

# UNIVERZITA KARLOVA

Fakulta sociálních věd

## Záznam o průběhu obhajoby disertační práce

Akademický rok: 2019/2020

**Jméno a příjmení studenta:** Mgr. Ivo Bakota  
**Rok narození:** 1990  
**Identifikační číslo studenta:** 67111895

**Typ studijního programu:** doktorský  
**Studijní program:** Ekonomie a ekonometrie  
**Studijní obor:** Ekonomie a ekonometrie  
**Identifikační čísla studia:** 420269

**Název práce:** Essays in Macroeconomics with Heterogeneous Agents and Portfolio Choice  
**Pracoviště práce:** CERGE (23-CERGE)  
**Jazyk práce:** angličtina  
**Jazyk obhajoby:** čeština  
**Školitel:** PhDr. Mgr. Ctirad Slavík, Ph.D.  
**Oponent(i):** Marios Karabarbounis, Ph.D.  
Dirk Krueger, Ph.D.

**Datum obhajoby:** 14.07.2020      **Místo obhajoby:** Praha  
**Hlasování komise:** prospěl/a: 3      neprospěl/a: 0

**Průběh obhajoby:** The Defense Committee Chair initiated the defense by verbal statements confirming (i) that a satisfactory number of Defense Committee Members were present, (ii) that the student fulfilled all the requirements as listed in the Study and Examination Code of Charles University including showing the appropriate documents.

At the beginning, the curriculum vitae of Ivo Bakota was presented. Following this presentation, Ivo Bakota started the presentation of the dissertation, acquainting the Defense Committee with the main topics, methodologies, and findings of the dissertation.

After reading the referees' (appointed by the Graduation Council) comments, an open discussion followed. During the discussion, Ivo Bakota satisfactorily answered all the questions from the audience.

~ 11:08  
Veronika Selezneva:  
The data used in this Figure is from 1998. Any changes since then?

~ 11:13  
Veronika Selezneva:  
Could you please explain why the leverage changes? Do you know what shaped corporate tax policy? Could it be something directly related to the housing sector?

~ 11:35  
Veronika Selezneva:

Can I ask a question related to your previous paper (#2)? Do you still have participation costs in your model? If yes, does extensive margin matter? Does the government care about people being pushed to/away from participating in the market?

~ 11:37

Ctirad Slavik:

Can you finish the line of this argument? Why would you expect the result? It seems to me if firms endogenously issue even more bonds, it should lead to a decrease in the return on these bonds which will not be beneficial for the poor.

\* Ivo answers \*

Ctirad Slavik:

Ah, so it's the other way around. Would we also see effect for wages? Cause it will presumably increase the amount of total capital in the economy.

~ 11:38

Sergey Slobodyan:

I have a question. 0.3 was found in 2005 paper, under the Bush tax cut. You find that the optimal level of debt tax shield is 0.6. Coming back to pre-Bush tax cut situation – what was the tax rate at this point?

~ 11:39

Jan Zemlicka:

Could I have a question about computational method. I've checked your appendix – you use Krusell's method, the first moments and log linear law of motion. Did you try to check higher order moments and nonlinear law of motion?

\* Ivo answers \*

Jan Zemlicka:

So like even the metric in relation to long run error seems OK? Maybe as for including the histogram points - I think there's good paper by Gordon 2011. They include the histogram points and solve the thing. Maybe second question - about endogenous grid method. How did you avoid non-convexity? As you had some fixed cost – is it the result of you including some taste shock in the used method or does it come generically?

\* Ivo answers \*

So like it's the natural stochasticity of your model that smoothes out the value function, right? So you didn't have to use homotopy in the taste shock, you solved it directly, right?

~11:46

Veronika Selezneva:

Right now your model is a closed economy model. However, foreign sector actively participates in the US markets, both on the asset and liability side. It might be natural to assume that foreign investors are not very sensitive to changes in taxation. So if you open up your economy would that matter for your result? On a similar note. Wealthy agents may find it cheaper to switch from investing in the US stock market or bonds to investing and saving abroad, than poor agents, which should affect the optimal wedge. So is there a simple way to open up your model?

~ 11:50

Ctirad Slavik:

Actually, you could insert some kind of rule that relates returns on risky assets to the net foreign asset position of the US, right? But that's not so easy to combine.

~ 11:55

Ctirad Slavik:

So the coefficients for the law of motion of capital are updated using usual regression?

~ 11:56

Jan Zemlicka:

What happens if the Newton method doesn't converge? You switch and do the Aiyagari?

\* Ivo answers \*

It seems you need to have some contingency thing, because you're running this thing in a loop, so you should have some backup plan when it fails – how to switch it back.

~ 12:00

Ctirad Slavik:

You can't rely on initial Krusell and Smith idea, there should be enough moments. Otherwise, you might have not enough degrees of freedom.

\* Sergey Slobodyan reads questions and comments from the referee reports (I can also transcribe them if needed) \*

~ 12:20

Sergey Slobodyan:

What is the publication status of your papers?

**Výsledek obhajoby:**

prospěl/a (P)

**Předseda komise:**

doc. Sergey Slobodyan, M.A., Ph.D. ....  
(přítomen)

**Členové komise:**

Veronika Selezneva, Ph.D. (přítomen) .....

RNDr. Michal Franta, Ph.D. (přítomen) .....