Ben Eggleston University of Kansas, Spring 2011 Philosophy 666: Rational Choice Theory January 21, 2011

Survey of Ex Ante Responses

Please write your answers to the following questions in the space below the questions and on the back of this sheet. These questions may seem strange to you, and it is not expected that you can answer these questions with depth and rigor (though maybe you can). The purpose of this survey is simply to elicit the answers to these questions that occur to you at the start of this course.

- 1. Suppose you have \$1,000 to invest and you have two options, each resulting in a payout of some amount or other at the end of one year. One option is to buy a CD paying 5 percent interest, resulting in a guaranteed payout to you, at the end of one year, of \$1,050. The other option is to buy a junk bond paying 50 percent interest. But the bond might be worthless at the end of the year—that's why they have to offer such high interest rates to get people to buy them. You estimate that the bond has a 80-percent chance of a payout of \$1,500 at the end of one year, and a 20-percent chance of a payout of \$0 (i.e., a 20-percent chance of being worthless). How would you compare these two investments, and which one would you end up choosing?
- 2. Suppose you own one of two discount furniture stores in a college town. You and the owner of the other store can each advertise a lot or advertise a little. If you each advertise the same amount (whether a lot or a little), then you will split the market approximately evenly. If one of you advertises a lot and the other advertises a little, then the one who advertises a lot will gain enough market share to more than offset the extra expense of advertising a lot, while the other will have virtually no revenue at all. So, your possible outcomes are as follows. The best outcome for you is that you advertise a lot, and your rival advertises a little. Then you have the whole market and make a lot of money. The second-best outcome for you is that you and your rival both advertise a little—if the two of you are going to split the market, you might as well not spend too much money on advertising. The third-best outcome for you is that you and your rival both advertise a lot—the two of you split the market, and pay a lot to do so. But this is still better (for you) than the worst outcome for you, in which you advertises a little and your rival advertises a lot—for then you have virtually no revenue at all. You know that your rival is in the same situation as you. Due to antitrust laws, the two of you must make your decisions independently of each other. How would you decide what to do, and which strategy (advertise a lot or advertise a little) would you end up choosing?
- 3. Suppose you are in charge of taking four children out for lunch one Saturday. You can take them to McDonald's, Wendy's, or Burger King, but unfortunately they do not all have the same preferences. Specifically, one prefers McDonald's, then Wendy's, then Burger King; the second prefers McDonald's, then Burger King, then Wendy's; the third prefers Wendy's, then Burger King, then McDonald's, and the fourth prefers Burger King, then McDonald's, then Wendy's. Assuming you want to take them where they collectively most want to go, how would you go about aggregating their preferences into one collective preference, and which option (McDonald's, Wendy's, or Burger King) would you end you regarding as the children's collectively most-preferred place to have lunch?
- 4. Have you liked thinking about the foregoing questions, or has it been rather unpleasant?