

Updating Our Minority Interest Calculation

This report details improvements we're making to our Company Models to better handle the impact of Accounting Standards Update (ASU) 2016-01.

Background

The Financial Accounting Standards Board (FASB) passed ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities," in January 2016 with implementation beginning in fiscal year 2018. This rule impacts the way companies account for changes in the fair value of securities on their income statement.

As part of ASU 2016-01, companies must classify securities as equity investments or equity investments accounted for under the <u>equity method</u>. This change had a significant impact on companies that hold a large amount of equity securities for profit, such as Berkshire Hathaway (BRK.A). Adoption of ASU 2016-01 creates noise and volatility in GAAP Earnings, <u>Core Earnings</u>, net operating profit after-tax (<u>NOPAT</u>), and <u>invested capital</u>. We previously updated our models to reverse the impact of this accounting rule change and ensure our models provide the most accurate picture of a company's true operations. Details here.

The Update

Upon further investigation, we determined that our approach to reversing the impact of ASU 2016-01 could be improved. More specifically, we improved how we determine what percentage of unrealized gains and losses on equity securities are related to minority shareholders. This percentage is important because we remove it from the unrealized gains and losses on equity securities used to adjust other comprehensive income (OCI) values.

The changes that will impact invested capital directly:

- 1. Calculate the minority interest percentage using balance sheet values instead of income statement values
- Restrict the percentage of unrealized gains and losses on equity securities related to minority shareholders to between 0% and 50%.

The Reason

We make this adjustment because, depending on what percentage of the company minority shareholders own, companies allocate a portion of unrealized gains and losses on equity securities to retained earnings and a portion to the minority interest liability. To reverse the impact of ASU 2016-01, we need to only add back to OCI the portion of unrealized gains and losses on equity securities related to non-minority interest shareholders. Since companies do not often disclose the exact percentage of the company that minority shareholders own, we must determine one.

To calculate the percentage that minority shareholders own, there are two logical approaches:

- 1. Income Statement
 - a. Calculation:
 - i. Minority Interest Expense / (Net Income + Minority Interest Expense)
- 2. Balance Sheet
 - a. Calculation:
 - i. Minority Interest Liability / (Shareholders Equity + Minority Interest Liability)

Initially, we used the income statement approach in our models. Upon further review, we found that using the balance sheet approach was more accurate, less volatile, and produced less abnormal or outlier results than using income statement values.

To further eliminate outliers, we restrict the percentage of unrealized gains and losses on equity securities related to minority shareholders to between 0% and 50%. This restriction is based on (1) in practice, most minority interest ownerships are between 10% and 30%, (2) companies do not usually disclose a minority interest unless it represents at least 10% of the company, and (3) ownership above 50% is no longer "minority" and will likely result in the company being consolidated by the owner.



Impact on our Models

These changes will be reflected in our models beginning on March 24, 2023. While these changes will have an impact on models, we expect the impact to be mostly minimal. Figure 1 shows the ten largest changes in invested capital, and subsequently ROIC, in the current trailing-twelve-month (TTM) period as a result of this update.

Figure 1: Largest Impact from Changes to Minority Interest Calculation

Ticker	Company	% Change in Invested Capital
Largest % Increase in Invested Capital		
VNRX	VolitionRX	41%
YTEN	Yield 10 Bioscience	17%
EEX	Emerald Holding Inc.	10%
BIIB	Biogen, Inc.	8%
VXRT	Vaxart, Inc.	8%
Largest % Decrease in Invested Capital		
MKSI	MKS Instruments	-26%
CASA	Casa Systems	-15%
SSTI	ShotSpotter Inc.	-15%
ZYXI	Zynex Inc.	-13%
TCX	Tucows Inc.	-12%

Sources: New Constructs, LLC and company filings

This article was originally published on March 22, 2023.

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

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



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 <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 & Evidence</u> 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 <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 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.



DILIGENCE PAYS 3/22/23

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.