

TESTING FOR EFFICIENCY IN LOTTO MARKETS

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Abstract

State-sponsored lotto games, because they are pari-mutuel and because jackpots with no winner are rolled over into the next drawing, present an excellent opportunity to test for market efficiency. Using data from Massachusetts, Kentucky, and Ohio, we investigate bettors' responses and test for weak-form efficiency. Lotto bets do not have positive net expected returns, thus weak-form efficiency exists. To evaluate strong-form efficiency we utilize the concept of a rational expectations equilibrium. We find that in general lotto bettors' decisions to play generate a level of sales that conform to their original forecasts of expected value.

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