Discussion of “The Overnight Drift” by Boyarchenko, Larsen, and Whelan

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This discussion

- The paper is accepted at the RFS (congrats!)
- My take on how the paper fits in the literature and open questions for future work

Cliff, Cooper, and Gulen (2008)

"Return Differences between Trading and Non-trading Hours: Like Night and Day"

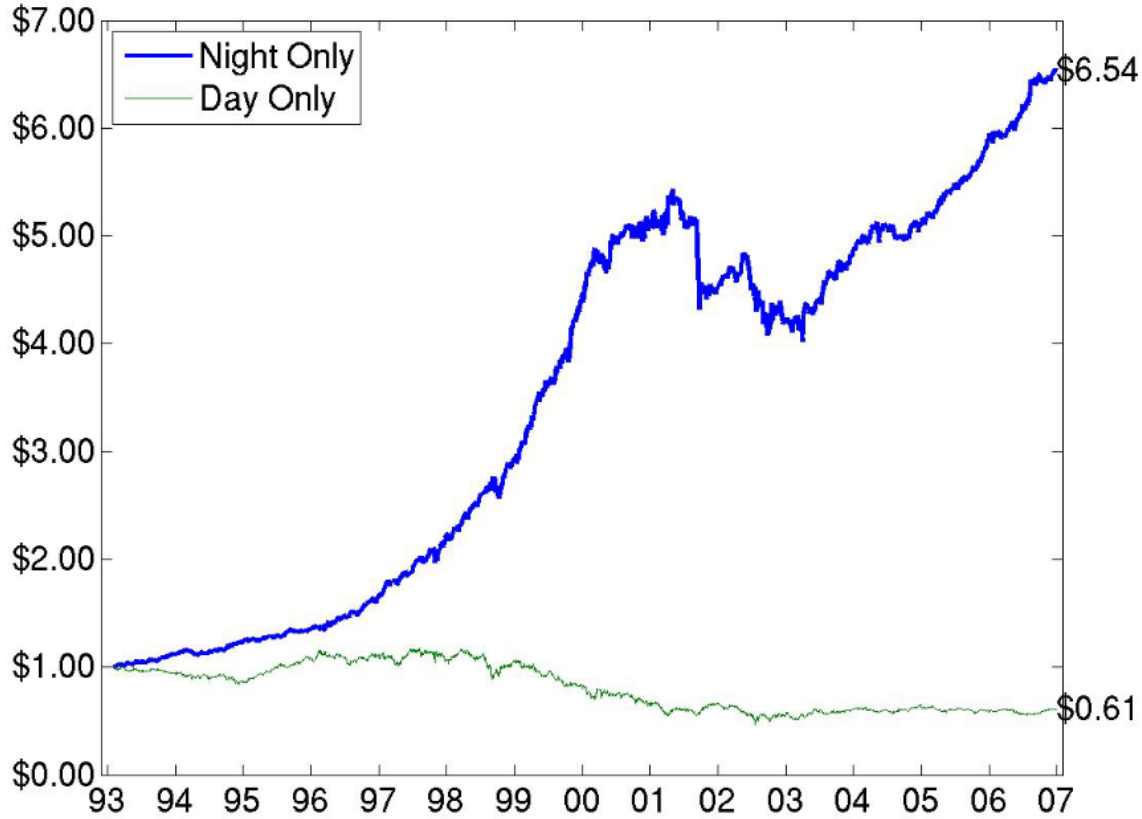


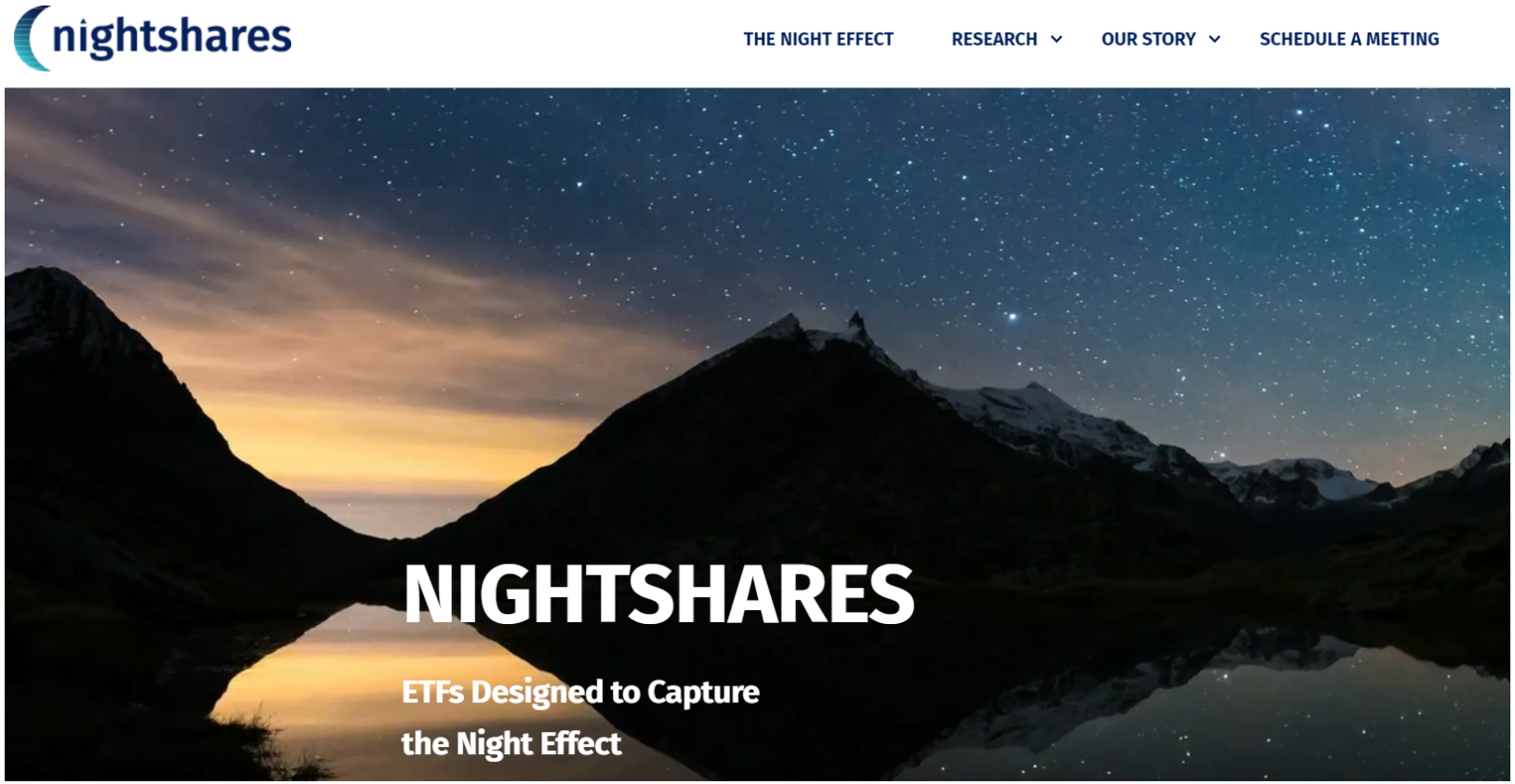
Figure 1
Growth of a $1 investment in night returns (close to open, heavy blue line) and day returns (open to close, thin green line) from 1993 to 2006 in the S&P 500 Spider (SPY) exchange traded fund.

This paper

- *Fact:* U.S. futures overnight drift accrues during the opening of European markets

- *Explanation:* Return reversal due to inventory risk (Grossman and Miller (1988); GM)
  - Order imbalances can last most of the overnight period and cannot be resolved until European trading begins
  - Require asymmetric reaction to demand shocks to generate an unconditional positive drift: intraday sell-offs generate much stronger reversal than intraday rallies
  - Consistent with time-varying dealer risk bearing capacity

Night ETF



https://www.nightshares.com/

General impression

- This paper deserves a lot of credit for dissecting futures data to provide a new stylized fact
  - Pattern unlikely driven by chance
- Mechanism makes sense to me
  - Why does the return premium accrue unevenly over the night? Neat argument about volume time
  - Nice supporting evidence from closing order imbalance and volatility

Alternative/complementary stories

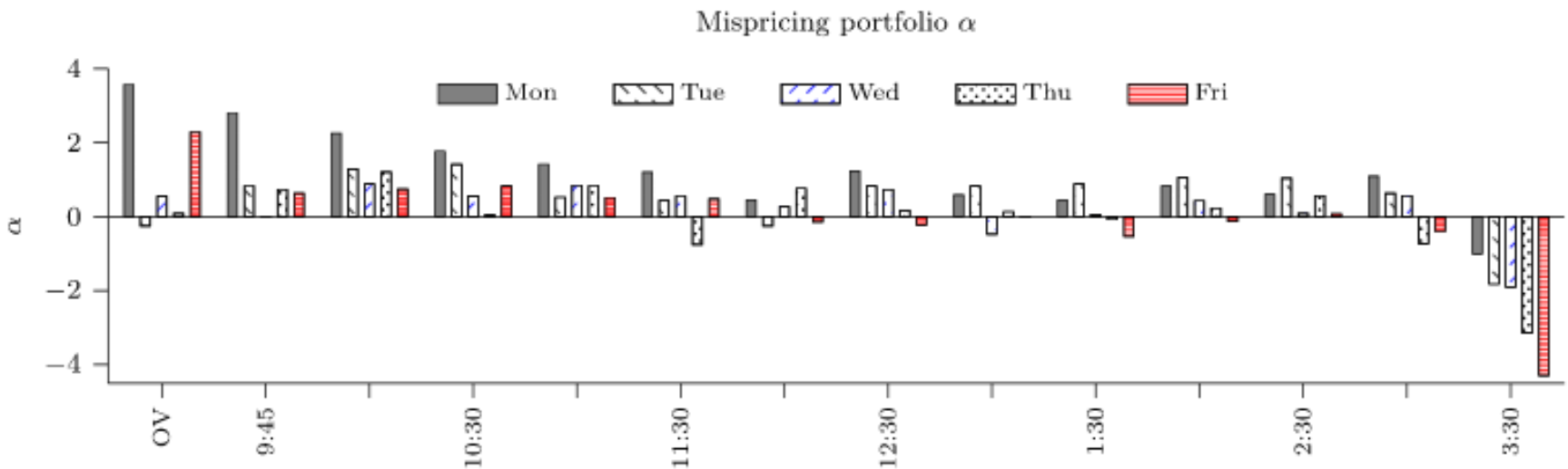
1. Uncertainty resolution (Bondarenko and Muravyev (2022))
   - BM "reject" inventory risk (Section V.E)
   - BLW argues that uncertainty resolution is unlikely to explain the overnight drift (Internet Appendix C.3)

2. Retail attention story (Berkman et al. (2021); Haghani et al. (2022))
   - Noisy open price vs. noisy closing price in the inventory risk story
   - Can we link retail flows to the overnight drift?

3. Market manipulation (Knuteson (2022))

#1 What happens at the close?

Cross-sectional evidence: mispricing worsens at the close, followed by morning reversal (Bogousslavsky (2021))



Consistent with (overnight) inventory risk and institutional constraints

#1 What happens at the close? (2)

- Reversal is two-sided
- GM predicts price impact at the close of similar magnitude as the overnight drift
  - Not apparent in the figures/tables
  - Tests condition on closing imbalance, not return
- There must be some time-varying price impact of trading: higher overnight than at the close (in line with lower volume)
  - Then I expect reversal of the overnight drift in the *following* periods
  - Who pays the extra cost at the EU open?

$\Rightarrow$ There is scope for more work on the closing period

#2 Other markets? Liu and Tse (2017); 1999-2014 index futures

Country	Exchange	Symbol	Mean	*t*-stat.	Std.
Panel B: Open-to-close daytime return (%)					
US		ESP	−0.005	−0.30	1.03
Netherlands		AEX	−0.042	−2.24	1.22
France		CAC	−0.024	−1.27	1.22
Germany		DAX	−0.025	−1.18	1.33
Italy		MIB	−0.067	−3.18	1.35
UK		Z	−0.044	−2.71	1.04
Spain		IB	−0.050	−2.50	1.26
Japan		NK	−0.027	−1.52	1.12
Australia		ASX	0.000	0.03	0.73
South Korea		KOS	−0.004	−0.16	1.53
Hong Kong		HSI	−0.006	−0.33	1.24
Singapore		STI	−0.003	−0.18	1.19
Panel C: Close-to-open overnight return (%)					
US		ESP	0.022	2.09	0.66
Netherlands		AEX	0.039	2.99	0.84
France		CAC	0.029	2.19	0.83
Germany		DAX	0.032	2.56	0.78
Italy		MIB	0.056	5.08	0.70
UK		Z	0.047	4.19	0.71
Spain		IB	0.055	3.90	0.90
Japan		NK	0.037	2.10	1.11
Australia		ASX	0.012	0.91	0.82
South Korea		KOS	0.030	1.65	1.15
Hong Kong		HSI	0.034	1.90	1.12
Singapore		STI	0.024	1.67	0.93

- Consistent explanation across markets?
- Why not China? Qiao and Dam (2020): $T + 1$ trading rule. Could fit the story if day traders consume liquidity when closing their positions (but relevant at the market level?)

Final thoughts

Great paper

- Important contribution to the literature on day&night returns
  - and to the literature on liquidity provision
- Opens up several avenues for future work:
  - Link to stock-level evidence: What drives imbalances?
  - Zoom in on the close
  - Test directly for changes in liquidity (Hameed, Kang, and Viswanathan (2010))
  - Other countries