Columbia Business School

Capital Markets & Investments

Session 16:
Beyond CAPM (2) – Factor Investing (Part 1)

Spring 2025

Professor Simon Oh

IMF


7TH IMF ANNUAL
MACRO-FINANCIAL
RESEARCH
CONFERENCE
INTERNATIONAL MONETARY FUND

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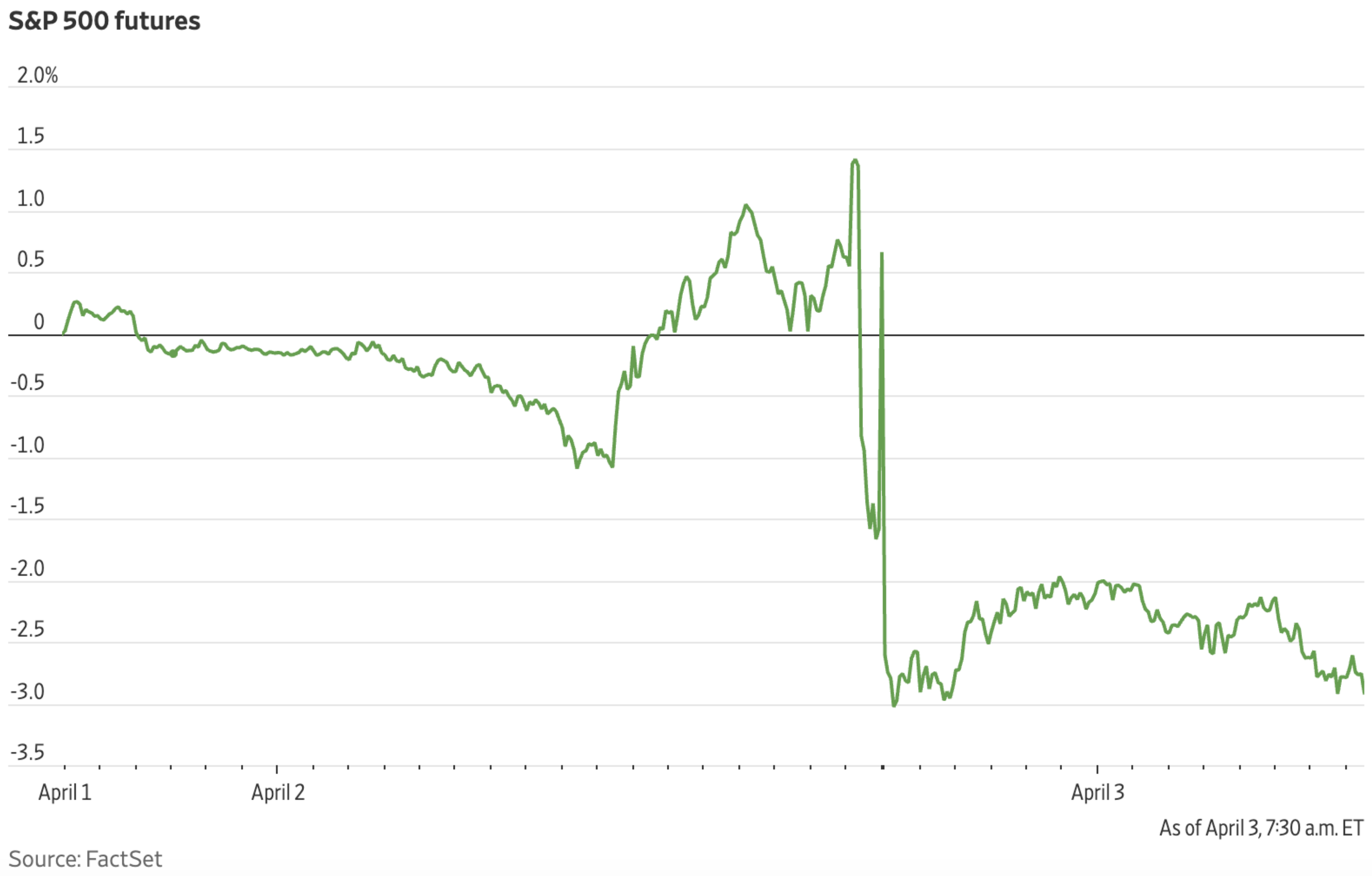
Liberation Day

Yield on 10-Year Treasury Note

S&P500 Return



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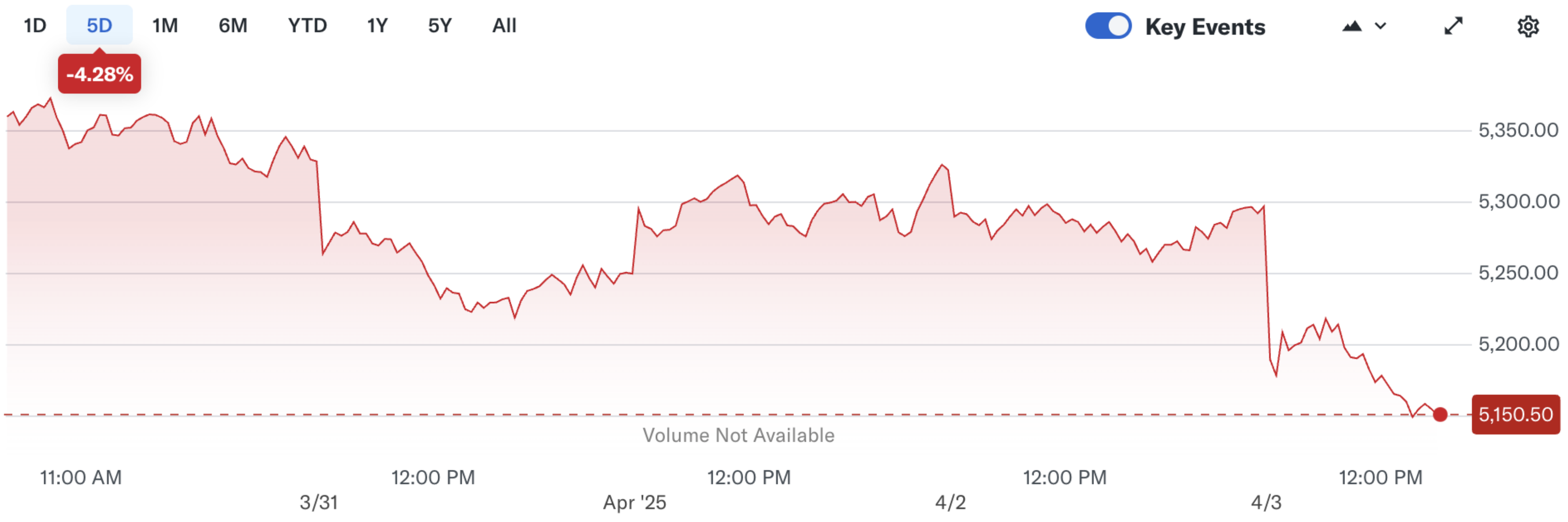
EURO STOXX RETURN

Zurich - Delayed Quote • EUR

EURO STOXX 50 I (^STOXX50E) ☆ Follow

5,150.74 **-153.21 (-2.89%)**

As of 1:38:00 PM GMT+2. Market Open.



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How do growth expectations move?

Survey of Professional Forecasters

The *Survey of Professional Forecasters* is the oldest quarterly survey of macroeconomic forecasts in the United States. The survey began in 1968 and was conducted by the American Statistical Association and the National Bureau of Economic Research. The Federal Reserve Bank of Philadelphia took over the survey in 1990.

Quarterly → Daily Expectations

High-Frequency Expectations from Asset Prices: A Machine Learning Approach*

Aditya Chaudhry† Sangmin S. Oh‡

September 16, 2020. Comments welcome.

Abstract

We propose a novel reinforcement learning approach to extract high-frequency aggregate growth expectations from asset prices. While much expectations-based research in macroeconomics and finance relies on low-frequency surveys, the multitude of events that pass between survey dates renders identification of causal effects on expectations difficult. Our method allows us to construct a daily time-series of the cross-sectional mean of a panel of GDP growth forecasts. The high-frequency nature of our series enables clean identification in event studies. In particular, we use our estimated daily growth expectations series to test the "Fed information effect" and find little evidence to support its existence. Extensions of our framework can obtain daily expectations series of any macroeconomic variable for which a low-frequency panel of forecasts is available. In this way, our method provides a sharp empirical tool to advance understanding of how expectations are formed.