Dylan Baker Golosov et al. Memo

Golosov et al. (2024) explores numerous questions concerning the effects of exogenous changes in household wealth and unearned labor. To do so, they analyze US tax records, with a focus on the "treated" group of individuals who won the lottery. Initially, they analyze the earnings response to a lottery win. They consider a number of possible estimators, including simply taking first differences, adding time effects, and using a diff-in-diff, with various possible control groups. All estimators yield similar results in this setting, and they proceed with the diff-in-diff with the control group of individuals who did not yet win the lottery but would eventually. They use an event study design. They find that the wage earnings of a lottery win fall, on average, by \$3,572 (\sim 10%), in the first year after winning.

Notably, the effect discussed in the last paragraph captures the effect of a lottery win, but is difficult to interpret since it doesn't convey information about the amount of the win. The authors then use an instrumental variable approach to estimate wealth effects using variation in the timing of lottery wins as the instrument. They find that an extra \$100 of wealth is associated with winners reducing their earnings by \$2.3 in each of the five subsequent year and increasing their capital income by \$0.9. For every \$100,000 of additional wealth, employment probability decreased by 3.7 p.p. They find meaningful heterogeneity in these results across the pre-win income distribution, e.g., lower-income households were more likely to stop working.

The authors then turn to propensity to earn and consume out of unearned income. They compare results from using the annuitization method and the capitalization method. They find similar results through either method, which say that consumption increases in the first post-win year by between \$4,862 and \$5,176. They also estimate the MPE and MPC with the IV method and consider hetereogeneity along age, gender, and marital status. The authors then consider a number of dimensions along which winners might respond. They find a significant increase in propensity to exit the labor force, a small increase in the probability of becoming self-employed with an income below \$15,000, no effect on the probability of starting a business, no effect on the frequency of job moves (though with hetereogeneity in which people have an increase in the probability of moving to a lower-paying employer and a symmetric decrease in the probability of moving to a higher-paying employer), an increase in the probability of moving (particularly among low-income winners), an increase in the probability of getting married, and a decrease in the probability of getting divorced. When comparing against other similar studies, they find reasonably similar results with other studies in the American context, but that past studies were distorted by overstating the post-tax wealth increase among winners. They find generally larger effects than those among European datasets using similar types of data.

One of the clear strengths of the paper seems to be the quality and size of the dataset, combined with the clean identification strategy through the usage of lotteries, that allows the authors to get around some of the common pitfalls of past efforts to analyze the questions of interest. One kind of foundational point of confusion on my part is that in the IV approach, I'm not totally sure if I understand what they mean when they say they use timing variation in the lottery win as an instrument. Additionally, particularly at the lower end of the income distribution, I would've been interested to see the conditional effects at a more granular level than quartile, since it seems that there's a meaningful difference between someone in the bottom e.g. 5 percentiles versus the bottom 25 percentiles. One challenge in the heterogeneity analysis, as the authors allude to, is that it's unclear if the variable that we're comparing effects across is the instructive variable per se versus simply being correlated with variables influencing the effects.