

In Pursuit of Value

December, 2012

Stocks and Lotteries

Most people know that lottery tickets are usually not worth buying. Just as casino operators are richer than their customers, so is the relentless Math of the lottery better for the state governments that run them. However, sometimes a lottery ticket can statistically be worth its cost. Powerball, a multi-state lottery, occasionally offers an enormous cumulative prize if several drawings pass without a winner. Investors think in terms of the expected value of a security, conceptually the aggregate of all the possible values each multiplied by its probability and discounted at an appropriate interest rate. A coin toss that pays \$3 but costs \$1 has a positive expected value. Recently the Powerball offered a \$500 million prize for the cost of a \$2 ticket with odds of

winning at 1 in 175 million. The corresponding \$2.85 expected value (\$500 million divided by 175 million) for a \$2 ticket could have tempted even the statistically hardened lotto player as well as the more typical buyer happy to trade "a dollar for a dream". There is a further \$0.36 of value from various smaller prizes.

Unfortunately, even at \$587.5 million (where the jackpot ultimately reached through frenzied last minute buying) it wasn't a good bet statistically (though I doubt the winners are too bothered by that). Winners don't actually receive



that sum, but instead are offered a discounted two thirds to account for the time value of money. The \$2.85 expected value drops to \$1.90. And lottery winnings are taxable, in this case probably in a tax bracket whose rate even Republicans would agree needs to rise; \$1.90 becomes \$1.07. But even this assumes that there's only one winner. In fact, given the 186 million tickets actually sold, the probability of precisely one winner is just over one in three; all the other outcomes from no winner to more than one have an aggregate probability of two thirds. There's a 20% chance of two winners (as it happens the actual outcome). These adjustments further reduce the expected value to just \$0.90. For those who only buy lottery tickets when the statistics support it, even a \$1 billion jackpot would have been insufficient to draw them in.

But lotteries do just fine without the buying support of Mathematical killjoys. They're run by state governments and are probably the only form of revenue that's raised from people who are smiling. Bloomberg reported earlier this year that annual ticket sales have reached \$50 billion. The regressive nature of the Lottery tax evidently causes few moral qualms, and since I don't buy lottery tickets it's a rare case of a tax that doesn't reach me. I wish there were more.

Economists have long wrestled with the apparent irrationality of lottery ticket buyers. In theory, no demand for them should exist. Behavioral finance ponders the tendency of individuals to overpay (statistically speaking) to avoid a large loss – most forms of insurance are based on this model, whereby homeowners pay more in insurance premiums than the actuarial value of the coverage purchased. This sensible behavior reflects declining marginal utility for money; losing a \$ hurts more than making a \$ helps, and at \$1 million it's just more so. Consequently, overpaying for low probability large pay-offs makes even less sense, but it happens all the time. There are some things economists just can't figure out.

But lottery-type behavior exists elsewhere, including in financial markets. The Capital Asset Pricing model (CAPM) relies on market participants to price stocks so that they have an identical risk-adjusted expected return. More volatile stocks ought to deliver higher returns, and less volatile stocks lower ones; except that they don't, as copious amounts of research have shown over the past forty years or so. Companies with slow and

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steady earnings growth are the tortoise that more often than not beats the high beta hare. There are several possible explanations for this, but one involves the desire of some investors to own lottery ticket-like stocks. More volatile stocks often include a few spectacular winners, but over time the gains on those have been insufficient to carry the weight of many others whose promised returns are ultimately not realized. However, the search for those big winners causes many investors to accept lower returns (i.e. invest at higher prices) when they hold higher beta equities. Discussing the small pharmaceutical stock you own that tripled when it was acquired will probably hold the interest of cocktail party companions rather better than expounding on why you still own McDonalds (MCD) which is one of our investments. I promise to talk about something else if we meet at a holiday party. Boring is often better in investing, but people may not care to hear that. Both our Hedged Dividend Capture and High Dividend Low Beta Strategies invest in just these types of companies.

In our investment portfolios we hold many names that are tortoise-like in that they're not supposed to provide daily excitement and fortunately rarely do. IBM and Family Dollar (FDO) fall in this category (although we recently sold FDO as its valuation became less attractive). We also own some names that have betas above 1 and are therefore, we expect, a bit more "hare-like" but well short of lottery tickets. Generally we limit such positions to 3% or so of the portfolio to prevent any one of them dominating results. Devon Energy (DVN) and JCPenney (JCP) both fall into this category and have been well short of winning lottery tickets of late. DVN is a totally U.S. focused energy company that is trading below the NAV of its proved reserves. They have a strong balance sheet including virtually no net debt (adding back cash on hand) and a well-regarded management team. JCP's transformation from a retailer addicted to coupons to a much higher margin "mall within a mall" of specialty stores has been bumpier than we expected but it too has a strong balance sheet with manageable debt, positive cash flows and a valuation that we believe is below liquidation value. DVN and JCP have both underperformed the market recently. In the same category, Howard Hughes Corp (HHC) and Energizer Holdings (ENR) both reached price targets recently and were sold.

SL Advisors, LLC focuses on identifying securities that are trading at a discount to intrinsic value.

Although equity indices closed modestly higher, November was quite a volatile month as investors suddenly incorporated higher investment taxes into their outlook following the election. By November 15th MLPs were down over 7% for the month. We used the opportunity to make some rebalancing trades and reinvest some of the additional cash that had built up through distributions. We think MLPs may wind up being relatively more attractive on an after tax basis than other income generating sectors once the new tax rates are set. Fiscal cliff negotiations will no doubt continue for the rest of December and quite possibly into January so headlines from government officials will remain part of the investment landscape for a while longer. Although equities represent a good long term investment and a far better one than the alternatives, cautious guidance on profits continues to be more common than not from CEOs. Major capital investments are in many cases being delayed until tax policy is clearer. As a result in our Deep Value Equity strategy we have a little more cash than normal, partly the result of sale proceeds such as those listed above.

The Hedge Fund Mirage is One Year Old

December marks the one year anniversary of the publication of my book. Being a first-time author brought many pleasant surprises, most notably the widespread positive reaction not only from the financial press but from the hedge fund industry as well. Although people sometimes assume that I've lost all my hedge fund friends, the reality is quite the opposite, and to illustrate the open-mindedness of many I am regularly asked to give presentations at conferences and other events. Next month I'll be at the GAIM Conference in Boca Raton where I'll be giving a keynote presentation. It'll be wrenching to leave New Jersey in January for a couple of days.

That doesn't mean people all agree with me that all the money ever invested in hedge funds would have been better off in treasury bills. But they are interested to hear my perspective, and perhaps in some small way highlighting the poor results of the clients will help lead to better outcomes in the future. Articulating a provocative view has been more fun than I expected, and hedge funds have further co-operated by continuing to deliver mediocre results at great expense, further challenging those who mistakenly assert that past results have been good for the typical client.