


From: Bruce O Knuteson knuteson@mit.edu 
Subject: comments on your "Overnight Return Momentum and the Timing of Trading Volume"
Date: November 15, 2024 at 9:05 PM
To: martin.wallmeier@unifr.ch, thomas.perreten@unifr.ch



Dear Martin, Thomas,

Thank you for your article "Overnight Return Momentum and the Timing of Trading Volume" (<https://ssrn.com/abstract=5004991>), which documents an interesting relationship among a stock's overnight returns, its intraday volume profile, and its overall trading volume relative to its market capitalization.

The relationship you observe is insightful and described clearly, and will hopefully be widely appreciated.

I attach Figures 3 and 4 of [2023] to support three comments on your article.

My first comment disproves your suggestion that these return patterns were caused by a gradual change in "investors' willingness to accept lower expected returns ... moderated by differential but stable trade timing patterns." Your suggestion does not explain (or even accommodate) the consistently negative index-level intraday returns outside the US and China shown in Figure 3 of [2023] (or the consistently negative index-level intraday returns in the US before 2008, or the consistently negative overnight returns in China after 2008). Your suggestion also does not explain (or even accommodate) any of the strikingly negative (intraday or overnight) returns in the individual US stocks observed in Figure 4 of [2023]. Any serious explanation for these return patterns must acknowledge and address these salient features of these strikingly suspicious facts. You don't get to pick and choose which features you explain.

My second comment refutes your suggestion (pages 4-6) that the intraday volume profiles you note are inconsistent with my claim [2016, 2018, 2019] that "an order placed near market open moves the price more than an equally sized order placed near market close." To see this, note that you cannot determine from your Figure 1a (which shows AMD's trading volume as a function of time of day) the expected price impact of an order of a given size placed at 9:32am, or even the relative expected price impact of orders of the same size placed at 9:32am and 3:58pm (much less the expected price impact of an order placed at 9:28am, since your analysis of volume explicitly excludes the overnight period after market close at 4pm and before the next day's market open at 9:30am). [1]

My third comment refutes your suggestion (pages 4-6) that the total return to the portfolios you show in your Figure 4d (bottom right pane on page 38, titled "Total") are evidence against the explanation provided in [2016, 2018, 2019] ("the market manipulation explanation"). The market manipulation explanation involves (at most a few) quant firms systematically expanding their portfolios early in the day (when their trading moves prices more) and contracting their portfolios later in the day (when their trading moves prices less), creating mark-to-market gains on their large existing portfolios from the price impact of their trading that exceed the cost of their daily round-trip trading. The market manipulation explanation predicts that at least one such (long-lived, suspiciously consistently well-performing) quant firm exists and that the total (wonderful and suspiciously consistently positive) returns to *its portfolio* can be understood in terms of the price impact of its trading. The market manipulation explanation makes no prediction for the relative total returns of the specific portfolios you show in your Figure 4d (which are five portfolios of 100 equally weighted stocks each, constructed by sorting the S&P 500 constituents according to each stock's cumulative overnight return over the previous six months, and which are very, very unlikely to approximate the culpable firm's portfolio). Your Figure 4d therefore provides no evidence against the market manipulation explanation. [2]

To summarize, the attached figures disprove the explanation you suggest, and your article does not in fact provide any evidence disfavoring the market manipulation explanation, but your observation regarding the cross-sectional differences in volume timing (and overall trading volume relative to market capitalization) is insightful. Do you know who pays little to no attention to trading volume? Retail investors, long-term investors, and investors who allegedly slowly become more willing to accept lower expected returns. Do you know who pays a lot of attention to trading volume? Quants.

Regards,
Bruce

Bruce Knuteson
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[1] For a deeper appreciation of how a plot of "AMD's trading volume as a function of time of day" (your Figure 1a) differs from a plot of "the price impact of an AMD order (of some specified size) as a function of time of day", I recommend consulting Section II of [2019], the references cited in that section, and the former physicists who authored those references, keeping in mind footnote 18 of [2018].

[2] I have suggested the market manipulation described in [2016, 2018, 2019] *caused* most of the total positive stock returns over the past three decades in the indices (outside China) shown in Figure 3 of [2023] (attached), *caused* many of the largest companies in the United States to be the largest (e.g., page 3 of [2021]), and *caused* the wonderful and suspiciously consistently positive returns enjoyed by the culpable quant firms [2016-2023]. If you are (understandably) unhappy that these strong claims do not seem to lend themselves to a test like your attempt in your Figure 4d, I can assure you I am far unhappier about it, and I encourage you to join me in loudly expressing our unhappiness to the world's financial regulators. The market manipulation explanation appears to be in excellent agreement with striking empirical facts that nobody (including you, as noted in my first comment above) has managed to explain in any other way [2016-2023]. Nobody (including you, as noted in my second and third comments above) appears able to produce evidence strongly disfavoring the market manipulation explanation. Unfortunately, the only people in a position to authoritatively test the market manipulation explanation's core predictions -- namely, that there is

only people in a position to authoritatively test the market manipulation explanation's core predictions -- namely, that there is indeed a large, long-lived quant firm that has traded in the way I describe, profited from it, caused the striking return patterns in the figures attached, and significantly affected long-term prices in the way I suggest -- are financial regulators with widely understood shortcomings and abysmal track records. Germany's BaFin missed Wirecard, the US's SEC missed Madoff, and as far as I can tell BaFin, the SEC, Switzerland's FINMA, and other major financial regulators haven't yet even publicly acknowledged these suspicious return patterns exist.

[2016] [Information, Impact, Ignorance, Illegality, Investing, and Inequality](#)

[2018] [How to Increase Global Wealth Inequality for Fun and Profit](#)

[2019] [Celebrating Three Decades of Worldwide Stock Market Manipulation](#)

[2020] [Strikingly Suspicious Overnight and Intraday Returns](#)

[2021] [They Chose to Not Tell You](#)

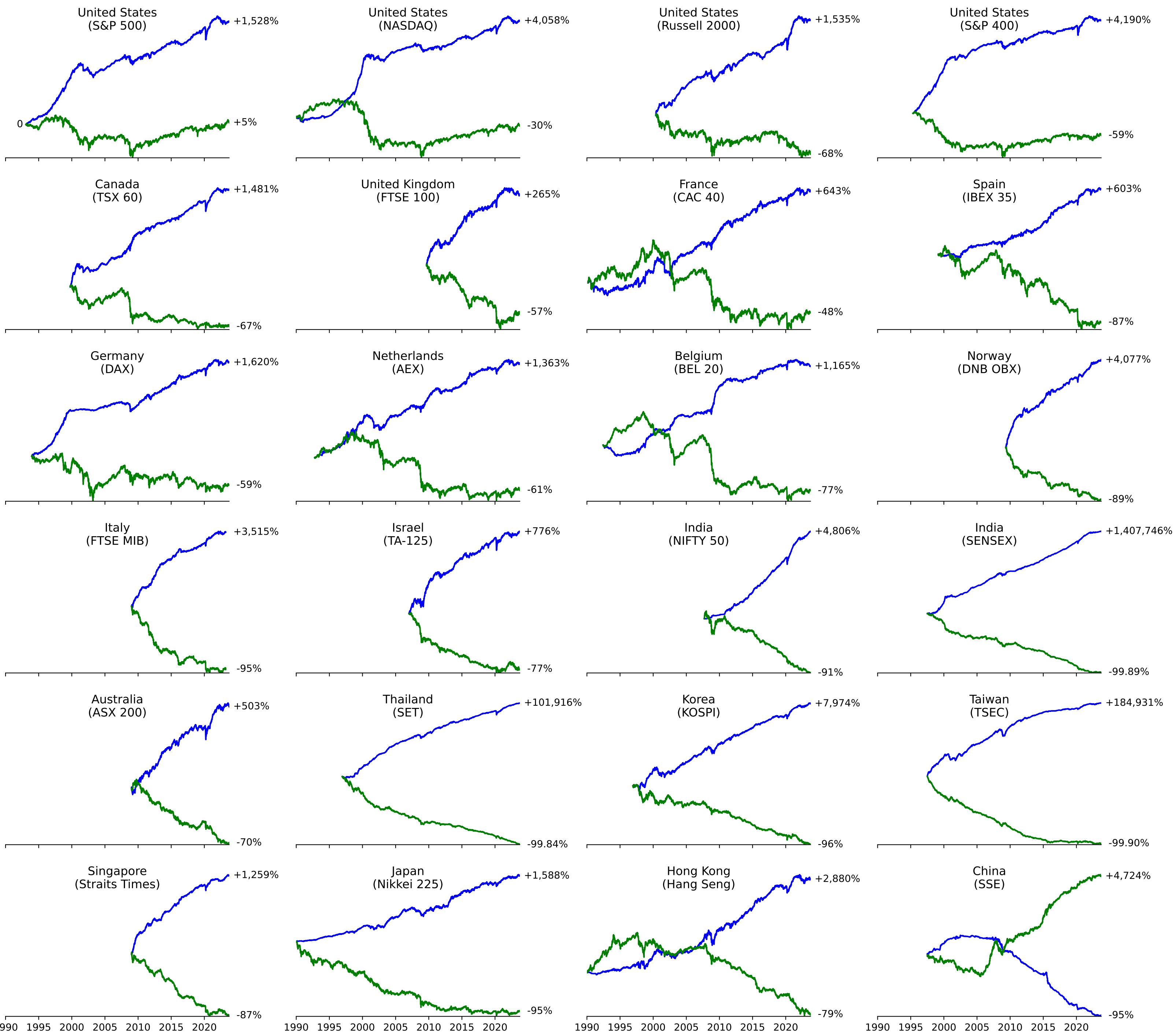
[2022] [They Still Haven't Told You](#)

[2023] [Nothing to See Here: How to Say It When You Need to](#)

Overnight and Intraday Returns to Major Stock Market Indices

(log scale)

— overnight
— intraday



Overnight and Intraday Returns in the United States

50 stocks included in our public thread with the SEC, data through September 30, 2023, log scale

— overnight
— intraday

