Review of Impact of Lotteries and Inheritance on Savings, Consumption, and Labor Behavior: Evidence from U.K. 2001 - 2008, by Seung Yong Sung

Reviewed by Aaron Watt

## 1 Summary

This paper examines behavioral responses in savings, hours worked, and consumption to two different types of unearned income: inheritance and lottery winnings. The author also checks for heterogeneous responses by age and income level. The analysis is performed on 8 years of panel survey data from 3027 UK households – an understudied location for these responses. The panel data is an important feature (as opposed to cross-sectional) and allows the author to more credibly identify behavioral responses and check for anticipation and delayed responses. The author also employs a censoring model because they believe that savings is likely sensored below zero.

The main results from running several versions of a household fixed effect model are summarized in table 1 below. We see that increasing inheritance and lottery winnings both increase the amount of savings for UK households (Table 5 in the paper), but the effects are not distinguishable between lottery winnings versus inheritance. Labor hours (Table 6 in the paper) appear to be depressed by inheritance on average. The small number of lottery winners seem to limit the precision of the estimates of impacts of lottery winnings on labor, perhaps a concern for the paper overall. Consumption, as proxied by annual grocery expenditures, increases in the year of an inheritance, and a little bit the year before (indicating some anticipation). Consumption seems to increase the year after a lottery win, but the effect is barely significant, perhaps due to either the small number of lottery winners or that groceries are not the goods that people spend lottery winnings on.

Taking the findings at face value and comparing to previous literature, it seems that the main surprising findings are that UK households save less and consume more from inheritance compared to other non-UK settings previously studied. As the author notes however, the saving finding may be significantly impacted by the form of the survey question being asked, where the survey used may be eliciting a response that underestimates actual savings.

Overall, I thought this paper was fairly complete, well written, and the analysis was clear. I am left a little unclear on how what policy implications these estimates might have and I have some notes for consideration below.

	Dependent variable		
	Savings (£)	Labor (Hrs/week)	Consumption (£/year)
	Table 5	Table 6	Table 7
£1,000 inheritance /	117***	-0.0168**	8.472***
£1,000 lottery winnings >	155*	0.0762	-0.099
Difference in response?	None Sig.	None Sig.	Yes
Heterogeneity? (age or income)	None Sig.	None Sig.	Yes: 56+ consuming more
Anticipation?	None Sig.	None Sig.	Yes: for inheritance
Delayed response?	None Sig.	None Sig.	Yes: for lottery

Table 1: Sung 2022 Results when employing all controls

Dependent Variable

## 2 Key Considerations

- (2.1) Discussion of censoring
- (2.2) Discussion of gifting and investing, differences from saving
- (2.3) Discussion of policy implications

#### 2.1 Discussion of censoring

Because the censoring model is used as the main result in analyzing savings, I think it is important for the reader to understand what the possible empirical implications are from using that model. One important addition is to show both the OLS and Honoré (censoring model) results, and describe for the reader what the main differences are. This could just be added to the appendix and referenced in the main body.

An additional piece would be to write down the the censored model to help the reader understand the importance of using the new method. What would be the impacts of using OLS on the results? This is not a "requirement" in my opinion, but would serve to make the paper more robust.

#### 2.2 Discussion of gifting and investing, differences from saving

In Section 5.1, the author briefly discusses that gifting or investing part of an inheritance or lottery winning would change the empirical results. However, it stops short of explaining how this paper addresses that issue. Has the author already addressed it? Are these empirical results impervious to this issue for some reason? Are these result and under or over estimate compared to a simple model without gifting and investing? Some discussion on this would suffice, but a very robust paper would write down the Lifecycle/Permanent Income

Hypothesis model and show how including gifting and investment would change the results, then relating that expected result to the empirical findings.

### 2.3 Discussion of policy implications

There are two categories of policy issues I would love to see discussed more: (1) how do the policy differences between countries contribute to differences in estimates windfall impacts; and (2) how do these estimates of windfalls impacts on savings, labor, and consumption impact policy decisions?

For (1), more discussion in the introduction on potential policy differences can help build the contribution – why would the UK serve as a distinct setting that would provide important information about people's behavior? For example, perhaps the UK has a larger pension system, so estimates in this setting can help us understand behavior when people have more government provided services.

For (2), more discussion in the conclusion or results section about where these results fit into policy decisions would be helpful. For example, if we find that people have a much larger propensity to save from inheritance than lottery winnings, ignoring sample selection issues, perhaps that suggests people will save and plan more when they have more certainty about their future situation. So this might imply a government policy that lottery winnings should be spread out more over time or delayed to allow the person to plan more. Or if the government has ownership over the lottery system (like in some states of the US), maybe every lottery win should include a consultation with a financial planner.

# 3 Suggestions

• From Table 2, there seem to be significant differences in labor income and monthly savings between the treatment and control groups. A matching procedure to prune the dataset beforehand to get a more balanced panel could be employed as a robustness check – same set of tables but with a pruned, more balanced panel.