
My Big Fatty Reefer Vetting



KASE LEARNING SHORTING CONFERENCE
DECEMBER 3, 2018

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with assistance from Daniel Nall and Andrew Beeli

Doobage

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Chronic

A brief follow-up: It's still taking a long time for Energous Corp (WATT) to get a product to market.



(the magic underwear guy then)

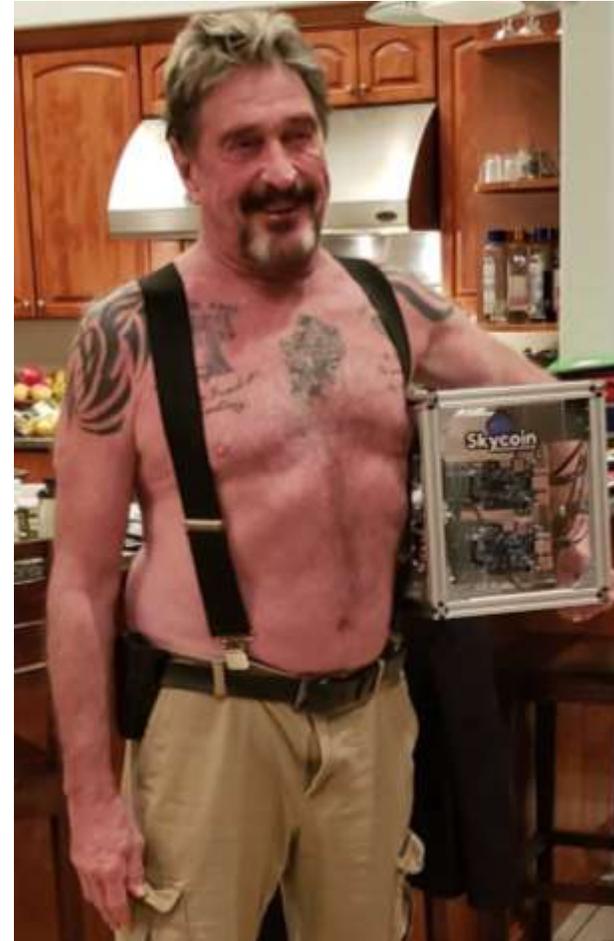


Chronic

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(the magic underwear guy then)



(the magic underwear guy now)



Fifty Cent Bag



Energous (WATT) down 55% since our May 3 presentation at Kase Learning



Greenery

Long-short hedge fund management firm based in Toledo, Ohio

Bottoms-up fundamental and other multistrategy approaches, focused on U.S. microcap

Launched our flagship fund in August 2008

Historical annualized return of 16.9% with no down years yet
(+13.98% in 2008, +7.27% in 2011, +10.77% ytd through Nov 2018)

Historical R^2 to S&P 500 = 0.15

\$106 million assets under management

Currently 59% gross long, 23% gross short (beta-adjusted net long = 15%)



Muggle

“You don’t need to be a rocket scientist. Investing is not a game where the guy with the 160 IQ beats the guy with the 130 IQ.

[Even if you do have an IQ of 160, just] give away 30 points to somebody else. You don’t need a lot of brains to be in this business.”

- Warren Buffett



Wisdom-weed (audience participation opportunity)



Four U.S.-listed corporations sport a market capitalization of more than \$5 billion (as of 11/26/2018), with consensus calendar 2019 revenue estimates of less than \$250 million.

Name one of the four.

Sage Therapeutics (\$5.2 bil)
Bluebird Bio (\$6.7 bil)
Alnylam Pharmaceuticals (\$7.4 bil)
Tilray Inc. (\$10.8 bil)



Sassafras

Pioneering the Future of Medical Cannabis Globally

Tilray: A Global Leader

Tilray is a global leader in medical cannabis research, cultivation, processing and distribution. We aspire to lead, legitimize and define the future of our industry by building the world's most trusted cannabis company.

A proud pioneer, we are the first GMP-certified medical cannabis producer to supply cannabis flower and extract products to tens of thousands of patients, physicians, pharmacies, hospitals, governments and researchers on five continents.



Hocus-pocus



Tilray 2018 Q3

Revenue (orange): \$10.0 million

Gross Profit (not shown): \$3.1 million

Operating Income (green): -\$20.0 million



Rip



+1,159% from IPO
July 18, 2018 to high close
on Sep 19, 2018

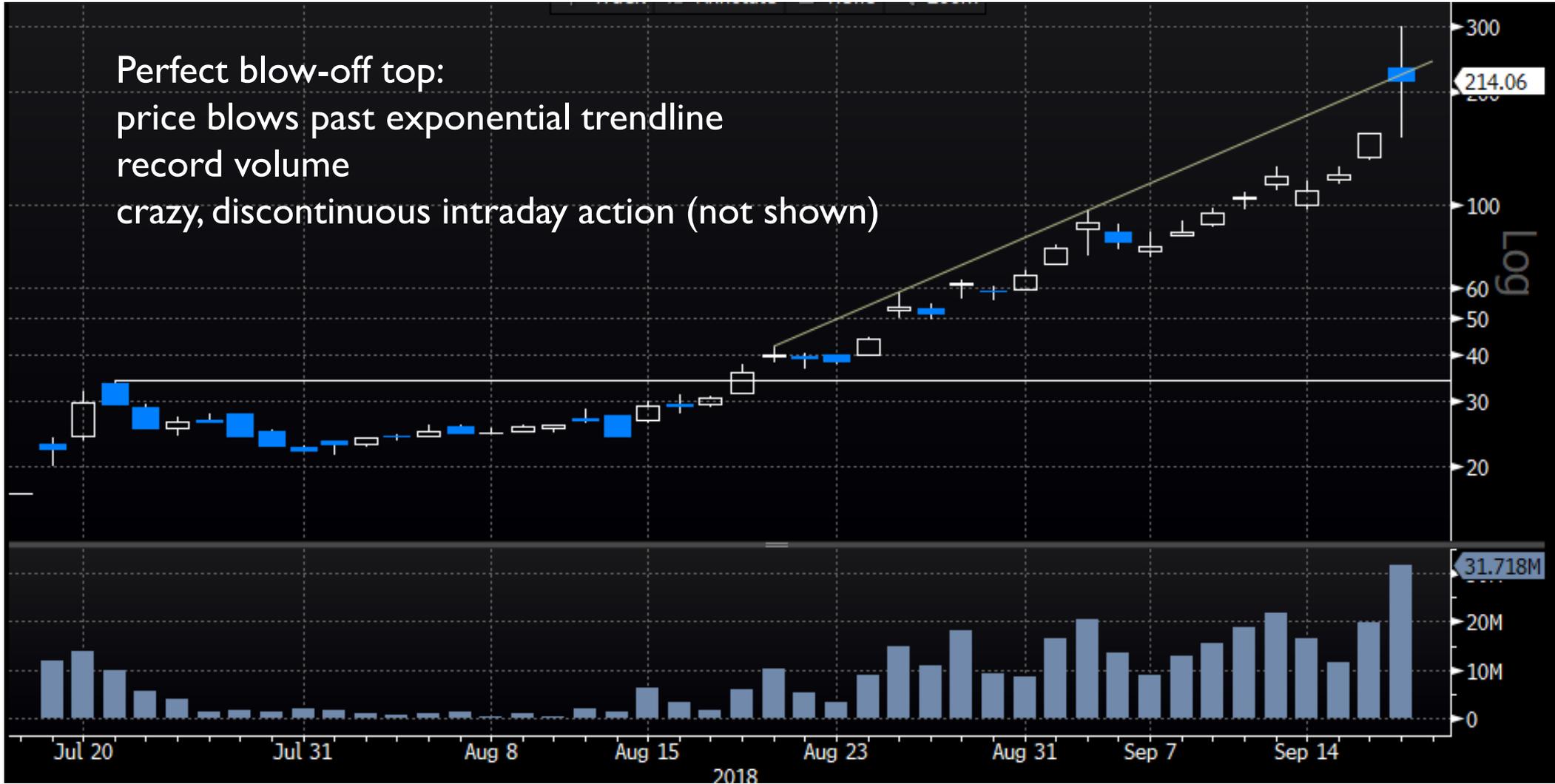
(44 trading days)

Note the float is only
10.3 million shares (of
76.5 million outstanding).



Log

Perfect blow-off top:
price blows past exponential trendline
record volume
crazy, discontinuous intraday action (not shown)



Tighten someone's wig



THIS is what a short-squeeze looks like.

Spot lending rates were more expensive than -100% for all of September, peaking at -600% the day of the blow-off top.



Balloon room

Being insanely expensive on an enterprise value to sales basis is probably not good.



| Sales/ Enterprise Value (Large Stocks) | | | | | |
|--|---------------|------------|---------------|--------|----------------|
| Decile | Annual Return | Annual Vol | Market Return | Sharpe | Tracking Error |
| 1 | 6.5% | 22.5% | 10.5% | 6.7% | 12.2% |
| 2 | 7.6% | 17.2% | 10.5% | 15.3% | 6.8% |
| 3 | 9.4% | 15.5% | 10.5% | 28.6% | 4.6% |
| 4 | 9.4% | 15.7% | 10.5% | 28.3% | 4.0% |
| 5 | 9.6% | 15.8% | 10.5% | 28.9% | 3.9% |
| 6 | 10.6% | 15.7% | 10.5% | 35.8% | 4.4% |
| 7 | 11.2% | 16.2% | 10.5% | 38.6% | 4.6% |
| 8 | 11.6% | 16.9% | 10.5% | 38.9% | 5.5% |
| 9 | 11.6% | 17.4% | 10.5% | 37.8% | 6.1% |
| 10 | 13.4% | 17.1% | 10.5% | 49.3% | 6.8% |

U.S. stocks 1963-2015, analysis by Patrick O'Shaughnessy, www.investorfieldguide.com



Back roll

Let's look at every stock

with trailing revenue less than \$100 million (TLRY = \$32.5 million)

market capitalization above \$5 billion (TLRY = \$9.5 billion)

United States listed

excluding BICS **biotechnology & pharmaceuticals**

(post-screen) also excluding **financials, holding companies, thin OTC names**



Rough stuff

| date | Ticker | Short.Name | Market.Cap | Revenue.T12 | Price.D.1 | price/revs | 6-mo ret. | 1-yr ret. | 2-yr. ret. | 3-yr. ret. | 5-yr. ret. | |
|-----------|----------|------------|--------------------|----------------|------------|------------|-----------|-----------|------------|------------|------------|-------|
| 5/1/1998 | 151885SD | US Equity | YAHOO! INC | 5,339,666,944 | 66,010,000 | 118.625 | 81 | 10% | 47% | 10% | -81% | -79% |
| 6/1/1998 | ATHMQ | US Equity | @HOME Network | 5,038,975,488 | 12,404,000 | 33.8125 | 406 | 76% | 248% | 21% | -75% | -100% |
| 2/1/1999 | 338846Q | US Equity | LYCOS INC | 5,472,421,376 | 71,541,000 | 127.4375 | 76 | -35% | 17% | -73% | -86% | -90% |
| 4/1/1999 | RNWK | US Equity | REALNETWORKS INC | 5,335,605,248 | 64,839,000 | 157.875 | 82 | 35% | 44% | -82% | -82% | -85% |
| 5/1/1999 | DCLK | US Equity | DOUBLECLICK INC | 5,471,702,016 | 80,188,000 | 139.8125 | 68 | 3% | 6% | -82% | -89% | -88% |
| 7/1/1999 | INKT | US Equity | INKTOMI CORP | 6,454,606,336 | 39,890,000 | 132.4375 | 162 | 34% | 79% | -86% | -99% | -99% |
| 11/1/1999 | VRSN | US Equity | VERISIGN INC | 6,633,644,544 | 58,034,000 | 131.5625 | 114 | 107% | 94% | -44% | -87% | -60% |
| 11/1/1999 | BVSN | US Equity | BROADVISION INC | 6,176,664,576 | 71,386,999 | 80.9375 | 87 | 60% | 16% | -92% | -99% | -99% |
| 11/1/1999 | LDIG | US Equity | LIBERTY DIGITAL | 6,070,374,912 | 84,779,000 | 30.875 | 72 | 7% | -58% | -91% | -89% | -89% |
| 11/1/1999 | MFNXQ | US Equity | METROMEDIA FIBER | 5,410,808,320 | 65,976,000 | 34.75 | 82 | 85% | 23% | -96% | -100% | -100% |
| 12/1/1999 | 2482718Q | US Equity | PORTAL SOFTWARE | 8,197,754,880 | 54,291,000 | 108.6875 | 151 | -21% | -89% | -97% | -98% | -99% |
| 2/1/2000 | VERT | US Equity | BRAVOSOLUTION US | 8,977,162,240 | 11,939,900 | 252.125 | 752 | -64% | -96% | -99% | -100% | -100% |
| 2/1/2000 | ALGXQ | US Equity | ALLEGIANCE TELECOM | 6,997,311,488 | 65,357,998 | 107.875 | 107 | -24% | -55% | -92% | -99% | -100% |
| 2/1/2000 | AFFX | US Equity | AFFYMETRIX INC | 5,935,451,136 | 90,326,001 | 229 | 66 | -41% | -42% | -74% | -76% | -62% |
| 3/1/2000 | TIBX | US Equity | TIBCO SOFTWARE | 23,580,602,368 | 96,440,000 | 130.125 | 245 | -17% | -91% | -91% | -96% | -93% |
| 3/1/2000 | NXTP | US Equity | NEXTEL PARTNER-A | 8,198,039,552 | 32,720,001 | 34.125 | 251 | -8% | -45% | -82% | -84% | -42% |
| 3/1/2000 | RMBS | US Equity | RAMBUS INC | 7,018,344,960 | 44,745,000 | 295 | 157 | 7% | -46% | -90% | -79% | -77% |
| 3/1/2000 | CREE | US Equity | CREE INC | 5,886,169,088 | 77,711,000 | 198.1875 | 76 | -34% | -78% | -84% | -83% | -76% |
| 3/1/2000 | MUSE | US Equity | MICROMUSE INC | 5,371,753,472 | 69,573,000 | 159.75 | 77 | 10% | -43% | -88% | -93% | -94% |
| 3/1/2000 | TERN | US Equity | TERAYON COMM SYS | 5,056,182,272 | 71,264,000 | 231.75 | 71 | -31% | -95% | -94% | -98% | -97% |
| 4/1/2000 | ACTA | US Equity | ACTUA CORP | 23,804,479,488 | 16,535,859 | 90.3125 | 1440 | -81% | -98% | -99% | -100% | -100% |
| 4/1/2000 | BCOR | US Equity | BLUCORA INC | 20,609,366,016 | 56,993,000 | 145.4375 | 362 | -58% | -97% | -98% | -98% | -94% |
| 4/1/2000 | CMRCQ | US Equity | COMMERCE ONE LLC | 11,188,974,592 | 33,557,000 | 149.25 | 333 | 5% | -87% | -98% | -100% | -100% |
| 4/1/2000 | VIGN | US Equity | VIGNETTE CORP | 9,542,566,912 | 89,185,000 | 160.25 | 107 | -44% | -88% | -94% | -97% | -98% |
| 4/1/2000 | 3464235Q | US Equity | DIGEX INC-A | 7,044,531,200 | 59,786,000 | 110.9375 | 118 | -58% | -87% | -99% | -100% | -99% |
| 4/1/2000 | 2725934Q | US Equity | GLOBESPANVIRATA | 5,926,034,432 | 56,220,000 | 101.9375 | 105 | 20% | -79% | -85% | -95% | -91% |
| 4/1/2000 | SWCM | US Equity | SOFTWARE.COM | 5,439,169,536 | 44,638,000 | 128.875 | 122 | 41% | -76% | -92% | -98% | -95% |
| 5/1/2000 | RBAKQ | US Equity | REDBACK NETW-OLD | 7,638,069,248 | 64,274,000 | 87 | 119 | 29% | -78% | -97% | -99% | -100% |
| 6/1/2000 | ARBA | US Equity | ARIBA INC | 13,882,901,504 | 92,555,000 | 58.875 | 150 | 4% | -90% | -95% | -94% | -98% |
| 6/1/2000 | GEC | US Equity | PHONE.COM | 6,036,211,200 | 66,834,000 | 76.6875 | 90 | -31% | -47% | -92% | -97% | -93% |
| 7/1/2000 | ARTG | US Equity | ART TECHNOLOGY | 6,715,280,896 | 49,229,001 | 100.9375 | 136 | -70% | -94% | -99% | -98% | -99% |
| 10/1/2000 | FN5R | US Equity | FINISAR CORP | 7,745,466,880 | 80,480,000 | 48.375 | 96 | -80% | -92% | -99% | -95% | -97% |
| 10/1/2000 | AVNX | US Equity | OCLARO NORTH AME | 6,937,874,944 | 40,743,000 | 107.6875 | 170 | -90% | -97% | -99% | -96% | -99% |
| 10/1/2000 | BCSI | US Equity | BLUE COAT SYSTEM | 5,663,215,104 | 48,110,000 | 143 | 118 | -97% | -99% | -99% | -98% | -94% |
| 10/1/2000 | IWOV | US Equity | INTERWOVEN INC | 5,582,834,176 | 49,923,000 | 113.0625 | 112 | -82% | -93% | -96% | -95% | -96% |
| 5/1/2001 | ONIS | US Equity | ONI SYSTEMS CORP | 5,049,863,168 | 59,662,001 | 37.05 | 85 | -86% | -86% | -86% | -92% | -92% |
| 4/1/2004 | XM5R | US Equity | XM SATELLITE -A | 5,291,103,232 | 91,780,998 | 28.34 | 58 | 9% | 8% | -21% | -54% | -94% |
| 11/1/2004 | WYNN | US Equity | WYNN RESORTS LTD | 5,179,798,528 | 752,000 | 58.09 | 6888 | -9% | -19% | 25% | 185% | 4% |
| 12/1/2004 | SIRI | US Equity | SIRIUS XM HOLDING | 8,816,549,888 | 46,587,000 | 6.98 | 189 | -13% | 2% | -39% | -45% | -91% |
| 3/1/2011 | CIEIQ | US Equity | COBALT INTERNATI | 5,348,168,192 | 0 | 15.01 | 9999 | -37% | 107% | 64% | 28% | -82% |
| 5/1/2011 | MCPIQ | US Equity | MOLYCORP INC | 6,032,641,024 | 34,878,000 | 73.3 | 173 | -49% | -62% | -92% | -94% | -100% |
| 10/1/2018 | NIO | US Equity | NIO INC - ADR | 6,771,666,432 | 45,991,000 | 6.6 | 147 | | | | | |

| | 6-month | 1-year | 2-year | 3-year | 5-year |
|---------|---------|--------|--------|--------|--------|
| Mean | -16% | -37% | -76% | -81% | -89% |
| Median | -17% | -62% | -92% | -95% | -94% |
| winners | 17 | 12 | 4 | 2 | 1 |
| losers | 24 | 29 | 37 | 39 | 40 |



Enlightened

Stocks higher at one year:

Tech bubble 1998 (2 of 2) or 1999 (7 of 9);

all of these were -75% or worse by year 3

Large asset base (roughly \$2 bil in assets):

XM Satellite +8% year 1 -94% year 5

Sirius +2% year 1 -91% year 5

Cobalt Intl +107% year 1 -82% year 5

Only one stock higher at 5 years:

Wynn Resorts

\$3.4 billion of assets; 3.4x tangible book

+185% at year 3 +4% at year 5

| date | Ticker | Short.Name | price/revs | 6-mo ret. | 1-yr ret. | 2-yr. ret. | 3-yr. ret. | 5-yr. ret. |
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| 4/1/2000 | ACTA | US Equity ACTUA CORP | 1440 | -81% | -98% | -99% | -100% | -100% |
| 4/1/2000 | BCOR | US Equity BLUCORA INC | 362 | -58% | -97% | -98% | -98% | -94% |
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| 6/1/2000 | GEC | US Equity PHONE.COM | 90 | -31% | -47% | -92% | -97% | -93% |
| 7/1/2000 | ARTG | US Equity ART TECHNOLOGY | 136 | -70% | -94% | -99% | -98% | -99% |
| 10/1/2000 | FNSR | US Equity FINISAR CORP | 96 | -80% | -92% | -99% | -95% | -97% |
| 10/1/2000 | AVNX | US Equity OCLARO NORTH AME | 170 | -90% | -97% | -99% | -96% | -99% |
| 10/1/2000 | BCSI | US Equity BLUE COAT SYSTEM | 118 | -97% | -99% | -99% | -98% | -94% |
| 10/1/2000 | IWOV | US Equity INTERWOVEN INC | 112 | -82% | -93% | -96% | -95% | -96% |
| 5/1/2001 | ONIS | US Equity ONI SYSTEMS CORP | 85 | -86% | -86% | -86% | -92% | -92% |
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| 10/1/2018 | NIO | US Equity NIO INC - ADR | 147 | | | | | |

Frosty top



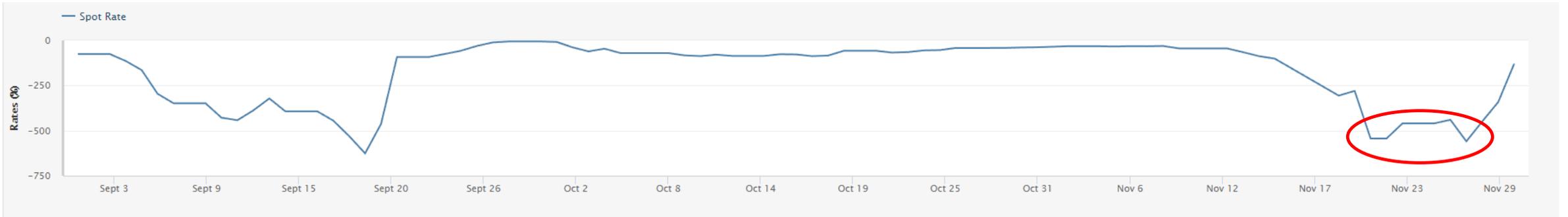
Contact high



One-hitter



Locoweed



From November 12 to November 28, borrow on Tilray again tightened dramatically, with spot rates reaching -500%.

The share price was down slightly.



Rainy day woman

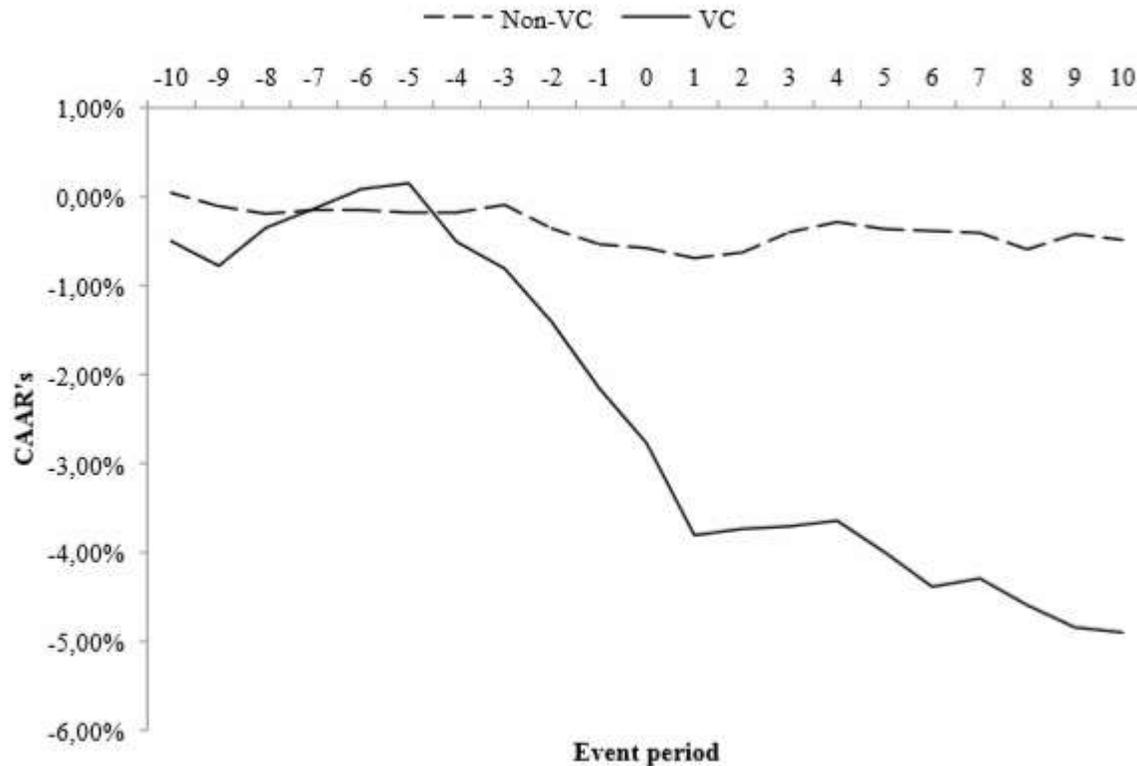


Figure 7: The build up of the cumulative negative average abnormal returns for the VC and Non-VC sample [-10;10]

Tilray's IPO lockup expires January 15.

Firms with large residual VC interests have larger-than-average abnormal negative return into IPO lockup expiry. (1)

Firms with the strongest IPO-to-lockup performance tend to suffer greater abnormal negative returns around lock-up expiry. (2)



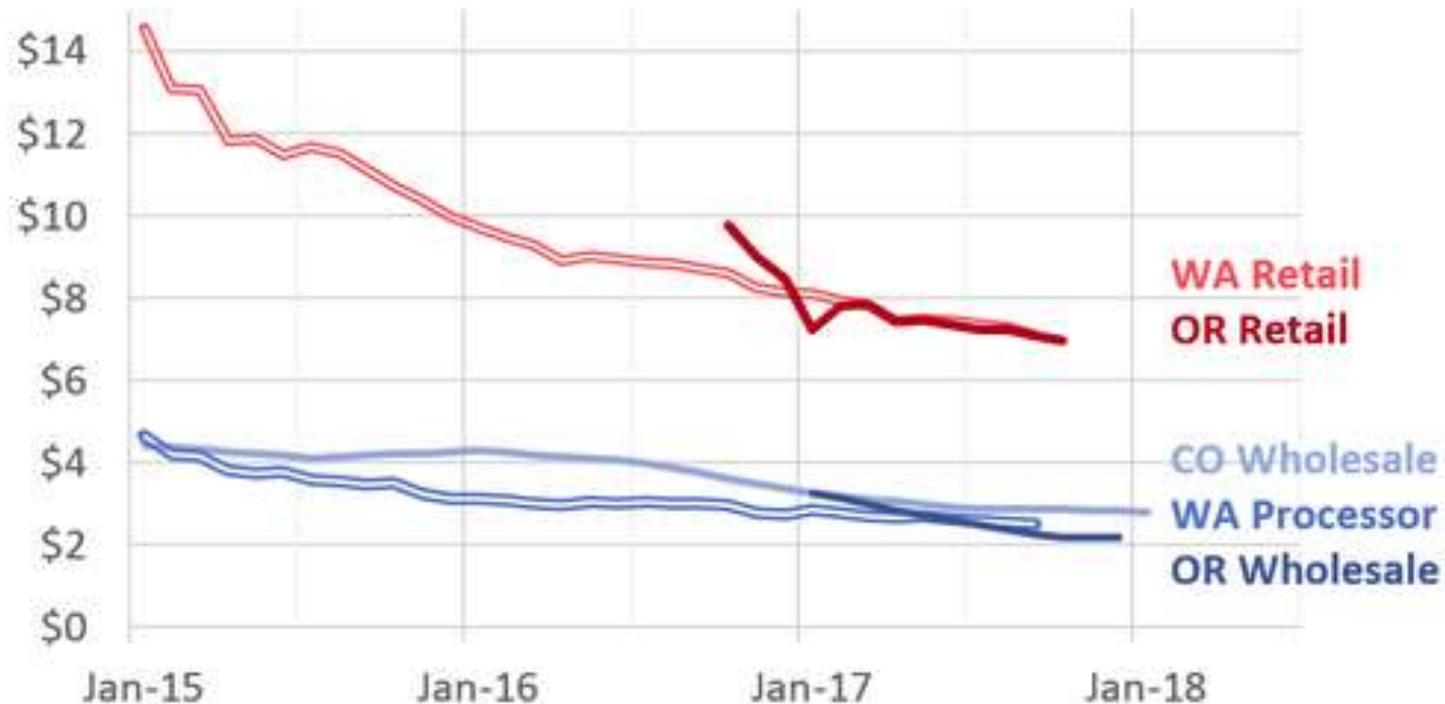
1. Negative abnormal returns around lockup expiration. Devos and Ben, 2015

2. Venture capital and IPO lockup expiration: an empirical analysis. Bradley, Jordan, et al, 2000

Dipper

Recreational Marijuana Prices

Price per Gram



Source: CO Dept of Revenue, Portland Business Journal, WA Econ and Rev Forecast Council, OLCC, Oregon Office of Economic Analysis

Marijuana cultivation is a commodity business (as is marijuana extraction).



Square mackerel



Strawberries in Iceland

are grown in a greenhouse, taste amazing, and are \$15 a pound. Where do you buy your strawberries from?

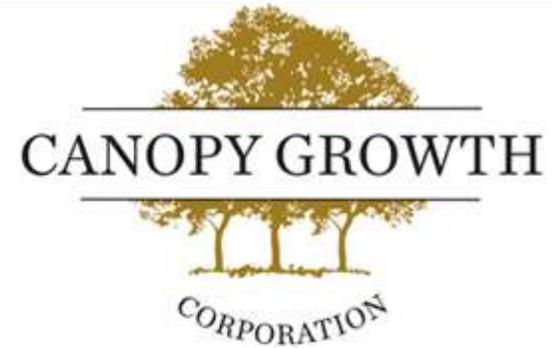


Don't fear the reefer

The biggest risk to our short thesis is someone making another brutally stupid \$4 billion investment.



Constellation
Brands



Mohasky?

