

QMM1

HW 5

By FILIP MELLGREN

Fall 2022

1 Problems

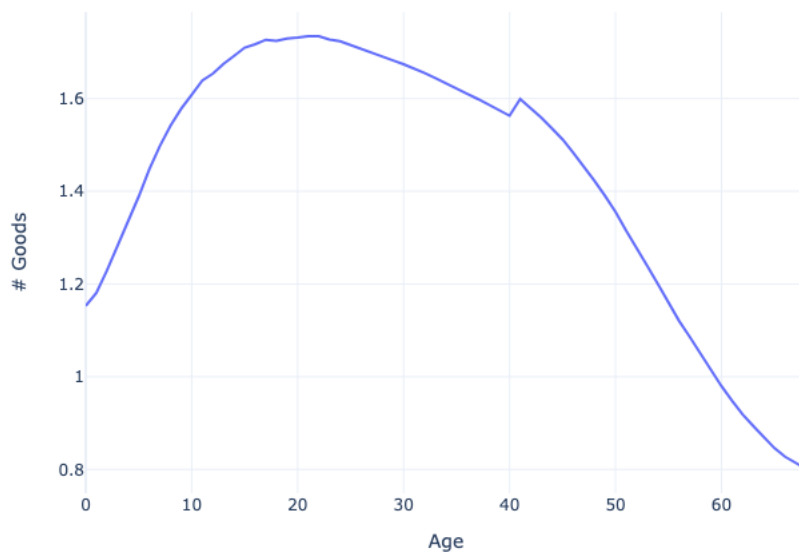
Here is a link to my code: <https://github.com/filipmellgren/QMM/tree/main/ps4>.

Thanks to Tom and Jonas for pointing out bugs in my code.

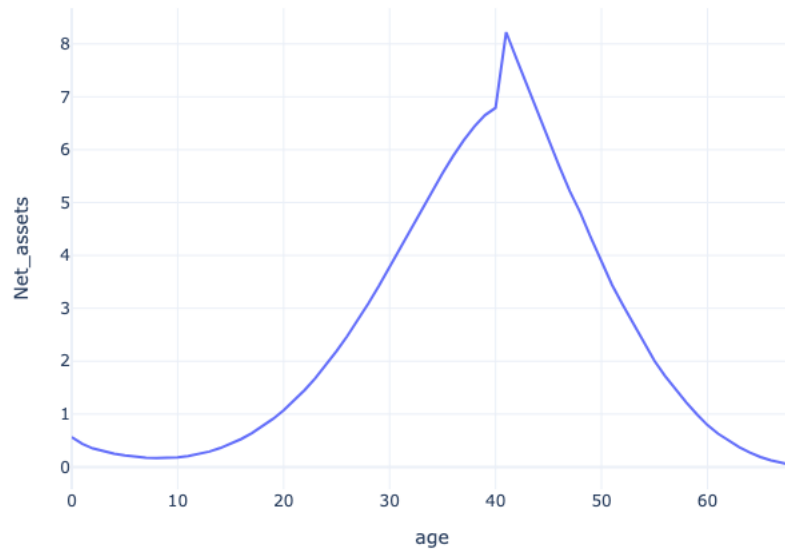
1. Bequest questions

Solution:

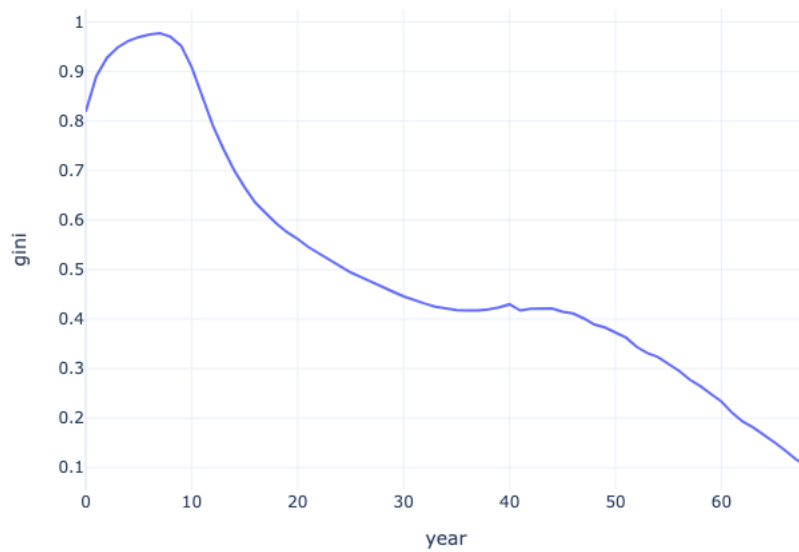
Average consumption, $\phi = 0$

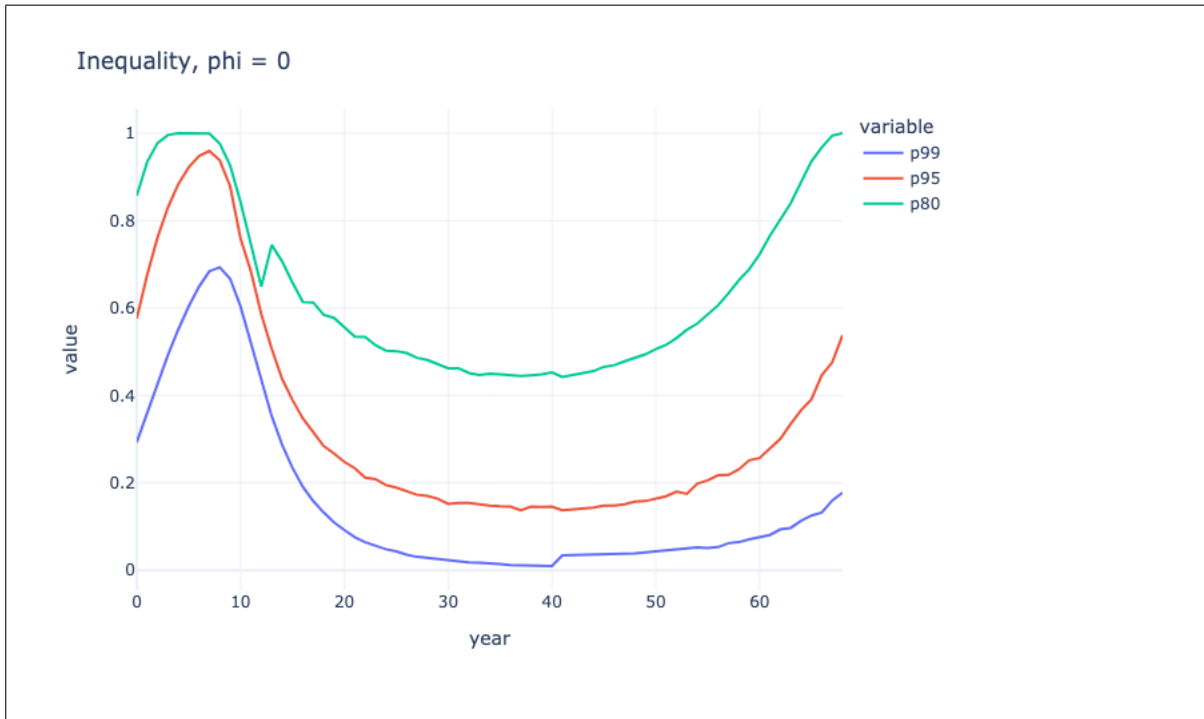


Average Assets, $\phi = 0$



Gini, $\phi = 0$





2. Life cycle paths of savings and consumption, and Lorenz curve

Solution:

3. Add bequest motive with $\phi_1 = -10$

figures/consumption_-10_tax_15.png

Solution:

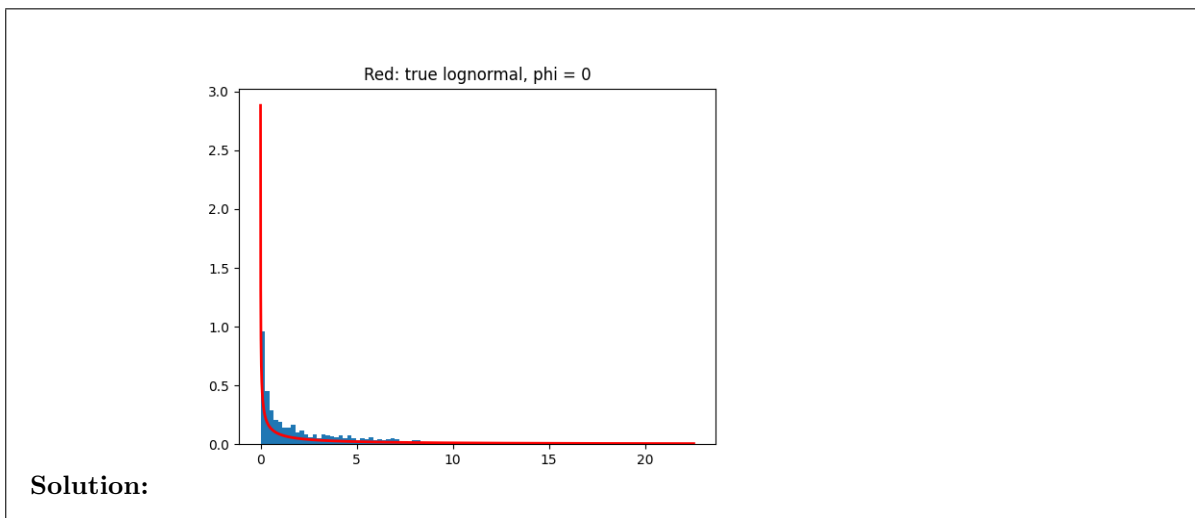
figures/avg_assets_-10_tax_15.png

figures/gini_-10_tax_15.png

figures/inequality_-10_tax_15.png

The resulting graphs look wacky. Not sure why, but bequests seemingly much too high. Could be an issue with the terminal policy.

4. density comparison



5. Tax increase

Solution:

`figures/consumption_0_tax_30.png`

`figures/avg_assets_0_tax_30.png`

`figures/gini_0_tax_30.png`

`figures/inequality_0_tax_30.png`