

Yes, it is rational to vote

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With another national election coming up, and the publicity building up already, now is a good time to ask, is it rational for you to vote? And, by extension, is it worth your while to pay attention to what Hillary, Rudy, and all the others will be saying for the next year or so? With a chance of casting a decisive vote that is comparable to the chance of winning the lottery, what is the gain from being a good citizen and casting your vote?

The short answer is, quite a lot. First the bad news. With 100 million voters, your chance that your vote will be decisive--even if the national election is predicted to be reasonably close--is, at best, 1 in a million in a battleground state such as Ohio and much less than 1 in 10 million in a less closely-fought state such as New York. (The calculation is based on the chance that your state's vote will be exactly tied, along with the chance that your state's electoral vote is necessary for one candidate or the other to win the Electoral College. Both these conditions are necessary for your vote to be decisive.) So voting doesn't seem like such a good investment.

But here's the good news. If your vote is decisive, it will make a difference for 300 million people. If you think your preferred candidate could bring the equivalent of a \$50 improvement in the quality of life to the average American--not an implausible hope, given the size of the Federal budget and the impact of decisions in foreign policy, health, the courts, and other areas--you're now buying a \$1.5 billion lottery ticket. With this payoff, a 1 in 10 million chance of being decisive isn't bad odds.

And many people do see it that way. Surveys show that voters choose based on who they think will do better for the country as a whole, rather than their personal betterment. Indeed, when it comes to voting, it is irrational to be selfish, but if you care how others are affected, it's a smart calculation to cast your ballot, because the returns to voting are so high for everyone if you are decisive. Voting and vote choice (including related actions such as the decision to gather information in order to make an informed vote) are rational in large elections only to the extent that voters are not selfish.

That's also the reason for contributing money to a candidate: Large contributions, or contributions to local elections, could conceivably be justified as providing access or the opportunity to directly influence policy. But small-dollar contributions to national elections, like voting, can be better motivated by the possibility of large social benefit than by any direct benefit to you. Such civically motivated behavior is consistent with both small and large anonymous contributions to charity.

The social benefit from voting also explains the declining response rates in opinion polls. In the 1950s, when mass opinion polling was rare, we would argue that it was more rational to respond to a survey than to vote in an election: for example, as one of 1000 respondents to a Gallup poll, there was a real chance that your response could noticeably affect the poll numbers (for example, changing a poll result from 49% to 50%). Nowadays, polls are so common that a telephone poll was done recently to estimate how often individuals are surveyed (the answer was about once per year). It is thus unlikely that a response to a single survey will have much impact.

So, yes, Virginia--and Ohio, and Florida, and Pennsylvania, and New Jersey--it is rational to vote. Utah, Wyoming, and Massachusetts: maybe it's not worth your time. On the other hand, there's a chance you could swing the national popular vote (which can affect the perception of a mandate) and in any case you're likely to have close local races that can ultimately affect policies from schools to taxes to crime and punishment, so if you have any preferences there, it might very well be worth your time to cast your ballot and have a small chance of making a big difference.

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