

December 12, 2016

This note responds the author's reply to my referee report. My only remaining quarrel concerns point 3 in my report.

I do not dispute the possibility that young and old agents, as modeled in an overlapping generations model, might find themselves facing trade-offs between meeting current desires and a better environmental future. However, there are issues that remain within the paper. One is a modeling strategy issue; the other is one of interpretation and motivation.

Two period overlapping generation models as opposed to infinitely lived agent models have implicit finite time periods for the lifetime of a generation. Suppose each generation has a 50 year lifespan. Divide that period into two 25 year periods. Now, environmental improvements, based on current expenditures may well have benefits realized 300-400 years from now (this is consistent with documents such as the Stern Review). This exceeds the lifespan of the current old and new overlapping agents at a time, say the present. So, just how does the conflict arise with health care improvements standing in for the short-term source of the intergenerational conflict? Aren't ALL living generations at a point in time staring at the same long-term consequences beyond their lifetimes? From a modeling perspective, I mean to challenge the overlapping generation setup. It seems to me the model would be more convincing with possibly altruistic infinitely lived agents representing a dynasty. Unfortunately, that would be another paper.

Having made the previous point, I will tentatively accept the author's focus on what I regard as short-to-intermediate run periods as whether or not health care IS the trade-off problem. Is that really the true source of intergenerational conflict? Or, is it merely a pretext for working out some dynamics in an overlapping generations setup? Why not building bridges or broader infrastructure? Conflicts might exist there! Why not invest in technologies that allow future generations to deal with the consequences of climate change? Why is the health care issue THE source of the trade-off and intergenerational conflict? The author's response cites absolutely NO empirical support for this alleged trade-off in what is a clearly aggregative model. I stand by my previous concern: there is absolutely no logical basis for selecting *health care investment* as the short-run alternative to an aggregative improvement in the long-run state of the environment. Many alternative sources for intergenerational conflict exist. Why this one and not others?

Does the model offer anything from a purely modeling perspective in a two-sector context? Possibly --- at the end of the author's response lies the potential defense. That result is not obvious and should hold up to many other specifications beyond health care expenditure, which as far as I can see is merely serving as a pretext for analyzing a potential trade-off and thereby promote a conflict with between the coexisting generations at each time. Perhaps something like this argument might save the paper. An indication that the result is robust to other interpretations of the conflict's source would help as well.

Conclusion:

I think the paper still needs work on the motivational front. I believe the author poses a false alternative in an aggregative setting. Perhaps a revision that clearly lays out a plausible case for the supposed intergenerational conflict could be published. It would help enormously to highlight the counterintuitive

point regarding complementarity between health care expenditure and better environmental quality via capital accumulation.