Preregistration: Mental Models of the Stock Market

Attention Study: Extension

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In addition to the existing preregistration plan, we preregister an extension to the Attention Study, which elicits quantitative return expectations for both scenarios.

Study parameters

- Sample size: 600 (about 300 per treatment)
- Sample type: Prolific sample (no quotas except balance with respect to gender)
- Start of data collection: August 5, 2024 (after preregistration)
- Number of arms: 2
- 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:

- Quantitative prediction of the return of the stock over the next year for both scenarios.
- Background characteristics

The study contains the following experimental conditions.

Control Participants make their return prediction on the standard prediction screen.[1]

Other Traders and Prices On the prediction screen, before participants make their return prediction, they are asked to predict (i) how other traders responded to the announcements in the two scenarios and (ii) how this reaction affected the stock price over the last four weeks.

The precise instructions of the prediction screens are attached below.

We plan to winsorize the quantitative return forecasts at $+30\%$ and -30%.

Research question Do individuals believe that old news is relevant for future return differences because they fail to pay attention to the reaction of other traders and/or the reaction of the stock price that has been taking place over the last four weeks?

In comparison to the control condition, the condition *Other Traders and Prices* directs individuals' attention to the response of other traders *and* the subsequent response of the stock price.

We test whether this attention manipulation affects individuals' *quantitative* return expectations.

[1] Only later, before the questions on background characteristics, they are asked to predict (i) how other traders responded to the announcements in the two scenarios and (ii) how this reaction affected the stock price over the last four weeks.

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.

Return of an investment in Nike stock

Now, please 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 return would you expect for this investment in each of the scenarios?

For comparison, the S&P 500—an index that represents the 500 largest exchange-traded companies in the US—had an average annual return of 10% over the last twenty years.

Scenario 1: Nike maintains supplier partnership
Assume you would make the following investment in scenario 1.

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

In scenario 1, I predict the following return for this investment:

[ ] %

Scenario 2: Nike secures cost-saving partnership
Assume you would make the following investment in scenario 2.

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

In scenario 2, I predict the following return for this investment:

[ ] %

Prediction screen in the *Other Traders and Prices* cond.

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.

Please think about the past four weeks. How did stock market traders react to the announcement in scenario 2?

The announcement made stock market traders **more eager to buy and less eager to sell** Nike stock at the old stock price.

The announcement **did not change** how eager stock market traders were to buy and sell Nike stock at the old stock price.

The announcement made stock market traders **less eager to buy and more eager to sell** Nike stock at the old stock price.

How did this reaction of stock market traders affect the Nike stock price in scenario 2 over the past four weeks?

The Nike stock price **increased** in response to stock market traders' reaction.

The Nike stock price **did not change** in response to stock market traders' reaction.

The Nike stock price **decreased** in response to stock market traders' reaction.

Return of an investment in Nike stock

Now, please 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 return would you expect for this investment in each of the scenarios?

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