

# Preregistration: Mental Models of the Stock Market Detection Study: Extension

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In addition to the existing preregistration plan, we preregister an extension to the Detection Study.

## Study parameters

- Sample size: 900 (about 300 per treatment)
- Sample type: Prolific sample (no quotas except balance with respect to gender)
- Start of data collection: August 2, 2024 (after preregistration)
- Number of arms: 3
- Randomization method: Computerized via Qualtrics
- We plan to work with all complete responses. In the (typically very rare) case that a respondent submits multiple responses, we only count the first response.
- Respondents can only start with the survey if they pass an attention screener. Moreover, they can only proceed with the survey if they pass a comprehension quiz that tests their understanding of the scenarios (multiple attempts are allowed).

**Study design** The control condition of the study is a shorter version of the main descriptive survey for households (see full instructions of the main survey). We only consider the *Nike good news* case. The shortened version contains the following questions:

- Prediction: In which scenario is the future expected return of an investment in the stock over the next year higher?
- Open-ended explanation of prediction
- Background characteristics

The study involves the following experimental conditions.

**Control** Participants see the standard scenario screen and make their return prediction on the standard prediction screen.

**Ruling out future mispricing** Participants see the standard scenario screen. On the prediction screen, before participants make their return prediction, we ask them to assume that the current stock price and the future stock price of Nike fully and correctly reflect whatever is or will be known about Nike's business prospects at that point in time in both scenarios.

**Anticipated news** On the scenario screen, we frame the news about Nike's supplier partnership as expected rather than unexpected in both scenarios. Respondents are reminded of this aspect on the prediction screen and on the return explanation screen.

The precise instructions of the prediction screen and – for the Anticipated News arm – the scenario screen are attached below.

**Research question** Do individuals believe that the four-week-old news is relevant for future return differences because they believe in mispricing?

In comparison to the control condition, the Ruling out future mispricing condition explicitly rules out any mechanism related to under- or overreaction, even if this overreaction is only expected to build up later than four weeks after the news. Similarly, the anticipated news condition frames the news as expected for a long time by market participants, which also rules out mechanisms related to over- or under-reaction. Individuals who understand these mechanisms and would consciously base their return predictions on them in the control condition should not do so in the two treatment conditions.

We test whether the detection treatments affect individuals' return expectations and the reasoning behind their expectations.

# Prediction screen in the *Control* condition

## Your prediction

**Review the two scenarios** (click to open detailed description)

- Scenario 1: Nike maintains supplier partnership
- Scenario 2: Nike secures cost-saving partnership

The announcements were made four weeks ago and received a lot of attention.

Imagine that you invest \$1,000 in Nike stocks today, **four weeks after the announcement was made in the two scenarios**. Imagine that you sell these stocks in twelve months from now.

### What would you expect?

In which scenario would the return of this investment in Nike stocks be higher?

## Your prediction

The expected return would be ...

higher in scenario 1	similar in both scenarios	higher in scenario 2
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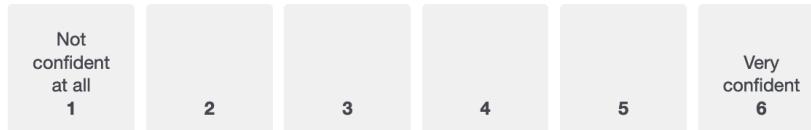
**Return of investment over the next twelve months**

Invest \$1,000 in Nike stocks today, *four weeks after the announcement*.

Sell these stocks one year from now.

"Similar in both scenarios" means that the difference in returns is smaller than or equal to 0.5 percentage points.

**How confident are you in your above prediction?** Please answer on a scale from 1 (Not confident at all) to 6 (Very confident).



# Prediction screen in the *Detect future mispricing condition*

## Your prediction

**Review the two scenarios** (click to open detailed description)

- Scenario 1: Nike maintains supplier partnership
- Scenario 2: Nike secures cost-saving partnership

In both scenarios, the announcement was made four weeks ago and received a lot of attention from stock market traders.

Imagine that you invest \$1,000 in Nike stocks today, **four weeks after the announcement was made in the two scenarios**. Imagine that you sell these stocks in twelve months from now.

### What would you expect?

In which scenario would the return of this investment in Nike stocks be higher?

### Important for your prediction

Please assume that the stock price of Nike has changed over the last four weeks since the announcements. The stock price responded to what the announcements revealed about Nike's future business prospects.

Please assume that the current stock price of Nike in both scenarios fully and correctly reflects what is currently known about Nike's future business prospects.

Please also assume that, at any future point in time, the future stock prices of Nike in both scenarios fully and correctly reflect whatever will be known about Nike's business prospects at this future point in time.

Click here to confirm that you have read this information.

## Your prediction

The expected return would be ...

higher in scenario 1	similar in both scenarios	higher in scenario 2
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Return of investment over the next twelve months  
Invest \$1,000 in Nike stocks today, *four weeks after the announcement*.

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**How confident are you in your above prediction?** Please answer on a scale from 1 (Not confident at all) to 6 (Very confident).



# Scenario screen and prediction screen in the *Anticipated news condition*

## Two scenarios

Please think about the following two hypothetical scenarios.

### **Scenario 1: Nike maintains supplier partnership**

Four weeks ago, on July 5, 2024, Nike Inc. announced the continuation of its partnership with major polyester supplier Toray Industries Inc., in a move aimed at retaining its current supply chain. The continuation of the partnership is expected to maintain the company's current cost structure. Industry experts and stock market traders were not surprised because they had known about the continuation for a long time. Widely-circulated industry reports had left no doubt that the partnership would be continued.

### **Scenario 2: Nike secures cost-saving partnership**

Four weeks ago, on July 5, 2024, Nike Inc. announced a new strategic partnership with leading recycled polyester supplier Unifi Inc., aimed at reducing raw material costs by 20%. The deal is expected to have a significant impact on Nike's bottom line, making its products more price-competitive. Industry experts dubbed the new partnership a "fantastic success" for the company. They projected the move to significantly enhance Nike's market position in the sports apparel industry. Industry experts and stock market traders were not surprised because they had known about the partnership for a long time. Widely-circulated industry reports had left no doubt that the new partnership was coming.

**In both scenarios, the announcement was made four weeks ago and received a lot of attention from stock market traders. Industry experts and stock market traders had known about the continuation/change of the supplier partnership for a long time and were not surprised by the news in both scenarios.**

## Quiz

**Please select all correct statements in the following list. Do not select any incorrect statements.**

The scenarios are about a lawsuit against Nike.

The scenarios are about Nike's supply chain partnerships.

In both scenarios, the announcement was made four weeks ago, but experts and traders had known about the continuation/change of the supplier partnership for a long time and were not surprised by the announcement.

In both scenarios, the announcement was made earlier today.

In both scenarios, the announcement did not receive a lot of attention among stock market traders.

In both scenarios, the announcement received a lot of attention among stock market traders.

In scenario 1, Nike maintains its current supply partnerships. In scenario 2, Nike secures a new supply partnership.

In scenario 1, Nike secures a new supply partnership. In scenario 2, Nike maintains its current supply partnerships.

## Your prediction

**Review the two scenarios** (click to open detailed description)

- **Scenario 1: Nike maintains supplier partnership**
- **Scenario 2: Nike secures cost-saving partnership**

In both scenarios, the announcement was made four weeks ago and received a lot of attention from stock market traders. Industry experts and stock market traders had known about the continuation/change of the supplier partnership for a long time and were not surprised by the news in both scenarios.

Imagine that you invest \$1,000 in Nike stocks today, **four weeks after the announcement was made in the two scenarios**. Imagine that you sell these stocks in twelve months from now.

### What would you expect?

In which scenario would the return of this investment in Nike stocks be higher?

## Your prediction

The expected return would be ...

higher in scenario 1	similar in both scenarios	higher in scenario 2
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### Return of investment over the next twelve months

Invest \$1,000 in Nike stocks today, *four weeks after the announcement*.

Sell these stocks one year from now.

*"Similar in both scenarios" means that the difference in returns is smaller than or equal to 0.5 percentage points.*

**How confident are you in your above prediction?** Please answer on a scale from 1 (Not confident at all) to 6 (Very confident).

