

Lotteries and State Budgets

Joan Baumgartner Brown
January 29, 2016

A couple months ago, driving on I65 in Indianapolis, I made a late decision to exit the interstate and in quickly moving into the right exit lane, failed to notice the black car already in that lane and sideswiped it. No one was hurt and the driver was in a pretty good mood, since it was my fault and my car was hurt much worse than hers, so we chatted by the side of the highway as we waited for the police. The weather was chilly and gray and we talked about Indiana winters. I mentioned that my daughter-in-law was from southern California and I fully expected my kids to move there at some point for the gorgeous weather.

“Oh, we LOVE Southern California and we hope to move there sometime. I’d love for my kids to grow up there,” she said. “And we’re already figuring out how to make that happen.”

“That’s great”, I said. “I’m so impressed when young families have a real plan for the future they really want.”

“Yep,” she said. “We buy lottery tickets every week. When we win big, we’re outta here.”

I started to make a sarcastic remark and then I looked at her face and saw that she was dead serious. That was their plan for their family’s future. The lottery.

As a plan for future financial security, the lottery doesn’t really provide a great chance for success. In fact there are lots of almost impossible things that are more likely to happen to any of us than winning mega millions lottery:

*Death by Vending Machine – odds 1 in 112 million

*Having Identical Quadruplets – odds in 1 in 15 million

*Becoming President – odds 1 in 10 million

*Becoming a Movie Star – odds 1 in 1.5 million

*Getting Struck by Lightning – odds 1 in 1 million¹

Chances of winning at the mega million level in the lottery are somewhere around 1 in 176 million. 1 in 176 million.

It may seem very strange to most of us, but we can clearly see from statistics, that even with these odds, for many Americans, the lottery represents a real possibility for a different way of life, a dream come true. And many states originally push for lotteries because they promise a dream come true for state budgets and they sell those lotteries as a dream come true for education, infrastructure, and a whole host of good causes.

State sponsored lotteries are the most popular form of commercialized gambling in the United States. In 2014, lottery tickets sales in the US surpassed \$70 billion (that's more than \$630 for every US household) according to the North American Association of State and Provincial Lotteries. That tops the \$62.7 billion spent on music, movies, books, video games and sports teams combined.²

And while lotteries, on the average, generate less than 3% of total state revenues, the sale of lottery tickets by state governments is arguably the most visible and controversial revenue-generating activity in which state governments participate. Today we'll look at a bit of history of lotteries, the role they play in state government budgets, and some of the consequences of lotteries as a source of state revenue.

History

While scholars disagree on the exact origin of lotteries, ancient accounts of lottery-type games can be found in every culture.

References to lotteries and "drawing lots" have been found in many ancient texts from numerous civilizations from Ancient China, to the Celtic Era, to Ancient Greece in Homer's *The Iliad*. Earliest records can be traced all the way back to between 205 and 187 B.C. during the Han Dynasty in what is now China. It is believed that the

game Keno, a lottery-like game that is still played in casinos and through some state lotteries, originated at the time. Even then lotteries were used to finance government projects, including one of the most famous, the Great Wall of China.

The first known European lotteries occurred during the Roman Empire. At first these lotteries were usually done simply as amusement at dinner parties for the nobility, however during the reign of Augustus Caesar tickets for a lottery were sold in order to raise funds for repairs to the City of Rome.

Public lotteries were first seen in Europe in the mid-1400s and the first lotteries with prizes in the form of money began to appear in numerous towns in Flanders (present day Belgium, Holland, and France). These first lotteries with monetary prizes were held to raise money to build chapels, almshouses, canals and port facilities. These lotteries were openly recognized and hailed as a less painful form of taxation and were quite popular among the people.

In 1567 Queen Elizabeth I established the first English state lottery. At this time England was seeking to expand its export markets around the world. The lottery was intended to raise money for the enormous costs of building ships and developing ports. The cost of tickets was too high for the average citizen and the first prize was an amazing £5000, which was paid partly in 'ready money', or cash, and partly in silver-plate, tapestries and 'good linen cloth'. To encourage as many people as possible to buy tickets, all ticket holders were promised freedom from arrest for all crimes other than murder, felonies, piracy or treason.³

King James I of England created a new lottery in London in 1612. The proceeds were used to aid the Virginia Company in financing the first British colony in America – Jamestown, Virginia. Supplying an overseas colony with food, materials and laborers was an expensive venture for the Virginia Company, and it depended upon the sale of stock to raise money. But when not enough people were willing to take

the risk and buy stock, the King authorized the Company to hold lotteries. The lotteries soon became the primary source of investment income for the Virginia Company. An interesting side note is that Anglican churches held two of the three winning tickets in the first lottery draw. ⁴

All 13 original colonies established lotteries, usually more than one, to raise revenue. Playing the lottery was not seen as participating in gambling but was seen as a civic responsibility.⁵ Many of our founding fathers participated in and sponsored lotteries. Benjamin Franklin, John Hancock, and George Washington were all prominent sponsors of specific lotteries for public works projects. In 1776 lotteries were used extensively to raise money for the colonial army.

When General George Washington, from a military camp in the midst of fighting in 1779, sent a letter of requisition to John Mitchell, the deputy quarter-master general in Philadelphia, he requested candlesticks, tablecloths, china and tucked some lottery tickets into the request with the instructions: "Please to examine if any of the inclosed (sic) tickets have come up Prizes."⁶ Thomas Jefferson, \$80,000 in debt at the end of his life, helped his heirs organize a lottery to dispose of the bulk of his property that would follow his death.

Lotteries were very active during the period following the adoption of the Constitution, prior to the establishment of effective means of local taxation. Before 1790, America had only three incorporated banks, so lotteries were a standard source for public and private financing. Between 1790 and the Civil War, fifty colleges, three hundred schools and most notably, universities such as Harvard, Princeton, Columbia, and Yale were funded by lotteries. During this period, more than two hundred churches were erected with lottery proceeds. A lottery announcement for a church in Providence, Rhode Island, said the operators anticipated a very rapid sale of tickets "for the promulgation of the blessed Gospel of Peace." With the exception of the Quakers, who fiercely opposed lotteries from the start, almost all religious denominations benefitted from lotteries. In 1791, the *Columbian Centinel*, an influential Boston newspaper put it this way: "there is

nothing in that sacred book (the Bible) which can be thought opposed to this method of gambling.”⁷

In the US, lotteries continued to gain popularity and provide financial gain well into the 19th century. They became so popular that a new industry, a proliferation of shops that sold only lottery tickets, grew up around the country; in 1831, in Philadelphia alone, there were over 100 such shops.

Despite their rapid geographical and financial growth, state-authorized lotteries were not without problems. Private firms gradually took over more of the day-to-day operations, and fraud became rampant. Many lotteries awarded fewer prizes than advertised or none at all. States found themselves unable to regulate the industry at all. Anti-gambling sentiment became part of the social reform movement already underway, which included abolition of slavery, promotion of women’s rights and temperance. People began to see gambling in general and lotteries in particular as a way of taking advantage of the poor.

In 1818, when local media uncovered problems with the New York Medical Society Lottery, promoted as the first lottery to promote medical science, the state legislature investigated and found that lottery operators routinely tipped off prominent people, mainly politicians, as to what the winning numbers would be. The legislature enacted a temporary ban on all lotteries in the state as a response.

Throughout the mid-1800s similar situations were developing in every state that sanctioned lotteries. Perhaps the most notorious state lottery was the Louisiana State Lottery, known as the "Golden Octopus" as ticket sales were so widespread that it reached into almost every American home. The Louisiana lottery was a breeding ground of corruption with operators having bribed the Louisiana state legislators, both Republican and Democratic to get the original contract to operate the lottery, and continued to bribe police, judges, governors, and congressmen, just at the time other states were beginning to look at lotteries suspiciously.

Spurred on by the horrible mess in Louisiana, in July of 1890 President Benjamin Harrison sent a message to Congress insisting that "severe and effective legislation"⁸ be enacted against all lotteries. Congress agreed and banned the US postal system from carrying lottery tickets almost immediately and in 1892 upheld a law to put a complete halt to all lotteries in the US by 1900. In 1905, the US Supreme Court reaffirmed the states' use of police powers to control gambling. No state was directly involved in any gambling operations and constitutional provisions prohibited lotteries in most states for the next 60 years.

But while the US experienced this 60-year prohibition against lotteries, at no point were they forgotten by the public or by elected officials. A group of New York philanthropists founded the National Conference for Legalizing Lotteries to support enactment of state and federal lotteries to fund hospitals and other charitable causes. Looking for alternatives to the steep increases in corporate and individual taxes during the First World War further fueled the debate in favor of lotteries. Not surprisingly, during the Great Depression, there was a flurry of proposals for lotteries at both the state and federal levels to fund unemployment relief.

In 1934, nearly four decades after Congress enacted legislation that essentially put an end to lotteries, Representative Edward A Kenney from New Jersey introduced a bill authorizing the federal government to establish a lottery to meet the expenses of the Veterans Administration, which had been significantly diminished by a cut in the federal budget.

Public support for these proposals was usually high, with every poll taken after 1938 showing more support than opposition.⁹ And yet the states remained, for the most part, lottery-free.

During this time, US citizens satisfied their taste for lotteries by illegally participating in Irish Sweepstakes and "numbers" games both domestically and abroad.

While the public's taste for lotteries may have been seasoned by the hope for economic security and actual wealth, lotteries really gained ground as an alternative to taxes. In 1956, the Republic Party platform proposed a national lottery on the grounds that it would provide tax relief for all taxpayers. Growing opposition to seemingly unending tax increases was a leading factor in finally revitalizing the conversations around legalized lotteries in the mid-20th century.

Then in 1963, the New Hampshire legislature created a state lottery, the first legal lottery in this century, labeled as a "sweepstakes" and tied it to horse races to avoid the federal anti-lottery statutes. In a period of relative national prosperity, New Hampshire's school system was one of the poorest-funded in the country and the voters chose the lottery as one solution. At the same time, lotteries were being voted down in Florida, Rhode Island, Vermont, Connecticut, Maine and West Virginia.

New York became the second state to create a lottery, doing so in 1967, followed by New Jersey in 1970. Faced with declining tax revenues due to industry and job losses in the early 1970s, Michigan, Ohio, Maryland, Washington, Rhode Island, Maine, Connecticut, Massachusetts, Pennsylvania, Illinois, Vermont and Delaware had all approved lotteries by 1978. The first scratch-off game was introduced in Massachusetts in 1974 and the present day lottery industry was on its way.

With tremendous additional economic strain during the 1980s and cuts in federal revenue-sharing programs, community block grants, funds for education, housing subsidies and other similar programs, the revenue that lotteries promised to provide state governments became even more attractive. During the decade of the 80s Arizona, California, Colorado, Florida, Idaho, Indiana, Iowa, Kansas, Kentucky, Missouri, Montana, Oregon, South Dakota, Virginia, West Virginia, Wisconsin, and the District of Columbia all established state lotteries.

In 1988, Indiana state voters approved a constitutional amendment lifting the ban on all gambling activities in Indiana by 62 percent approval vote. Legislators authorized the creation of the state lottery, along with pari-mutuel betting on horse racing, in May 1989. The first scratch-off game, Hoosier Millionaire, went on sale in October. Lotto Cash, the first online game, began in April 1990.

The lottery boon continued to grow, slower in some parts of the country, like the south, until presently, all but six states conduct state sponsored lotteries. Alabama, Utah, and Mississippi cite religious reasons. Nevada's casino industry continues to exert enough pressure to keep competition from the lottery out of the state. And Hawaii (who, along with Utah, bans all gambling) and Alaska haven't been able to muster up support by using the primary argument that they are losing revenues to adjacent states.

State Spending of Lottery Revenue

Prize money represents the biggest allocation of lottery revenue in all but five states. In those places (Delaware, Oregon, Rhode Island, South Dakota and West Virginia), a larger share of lottery revenue is set aside for the state.

On the average, about two-thirds of the 70 billion dollars in lottery revenue is set aside for prizes (and of course, winners pay taxes on those prizes). Then about 5 percent nationally, is allocated to administration — that covers things like salaries and advertising. What's left is money for the states to spend.

Data such as this doesn't tell us much about what states do with whatever money comes to them. What the data does tell us is that state lotteries generate vast revenues, most of which don't head back to the states for education or the other public works that lottery promoters often tout.

But there's little centralized data to help reach a more nuanced conclusion about the lottery's impact in the 44 U.S. states (and the District of Columbia) that have one.

Even if such data did exist, it would have to be treated with a great deal of caution because it's difficult to track specific spending of lottery revenues. John Oliver, on the HBO show *Last Week Tonight*, (after calling the lottery the best use of magic marker and ping pong balls since Kermit the Frog's eyes) gives a rather indelicate description of trying to track lottery money within state budgets. Oliver says such tracking is like trying to pee in one corner of a swimming pool. You can't contain it, you can't see where it went and in a couple minutes there's not even a warm spot where it was.

That said, the way states allocate their portion of lottery revenues generally fall into three major patterns: those states allocating revenues to general fund, those states allocating for non-education purposes, and those states allocating just for education.

The first category of state lottery allocations includes those states that transfer lottery proceeds to their general fund. Eight states (Connecticut, Delaware, Iowa, Maine, Maryland, Montana, North Dakota, and Rhode Island) and the District of Columbia drive revenue to their state's general fund, and these lotteries are spread throughout the country. However, they tend to be states with the oldest lotteries. With the exception of North Dakota's lottery, founded in 2004, the other seven state lotteries in this category are a minimum of 20 years old, and the majority of them are over 30 years old. While lottery revenues go directly to general funds, many of these states market their lotteries as benefiting public K-12 education programs. However, since lottery revenue is rarely tracked beyond the general fund, there is little data to support how much lottery money actually supports educational programs in these states.

The second category of state lottery allocation reflects 11 states that predominantly earmark revenue for specific programs other than education. These states currently include: Arizona, Colorado, Kansas, Massachusetts, Minnesota, New Jersey, New Mexico, Pennsylvania, South Dakota, Wisconsin, and Indiana. These states represent a wide variety of target for funding - everything from game and

fish funds (Minnesota) to publicly funded stadiums (Washington).

Indiana falls into this category, allocating equal amounts to the Police and Fireman's Retirement Fund and the Teachers' Retirement Fund (\$30 million to each) and the bulk of the revenues (\$164.5 million) to the Build Indiana Fund.

Since the Hoosier Lottery debuted in 1989, the agency has paid more than \$9.4 billion to winning players and has contributed more than \$4.3 billion to various causes across the state. The 1989 Lottery Act provided that \$10 million of Hoosier Lottery profits would be used annually to offset police and fire pension liabilities of towns and cities in Indiana and in 1999, the allocation was raised to \$30 million. The 1989 Act also provided for annual appropriation of Lottery profits to help reduce unfunded liability in the Indiana Teachers' Retirement Fund. While this allocation has been redirected a time or two, current law now requires transfer from lottery profits to the Pension Stabilization Fund (designed to address unfunded liabilities in the Teachers' Pension Fund) in the amount of \$30 million each year.

According to Carrie Stroud, Hoosier Lottery Chief of Staff the remaining monies currently go into the Build Indiana Fund, also established in 1989, which, in part, lowers the vehicle excise tax. The Build Indiana Fund also provides funds for specific capital and construction projects. In fiscal year 2015, Allen County received more than \$12 million in excise tax reduction, \$2 million into local police and fire pensions and \$38,000 into the Indiana Technology Fund. Teacher pensions are a liability of the state, so are not divided up into county or local distributions.

For FY 2015, the Hoosier Lottery contributed \$243 million of Indiana's total gaming revenue of \$903 million (total gaming revenue also includes riverboat wagering, racetrack and slot machine wagering, pari-mutuel betting, and charity gaming taxes), which is up from FY 2014 by 7.1%.

These 11 states earmarking funds for programs other than public K-12 education

represent a broad geographic and program variety, but programs do tend to reflect older, established state lotteries. All but 1 of the 11 states (New Mexico), has a lottery system older than 15 years.

The third and final category of lottery allocation includes the 25 state lotteries that currently earmark revenue support specifically for public education programs. The focus on educational and scholarship programs is a trend that has dominated the most recent states to adopt lotteries. This may be true because benefit to education is one of the key ways new lotteries are marketed to reluctant states.

Of those, 14 have earmarked 100 percent of lottery revenue to education, including both Illinois and Ohio. Ohio lottery approval was given “provided that the entire net proceeds of any such lottery are paid into a fund of the state treasury that shall consist solely of such proceeds and shall be used solely for the support of elementary, secondary, vocational, and special education programs as determined in appropriations made by the General Assembly. Michigan allocates less than 1% of their profits to causes other than education. In these states revenues either support elementary and secondary education, a college scholarship fund, or a mix of both. Some states explicitly cite education benefits in slogans marketing their lotteries:

Ohio: Take a chance on education. Odds are, you'll have fun!

New York: Raising Billions to Educate Millions

South Carolina: Big Fun, Bright Futures¹⁰

Recent studies show that in 21 of these 25 states, spending on education remains flat or actually decreased from before the implementation of the lottery, following an initial bump. In 2013, Daniel Jones of the Centre for Market and Public Organisation at the University of Bristol presented an academic study of US lotteries and concluded “the introduction of an education lottery fails to significantly increase state education expenditures. Instead, unrelated expenditures (in other areas of the budget) increase. Thus, the lottery does not change government’s contribution to education.”¹¹

Similarly, Patrick Pierce, a political science professor at St. Mary's College, and author of *Gambling Politics: State Government and the Business of Betting*, "Money from the lottery generally substitutes for money that would go to education anyway. After a few years, lottery money earmarked for education tends to find its way into a state's general revenue pool."¹² A pretty simple statement, but seems to accurately sum up what's happened across the country as the optimistic claims that helped get lottery legislation passed fade away. Pierce found that in the early stages of initiating a lottery, spending on services like education went up for a few years, but then began to level off as the new lottery winnings eventually replaced taxes collected as general revenue. "Governors could then take the political credit for no tax increases or tax cuts while they were governors," he said. "The only reason they were able to do it was because of the lottery. They didn't make state government more efficient. They didn't do anything other than benefit from this voluntary tax that state residents were paying."

Anecdotally as well as academically, regardless of the formal declarations of where lottery proceeds are directed, close examination shows that as the lottery begins adding revenues to education lines on state budgets, revenue from other sources begins to decrease. As an example, in 2012 North Carolina, with great fanfare, allocated \$100 million of lottery revenues for the construction of schools, but this wasn't an additional \$100 million for school construction. School construction had traditionally been funded in a large part through corporate taxes, but as the lottery revenues began to flow in, corporate taxes seeped off to other uses. And in a year of political importance, North Carolina voted to decrease corporate taxes across the board. And in truth, education expenditures actually decreased over time with the designation of these funds.

In Virginia, the story is very similar. Twenty-six years ago when the lottery law was presented to voters, it was sold as supplemental funding to improve schools. In practice, the roughly \$450 million in lottery funding that reaches the school systems is simply a replacement of funds the state has now withdrawn. That first Virginia

lottery law did not absolutely pledge lottery funds to schools, and voters were shocked to learn the money was going into the general fund. This caused a general uproar, and in 2000, an amendment was pushed through pledging the majority of lottery funds to education. 60% of the funds went into education but in the same year, that same amount was deducted from state budgeting for schools. The other 40% went to special projects such as enhanced special education and speech therapy programs, building and repairing crumbling schools, but only for a few years. Today even that split is gone and lottery monies simply lower the state's obligation to its schools.

Unintended Consequences

In addition to the fact that lottery revenues don't really provide the promised improvements in state services, including education, those opposed to state lotteries often argue that the revenue raised is not enough to offset social costs, such as problem gambling, the cost of fighting fraud, and exploitation of the poor, who disproportionately buy lottery tickets. These unintended consequences siphon money away from other state services and benefits.

There is growing evidence that the new games the lotteries consistently introduce to increase sales are increasingly more addictive than early sweepstakes-type games, and are compounding the problem of compulsive gamblers. Dr. Lance Dodes, Director of the Center for Problem Gambling at Mt. Auburn Hospital in Cambridge Massachusetts, estimates that 40% of his patients are lottery players.¹³

It's true that more than half of U.S. adults play the lottery occasionally, but only a small percentage of those players account for most of the sales. According to a 1999 report authored by Charles Clotfelter and Philip Cook, 54% of lottery sales come from only 5% of players (roughly 2.5% of U.S. adults). Sales figures from the National Association of State and Provincial Lotteries show that the highest percentage of lottery ticket sales are made by people with a high school education or

less and a household income of less than \$15,000 per year. And this same demographic ranks highest in demographic divisions of problem gamblers.

This is interesting, isn't it, just as an aside? State governments very often take quite a protective view of their citizens and invest heavily in public awareness campaigns to promote health and safety such as "don't drink and drive", "don't text and drive", "buckle up for safety", "only you can prevent forest fires" and on and on. But when it comes to the lottery, state governments spend about \$1 billion a year encouraging what can only be seen as risky behavior, certainly for some segments of the population.

As an antidote, 39 states, including Indiana, allocate public money to contraindications for compulsive gambling. The total amount of public funding allocated for problem gambling services in the U.S. in 2013 was \$60.6 million.

Just as in the 19th century, fighting fraud in the lottery industry also takes resources from state budgets. Retail storeowners and clerks are hitting lottery jackpots too often, spurring states to crack down on a variety of scams that cheat rule-abiding players—and divert money from state coffers. The scams tarnish claims that lotteries give people an equal chance to win big money.

In recent months, there have been incidents in several states. During 2015, investigations spurred by an Indianapolis television station caused the Hoosier Lottery to tighten its security and probe the practices of several retailers and winners. Indiana lottery law prohibits employees and owner from purchasing tickets in their own establishments. In addition, where the lottery had previously only checked on those winning prizes above a certain level, the investigation has led to the lottery taking a look at those winning smaller amounts but with unusual frequency. Michael Cuculic of Portage has won the Hoosier Lottery more times than anyone in the past 20 years, data shows. He's won 323 times, mostly from Daily 4, for a total of \$1.2 million. Two academic statisticians -- UCLA's

Skip Garibaldi and Jeffrey Rosenthal of the University of Toronto -- raised questions about Cuculic's number of wins. "He would have had to have spent about \$2.3 million on tickets, which comes to \$320 a day on lottery tickets," Garibaldi said.¹⁴ Cuculic denies spending that much on tickets. Investigations continue – at costs that come from lottery revenues.

Also close to home, in Michigan in November 2014, the state's auditor general found 37 storeowners turned in winning tickets worth about \$3.6 million in 2012 and 2013. One retailer collected 107 prizes worth \$346,312 in 2013. In addition, six storeowners didn't report more than \$500,000 in lottery winnings on their 2012 tax returns. The findings are under investigation. The Michigan Bureau of State Lottery also has software now to track every ticket and where it was sold, and soon will be able to check for patterns and anomalies, such as how often retailers claim winnings or how many winning tickets come from certain stores. In addition, lottery spokesman Jeff Holyfield said, the bureau will question every person who claims a large prize to find out how they obtained their ticket.

In reviewing winners of the Ohio Lottery since the inception of the games there in 1974, the Springfield (Ohio) News-Sun found several serial winners, many of them store operators, who cashed hundreds of tickets over several years. Since 2010, Ohio state lottery investigators have run an average of 100 stings a year at retail outlets, resulting in nearly 50 arrests.

Most often, lottery officials say, the scams involve retailers who are cashing in winning tickets for a fee for people who don't want to collect their jackpots personally because they owe back taxes, child support payments or other debts that states generally deduct from lottery winnings. Or, they're in the country illegally.

Aside from these unintended costs of the lottery, the greatest criticism of state run lotteries is that they are, in fact, a regressive tax. It's common to hear people refer to the lottery as a tax on people who are bad at math or a tax on the stupid, and

considering the aforementioned gambling statistics, we might consider it a tax on addicts. But is it a tax at all?

The key argument against the lottery being considered a tax is that participation is voluntary. A myriad of arguments exist on both sides, but one of the nation's foremost authorities on the impact of lotteries, Professor Ross Rubenstein, an education policy and public finance researcher at Georgia State University, presents a very compelling view of lotteries.

Professor Rubenstein contends that the lottery itself is not a tax. But the inflated price of lottery tickets is. In an article published in 2002, Professor Rubenstein sums it up by saying "If a competitive market existed for lottery products, it is unlikely that each firm's profits would approach 35 percent of revenues (the ballpark for state's profit). Although purchases of lottery tickets are voluntary, the implicit tax on a dollar spent on lottery products is not voluntary, just as sales taxes paid on purchased good are not voluntary."¹⁵

So, according to Professor Rubenstein, choosing to play is, certainly, voluntary but the unchallenged, uncompetitive price of lottery tickets is not.

It is illegal for anyone, except the states, to run a lottery. So unlike casinos, which do face stiff competition from other casinos and other types of wagering opportunities, lotteries operate as a monopoly. So, they can set their pricing artificially high (based on the true value of the product) or equivalently, set their payout rates artificially low.

If this inflated value constitutes a tax, and what else could it be considered as it is imposed by the state, and purchasers have no opt out and we also know without a doubt that a disproportionate amount of income is spent on the lottery by lower socio-economic groups, we can see where regressive tax doesn't seem like a stretch at all.

Studies have shown that those in the country in the lowest fifth in terms of socioeconomic status had the “highest rate of lottery gambling (61%).” Interestingly, the percent of those who participated in lottery gambling didn’t vary at all in the three highest socioeconomic statuses. People in those groups had a below 40% gambling rate. This same study, conducted by researchers at the University of Buffalo, also considered ethnicity and concluded that “increased levels of lottery play are unequivocally linked with certain subgroups in the U.S. population — males, blacks, Native Americans, and those who live in disadvantaged neighborhoods.”

The reasons that explain the connection between poverty and lottery play are complex. A 2008 experimental study in the *Journal of Behavioral Decision Making* states that “it would be naive to think that low-income individuals disproportionately play lotteries due to ignorance or cognitive errors.” The researchers found that participants, acutely aware of their economic status and the difficulties in breaking out of their strata, may play such unlikely odds because of a sense that this is a uniquely level playing field where everyone, rich or poor, has the same chance of winning.¹⁶

The sheer availability of lottery outlets and their heavy distribution in poorer neighborhoods and the power of lottery advertising (which could be a Quest paper in its own right) contribute to the unequal distribution of lottery purchases by poorer citizens. Where wealthier individuals may jump in and buy a few tickets when the payouts move into high levels (as we saw in the last couple weeks) as a form of entertainment and a “why not”, poorer individuals play on a consistent schedule and clearly do not see it as entertainment but as investment, perhaps the only chance they have of accruing any financial stability.

Cornell University economics and management professor David Just agrees with this. “What appears to be happening is that (players) really believe that there's going to be a return on this investment,” he says.

Even if everyone did understand the abysmal odds, Just says, his research shows why some still play.

"It's the desperation play," he says. "People don't treat it like entertainment. Instead those — particularly those who are poor — are treating this more as an investment opportunity. It's their Hail Mary pass to try and make it big."¹⁷

Just found that an amazing correlation exists between people who live around the poverty line and those who consistently play the lottery.

Studies from the Carolinas, California, Illinois and Connecticut echo that. And at least some lotteries acknowledge their market indirectly: An Ohio marketing plan once suggested that lottery ads be timed to coincide with the receipt of government benefits.

There's no denying that state budgets benefit from the revenues produced by lottery ticket sales but which of their citizens actually derive benefit on an individual and community level leaves a great deal of room for discussion. But even a cursory look, such as this Quest paper, leads us see that the promise of dreams coming true often falls short.

And we circle back around to my young friend by the side of the road. And her dream, her 1 in 176 million chance, of winning big and moving her young family to sunny Southern California.

End Notes/Bibliography

¹Gregory Wallace, "Odds of Winning the Powerball Jackpot." February 9, 2015. CNN Money, Cable News Network. December 7, 2015. <http://money.cnn.com/2015/02/09/pf/powerball-jackpot-odds/>

² Chris Isidore, "Americans and the Lottery", February 11, 2015. CNN Money, Cable News Network, September 26, 2015. <http://money.cnn.com/2015/02/11/news/companies/lottery-spending/>

³ "The First National Lottery", Timelines: Sources from History, The British Library. December 7, 2015. <http://www.bl.uk/learning/timeline/item102765.html>.

⁴ Wesley Frank Craven. The Virginia Company of London, 1606-1624. (Williamsburg, VA: Virginia 350th Anniversary Celebration Corporation, 1957).

⁵ Charles T. Clotfelter and Philip J. Cook, Selling Hope: State Lotteries In America (Cambridge, MA: Harvard University Press, 1989), 20.

⁶ Gary Hicks, Fate's Bookie: How the Lottery Shaped the World, (Stroud, Gloucestershire: The History Press, 2009) 123.

⁷ Hicks, Fate's Bookie: How the Lottery Shaped the World, 126.

⁸ "American Lotteries", History of Lotteries.com., December 28, 2015. <http://www.historyoflottery.com/index.html>

⁹ Clotfelter and Cook, Selling Hope, 43.

¹⁰ Richard C. Auxier, "Nearly All States Play the Lottery, but None Win Big". September 9, 2014. TaxVox, Tax Policy Center, Brookings Institute. December 21, 2015. <http://taxvox.taxpolicycenter.org/2014/09/09/nearly-states-play-lottery-none-big-winners/>

¹¹ Daniel Jones, "Education's Gambling Problem: The Impact of Earmarking Lottery Revenue for Education" (Bristol, UK: Centre for Market and Public Organization, University of Bristol, 2013).

¹²David Goldman, "Does Powerball Really Fund Education?", January 24, 2016. CNN Money, Cable News Network, January 18, 2015. <http://money.cnn.com/2016/01/13/news/powerball-education/>

¹³ Daniel Golden and David M. Halbfinger, "Lottery Addiction Rises, and Lives Fall," Boston Globe, February 11, 1997, A1.

¹⁴ “Hoosier Lottery Fraud”. Call 6 Investigates. WRTV, ABC. Indianapolis, Indiana. July 2015. Television.

¹⁵ Ross Rubenstein and Benjamin Scafidi, “Who Pays and Who Benefits?”, National Tax Journal, Vol. LV, No. 2, June 2002.

¹⁶ Emily Haisley, Romel Mostafa, George Lowenstein. “Subjective relative poverty and Lottery Ticket Purchases”, Journal of Behavioral Decision Making, Volume 21, Issue 3, 283-295. July 2008.

¹⁷“Lotteries Take in Billions, Often Attract the Poor”. All Things Considered. NPR. July 16, 2014. Radio.