## **Response to the Referees**

Thanks very much for the helpful comments. We have tried to be a lot clearer in this draft. We address the comments of referee number 2 first because these comments go to the heart of what distinguishes our paper from other attempts to integrate meaningful demographics into a heterogeneous agent overlapping generations model.

## Referee 2:

We apologize for being insufficiently clear about how we used the Lee-Carter framework in the context of our model. We discovered that to completely explain required a substantial note which we attach with the revised paper. We will refer to this note and make it available on-line to anyone who wants to delve into this further. A brief summary of what we do is as follows. Demographers focus on the evolution of longevity based on primitives like mortality and life expectancy. Much of the underly data used in mortality forecasting is available only at five year intervals. For our modeling purposes we want to map these demographic primitives into a sequence of survival probabilities at an annual frequency. These in turn will determine the individual decisions and the composition effects (the aggregation effects) of those decisions. The attached note describes how we compute these survival probabilities using the Lee-Carter framework.

## Referee 1:

**Comments 1 and 2:** Thanks for holding our feet to the fire and apologies for the confusion we generated. As noted in the response to Referee 2 the attached note tries to clarify exactly how we treat the demographics and their effect on individual decisions and their composition effect. This gives us a simple transparent structure in which we can better isolate and understand the importance if changes in mortality and changes in composition. In this we differ from the previous literature much of which addresses different questions, some of which use crude demographics and some of which make assumptions that imply unrealistic paths for interest rates.

**Comment 3**. We have tried to elaborate on the accomplishments of the paper – we now have a better account of China and Germany because of the refinement.

**Comment 4**: We have elaborated on why we focus on Net Foreign Assets.

**Comment 5:** We have tried to economize on the Figures and we have eliminated several and simplified others. We are still working on the color issue.