ROIC Improved in Ten S&P 500 Sectors Through 3Q21

This report is an abridged and free version of S&P 500 & Sectors: ROIC vs. WACC Through 3Q21, one of the reports in our quarterly series on fundamental market and sector trends, which is available to Pro and higher members. More free reports on the fundamental trends for the overall market and each sector are available here.

The full version of the report analyzes the drivers[1,2] of economic earnings [return on invested capital (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).

These reports leverage more reliable fundamental data[3] that overcomes flaws with legacy fundamental datasets to provide a more informed view of the fundamentals and valuations of companies and sectors. Our Earnings Distortion research has been shown to generate a new source of alpha.

S&P 500 ROIC Continues to Rebound in 3Q21

Economic disturbances caused by the COVID-19 pandemic drove the S&P 500's return on invested capital down in 2020. However, the S&P 500's ROIC sharply recovered in 1H21 to pre-pandemic levels and continued to rise in 3Q21.The S&P 500's ROIC rose from 7.3% in 3Q20 to 9.1% in 3Q21.

See Figure 1 in the full version of our report for the chart of ROIC vs. WACC for the S&P 500 from December 2004 through 3Q21.

Key Details on Select S&P 500 Sectors

Ten of eleven S&P 500 sectors saw a year-over-year improvement in ROIC in 3Q21.

The Technology sector performed best over the past year, with its ROIC rising over 730 basis points. This trend is not surprising given that the global COVID-19 shutdowns accelerated the enterprise and consumer shift to cloud and other software-based solutions.

On the flip side, the Consumer Non-cyclicals sector is the only sector to have a YoY drop in ROIC.

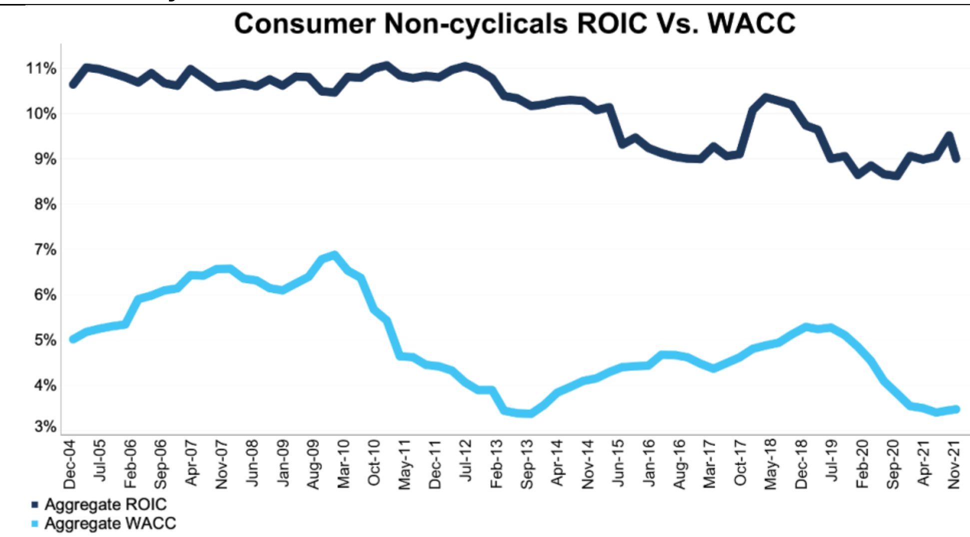
Overall, the Technology sector earns the highest ROIC of all sectors, by far, and the Energy sector earns the lowest ROIC. Below, we highlight the Consumer Non-cyclicals, which had the largest YoY drop in ROIC.

[1] We calculate these metrics based on SPGI's methodology, which sums the individual S&P 500 constituent values for NOPAT and invested capital before using them to calculate the metrics. We call this the "Aggregate" methodology. Get more details in the Appendix.
[2] Our research is based on the latest audited financial data, which is the calendar 3Q21 10-Q in most cases. Price data is as of 11/16/21.
[3] Three independent studies prove the superiority of our data, models, and ratings. Learn more here.

Sample Sector Analysis[4]: Consumer Non-cyclicals

Figure 1 shows the Consumer Non-Cyclicals sector ROIC fell from 9.1% in 3Q20 to 9.0% in 3Q21. The Consumer Non-cyclicals sector NOPAT margin fell from 6.5% in 3Q20 to 6.3% in 3Q21, while invested capital turns rose from 1.39 in 3Q20 to 1.44 in 3Q21.

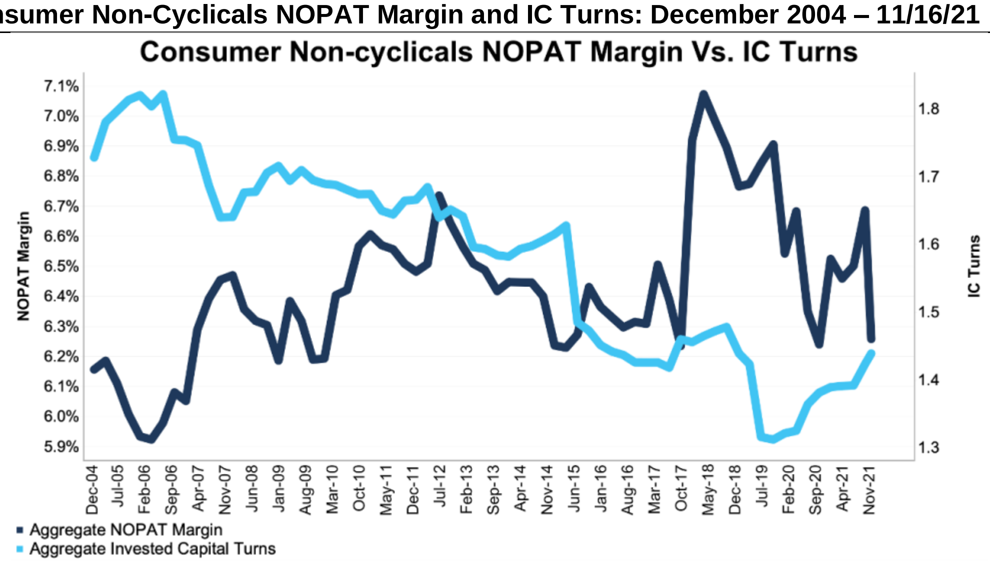
Figure 1: Consumer Non-cyclicals ROIC vs. WACC: December 2004 – 11/16/21



Sources: New Constructs, LLC and company filings.
The November 16, 2021 measurement period uses price data as of that date and incorporates the financial data from 3Q21 10-Qs, as this is the earliest date for which all the 3Q21 10-Qs for the S&P 500 constituents were available.

Figure 2 compares the NOPAT margin and invested capital turns trends for the Consumer Non-cyclicals sector since 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.

Figure 2: Consumer Non-Cyclicals NOPAT Margin and IC Turns: December 2004 – 11/16/21



Sources: New Constructs, LLC and company filings.
The November 16, 2021 measurement period uses price data as of that date and incorporates the financial data from 3Q21 10-Qs, as this is the earliest date for which all the 3Q21 10-Qs for the S&P 500 constituents were available.

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.

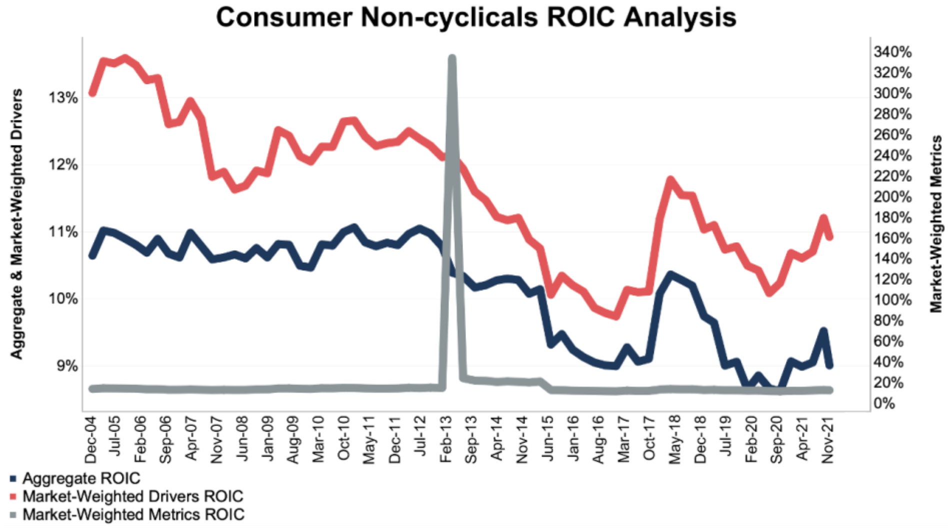
[4] The full version of this report provides analysis for every sector like what we show for this sector.

For additional perspective, we compare the Aggregate method for ROIC with two other market-weighted methodologies: market-weighted metrics and market-weighted drivers. Each method has its pros and cons, which are detailed in the Appendix.

Figure 3 compares these three methods for calculating the Consumer Non-cyclicals sector ROIC.

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 3: Consumer Non-cyclicals ROIC Methodologies Compared: December 2004 – 11/16/21



Sources: New Constructs, LLC and company filings.
The November 16, 2021 measurement period uses price data as of that date and incorporates the financial data from 3Q21 10-Qs, as this is the earliest date for which all the 3Q21 10-Qs for the S&P 500 constituents were available.

This article originally published on [November 24, 2021](https://www.newconstructs.com).

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

Follow us on Twitter, Facebook, LinkedIn, and StockTwits for real-time alerts on all our research.

Appendix: 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.
- 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.

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:

1. Legacy fundamental datasets suffer from significant inaccuracies, omissions and biases.
2. Only our "novel database" enables investors to overcome these flaws and apply reliable fundamental data in their research.
3. Our proprietary measures of Core Earnings and Earnings Distortion materially improve stock picking and forecasting of profits.

Best Fundamental Data in the World

Forthcoming in The Journal of Financial Economics, a top peer-reviewed journal, Core Earnings: New Data & Evidence proves our Robo-Analyst technology overcomes material shortcomings in legacy firms' data collection processes to provide superior fundamental data, earnings models, and research. More details.

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, 1st 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, 2nd 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, 5th 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, 2nd 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, 3rd para.
- "Our results ultimately suggest that Robo-Analysts are a valuable, alternative information intermediary to traditional sell-side analysts." – pp. 20, 3rd para.

Our mission is to provide the best fundamental analysis of public and private businesses in the world and make it affordable for all investors, not just Wall Street insiders.

We believe every investor deserves to know the whole truth about the profitability and valuation of any company they consider for investment. More details on our cutting-edge technology and how we use it are here.

DISCLOSURES

New Constructs®, LLC (together with any subsidiaries and/or affiliates, "New Constructs") is an independent organization with no management ties to the companies it covers. None of the members of New Constructs' management team or the management team of any New Constructs' affiliate holds a seat on the Board of Directors of any of the companies New Constructs covers. New Constructs does not perform any investment or merchant banking functions and does not operate a trading desk.

New Constructs' Stock Ownership Policy prevents any of its employees or managers from engaging in Insider Trading and restricts any trading whereby an employee may exploit inside information regarding our stock research. In addition, employees and managers of the company are bound by a code of ethics that restricts them from purchasing or selling a security that they know or should have known was under consideration for inclusion in a New Constructs report nor may they purchase or sell a security for the first two days after New Constructs issues a report on that security.

DISCLAIMERS

The information and opinions presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or solicitation of an offer to buy or sell securities or other financial instruments. New Constructs has not taken any steps to ensure that the securities referred to in this report are suitable for any particular investor and nothing in this report constitutes investment, legal, accounting or tax advice. This report includes general information that does not take into account your individual circumstance, financial situation or needs, nor does it represent a personal recommendation to you. The investments or services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about any such investments or investment services.

Information and opinions presented in this report have been obtained or derived from sources believed by New Constructs to be reliable, but New Constructs makes no representation as to their accuracy, authority, usefulness, reliability, timeliness or completeness. New Constructs accepts no liability for loss arising from the use of the information presented in this report, and New Constructs makes no warranty as to results that may be obtained from the information presented in this report. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information and opinions contained in this report reflect a judgment at its original date of publication by New Constructs and are subject to change without notice. New Constructs may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and New Constructs is under no obligation to insure that such other reports are brought to the attention of any recipient of this report.

New Constructs' reports are intended for distribution to its professional and institutional investor customers. Recipients who are not professionals or institutional investor customers of New Constructs should seek the advice of their independent financial advisor prior to making any investment decision or for any necessary explanation of its contents.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would be subject New Constructs to any registration or licensing requirement within such jurisdiction.

This report may provide the addresses of websites. Except to the extent to which the report refers to New Constructs own website material, New Constructs has not reviewed the linked site and takes no responsibility for the content therein. Such address or hyperlink (including addresses or hyperlinks to New Constructs own website material) is provided solely for your convenience and the information and content of the linked site do not in any way form part of this report. Accessing such websites or following such hyperlink through this report shall be at your own risk.