

# Zoltán RÁCZ

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Department of Economics  
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## FIELDS

Macroeconomics, Household Finance, Heterogenous Agent Models, Income Risk

## REFERENCES

**Professor Lars Ljungqvist**  
Department of Economics  
Stockholm School of Economics  
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**Professor Paolo Sodini**  
Department of Finance  
Stockholm School of Economics  
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**Professor David Domeij**  
Department of Economics  
Stockholm School of Economics  
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## EDUCATION

2017 - 2023 (expected)

**Stockholm School of Economics**  
Ph.D. candidate in Economics

2021 - 2022

**New York University**  
Visiting Ph.D. student

2015 - 2017

**Institute for Advanced Studies, Vienna**  
M.Sc. in Economics

2012 - 2015

**Corvinus University of Budapest**  
B.Sc. in Economic and Financial Mathematical Analysis

## SCHOLARSHIPS AND AWARDS

2019

Jan Wallander and Tom Hedelius Grant for Studies Abroad

2017 - 2023

Stockholm School of Economics Full Doctoral Grant

2015 - 2017

IHS, Fully Funded Master's Program

2015

Corvinus University, Faculty of Economics'  
Special scholarship for professional or research activity

## TEACHING EXPERIENCE

**Stockholm School of Economics**

Fall 2019, 2020

**Mathematics I** (PhD level)  
Teaching Assistant to Professor Jörgen Weibull

Spring 2019

**Dynamic Macroeconomics** (MSc level)  
Teaching Assistant to Professor Kelly Ragan

Fall 2019

**Math Camp** (PhD level)  
Instructor

Fall 2018

**Mathematics II** (PhD level)  
Teaching Assistant to Professor Mark Voorneveld

## **Corvinus University of Budapest**

Teaching Assistant

2013 - 2015

**Microeconomics I and II** (BSc level)

**Linear Algebra I and II** (BSc level)

**Real Analysis I and II** (BSc level)

## **OTHER INFORMATION**

Programming:

Julia, R, Matlab, Python, Git

Languages:

Hungarian (native), English (fluent), German (basic),  
Swedish (basic), French (basic)

Date of Birth:

04/09/1993

Citizenship:

Hungary

## **WORKING PAPERS**

### **Housing and Portfolio Choice over the Wealth Distribution** (Job Market Paper)

Why do the rich take more financial risk and earn higher returns? In this paper I argue that understanding the interdependence of optimal housing decisions, debt taking and portfolio allocation over the wealth distribution is key to explain this robust empirical pattern. Calibrating a rich life-cycle model to match saving and home ownership profiles over age in Swedish administrative data I find that the model predicts portfolio choice patterns over the wealth distribution which provide a good fit to data. A crucial driver is the wedge between borrowing and lending rates: the lower risk premium due to debt costs affects not only indebted households, but also those who lack a large buffer of liquid savings and thus are in the risk of becoming indebted in the future. This mechanism is magnified by life-cycle effects and the lower optimal leverage ratio of the rich. I decompose the effect of different channels and also analyze the response of the economy to shocks in partial equilibrium. Changes in housing market conditions, such as the mortgage rate of house prices have a substantial effect on the demand for risky assets and on wealth inequality.

### **Portfolio Choice and Life-Changing Decisions**

How do long-term saving targets affect optimal saving and portfolio choice decisions? I analyze a continuous time stochastic optimal control and stopping time model in which the agent may up- or downgrade her utility flow, income or liquidity constraint at a chosen time at the cost of a monetary payment. This general framework covers applications such as a home purchase, voluntary retirement or bankruptcy. For the case of CRRA preferences an analytical solution is provided and it is shown that the presence of such an option increases risk taking and savings, and this effect is stronger closer to the optimal switching point. The deviation from the optimal policy of Merton's benchmark model is characterized as a function of the transaction cost and the value of switching states. In the limiting case when the value of saving for the wealth target completely dominates the current utility flow, the optimal policy corresponds to the growth-optimal portfolio.

## WORK IN PROGRESS

### Human capital inference

with Gualtiero Azzalini

There is a long-standing literature in economics whose goal is to infer properties of individuals' income and human capital and their impact on consumption-saving decisions by using revealed choices, especially on consumption. While this approach is superior to the utilization of income data alone, it nevertheless relies on very strong assumptions on the form of the stochastic process for income, in particular it hard-wires the relationship between shocks to current income and expected future income, that is, human capital. In this paper we develop a new method that enables to perform this task without imposing any restriction on the latter. Specifically, we log-linearize the recursive relationship defining human capital, insert it into a linearized savings policy function and derive moment conditions which, in turn, we use for GMM estimation of the parameters governing moments of the joint and marginal distributions of savings and income. Using high quality Swedish administrative data on wealth – which enables us to overcome the well-known issues deriving from using imputed or survey data – we find that about 60 percent of human capital corresponds to expected income in the following year. This result suggests that individuals are very short-sighted regarding their future income when they make consumption-saving decisions.

### A Bewley model with portfolio choice

with Gualtiero Azzalini and Markus Kondziella

Preference heterogeneity and income risk are important determinants of individuals' savings and portfolio decisions. How much does capturing their effect on portfolio choices over the wealth distribution help explaining inequality? To assess this question, we build a partial equilibrium Bewley-type model with endogenous portfolio choice, cyclical skewness in labour income, idiosyncratic returns and heterogeneity in preference parameters. Calibrating the latter to match the increasing schedules in wealth of participation, unconditional risky share and share of idiosyncratic variance in individual portfolios as in the data, we find that the model can match well the shape of the wealth distribution, particularly at the very top. Crucial for this result is the presence of a group of individuals with low risk aversion and high share of idiosyncratic variance who endogenously end up in the right tail of the distribution. On the other hand, cyclical skewness of labor income enables us to explain the low stock holdings of households whose wealth is dominated by human capital. Finally, we analyse the response to realistic aggregate return shocks and the model implied evolution of wealth inequality when feeding the historical time series of aggregate returns and GDP growth.

## PRE-GRADUATE PUBLICATIONS

Rácz, Zoltán and Attila Tasnádi. 2016. "A Bertrand-Edgeworth oligopoly with a public firm." *Journal of Economics* 119 (November): 253-266.