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**HETEROGENEOUS AGENTS FINANCIAL AND MONETARY
MODELS IN CONTINUOUS TIME**

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ABSTRACT

Heterogeneous agent models have become an active branch of economic research, as a result of the criticism brought to estimates based on the existence of a representative agent, which is a major simplification of the reality. However, in the case of Romania, such an analysis is scarce. In this context, this paper aims to make a first step in estimating heterogeneous agent models in continuous time in the case of Romania, bringing a new perspective on the transmission mechanisms of economic policies. Empirical evidence shows an increased consumption in the case of higher productivity agents as compared to low productivity households, in tandem with a greater propensity to save, regardless the amount of assets held. Such results are confirmed as well by the inclusion within the model of more types of assets. Inequality among agents is evaluated to lead to a reduction in the efficiency of the fiscal policy. Against this background, while on the short term the impact of a fiscal shock is expected to have a similar magnitude to the one resulted from representative agent estimates, on the medium term it is anticipated to fade off much faster. In the case of monetary policy, including heterogeneity does not change the ordinary functioning of the interest rate channel. At the same time, another novelty element brought by this paper refers to the implications of heterogeneity on the impact of European funds, feature only marginally explored in economic literature even in the case of developed economies. In the case of the Next Generation programme, financial and monetary models with heterogeneous agents suggest a potential lower impact as compared to classical estimates, amid both the significant decrease in stimulative effects and qualitative factors.

KEY WORDS: heterogeneous agents, inequality, representative agent, fiscal policy, monetary policy, European funds, Next Generation EU

CONTENTS

1.	INTRODUCTION	7
2.	LITERATURE REVIEW	12
3.	STYLIZED FACTS REGARDING HETEROGENEOUS AGENTS MODELS IN CONTINUOUS TIME	23
4.	FINANCIAL AND MONETARY MODELS WITH ONE CLASS OF ASSETS.....	28
4.1.	Brief description of economic policies in Romania.....	28
4.1.1.	Fiscal and budgetary policy	28
4.1.2.	Monetary policy	40
4.2.	Methodology.....	48
4.2.1.	Main institutional sectors.....	48
4.2.2.	Description of the equilibrium	52
4.2.3.	Solving the model	53
4.3.	Data and calibration of the model.....	56
4.4.	Results.....	61
4.4.1.	Estimated coefficients	61
4.4.2.	Distribution of heterogeneous agents.....	62
4.4.3.	Impact of the mix of economic policies.....	65
5.	FINANCIAL AND MONETARY MODELS WITH MORE ASSETS	71
5.1.	Methodology.....	71
5.2.	Calibration of the model	72
5.3.	Results.....	75
6.	COMPARISON WITH REPRESENTATIVE AGENT MODELS.....	79
6.1.	Budgetary and fiscal policy in the light of fiscal multipliers.....	79
6.1.1.	Stylized facts.....	79
6.1.2.	Empirical evidence.....	81
6.2.	Impact of the monetary policy	87
6.2.1.	Impact of a permanent monetary policy shock	87
6.2.2.	Impact of a temporary monetary policy shock.....	92

6.3. Comparison of results of heterogeneous agents models with those of representative agent models	94
7. IMPLICATIONS OF HETEROGENEOUS AGENTS MODELS ON MODELLING	
THE IMPACT OF EUROPEAN FUNDS	100
7.1. Stylized facts on the NGEU recovery programme	100
7.1.1. Purpose of the programme and EU allocations.....	100
7.1.2. Romania and the recovery programme	106
7.2. Quantifying the NGEU impact in the light of representative agent models.....	109
7.3. Influence stemming from heterogeneous agents models.....	113
8. FUTURE RESEARCH	117
9. CONCLUDING REMARKS	121
REFERENCES	127
APPENDIX	138
A1. Methodology for computing the fiscal impulse	138
A2. Quantifying the output gap	140
A3. Distribution of estimated parameters	146
A4. Distribution of income in Romania.....	147
A5. Fiscal multipliers.....	150
A6. Methodology for identifying a permanent monetary policy shock.....	156
A7. Methodology for identifying a temporary monetary policy shock	158
A8. Methodology for evaluating European funds	159
LIST OF ABBREVIATIONS	161
LIST OF FIGURES	163
LIST OF TABLES	166