard University, and Princeton University. He is Fellow of the American Academy of Arts and Sciences, Corresponding Fellow of the British Academy, Fellow of the Econometric Society (President in 2003), Charter Member of the Game Theory Society (President for the period 2010-2012), and the list can continue unaccountably, pointing towards a single conclusion.

The entire career of Professor Maskin is under the auspices of clarity, precision and power of the mathematical logic used to shed light on economic and social problems of highest importance for humanity. However, no words said here can ever equalize the recognition he received from the profession, as testimony of his immense contribution to the field of economics.

Therefore, we, Babeş-Bolyai University thank Eric Maskin for the honor of accepting our distinction of Doctor Honoris Causa!

Thank you Professor Eric Maskin!

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