# The Public Defense of the Doctoral Thesis in Economics

by

Judit Krekó

on

# Essays in Empirical Analysis of Economic Policy

will be held on Wednesday, May 6, 2020 at 13:00 pm

Central European University

### Thesis Committee:

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Anikó Bíró (External member)

Arieda Muço (Internal member)

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The doctoral thesis is available for inspection at the CEU Department of Economics and Business

### Abstract

Two of the three essays investigate the role of employment policies in labor market outcomes of disabled persons, focusing on Hungarian policy reforms and using administrative data. The first chapter explores the effect of the disability quota-levy system. The chapter concludes that firms react sensitively to the financial incentive, however, low effective labor supply hampers the effectiveness of the quota regulation. The second chapter focuses on the effects of earnings limit accompanied to disability benefits and it demonstrates that a low earnings limit might reduce earnings and employment rate of partially disabled beneficiaries. The third chapter (with Gábor Oblath) investigates the relationship between economic growth and real exchange rate misalignment within the European Union, using panel econometric techniques. In this essay we finds that deviation in the price level of GDP and the internal relative price from levels consistent with economic development affects economic growth in the EU and analyze the role of different factors influencing this effect.

### Chapter 1 - Effect of employment tax incentives: the case of disability quota in Hungary

This paper evaluates the effect of the Hungarian disability quota - levy system on disabled employment and firm behavior, and also aims to shed light on factors influencing the effectiveness of employment tax incentives. According to the quota rule, firms above a certain size threshold, have to employ at least five percent disabled employees or pay a levy in case of non-compliance. The special feature of the Hungarian quota system is the uniquely high levy, which is accompanied by poor labor market integration of the disabled. The estimation exploits two significant policy changes: the drastic increase in the levy in 2010 and the increase in the firm size threshold from 20 to 25 employees in 2012. The policy effect on disabled employment is estimated on firm level data with regression discontinuity design (RDD). The baseline RDD results are adjusted to account for the potential bias arising from non-random firm selection, as many firms adjust their size to avoid the quota. The estimated disabled employment effect is high in international comparison, however, almost three-quarter of the quota is not fulfilled. I find evidence that the ratio of disabled population influences the disabled employment effect of the quota. This suggests that low effective labor supply is a factor behind low quota fulfillment.

### Chapter 2 - Earnings limit for disability benefits: is it really a cash-cliff?

This paper aims to evaluate the effect of disability benefit earnings limits on labor supply of moderately disabled individuals. Earnings limits accompanied to disability benefits are often blamed for their negative work incentive, though their impact on labor supply is ambiguous even a priori and the empirical evidence is mixed. This paper adds to this debate by analyzing the effect of a policy reform which decreased the earnings ceiling accompanied to the main benefit of moderately disabled persons in Hungary, the regular social assistance (RSA), from 80% of the pre-disability wage to 80% of the statutory minimum wage. The impact of tighter restrictions is estimated in a regression discontinuity (RD) design and in a difference in difference (DiD) framework, using administrative data. Both RD and DiD results confirm that the lower earnings ceiling has not induced more beneficiaries to exit the benefit and take a job paid above the new limit. However, it reduced both earnings and employment of beneficiaries. The results suggest that the substitution effects dominates the income effect in labor supply reactions to the new earnings limit. The results suggest that the substitution effect dominates the income effect the labor supply reactions to the new wage

limit. Despite the low wage ceiling and the low amount of the benefit, many RSA recipients choose staying below the threshold rather than leaving the benefit and take a better paid job under the stricter wage restrictions, resulting in discontinuously lower income of new entrants.

# Chapter 3 - Economic growth and real exchange rate misalignments in the European Union

co-authored with Gábor Oblath

We investigate the relationship between economic growth and real exchange rate (RER) misalignments within the European Union (EU) during the period 1995-2016. In addition to the relative price level of GDP, we quantify an alternative indicator for the RER: the internal relative price of services to goods. We interpret RER-misalignments as deviations from levels consistent with levels of economic development among EU countries. Using pooled OLS and dynamic panel techniques, we find that within the EU over- (under-) valuations, both in the relative price level of GDP and the internal relative price indicator are associated with lower (higher) growth. This is mainly due to developments in countries operating under fixed exchange rate regimes. Our results indicate that the level of development does not influence the strength of the growth-misalignment relationship within the EU. Regarding the price level of GDP, we find that the positive relationship between undervaluation and growth diminishes with the degree of undervaluation. We find that overvaluation has a statistically significant negative effect on export market shares and private investments, indicating that both the competitiveness and the investment channels play a role in the relationship between growth and RER misalignments. The policy implications of the analysis point to the importance of a growth strategy avoiding overvaluation on the one hand, and to the futility of aiming at excessive undervaluation, on the other.

# JUDIT KREKÓ

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### **EDUCATION**

### Central European University

2014-

### Department of Economics and Business

PhD in Economics

Supervisors: Andrea Weber, Gábor Kézdi, Álmos Telegdy, Róbert Lieli

# Budapest University of Economic Studies, Hungary

1995-2000

Faculty of Economics

Msc in Economics
Major: Finance

Minor: Economic Policy

### Eötvös Loránd University, Institute of Sociology

1994 - 1997

Six semesters. Courses in Sociology, Social Policy, Empirical survey, Sampling methods

#### WORK AND RESEARCH EXPERIENCE

### Budapest Institute for Policy Analysis

September 2019 - Present

 $senior\ researcher$ 

Budapest, Hungary

Conducting research and policy analysis in various topics of labor economics and economic policy

# Institute of Economics, Centre for Economic and Regional Studies October 2017research associate Budapest, Hungary

Preparing research analysis in a research group in the topic Economic growth, productivity and structural change

 $\mathbf{OGResearch}$  2017-2018

external expert Budapest, Hungary

Preparing research on various macroeconomic topics related to consultancy assignments

### National Bank of Hungary

2000 - 2012

 $senior\ economist,\ economist,\ Department\ of\ Economics, Monetary\ Strategy\ and\ Economic\ Analysis\ Division$   $Budapest,\ Hungary$ 

Conducting and managing research and analysis in strategic issues of monetary policy

Participating, and on a periodic basis leading the team responsible for strategic background paper prepared to rate setting meetings of the Monetary Council

#### TEACHING EXPERIENCE

Teaching	accietant	at	Central	European	University
reaching	assistant	aι	Centrar	European	Omversiv

Winter 2016/2017 and winter 2015/2016: Global Financial Markets

Budapest, Hungary

### Teaching assistant at Central European University

Budapest, Hungary

Fall 2016-2017: Mathematical Statistics

### Teaching assistant at Central European University

Budapest, Hungary

Fall 2016-2017: Advanced Macroeconomics

### SELECTED CONFERENCE PRESENTATIONS

### Workshop on Labour Market Policies and Dynamics

February 2020

Torino, Italy

The Hungarian job trial program for youth: does it work?

## yearly Conference of the Hungarian Society of Economics

December 2019

Budapest, Hungary

Earnings limit for disability benefits: is it really a cash-cliff?

# 31st Conference of European Association of Labour Economists

September 2019

Uppsala, Sweden

Labor shares in the EU - sectoral effects and the role of relative prices

### 25th International Panel Data Conference

July 2019

Vilnius, Lithuania

Economic growth and exchange rate misalignment in the European Union

## 33th Annual Congress of European Economic Association

August 2018

Cologne, Germany

Effect of employment tax incentives: the case of disability quota in Hungary

### ARTICLES AND WORKING PAPERS

Krekó, Judit - Molnár, Tamás - Scharle, Ágota: Youth labour market programmes and the Youth Guarantee

in: The Hungarian Labour Market, 2019 (forthcoming)

Krekó, Judit and Oblath, Gábor: Economic growth and real exchange rate misalignments in the European Union

Acta Oeconomica (forthcoming)

Kónya, István - Krekó, Judit - Oblath, Gábor: Labor shares in the EU - sectoral effects and the role of relative prices

IEHAS Discussion Papers 1902, Institute of Economics, Centre for Economic and Regional Studies

### ECB (2012): Competitiveness and External Imbalances in the Euro area

(by A Team of the Working Group on Econometric Modelling of the European System of Central Banks)

ECB Occasional Paper, 139

Krekó, Judit - Balogh, Csaba - Lehmann, Kristóf - Mátrai, Róbert - Pulai, György - Vonnák, Balázs (2012): International experiences and domestic opportunities of applying unconventional monetary policy tools

MNB Occasional papers, 100

Krekó, Judit - Endrész, Marianna (2010): The role of foreign currency lending in the impact of the exchange rate on the real economy

MNB Bulletin, 2010 March

### **LANGUAGES**

Hungarian nativeEnglish fluent

Russian intermediate