

Aggregation Experiment 2 materials

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Created 2020-12-11 08:37:51

Demographics

Figure 1 shows page 1 of the demographics. Figure 2 shows the business-specific questionnaire that participants see if they select “Yes” to the last question on page 1. Figures 3, 4, and 5 show the drop-down menu options for the sector, company role, and allocation role questions, respectively.

1. What is your sex?

☒ Male ☐ Female

2. What is your age?

3. Do you speak a language other than English at home?

4. How many years of experience do you have studying business?

 years

5. How many years of experience do you have working in a corporate business setting?

 years

6. Do you currently work in an executive or managerial role?

☐ Yes ☒ No

Continue

Figure 1

Demographics

1. What is your company name? (optional)

2. What is your primary company sector?

3. Approximately, how many employees work at your company?

4. What is the size of your company's revenues?

\$ million

5. What is your role in the company?

6. What is your role in resource allocation decisions?

7. How large is the annual budget under your discretion?

\$ million

Figure 2

Business-specific questionnaire



Figure 3

Sector options

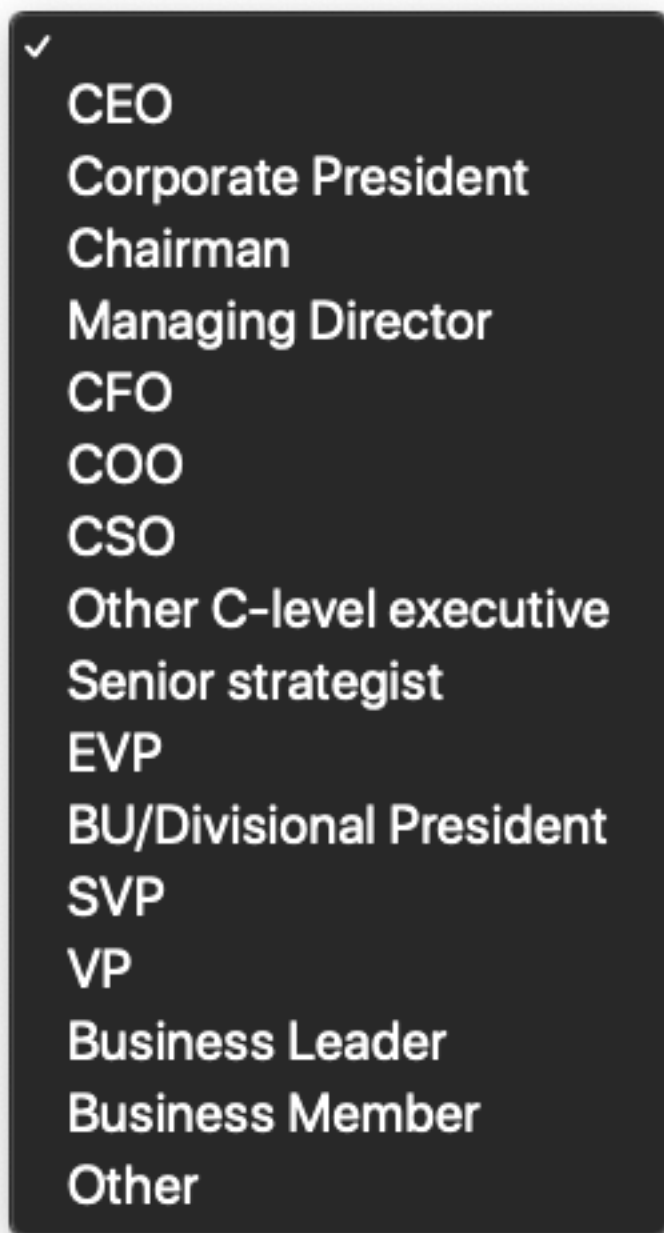


Figure 4

Company role options

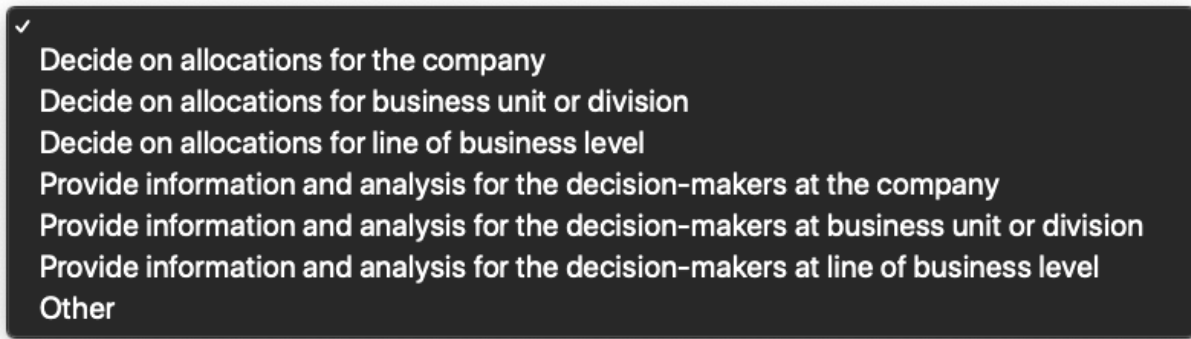


Figure 5

Allocation role options

Instructions

Figure 6 shows the instructions.

Imagine that you are an executive in a large company composed of many individual businesses. You will see various projects from these businesses and have to decide whether you would like to invest in them.

Imagine that making good investment decisions will result in you receiving a generous bonus and a potential promotion, and that doing poorly will result in you receiving a large pay cut and a potential demotion. We want to know what choices you would actually make in these scenarios.

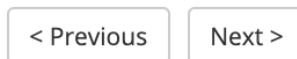


Figure 6

Instructions

Project choice

Figures 7 and 8 show the webpage shown after the instructions to those in the aware and naive conditions, respectively. Figure 9 shows the joint presentation with distribution condition of the new experiment. Those in the separate presentation condition would see

each project separately, and those in the no distribution condition would see them without the distribution.

The gambles were generated from the following restrictions:

1. Each gamble has a positive EV
2. Each gamble has a gain/loss ratio less than 2.25 (the median loss aversion coefficient from Tversky & Kahneman, 1992)
3. The entire portfolio has a probability of loss of less than 0.1
4. No identical gambles

You will now see the 10 projects.



Continue

Figure 7

Awareness - Aware condition

You will now see the projects.



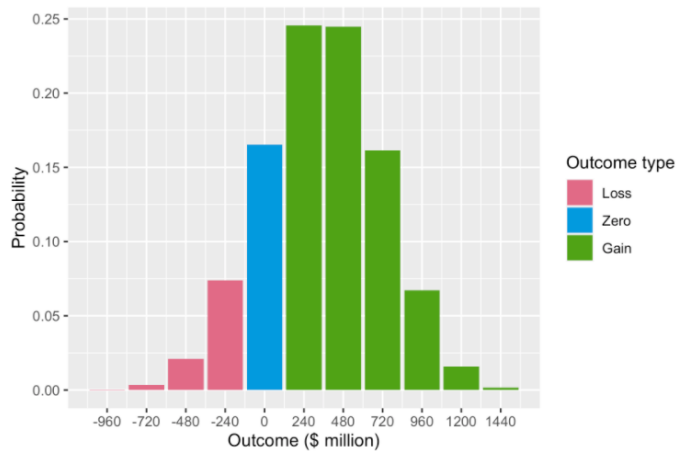
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Figure 8

Awareness - Naive condition

Below is the probability distribution of final outcomes if all projects were chosen.

The numbers on the x-axis (labelled 'Outcome') represent the final amounts of money possible if you chose to invest in all the projects. The numbers on the y-axis (labelled 'Probability') represent the likelihoods of each of the possible outcomes. Negative final outcomes (losses) are shown in red, positive final outcomes (gains) are shown in green, and a final outcome of zero (no loss or gain) is shown in blue.



Indicate below whether you would invest in the following:

Microxy is a business in your company that proposes to construct a microchip project, which they forecast will cost \$70 million. If the project succeeds, forecasts show the company would make \$240 million. Research suggests that there is a 45% chance of the project succeeding. Therefore, **there is 45% chance of gaining \$170 million and a 55% chance of losing \$70 million on the investment.***

Yes ☐

No ☐

Biotechly is a business in your company that proposes to construct a pharmaceutical project, which they forecast will cost \$90 million. If the project succeeds, forecasts show the company would make \$240 million. Research suggests that there is a 55% chance of the project succeeding. Therefore, **there is 55% chance of gaining \$150 million and a 45% chance of losing \$90 million on the investment.***

Yes ☐

No ☐

Logivia is a business in your company that proposes to construct a shipping logistics project, which they forecast will cost \$120 million. If the project succeeds, forecasts show the company would make \$240 million. Research suggests that there is a 60% chance of the project succeeding. Therefore, **there is 60% chance of gaining \$120 million and a 40% chance of losing \$120 million on the investment.***

Yes ☐

No ☐

Figure 9

Joint presentation - Distribution present (cropped for space)

Follow up

After seeing the individual projects, participants would be asked three follow-up questions. Figure 10 shows the project number question (maximum value is set to 20). Figures 11 and 12 ask participants whether they are willing to take all or none of the projects; and how many projects would they choose if they could pick randomly (maximum value is set to 20). Those in the distribution absent condition were asked the same questions, but without the distribution and its explanation.

In total, how many projects did you just see?

projects

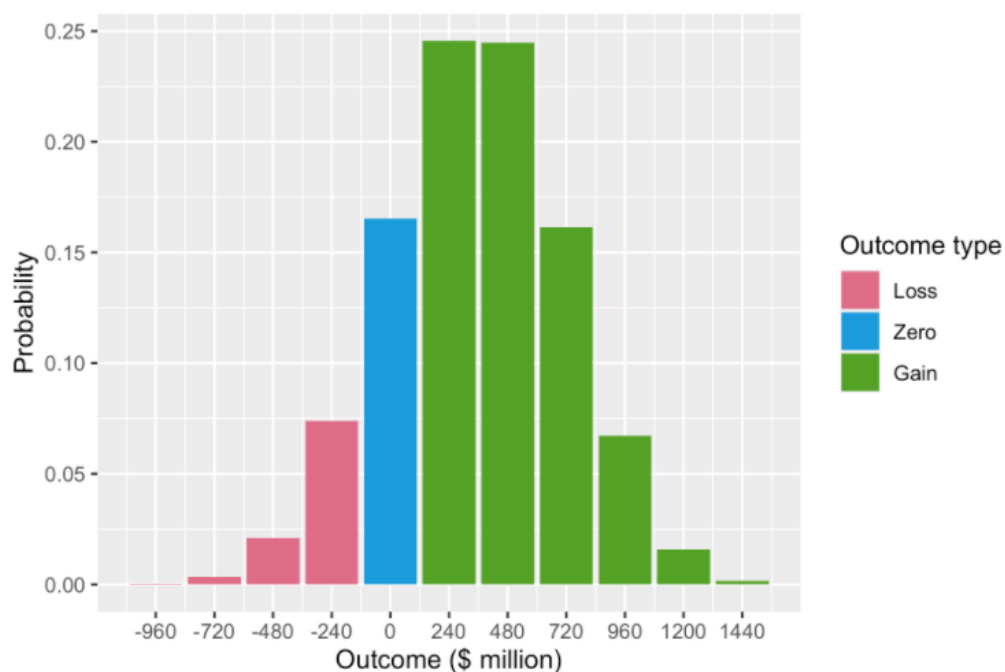
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Figure 10

Follow-up 1

Below is the probability distribution of final outcomes if all projects were chosen.

The numbers on the x-axis (labelled 'Outcome') represent the final amounts of money possible if you chose to invest in all the projects. The numbers on the y-axis (labelled 'Probability') represent the likelihoods of each of the possible outcomes. Negative final outcomes (losses) are shown in red, positive final outcomes (gains) are shown in green, and a final outcome of zero (no loss or gain) is shown in blue.



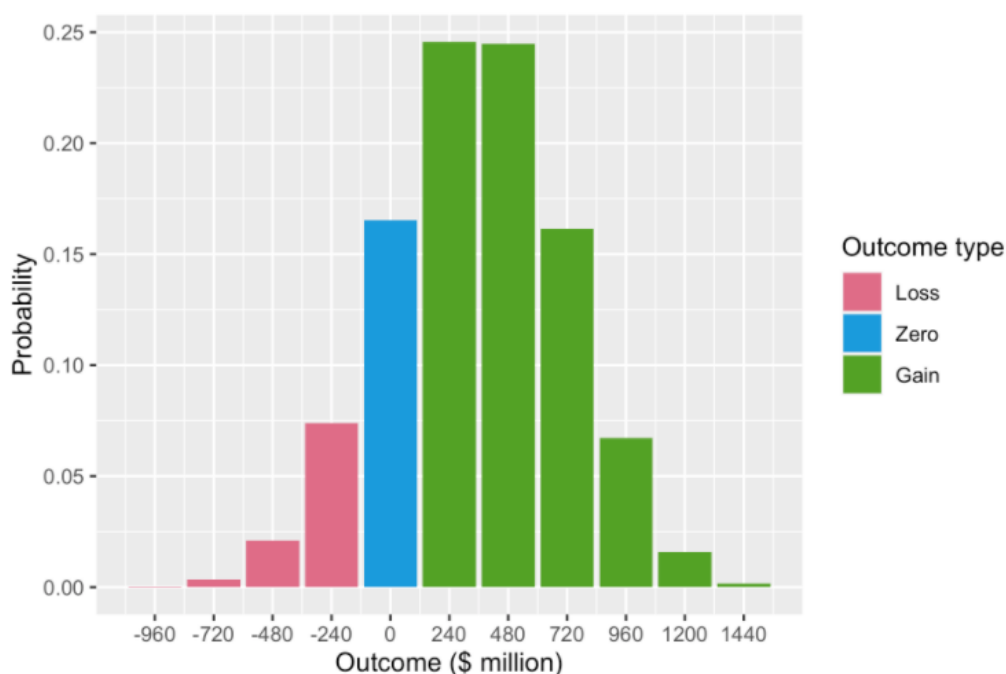
Consider all the projects you saw. If you had to choose between investing in all of them, or investing in none of them, which would you choose?

Figure 11

Follow-up 2

Below is the probability distribution of final outcomes if all projects were chosen.

The numbers on the x-axis (labelled 'Outcome') represent the final amounts of money possible if you chose to invest in all the projects. The numbers on the y-axis (labelled 'Probability') represent the likelihoods of each of the possible outcomes. Negative final outcomes (losses) are shown in red, positive final outcomes (gains) are shown in green, and a final outcome of zero (no loss or gain) is shown in blue.



If you could choose to invest in a certain number of the projects you saw, how many would you invest in?

projects

Figure 12

Follow-up 3

References

- Tversky, A., & Kahneman, D. (1992). Advances in Prospect Theory: Cumulative Representation of Uncertainty. *Journal of Risk and Uncertainty*, 5(4), 297–323.
<http://www.jstor.org/stable/41755005>