

# Share Buybacks Are Creating Distortions in Stock Market Data

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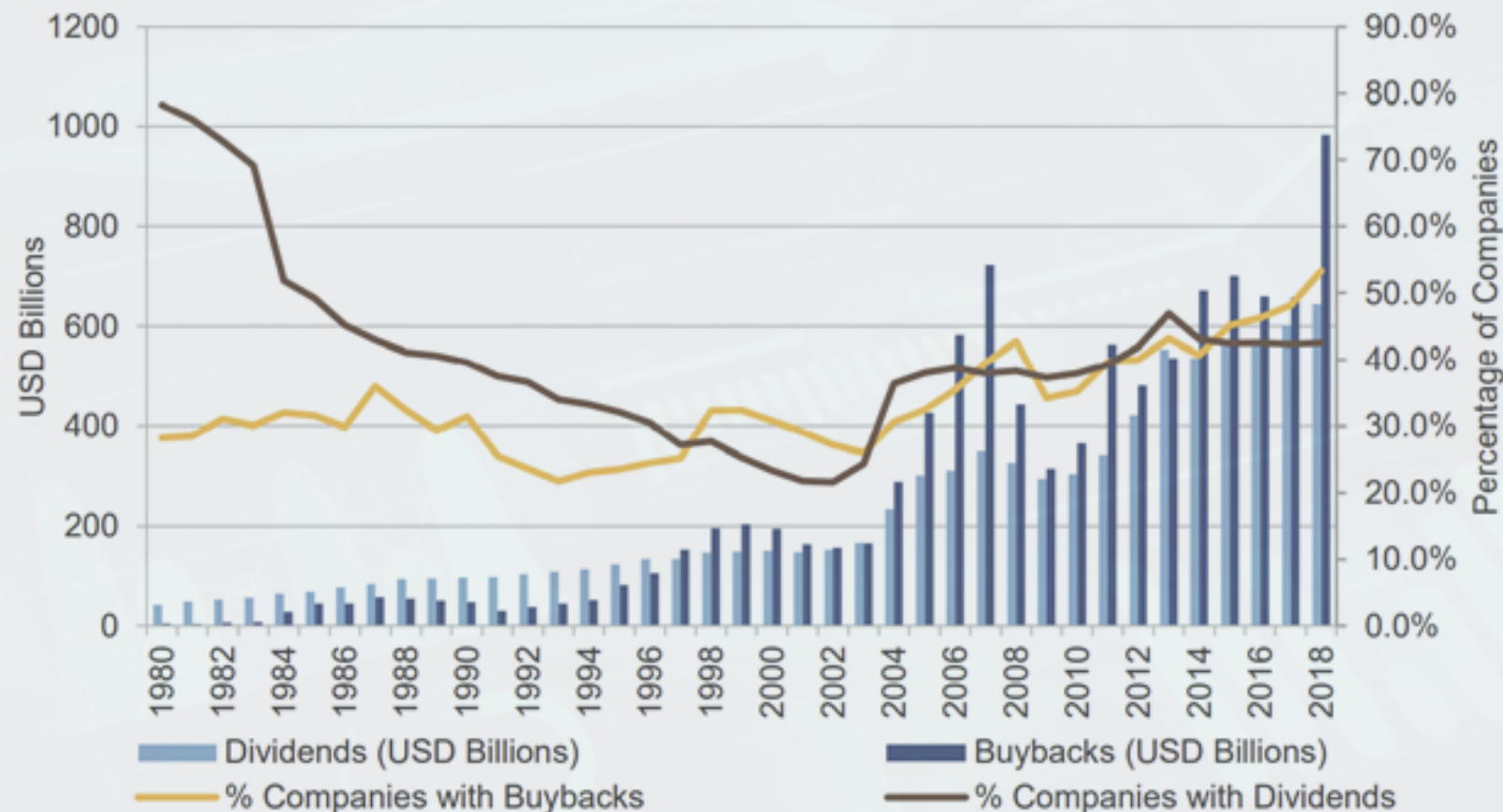
*Accounting statements are created for taxes purposes, not investing.  
Find out how to adjust accounting statement for better investing!*



FSA Valuation  
Service Inc.

Over the past decade share buybacks have increased substantially

**Exhibit 1: Aggregate Dividends and Buybacks Paid by U.S. Firms and the Percentage of Firms with Positive Dividends and Buybacks in the U.S.**



Source: S&P Dow Jones Indices LLC, Compustat. Only listed companies with fundamental data available in Compustat are calculated. Data as of fiscal year-end from 1980 to 2018. Dividend and buyback data may include the amount paid for preferred shares. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.



# What happens to the equity account when a buyback is executed?

On the balance sheet, a share repurchase reduces the company's cash by the amount of cash expenditure on the buyback. Simultaneously, this will shrink shareholder's equity by the same amount.

Sounds reasonable and it's prescribed by GAAP. The problem is it creates a massive distortion in the equity account if repurchased shares are substantially higher than when they were issued.

Imagine a company that originally issued one hundred million public shares at \$5.00 for a total raise of \$500M. The cash account goes up by \$500M and to make the balance sheet balance the equity account goes up by the same \$500M.

Now suppose for the next few years the company starts executing its strategy and shares rise to \$25 per share as investors applaud the strategy. Also suppose the retained earnings of the company are improving but not nearly as fast as the shares have appreciated in the market. Through retained earnings the equity account has risen to \$10 per share.

Despite the run up in shares to \$25 management decides their shares are undervalued and decides to repurchase 50% of the outstanding shares.

This will reduce the cash account by  $5M \times \$25$  per share = \$1.25Billion. Simultaneously, this will shrink the shareholder's equity by \$1.25Billion. Now the equity account stands at:

+ \$5 x 100M: the original equity raise \$500M  
+ \$500M: retained earnings  
- \$1.25B in share repurchases.  
= **(-\$250M)**

You may be thinking this illustrative example is contrived and would never happen in the real world. But it happens all the time. Take a look at these high-profile examples:

*Among other distortions, share buybacks are massively distorting ROE metrics*

# ROE vs. CFIRR Lens

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*Hundreds of companies have massive distortions in their ROE. We have identified over 250 stocks with distorted ROE's, including high profile companies like Home Depot, AutoZone, Wynn Resorts and many more.*



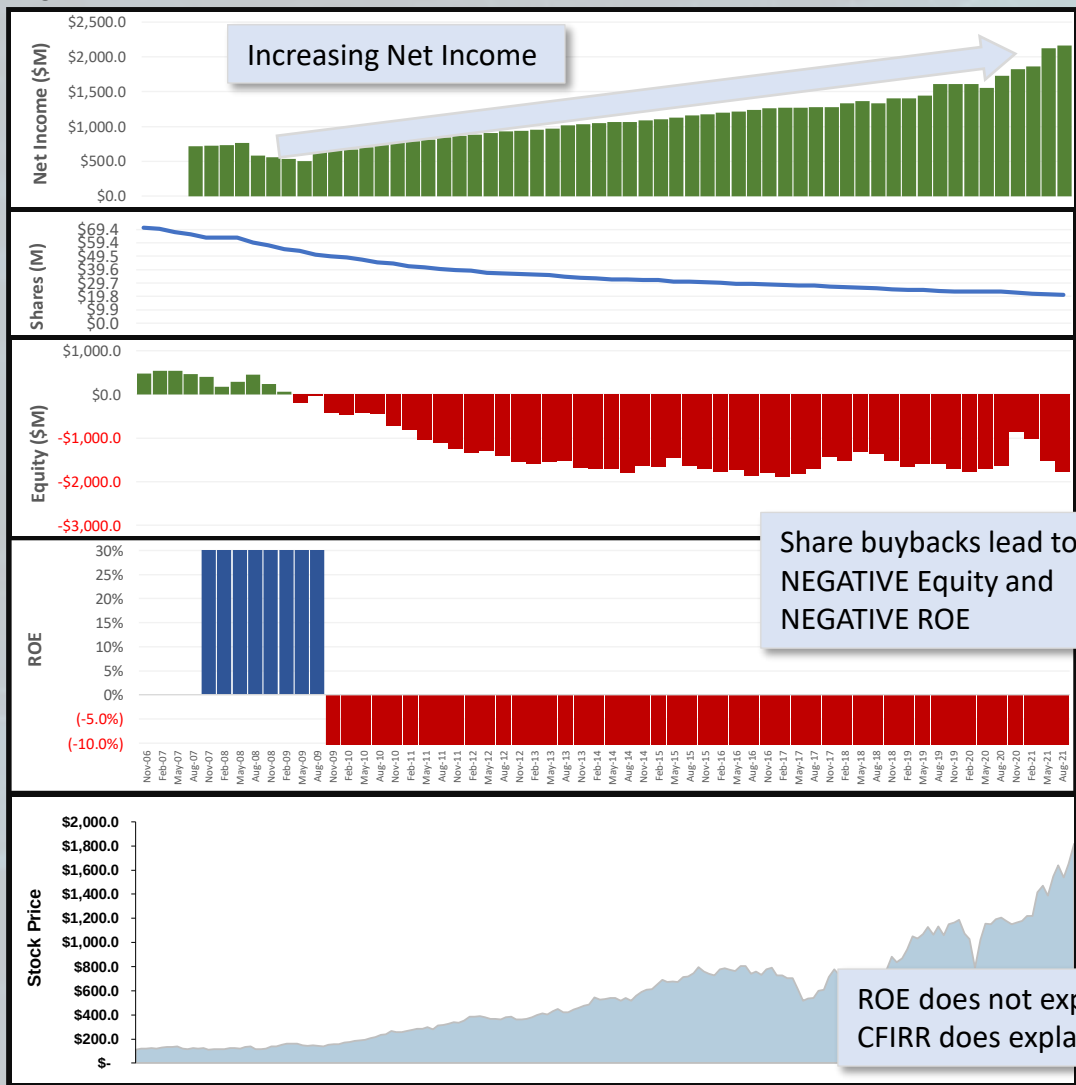
FSA Valuation  
Service Inc.

# ROE vs. CFIRR Lens – AutoZone Inc.

## AutoZone Inc

## ROE Lens

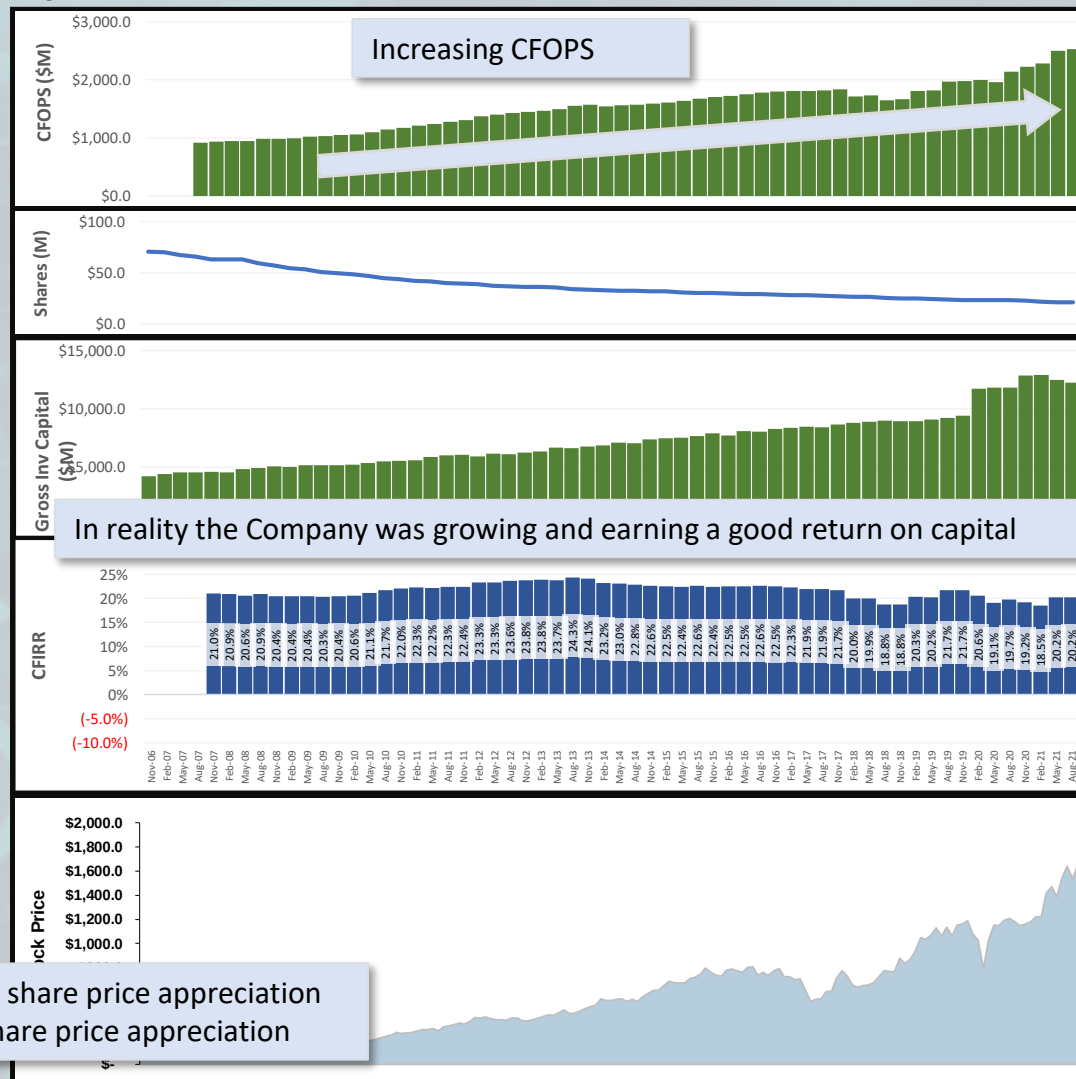
AZO



## AutoZone Inc

## CFIRR Lens

AZO



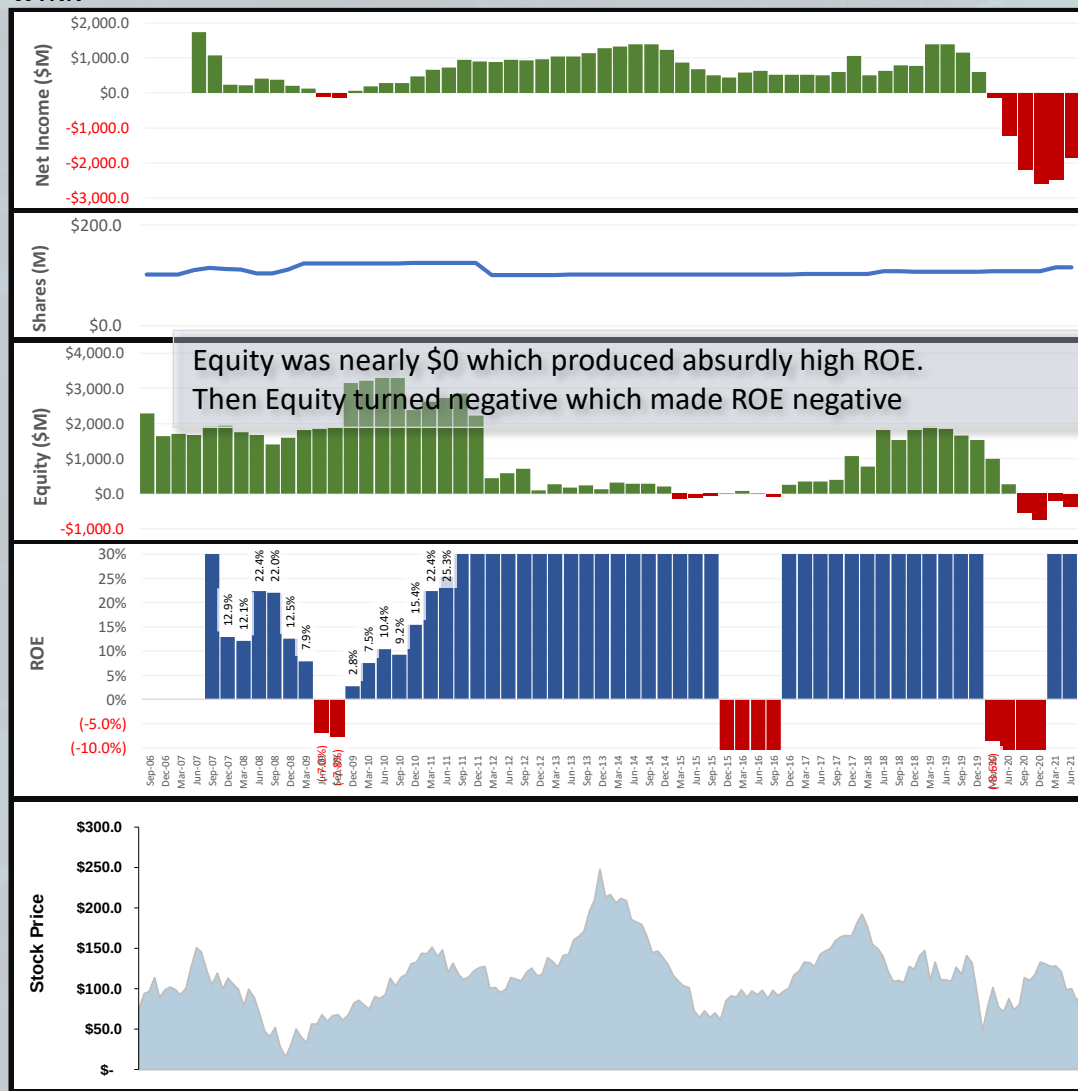


# ROE vs. CFIRR Lens – Wynn Resorts Ltd.

## Wynn Resorts Ltd

### ROE Lens

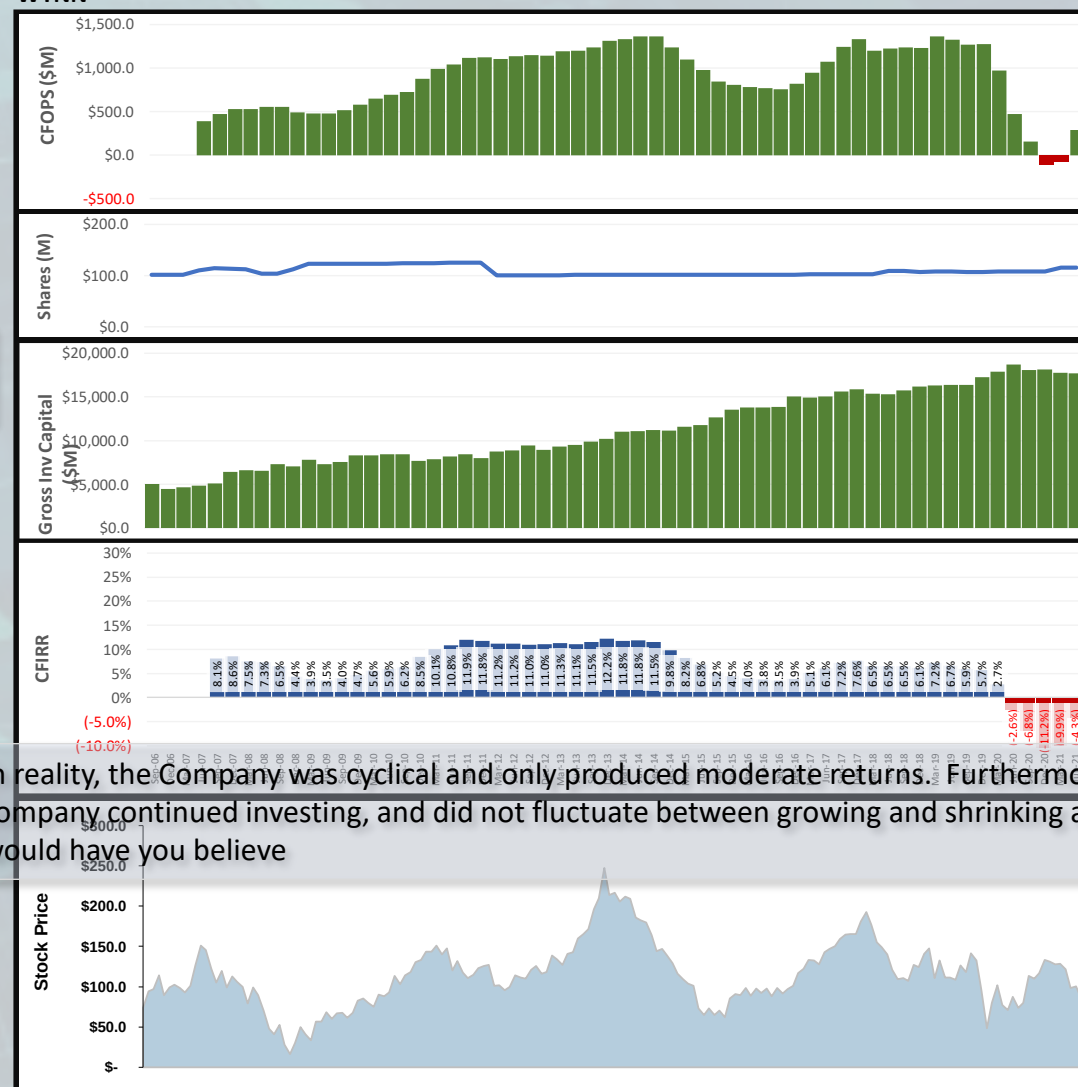
WYNN



## Wynn Resorts Ltd

### CFIRR Lens

WYNN



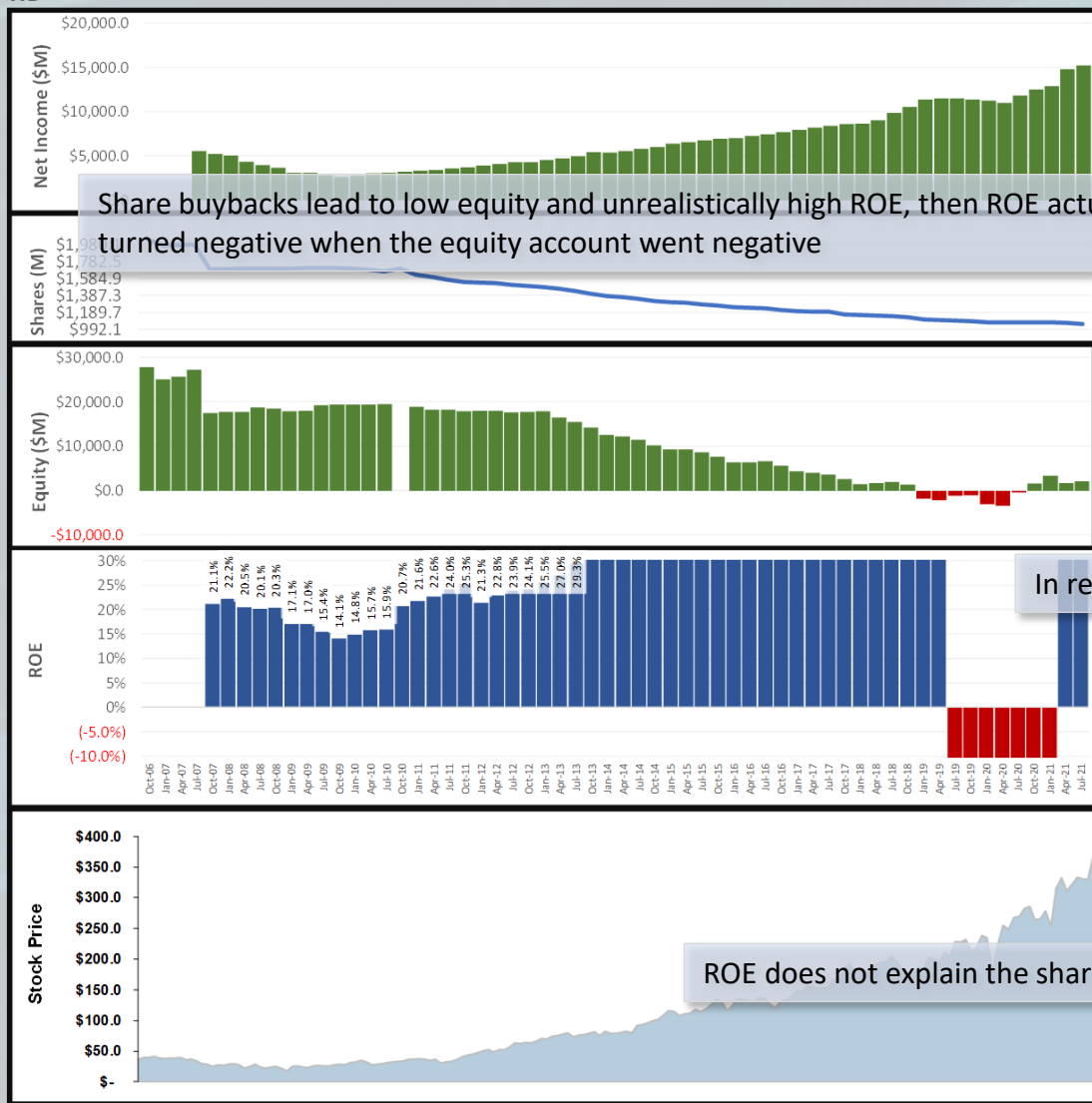


# ROE vs. CFIRR Lens – The Home Depot Inc.

## The Home Depot Inc

### ROE Lens

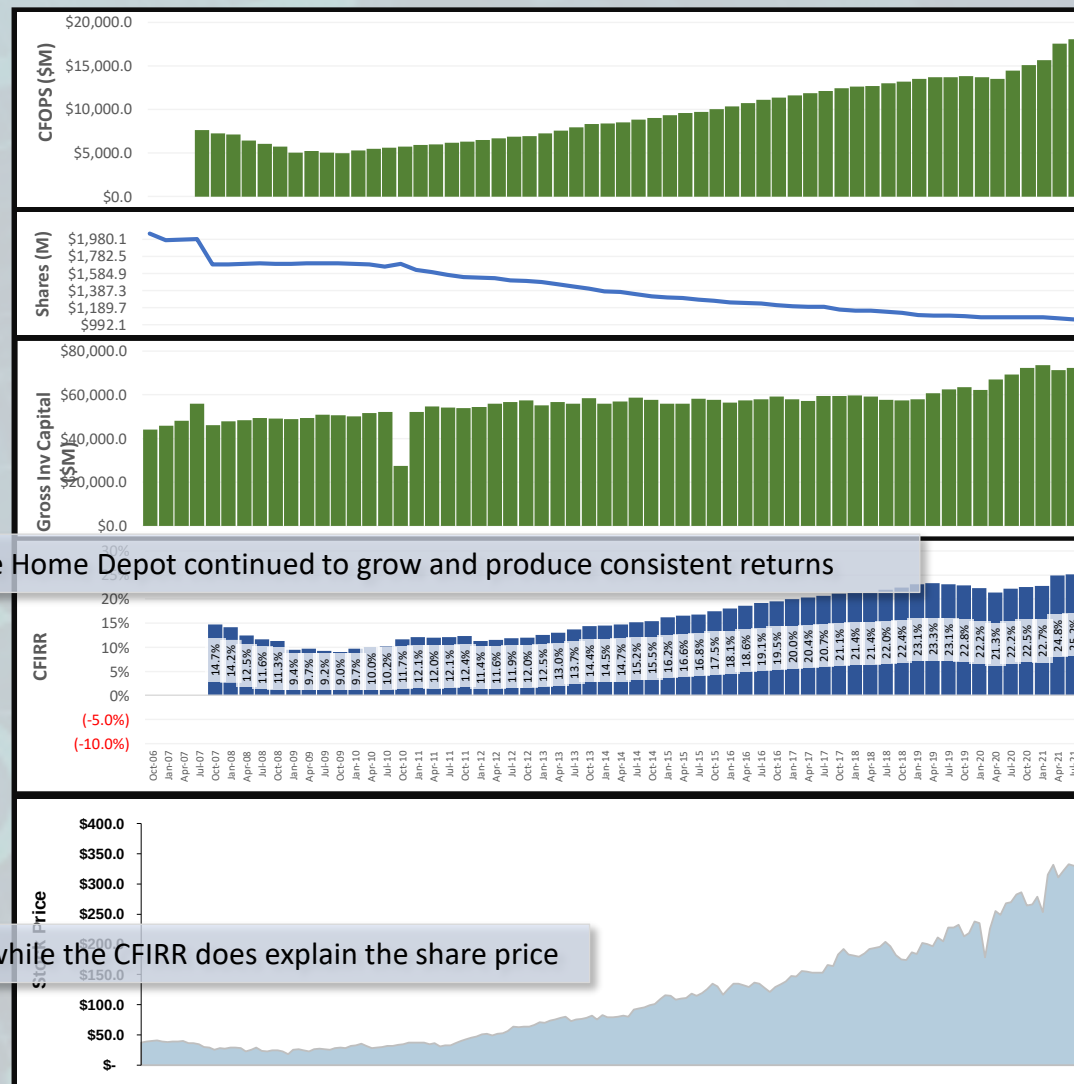
HD



## The Home Depot Inc

### CFIRR Lens

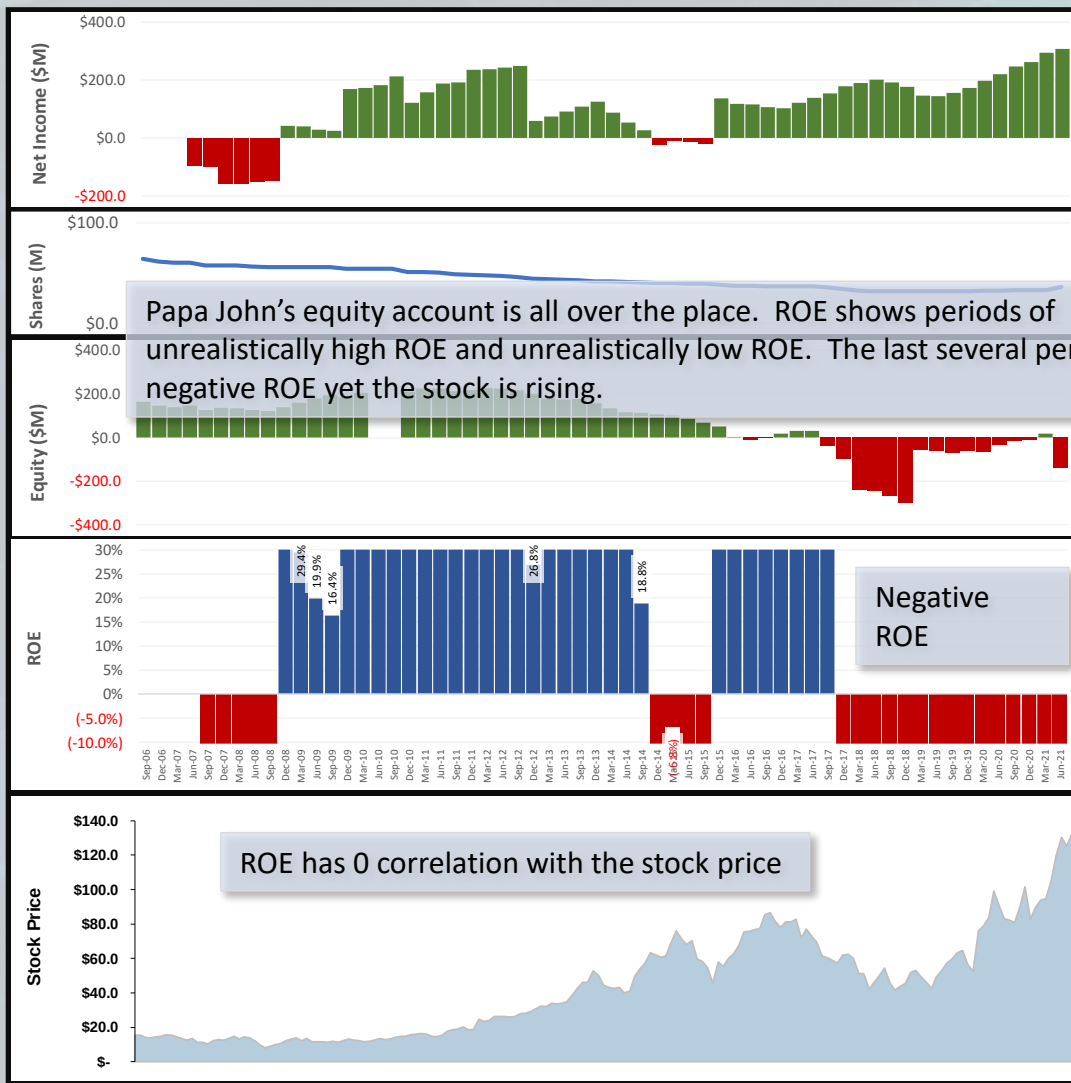
HD



# ROE vs. CFIRR Lens – Papa John's International

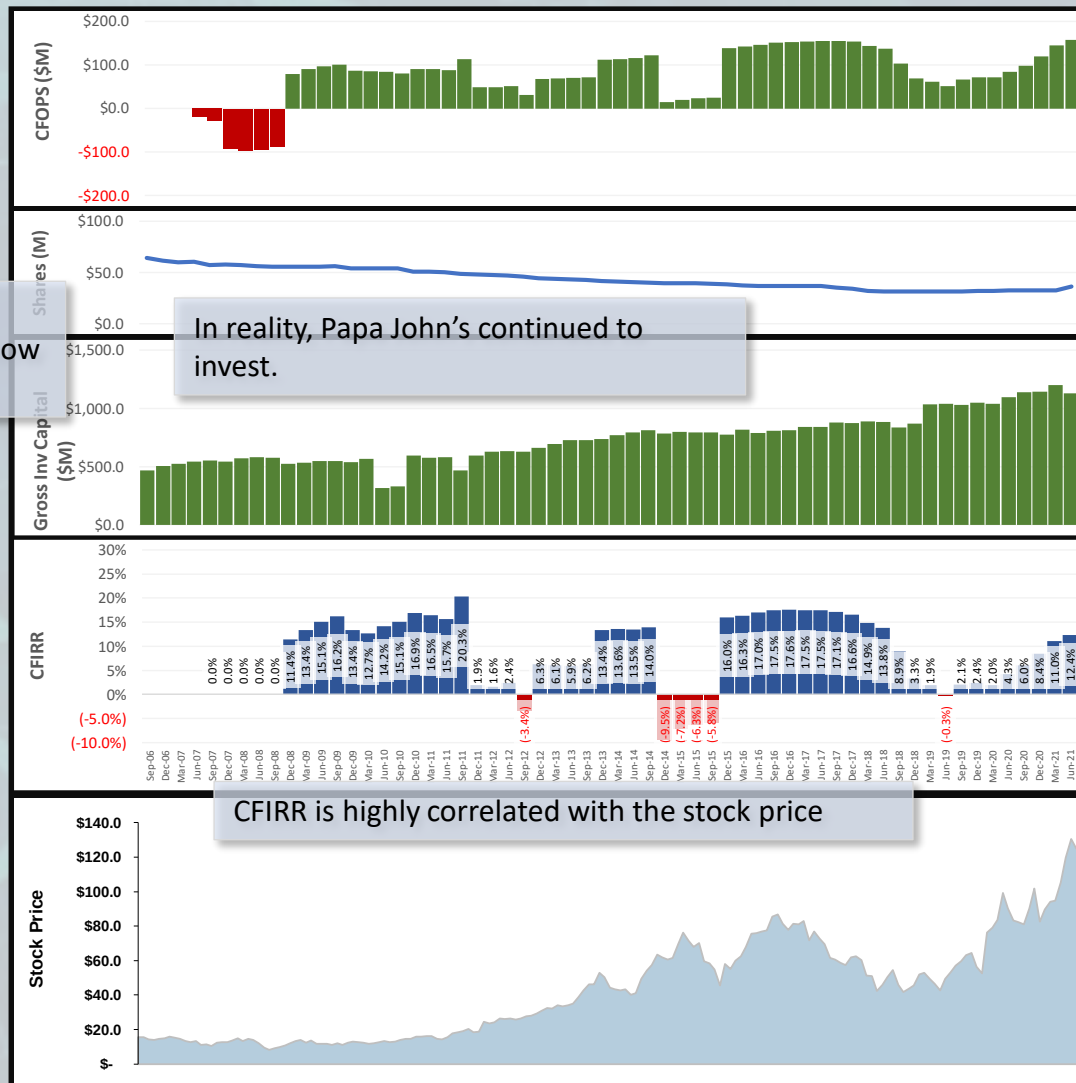
## Papa John's International ROE Lens

PZZA



## Papa John's International CFIRR Lens

PZZA

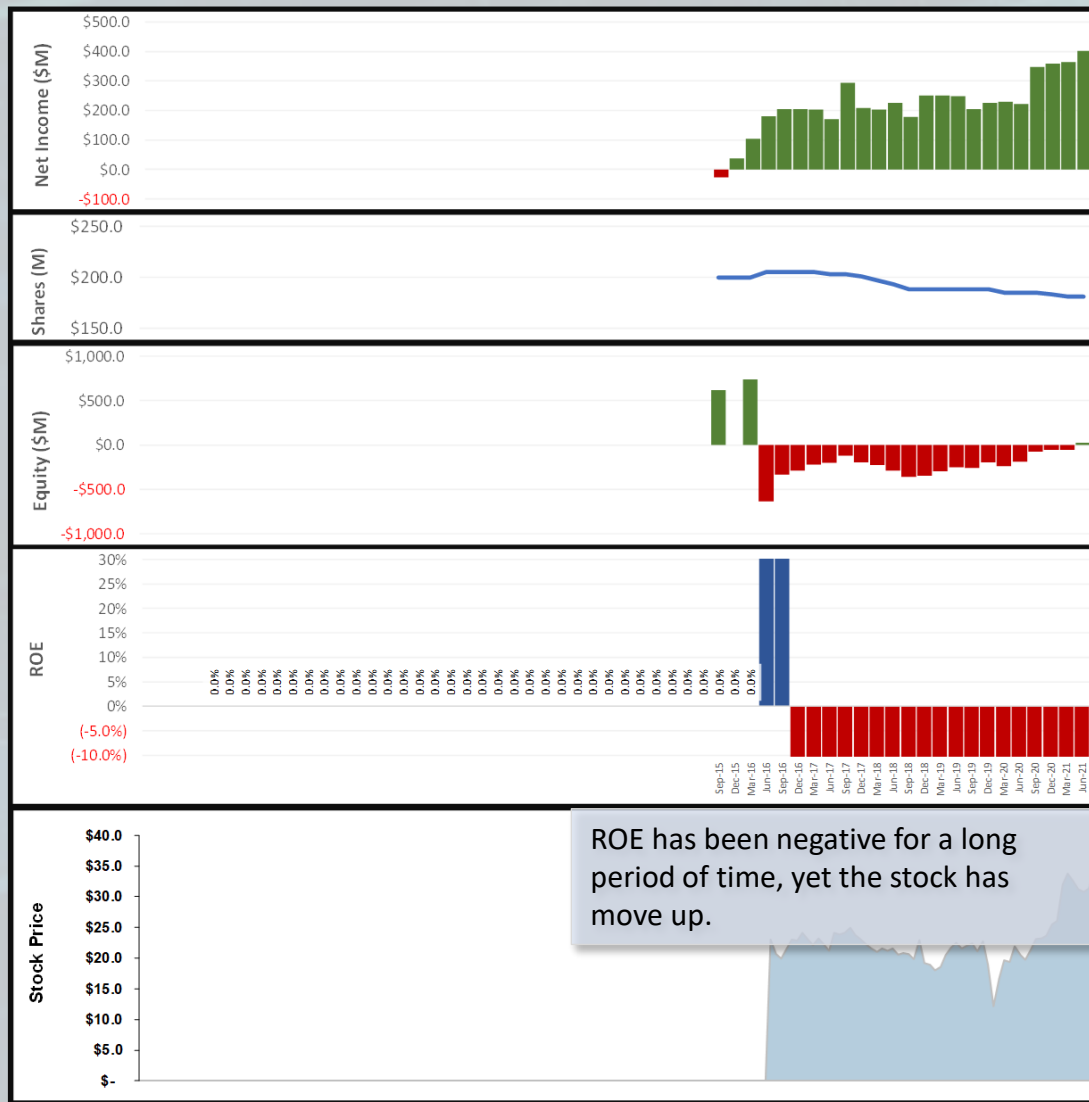


# ROE vs. CFIRR Lens – Valvoline Inc

## Valvoline Inc

## ROE Lens

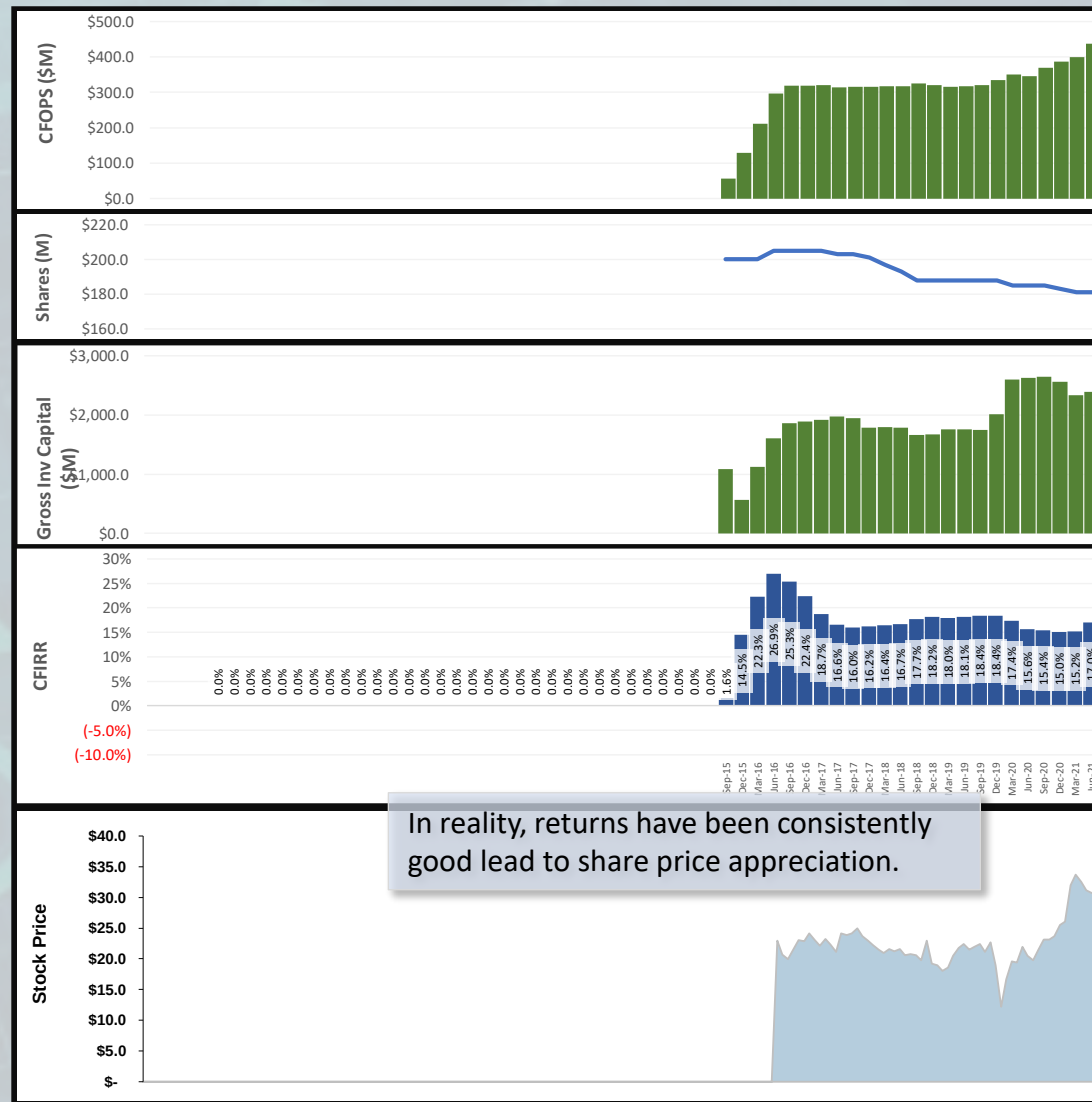
VVV



## Valvoline Inc

## CFIRR Lens

VVV





# ROE vs. CFIRR Lens – Choice Hotels International

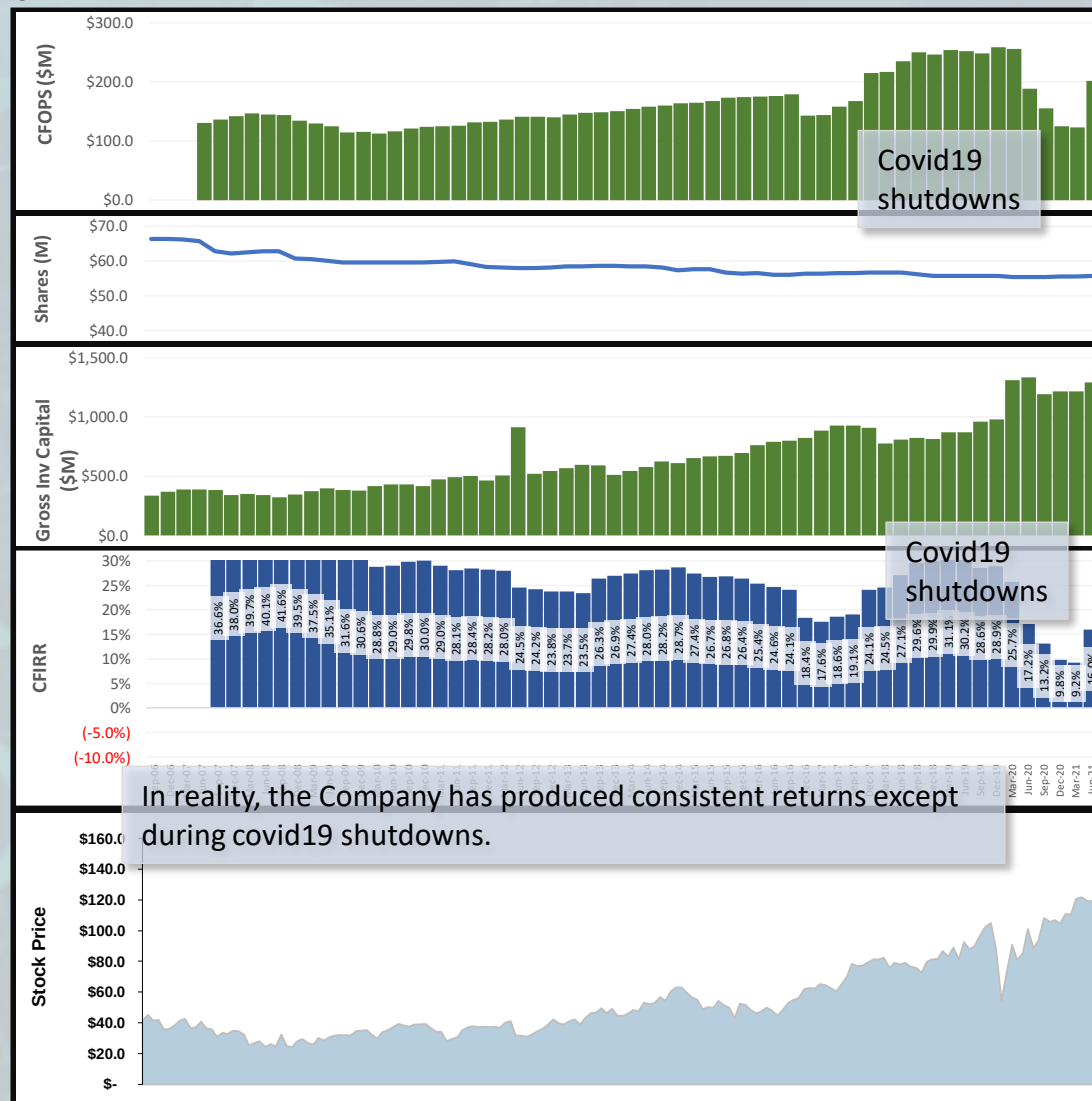
## Choice Hotels International ROE Lens

CHH



## Choice Hotels International CFIRR Lens

CHH

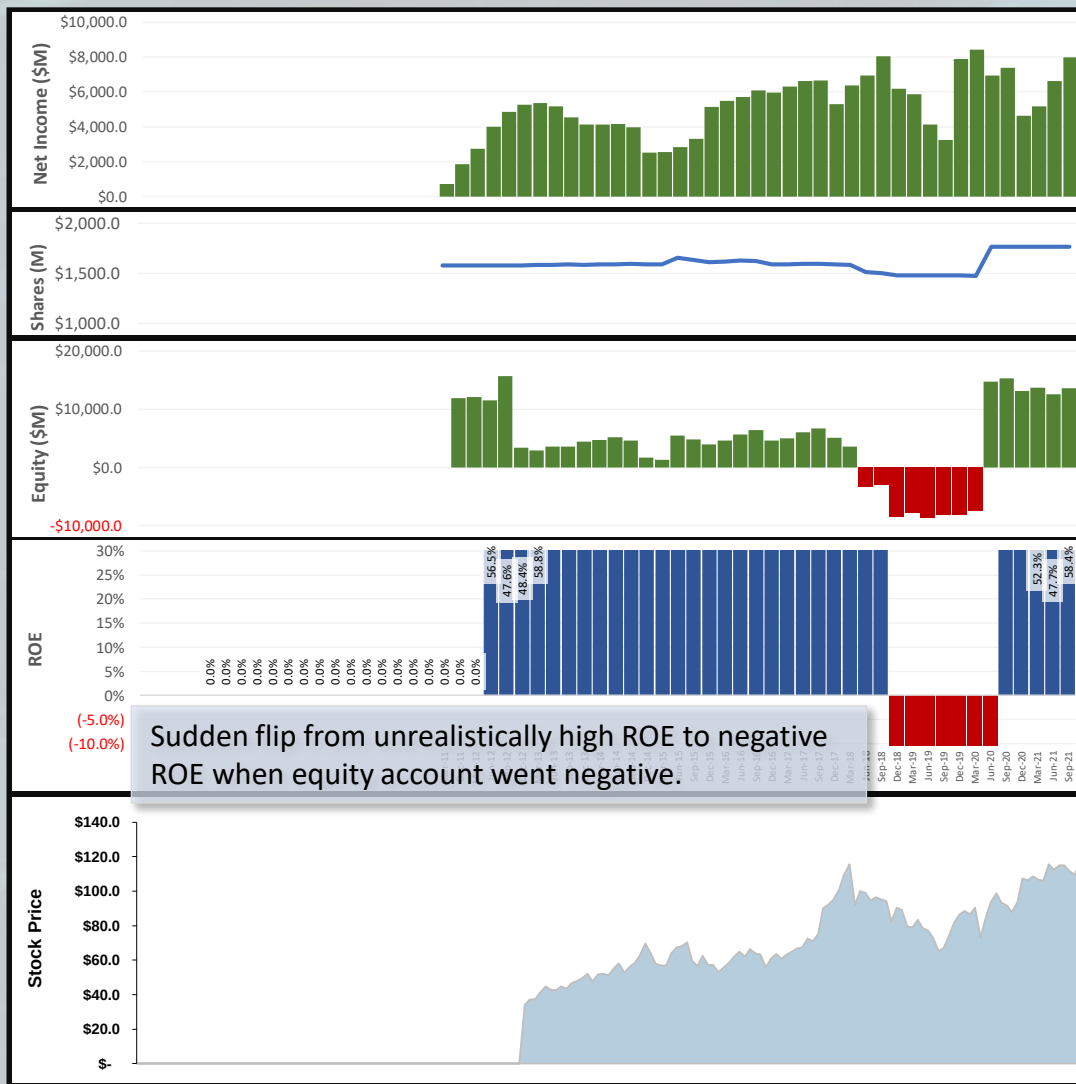


# ROE vs. CFIRR Lens – AbbVie Inc

## AbbVie Inc

ABBV

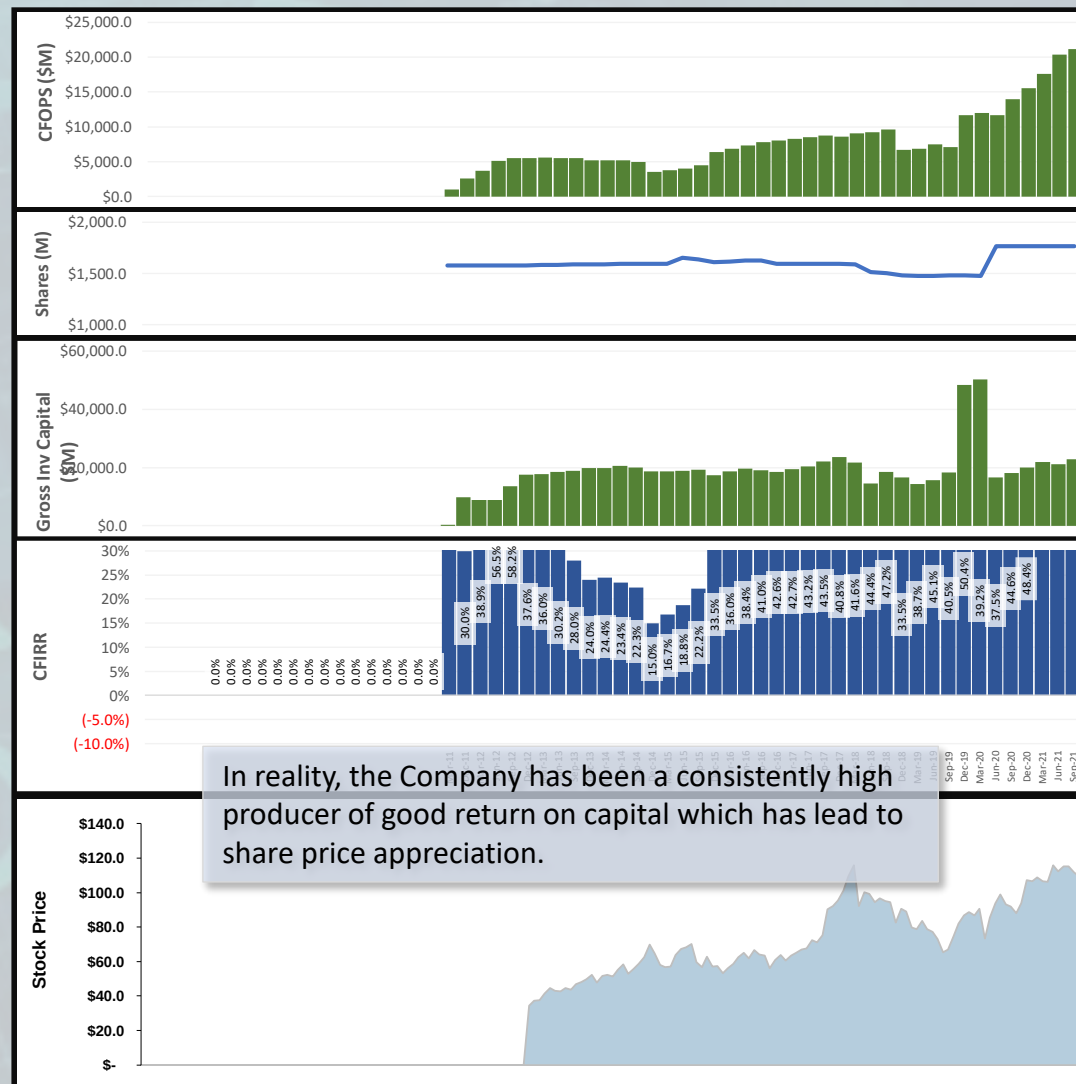
## ROE Lens



## AbbVie Inc

ABBV

## CFIRR Lens

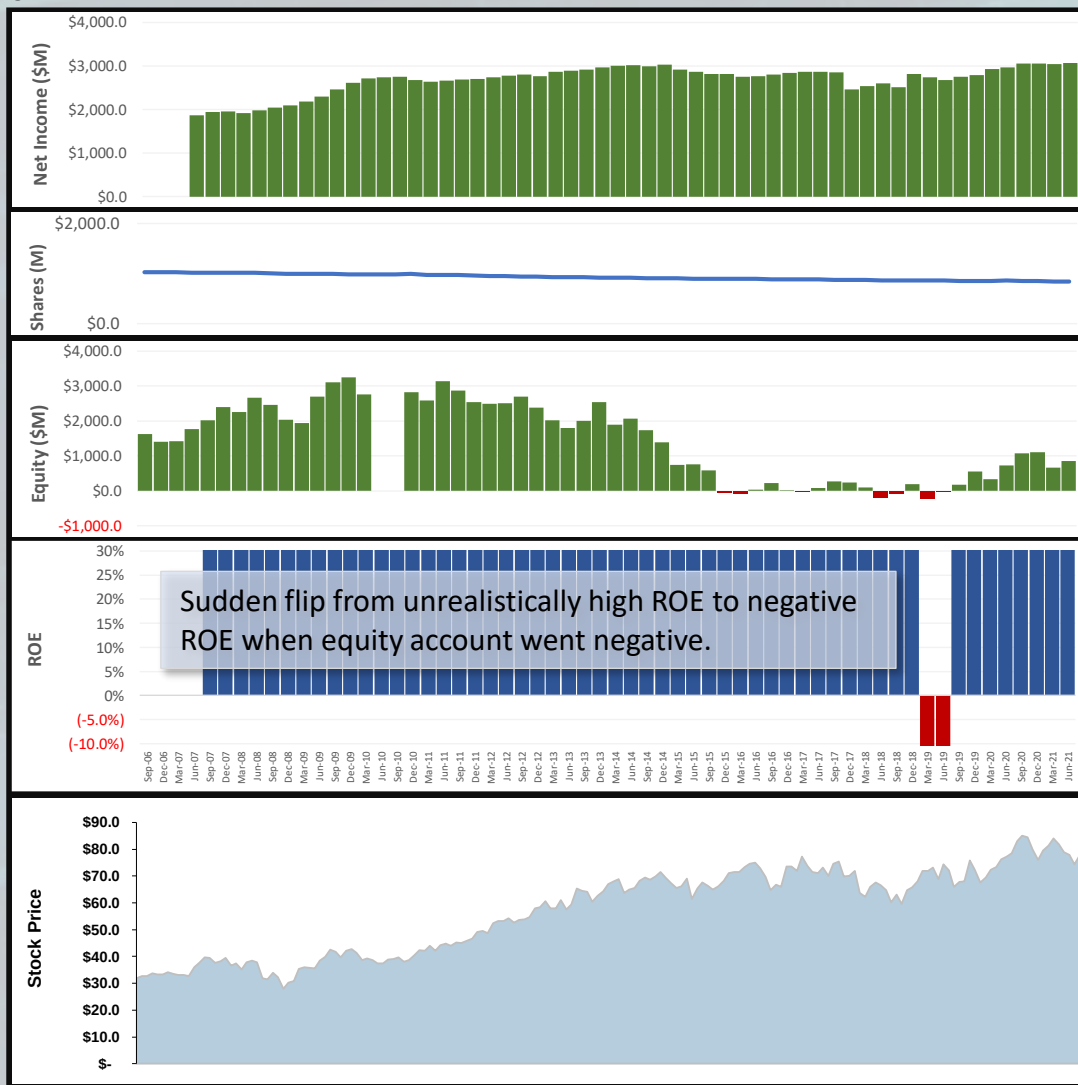


# ROE vs. CFIRR Lens – Colgate-Palmolive Co

## Colgate-Palmolive Co

### ROE Lens

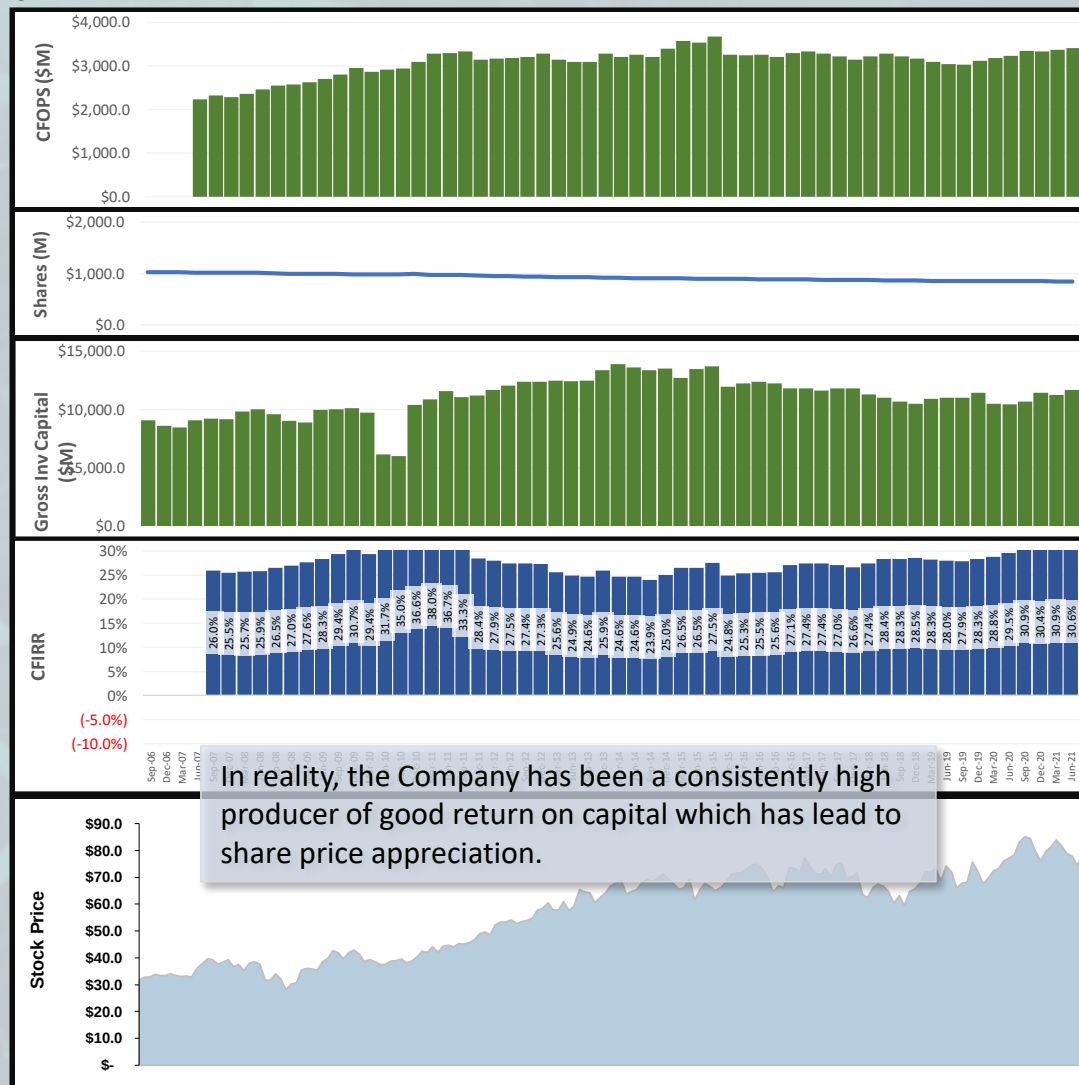
CL



## Colgate-Palmolive Co

### CFIRR Lens

CL

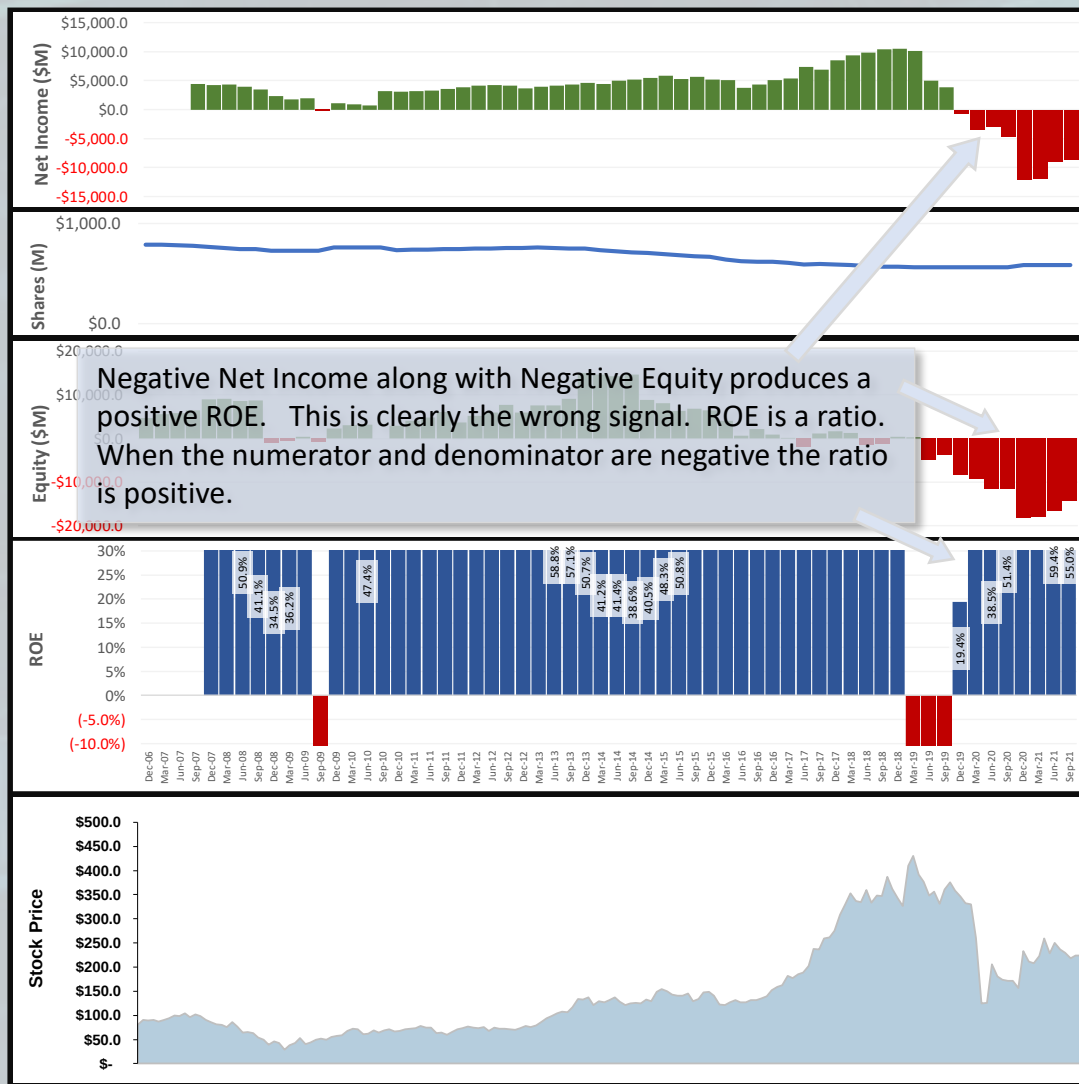


# ROE vs. CFIRR Lens – Boeing Co

## Boeing Co

## ROE Lens

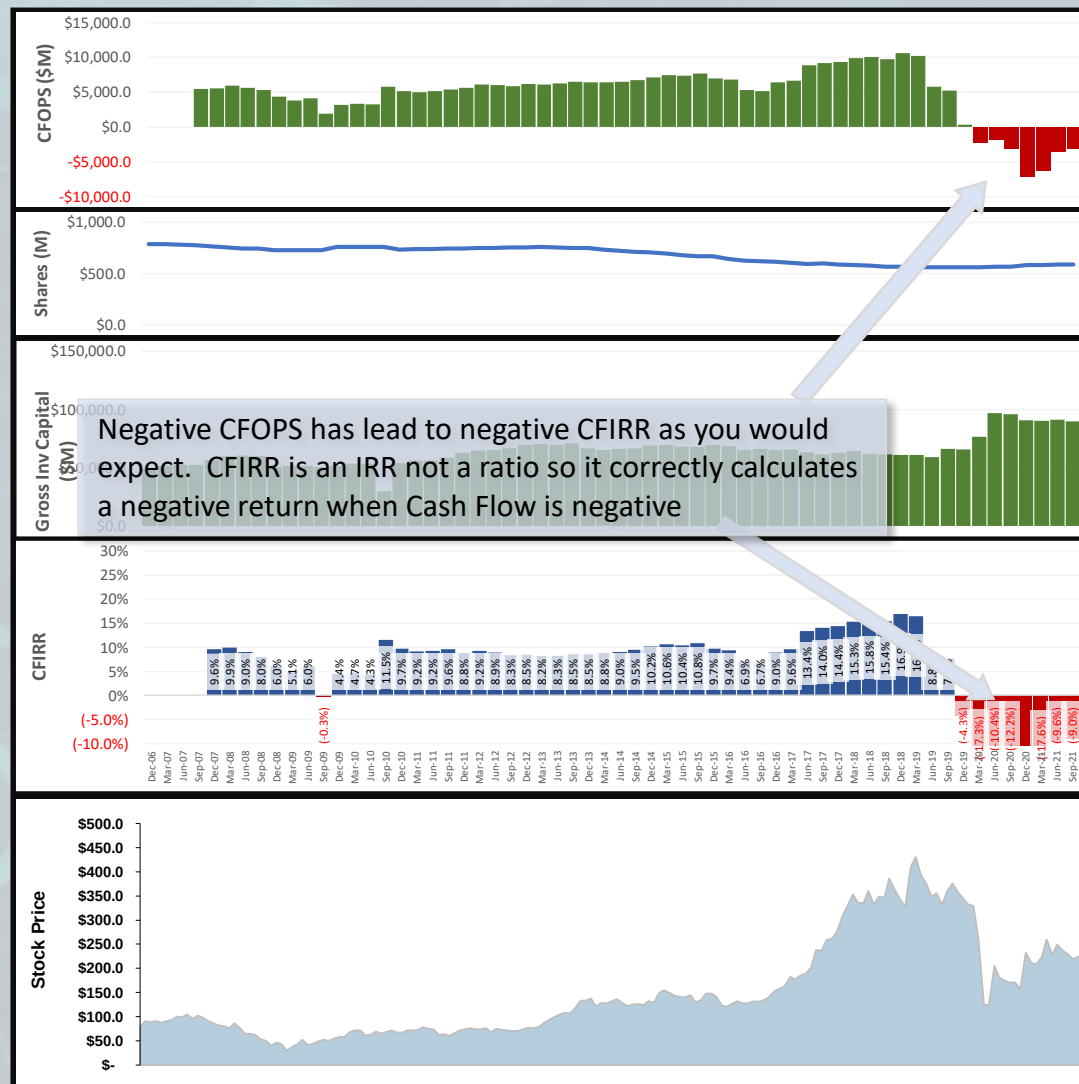
BA



## Boeing Co

## CFIRR Lens

BA

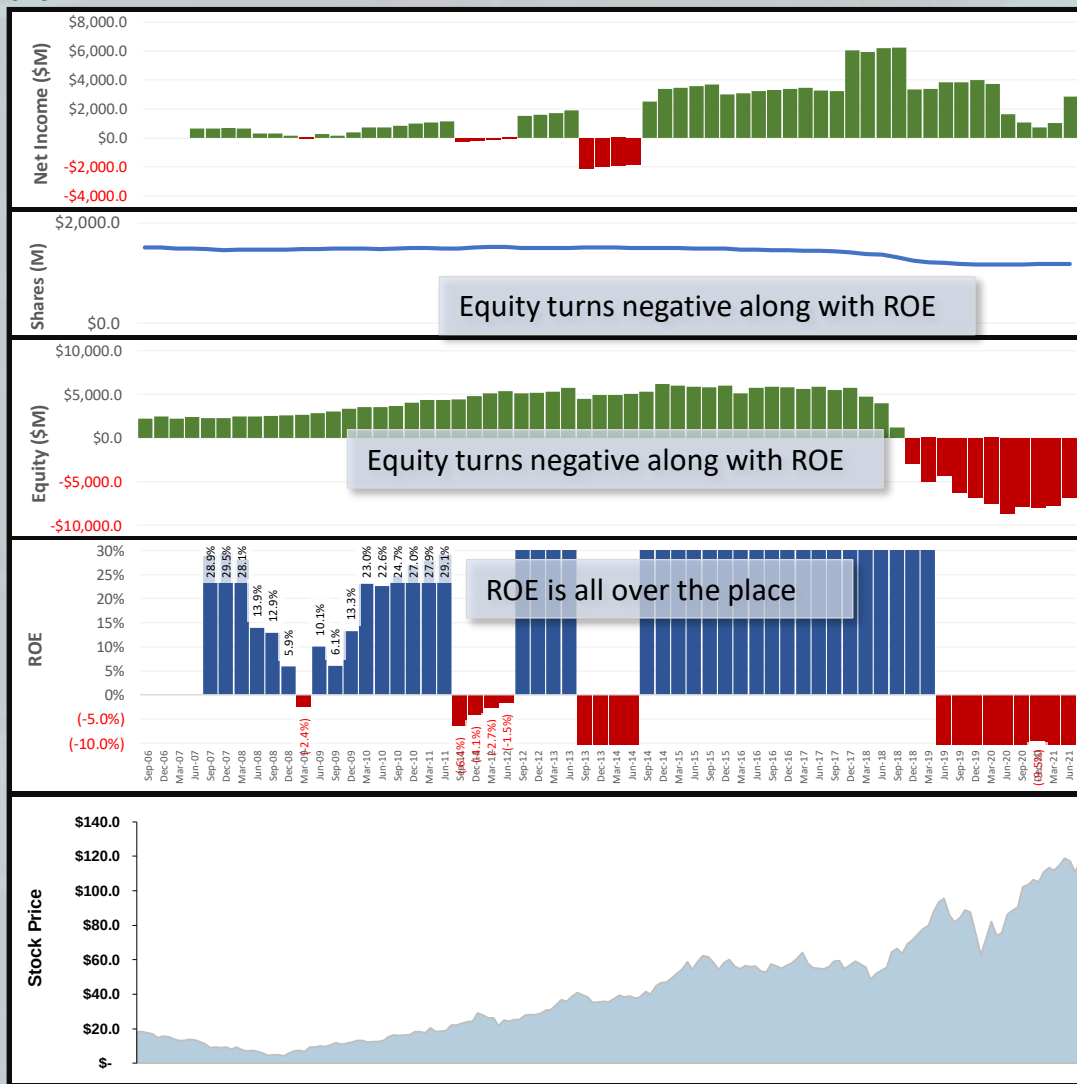


# ROE vs. CFIRR Lens – Starbucks Corp

## Starbucks Corp

### ROE Lens

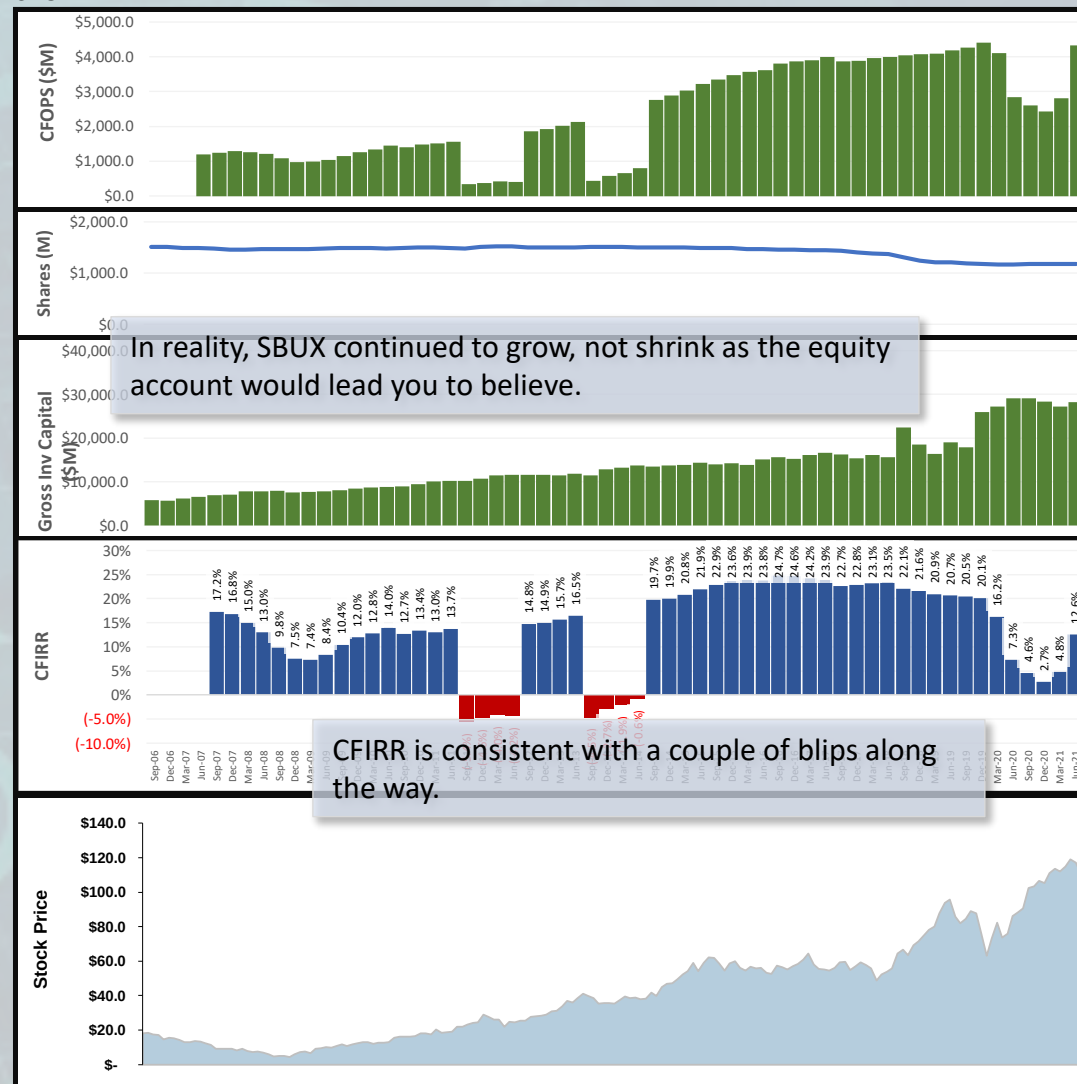
SBUX



## Starbucks Corp

### CFIRR Lens

SBUX

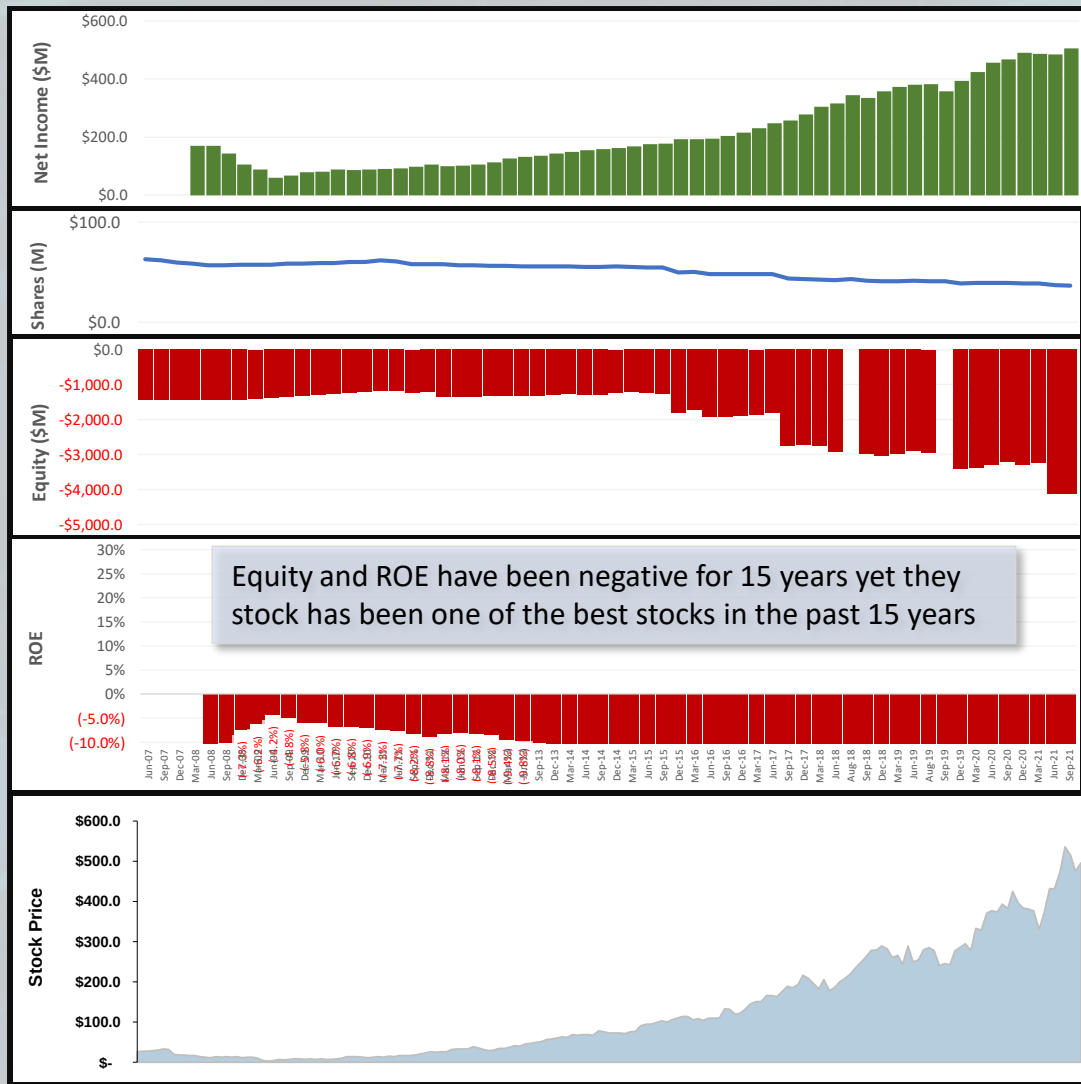


# ROE vs. CFIRR Lens – Domino's Pizza Inc

## Domino's Pizza Inc

## ROE Lens

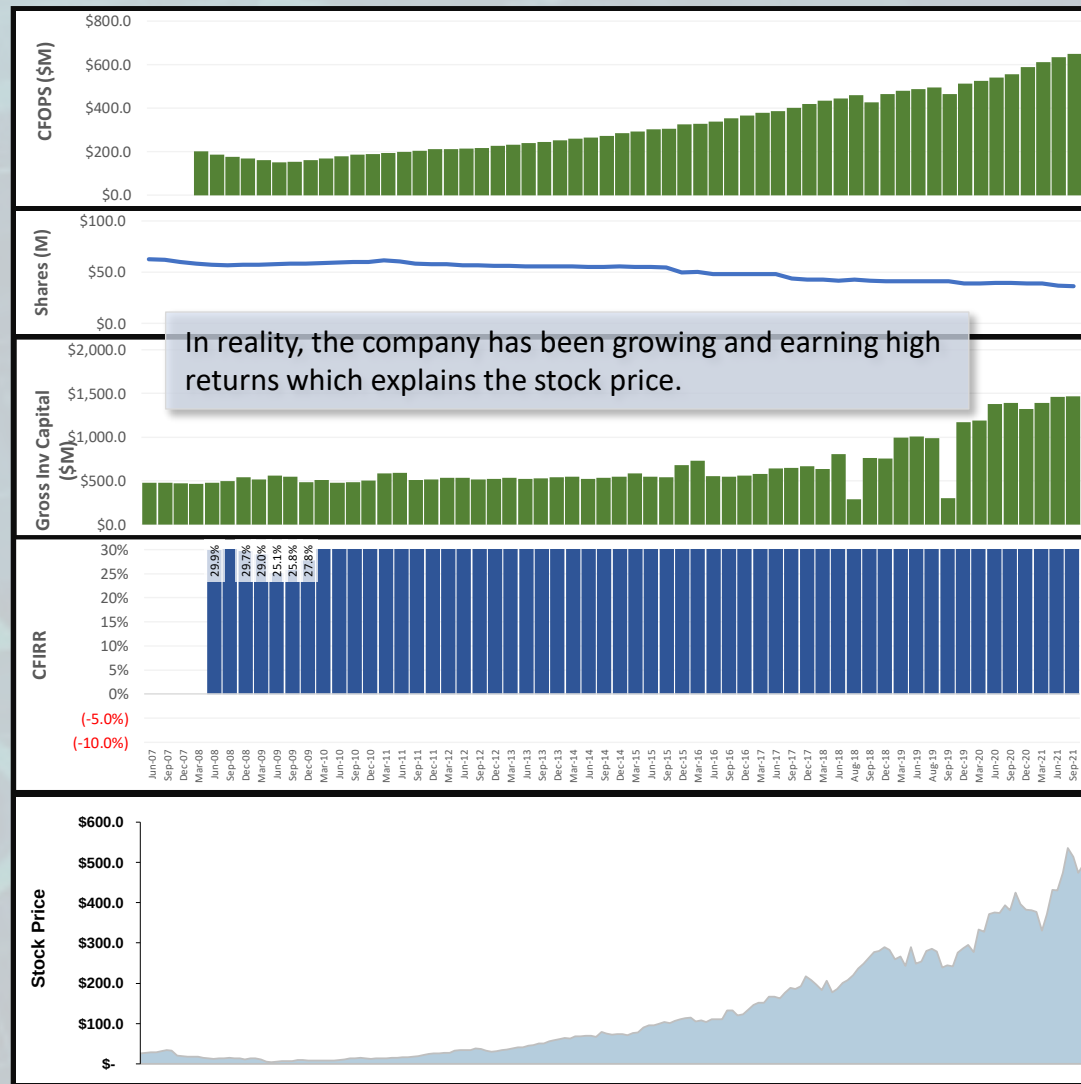
DPZ



## Domino's Pizza Inc

## CFIRR Lens

DPZ

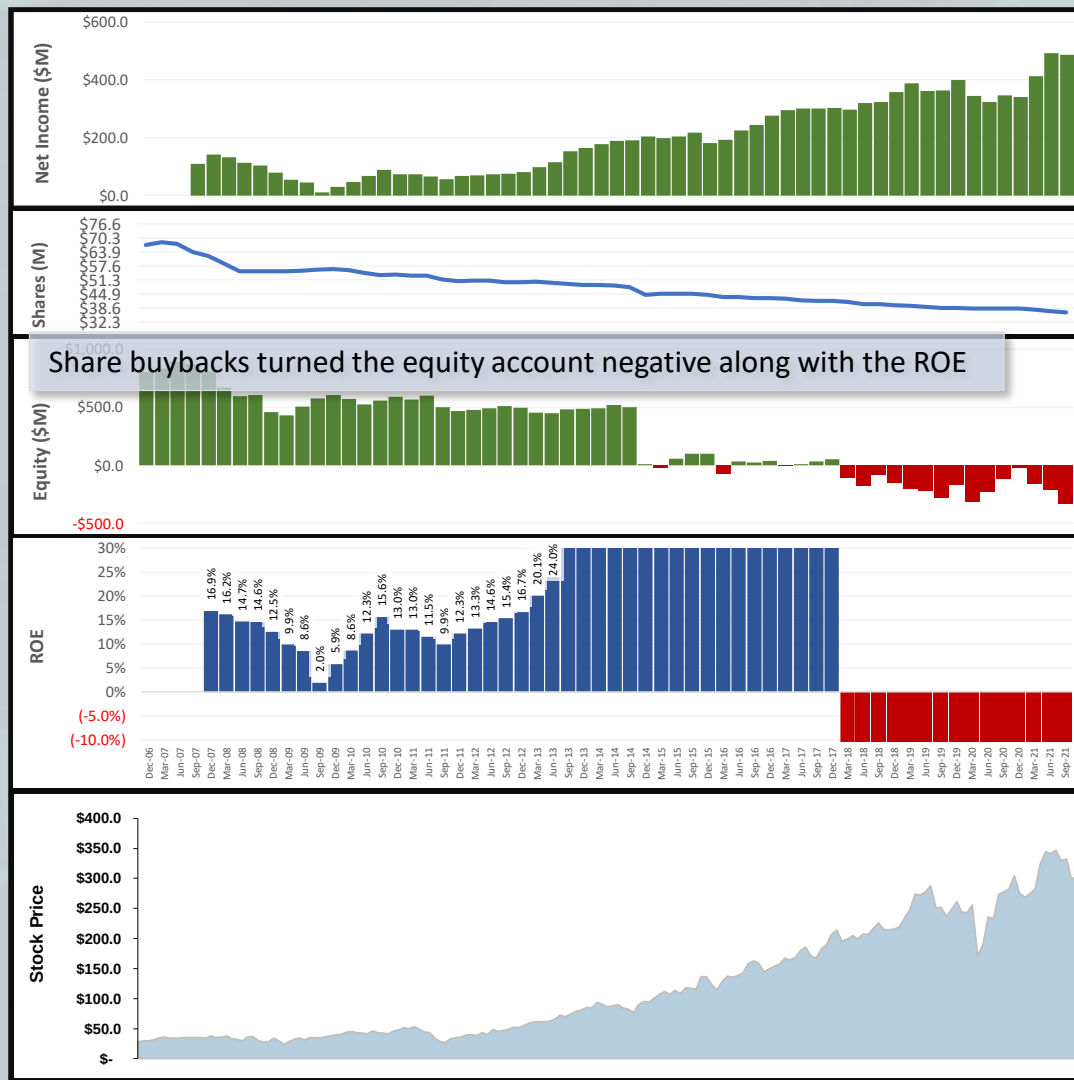




# ROE vs. CFIRR Lens – Lennox International Inc

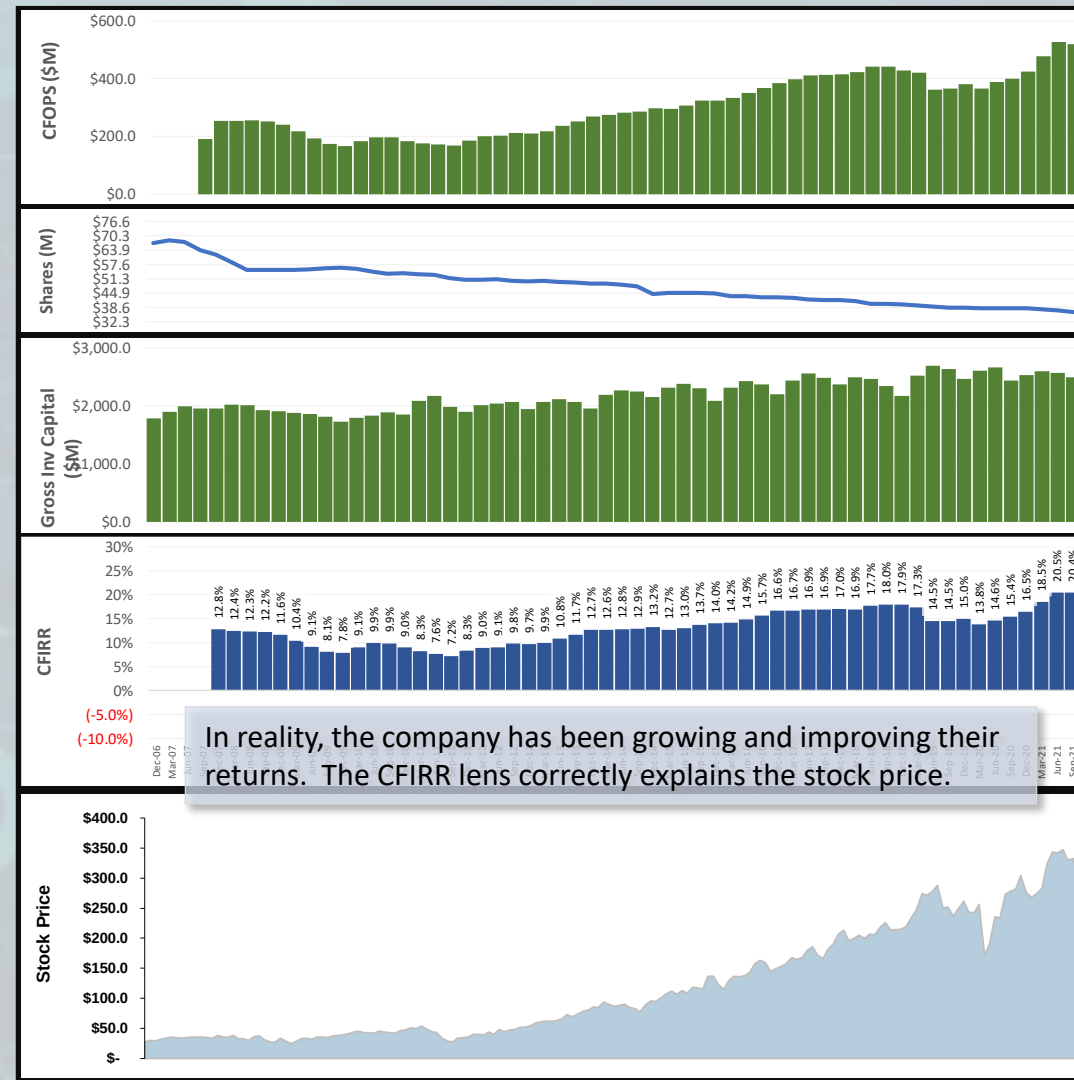
## Lennox International Inc ROE Lens

LII



## Lennox International Inc CFIRR Lens

LII





Screening for  
positive ROE  
missed **HUNDREDS**  
of high quality  
stocks

## ROE screening missed 214 high quality companies

- We found 214 companies with Negative ROE and Positive CFIRR three years ago
- On average those companies returned an 18% 3-Year CAGR in the stock market
- The top 20 by market cap returned 25.5% 3-Year CAGR in the stock market
- Several “missed” stocks were high profile names like Eli Lilly, Coca-Cola, McDonald’s, Advanced Micro Devices and many more



ROE screening  
missed 214 high  
quality stocks

FAILED the ROE  
screening test  
ROE < 0

But PASSED the  
CFIRR screening test  
CFIRR > 0

3-year stock  
market  
return

| Trades | Exchange      | Company Name | Ticker                 | Sector | Market Cap \$M | ROE % (FY-3) | CFIRREX % (FY-3) | Price Change CAGR % (3 Years) |          |
|--------|---------------|--------------|------------------------|--------|----------------|--------------|------------------|-------------------------------|----------|
| 1      | United States | NYS          | Eli Lilly              | LLY    | HC             | 253,496      | (-19.0%)         | 10.3%                         | 34.0%    |
| 2      | United States | NYS          | Coca-Cola              | KO     | CS             | 245,265      | (-9.9%)          | 7.9%                          | 5.3%     |
| 3      | United States | NAS          | Cisco Systems          | CSCO   | IT             | 240,664      | (-0.8%)          | 13.3%                         | 7.3%     |
| 4      | United States | NYS          | McDonald's             | MCD    | CD             | 190,331      | (-229.9%)        | 15.5%                         | 12.2%    |
| 5      | United States | NAS          | Advanced Micro Devices | AMD    | IT             | 165,244      | (-18.4%)         | 6.9%                          | 89.9%    |
| 6      | United States | NYS          | Philip Morris Intl     | PM     | CS             | 146,891      | (-62.4%)         | 31.1%                         | 1.7%     |
| 7      | United States | NAS          | JD.com                 | JD     | CD             | 120,449      | (-5.2%)          | 0.5%                          | 47.6%    |
| 8      | United States | NYS          | General Motors         | GM     | CD             | 87,780       | (-1.0%)          | 6.4%                          | 17.3%    |
| 9      | United States | NAS          | MercadoLibre           | MELI   | CD             | 81,018       | (-25.6%)         | 14.7%                         | 65.8%    |
| 10     | United States | NYS          | HCA Healthcare         | HCA    | HC             | 77,833       | (-213.3%)        | 11.3%                         | 22.4%    |
| 11     | United States | NYS          | Boston Scientific      | BSX    | HC             | 61,361       | (-3.3%)          | 29.3%                         | 5.9%     |
| 12     | United States | NAS          | IDEXX Laboratories     | IDXX   | HC             | 54,103       | (-325.1%)        | 23.5%                         | 46.8%    |
| 13     | United States | NAS          | Vertex Pharmaceuticals | VRTX   | HC             | 49,409       | (-26.4%)         | 8.5%                          | 3.4%     |
| 14     | United States | NYS          | AutoZone               | AZO    | CD             | 38,428       | (-79.7%)         | 21.5%                         | 33.4%    |
| 15     | United States | NYS          | Yum Brands             | YUM    | CD             | 37,244       | (-39.7%)         | 23.8%                         | 13.1%    |
| 16     | United States | NYS          | HP                     | HPQ    | IT             | 36,823       | (-48.5%)         | 28.7%                         | 9.1%     |
| 17     | United States | NYS          | TransDigm Gr           | TDG    | IN             | 36,632       | (-34.8%)         | 44.3%                         | 24.2%    |
| 18     | United States | NYS          | McKesson               | MCK    | HC             | 33,848       | (-20.3%)         | 17.8%                         | 20.4%    |
| 19     | United States | ASE          | Howmet Aerospace       | HWM.PR | IN             | 33,275       | (-10.8%)         | 5.4%                          | (-2.6%)  |
| 20     | United States | NAS          | Zebra Technologies     | ZBRA   | IT             | 32,473       | (-15.0%)         | 36.8%                         | 53.5%    |
| 21     | United States | NYS          | Corning                | GLW    | IT             | 32,129       | (-2.0%)          | 4.3%                          | 5.1%     |
| 22     | United States | NYS          | Orange                 | ORAN   | TE             | 29,620       | (-1.6%)          | 1.5%                          | (-11.7%) |
| 23     | United States | NYS          | Ball                   | BLL    | CD             | 29,570       | (-2.2%)          | 12.3%                         | 24.0%    |
| 24     | United States | NYS          | Gartner                | IT     | IT             | 27,490       | (-59.4%)         | 30.4%                         | 33.0%    |
| 25     | United States | NYS          | AmerisourceBergen      | ABC    | HC             | 26,498       | (-30.2%)         | 46.1%                         | 12.9%    |
| 26     | United States | NAS          | VeriSign               | VRSN   | IT             | 26,058       | (-38.0%)         | 26.2%                         | 13.1%    |
| 27     | United States | NAS          | Sirius XM Holdings     | SIRI   | TE             | 26,012       | (-96.4%)         | 30.3%                         | 1.6%     |
| 28     | United States | NAS          | Horizon Therapeutics   | HZNP   | HC             | 25,082       | (-32.3%)         | 0.1%                          | 78.4%    |
| 29     | United States | NYS          | Edison                 | EIX    | UT             | 24,332       | (-2.5%)          | 3.3%                          | (-2.3%)  |
| 30     | United States | NYS          | Ingersoll Rand         | IR     | IN             | 24,049       | (-9.4%)          | 9.5%                          | 29.2%    |
| 31     | United States | NYS          | CNH Industrial         | CNHI   | IN             | 23,929       | (-25.9%)         | 3.5%                          | 18.6%    |
| 32     | United States | NAS          | Caesars Entertainment  | CZR    | CD             | 22,680       | (-27.3%)         | 8.1%                          | 42.2%    |
| 33     | United States | NYS          | Halliburton            | HAL    | EN             | 22,073       | (-21.0%)         | 3.4%                          | (-11.6%) |
| 34     | United States | NYS          | Entergy                | ETR    | UT             | 20,949       | (-5.8%)          | 0.6%                          | 7.3%     |
| 35     | United States | NYS          | Bath & Body Works      | BBWI   | CD             | 19,957       | (-131.7%)        | 18.8%                         | 39.6%    |

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# There are Numerous Distortions in Accounting Data

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*Contact FSA Valuation Service Inc. and find out how our data platform can help you find opportunities in the stock market.*

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*There are numerous distortions in accounting data*

### 1) Share Buybacks Reduce Equity Distorting ROE and Price to Book

- Equity can be near zero and can even go below zero if buybacks are significant. The original investment is completely wiped out. ROE can be unrealistically high then flip to negative without any change in operating cash flow.

### 2) Original Investment is Lost with Traditional Performance Metrics

- Net Assets conceals the original amount of money invested by capital providers.

### 3) Inflation Distortion

- Assets are carried on the balance sheet at historical dollars but income and cash flow is in today's dollars. When the balance sheet is adjusted for inflation investors can assess real returns which provide a clearer picture of the true economics compared to nominal returns.

### 4) Companies Spend Cash Not Earnings

- Earnings are for tax reporting, cash is the true indicator of value

### 5) Performance Ratios Do Not Account for Asset Life

- Companies operate and invest in capital projects with assets lives. Management assess viability and success of capital projects using an internal rate of return not a ratio. Investors should assess the business the same way management assess internal capital projects.

### 6) ROE Has a Leverage Distortion

- Management teams compensated on ROE would have incentive to lever up the balance sheet which increases ROE without improving operations

### 7) Traditional Metrics Make No Distinction Between Working Capital and Long-term Invested Capital

- Cash and equivalents on the balance sheet are liquid assets and do generate material returns for shareholders so they are a drag on return on capital. However, the cash is easily returned to shareholder's in the form of dividends, paying down debt or share buybacks. Shareholder's really want to know the return on deployed capital, then determine if the excess cash and equivalents is better off deployed in the business or return to shareholders.

# Are Accounting Distortions Causing You to Miss Out Stock Market Opportunities?

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