Preregistration: Mental Models of the Stock Market Attention Study

Peter Andre, Philipp Schirmer, Johannes Wohlfart

June 12, 2023

In addition to the existing preregistration plan, we preregister the Attention Study.

Study parameters

• Sample size: 1,200 (about 400 per treatment)

• Sample type: Prolific sample (no quotas)

• Start of data collection: June 12, 2023 (after preregistration)

• Number of treatments: 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
- Structured question about the reasoning behind respondents' prediction
- Background characteristics

The study contains the following experimental conditions.

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

Other Traders On the prediction screen, before participants make their return prediction, they are asked to predict how other traders responded to the announcements in the two scenarios.²

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 screen are attached below.

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* directs individuals' attention to the response of other traders just before the return prediction is made. 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 these attention manipulations affect individuals' return expectations and the reasoning behind their expectations.

¹Only 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.

²Only later, before the questions on background characteristics, they are asked to predict 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.

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?

The expected return would be ...

	higher in	similar in	higher in
	scenario	both	scenario
	1	scenarios	2
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.	0	0	0

[&]quot;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).

Not confident at all	2	3	4	5	Very confident 6

Prediction screen in the Other Traders condition

Your prediction

Doviou t	ha two	econorioe	(click to open	detailed	description
Review t	ne two	scenarios	iciick to open	geralieg	aescriptioni

- ► 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 <u>past four weeks</u>. 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.

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?

The expected return would be ...

	higher in	similar in	higher in
	scenario	both	scenario
	1	scenarios	2
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.	0	0	0

[&]quot;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).

Not confident					Very confident
at all					confident
1	2	3	4	5	6

Prediction screen in the Other Traders and Prices cond.

Your prediction

Ē	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 <u>past four weeks</u>. 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 <u>past four weeks</u>?

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.

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?

[...]