

Fourth Year Forum's Report: Feedback and Work Plan

February 2023

On January 25th, I presented the paper “*Aggregate and distributional consequences of credit shocks on housing and rental markets*”, which is joint work with Andrew Hannon (U Cambridge) and Gonzalo Paz-Pardo (ECB). The discussant was Andrea Gazzani (Bank of Italy). My two supervisors, Russell Cooper and Ramon Marimon, were present during the presentation. Moreover, faculty members Jesús Bueren and Alexander Monje-Naranjo also attended the presentation and gave valuable feedback.

This document reflects their comments in a systematic way. In particular, I order these comments from more to less relevant according to our own assessment. We also make a commentary on how we could address those problems.

- **Arbitrage condition & relationship between rents and house prices.** We need to clearly show that the equilibrium condition of house prices being equal to the present discounted value of rents holds. Here we can use our supply and demand illustration to show that if landlords were able to make profits is because we are off equilibrium because if that is the case additional households will buy rental properties and supply the extra units putting downward pressure on rents. However, we probably need to show under which conditions the supply is upward sloping and how it intersects with the demand curve, which is downward sloping.
- **Motivation: selling the paper!** Need to make clearer what is our contribution. We should put more emphasis on how the rental market is of first order importance when looking at macro-pru policies. CB's and other researchers may be overlooking the rental market when assessing the effects of these policies.
- **How does the equilibrium work?** There was some confusion about how the equilibrium is determined and why there was no rental sector in the supply side. We need to stress out that landlords and homeowners compete for the same stock of housing, and that rental supply comes from the household's side. We need to incorporate into the paper a detailed description of the algorithm we use to solve the model.

- **Other applications:** we plan to do a monetary policy experiment where we change the equilibrium interest rate as an additional application of the model. Moreover, we were also suggested to look at the effects of property taxes. This is a great suggestion for a follow-up paper.
- **Heterogenous benefits of macro-prudential policies.** It will require to introduce aggregate uncertainty which is computationally costly and in addition it may make our contribution more difficult to disentangle. In any case, we think that it is an interesting avenue for future research.
- **Role of bequests.** This is indeed an interesting dimension since it is true that some households inherit their second or third properties, however, we do not have good quality data to address this issue.
- **Why does LTI bites the most?** We will generate some plots to see what types of households are more constrained by which limit. This will help explain why for the reform considered and the calibrated income process the LTI is the stricter limit for most households.