August 9, 2013 |NY Times
Win a Lottery Jackpot? Not Much Chance of That
By TARA SIEGEL BERNARD

When those exceedingly lucky people come forward to claim this week's Powerball lottery jackpot, which swelled to $448 million on Wednesday, it's hard not to think: Somebody is winning these things, right? It could be me.

This is exactly the sort of logic that, over the last year, led millions of people to spend $5.9 billion of their hard-earned dollars on Powerball alone. They spent nearly $69 billion on all lottery games in 2012, according to two lottery trade groups.

It is also precisely the kind of mental trap the Powerball people want you to fall in; they tweaked the game rules last year, doubling the price of tickets to $2 to raise more revenue and create more eye-catching jackpots.

And the state agencies running the games advertise heavily that it could be you making off with millions of dollars.

The odds of winning, however, remain infinitesimal: Powerball players, for instance, have a 1 in 175 million chance of winning. You have roughly the same chance of getting hit by lightning on your birthday.

Even though some people may be able to intellectually grasp what that means, the Multi-State Lottery Association can predict with clocklike certainty that on Saturday night, with a jackpot worth about $40 million, 13 million to 15 million people will buy tickets. Those ticket buyers are all thinking they have a shot of defying the odds.

That is why the lottery is called a tax on people who don't understand math. Lower-income individuals who play but don't win are hurt the most because they're wasting a greater share of their income on the games. That's also why the lottery is often called a regressive tax on the poor.

Sure, last year the games returned $19.41 billion to the states that sponsored them, according to the North American Association of State and Provincial Lotteries, which represents 52 lottery groups. But that's not why anyone plays them.

What's the big motivation to volunteer to pay this tax? Psychologists say it has more to do with our all-too-human propensity to run with the dreamlike possibilities it creates in our minds.

"For emotionally significant events, the size of the probability simply doesn't matter," said Daniel Kahneman, the Nobel-prize winning psychologist. "What matters is the possibility of winning. People are excited by the image in their mind.

The excitement grows with the size of the prize, but it doesn't diminish with the size of the probability."

So ticket buyers allow themselves some momentary escapism since it costs only $2, thinking about what they would do with all that money. And they'll ignore all of the well-known horrors and pitfalls that many lottery winners encounter, whether it's a severe depression or blowing through all of the money in a form of self-sabotage that ends with them living in a trailer down by the river. This phenomenon of feeling anxious and undeserving, among other things, is what some experts call "sudden wealth syndrome." It may afflict people who benefit from all sorts of success or windfalls, whether from the sale of a valuable business, signing an N.F.L. contract or inheriting a huge sum from a maiden aunt.

"Money that is much more than you're used to sounds unlimited," said Susan Bradley, a financial planner and founder of the Sudden Money Institute, who has worked with several lottery winners. "If you don't have someone to help you, yes, you can go through extraordinarily large amounts of money, and, even worse, you can be in debt. It can really happen."

Plugging some numbers into this dream provides some perspective. Winners wanting to be able to safely spend $1 million a year for 55 years (adjusted for inflation) would need about $36 million, after taxes, to invest, according to calculations by Northern Trust. (Those numbers also factor in annual taxes and investment expenses.) They would need to set aside nearly $15 million in high-quality bonds to know they would always have 15 years of spending in stable investments. To cover the remaining 40 years, they would need to put another $21 million in a diversified stock portfolio.

So in thinking about it, it's not even worth playing unless the jackpot is more than $75 million, because the state and federal government take about half in taxes.

Part of that fantasy is that winners would start buying fast cars and big homes, not to mention stuff for all of your family members along with their children's education. It's easy to see how they could run through the money, as hard as that may seem to believe with $36 million in hand. Of course, if you want to live even larger — more homes, more cars, more ex-spouses, servants, accountants, lawyers, other lawyers to watch the lawyers — you'll need far more. Probably more like $100 million, after taxes.

"If they make it to the fifth year with enough money to securely handle their life going forward and all of their relationships are intact, they are probably going to make it long term," Ms. Bradley said.

So let's get back to the probability of all of this ever even happening.

Buying more tickets improves your odds, but not by much. So if you want the fantasy, just buy one. Buying more doesn't make the fantasy any richer.

It would take centuries of ticket buying before you even make a dent. If you purchased roughly 126,000 tickets a month for the next 80 years, for example, you could improve your odds to 50 percent, explained Gary A. Lorden, emeritus professor of math at California Institute of Technology (who, for the record, has bought a single ticket three times over the last decade; he split the last one with his grandson).

"The difference is like moving from a big house to a small house to make it less likely a meteor will strike your roof," he said.

Good luck with that.