Texas Tech University ECO 6353—Consumption & Investment Dynamics

Ongoing Coding Problems—Part 2

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Part (a)

The three main errors and their explanation:

The gamma value of 3.5 is missing.

Remove the small positive value from the guess of c2. Since we already specify that if c2 is less than 0, then c2 equals the small positive value.

In the iteration loop of c2, replace x, y, and z in the interp1 function with w_0 , a, and, w_1 , respectively. Spec

Part (b)

When the borrowing constraint is set to 0, borrowers have no inherent debt limit. This allows them to borrow against future utility and convert it into present consumption. When this constraint is applied for the current period, it extends to all periods, enabling consumers to exchange future utility claims for present consumption.

Part (c)

If the risk aversion parameter is increased to 0.1, it means that consumers react more strongly to uncertainty about the future. For example, when facing uncertainty about economic growth in future periods, consumers would likely increase precautionary savings, invest in safe assets, and reduce current consumption to ensure they can consume during risky periods.

Part (d)

Since there are so many graphs, please see the graphs by running the codes.

Part (e)

Again, since there are so many graphs, please see the graphs by running the codes.