



## S&P 500 & Sectors: ROIC Hits New Peak, but Can It Last?

Trailing-twelve-month (TTM) return on invested capital (ROIC) spiked to a new high for the S&P 500 in 1Q22. All eleven S&P 500 sectors saw a year-over-year (YoY) improvement in ROIC as well. This improvement comes from higher net operating profit after-tax (NOPAT) margins and [invested capital turns](#).

This report presents the drivers<sup>1,2</sup> of [economic earnings](#) [ROIC, NOPAT margin, invested capital turns, and weighted average cost of capital (WACC)] for the S&P 500 and each of its sectors (last quarter's analysis is [here](#)). You can find the same analysis on other key metrics [here](#).

This report leverages our cutting-edge [Robo-Analyst technology](#) to deliver [proven-superior](#)<sup>3</sup> fundamental research and support more cost-effective fulfillment of the [fiduciary duty of care](#).

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### S&P 500 ROIC Continues to Rise in 1Q22

Figure 1 shows the S&P 500's ROIC rose from 7.6% in 1Q21 to 10.1% in 1Q22. The S&P 500's NOPAT margin rose from 11.1% in 1Q21 to 13.1% in 1Q22, while invested capital turns rose from 0.69 in 1Q21 to 0.77 in 1Q22. Two key observations:

1. Margins are, no doubt, getting an artificial boost from inflation as profits today are based on higher prices for goods sold than the cost of the goods sold. This boost will continue as long as high levels of inflation persist.
2. WACC has increased by less than the yields for AAA corporate bonds. That lag implies firms have shortened the maturities of their outstanding bonds to benefit from the steepness of the yield curve for maturities shorter than five years. Shortening maturities might lower the cost of debt and WACC in the near term, but it leaves firms exposed to sharply rising financing costs if interest rates keep rising.

As a result, the "record" return on capital is a bit of a mirage, and the trend in ROIC could reverse soon.

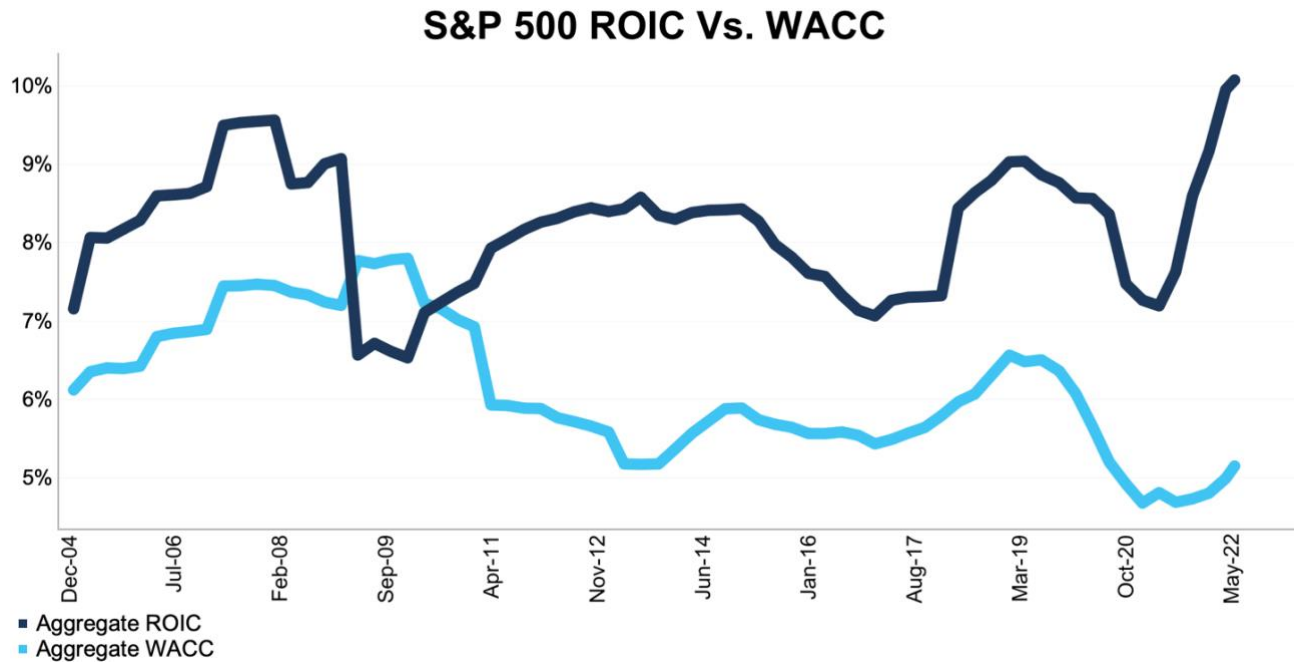
<sup>1</sup> Calculated using SPGI's methodology, which sums individual S&P 500 constituent values for NOPAT and invested capital. See Appendix III for more details on this "Aggregate" method and Appendix I for details on how we calculate WACC for the S&P 500 and each of its sectors.

<sup>2</sup> This report is based on the latest audited financial data available, which is the 1Q22 10-Q in most cases. Price data is as of 5/16/22.

<sup>3</sup> Our research utilizes our [Core Earnings](#), a more reliable measure of profits, as proven in [Core Earnings: New Data & Evidence](#), written by professors at Harvard Business School (HBS) & MIT Sloan and published in [The Journal of Financial Economics](#).



**Figure 1: ROIC and WACC for the S&P 500 From December 2004 – 5/16/22<sup>4</sup>**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

**Ranking the S&P 500 Sectors by Change in ROIC**

Figure 2 ranks all 11 S&P 500 sectors by the change in ROIC from 1Q21 to 1Q22.

**Figure 2: ROIC for All S&P 500 Sectors**

Sector	1Q22 TTM ROIC	YoY Change (% points)
Energy	9%	9.0%
Basic Materials	10%	4.5%
Technology	29%	4.0%
Industrials	7%	2.8%
Healthcare	12%	2.6%
Consumer Cyclical	9%	1.5%
Financials	8%	1.0%
Real Estate	5%	0.9%
Consumer Non-cyclicals	10%	0.5%
Utilities	4%	0.1%
Telecom Services	5%	0.1%
<b>S&amp;P 500</b>	<b>10%</b>	<b>2.4%</b>

Sources: New Constructs, LLC and company filings.  
 Financial data incorporates 1Q22 10-Qs.

The Energy sector performed best over the past twelve months as measured by change in ROIC, with its ROIC rising 900 basis points. Given the impact COVID-19 had on energy companies and energy prices in 2020 and the strength of the rebound, this trend is not surprising.

<sup>4</sup> We use stock prices from 5/16/22 for our WACC calculation because that is the date when all the 1Q22 10-Qs for the S&P 500 constituents were available.



On the flip side, the Telecom Services sector, at only 3 basis points, saw the slightest YoY improvement in ROIC over the past twelve months.

Overall, the Technology sector earns the highest ROIC of all sectors, by far, and the Utilities sector earns the lowest ROIC.

**Details on each of the S&P 500 Sectors**

Figures 3-13 compare the ROIC and WACC trends for every sector since the end of 2004. Appendix I presents the current WACC for each sector.

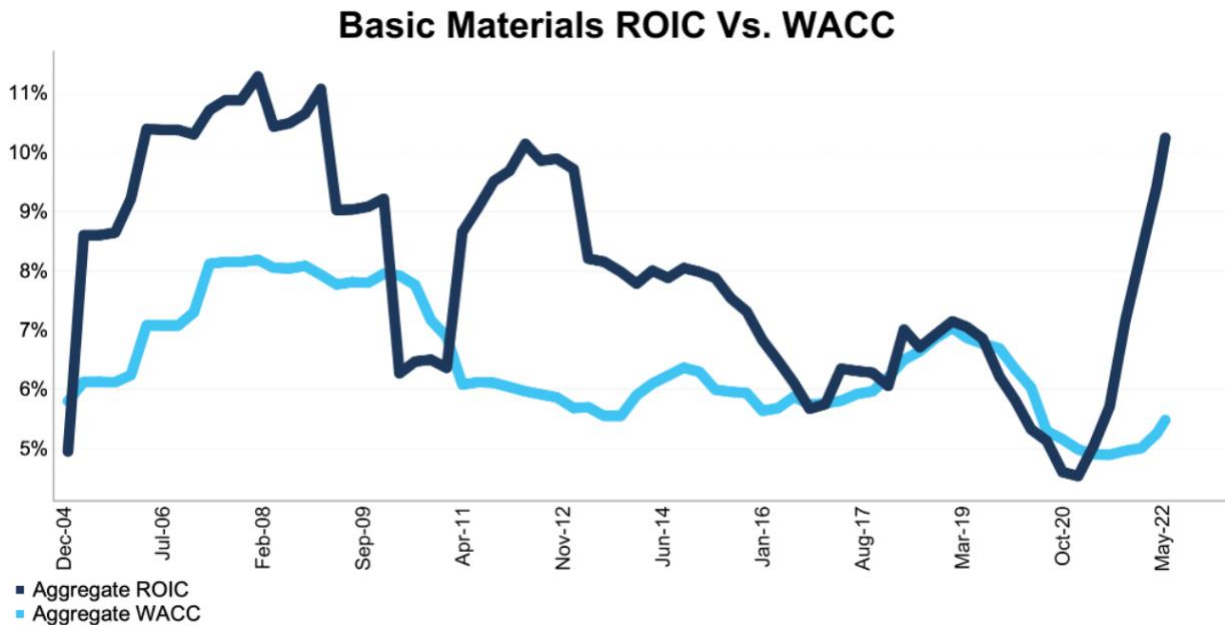
Appendix II presents the [drivers of ROIC](#): [NOPAT margin](#) and [invested capital turns](#) for each sector.

Appendix III presents additional ROIC analysis based on different weighting methodologies to adjust for the impact of a firm’s size on its sector and the S&P 500.

**Basic Materials**

Figure 3 shows the Basic Materials sector ROIC rose from 5.7% in 1Q22 to 10.2% in 1Q22. The Basic Materials sector NOPAT margin rose from 11.0% in 1Q21 to 15.1% in 1Q22, while invested capital turns rose from 0.52 in 1Q22 to 0.68 in 1Q22.

**Figure 3: Basic Materials ROIC vs. WACC: December 2004 – 5/16/22**



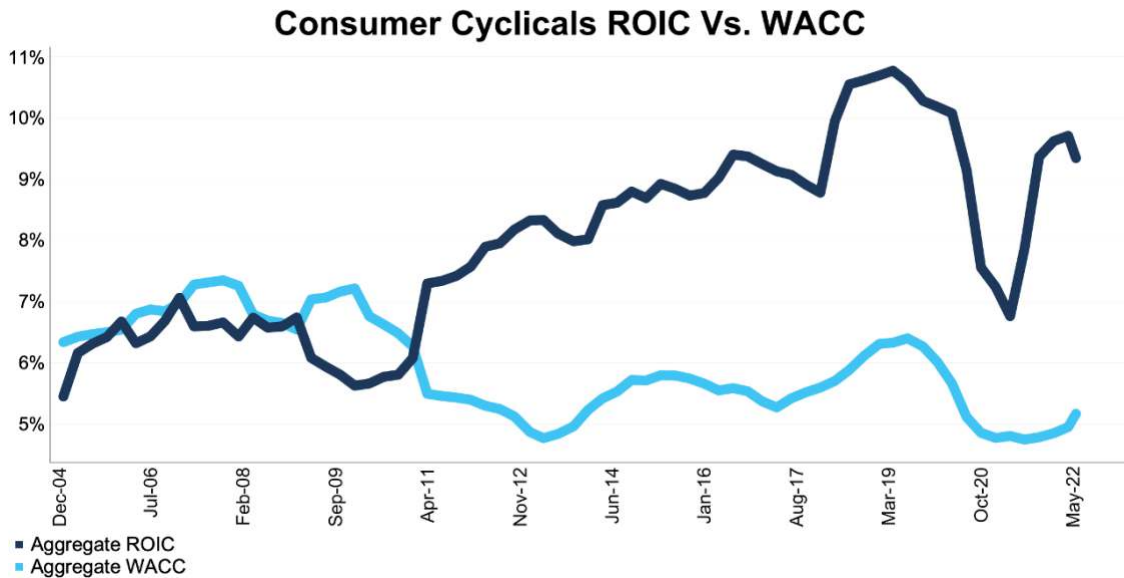
Sources: New Constructs, LLC and company filings. The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.



### Consumer Cyclical

Figure 4 shows the Consumer Cyclical sector ROIC rose from 7.9% in 1Q22 to 9.3% in 1Q22. The Consumer Cyclical sector NOPAT margin rose from 6.9% in 1Q21 to 7.6% in 1Q22, while invested capital turns rose from 1.14 in 1Q21 to 1.23 in 1Q22.

**Figure 4: Consumer Cyclical ROIC vs. WACC: December 2004 – 5/16/22**

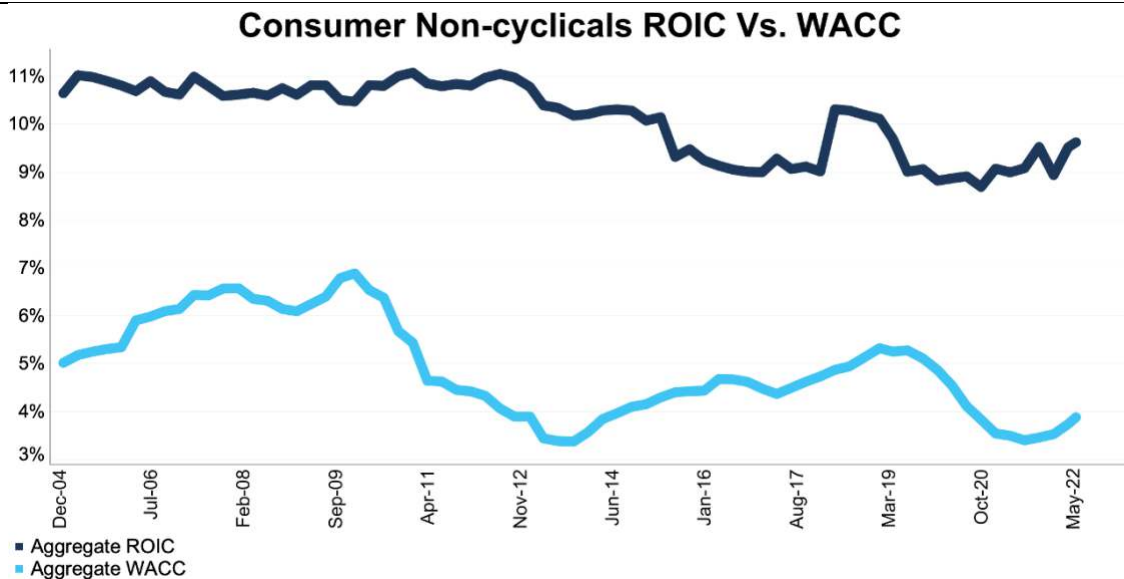


Sources: New Constructs, LLC and company filings. The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

### Consumer Non-cyclical

Figure 5 shows the Consumer Non-Cyclical sector ROIC rose from 9.1% in 1Q21 to 9.6% in 1Q22. The Consumer Non-cyclical sector NOPAT margin remained flat YoY at 6.5 in 1Q22, while invested capital turns rose from 1.39 in 1Q21 to 1.49 in 1Q22.

**Figure 5: Consumer Non-cyclical ROIC vs. WACC: December 2004 – 5/16/22**



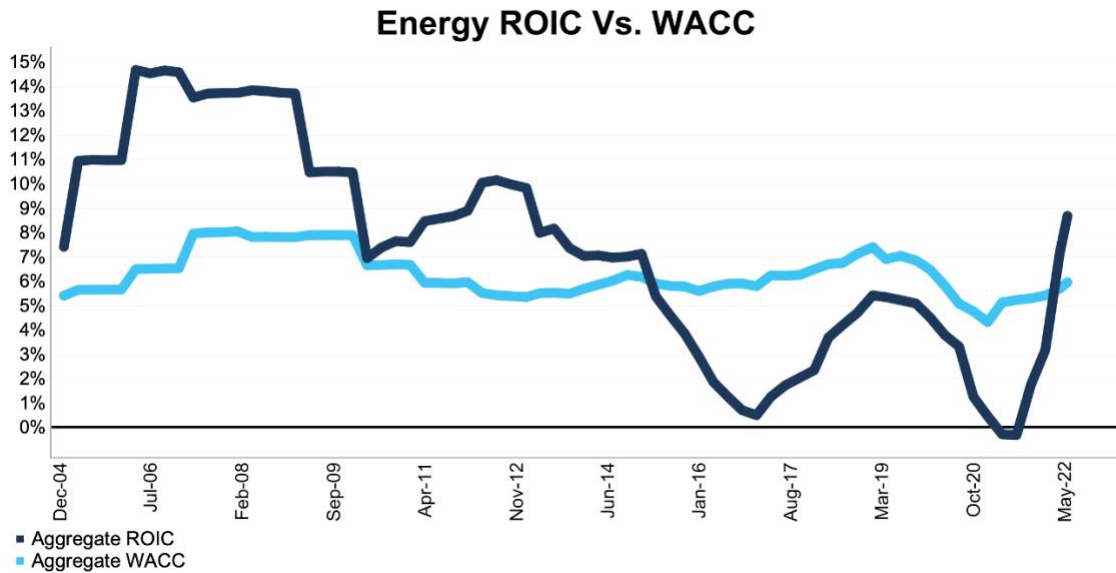
Sources: New Constructs, LLC and company filings. The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.



### Energy

Figure 6 shows the Energy sector ROIC rose from -0.3% in 1Q21 to 8.7% in 1Q22. The Energy sector NOPAT margin rose from -0.8% in 1Q21 to 12.5% in 1Q22, while invested capital turns rose from 0.39 in 1Q21 to 0.70 in 1Q22.

**Figure 6: Energy ROIC vs. WACC: December 2004 – 5/16/22**

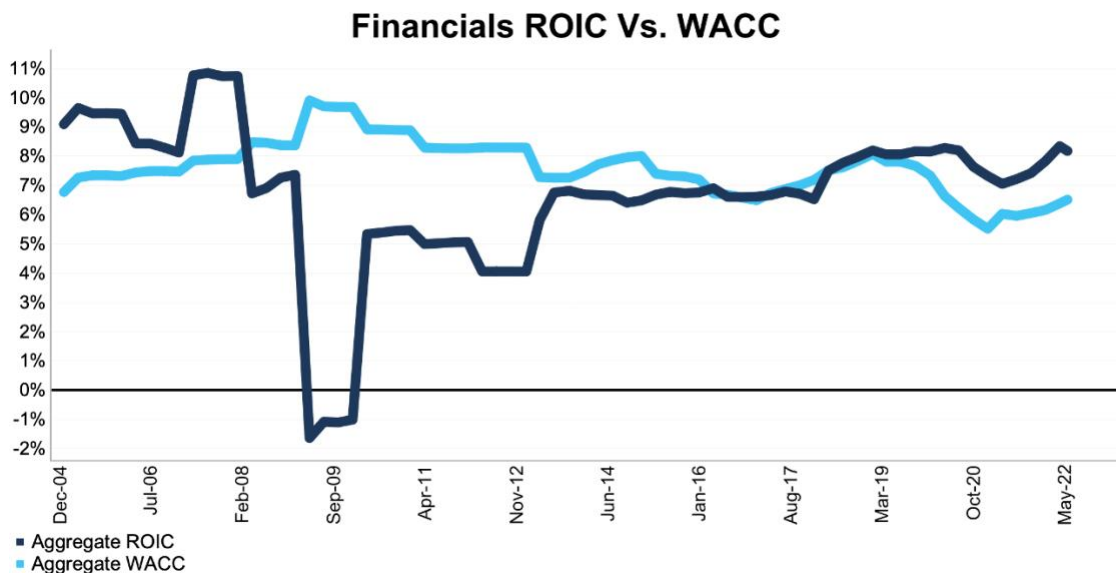


Sources: New Constructs, LLC and company filings. The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

### Financials

Figure 7 shows the Financials sector ROIC rose from 7.2% in 1Q21 to 8.2% in 1Q22. The Financials sector NOPAT margin rose from 14.8% in 1Q21 to 16.7% in 1Q22, while invested capital turns remained flat YoY at 0.49 in 1Q22.

**Figure 7: Financials ROIC vs. WACC: December 2004 – 5/16/22**



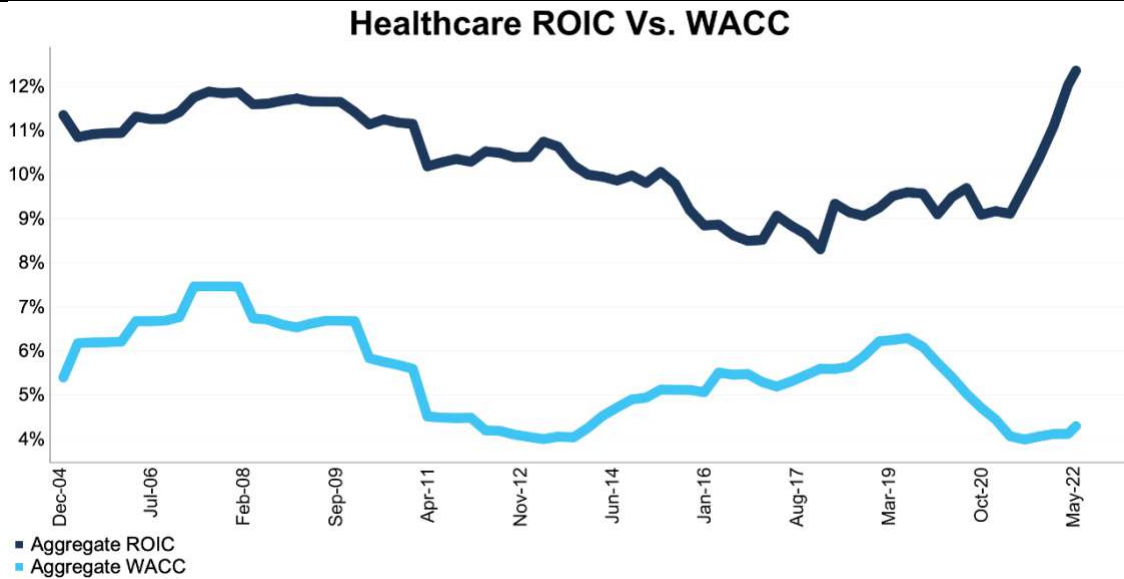
Sources: New Constructs, LLC and company filings. The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.



### Healthcare

Figure 8 shows the Healthcare sector ROIC rose from 9.7% in 1Q21 to 12.4% in 1Q22. The Healthcare sector NOPAT margin rose from 11.0% in 1Q21 to 12.2% in 1Q22, while invested capital turns rose from 0.89 in 1Q21 to 1.01 in 1Q22.

**Figure 8: Healthcare ROIC vs. WACC: December 2004 – 5/16/22**



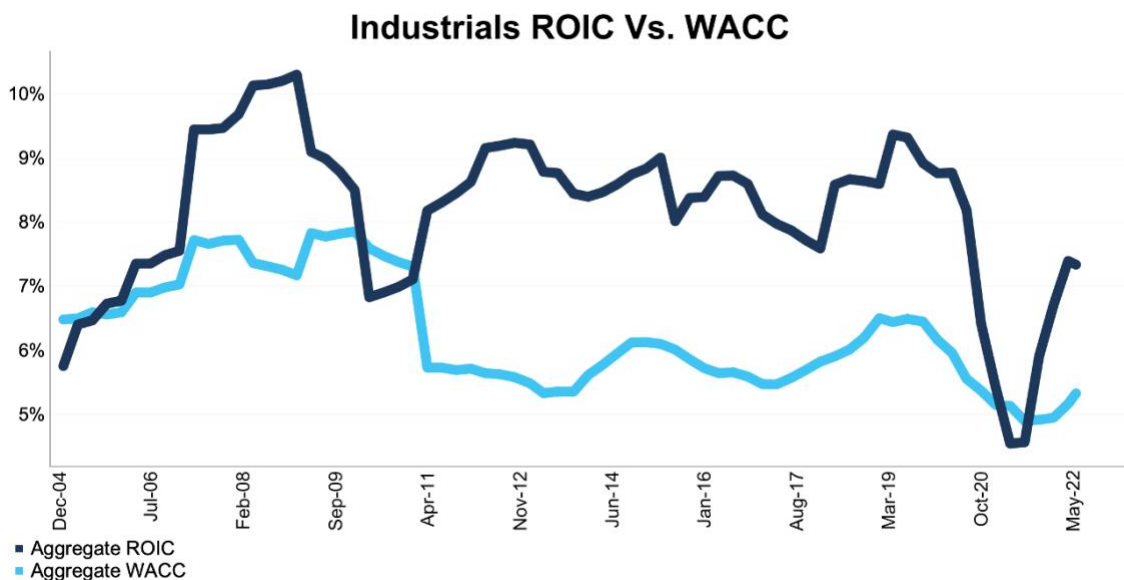
Sources: New Constructs, LLC and company filings.

The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

### Industrials

Figure 9 shows the Industrials sector ROIC rose from 4.6% in 1Q21 to 7.3% in 1Q22. The Industrials sector NOPAT margin rose from 7.0% in 1Q21 to 9.5% in 1Q22, while invested capital turns rose from 0.65 in 1Q21 to 0.78 in 1Q22.

**Figure 9: Industrials ROIC vs. WACC: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.

The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

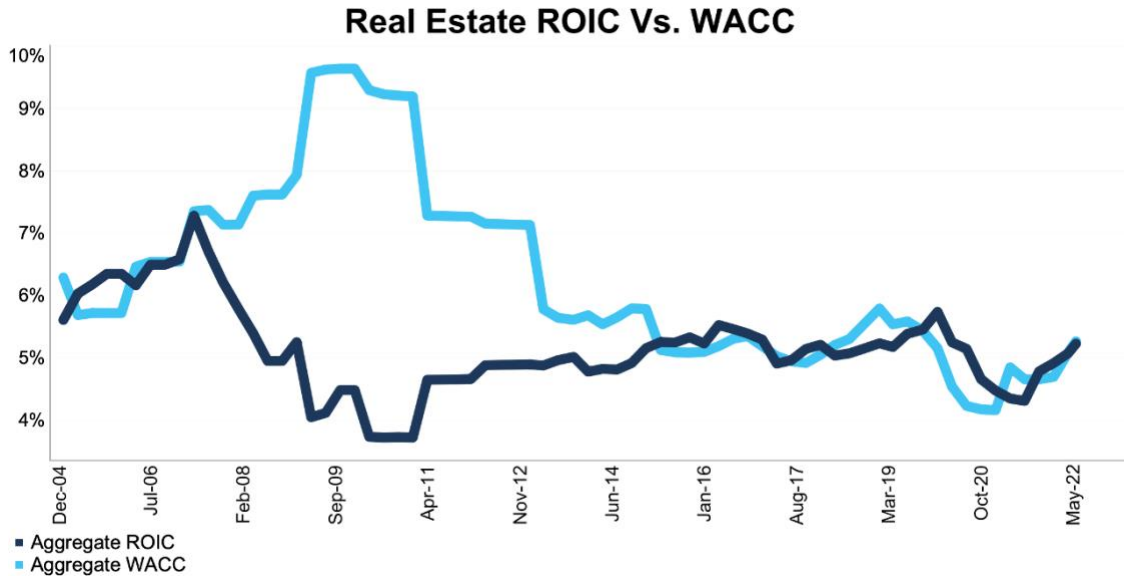




**Real Estate**

Figure 10 shows the Real Estate sector ROIC rose from 4.3% in 1Q21 to 5.2% in 1Q22. The Real Estate sector NOPAT margin rose from 21.9% in 1Q21 to 24.7% in 1Q22, while invested capital turns rose from 0.20 in 1Q21 to 0.21 in 1Q22.

**Figure 10: Real Estate ROIC vs. WACC: December 2004 – 5/16/22**



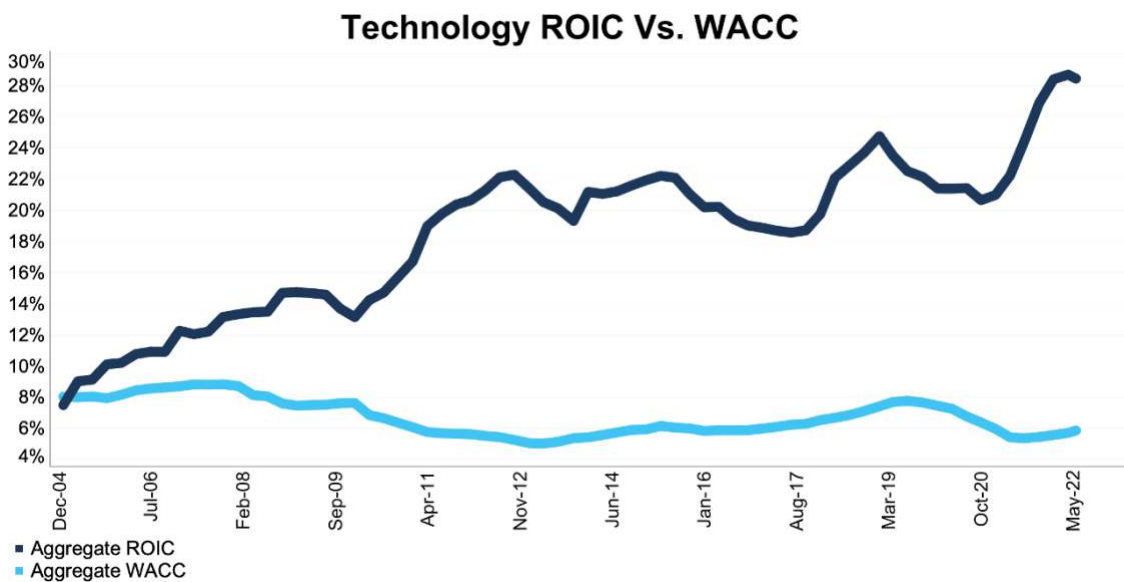
Sources: New Constructs, LLC and company filings.

The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

**Technology**

Figure 11 shows the Technology sector ROIC rose from 24.5% in 1Q21 to 28.5% in 1Q22. The Technology sector NOPAT margin rose from 22.2% in 1Q21 to 24.3% in 1Q22, while invested capital turns rose from 1.10 in 1Q21 to 1.17 in 1Q22.

**Figure 11: Technology ROIC vs. WACC: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.

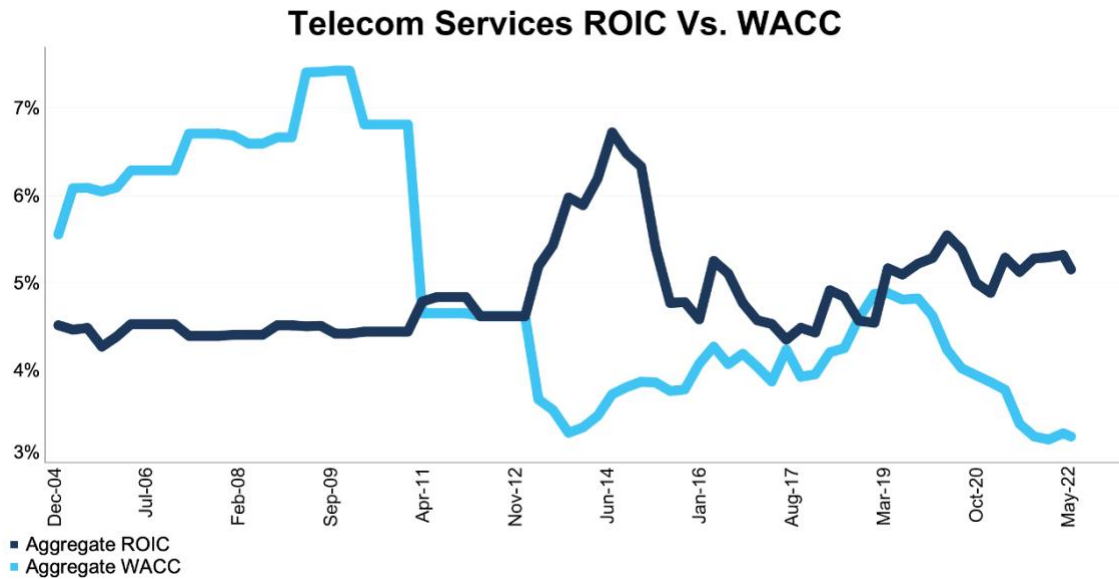
The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.



### Telecom Services

Figure 12 shows the Telecom Services sector ROIC rose from 5.1% in 1Q21 to 5.2% in 1Q22. The Telecom Services sector NOPAT margin rose from 14.9% in 1Q21 to 15.8% in 1Q22, while invested capital turns fell from 0.34 in 1Q21 to 0.33 in 1Q22.

**Figure 12: Telecom Services ROIC vs. WACC: December 2004 – 5/16/22**

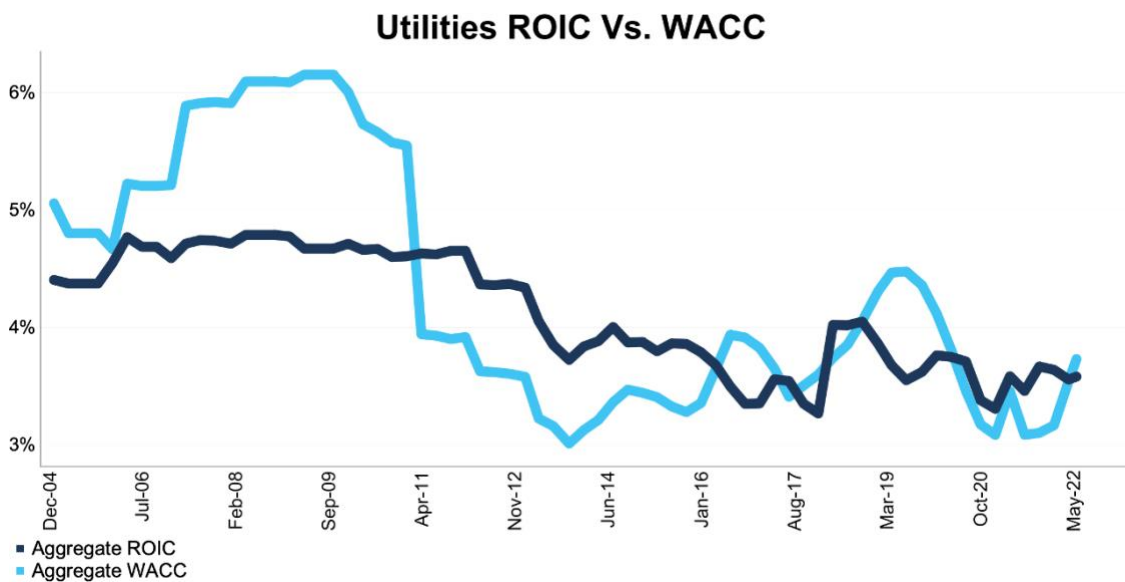


Sources: New Constructs, LLC and company filings. The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

### Utilities

Figure 13 shows the Utilities sector ROIC rose from 3.5% in 1Q21 to 3.6% in 1Q22. The Utilities sector NOPAT margin fell from 17.2% in 1Q21 to 16.2% in 1Q22, while invested capital turns rose from 0.20 in 1Q21 to 0.22 in 1Q22.

**Figure 13: Utilities ROIC vs. WACC: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings. The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.





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*Disclosure: David Trainer, Kyle Guske II, and Matt Shuler receive no compensation to write about any specific stock, style, or theme.*

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**Appendix I: WACC for Each Sector and S&P 500**

This appendix shows the WACC for the S&P 500 and each sector in 1Q22, based on prices as of 5/16/22 and financial data from 1Q22 10-Qs.

We derive the sector and S&P 500 WACCs by solving for WACC in the [economic earnings](#) formula:

$$(ROIC-WACC) * \text{Average Invested Capital} = \text{Economic Earnings}$$

translates to

$$WACC = ROIC - \text{Economic Earnings} / \text{Average Invested Capital}$$

We calculate Economic Earnings, NOPAT and Invested Capital according to the Aggregate methodology described in Appendix III.

**Figure 14: WACC by Sector – as of 5/16/22**

Sector	WACC
Financials	6.5%
Energy	6.0%
Technology	5.9%
Basic Materials	5.5%
Industrials	5.3%
Real Estate	5.3%
Consumer Cyclicals	5.2%
Healthcare	4.3%
Consumer Non-cyclical	3.9%
Utilities	3.7%
Telecom Services	3.2%
<b>S&amp;P 500</b>	<b>5.2%</b>

Sources: New Constructs, LLC and company filings.  
Prices as of 5/16/22, financial data incorporates 1Q22 10-Qs.



**Appendix II: NOPAT Margin and Invested Capital Turns Since 2004**

This appendix shows the two key drivers ([DuPont model](#)) of ROIC – NOPAT margin and invested capital turns – for each sector going back to December 2004. We sum the individual S&P 500 constituent values for revenue, NOPAT, and invested capital to calculate these metrics. We call this approach the “Aggregate” methodology. More methodology details in Appendix III.

Figure 15 ranks all 11 sectors by NOPAT margin based on financial data from 1Q22 10-Qs

**Figure 15: NOPAT Margin by Sector – Financial Data from 1Q22 10-Qs**

Sector	NOPAT Margin
Real Estate	24.7%
Technology	24.3%
Financials	16.7%
Utilities	16.2%
Telecom Services	15.8%
Basic Materials	15.1%
Energy	12.5%
Healthcare	12.2%
Industrials	9.5%
Consumer Cyclicals	7.6%
Consumer Non-cyclical	6.5%
<b>S&amp;P 500</b>	<b>13.1%</b>

Sources: New Constructs, LLC and company filings.  
Financial data incorporates 1Q22 10-Qs.

Figure 16 ranks all 11 sectors by invested capital turns based on financial data from 1Q22 10-Qs.

**Figure 16: Invested Capital Turns by Sector – Financial Data from 1Q22 10-Qs**

Sector	Invested Capital Turns
Consumer Non-cyclical	1.5
Consumer Cyclical	1.2
Technology	1.2
Healthcare	1.0
Industrials	0.8
Energy	0.7
Basic Materials	0.7
Financials	0.5
Telecom Services	0.3
Utilities	0.2
Real Estate	0.2
<b>S&amp;P 500</b>	<b>0.8</b>

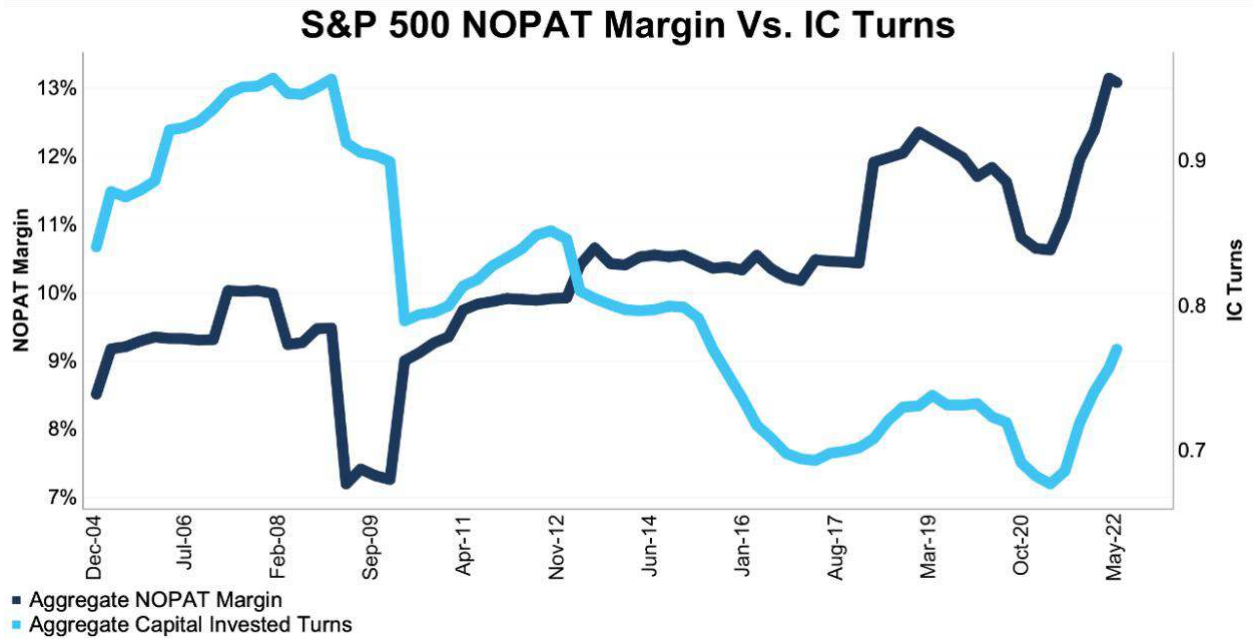
Sources: New Constructs, LLC and company filings.  
Financial data incorporates 1Q22 10-Qs

These two tables show how rare it is for a sector to have both high margins and capital turns. Real Estate, the highest margin sector, has the lowest invested capital turns. Consumer Non-cyclical, the sector with the highest invested capital turns has the lowest margin. The Technology sector has both high margins and invested capital turns, which is why that sector leads the market in ROIC by a wide margin.



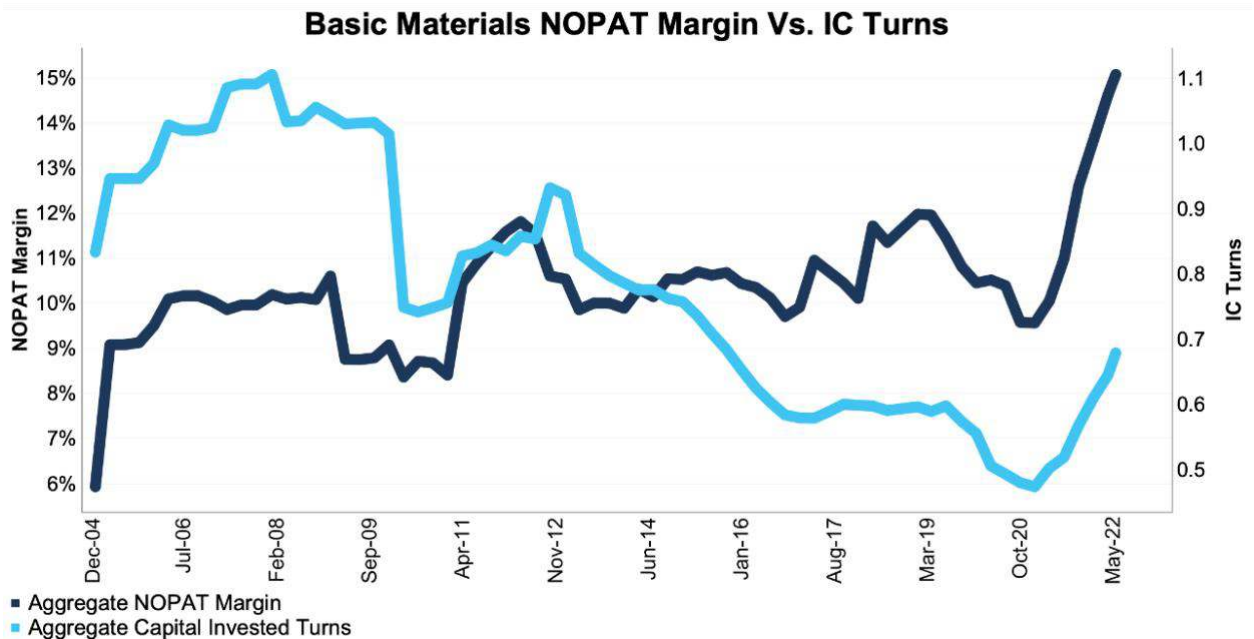
Figures 17-28 compare the trends for NOPAT margin and invested capital turns for the S&P 500 and every sector since 2004.

**Figure 17: S&P 500 NOPAT Margin and IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

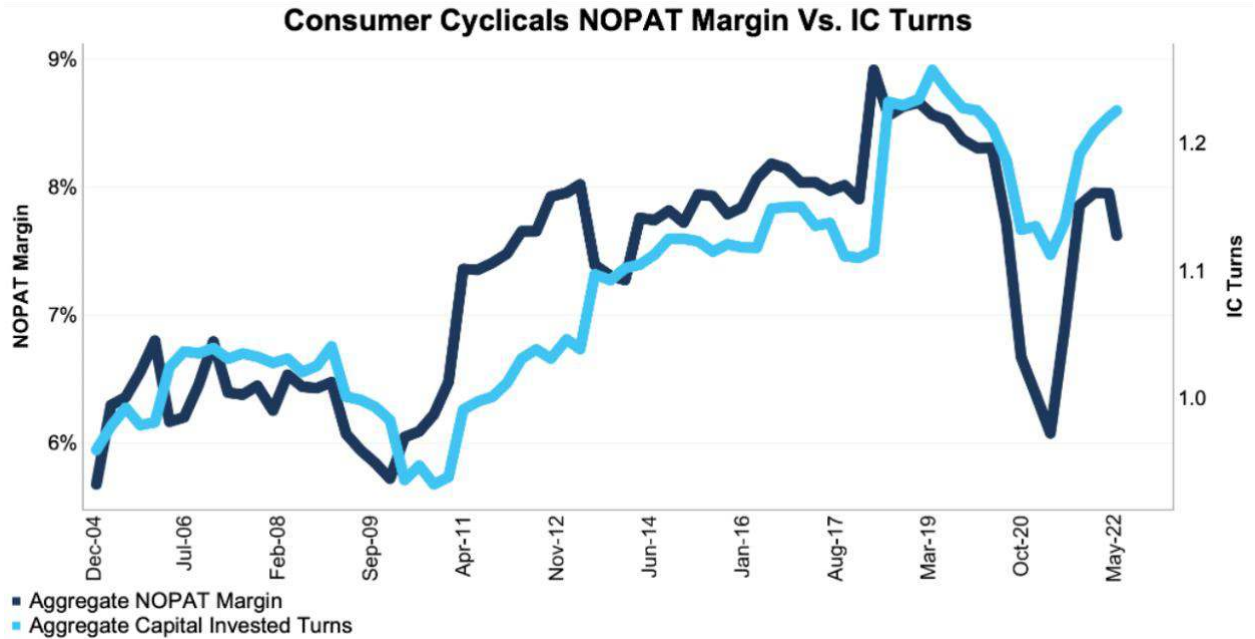
**Figure 18: Basic Materials NOPAT Margin and IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

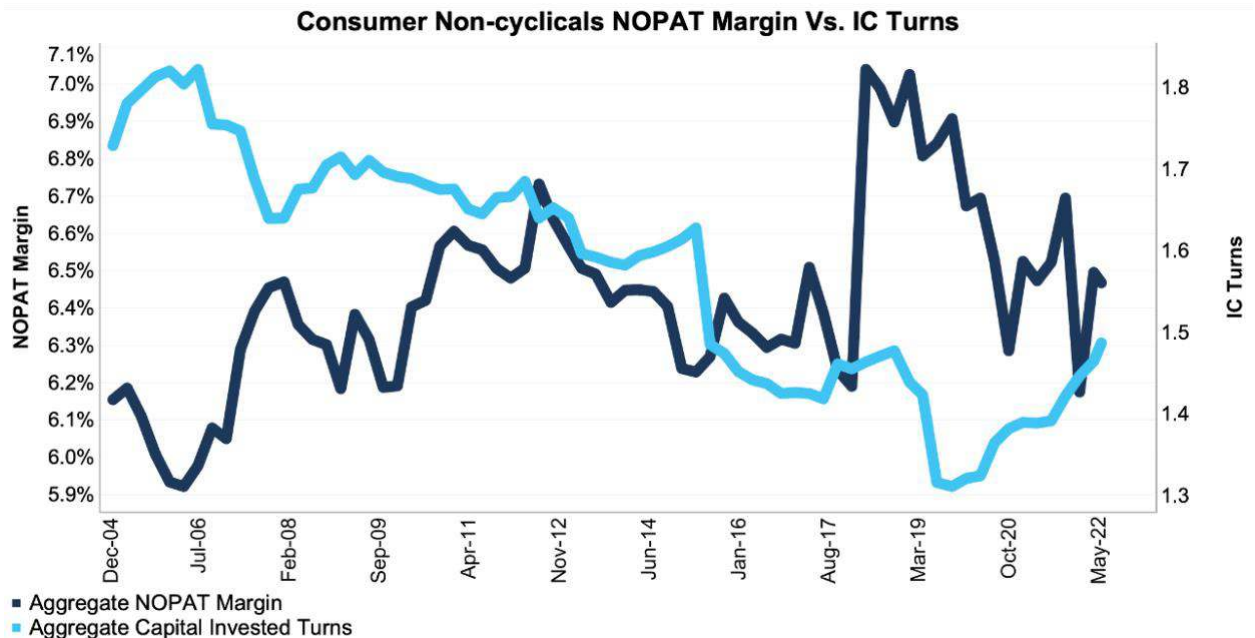


**Figure 19: Consumer Cyclical NOPAT Margin and IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

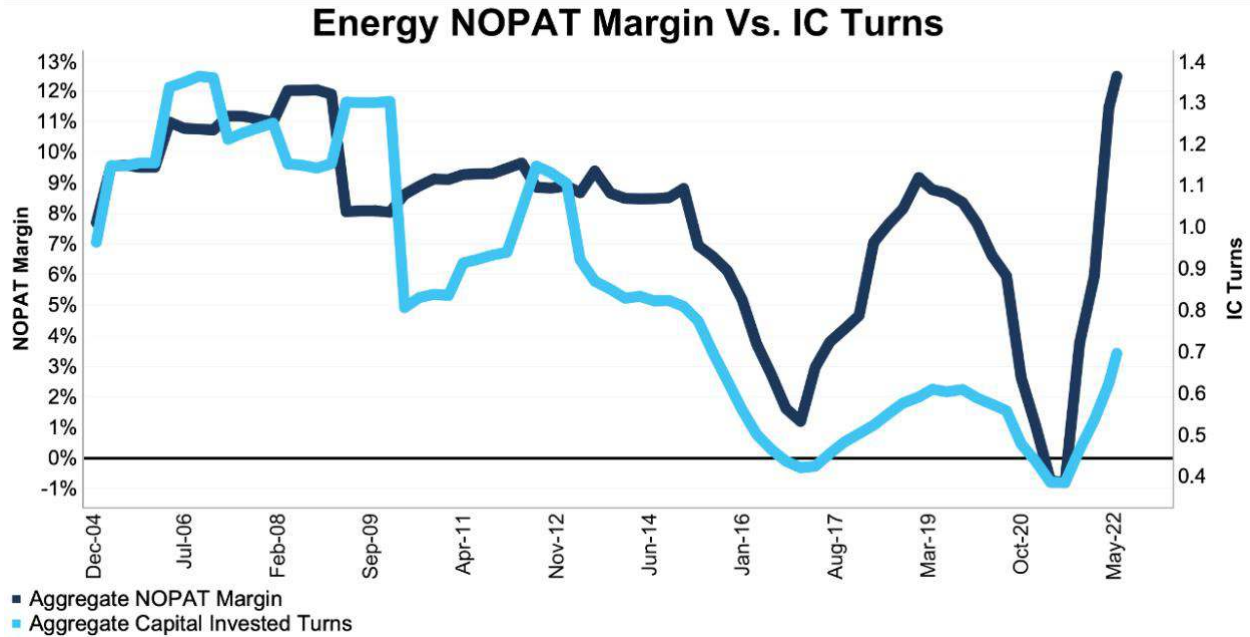
**Figure 20: Consumer Non-Cyclicals NOPAT Margin and IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

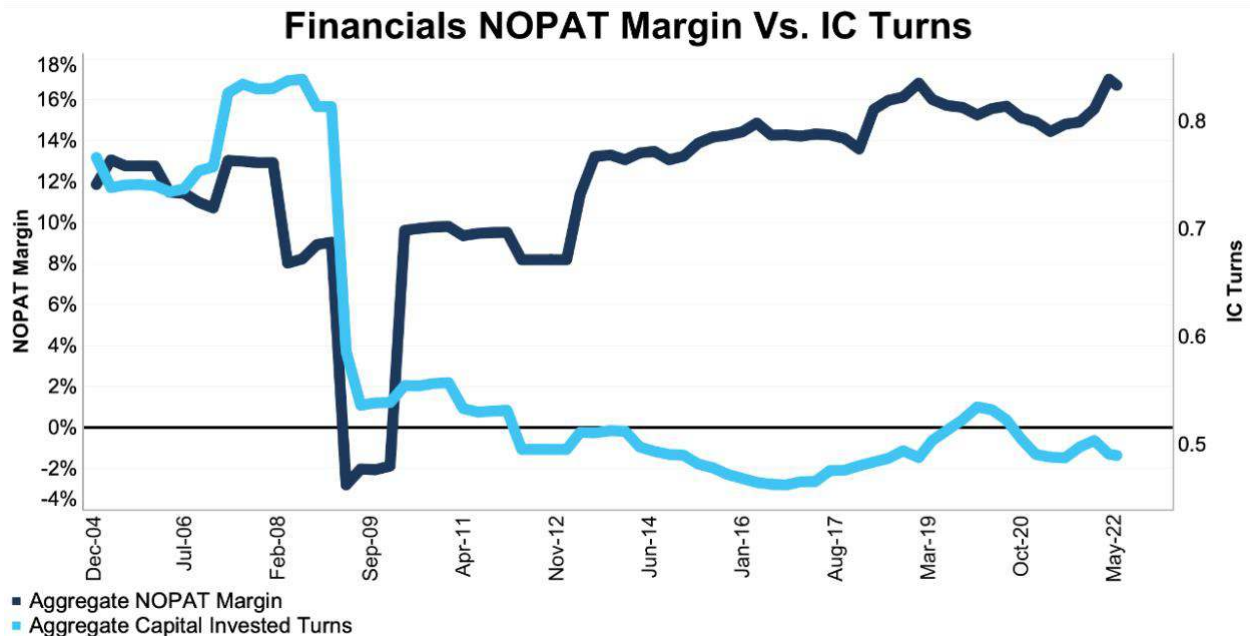


**Figure 21: Energy NOPAT Margin and IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

**Figure 22: Financials NOPAT Margin and IC Turns: December 2004 – 5/16/22**

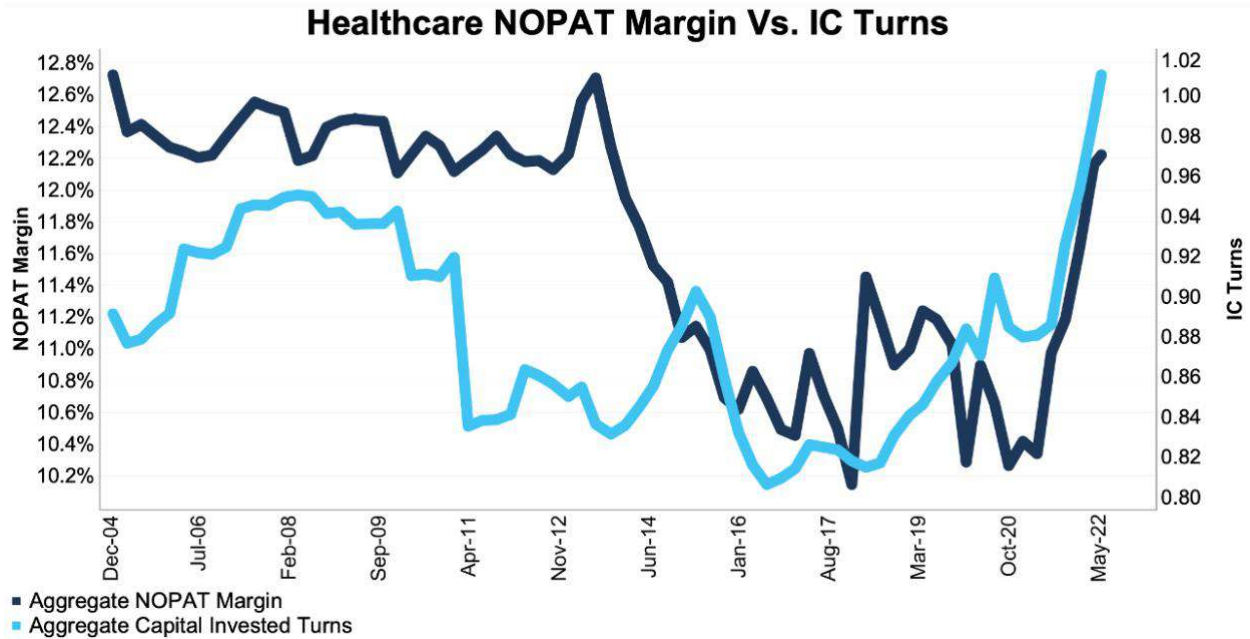


Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.



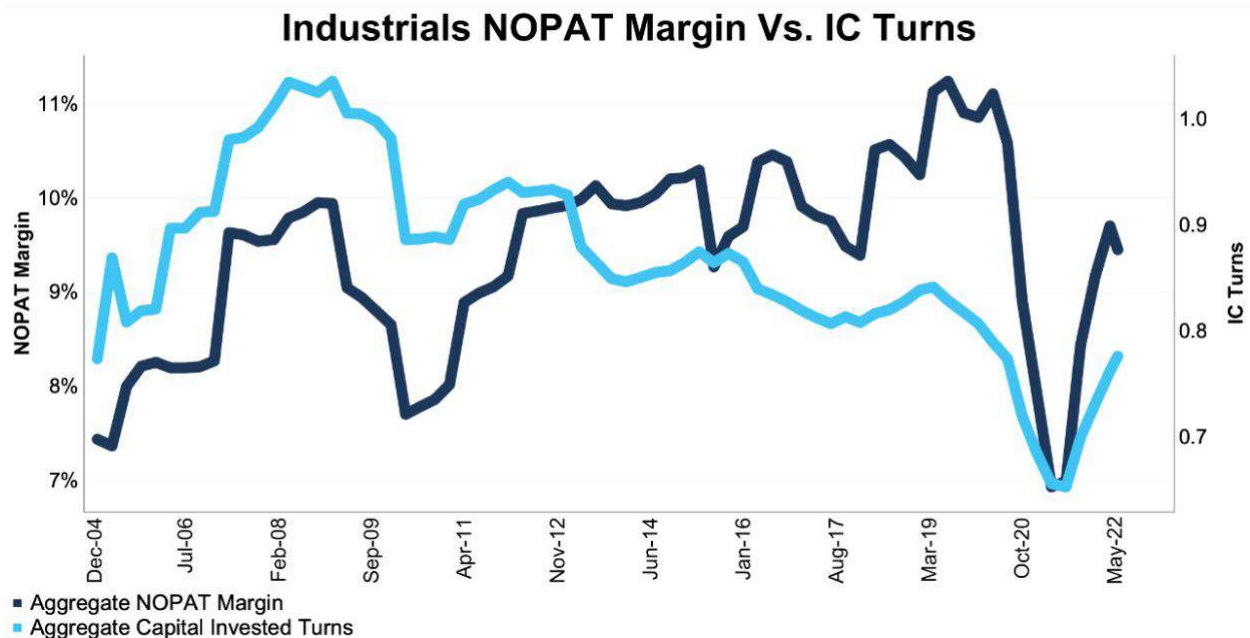


**Figure 23: Healthcare NOPAT Margin and IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

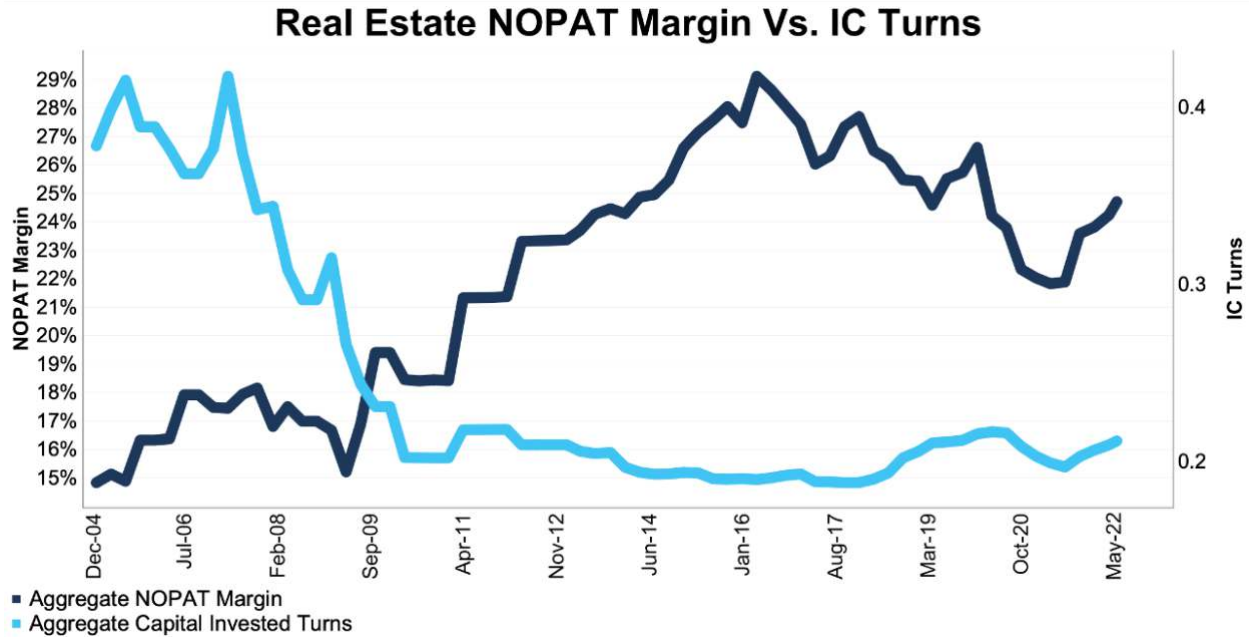
**Figure 24: Industrials NOPAT Margin vs. IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

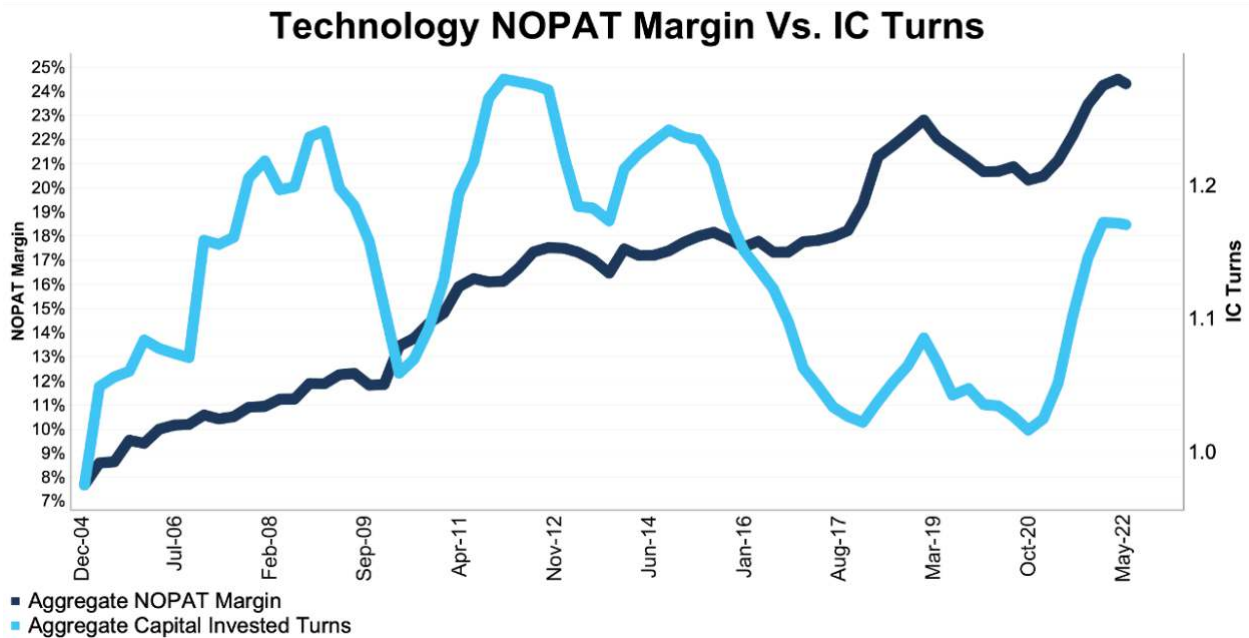


**Figure 25: Real Estate NOPAT Margin Vs. IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

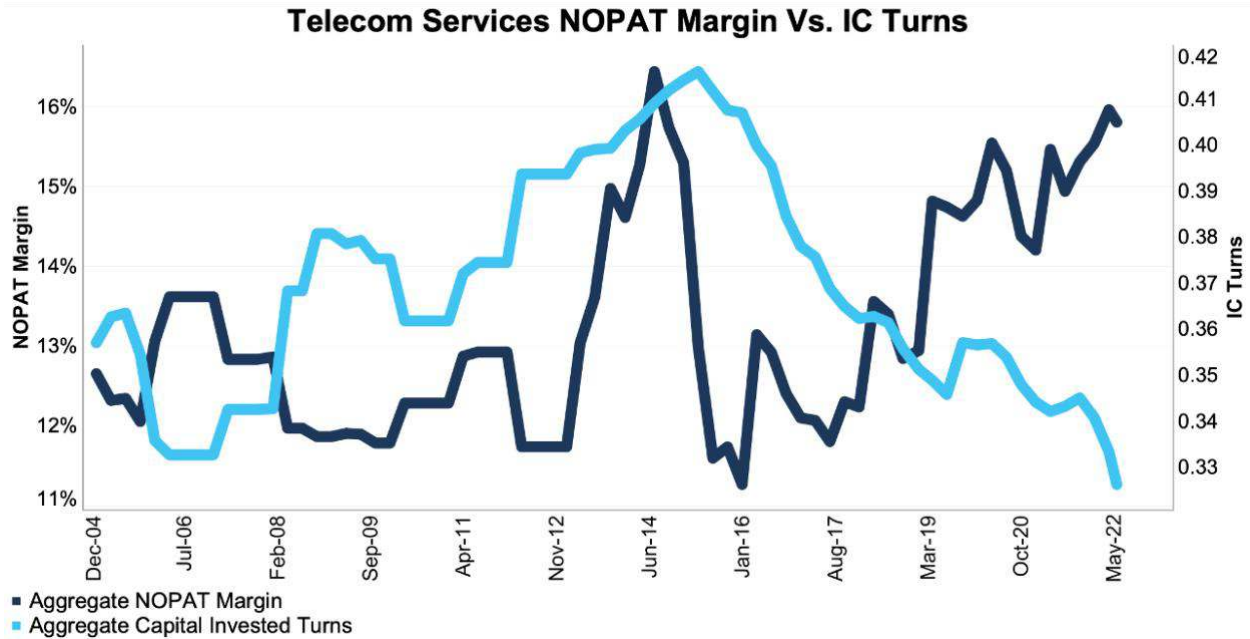
**Figure 26: Technology NOPAT Margin Vs. IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

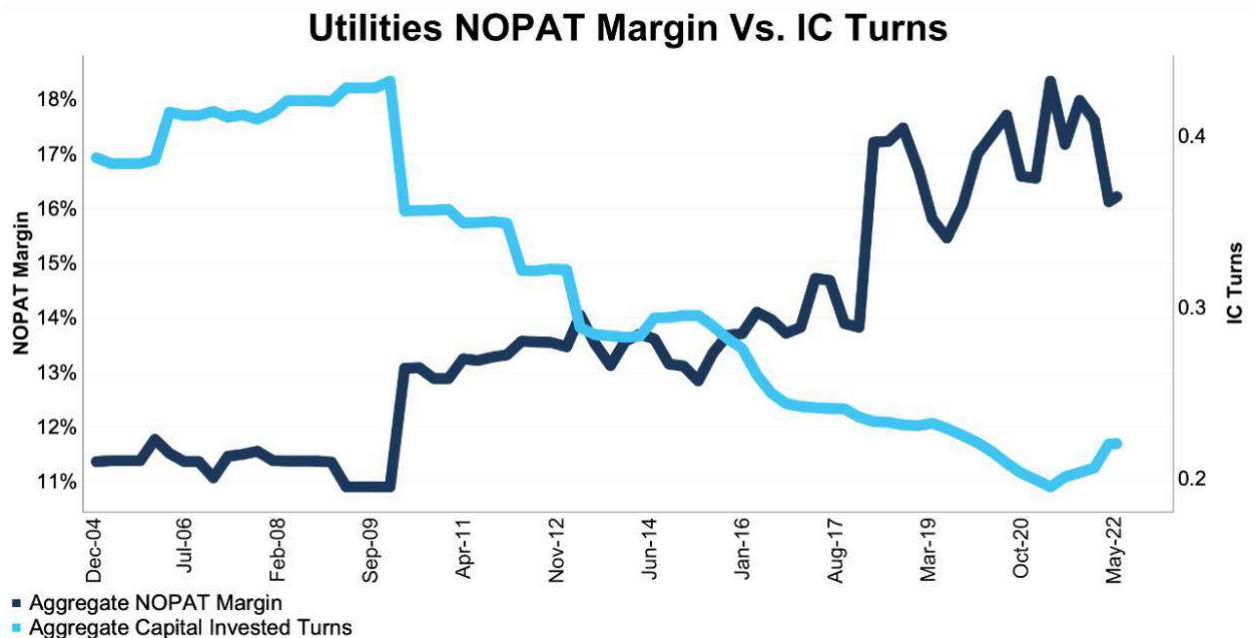


**Figure 27: Telecom Services NOPAT Margin Vs. IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

**Figure 28: Utilities NOPAT Margin vs. IC Turns: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.



### Appendix III: Analyzing ROIC with Different Weighting Methodologies

We derive the metrics above by summing the individual S&P 500 constituent values for revenue, NOPAT, and invested capital to calculate the metrics presented. We call this approach the “Aggregate” methodology.

The Aggregate methodology provides a straightforward look at the entire sector, regardless of market cap or index weighting and matches how S&P Global (SPGI) calculates metrics for the S&P 500.

For additional perspective, we compare the Aggregate method for ROIC with two other market-weighted methodologies:

1. **Market-weighted metrics** – calculated by market-cap-weighting the ROIC for the individual companies relative to their sector or the overall S&P 500 in each period. Details:
  - a. Company weight equals the company’s market cap divided by the market cap of the S&P 500/its sector
  - b. We multiply each company’s ROIC by its weight
  - c. S&P 500/Sector ROIC equals the sum of the weighted ROICs for all the companies in the S&P 500/each sector
2. **Market-weighted drivers** – calculated by market-cap-weighting the NOPAT and invested capital for the individual companies in each sector in each period. Details:
  - a. Company weight equals the company’s market cap divided by the market cap of the S&P 500/its sector
  - b. We multiply each company’s NOPAT and invested capital by its weight
  - c. We sum the weighted NOPAT and invested capital for each company in the S&P 500/each sector to determine each sector’s weighted NOPAT and weighted invested capital
  - d. S&P 500/Sector ROIC equals weighted sector NOPAT divided by weighted sector invested capital

Each methodology has its pros and cons, as outlined below:

#### **Aggregate method**

Pros:

- A straightforward look at the entire S&P 500/sector, regardless of company size or weighting in any indices.
- Matches how S&P Global calculates metrics for the S&P 500.

Cons:

- Vulnerable to impact of by companies entering/exiting the group of companies, which could unduly affect aggregate values despite the level of change from companies that remain in the group.

#### **Market-weighted metrics method**

Pros:

- Accounts for a firm’s size relative to the overall S&P 500/sector and weights its metrics accordingly.

Cons:

- Vulnerable to outsized impact of one or a few companies, as shown below in the Consumer Non-cyclicals sector. This outsized impact tends to occur only for ratios where unusually small denominator values can create extremely high or low results.

#### **Market-weighted drivers method**

Pros:

- Accounts for a firm’s size relative to the overall S&P 500/sector and weights its NOPAT and invested capital accordingly.
- Mitigates potential outsized impact of one or a few companies by aggregating values that drive the ratio before calculating the ratio.

Cons:



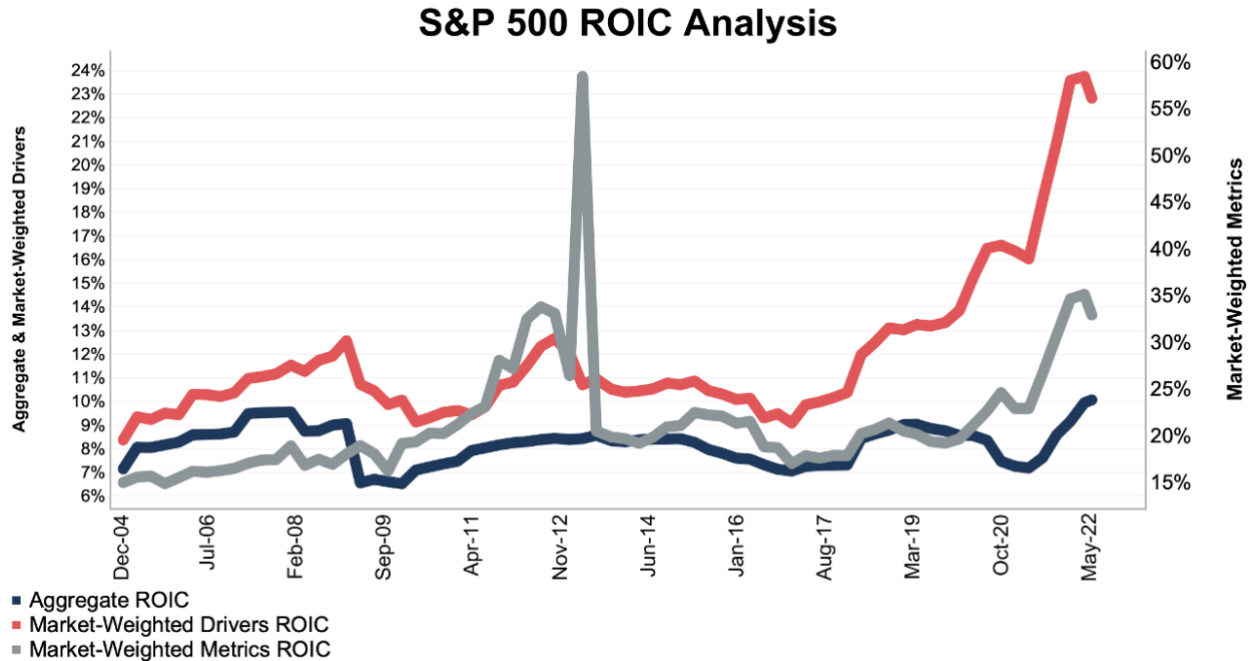
- Can minimize the impact of period-over-period changes in smaller companies, as their impact on the overall sector NOPAT and invested capital is smaller.

Figures 29-40 compare these three methods for calculating S&P 500 and sector ROICs.

In Figure 29, we chart the market-weighted metrics version of ROIC on its own axis to highlight the differences in the aggregate and market-weighted drivers versions of ROIC.

Note the impact on the market-weighted metrics version of ROIC for the entire S&P 500 from Lorillard (LO) in 2013, when the firm’s ROIC was more than 36,000%.

**Figure 29: S&P 500 ROIC Methodologies Compared: December 2004 – 5/16/22**

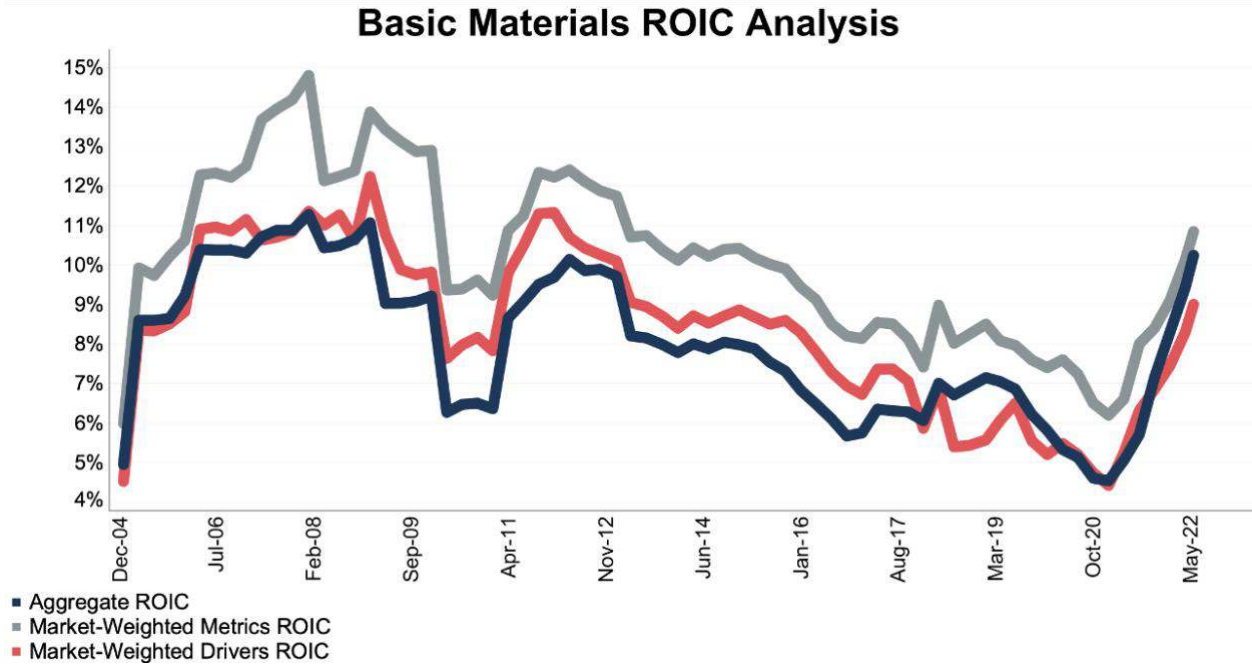


Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.



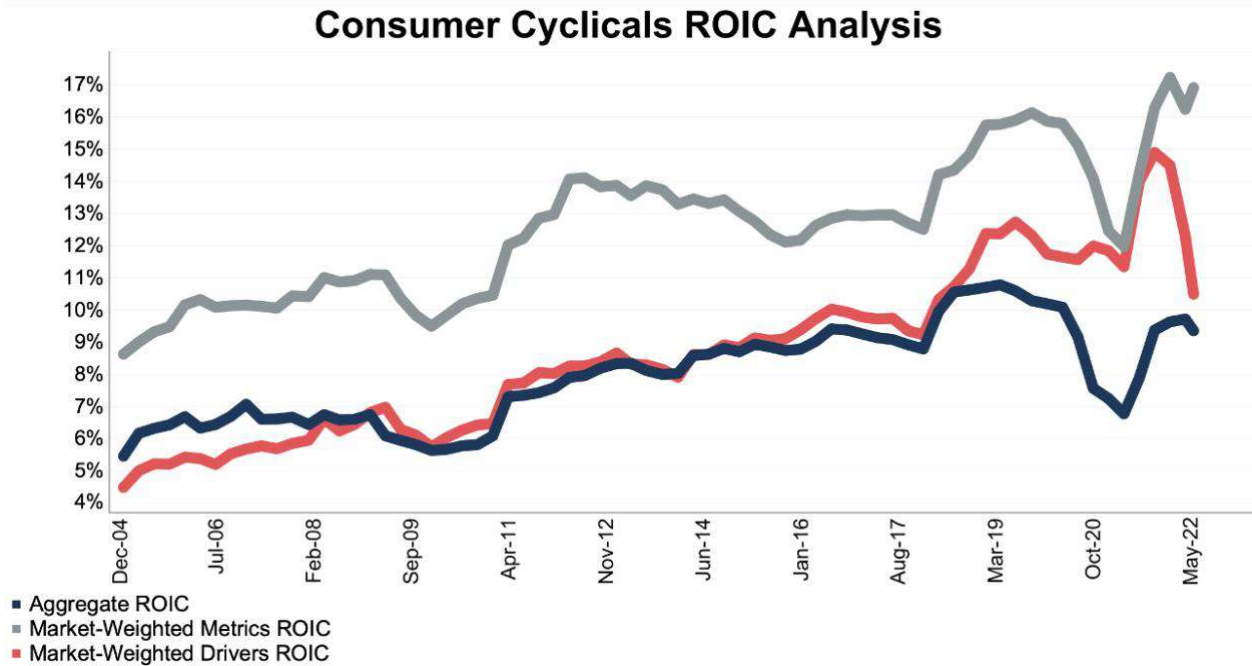


**Figure 30: Basic Materials ROIC Methodologies Compared: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

**Figure 31: Consumer Cyclical ROIC Methodologies Compared: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

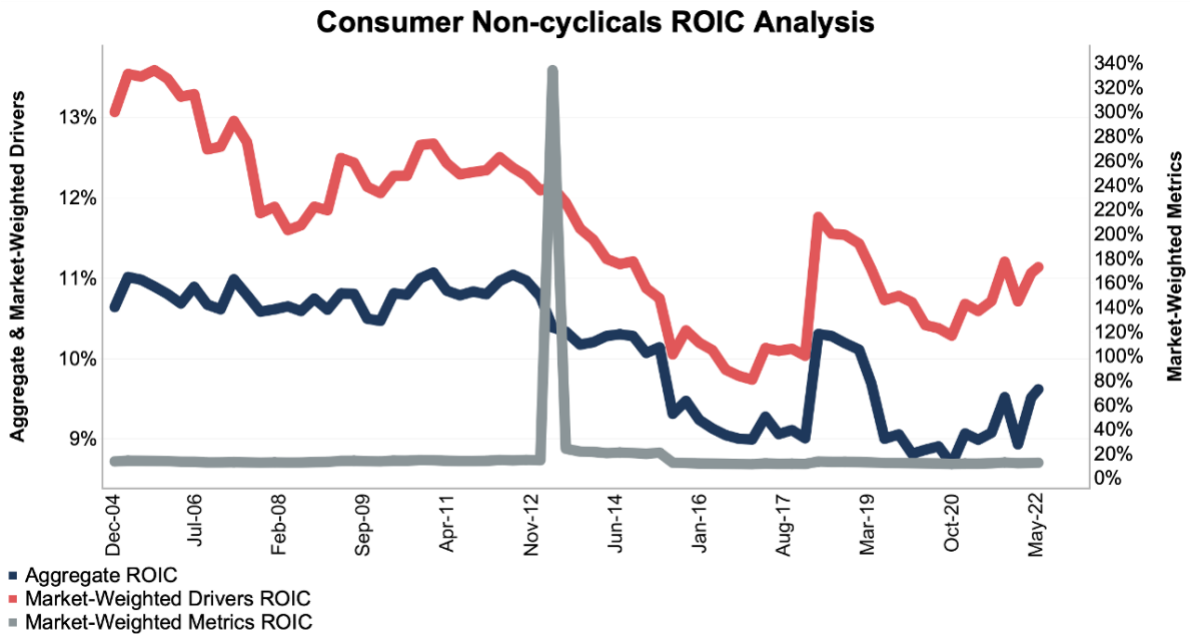




Note the impact on the market-weighted metrics version of ROIC for the Consumer Non-cyclicals sector from Lorillard (LO) in 2013, when the firm’s ROIC was more than 36,000%.

This outlier caused the Consumer Non-cyclicals sector’s ROIC to increase from 15% to 334% in just one period, before falling to 24% one period later.

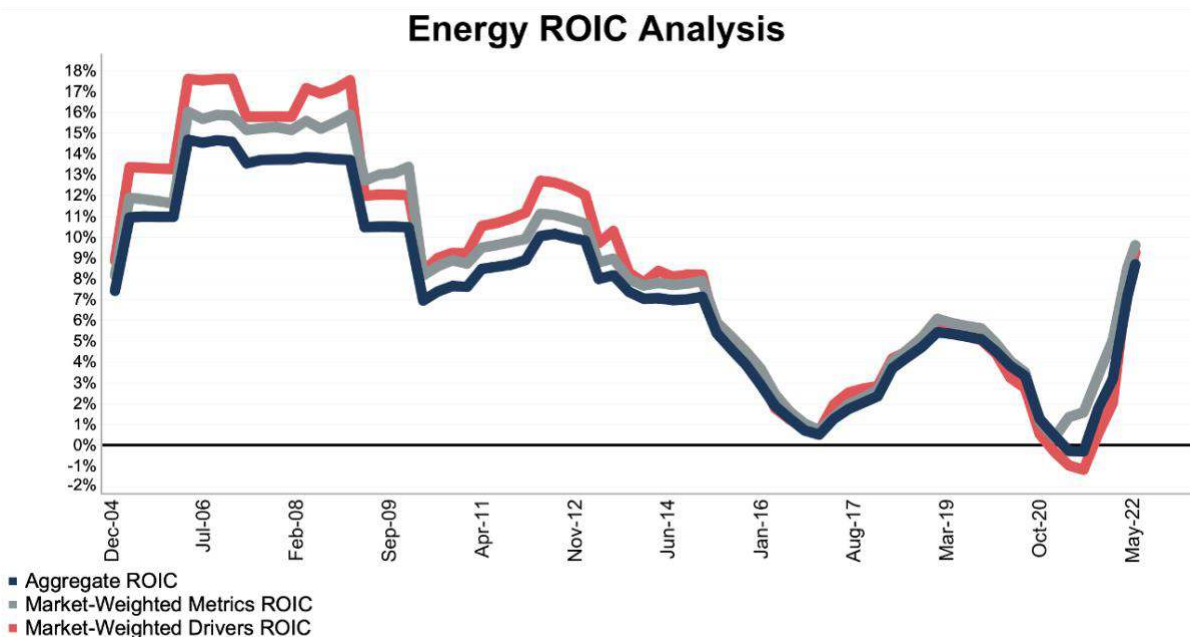
**Figure 32: Consumer Non-cyclicals ROIC Methodologies Compared: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.

The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

**Figure 33: Energy ROIC Methodologies Compared: December 2004 – 5/16/22**

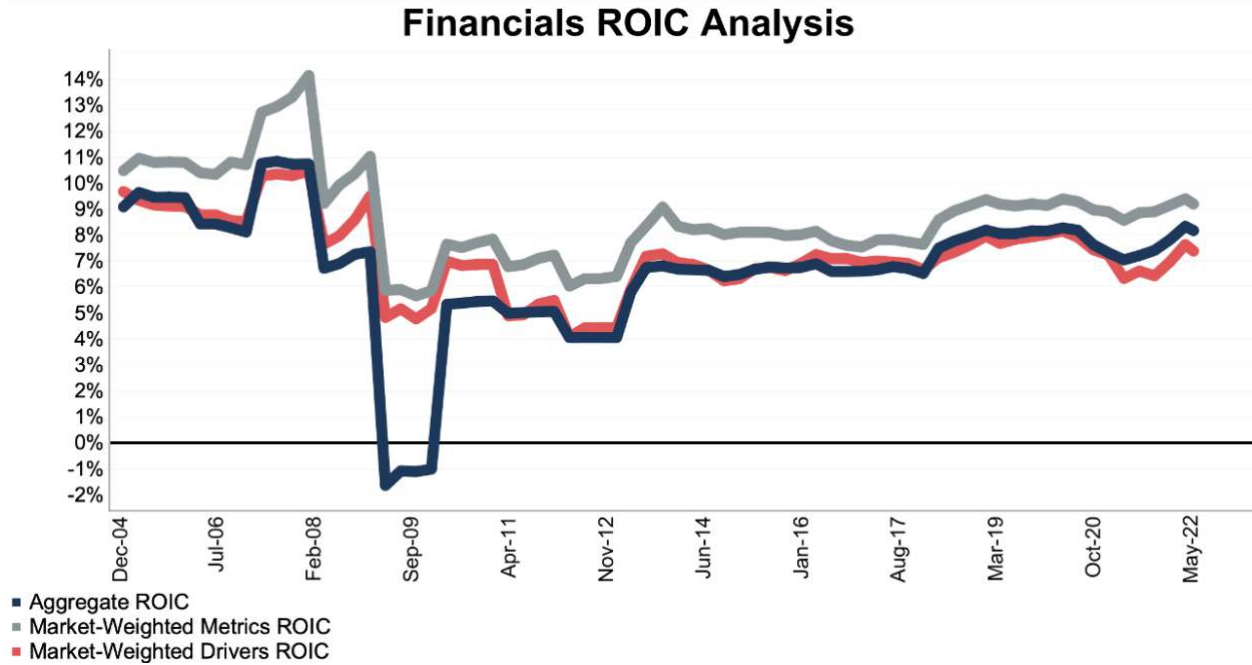


Sources: New Constructs, LLC and company filings.

The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

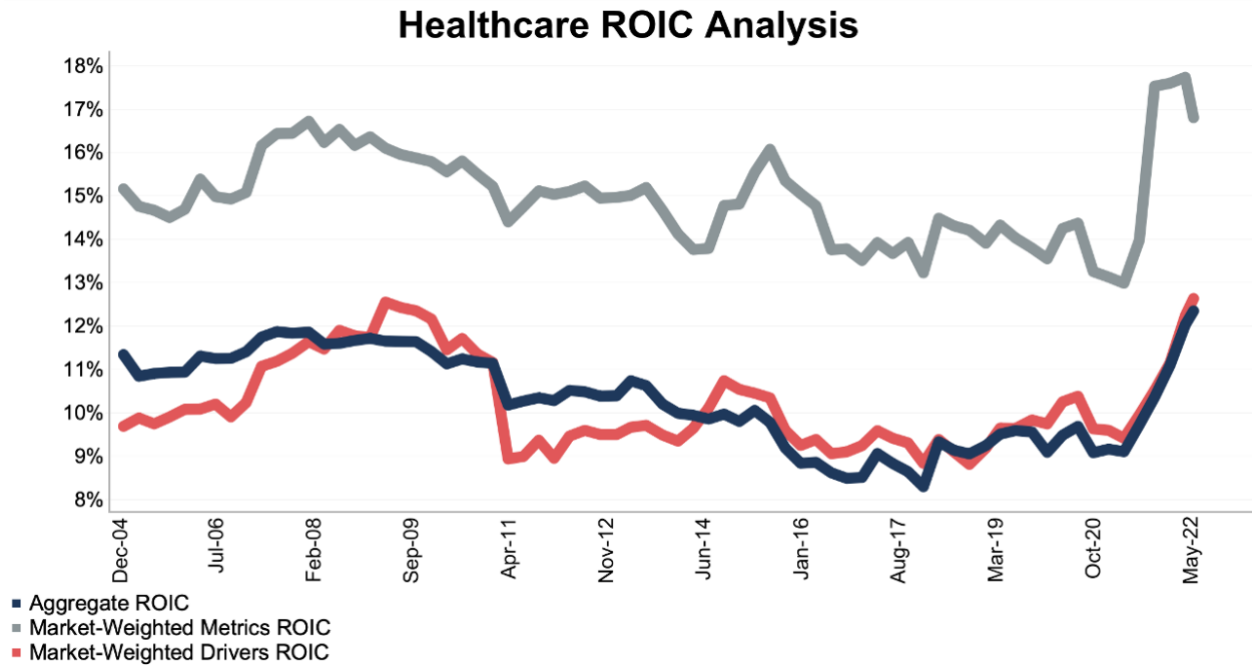


**Figure 34: Financials ROIC Methodologies Compared: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

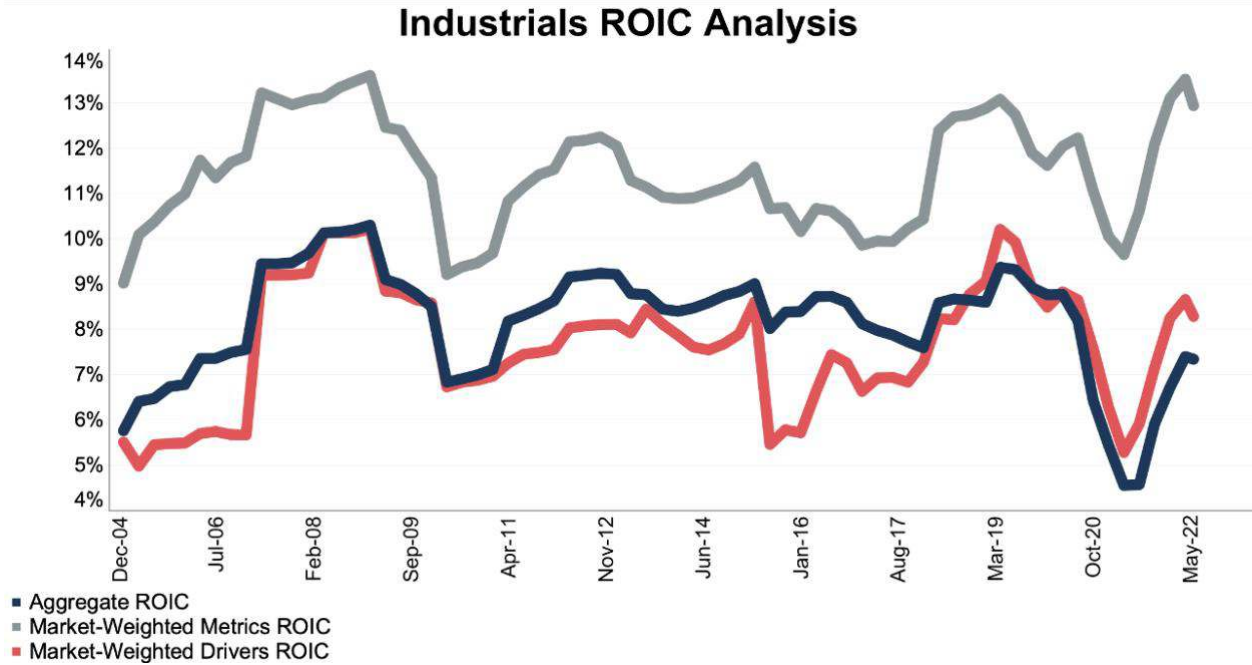
**Figure 35: Healthcare ROIC Methodologies Compared: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

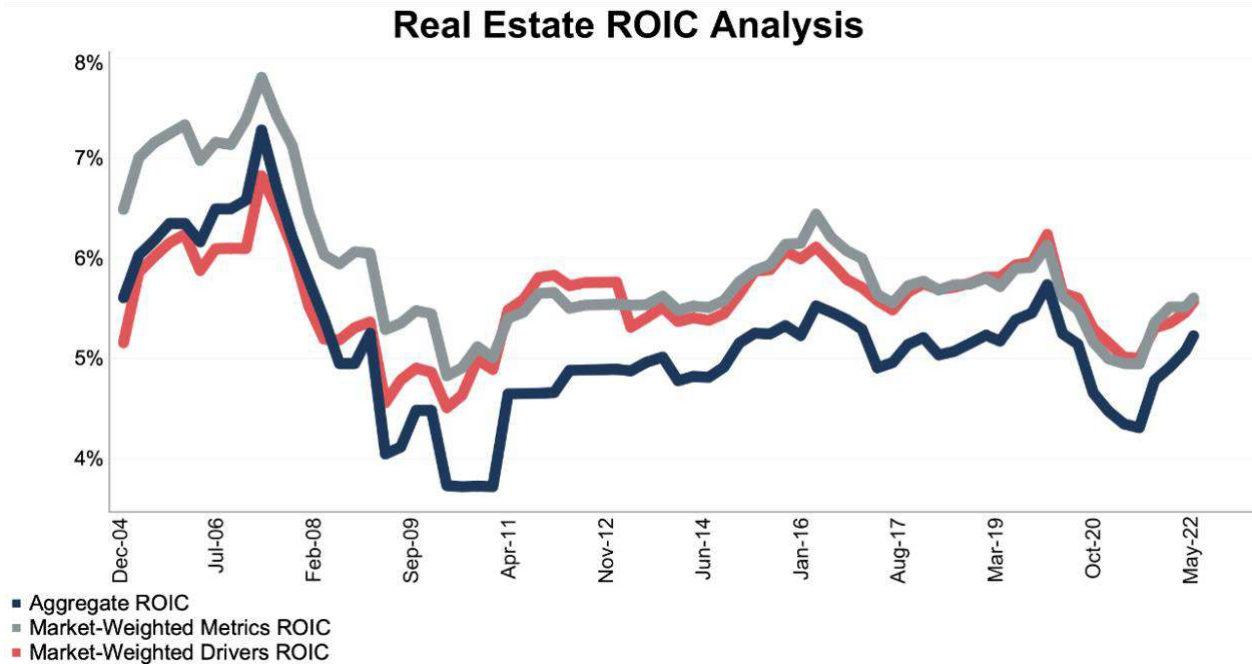


**Figure 36: Industrials ROIC Methodologies Compared: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

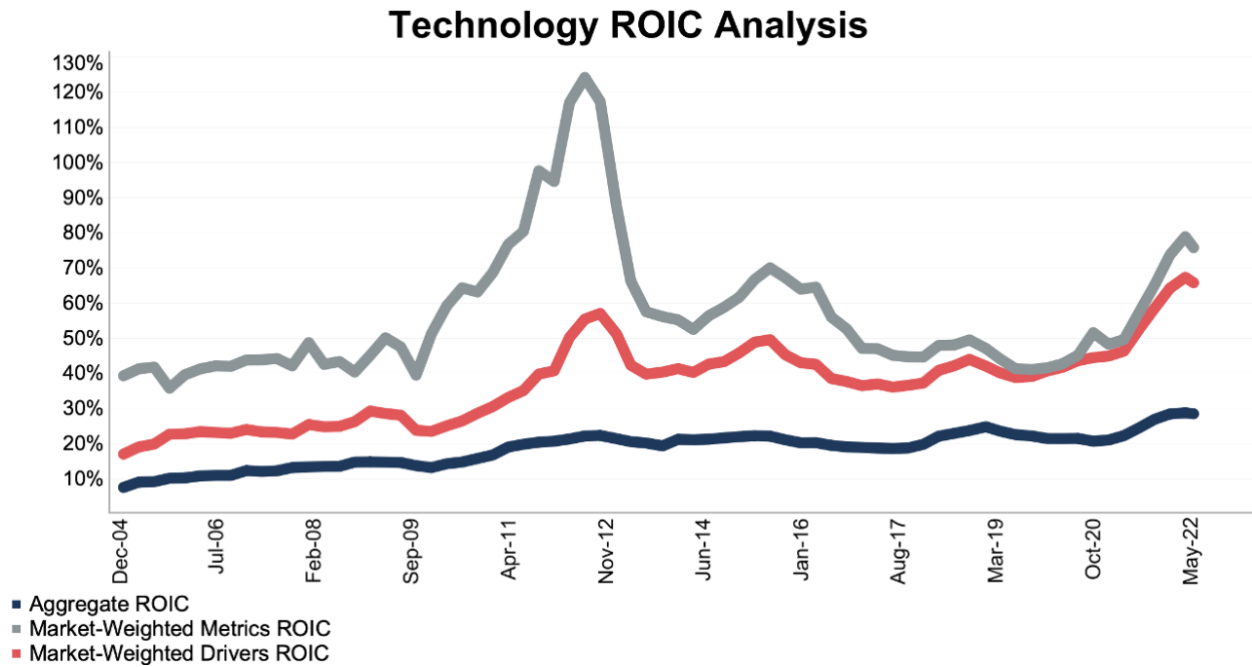
**Figure 37: Real Estate ROIC Methodologies Compared: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

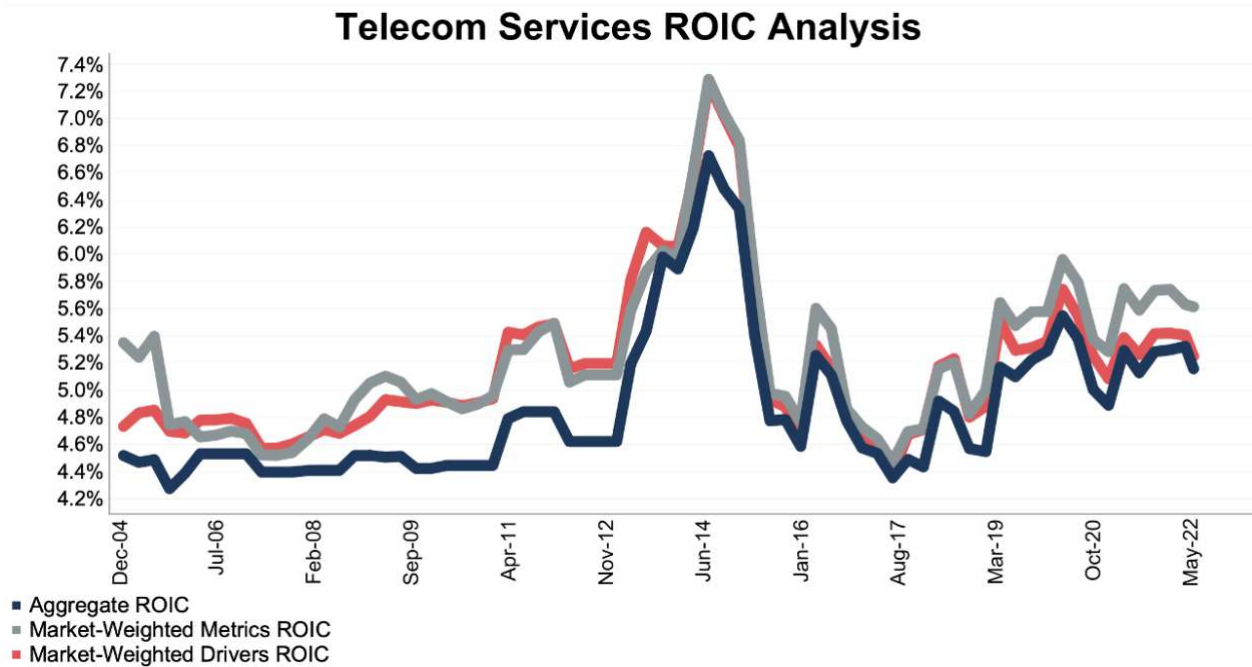


**Figure 38: Technology ROIC Methodologies Compared: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.

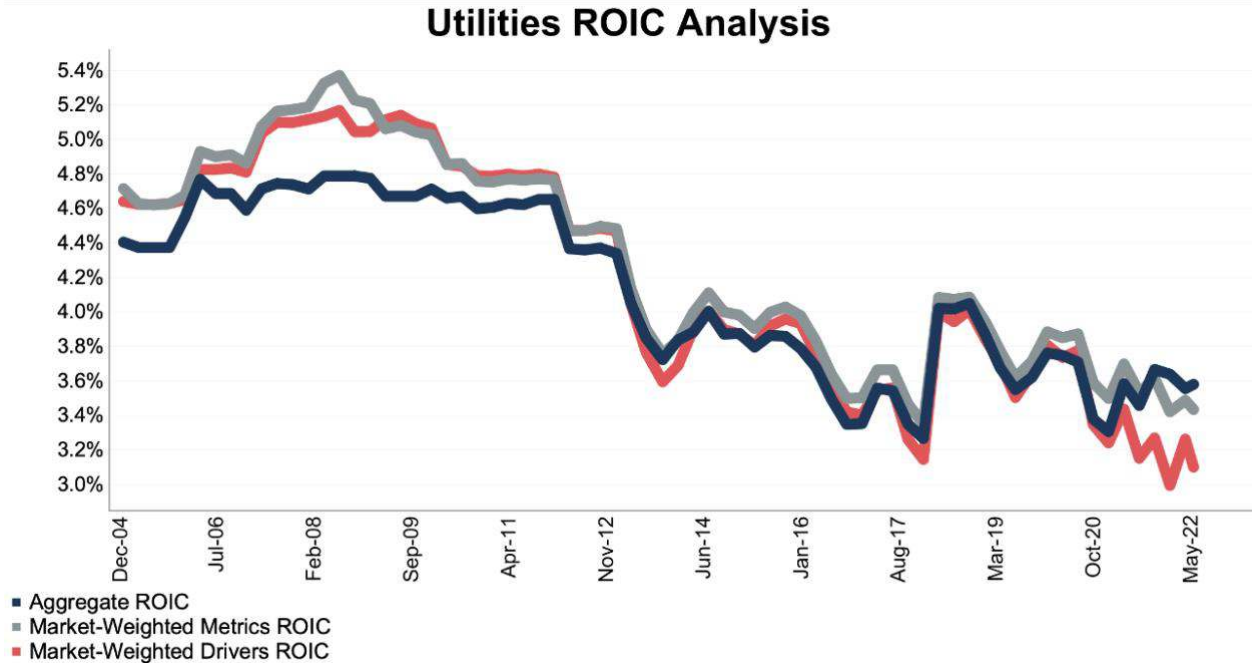
**Figure 39: Telecom Services ROIC Methodologies Compared: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.



**Figure 40: Utilities ROIC Methodologies Compared: December 2004 – 5/16/22**



Sources: New Constructs, LLC and company filings.  
 The May 16, 2022 measurement period uses price data as of that date for our WACC calculation and incorporates the financial data from 1Q22 10-Qs for ROIC, as this is the earliest date for which all the 1Q22 10-Qs for the S&P 500 constituents were available.



## *It's Official: We Offer the Best Fundamental Data in the World*

Many firms claim their research is superior, but none of them can prove it with independent studies from highly-respected institutions as we can. Three different papers from both the public and private sectors show:

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Key quotes from the paper:

- “[New Constructs’] *Total Adjustments* differs significantly from the items identified and excluded from Compustat’s adjusted earnings measures. For example... 50% to 70% of the variation in *Total Adjustments* is not explained by *S&P Global’s (SPGI) Adjustments* individually.” – pp. 14, 1<sup>st</sup> para.
- “A final source of differences [between New Constructs’ and S&P Global’s data] is due to data collection oversights...we identified cases where Compustat did not collect information relating to firms’ income that is useful in assessing core earnings.” – pp. 16, 2<sup>nd</sup> para.

### **Superior Models**

A top accounting firm features the superiority of our ROIC, NOPAT and Invested Capital research to Capital IQ & Bloomberg’s in [Getting ROIC Right](#). See the [Appendix](#) for direct comparison details.

Key quotes from the paper:

- “...an accurate calculation of ROIC requires more diligence than often occurs in some of the common, off-the-shelf ROIC calculations. Only by scouring the footnotes and the MD&A [ as New Constructs does] can investors get an accurate calculation of ROIC.” – pp. 8, 5<sup>th</sup> para.
- “The majority of the difference...comes from New Constructs’ machine learning approach, which leverages technology to calculate ROIC by applying accounting adjustments that may be buried deeply in the footnotes across thousands of companies.” – pp. 4, 2<sup>nd</sup> para.

### **Superior Stock Ratings**

Robo-Analysts’ stock ratings outperform those from human analysts as shown in this [paper](#) from Indiana’s Kelley School of Business. Bloomberg features the paper [here](#).

Key quotes from the paper:

- “the portfolios formed following the buy recommendations of Robo-Analysts earn abnormal returns that are statistically and economically significant.” – pp. 6, 3<sup>rd</sup> para.
- “Our results ultimately suggest that Robo-Analysts are a valuable, alternative information intermediary to traditional sell-side analysts.” – pp. 20, 3<sup>rd</sup> para.

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