

Review of the Dissertation Thesis - Dušan Stojanović

Chapter 1 investigates the distributional effects of the European Central Bank's (ECB) quantitative easing (QE) program on income and wealth inequality in the Euro Area. The novelty of this chapter lies in simultaneously considering both financial and labor market segmentation. The main goal is to understand how QE could simultaneously reduce labor income inequality while increasing wealth inequality. To achieve this, the candidate constructs a New Keynesian model that incorporates two key dimensions of household heterogeneity: financial market segmentation (where only wealthy households can access financial and capital markets) and labor market segmentation (differentiating between high-skilled and low-skilled labor). The model demonstrates that QE influences income and wealth inequality through portfolio rebalancing and earnings heterogeneity channels. The impact of QE on inequality depends on the time horizon considered: in the short run, it reduces inequality, but in the medium to long run, inequality increases. This is because QE initially benefits poor households more through labor income, but ultimately, its effects on non-labor income favor wealthy households. Overall, the chapter argues that analyzing both labor and financial market segmentation offers a more comprehensive understanding of QE's distributional consequences than focusing solely on financial markets. I thoroughly enjoyed reading this chapter and found much to appreciate. It showcases the student's ability to handle and master complex macroeconomic models. However, I would suggest dedicating more space and time to developing the intuitions behind the model while relegating less critical equations to the appendix. Although Section 1.3 provides a general overview of the model's structure and equations, a more detailed presentation of the model's assumptions might be necessary for readers to fully grasp the results. Enhancing the transparency of the assumptions could further strengthen the chapter's contribution. **[I recommend the candidate to address this concern before defending].**

In addition, further discussion of the assumed heterogeneity would be valuable. Agents are divided into two groups: low-skilled/poor and high-skilled/rich. While this simplification may make sense in principle, it might overlook nuances in income and wealth distribution within these groups. For instance, there may be significant differences in the impact of QE on low-income but financially included households compared to low-income households that are economically excluded. **[I recommend the candidate to discuss this assumption before defending].** It would be interesting to see results that include a mix of these two categories, which might provide a more realistic analysis. **[This comment is not straightforward to address and it should be seen as a general idea for the future].** Finally, while I understand the focus on QE, it could be interesting to investigate how the two channels operate under conventional monetary policy: when the monetary authority manipulates short-term interest

rates, what are the strengths of the two channels? **[This comment is for improving the paper towards a potential submission for publication].** Overall, this is a very strong thesis chapter.

Chapter 2 shifts the focus to the real effects of government spending, particularly when firms face significant training costs for new hires. The chapter argues that conventional models with a representative agent and pecuniary hiring costs (e.g., vacancy posting costs) might not accurately capture the dynamics of government spending multipliers, especially when training costs vary across different skill levels. The chapter develops a two-agent New Keynesian (TANK) model with segmented labor and financial markets. It shows that when firms face high training costs, they tend to prioritize hiring low-skilled workers, who are cheaper to train. This preference for low-skilled labor during periods of high aggregate demand leads to an expansionary effect, as the economy experiences increased hiring. The chapter contrasts this outcome with models that consider only vacancy posting costs or that use a representative agent framework, highlighting the unique insights gained from incorporating segmented markets and training costs. The main contribution of the paper is to show that government spending multipliers can remain large despite training costs, thanks to the reallocation of hiring toward low-skilled workers, who are easier to train.

This chapter also contains many appealing features. The student demonstrates excellent theoretical and quantitative skills, and the labor market modeling builds upon the strengths already demonstrated in Chapter 1. I have three main comments for this chapter. First, as with Chapter 1, the model's exposition would benefit from being more streamlined, with greater emphasis on justifying the modeling assumptions and less focus on technical equations, particularly those not central to the main argument. **[I recommend the candidate to address this concern before defending]** Second, the direct correlation between wealth and being subject to training costs seems somewhat extreme. Ideally, the relationship could be linked to skill levels, which would allow for endogenizing financial market participation. While I understand that idiosyncratic shocks are not considered in this model, it would be worth exploring how such shocks could drive endogenous differences in wealth and, consequently, market participation. **[This comment is not straightforward to address and it should be seen as a general idea for the future].** Also, the main mechanism stems from a certain degree of substitution between workers (job) that require training and those one that do not. This substitutability is crucial for the result. Is there any evidence for it? **[I recommend the candidate to discuss this assumption before defending].** Lastly, one potentially interesting implication is left unexplored: the focus on hiring cheaper, low-skilled labor might have long-term consequences for productivity. High-skilled workers are generally associated with higher productivity, and if firms consistently prioritize low-skilled labor to minimize training costs, this could hinder long-term growth by limiting the accumulation of human capital and technological progress. Some discussion of this point would add depth to the chapter. **[It is not a binding comment to address for the defense, but some discussion of this trade-off could be beneficial.]**

Chapter 3 explores how changes in corporate income tax rates affect the overall productivity of the U.S. economy, focusing on the dynamics of firm entry and exit, as well as the role of corporate borrowing. The chapter employs a proxy structural vector autoregression (SVAR) model to analyze these relationships. The findings challenge traditional economic theory, which suggests that tax cuts automatically lead to higher productivity. Instead, the chapter argues that tax cuts, along with an increase in new businesses and corporate borrowing, initially result in a short-term boost to aggregate Total Factor Productivity (TFP) and real Gross Domestic Product (GDP). This productivity increase is largely due to a “cleansing effect,” where less efficient firms exit the market, freeing up resources for newer, potentially more productive firms. The chapter emphasizes that corporate borrowing plays a crucial role in amplifying this effect, as firms with access to more capital can invest and grow, further contributing to economic improvement. Although the chapter is in its early stages, it shows promise. It is important, however, that a reader can see the empirical model used with the equations and some tables with the results. In the current version, I could only see impulse response functions (graph and tables). **[I recommend the candidate to address this concern before defending]**. In the future, the student should use individual firm-level data to provide direct evidence supporting the proposed mechanisms.

In conclusion, this dissertation is of high quality, and in my experience, the student has demonstrated the skills and knowledge necessary to be awarded a PhD in Economics. Therefore, the thesis satisfies formal and content requirements for a PhD thesis in economics, and I believe the student is ready for a dissertation defense.

I hope this report is helpful.

Best regards,

Roberto Pancrazi