

EDUCATION'S GAMBLING PROBLEM

HOW STATE EDUCATION LOTTERIES REDUCED CHARITABLE DONATIONS



Over the past fifty years in the United States, state governments have gradually come to adopt government-operated lotteries as an additional source of revenue.

Of the 43 states that currently operate a lottery, 20 states earmark 100 per cent of their lottery revenues for education-related spending, but what impact do these lotteries have on education funding? **Daniel Jones** analyses the impact of education lotteries on voluntary donations.

Part of the answer depends on whether state governments use lottery revenues as promised. Some evidence suggests they do not. That issue aside, government is not the only source of funding for education; education also benefits from and relies on private donations.

A good cause

In the United States, education is often the most popular secular category of giving.

In 2011, Americans donated \$40 billion to education related causes – roughly twice the amount raised from 2011 government-operated lottery revenues. That education is widely viewed as a ‘good cause’ is part of the reason that many states tie their lottery to education, especially in states where lotteries are opposed for cultural or religious reasons, but how does tying a lottery to a ‘good cause’ impact voluntary donations to that cause? This is tied to a larger (and much-discussed) question: what motivates donors to give?

If ensuring a certain level of funding for a cause is an important motivation, then a new source of funding might ‘crowd-out’ private donations; a donor knows that they can reduce their contributions to the cause while still maintaining the same overall level of funding. Alternatively, if donors are completely motivated by the joy or ‘warm glow’ they receive from giving, we would not expect crowding-out of donations.

Crowding-out

Looking at the impact of the introduction of state-run education lotteries on charitable donations the findings show that donations to education significantly decrease. Based on donor-level survey data, the average donor reduces his or her education donations by between 20 and 30 per cent when a lottery is introduced. This is not to say that education-related giving falls by 20 or 30 per cent, as many of the dollars that are donated do not come from the ‘average donor’ and instead are part of large donations made by the very wealthy. Still, at a more aggregate level, there is a substantial decline in donations; using data from non-profit firms’ financial statements, which therefore account for donations from both ‘major donors’ and ‘average donors’, total donations to education-related organisations fall by between seven and eight per cent.

The evidence points towards donations being crowded-out. As illustrated in figure 1, the response is clearly linked to the fact that an *education* lottery is being introduced. There is no change in donations to other causes, as one might expect if donors were simply reducing charitable giving to

pay for a previously-unavailable good (lottery tickets). Moreover, the drop in donations is mainly driven by individuals who never play the lottery. Similarly, education donations are not impacted when a lottery unrelated to education is introduced. It also genuinely seems to be the donors who are responding. Andreoni and Payne (2003, 2011) have pointed out that what looks like a crowding-out of donors is often actually driven by a decrease in fundraisers' effort, but – looking at fundraising behaviour in response to a lottery – that does not appear to be the explanation for these drops in giving.

These results are somewhat surprising given a long literature searching for evidence of crowd-out; much of the existing work finds very little decline in donors' willingness to give.

Too much information

What makes education lotteries different? One explanation is that these lotteries are more salient to donors than the types of government spending previously studied (e.g., government grants to non-profits). States spend millions of dollars advertising their lotteries and are quick to point out that the money goes towards education. Maybe donors are crowded-out by a new source of funding but only if they are aware of the change in spending. Exploring this idea more directly, there is indeed evidence that the most crowd-out occurs in states that spend more on advertising their lotteries.

Similarly, there is more crowd-out in states where lotteries are introduced through direct vote rather than through legislative action. These are the states where, presumably, a larger number of donors are aware of this new source of funding for education.

Multiple good causes

This returns us to the initial question: how does tying a lottery's revenues to a 'good cause' impact citizens' voluntary donations to that cause? In this context, the answer is fairly clear: donations fall. However, the fact that state governments are very vocal about the *particular* cause being supported (education) seems to be critical to this result.

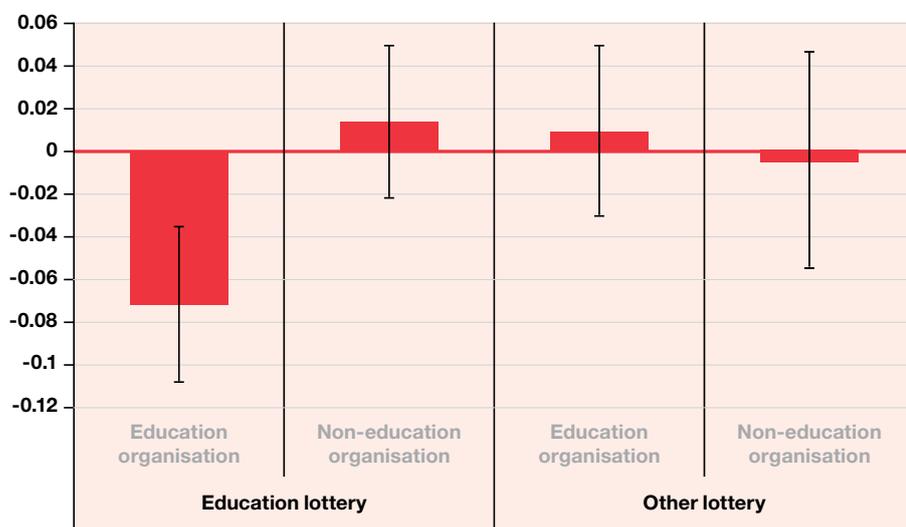
This suggests that a lottery supporting 'good causes', but without loudly highlighting any one cause in particular, may avoid disrupting charitable activity. Within the US, the lotteries that do not fund education often fund a bundle of causes; this could explain why the figure above reveals very little evidence of a drop in giving to non-education organisations when a non-education lottery is introduced.

Outside of the US, large-scale lotteries like the UK National Lottery and the Dutch Postcode Lottery often provide funding for a huge number of charities across a variety of causes. Without constant reminders that a *particular* cause is being supported, these lotteries might be immune to the crowd-out observed here. Indeed, in an analysis of UK

charities that have received lottery grants, Andreoni et al. (2013) find no evidence of crowd-out. Thus, while earmarking lottery revenues for a particular cause does enhance the profitability of the lottery (Landry and Price (2007)), this benefit comes at the cost of disrupting private charitable support.

A lottery supporting good causes but without loudly highlighting any one cause in particular may avoid disrupting charitable activity.

Figure 1
Change in donations received by non-profits after a lottery is introduced



Y: Percent change

Daniel Jones is Assistant Professor of Economics, Darla Moore School of Business, University of South Carolina

Further reading

Andreoni, J., & Payne, A. A. (2003), *Do government grants to private charities crowd out giving or fund-raising?* *American Economic Review*, 792-812.

Andreoni, J., & Payne, A. A. (2011), *Is crowding out due entirely to fundraising?* *Evidence from a panel of charities*, *Journal of Public Economics*, 95(5), 334-343.

Andreoni, J., Payne, A., & Smith, S. (2013), *Do grants to charities crowd out other income? Evidence from the UK*, CMPO Working Paper 13/301.

Landry, C. E., & Price, M. K. (2007), *Earmarking lottery proceeds for public goods: Empirical evidence from US lotto expenditures*, *Economics Letters*, 95(3), 451-455.