

## Lessons From the Couple Who Hacked the Lottery

The best story I've read in a while comes from Highline Magazine. It tells the tale of a couple from a small Northern Michigan town who figured out how to hack the lottery to win millions of dollars.

And what they did required no deception, no cheating, and no broken laws. It was perfectly legal and they won the lottery on thousands of occasions.

There are a number of applicable investing lessons from the story of Jerry and Marge Selbee.

**It pays to be first.** If you can find an investing idea, strategy, or arbitrage opportunity before everyone else, you can earn huge profits. After retiring, Jerry discovered a loophole in one of the Michigan lottery games called WinFall. The rules of the game were that you guessed six numbers in the drawing. The jackpot would go to anyone who picked all six. But there were smaller winnings paid out to anyone who picked five, four, three, or two numbers correctly.

And if no one picked all six, on the next drawing the winnings would "roll-down" to those who picked five, four, three, or two. Jerry ran the numbers and discovered that you could game the system by only buying lottery tickets on these roll-downs (which happened every six weeks or so) and give yourself a better chance to win (something no one at the state lottery thought of).

**You have to play the probabilities.** The craziest part of this story to me is that the odds were explicitly spelled out for anyone to see:

*The brochure listed the odds of various correct guesses. Jerry saw that you had a 1-in-54 chance to pick three out of the six numbers in a drawing, winning \$5, and a 1-in-1,500 chance to pick four numbers, winning \$100. What he now realized, doing some mental arithmetic, was that a player who waited until the roll-down stood to win more than he lost, on average, as long as no player that week picked all six numbers. With the jackpot spilling over, each winning three-number combination would put \$50 in the player's pocket instead of \$5, and the four-number winners would pay out \$1,000 in prize money instead of \$100, and all of a sudden, the odds were in your favor. If no one won the jackpot, Jerry realized, a \$1 lottery ticket was worth more than \$1 on a roll-down week—statistically speaking.*

*"I just multiplied it out," Jerry recalled, "and then I said, 'Hell, you got a positive return here.'"*

Once Selbee discovered he had the odds in his favor he bet big, often buying thousands of tickets a day (which would mean standing at the lotto machine all day long to print them out). Of course, the markets aren't governed by the exact laws of probabilities like they are in gambling but this is the idea behind all successful investment strategies.

Selbee even set up an LLC to bring in other investors into his strategy (mostly friends and family).

**You have to be willing to accept losses to earn gains.** Just because the probabilities are in your favor does not mean you win every time. There's always a chance a short-term outcome can go against you even when you have the odds in your favor. In fact, the first time he played, Selbee lost a little money on the 2,200 tickets he purchased.

The biggest loss on a single try was \$360,000. In total, the Selbees and their investment group ended up spending almost \$27 million on lottery tickets over a few years, while the winnings came out to just under \$8 million. That means they lost money on a regular basis but since the odds were stacked in their favor the positive expected returns more than made up for it.

**Eventually all edges go away in the markets.** Michigan shut down the WindFall game out of the blue but Selbee was hooked at that point so he decided to try his luck in Massachusetts, another state who ran the game (this required a 12-hour drive each way simply to purchase the tickets). But this time he ran into some competition.

Students from MIT had also figured out the loophole as well as a researcher from Boston University:

*Unbeknownst to him, however, the MIT students were preparing to attack the game with a new and unprecedented level of aggression. Though it would later be estimated that their group made at least \$3.5 million by playing Cash WinFall, they had noticed that their profit margins were declining, for a simple reason: competition. With MIT, Zhang and the Selbees pushing huge pots of money into each roll-down drawing, they were all having to split the payouts. This had gotten the students thinking. Might there be a way to freeze out the other groups? They hit on an idea: Instead of waiting for a roll-down, perhaps they could force one to happen, by making an insanely large bet.*

The MIT group actually approached Selbee at one point to team up but he liked being on his own. But with all the money pouring in the lottery association finally figured out the loophole after paying out large amounts to small groups like this. Once the story hit the Boston Globe the politicians finally shut it down.

There was nothing they could do to the Selbees because they didn't do anything illegal (even though it was implied that they were cheaters).

I love the fact that a guy who was interested in solving puzzles from a small town could figure something like this out on his own and win big. And my favorite part of the story is they didn't really change their lifestyle all that much after winning so much money.

The entire story is worth a read:

[The Lottery Hackers \(Highline\)](#)

