

All Cap Index & Sectors: Price-to-Economic Book Value Ratio Rises in 4Q22 (Free, Abridged)

The trailing price-to-economic book value (<u>PEBV</u>) ratio for the NC 2000 rose from 1.6 as of 12/30/22 to 1.7 as of 3/8/23.

This report is a free and abridged version of <u>All Cap Index & Sectors: Price-to-Economic Book Value Ratio Rises</u> in 4Q22, one of our quarterly reports on <u>fundamental market and sector trends</u>. The full reports are available to our <u>Professional</u> and <u>Institutional</u> members or can be purchased below.

The full version of this report analyzes^{1,2} the trailing PEBV ratio for the NC 2000³, our All Cap Index, and each of its sectors based on financial filings through 2022. Last quarter's analysis of the PEBV ratio for the NC 2000 and its sectors is <u>here</u>.

This report leverages our cutting-edge <u>Robo-Analyst technology</u> to deliver <u>proven-superior</u>⁴ fundamental research and support more cost-effective fulfillment of the <u>fiduciary duty of care</u>.

Buy the Full Version of This Report

NC 2000 Trailing PEBV Ratio Rose from 12/30/22 to 3/8/23

The trailing PEBV ratio compares the NC 2000's expected future profits (as reflected in its price) to its economic book value as of 3/8/23. The NC 2000's PEBV ratio of 1.7 implies the profits (<u>NOPAT</u>) of the NC 2000 will permanently increase 70% from TTM ended 4Q22 levels.

See Figure 1 in the <u>full version</u> of our report for the chart of the NC 2000 PEBV Ratio from December 1998 through 3/8/23.

Key Details on Select NC 2000 Sectors

Only the Energy sector trades below its economic book value based on data through 2022 and prices as of 3/8/23. The Energy sector has the lowest trailing PEBV ratio, and the Utilities sector has the highest trailing PEBV ratio among the eleven All Cap Index sectors based on prices as of 3/8/23 and data from 2022 10-Ks.

A trailing PEBV ratio of 0.6 means the market expects the Energy sector's profits to decline by 40% from 2022 levels. On the flip side, investors expect the Utilities and Real Estate sectors (trailing PEBV ratios of 10.8 and 8.1) to improve profits more than any other NC 2000 sectors.

Below, we highlight the Basic Materials sector.

Sample Sector Analysis⁵: Basic Materials: Trailing PEBV Ratio = 1.2

Figure 1 shows the trailing PEBV ratio for the Basic Materials sector rose from 1.0 as of 12/30/22 to 1.2 as of 3/8/23. The Basic Materials sector market cap rose from \$1.1 trillion as of 12/30/22 to \$1.2 trillion as of 3/8/23, while its economic book value fell from \$1.2 trillion as of 12/30/22 to \$986 billion as of 3/8/23.

Page 1 of 7

Important Disclosure Information is contained on the last page of this report. The recipient of this report is directed to read these disclosures.

¹ We calculate these metrics based on <u>S&P Global</u>'s (SPGI) methodology, which sums individual NC 2000 constituent values for market cap and economic book value before using them to calculate the metrics. We call this the "Aggregate" methodology. Get more details in Appendices I and II.

² Based on latest available audited financial data, which is the 2022 10-K in most cases. Price data is as of 3/8/23. See the appendices for more information calculation methodologies.

³ The NC 2000 consists of the largest 2000 U.S. companies by market cap in our coverage. Constituents are updated on a quarterly basis. We exclude companies that report under IFRS and non-U.S. ADR companies.

⁴ Our research utilizes our <u>Core Earnings</u>, a more reliable measure of profits, as proven in <u>Core Earnings: New Data & Evidence</u>, written by professors at Harvard Business School (HBS) & MIT Sloan and published in <u>The Journal of Financial Economics</u>.

⁵ The full version of this report provides analyses for all eleven sectors.



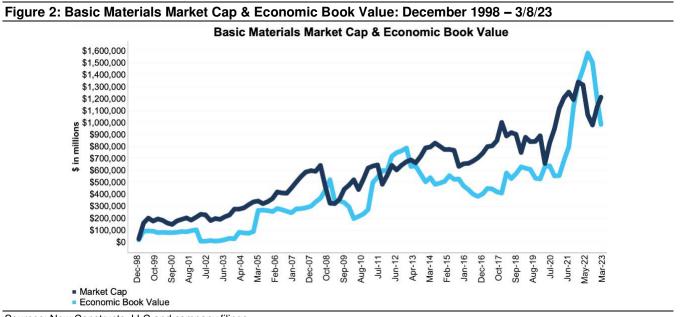




Sources: New Constructs, LLC and company filings.

The March 8, 2023 measurement period uses price data as of that date and incorporates the financial data from 2022 10-Ks, as this is the earliest date for which all of the 2022 10-Ks for the NC 2000 constituents were available.

Figure 2 compares the trends for market cap and economic book value for the Basic Materials sector since 1998. We sum up the individual NC 2000/sector constituent values for market cap and economic book value. We call this approach the "Aggregate" methodology, and it matches S&P Global's (SPGI) methodology for these calculations.



Sources: New Constructs, LLC and company filings. The March 8, 2023 measurement period uses price data as of that date and incorporates the financial data from 2022 10-Ks, as this is the earliest date for which all of the 2022 10-Ks for the NC 2000 constituents were available.

The Aggregate methodology provides a straightforward look at the entire NC 2000/sector, regardless of firm size 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 trailing PEBV ratio with two other marketweighted methodologies. Each method has its pros and cons, which are detailed in the Appendix.



20

18

16

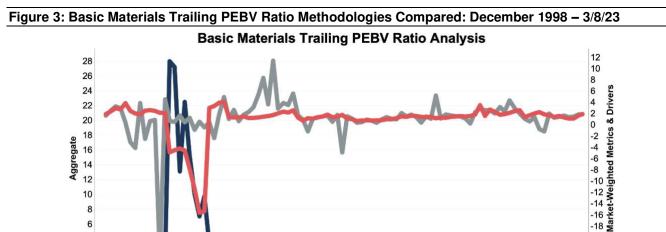
MACRO FUNDAMENTALS 3/31/23

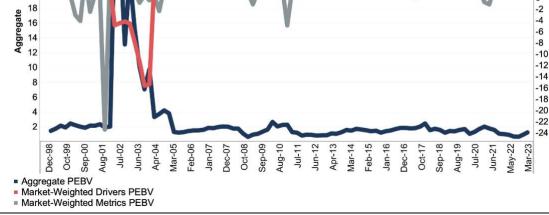
-20

-22

-24

Figure 3 compares these three methods for calculating the Basic Materials sector's trailing PEBV ratios.





Sources: New Constructs, LLC and company filings.

The March 8, 2023 measurement period uses price data as of that date and incorporates the financial data from 2022 10-Ks, as this is the earliest date for which all of the 2022 10-Ks for the NC 2000 constituents were available.

This article was originally published on March 31, 2023.

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

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



Appendix: Analyzing Trailing PEBV Ratio with Different Weighting Methodologies

We derive the metrics above by summing the individual NC 2000/sector constituent values for market cap and economic book value to calculate trailing PEBV ratio. We call this approach the "Aggregate" methodology.

The Aggregate methodology provides a straightforward look at the entire NC 2000/sector, regardless of firm size 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 trailing PEBV ratio with two other marketweighted methodologies. These market-weighted methodologies add more value for ratios that do not include market values, e.g. ROIC and its drivers, but we include them here, nonetheless, for comparison:

- 1. **Market-weighted metrics** calculated by market-cap-weighting the trailing PEBV ratio for the individual companies relative to their sector or the overall NC 2000 in each period. Details:
 - a. Company weight equals the company's market cap divided by the market cap of the NC 2000 or its sector
 - b. We multiply each company's trailing PEBV ratio by its weight
 - c. NC 2000/Sector trailing PEBV ratio equals the sum of the weighted trailing PEBV ratios for all the companies in the NC 2000/sector
- 2. **Market-weighted drivers** calculated by market-cap-weighting the market cap and economic book value 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 NC 2000 or its sector
 - b. We multiply each company's market cap and economic book value by its weight
 - c. We sum the weighted market cap and weighted economic book value for each company in the NC 2000/each sector to determine the NC 2000 or sector's weighted market cap and weighted economic book value
 - d. NC 2000/Sector trailing PEBV ratio equals weighted NC 2000/sector market cap divided by weighted NC 2000/sector economic book value

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

Aggregate method

Pros:

- A straightforward look at the entire NC 2000/sector, regardless of company size or weighting.
- Matches how S&P Global calculates metrics for the S&P 500.

Cons:

• Vulnerable to impact of companies entering/exiting the group of companies, which could unduly affect aggregate values. Also susceptible to outliers in any one period.

Market-weighted metrics method

Pros:

• Accounts for a firm's market cap relative to the NC 2000/sector and weights its metrics accordingly.

Cons:

• Vulnerable to outlier results from a single company disproportionately impacting the overall trailing PEBV ratio.

Market-weighted drivers method

Pros:

- Accounts for a firm's market cap relative to the NC 2000/sector and weights its size and economic book value accordingly.
- Mitigates the disproportionate impact of outlier results from one company on the overall results.

Cons:



MACRO FUNDAMENTALS 3/31/23

• More susceptible to large swings in market cap or economic book value (which can be impacted by changes in WACC) period over period, particularly from firms with a large weighting in the NC 2000/Sector.

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 highlyrespected 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 <u>reliable</u> fundamental data in their research.
- 3. Our proprietary measures of <u>Core Earnings</u> and <u>Earnings Distortion</u> materially improve stock picking and forecasting of profits.

Best Fundamental Data in the World

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

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 <u>Getting ROIC Right</u>. See the <u>Appendix</u> 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 <u>paper</u> from Indiana's Kelley School of Business. Bloomberg features the paper <u>here</u>.

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 <u>here</u>.



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.

All material in this report is the property of, and under copyright, of New Constructs. None of the contents, nor any copy of it, may be altered in any way, copied, or distributed or transmitted to any other party without the prior express written consent of New Constructs. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of New Constructs. Copyright New Constructs, LLC 2003 through the present date. All rights reserved.