## **Reviewer: anonymous**

## Review of "The Housing Wealth Effect on Consumption Reconsidered"

## e-journal Economics

This paper studies an interesting topic: how is consumption affected by house price changes. The paper entails both an empirical part in which two VAR models are estimated and impulse-response functions are computed and a theoretical part in which a life-cycle model is developed to analyze the impact of house price changes on consumption. While the paper tries to answer an important question, the investigation undertaken in this paper can be improved in several aspects to better address the question raised in this paper. In the following I set out my main concerns:

- 1. The analysis is conducted in a partial equilibrium model. As a result the structure of the model is very rigid and important equilibrium effects are excluded from the analysis (see also points below). For a better analysis of the research question the analysis should be set in a more flexible model environment, possibly in a general equilibrium model.
- 2. There are three generations in the model: a young generation which accumulates savings, a middle-aged generation which purchases the stock of houses and an old generation which sells the stock of houses to the middle-aged generation. It is assumed that the middle-aged generation always buys the total housing stock from the old generation, independent of the price. This facilitates the analysis as it reduces the choices of the middle-aged generation. However, this assumption also limits the insights that can be gained from the analysis. Furthermore, no strong empirical evidence is provided that this assumption is reasonable. It is the aim of this paper to investigate the effect of house price changes on the total comsumption. By assuming that the middle-aged generation always buys the total housing stock from the old generation independent of the price, the analysis excludes a potentially important influence on consumption. It would be important to investigate in the model how strongly the results depend on the assumption of a completely inelastic demand for houses by the middle-aged generation. The impact of housing price changes on the middle-aged generation is accerbated by the assumption that the middle-aged generation buys the complete housing stock (and not only a fraction of it) as the model does not include any kind of bequests from the old generation to the younger generations. It would be important to at least discuss the impact that bequests of (part of) the housing stock would have on the results of the model.
- 3. In the paper the impact of different sizes of the generations ("the share of each generation G in the whole population") on the total consumption is analyzed. However, there seems to be no impact on house prices due to the variation of the size of the generations. In the model the house price depends solely on a no-arbitrage condition which states that debt service and revenues from housing assets are the same. Housing assets are always sold by the old generation and bought by the middle-aged generation. However, if the sizes of the generations vary this should imply that also the number of persons selling the housing assets (in the middle-aged generation) and the number of persons buying the housing assets (in the middle-aged generation) should vary and this should have an impact on equilibrium house prices. The resulting, possibly important, impact on the level of consumption is not analyzed and

should be introduced in the model. Also, if house prices are not influenced by the different sizes of the generations it is hard to see how there can be a sensible equilibrium on the house market if the sizes of the generations change over time.

- 4. There seems to exist a kind of bank in the model that provides a credit to the middle-aged generation when purchasing the housing stock from the old generation. In particular, the middle-aged generation only pays a fraction of the price of the housing stock and pays the remaining part of outstandstanding mortgage debt in the next period when becoming the old generation. However, the agent that provides this credit to the middle-aged generation is not to stated explicitly in the exposition of the model and it is not clear whether this agent would make profits or incur deficits. This part of the model should be explained in much more detail.
- 5. The model is solved under the assumption that in equilibrium expectations are fulfilled and there is no difference between the actual price in period t and the expectation one period before (in t-1) for the price for the price in period t. Given this assumption it is not clear how surprise changes in house prices can be motivated and introduced in the analysis.
- 6. The empirical investigation seems to have a slightly different focus than the model. While the empirical investigation evaluates the effect of shocks to house prices on consumption, the model focuses on the impact of shocks to the <u>expected</u> house prices on cosumption.

In summary, this paper addresses an interesting question but the model seems to not address some potentially important issues that are likely to have an impact on the results of the analysis.