Coarse Categories in a Complex World: Experimental Instructions

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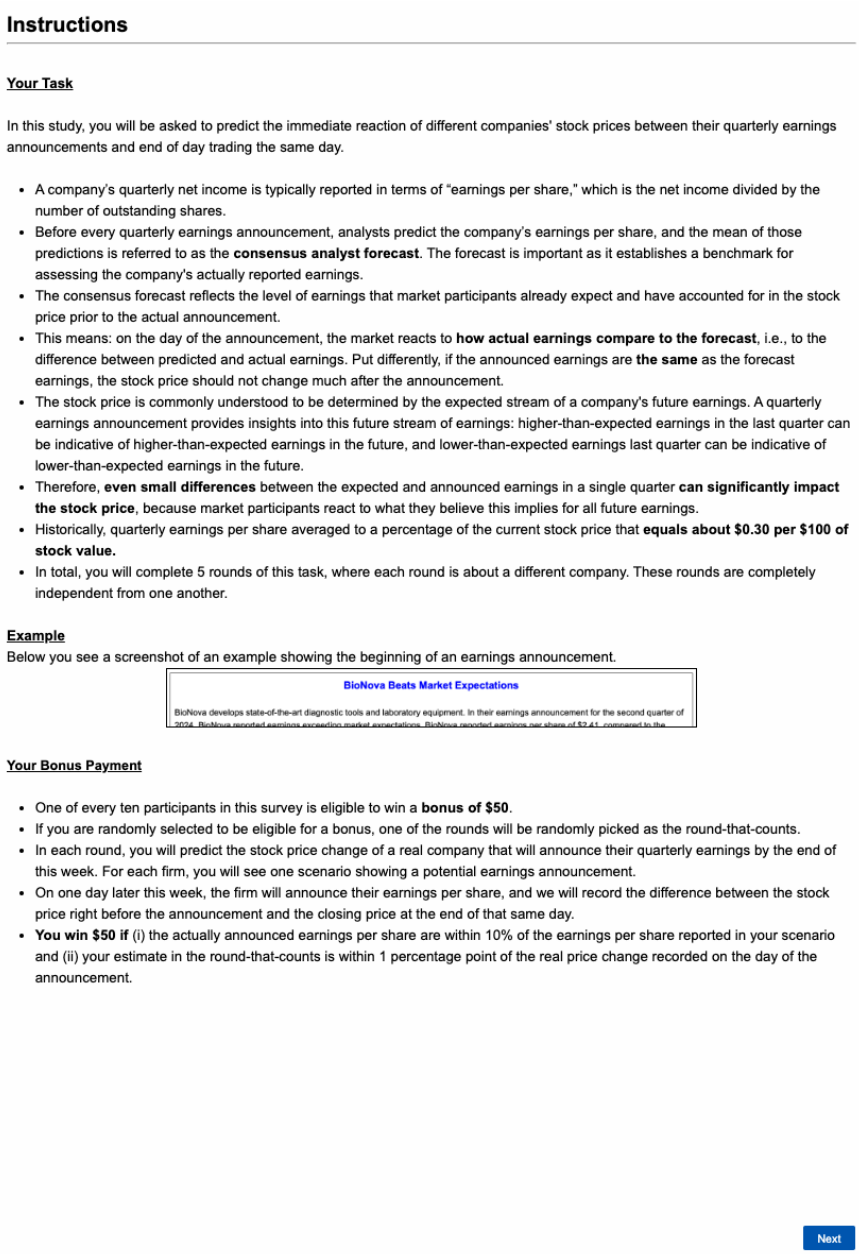
Figure 1: Instruction Screen 1



Instructions

Your Task

In this study, you will be asked to predict the immediate reaction of different companies' stock prices between their quarterly earnings announcements and end of day trading the same day.

- A company's quarterly net income is typically reported in terms of "earnings per share," which is the net income divided by the number of outstanding shares.
- Before every quarterly earnings announcement, analysts predict the company's earnings per share, and the mean of those predictions is referred to as the **consensus analyst forecast**. The forecast is important as it establishes a benchmark for assessing the company's actually reported earnings.
- The consensus forecast reflects the level of earnings that market participants already expect and have accounted for in the stock price prior to the actual announcement.
- This means: on the day of the announcement, the market reacts to **how actual earnings compare to the forecast**, i.e., to the difference between predicted and actual earnings. Put differently, if the announced earnings are **the same** as the forecast earnings, the stock price should not change much after the announcement.
- The stock price is commonly understood to be determined by the expected stream of a company's future earnings. A quarterly earnings announcement provides insights into this future stream of earnings: higher-than-expected earnings in the last quarter can be indicative of higher-than-expected earnings in the future, and lower-than-expected earnings last quarter can be indicative of lower-than-expected earnings in the future.
- Therefore, **even small differences** between the expected and announced earnings in a single quarter **can significantly impact the stock price**, because market participants react to what they believe this implies for all future earnings.
- Historically, quarterly earnings per share averaged to a percentage of the current stock price that **equals about $0.30 per $100 of stock value.**
- In total, you will complete 5 rounds of this task, where each round is about a different company. These rounds are completely independent from one another.

Example

Below you see a screenshot of an example showing the beginning of an earnings announcement.

BioNova Beats Market Expectations

BioNova develops state-of-the-art diagnostic tools and laboratory equipment. In their earnings announcement for the second quarter of

Your Bonus Payment

- One of every ten participants in this survey is eligible to win a **bonus of $50**.
- If you are randomly selected to be eligible for a bonus, one of the rounds will be randomly picked as the round-that-counts.
- In each round, you will predict the stock price change of a real company that will announce their quarterly earnings by the end of this week. For each firm, you will see one scenario showing a potential earnings announcement.
- On one day later this week, the firm will announce their earnings per share, and we will record the difference between the stock price right before the announcement and the closing price at the end of that same day.
- **You win $50 if** (i) the actually announced earnings per share are within 10% of the earnings per share reported in your scenario and (ii) your estimate in the round-that-counts is within 1 percentage point of the real price change recorded on the day of the announcement.

Next

This is the main instructions screen in the experiment. This screen is visible to both the Baseline and High Constraints conditions.

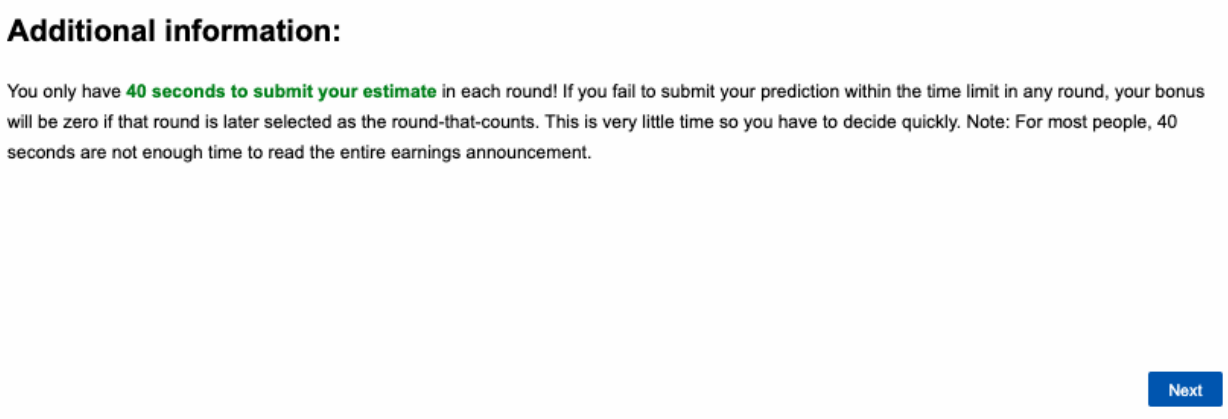
Figure 2: Instruction Screen 2

This is the first comprehension question screen in the experiment. Respondents who do not answer the questions correctly in the first two attempts are disqualified from the survey. This screen is visible to both the Baseline and High Constraints conditions.

Figure 3: Instruction Screen 3

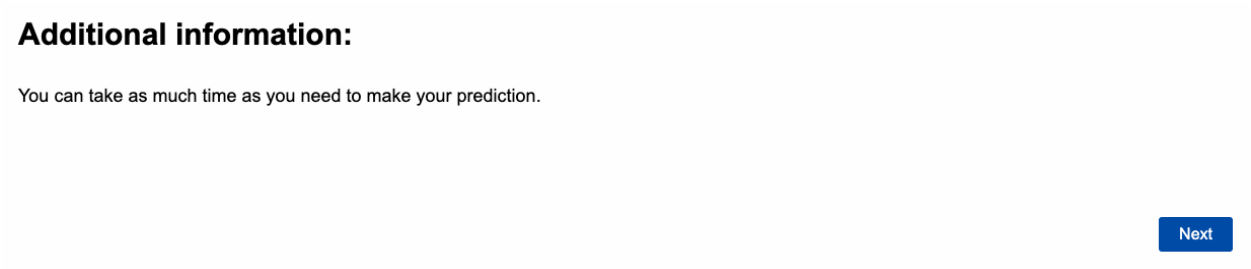
This screen elicits respondents' priors to a positive or negative earnings surprise. This screen is visible to both the Baseline and High Constraints conditions.

Figure 4: Instruction Screen 4 (High Constraints)



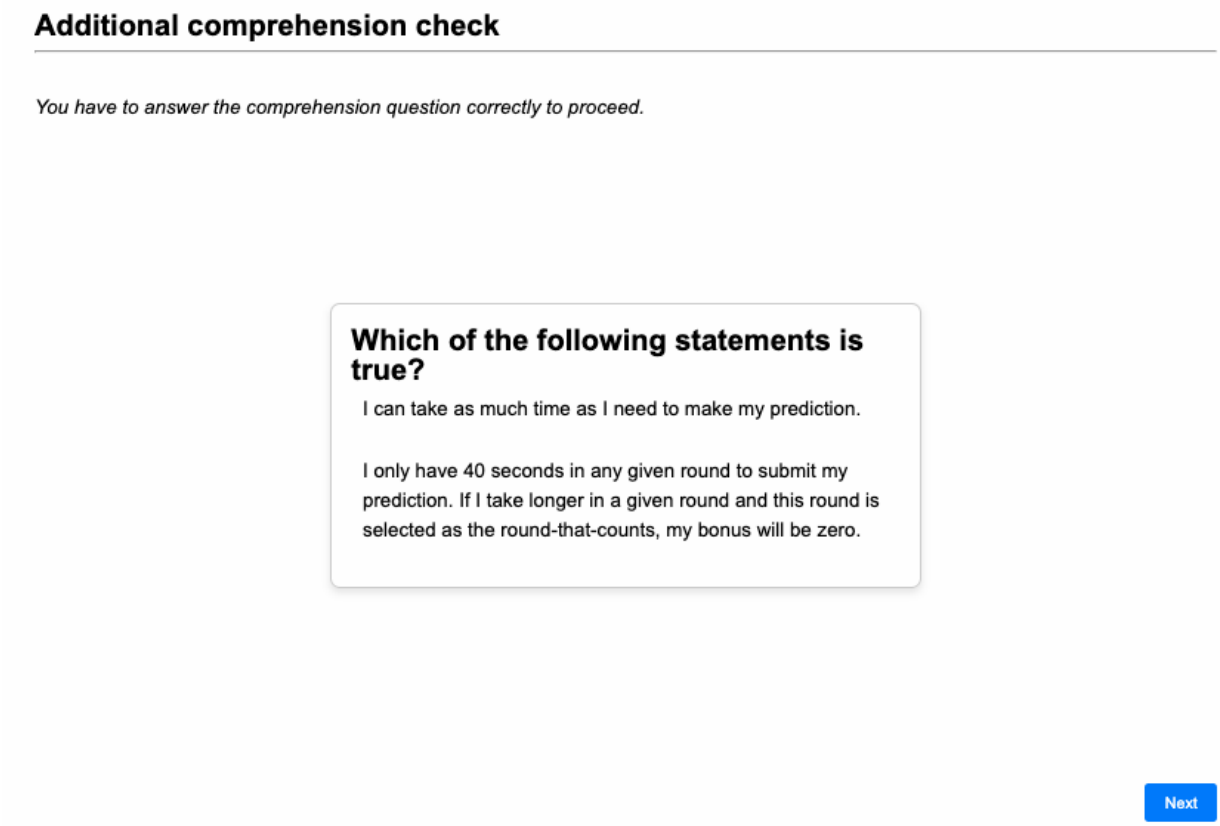
This instruction screen is visible only to the High Constraints condition.

Figure 5: Instruction Screen 4 (Baseline)



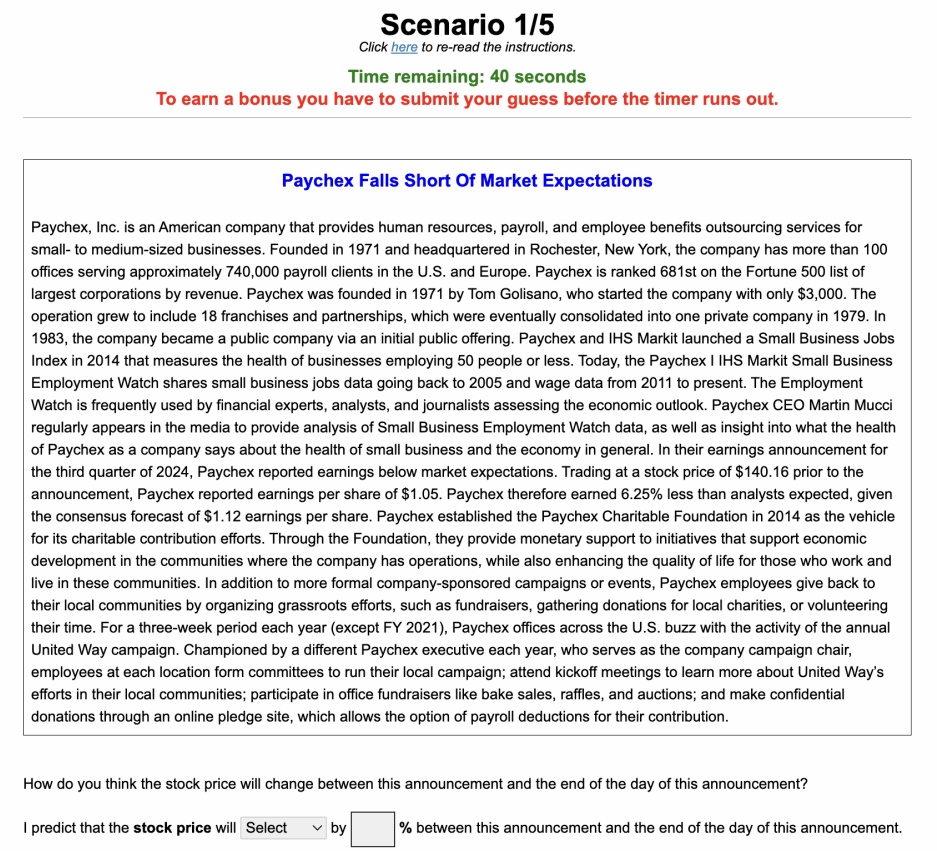
This instructions screen is visible only to the Baseline condition.

Figure 6: Instruction Screen 5



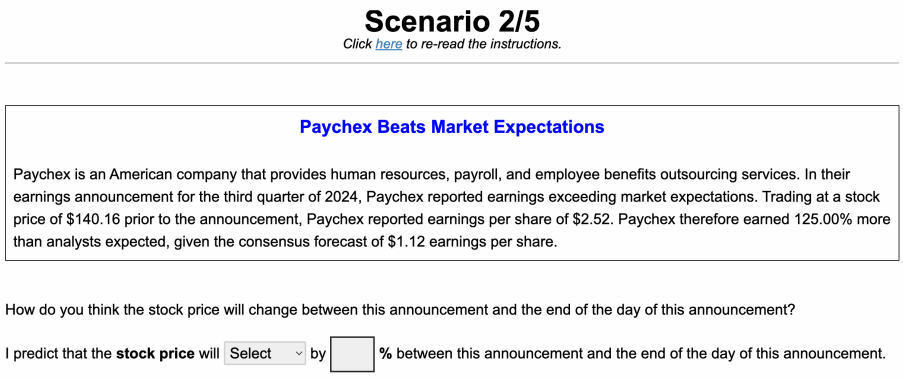
This is the second comprehension question screen in the experiment. Respondents cannot continue to the next screen until they answer the question correctly. They have unlimited attempts to answer correctly. This screen is visible to both the Baseline and High Constraints conditions.

Figure 7: Decision Screen (High Constraints)



This is a screenshot of the decision screen for the High Constraints condition in the experiment.

Figure 8: Decision Screen (Baseline)



This is a screenshot of the decision screen for the Baseline condition in the experiment.