## Example 13.1 State Lotteries

Over the past 40 years, state governments have increasingly turned to lotteries as means of supplementing their general revenues. Forty-three states (and Washington, D.C.) have lotteries, and all but two of those participate in multi-state lotteries (the exceptions are California and Florida). ${ }^{1}$ Of the seven states that do not have lotteries-Alabama, Alaska, Hawaii, Mississippi, Nevada, Utah and Wyoming-six have special reasons for avoiding them. There is strong religious opposition to gambling in Alabama, Mississippi, and Utah; the casino owners in Nevada do not want competition from a state lottery; and Alaska and Hawaii do not have to worry about losing revenue to neighboring states with lotteries, a common fear that led many states to establish their own lotteries.

## The Lottery Games

The state lotteries offer five basic products (with the percentage of total sales in parentheses). ${ }^{2}$

Instant Games (47\%) - these are typically scratch cards in which winning numbers are paid off immediately by the retail establishments that sell them.

Lotto (21\%) - customers select five or six numbers from a large set of numbers and win if their numbers are randomly selected in any order in a weekly drawing. In one common version of the game, 6 numbers are chosen from 1 to 44 . In the Powerball version of the game, 5 numbers are chosen from 1 to 53, and then one more number, the Powerball, from 1 to 42 . The odds of winning the first game are approximately one in seven million; the odds of winning the Powerball game, one in 120 million. The winners receive a percentage of the total expenditures on each Lotto game. Since the prize money

[^0]is rolled over into the next game if no one wins, it sometimes reaches hundreds of millions of dollars. Customers who select four or five of the winning numbers receive smaller payoffs on the order of a few hundred to a few thousand dollars.

Numbers games (19\%) - a legal version of the illegal street numbers games in which customers select three or four numbers.

Video Lottery Terminals (6\%) - Customers play a variety of games such as blackjack or poker on video terminals hooked up to a central computer, with winners receiving payouts immediately from the operators. This is the newest lottery product, available only in a few states.

Keno (5\%) - a variation of the numbers games in which customers select a few numbers and are paid off immediately by the operator of the game rather than from the pool of money bet on the numbers by the customers. The appeal is that there are repeated games/drawings of winning numbers throughout the day, rather than payoffs every few days or weekly as with the numbers games and Lotto.

The states run these lottery games in large part because the American public has eagerly embraced them. The state lotteries are the most popular form of commercial gambling in the United States - it is estimated that half of all American adults participate in the lotteries. ${ }^{3}$ In FY 2010, lottery sales were $\$ 58.8$ billion, of which the states took out $\$ 17.8$ billion in revenues. ${ }^{4}$

## History of Lotteries in the United States

Lotteries have not always been so popular in the United States. Indeed, they have a rather checkered history that divides into three distinct periods, beginning with Colonial America. The colonies imported lotteries from England where they had long been commonplace as a means of financing public works. For example, the British established a lottery in London to help finance the settlement in Jamestown, Virginia in the early 1600s. The colonies simply continued the practice of using lotteries to finance public works. Private institutions also ran lotteries to finance buildings, particularly religious institutions and universities. Some of the early buildings at Harvard, Yale and Princeton were financed with lotteries, as were many churches in the colonial period. The use of lotteries continued unabated until the 1830s, when they finally began to succumb to pressures from two sources. One was that the lotteries were usually licensed to private firms to operate and the firms were often less than honorable - fraud and corruption became widespread. The second was increasing opposition from social reformers and religious groups. States began to ban lotteries in the 1830s; by 1862 they were permitted in only two states.

Lotteries began to reappear in the 30 years following the Civil War, spurred on by the need to raise funds for reconstruction of the South and by the freewheeling, gambling

[^1]spirit of the Gold Rush to the Western frontier. This lasted until the 1890s, when social reformers and religious groups again rose up to oppose lotteries and other forms of gambling. In the 1890s, Congress passed laws banning interstate sales of lottery tickets and any use of the mails by lotteries, and by 1894 all state lotteries had disappeared. In 1910, the only legal form of gambling in the United States was horse racing, and that only in a few states.

The ban against state lotteries lasted for 70 years. New Hampshire finally broke away and ushered in the current period by establishing a state lottery in 1964, and New York (1967) and New Jersey (1970) soon followed its lead. New Jersey's was the first lottery that turned a significant profit (that is, revenue) for the state government, and the rush was on over the next 30 years to emulate New Jersey's success. Twelve states instituted lotteries in the 1970s, 17 states in the 1980s (plus Washington, D.C.), 6 states in the 1990s, and six states since $2000 .{ }^{5}$

## The Pros and Cons of State Lotteries

The current popularity of state lotteries appears to be driven by three main factors. The first is simply that people enjoy playing the lottery games. They presumably ignore the fact, discussed below, that the lottery is a thinly disguised form of taxation, preferring instead to view their participation in the various lottery games as a voluntary form of entertainment. The state supports this view with heavy advertising campaigns that trumpet the entertainment value of the games. State legislatures also earmark the lottery revenues for particular items, with education being the most common (23 states), thereby emphasizing that money spent on lottery games supports the public good. ${ }^{6}$ The second factor is the externality mentioned above, that once some states have lotteries, states without lotteries worry about losing revenue to the lottery states if they do not establish their own lotteries. Small states can easily join in partnerships with other states so that games such as Lotto have large enough prizes to interest people in playing. The third factor is that the lottery games are important sources of profit for the retail establishments that sell instant games, Lotto, and numbers tickets (mostly convenience stores) and that operate Keno and video terminal games. There are over 180,000 lottery retailers in the U.S. ${ }^{7}$ These retailers have clearly exerted strong political pressures on states without lotteries to institute them and to advertise the lottery games once the states do have them.

Proponents of state lotteries also argue that state lotteries substitute for illegal gambling, that is, people would spend just as much on illegal forms of gambling as they do on the state lottery games if the latter did not exit. They also note that the current state lotteries have generally been free of corruption.

[^2]The arguments against the state lotteries take a number of different forms. Some people have a moral aversion to any form of gambling - they view gambling as a sinful activity that the states have no business becoming involved in. Others worry about the social consequences of the state lotteries, that they may promote addictions to gambling. As noted above, these two arguments have long standing in the U.S. and were instrumental in the bans against lotteries that occurred before the Civil War and after 1894. Still another argument against the state lotteries is economic in nature, that a lottery is just another form of taxation and a particularly noxious form at that. It has three major drawbacks as a source of tax revenue. First, it is not at all a transparent tax, as already noted, to the point that many people who oppose tax increases of any kind nonetheless support expansions of the state lotteries. Second, it is a very high tax. The effective tax rate is the ratio of the revenues kept by the state to the sum of the prize money distributed and the administrative costs associated with the lottery games. (This is the rate on the net-of-tax base, which is how sales and excise taxes are typically stated.) In FY 2003, the average tax rate was $45.2 \%$, with a high of $83.3 \%$ in Oregon and a low of $20.9 \%$ in South Dakota. ${ }^{8}$ Most people would never accept general sales or excise taxes rates anywhere near $45 \%$, or even the $20.9 \%$ rate in South Dakota. Finally, it is a highly regressive tax. According to the 1996 report of the National Gambling Impact Study Commission, the average annual per capita expenditures on state lottery games by income class were: \$10,000 to \$24,900: \$569; \$25,000 to \$49,000: \$322; \$50,000 to \$99,999: \$225; and $>\$ 100,000: \$ 196$. $^{9}$

In addition, the argument that the state lotteries substitute for illegal gambling may not be true. One recent study of consumer behavior concluded that money spent on the lottery games reduces consumption of other goods and services by about $2 \%{ }^{10}$ Many economists are also skeptical that earmarking the lottery revenues for particular state services is at all effective in promoting those services. The problem is that money is fungible. For example, states that earmark the lottery revenues for education and want to spend the additional revenue on something else can substitute the lottery money for general revenues that would otherwise have been spent on education and redirect those general revenues to the favored item. The redirecting of funds is especially likely because the lottery revenues are relatively small - they average about 2\% of total state general revenues in the forty lottery states. ${ }^{11}$ Therefore, it is easy for the states to substitute lottery revenues for other sources of general revenue (primarily sales and income taxes) in the earmarked categories.

Despite some compelling arguments against the state lotteries, their popularity is such that they appear to be here to stay for the foreseeable future. This is so even though banning them would have only a minor effect on total state revenues.

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[^0]:    ${ }^{1}$ Data on lotteries can be found on the website of the North American Association of State and Provincial Lotteries, www.naspl.org. See, also, Hansen, A. (2004) Lotteries and State Fiscal Policy, Background Paper, October, Number 46, Tax Foundation, Table 1, p. 6. The example is based largely on this paper, which the interested reader should see for a more complete discussion of the state lotteries as well as an extensive research bibliography on the lotteries.
    ${ }^{2}$ The games are described in ibid., pp. 10-14.

[^1]:    ${ }^{3}$ Ibid., p. 1.
    ${ }^{4}$ North American Association of State and Provincial Lotteries, Member Lotteries, Sales and Profits. www.naspl.org.

[^2]:    ${ }^{5}$ For a more complete history of the lotteries, see Hansen, op. cit., pp. 3-8. The dates of the state adoptions are from Table 1, p. 6 and the website of the North American Association of State and Provincial Lotteries, www.naspl.org.
    ${ }^{6}$ Ibid., p. 18.
    ${ }^{7}$ Ibid., p. 9.

[^3]:    ${ }^{8}$ Ibid., Table 3, p. 15.
    ${ }^{9}$ Ibid., p. 28.
    ${ }^{10}$ Ibid., p. 21.
    ${ }^{11}$ Ibid., Table 5, p. 19.

