

Preregistration: Mental Models of the Stock Market

Downstream Consequences Study: Addendum

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We preregister an addendum to the preregistered Downstream Consequences Study. In the originally preregistered Downstream Consequences study, the size of the baseline effect of receiving real good news (instead of real bad news) on return expectations was smaller than expected, which complicates the interpretation of the results of the explaining equilibrium intervention (which requires a strong baseline difference in return expectations between the good news and the bad news condition).

We therefore run another version of this experiment. Wave 1 is completely identical to the original study. Wave 2 uses a different set of real news scenarios. We rely on a slightly adjusted version of the previously preregistered “Real News Study” featuring news about the company Siemens Energy. The content and structure is otherwise the same as in wave 2 of the originally preregistered Downstream Consequences Study. The adjusted instructions for wave 2 are attached below.

Start of the data collection: March 13th (after pre-registration).

In all other dimensions, we plan to follow the preregistration plan of the original study. In particular, we plan to recruit 1,500 (about 750 per treatment) respondents for wave 1 and reinvoke all participants one to two days later to wave 2. We plan to winsorize the quantitative return forecasts at +30% and –30%.

Wave 2: Good news condition

Siemens Energy

On the next page, you will receive information about the exchange-traded company *Siemens Energy*.

Siemens Energy is a German-based global company focused on energy technologies, including the generation and distribution of electricity. The company plays a crucial role in the international energy sector. It offers a diverse range of products and solutions for generating power from both renewable sources like wind and solar, as well as conventional sources like natural gas and coal. Siemens Energy aims to lead the transition towards more sustainable, reliable, and cost-effective energy systems worldwide.

A Few Months Ago: Siemens Energy Announces 7 Billion Euro Wind Power Deal

A few months ago, Siemens Energy made an announcement that received a lot of attention among stock market traders. Here is a summary of the news story.

Siemens Energy, in partnership with Spain's Dragados Offshore, secured a multi-billion euro contract with TenneT, a prominent German-Dutch grid operator. The deal, worth nearly 7 billion euros, is aimed at enhancing the connectivity of wind farms in the North Sea to mainland Germany. This significant contract promises to increase the availability of renewable energy, as it allows for the transfer of up to 6 gigawatts of offshore wind power to the German electrical grid.

The contract involves three key connectivity projects that will link wind-generated electricity from the North Sea to German cities. Siemens Energy will manufacture the main electrical components, such as switchgear, transformers, and converter technology. The projects are an extension of Siemens Energy's ongoing commitment to renewable energy, as the company recently secured similar large-scale contracts at the end of last year.

Recall: This news story broke a few months ago and received a lot of attention among stock market traders invested in or observing Siemens Energy's stock.

Quiz

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

Siemens Energy announced that they plan to take legal action against a former investment partner.

Siemens Energy announced a big deal worth nearly 7 billion euros.

The announcement was made a few months ago.

The announcement was made earlier today.

The announcement did not receive attention among stock market traders.

The announcement received a lot of attention among stock market traders.

The deal focuses on enhancing the connectivity of wind farms in the North Sea to the mainland.

The deal focuses on building new coal-fired power stations.

Well done! All responses were correct.

Now, you can earn additional money. On the following two pages, you have the opportunity to earn extra money based on your answers. Please respond carefully.

[PAGE BREAK]

Your prediction

[Review the news story](#) *(click to open detailed description)*

► **A Few Months Ago: Siemens Energy Announces 7 Billion Euro Wind Power Deal**

Consider the following investment.

Invest \$1,000 in Siemens Energy stock today, several weeks after the announcement was made.

Sell these stocks in twelve months from now.

Your task is to indicate which return you would expect for this investment.

The return of an investment in a stock is the percent change in value that you receive from investing in that stock. It includes both dividend payments and the change in the stock price.

For comparison, the DAX—which is the German stock market index that represents the 30 largest companies—had an average annual return of 7% over the last ten years.

You can earn additional money based on your prediction. We will calculate the actual return of the investment in a year from now. If your prediction is at most 0.5 percentage points away from the actual return, we will transfer £2 to your Prolific account in a year from now.

Please predict which return you would expect for the above investment.

I predict a return of ...

%

An investment decision

[Review the news story](#) (click to open detailed description)

► **A Few Months Ago: Siemens Energy Announces 7 Billion Euro Wind Power Deal**

In the following, we ask you to make a decision on how you would invest £100 for the coming 12 months.

You have the **chance to earn additional money** with your answer to this question. Upon completion of the study, we will randomly select ten participants who will receive a payout equal to the value of their investment after 12 months. If you are selected, this payout will depend on your investment decision, so please consider carefully. The payout will be made in 12 months (plus processing time) in the form of a Prolific bonus payment.

Two investment options are available:

- **Investing in a stock of the company *Siemens Energy*.** The return on your investment in Siemens Energy stock will be based on the actual return of this stock over the coming 12 months.
- **Investing in a savings bond that pays 2 percent interest per year for sure.** The return on your investment in the savings bond will be 2 percent for sure.

Please decide. How much of the £100 do you invest in *Siemens Energy* stock and how much in the savings bond?

(Note: The sum of your investments must amount to £100.)

My investment in the stock of <i>Siemens Energy</i>	£ <input type="text" value="0"/>
My investment in the savings bond	£ <input type="text" value="0"/>
Total	£ <input type="text" value="0"/>

Monitoring news

Please read the following statement carefully. Indicate how much you agree or disagree using the scale provided.

"To successfully invest in the stock market, one needs to spend a lot of time monitoring news about companies."

Strongly
disagree

Somewhat
disagree

Neither
agree nor
disagree

Somewhat
agree

Strongly
agree

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Relationship between expected return and uncertainty

The next question is about the relationship between the return you can expect from investing in a stock and the uncertainty of the return.

When uncertainty is higher, large deviations from the predicted return are more likely. For example, if uncertainty is high, it is more likely that the return is much higher or much lower than the predicted return. Note that uncertainty is distinct from the predicted return itself. One might predict a high return with high uncertainty or with low uncertainty. Conversely, one might predict a low return with high uncertainty or with low uncertainty.

Please think about two companies. **Market participants perceive the return of the stock of company A to be more uncertain than the return of the stock of company B.**

What would you expect, which company's stock would give a higher return?

Note: "Similar" means the difference in returns is smaller than or equal to 1 percentage point.

The return would be higher for company A's stock.

The return would be similar for the two companies' stocks.

The return would be higher for company B's stock.

When responding to the previous questions, did you look up any information regarding Siemens Energy or the Siemens Energy stock online, e.g., via Google?

Yes

Yes, but I could not find any information

No

Wave 2: Bad news condition

A Few Months Ago: Siemens Energy Retracts Forecast Amid Wind Turbine Crisis

A few months ago, Siemens Energy made an announcement that received a lot of attention among stock market traders. Here is a summary of the news story.

Siemens Energy is grappling with a crisis due to complications in its wind turbine business. The company has retracted its annual forecast, warning of additional costs in the billions of euros. During a call with analysts, Siemens Energy CEO Christian Bruch admitted that the setback is more severe than he had anticipated. Technical checks on Siemens Energy's wind turbines have revealed "significantly increased" failure rates, with interim reports suggesting that many turbines will need to be replaced or repaired at a cost exceeding one billion euros.

The challenges extend beyond technical issues; productivity improvements in the wind energy business have also fallen short of expectations. Additionally, Siemens Energy highlighted ongoing difficulties in ramping up manufacturing capacities in the offshore wind sector. As a result, Siemens Energy has retracted its profit forecast for the current fiscal year. Some experts started questioning whether Siemens Energy's wind turbine business is even capable of recovery.

Recall: This news story broke a few months ago and received a lot of attention among stock market traders invested in or observing Siemens Energy's stock.

Quiz

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

Siemens Energy has maintained its initial annual profit forecast for the current fiscal year.

Siemens Energy has retracted its annual forecast and expects additional costs in the billions of euros.

The announcement was made a few months ago.

The announcement was made earlier today.

The announcement did not receive a lot of attention among stock market traders.

The announcement received a lot of attention among stock market traders.

Siemens Energy's CEO Christian Bruch stated that the setbacks in the wind turbine sector are more severe than initially expected.

Siemens Energy's CEO Christian Bruch stated that the situation was anticipated and under control.