In a Jupyter notebook, answer the following questions using a tractable buffer stock saving model.

1. Kreinin (1961) describes a fascinating natural experiment: In the late 1940s, Germany made reparations payments to Jewish Israeli citizens who had fled to Israel from Germany during World War II. For simplicity, suppose that all Israeli recipients of these payments were buffer stock savers, all recipients were employed at the same wage, and all of them had already reached their target level of savings at the time that the surprise one-time reparations payment reached them. Draw diagrams showing what the model predicts about the dynamics of the level of consumption, assets, and consumption growth following the receipt of the payments by Israeli citizens.

   Answer:

   > The way to think about this is as a one-time jump in the level of m (because m is the measure of wealth and wealth was increased in a surprise, one-time way by the shock). The level of c jumps up, but because the consumer is now above the target level of wealth, the subsequent evolution of the level of consumption and m is downward, eventually returning to the target levels of consumption and wealth. The *growth rate* of consumption after the shock has been received drops down (after a one-time upward jump in the *level* of spending) and then gradually climbs back up toward the growth rate of permanent income.

2. Now suppose that, while each recipient received the same amount of money, different recipients had very different levels of permanent wages. Specifically, suppose that there are "poor" and "rich" Israelis, and that for the poor ones the reparations payment is, say, a couple of years' worth of permanent income, while for the rich ones the reparations payment is a small fraction of a year's income. How would you expect the marginal propensity to consume (MPC) out of the payments to differ for poor versus for rich Israelis? If there is any difference in the MPC's, explain it in intuitive terms.

   Answer:

   > The concavity of the consumption function is the key to the answer to this question. For 'rich' recipients, the given amount of income is only a small increment to their m so the marginal propensity to consume will be on average not too far from the MPC at the target level of wealth. But for the 'poor' recipients, the fact that the payment is large relative to their permanent income means that the *ratio* of m to permanent income is moved up very far. Since the consumption function is concave, this means that they will be arriving at a part of the consumption function where the MPC is much lower. So, the *average* MPC that they experience will be much *lower* than the average MPC of the rich recipients.

3. Now consider the one-time "economic stimulus checks" that the U.S. government mailed to households in the summer of 2008, which were a small percentage of income for some households and a very small percentage for other households. Assume that these checks were treated by households as one-time windfalls, not to be repeated. Discuss whether the buffer stock theory suggests that the MPC out of these checks should be similar to, or different from, the Israeli experience, and discuss whether the experiences of "poor" or "rich" Israeli households might be more relevant.

   Answer:

   > Since by the statement of the question the stimulus checks were 'a small percentage' or 'a very small percentage' for all households, we should expect all households to experience an MPC not too far from the MPC experienced by the *RICH* Israeli households, for whom the reparations payments were *also* a 'small' fraction of their permanent income.

References

KREININ, MORDECAI E. (1961): "Windfall Income and Consumption: Additional Evidence," *American Economic Review*, 51, 388–390.