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New Constructs

How COVID-19 Scrambles Earnings Reports: Most Misleading EPS in the S&P 500

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How COVID-19 Scrambles Earnings Most Overstated and Understated EPS in the S&P 500

- **1. Unscrubbed Earnings are Flawed**
- 2. Case Studies: Most Understated EPS in the S&P 500
- 3. Case Studies: Most Overstated EPS in the S&P 500
- 4. Stocks More Likely to Miss Street EPS in 2Q21
- 5. How To Protect Yourself From Misleading EPS



Part 1





What Causes Differences in Earnings Measures?

Unusual <u>items</u> in the footnotes & MD&A of financial filings

- Hidden Expenses/Income
- Unrecorded Goodwill
- Impairments
- Unconsolidated Subsidiaries
- Minority Interests
- Unrealized Gains/Losses
- Changes in Accounting Rules
- Derivatives Exposure

- Employee Stock Options
- Option Valuation Assumptions
- Operating Leases
- Loan Loss/LIFO Reserves
- Pension Assumptions
- Pension Over/Under Funding
- Carrying Value vs Fair Value
- Mid-year acquisitions



Theory vs. Reality: Street Earnings

Most investors are not aware that SPGI Operating Earnings and Street Earnings suffer from significant flaws when compared to Core Earnings, a better measure of earnings because they exclude material unusual gains/losses missed by Wall Street.

In Theory:

Wall Street analysts adjust Street EPS for unusual gains and losses that distort corporate EPS.

In Reality: They don't. Without adjusting for these items, investors don't get an accurate picture of a company's true profits.

66

Street Earnings adjustments are not necessarily complete or comparable across firms."

> -Page 16, 3rd paragraph Core Earnings: New Data and Evidence



The Problem: More Data = More Complexity To challenge investors

• Filings have grown to 200+ pages

(That's longer than the average novel.)

- Increasingly complex and time-consuming work
- Accounting rules are constantly changing























The Result: Misleading Earnings

47% of S&P 500 firms OVERstate EPS by > 10%. 12% of S&P 500 firms UNDERstate their EPS by >10%.

	Street Distortion > 10%	Average Street Distortion
Overstated EPS	237 companies	31%
Understated EPS	58 companies	-55%

The reverse <u>kitchen sink</u>: We expect companies to continue overstating EPS going forward by sneaking unusual gains (often from rising public/private investments in a hot stock market) into EPS in efforts to prolong the post-Covid-19 earnings euphoria.

Sources: New Constructs, LLC, Refinitiv, and company filings. Any trading symbols displayed are for illustrative purposes only and are not intended to portray recommendations. Past performance is not necessarily indicative of future results.



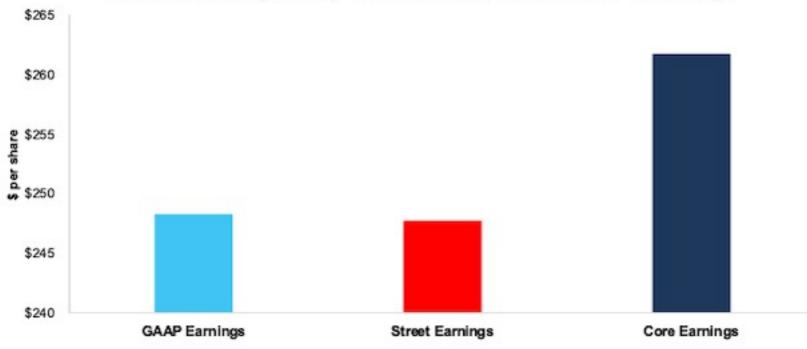
Part 2





NVR Inc. (NVR): Understated Street Eps

- The Street Distortion, or difference between NVR's Street EPS (\$274.75/share) and Core Earnings (\$261.74/share), is -\$13.99/share or 6% of Street EPS.
- NVR's GAAP EPS are \$261.74/share, so the GAAP Distortion, or difference between reported GAAP EPS and Core EPS, is \$13.43/share or 5% of GAAP EPS.
- Overall, Core EPS are 6% higher than Street EPS.



Street Earnings Only 4% Different Than GAAP Earnings

Sources: New Constructs, LLC, Refinitiv, and company filings.



NVR Inc. (NVR): Understated Street Eps - details

• Since Street Distortion and GAAP Distortion are about the same, it is clear that Street Earnings are not adding a lot of value by removing the unusual expenses that materially distort GAAP Earnings.

	TTM (\$ per share)
GAAP Earnings	\$248.31
- Hidden Unusual Items	-\$5.51
- Reported Unusual Items	\$0.00
- Tax Distortion	-\$7.92
Core Earnings	\$261.74

Sources: New Constructs, LLC, Refinitiv, and company filings. Any trading symbols displayed are for illustrative purposes only and are not intended to portray recommendations. Past performance is not necessarily indicative of future results.



NVR Inc. (NVR): Understated Street Eps - details

Hidden Unusual Expenses, Net = -\$5.51/per share, which equals -\$22 million

- <u>-\$0.2 million</u> in the TTM for capitalized interest charged to cost of sales Page 7 1Q21 10-Q
- -\$19.2 million in the TTM period based on <u>\$25.6 million</u> of impairment of lot deposits due to deteriorating market conditions – Page 53 2020 10-K
- -\$2.2 million in the TTM period based on <u>\$2.9 million</u> of capitalized interest charged to cost of sales – Page 54 2020 10-K

Tax Distortion = -\$7.92/per share , which equals -\$31 million

• We remove the tax impact of unusual items on reported taxes when we calculate Core Earnings. It is important that taxes get adjusted so they are appropriate for adjusted pre-tax earnings.

Sources: New Constructs, LLC, and company filings.



Allstate (ALL): Understated Street Eps

- The Street Distortion in Allstate's 1Q21 TTM EPS is -\$7.64/share (44% of Street EPS), which is 44% less than the -\$13.65/share (120% of GAAP EPS) in GAAP Distortion.
- Street Earnings do a better job of capturing unusual items for Allstate than NVR, but they still miss 44% of the unusual items in GAAP Earnings.
- Overall, Core EPS are 44% higher than Street EPS.



Street Earnings Miss 44% of Unusual Items in GAAP Earnings

Sources: New Constructs, LLC, Refinitiv, and company filings.



Allstate (ALL): Understated Street Eps - details

- Unlike NVR, majority of unusual items that Street and GAAP EPS fail to account for are reported.
- In theory, they should be easier to identify than the hidden items found in NVR's filings.

	TTM (\$ per share)
GAAP Earnings	\$11.36
- Hidden Unusual Items	\$0.30
- Reported Unusual Items Pre-Tax	-\$2.02
- Reported Unusual Items After-Tax	-\$12.18
- Tax Distortion	\$0.25
Core Earnings	\$25.02

Sources: New Constructs, LLC, Refinitiv, and company filings.



Allstate (ALL): Understated Street Eps - details

Hidden Unusual Gains, Net = \$0.30/per share , which equals \$92 million

• \$92 million in the TTM period based on <u>\$123 million</u> in realized capital gains – Page 42 2020 10-K

Reported Unusual Expenses Pre-Tax, Net = -\$2.02/per share, which equals -\$629 million

- -<u>\$738 million</u> for Shelter-in-Place Payback expenses 2Q20 10-Q
- \$679 million for pension and other postretirement remeasurement gains in the TTM period, based on
 - <u>-\$73 million</u> loss in 2Q20
 - <u>\$71 million</u> gain in 3Q20
 - <u>\$371 million</u> gain in 4Q20
 - <u>\$310 million</u> gain in 1Q21
- -\$305 million in restructuring and related charges in the TTM period, based on
 - <u>-\$14 million</u> in 2Q20
 - <u>-\$200 million</u> in 3Q20
 - <u>-\$40 million</u> in 4Q20
 - <u>-\$51 million</u> in 1Q21
- \$268 million contra adjustment for <u>recurring pension costs</u>. These recurring expenses are reported in non-recurring line items, so we add them back and exclude them from Earnings Distortion.
- \$3 million gain in the TTM period based on a <u>\$4 million</u> gain on disposition of operations 2020 10-K
 Reported Unusual Expenses After-Tax, Net = -\$12.18/per share, which equals -\$3.8 billion
- <u>-\$3.8 billion</u> loss from discontinued operations 1Q21 10-Q
- Tax Distortion = \$0.25/per share, which equals \$77 million
- We remove the tax impact of unusual items on reported taxes when we calculate Core Earnings. It is important that taxes get adjusted so they are appropriate for adjusted pre-tax earnings.

Sources: New Constructs, LLC, and company filings.



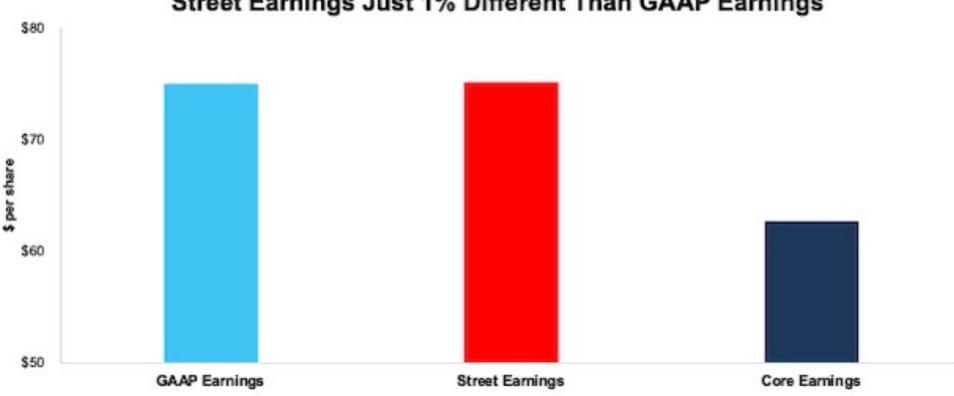
Part 3





Alphabet (GOOGL): Overstated Street Eps

- The Street Distortion in Alphabet's 1Q21 TTM EPS is \$12.45/share (17% of Street EPS), which is \$.08/share (1%) more than GAAP Distortion.
- Alphabet's GAAP EPS are \$75.04/share, so the "GAAP Distortion" is \$12.37/share (16% of GAAP EPS), or just \$0.08/share less than the Street Distortion.
- Street Distortion is actually worse than GAAP Distortion, and Street Earnings are more overstated than GAAP Earnings.
- Overall, Core EPS are 17% lower than Street EPS. \bullet



Street Earnings Just 1% Different Than GAAP Earnings

Sources: New Constructs, LLC, Refinitiv, and company filings.



Alphabet (GOOGL): Overstated Street Eps - Details

- The majority, \$8.63/share, of the unusual income that Street Earnings fail to capture is very clearly non-core.
- It appears below the "Income From Operations" line of Alphabet's income statement in both the 1Q21 10-Q and 2020 10-K.

	TTM (\$ per share)
GAAP Earnings	\$75.04
- Hidden Unusual Items	\$0
- Reported Unusual Items	\$14.84
- Tax Distortion	-\$2.47
Core Earnings	\$62.67

Sources: New Constructs, LLC, Refinitiv, and company filings. Any trading symbols displayed are for illustrative purposes only and are not intended to portray recommendations. Past performance is not necessarily indicative of future results.



Alphabet (GOOGL): Overstated Street Eps - Details

Reported Unusual Gains, Net = \$14.84/per share, which equals \$10.2 billion

- \$4.3 billion or \$6.28/per share in the TTM period based on a <u>\$4.3 billion</u> unrealized gain on equity securities – 2020 10-K
- Items detailed on next slide

Tax Distortion = -\$2.47/per share, which equals -\$1.7 billion

 We remove the tax impact of unusual items on reported taxes when we calculate Core Earnings. It is important that taxes get adjusted so they are appropriate for adjusted pre-tax earnings.



Alphabet (GOOGL): Overstated Street Eps - Details

Reported Unusual Gains, Net = \$14.84/per share, which equals \$10.2 billion

Each of the following is included in Other income (expense) on the income statement. We found these details in the footnotes:

- \$7.6 billion gain on debt & equity securities in the TTM period, based on
 - <u>\$1.5 billion</u> gain on equity securities in 2Q20
 - <u>\$387 million</u> gain on debt securities in 2Q20
 - <u>\$1.9 billion</u> gain on equity securities in 3Q20
 - <u>\$116 million</u> gain on debt securities in 3Q20
 - <u>-\$991 million</u> loss on equity and debt securities in 4Q20
 - <u>\$4.8 billion</u> gain on equity securities in 1Q21
 - <u>-\$86 million</u> loss on debt securities in 1Q21
- -\$1.3 billion in performance fees in the TTM period, based on
 - <u>-\$75 million</u> in 2Q20
 - <u>-\$135 million</u> in 3Q20
 - <u>-\$405 million</u> in 4Q20
 - <u>-\$665 million</u> in 1Q21
- -\$282 million in Other Expense (income) in the TTM period, based on
 - <u>\$147 million</u> expense in 2Q20
 - <u>-\$88 million</u> expense in 3Q20
 - <u>-\$420 million</u> expense in 4Q20
 - <u>\$373 million</u> income in 1Q21
- -\$150 million in foreign currency exchange losses in the TTM period, based on
 - <u>-\$92 million</u> loss in 2Q20
 - <u>-\$84 million</u> loss in 3Q20
 - <u>-\$87 million</u> loss in 4Q20
 - <u>\$113 million</u> gain in 1Q21

Sources: New Constructs, LLC, and company filings.



Part 4



Stocks More Likely to Miss Street EPS in 2Q21



3 firms More likely to miss 2q21 EPS Estimates

- Alphabet (GOOGL), Amazon (AMZN) and PayPal (PYPL) maintain investments in public and private companies that are not necessarily core to their businesses.
- Gains from these investments distort the company's EPS and Wall Street's EPS expectations.

Overstated EPS -> overstated EPS

Ticker	Name	Consensus Earnings Estimates for 2Q21	Core EPS Estimate for 2Q21*	Consensus Estimate Overstated by	
PYPL	PayPal Holdings	\$1.13	\$0.70	38%	
GOOGL	Alphabet, Inc.	\$19.21	\$16.03	17%	
AMZN	Amazon.com Inc.	\$12.22	\$11.03	10%	

*Assumes Street Distortion as a percent of Core EPS is same for 2Q21 EPS as for 1Q21 TTM EPS.

Sources: New Constructs, LLC, Refinitiv, and company filings.



More Likely to Miss: PayPal (PYPL)

- PayPal's 2Q21 street EPS estimate of \$1.13 is overstated by \$0.43/share, or 38% of 2Q21 street EPS estimate.
- Our Core EPS estimate is \$0.70.
- Street EPS estimates are overstated b/c they are based on prior historical EPS data that are overstated from billions of dollars of gains in what the company calls strategic investments, or stakes in publicly and privately held companies.



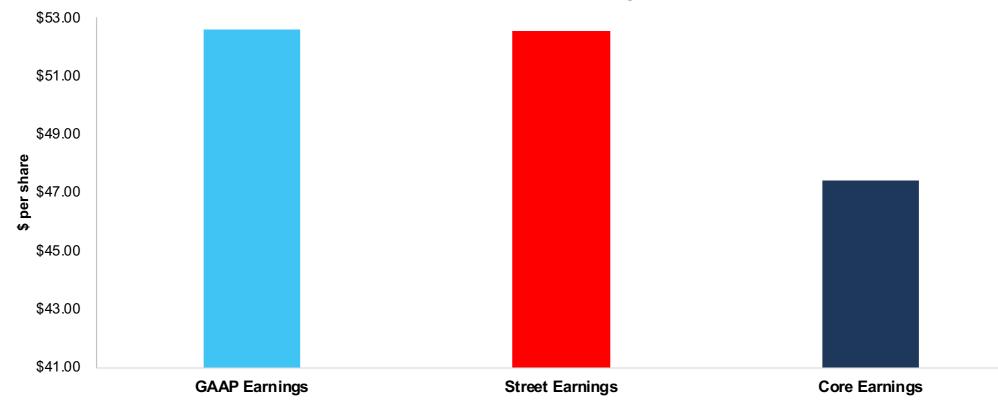
Street EPS Overstated by 38%

Sources: New Constructs, LLC, Refinitiv, and company filings.



More Likely to Miss: Amazon (AMZN)

- Amazon's 2Q21 consensus EPS estimate of \$12.22/share is overstated by \$1.19/share, or 10% of 2Q21 street EPS estimate.
- Our Core EPS estimate is \$11.03.
- Street EPS estimates are based on recent consensus earnings that include billions of dollars of non-core 'other income' and gains from its investments in private companies.



Street EPS Overstated by 10%

Sources: New Constructs, LLC, Refinitiv, and company filings.



Part 5





Auto-generated reports – updated daily Leverage auto-parsing expertise into new products and markets



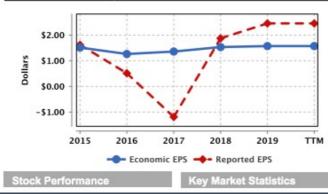
Ranks 106th out of 416 Industrials Sect stocks.



Risk/Reward Rating	Quality of Earnings		Valuation			
	Economic vs Reported EPS	Return on Invested Capital (ROIC)	FCF Yield	Price-to-EBV Ratio	Growth Appreciation Period (yrs)	
Very Unattractive	Misleading Trend	Bottom Quintile	<-5%	> 3.5 or -1 < 0	> 50	
Unattractive	False Positive	4th Quintile	-5%<-1%	2.4 < 3.5 or < -1	20 < 50	
Neutral	Neutral EE	3rd Quintile	-1%<3%	1.6 < 2.4	10 < 20	
Attractive	Positive EE	2nd Quintile	3%<10%	1.1 < 1.6	3 < 10	
Very Attractive	Rising EE	Top Quintile	>10%	0 < 1.1	0 < 3	
Actual Values	\$1.57 vs. \$2.46	25%	11%	0.6	<1	
Sector ETF (XLI)	Positive EE	10%	5%	1.8	26	
S&P 500 ETF (SPY)	Positive EE	20%	2%	2.6	29	

Economic EPS vs Reported EPS

Investment Rating Details



Earnings & Valuation Diligence Summary

Jan 1

- WU's accounting earnings overstate its economic earnings, which equal (ROIC - WACC) * Average Invested Capital.
- For WU, we made a total of \$3,681 million in income statement and balance sheet adjustments to convert accounting earnings to economic earnings in FY19.

Mar 1

Feb 1

- Price 🚊 Volume (in thousands)

- We made \$5,220 million in adjustments in our DCF valuation of the stock.
- See Appendix 1 for details on our calculations of key metrics and Appendices 2 and 3 for details on our <u>adjustments</u>.

Best Data in the Business



Stock Ratings: details

C Robo-Analysts Best Human Analysts on Investment Picks."

Microsoft Corporation (MSFT) Market Value: \$1716.3 Billion Dividend Yield: 1.0% Sector: Technology

– Vildana Hajric, Bloomberg News

Earnings Distortion Score : Miss

Analyst Notes : None

Risk/Reward Rating 😧	Quality of Earnings		Valuation		
	Economic vs Reported EPS 😧	ROIC 😧	FCF Yield 😧	Price to EBV 😧	Market-Implied GA
Very Unattractive	Misleading Trend	Bottom Quintile	< -5%	> 3.5 or -1 < 0	> 50
Unattractive	False Positive	4th Quintile	-5% < -1%	2.4 < 3.5 or < -1	20 < 50
Neutral	Neutral EE	3rd Quintile	-1% < 3%	1.6 < 2.4	10 < 20
Attractive	Positive EE	2nd Quintile	3% < 10%	1.1 < 1.6	3 < 10
Very Attractive	Rising EE	Top Quintile	> 10%	0 < 1.1	0 < 3
Actual Values			×		ên -
MSFT	\$5.79 vs. \$6.71	42%	2%	1.9	16 yrs
Benchmarks 😧]				
Sector ETF (QQQ)	Positive EE	37%	1%	3.1	31 yrs
5&P 500 ETF (SPY)	Positive EE	24%	2%	2.9	23 yrs
mall Cap ETF (IWM)	Positive EE	4%	1%	3.8	40 yrs
	Add to Portfolio	Company Model	Download XLS	Download Report	Marked-Up Filings

Investment Summary

Rating Breakdown

GAAP Reconciliation Adju

Adjustments Earnings Distortion



Switch to Credit Rating

Machine Learnings from experts

Human-Validated parsing instructions from 200,000+ filings





AI-Enabled Research Automation - Benefits The Robo-Analyst



Better

- Drives alpha
- Only way to analyze footnotes in 200+ page filings
- 100% transparency
- 1-click to audit every number



Faster

- Cover 10,000s of stocks, bonds, ETFs and mutual funds
- Entire 10-Ks & Qs analyzed in minutes
- Models & APIs updated instantly



Cheaper

- \$billions/year saved vs. legacy data collection systems
- \$millions/year saved while covering more companies w/ fewer people
- Cost effective fulfillment of fiduciary duties



Proof of superior fundamental vs SPGI and refinitiv

JOURNAL OF Financial **ECONOMICS**



HARVARD **BUSINESS SCHOOL**



Core Earnings: New Data and Evidence^{*}

> Ethan Rouen Harvard Business School

Eric So Massachusetts Institute of Technology Sloan School of Management

> Charles C.Y. Wang Harvard Business School

November 2020 Forthcoming, Journal of Financial Economics

Using a novel dataset, we show that components of firms' GAAP earnings stemming from ancillary business activities or transitory shocks are significant in frequency and magnitude. These components have grown over time and are dispersed across various sections of the 10-K. Excluding them from GAAP earnings yields a core earnings measure that distinguishes between the recurring and non-recurring components of net income and forecasts future performance. Analysts and market participants are slow to impound these earnings components implications, particularly the amounts disclosed in footnotes. Trading strategies that exploit non-core earnings produce abnormal returns of 8% per year.

Keywords: Core Earnings; Transitory Earnings; Non-Operating Earnings; Quantitative Disclosures; Fundamental Analysis; Equity Valuation

JEL: C14, G10, G18, M40, M41

^{*}First draft: July 2018. For helpful feedback, we thank Bill Schwert (editor), an anonymous referee, Dirk Black, Ilia Dichev, Vivian Fang (discussant), Trevor Harris, Paul Healy, Juhani Linnaimmaa (discussant), Pete Lisowsky, Stephen Penman, Edward Riedl, Doug Skinner, Joe Weber, and workshop participants at Acadian Asset Management, the ASSA/AEA Annual Meeting, Arrowstreet Capital, Boston University, Conference on Financial Conference, Harvard Business School, University, Fuller & Thaler, Global Quantitative and Macro Investment Economics. We also thank Carolyn Lin and Trang Nguyen for excellent research assistance. We are grateful to David Trainer, Lee Moneta-Koehler, and the New Constructs team for providing their data and offering valuable insights. None of the authors received any financial support or have financial dealings with the data provider or David Trainer, Lee Moneta-Koehler, and the New Constructs team for providing their data and offering valuable insights. None of the authors received any financial support or have financial dealings with the data provider or hold any paid or unpaid positions at the organization. The organization provided the data for academic research supposes and did not have the right to review the paper prior to its circulation. One of us, for teaching purposes, wrote a Harvard Business School case on the organization, which was based on field interviews and non-public information sources and fully funded by the school. All errors remain ours.

C Compustat adjustments explain only 26% to 53% of the variation in Total Adjustments [Earnings Distortion] – Online Appendix pp. 1, 2nd para.

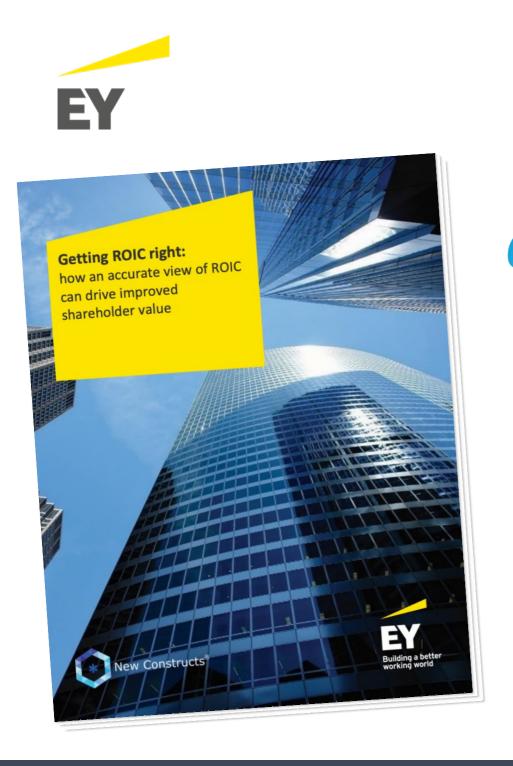
K we identified cases where Compustat did not collect information relating to firms' income that is useful in assessing Core Earnings." – pp. 16, 2nd para.

The average total non-core-earnings items identified amounts to 19% of average Net Income." – pp. 3, 2nd para.

Click here for the paper. Here's a short summary.



Proof of superior financial models



[New Constructs] accounts for a large number of items... which are not included in the other data sets." p. 5

The majority of the difference comes from [New Constructs]'s machine learning approach, which leverages technology to applying accounting adjustments that may be buried deeply in the footnotes across thousands of companies. p. 4

The other advantage of [New Constructs] is the transparency in disclosing calculations and all the data behind them. It is hard to determine the calculations at a granular level from the reports of many data providers. P. 4

Click <u>here</u> for the paper.



Proof of superior stock ratings

Diligence matters – so does being unconflicted



JEL Codes: G14, G24

We benefited from comments and suggestions received from Larry Brown, Elizabeth Demers (discussant), Jared Flake, Ryan Johnson, Philip Joos, Stephannie Larocque (discussant), Christian Leuz, Roni Michaely, Brady Twedt, Jim Wahlen, Ayan Johnson, Fnuip Joos, stephannie Larocque (discussant), Christian Leuz, Rolli Michaely, Brady Lwen, Jini Wainen, and participants at the 2019 BYU Accounting Research Symposium, 2020 Financial Accounting Reporting Section Midyear Meeting Plenary Session, and the 2020 Swiss Accounting Research Alpine Camp.

C the portfolios formed following the buy recommendations of Robo-Analysts earn abnormal returns that are statistically and economically significant." – pp. 6, 3rd para.

C Our results ultimately suggest that Robo-Analysts are a valuable, alternative information intermediary to traditional sell-side analysts." pp. 20, 3rd para.

Click here for the paper.



100% Unconflicted Reliable fundamental research

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New Constructs = unadulterated expertise in accounting, finance and SEC filings.



Takeaways

- New Constructs offers <u>more reliable</u> fundamental research that enables investors to overcome flaws in legacy fundamental datasets and apply reliable fundamental data in their research.
- 2. No one can do what we do.
- 3. Unique combination of expertise in:
 - Accounting
 - Finance
 - Technology
- 4. Research automation is the future.



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