Reply to referee 1

Thank you very much for your thorough and insightful comments. Let me reply to them one by one:

- 1. This is a good idea. I would suggest to introduce the unconditional correlations and the time-varying correlations at the paper's beginning to give a first impression of the problem.
- 2. See first point.
- 3. That is a good point. The introduction and the literature review should be better separated.
- 4. The specific identification of the VAR is not chosen for theoretical but for practical purposes: I know that all stock (i.e wealth) variables are pre-determined so that they cannot be contemporaneously influenced by the flow variables (income, consumption). I could make that more explicit.
- 5. See previous point.
- 6. The specific split point in the data is indeed chosen because many other studies argued that liberalization on mortgage markets took effect in or around 1984 (the abolishment of regulation Q, a stronger reliance on mortgage securitization, the deregulation of savings and loans etc.). I will add more citations and arguments here.
- 7. I can discuss Iacoviello in more detail. But I am not sure to which paper you refer. His 2004 paper "Consumption, house prices, and collateral constraints: a structural econometric analysis" argues that consumption is driven by housing prices because housing is a collateral for consumption loans. In my paper's introduction (on page 4) I explicitly argue that I do not think that this is plausible (I also cite Iacoviello's 2004 paper). As far as his 2005 paper, "House Prices, Borrowing Constraints, and Monetary Policy in the Business Cycle" is concerned, I did not discuss it because it did not look specifically at consumption and housing prices. But I can add more discussion of this paper and how it relates to my approach.
- 8. I am in principle favorable to the calibration of the model. However, the model is more of a device to think through the thesis that housing prices *always* affect consumption positively and less as model that can - as it stands - be applied to

actual data. But I can of course add some calibration exercises so that one might better understand the dynamics and magnitudes involved.

- 9. I have not assumed that the different groups are of equal size but looked at the effect of housing prices when there the share of those groups is indeed *different*. This forms the basis of the discussion on page 13 and 14: given that age shares are different (more old people relative to young or vice versa), how would consumption change if prices change? If that is not sufficiently clear now, I will try to clarify. As far as discount factors are concerned: for the old, the discount factor is not part of their *mpc* because they do not have any future income that they can discount (see equation 15)). On page 13, one can see that only the *mpc* of the middle-aged and thus their discount factor plays a role for the effect of housing prices on consumption. Differences between the discount factor for different generations do thus not affect the result for the consumption-housing price interaction.
- 10. A general equilibrium model would of course be interesting. I briefly discuss some implications in the conclusion on page 30 but could elaborate further at a more prominent place in the paper. A general equilibrium would however make the discussion more complicated: Higher housing prices would tend to increase overall output, income and employment, thereby probably leading to more consumption. That would be an additional transmission mechanism for housing prices on consumption, but also one that would necessitate a whole new paper.
- 11. This is a good point. I show all the impulse-response functions because I want to be as transparent as possible. For instance, if other impulse-response functions in the model would not plausible at all, I would become skeptical about my results. But it would certainly be good to put them in the appendix.