

Don Boyd to me

Jun 8

Hi Yimeng,

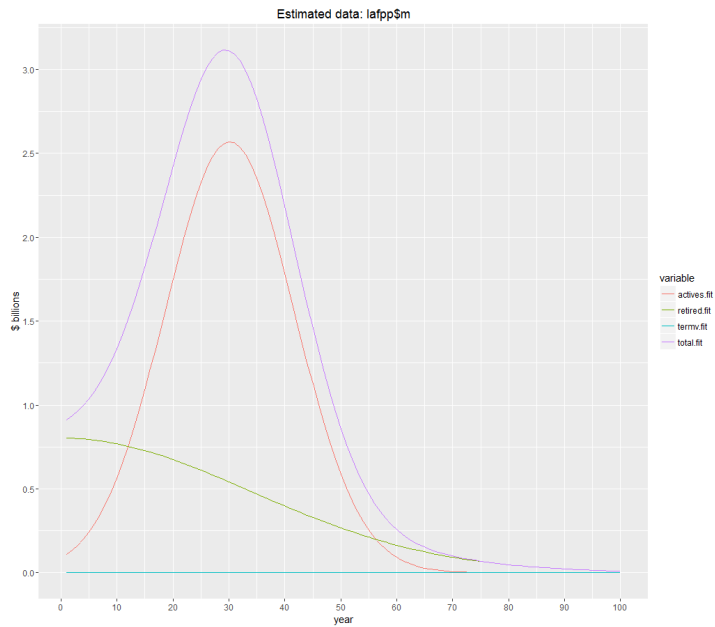
I've done several things in the attached:

- 1) It is designed to do any plan (primitively) and so I have removed the various comparisons to ucrp cash flow
- 2) The program constructs a data frame with 3 plans in it, and it will run on any of the 3 (by choosing planid=1, 2, or 3)
- 3) the 3 plans are:
 - a) the ucrp plan I've been working with, with everything indexed to actives benefits in year1=1
 - b) ucrp in \$ millions
 - c) lafpp in \$ millions (I had to guess at the year1 values; I am sure they can be improved upon)
- 4) the program scales all values so that total benefits in year1=1 (slightly different than the original ucrp scaling, which was based on actives); I found that if I do not scale, thje nlp solver can run into numerical difficulties
- 5) I dropped the two equality constraints for termvs (pv, and year1 benefits) because termvs are so small in LAFPP that the nlp solver ran into numerical difficulties. It still seems to work pretty welll, but I hate to leave out information we could use. There are a lot of possible workarounds to this (including simply dropping termvs) but I'd like to wait until we have looked at more plans before figuring out what to do.

I didn't see any benefit flows to compare to for LAFPP - the RVK flow is for an open plan. (We don't quite match on year1 but I'm not worrying about that now.)

I copy below a graph of the estimated LAFPP flows, with the scaled values converted back to \$ billions.

Don



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estimate_gauss_p
arameters_all(2)
r
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