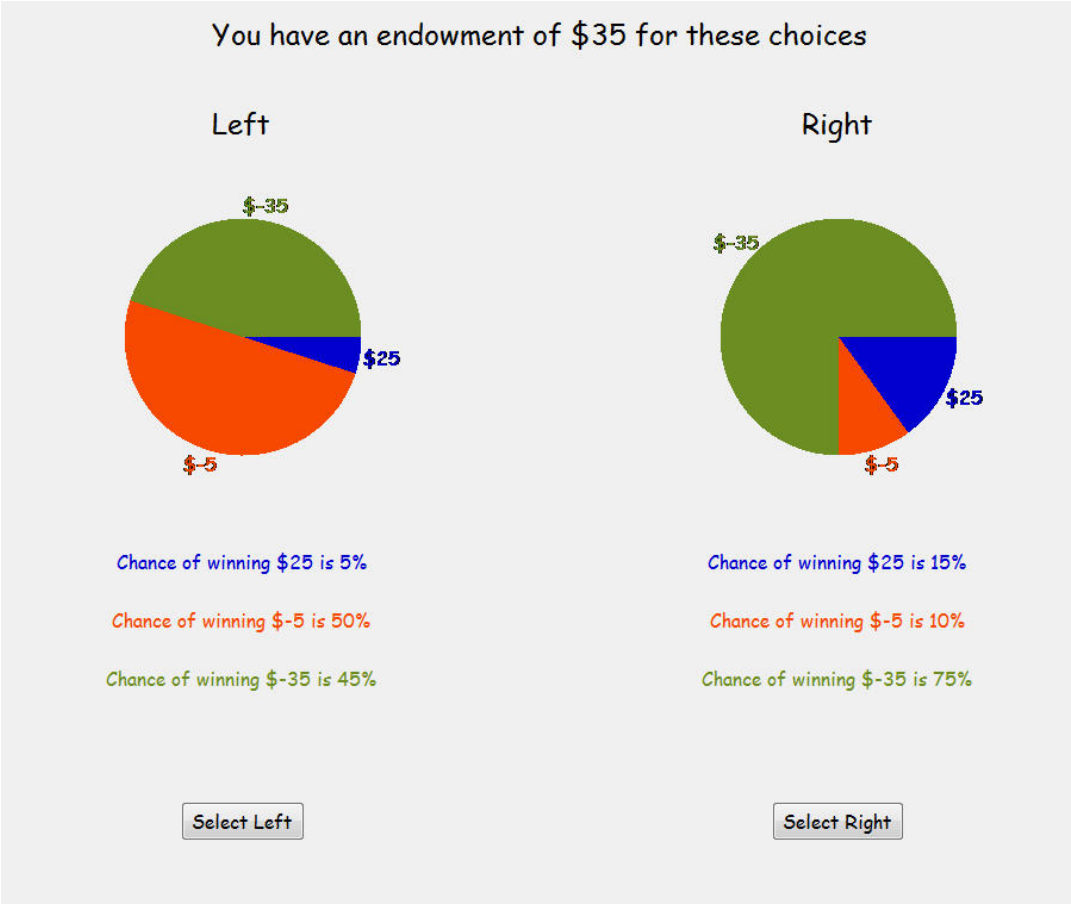
# Choices Over Risky Prospects

This is a task where you will choose between prospects with varying prizes and chances of winning each prize. You will be presented with a series of pairs of prospects where you will choose one of them. For each pair of prospects, you should choose the prospect you prefer. You will actually get the chance to play **one** of these prospects for earnings, and you will be paid according to the outcome of that prospect, so you should think carefully about which prospect you prefer on each decision screen.

Here is an example of what the computer display of such a pair of prospects will look like.




The outcome of the prospects will be determined by the draw of a random number between 1 and 100. Each number between, and including, 1 and 100 is equally likely to occur. In fact, you will be able to draw the number yourself using two 10-sided dice.

You might be told your cash endowment for each decision at the top of the screen. In this example it is $35, so any earnings would be added to or subtracted from this endowment. The endowment may change from choice to choice, so be sure to pay attention to it. The endowment you are shown only applies for that choice.

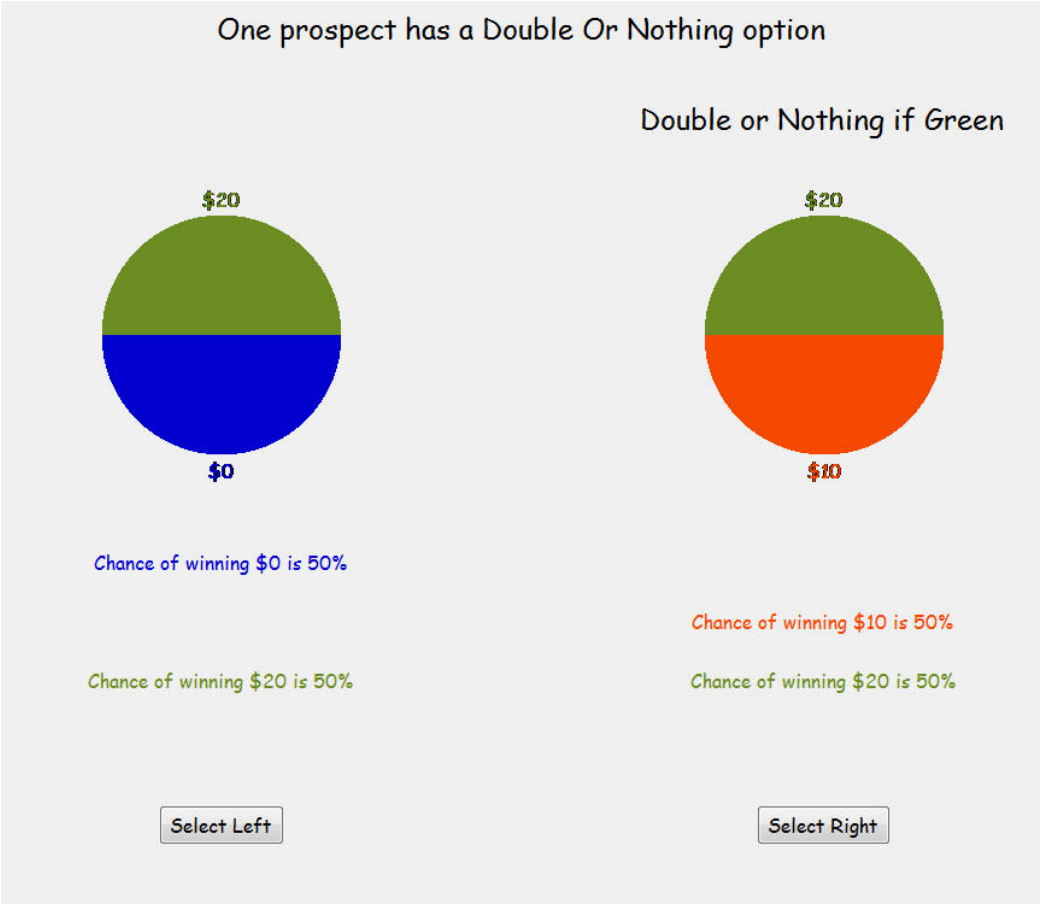
In this example the left prospect pays twenty-five dollars ($25) if the number drawn is between 1 and 5, pays negative five dollars ($-5) if the number is between 6 and 55, and pays negative thirty-five dollars ($-35) if the number is between 56 and 100. The blue color in the pie chart corresponds to 5% of the area and illustrates the chances that the number drawn will be between 1 and 5 and your prize will be $25. The orange area in the pie chart corresponds to 50% of the area and illustrates the chances that the number drawn will be between 6 and 55 and your prize will be $-5. The green area in the pie chart corresponds to 45% of the area and illustrates the chances that the number drawn will be between 56 and 100. When you select the decision screen to be played out the computer will confirm the die rolls that correspond to the different prizes.

Now look at the pie on the right. It pays twenty-five dollars ($25) if the number drawn is between 1 and 15, negative five dollars ($-5) if the number is between 16 and 25, and negative thirty-five dollars ($-35) if the number is between 26 and 100. As with the prospect on the left, the pie slices represent the fraction of the possible numbers which yield each payoff. For example, the size of the $25 pie slice is 15% of the total pie.

Even though the screen says that you might win a negative amount, this is actually a loss to be deducted from your endowment. So if you win $-5, your earnings would be $30 = $35 - $5.

Each pair of prospects is shown on a separate screen on the computer. On each screen, you should indicate which prospect you prefer to play by clicking on one of the buttons beneath the prospects.

Some decision screens could also have a pair of prospects in which one of the prospects will give you the chance for "Double or Nothing." For instance, the right prospect in this screen image pays "Double or Nothing" if the Green area is selected, which happens if the number drawn is between 51 and 100. The right pie chart indicates that if the number is between 1 and 50 you get $10. However, if the number is between 51 and 100 we will flip a coin with you to determine if you get either double the amount or $0. In this example, if it comes up Heads you get $40, otherwise you get nothing. The prizes listed underneath each pie refer to the amounts before any "Double or Nothing" coin toss.

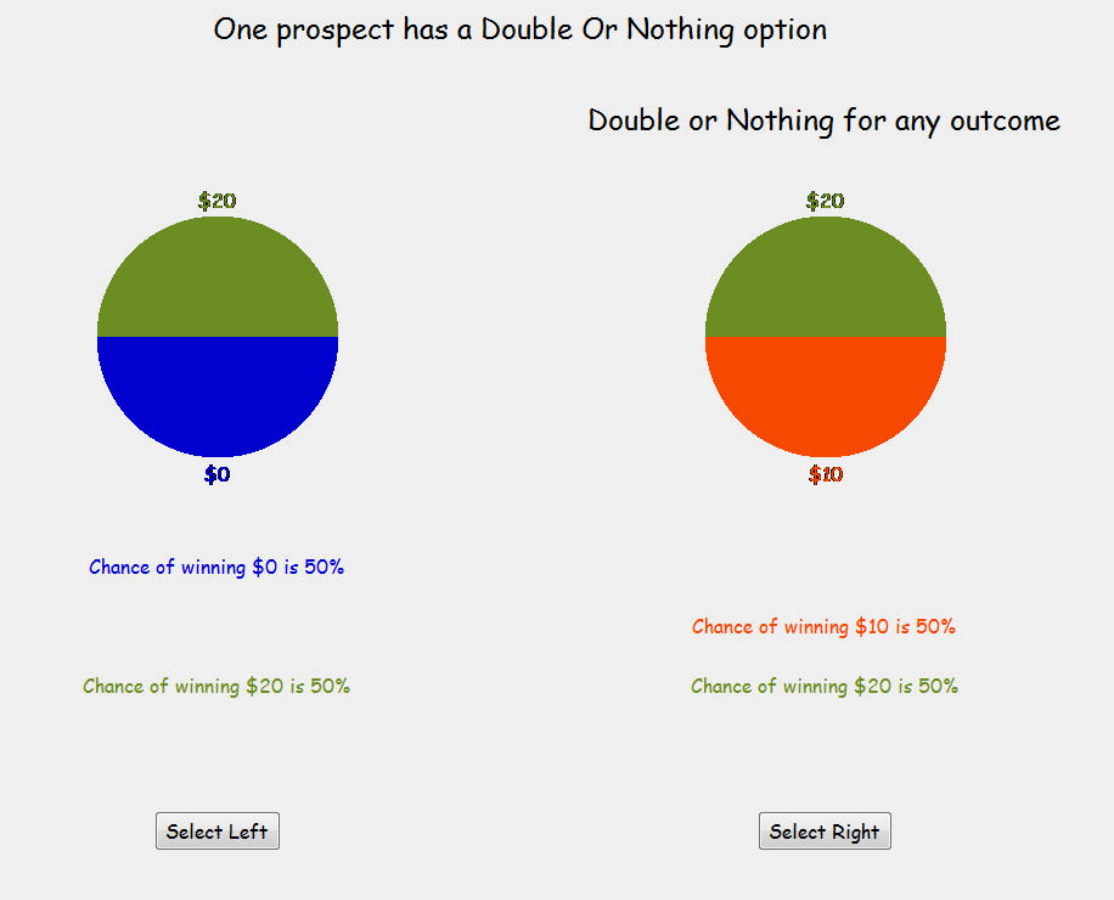



After you have worked through all of the pairs of prospects, please wait quietly until further instructions. When it is time to play this task out for earnings, you will then roll two 10-sided dice until a number comes up to determine which pair of prospects will be played out. If there are 40 pairs we will roll the dice until a number between 1 and 40 comes up, if there are 80 pairs we will roll until a number between 1 and 80 comes up, and so on. Since there is a chance that any of your choices could be played out for real, you should approach each pair of prospects as if it is the one that you will play out. Finally, you will roll the two ten-sided dice to determine the outcome of the prospect you chose, and if necessary we will then toss a coin to determine if you get "Double or Nothing."

Here is an example: suppose your first roll was 81. We would then pull up the 81st decision that you made and look at which prospect you chose – either the left one or the right one. Let's say that the 81st lottery was the same as the last example, and you chose the left prospect. If the random number from your second roll was 37, you would win $0; if it was 93, you would get $20.

If you picked the prospect on the right and drew the number 37, you would get $10; if it was 93, we would have to toss a coin to determine if you get "Double or Nothing." If the coin comes up Heads then you would get $40. However, if it comes up Tails you would get nothing from your chosen prospect.

It is also possible that you will be given a prospect in which there is a "Double or Nothing" option no matter what the outcome of the random number. This screen image illustrates this possibility.




In summary, your payoff is determined by five things:

- by your endowment, if there is one, shown at the top of the screen;
- by which prospect you selected, the left or the right, for each of these pairs;
- by which prospect pair is chosen to be played out in the series of pairs using the two 10-sided dice;
- by the outcome of that prospect when you roll the two 10-sided dice; and
- by the outcome of a coin toss if the chosen prospect outcome is of the "Double or Nothing" type.

Which prospects you prefer is a matter of personal choice. The people next to you may be presented with different prospects, and may have different preferences, so their responses should not matter to you or influence your decisions. Please work silently, and make your choices by thinking carefully about each prospect.

All payoffs are in cash, and are in addition to the $5 show-up fee that you receive just for being here, as well as any other earnings in other tasks from the session today.