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Household Finance: Research Findings and Implications for Policy

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Can Gambling Increase Savings? Empirical Evidence on Prize-linked Savings Accounts

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Executive Summary

Personal savings serve as the first available buffer for households when faced with job loss, healthcare costs, or other financial shocks. However, recent evidence suggests that a large percentage of households maintain little to no savings, resulting in high financial fragility. In light of this, economists and policymakers have investigated a wide range of proposals and products aimed at encouraging higher savings rates. One such proposal is the usage of prize-linked savings (PLS) products, which combine aspects of both standard savings accounts and lotteries. Typically, PLS accounts offer random, lottery-like payouts to account holders in lieu of interest, and participants can increase their chances of winning by increasing their balances held in the account. Thus, PLS changes the incentive structure for savings from a risk-free but relatively small payoff to a risky but potentially large prize. We use micro-level data from a PLS program run by the third largest bank in South Africa to study three questions:

- How much demand is there for PLS and what individual and household characteristics are associated with this demand?
- Do individuals who use PLS increase their overall savings level? If so, where does that money come from?
- How does winning prizes affect savings behavior?

In answering these questions, we seek to better understand why individuals fail to save in regular savings products and inform policymakers about the pros and cons of PLS.

Demand for PLS. We find that demand for PLS was high and broad, across all age, race, and income levels. Within 18 months of introducing the PLS product, the bank in our study had more PLS accounts than regular savings accounts, though average account balances

were much lower in PLS than in standard accounts. While individuals across all socioeconomic levels used PLS, we find that demand for PLS was highest at branches located in poorer, more financially constrained areas. Corroborating this, we use account-level data from bank employees to show that employees with the most consumer debt were the most likely to open a PLS account. Further, employees with standard savings accounts were 12% less likely to use PLS, suggesting that the skewed payoff of PLS is attractive to a different set of consumers than those who use regular savings products. At the branch level, we find no relationship between local financial knowledge levels and PLS usage, suggesting that it is not a misunderstanding of standard savings products that prevents individuals from using them. Rather, it appears that the skewed payoff of PLS is more attractive to financial constrained individuals than small amounts of interest.

PLS and overall savings levels. Participants in the PLS program increased their total savings on average by 1% of annual income, a 38% increase from the mean level of savings. Importantly, we do not find evidence that PLS deposits cannibalized savings in standard savings products. Rather, individuals who opened PLS accounts were more likely to increase balances in their regular savings accounts as well. We also find evidence that PLS can serve as a substitute for lottery gambling. Using random variation in the size of the jackpot of the National Lottery of South Africa, we show that demand for PLS was highest when the lottery jackpot was lowest.

Prize-winning and savings. Finally, we examine how winning a prize can affect savings behavior. Exploiting the random assignment of prizes, we show that prize winners increase their investment in PLS relative to non-winners. Interestingly, winners of small prizes on average increase their PLS deposits by amounts *larger* than the prize won, showing that prize-winning generates increased savings in excess of what would be expected from a pure income effect. In addition, large prizes create a local “buzz” which leads to increased PLS demand even by those who did not win. We find that when a bank branch has a jackpot winner it experiences excess growth in PLS deposits of 11.6% in the month following the prize, an 87% increase above the mean level of growth. This effect could be due to a misperception that the bank branch is “lucky,” or because the prize makes the potential benefits of PLS more salient to those in the community. Regardless, these results show that the prizes themselves can act to generate local savings.

Conclusions. Our results suggest that there is strong demand for savings products that offer the chance at winning a life-changing sum of money. The fact that demand for PLS is not correlated with education, but is stronger among poorer and financially-constrained individuals, suggests that consumers eschew standard savings not because they misunderstand them but because the perceived risk-free return is not large enough. Importantly, we find that when individuals invest in PLS they do not reduce investment in standard savings products, but instead reduce consumption in other areas (such as lottery play).

Under current laws and regulations, financial institutions in the US are not permitted to offer this type of product, except for credit unions in a few states in a program called "Save to Win." Preliminary US evidence from “Save to Win” is consistent with the South African data. The bi-partisan supported "American Savings Promotion Act" (H.R. 3374) would allow this type of product to be offered in the United States and this bill was passed by the House this fall. In the coming weeks, the Senate may consider the companion bill (S.1597).