**Who gambles?**

Kearney (2005) uses data from the 1998 National Opinion Research Council (NORC) survey of gambling and finds that low-income households spend a larger percentage of their wealth on lottery tickets. This finding is consistent with Brown et al. (1992), which finds that education is negatively correlated with propensity to play the lottery.

**Why (when) do people participate in lotteries?**

Guillen and Tschoegl (2002) provide an overview of the various incentives for PLS from both the bank and consumer sides.

Camerer and Kunreuther (1989) review decision theories behind choices regarding low probability events, such as winning the lottery. The paper mentions biases in probability judgment (conjunction fallacy, optimism, availability, and ignoring low probability risks) and alternate explanations besides expected utility theory (prospect theory, mental accounting, reframing, endowment effects, reluctance to make tradeoffs, regret theory, ambiguity, emotional dimensions of risk, process models, and shifting attention).

Guryan and Kearney (2008) find that the week following the sale of a large-prize winning ticket, the winning store experiences a 12 to 38 percent relative sales increase for the winning lotto game. The effect dissipates over time but sales remain elevated for up to 40 weeks, conditional on contemporaneous sales. The sales response increases with the size of the jackpot, and is larger in areas with more economically disadvantaged populations.

**Optimal lottery design?**

Shapira and Venezia (1992) uses empirical data from the Israeli lottery and from laboratory surveys that ask the respondents to rank lotteries varying in ticket price, size of prizes, and probabilities. Larger first prizes and a higher number of small prizes increase lottery rankings.

Pfiffelmann (2013) investigates data from two PLS: Premium Savings Bonds (British Treasury) and Savings Account MMmax (French insurance company). The results indicate that the optimal pay-off structure is characterized by a high level of skewness, as investors are willing to accept a decrease in the small and medium prizes of the lottery in exchange for an increase in the grand prize.

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