January 19, 2006

Lottery Taxes Divert Income from Retirement Savings

by Alicia Hansen and Gerald Prante

Saving for retirement is a daunting prospect for many people, one that can make get-rich-quick options seem more attractive than slow and steady saving, investing, and planning. A recent survey conducted by Opinion Research Corporation for the Consumer Federation of America and the Financial Planning Association, reported in a MarketWatch article, found that Americans are, for the most part, pessimistic about their ability to save for retirement—so pessimistic, in fact, that 21 percent of respondents said playing the lottery is "the most practical strategy for accumulating several hundred thousand dollars" for retirement.

The results of this study are not surprising, given that in Fiscal Year 2002, the average American spent more on lotteries than on reading materials or attending movies, and in Fiscal Year 2004, the average American spent $184 on the lottery (this figure includes video lottery terminals). If lottery players instead invested this money, they would have a head start on preparing for retirement. Few lottery players beat the long odds (less than one in 146 million for the Powerball grand prize[1]) and win enough money for retirement, and lotteries, on average, return only 53 cents on the dollar[2]. For the average investor, over a forty-year period, the stock market returns 811% more than the lottery.

As Table 1 shows, a person who spends $100 per month on the lottery—slightly less than the average resident of Rhode Island spends on the lottery (see Table 2)—over a forty-year period would be $144,000 richer if he instead invested that money. A lottery player who spends $50 per month—slightly less than the average resident of Massachusetts—would have an additional $72,201 if he instead invested his money, and the average New Yorker, who spends about $25 a month on the lottery, could be over $36,000 richer by retirement age if he instead invested in the stock market.

For the highest-spending lottery players, the difference is even more dramatic. A person who spends $300 a month on the lottery could instead earn nearly half a million dollars in the stock market—$433,208 more than he would win playing the lottery. According to the National Gambling Impact Study Commission, in 1998 the top 5 percent of players spent $3,870 or more annually, and the top 10 percent spent 2,593 or more[3]. There are five states where per capita annual lottery spending exceeds $500 (Rhode island, South

Dakota, Delaware, West Virginia and Massachusetts), and in the majority of lottery states, per capita spending is over $100.

Table 1. Rate of Return on Lottery vs. Rate of Return on Stocks over a Forty-Year Period

Average Amount Spent or Invested per Month (2006 Dollars)	Total Spent or Invested over 40 Years	Expected Return from Lottery [a] (Nominal Amount at End)	Expected. Return from Lottery [a] (2006 Dollars)	Expected Return from S&P 500 (Nominal Amount at End)	Expected Return from S&P 500 (2006 Dollars)	Increased Retirement Savings from Investing Rather than Playing Lottery (2006 Dollars)
$1	$761.37	$403.53	$178.14	$3,674.50	$1,622.17	$1,444.03
$5	$3,806.85	$2,017.63	$890.72	$18,372.49	$8,110.85	$7,220.13
$10	$7,613.70	$4,035.26	$1,781.44	$36,744.98	$16,221.69	$14,440.26
$25	$19,034.26	$10,088.16	$4,453.59	$91,862.44	$40,554.23	$36,100.64
$50	$38,068.52	$20,176.31	$8,907.18	$183,724.88	$81,108.46	$72,201.29
$100	$76,137.03	$40,352.63	$17,814.35	$367,449.77	$162,216.92	$144,402.57
$150	$114,205.55	$60,528.94	$26,721.53	$551,174.65	$243,325.39	$216,603.86
$200	$152,274.07	$80,705.26	$35,628.70	$734,899.53	$324,433.85	$288,805.14
$250	$190,342.59	$100,881.57	$44,535.88	$918,624.41	$405,542.31	$361,006.43
$300	$228,411.10	$121,057.89	$53,443.05	$1,102,349.30	$486,650.77	$433,207.72

Note: Calculations assume a constant 2 percent inflation rate, 7 percent return on S&P 500 average, and monthly compounding. Lottery spending is not adjusted for life cycle or income cycle.

(a) Based on a 53% cumulative payout rate for all lotteries from 1964 through 2003. These figures represent the average lottery player's winnings; of every dollar spent by consumers, lottery agencies have returned 53 cents in the form of prizes. Payout rates vary by state, type of game and year. See Teresa LaFleur and Bruce LaFleur, LaFleur's 2003 World Lottery Almanac (Boyds, Maryland: TLF Publications, 2003), 19.

Source: Tax Foundation.

Table 2. State Lottery Sales Per Capita, Fiscal Year 2004

State	Per Capita Sales	Rank
U.S. (a)	$184.25	N/A
Arizona	$64.75	37
California	$82.57	29
Colorado	$87.71	28
Connecticut	$259.68	9
Delaware (b)	$777.57	3

District of Columbia	$441.06	6
Florida	$178.56	18
Georgia	$309.66	7
Idaho	$79.21	31
Illinois	$134.78	24
Indiana	$118.17	26
Iowa	$71.20	36
Kansas	$82.12	30
Kentucky	$175.52	19
Louisiana	$75.50	35
Maine	$141.54	22
Maryland	$252.10	11
Massachusetts	$682.60	5
Michigan	$194.88	14
Minnesota	$76.12	34
Missouri	$137.97	23
Montana	$39.83	39
Nebraska	$53.17	38
New Hampshire	$183.23	17
New Jersey	$252.40	10
New Mexico	$78.64	32
New York	$304.24	8
North Dakota (e)	$9.21	N/A
Ohio	$188.21	16
Oregon (b)	$249.55	12
Pennsylvania	$189.86	15
Rhode Island (c)	$1,373.04	1
South Carolina	$227.63	13
South Dakota (c)	$865.25	2
Tennessee (d)	$72.82	N/A
Texas	$130.28	25
Vermont	$148.83	21
Virginia	$170.30	20
Washington	$78.06	33
West Virginia (b)	$718.81	4
Wisconsin	$87.94	27

(a) Excludes states with no lottery as of July 1, 2004: Alabama, Alaska, Arkansas, Hawaii, Mississippi, Nevada, North Carolina, Oklahoma, Utah and Wyoming
(b) Includes net video lottery terminal (VLT) sales (cash in less cash out).
(c) Includes gross VLT sales (cash in).
(d) Sales began January 20, 2004.
(e) Sales began March 25, 2004.

Source: North American Association of State and Provincial Lotteries; Census Bureau population data; Tax Foundation calculations.

Other Problems
Lotteries present other problems than the long odds of winning. Contrary to many

people's beliefs—and to state governments' claims—the money that states raise from lotteries is tax revenue, and lotteries exemplify poor tax policy in three ways[4]: First, they are not economically neutral. Since tax revenue pays for general public services, it is important that taxes be levied as broadly as possible rather than on a subset of the population who happen to enjoy a particular product or service. But the lottery imposes a high (45% in 2003) implicit tax rate on one product, and legislators, often reluctant to raise income or sales taxes, reason that voters are more accepting of a high tax on a recreational activity like gambling.

Second, good tax policy requires taxes that are easily understood, or transparent. Taxpayers should know if a product is taxed and how much. Lottery retailers do not give customers receipts itemizing the tax, and since states do not classify lottery profits as tax revenue, consumers may be unaware of the heavy built-in tax.

Third, many studies have shown that lotteries are regressive, meaning low-income people spend more as a percentage of their income. The aforementioned study bears this out: while 21%of total respondents considered the lottery a practical way to save for retirement, 38% of those with incomes under $25,000 reported that the lottery was a smart retirement plan.

Footnotes

1. See http://www.powerball.com/powerball/pb_prizes.asp.

2. This is the cumulative payout rate for all lotteries from 1964 through 2003, representing the average lottery player's winnings. Of every dollar spent by consumers, lottery agencies have returned 53 cents in the form of prizes. Payout rates vary by state, type of game and year. See Teresa LaFleur and Bruce LaFleur, *LaFleur's 2003 World Lottery Almanac* (Boyds, Maryland: TLF Publications, 2003), p. 19.

3. Charles T. Clotfelter, Philip J. Cook, Julie A. Edell and Marian Moore, "State Lotteries at the Turn of the Century: Report to the National Gambling Impact Study Commission" (Washington, DC: Government Printing Office, 1999), p. 12.

4. See Alicia Hansen, Tax Foundation *Background Paper* No. 46, "Lotteries and State Fiscal Policy" (October 2004).

Tax Foundation
2001 L Street N.W., Suite 1050
Washington, DC 20036
Ph: (202) 464-6200
www.taxfoundation.org