



New Constructs®  
Diligence | Independence | Performance

# Misleading Accounting Earnings Add Risk?

Learn how to get true earnings.

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

[david.trainer@newconstructs.com](mailto:david.trainer@newconstructs.com)  
615-377-0443

# RISE ABOVE RECORD LEVELS OF NOISE

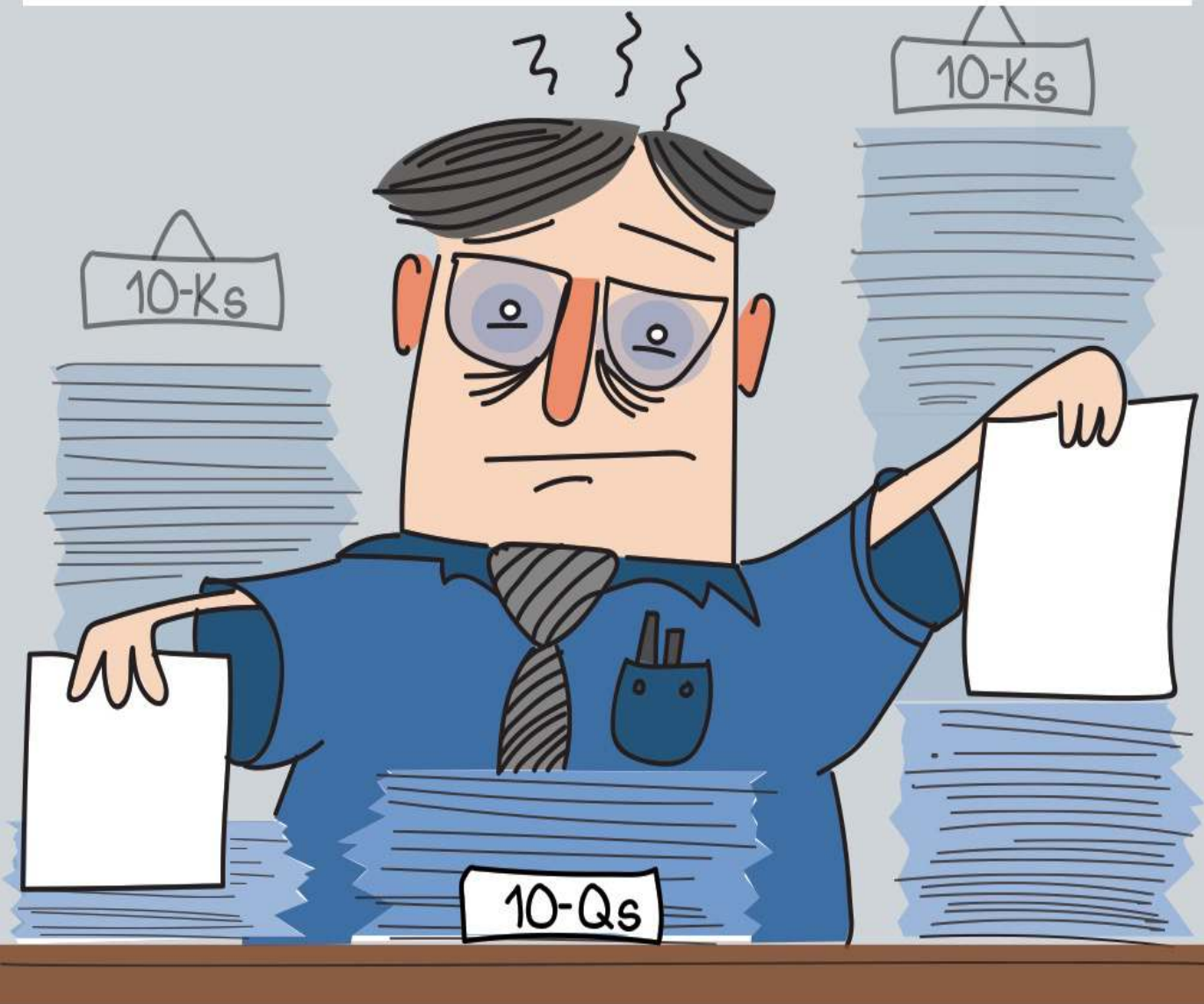
## Superior Research Gives You an Edge



# TECHNOLOGY TO CLOSE THE RESEARCH GAP

## Machine are better than humans at some things

WHO HAS TIME TO READ 200+ PAGE FILINGS?



# MACHINE LEARNING FROM EXPERTS

## Human-Validated Parsing Instructions from 140,000+ Filings

OUR FORENSIC EXPERTS USE CUTTING-EDGE TECH TO SHINE A LIGHT IN THE DARK CORNERS OF FINANCIAL FOOTNOTES.

FINANCIAL FOOTNOTES  
→ MATTER ←  
DILIGENCE MATTERS



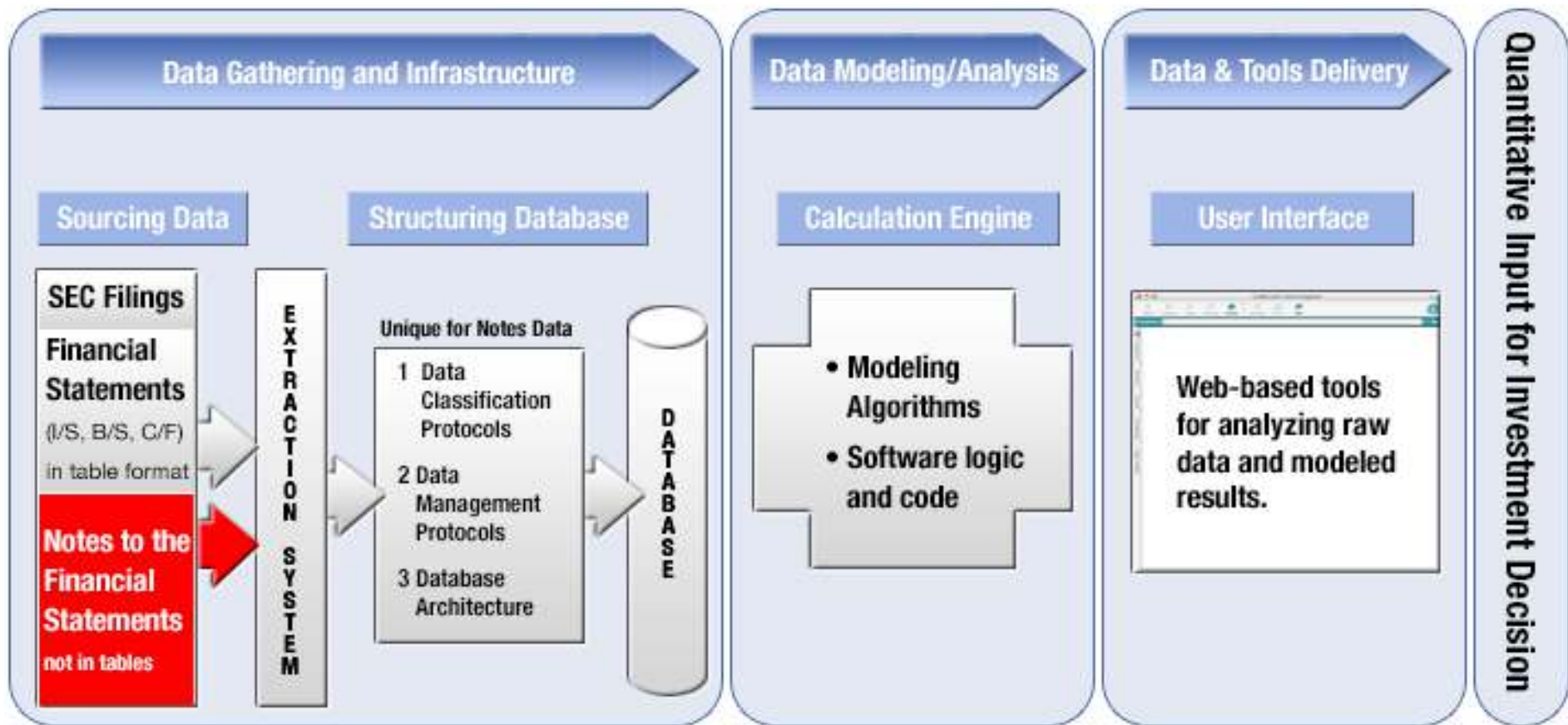
# GET THE DILIGENCE YOU DESERVE

LEVERAGE THE LATEST TECHNOLOGY AND GET AN EDGE  
WITH OUR RESEARCH ON STOCKS, ETFS AND MUTUAL FUNDS

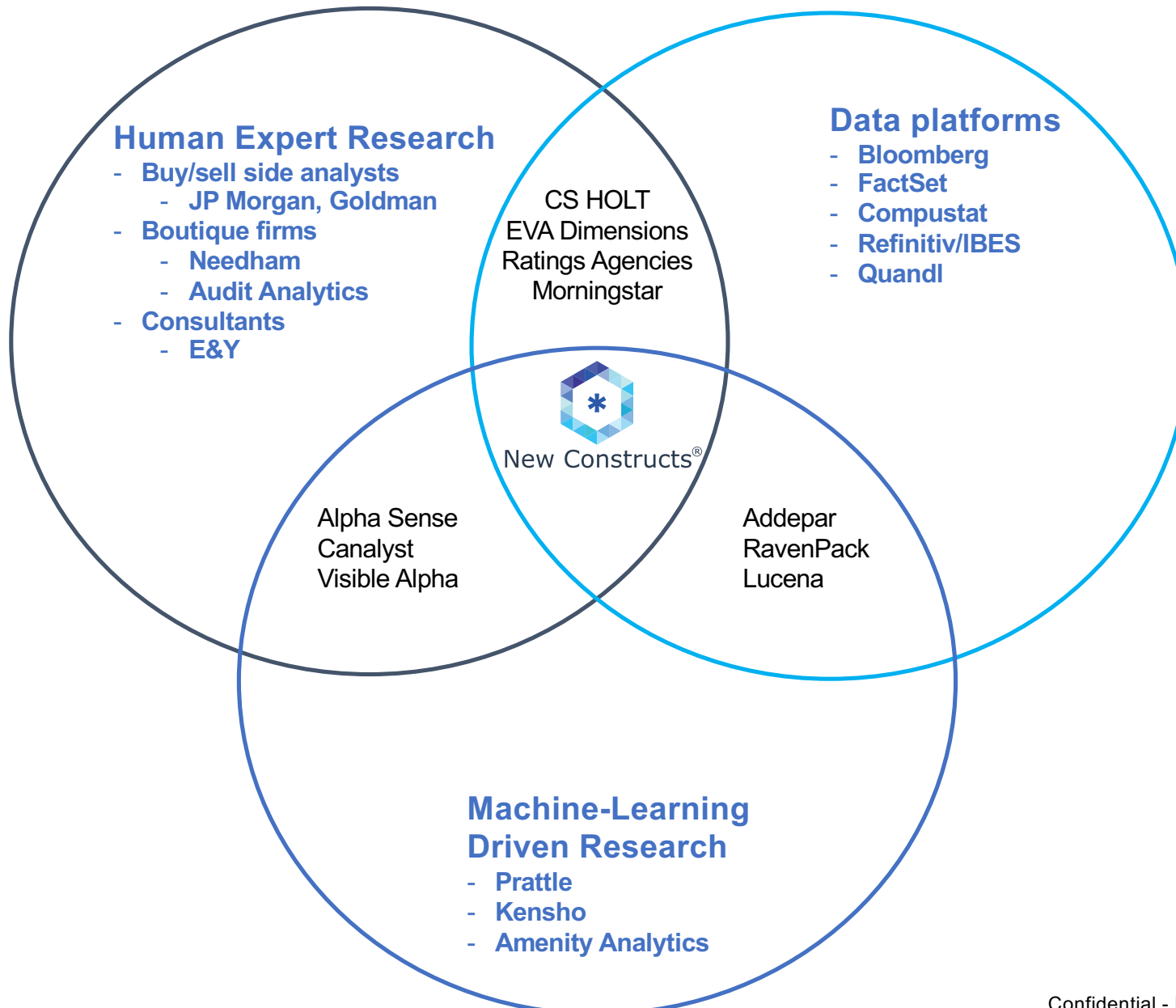


# RESEARCH TECHNOLOGY PLATFORM

## Data Collection & Modeling Under One Roof



We created our own data collection technology to provide high integrity models to clients. Traditional data feeds are not trustworthy for sophisticated financial modeling.



# MARKET LANDSCAPE

	Coverage			Cash Flow Models (Non-GAAP)		Consistent Due Diligence		100% Audit-Ability	Empirical Proof of Superior Data		Robo-Analyst Technology
	Stocks	ETFs	Mutual Funds	ROIC & Economic Earnings	Reverse DCF	Footnotes	MD&A	SEC Filings/ Source Data	HBS & MIT Sloan	Ernst & Young	AI-Enabled Research Automation & Scalability
<b>New Constructs</b>	√	√	√	√	√	√	√	√	√	√	√
Credit-Suisse HOLT	√			√	√	√					
EVA											
Dimensions/ISS	√			√							
MorningStar	√	√	√	black box	√						
CFRA	√		√	√		√					
S&P Capital IQ & Compustat	√	√		√		√		√			
FactSet	√					√		√			
AlphaSense						√	√	√			√
Zack's	√	√	√								
Calcbench	√					√		√			XBRL
Visible Alpha	√			√							
Valuentum.com	√	√									
Finbox.io	√			√							
Canalyst	√			√	√						
GuruFocus	√			√							



# SUCCESS WITH ELITE INSTITUTIONAL CLIENTS

## Self-Directed Clients Are Natural Fit for Simpler Products

- Top hedge fund and institutional money managers
- Top wealth management firms
- Top advisors
- Top accounting, insurance & consulting firms



Harvard Business School  
 &  
 MIT Sloan



# HOW THE WEALTH INDUSTRY WORKS WITH US

## Multiple models, Great Flexibility



- **Institutions:** full access to models and tool, including database feeds. Directly access thru our website



- **Advisors/RIAs:** firm or group-wide access to unlimited research. Direct access via our website or thru partners.



- **Retail:** individual sign up for Gold, Platinum or Pro subscriptions. Direct access via our website or thru partners.



- **ETF Providers:** we provide superior data to differentiate strategies and products



- **Consultants/Corporates:** custom engagements focused on enterprise value optimization and investor relations strategy. Direct access via our website along with custom work and consultation via partners.



# Part I

## Reported vs Economic Earnings

# ECONOMICS DO NOT ALWAYS FOLLOW ACCOUNTING

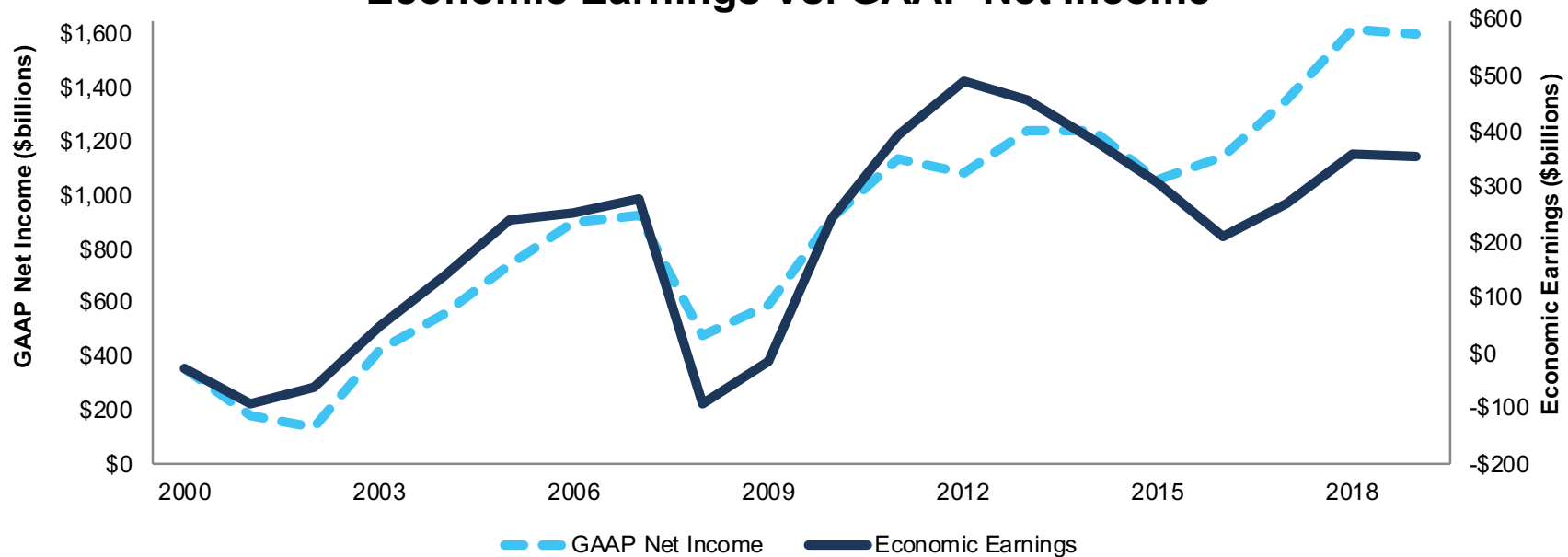
## (Unscrubbed) Earnings Trends Are Misleading

*“Look at the financial footnotes in 10-K filings and the gains then disappear”*

*“Only 1 sector has experienced real earnings gains in the past 12 months”*

– MarketWatch.com [5/4/17](#) & [2/28/18](#)

### Economic Earnings Vs. GAAP Net Income



# SEE THE DIFFERENCE: PROTECT YOUR PORTFOLIO

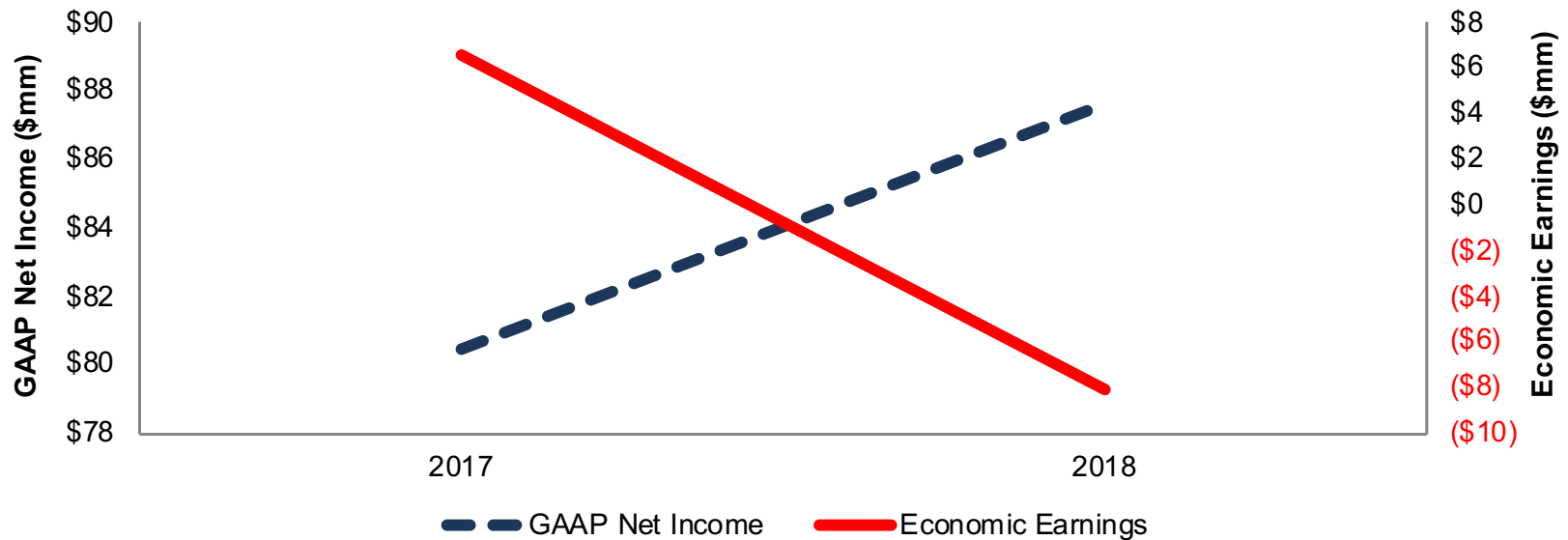
## Accounting Results Going Up Economic Earnings Going Down



### Rogers Corporation (ROG)

GAAP net income grew 8% in 2018, economic earnings declined from \$7 million to -\$8 million.

### ROG's Misleading GAAP Net Income



\*This graph was created based on information collected and analyzed by New Constructs, LLC. New Constructs regularly gathers information from over 3,000 companies' 10Ks, including the Notes to the Financial Statements and MD&A.

# SEE THE DIFFERENCE: BOOST YOUR PORTFOLIO

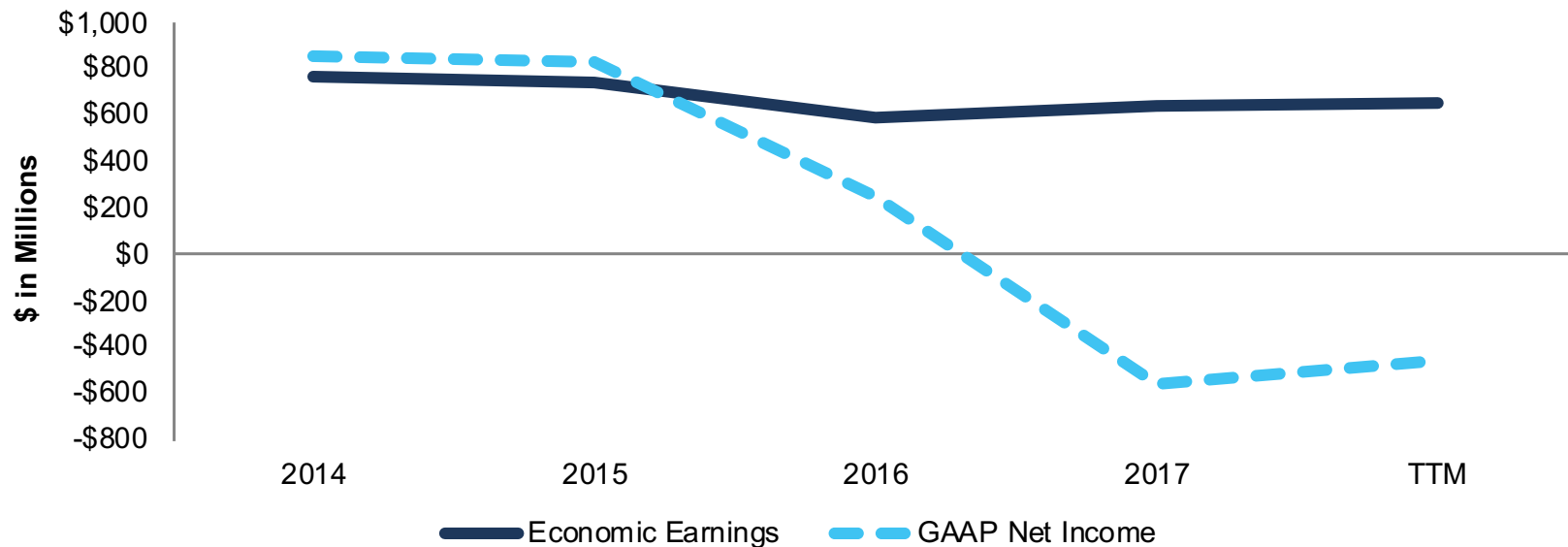
## Economic Earnings Higher Than Accounting Earnings



### Western Union (WU)

- From 2014-2Q 2018, GAAP earnings declined from \$852 million to -\$558 million.
- Economic earnings declined by just 15%, from \$769 million to \$657 million, over the same time.

### GAAP Earnings Mislead Investors



\*This graph was created based on information collected and analyzed by New Constructs, LLC. New Constructs regularly gathers information from over 3,000 companies' 10Ks, including the Notes to the Financial Statements and MD&A.

# Part II

## What's the difference?

Core Problem: GAAP is exploitable.

Only Solution: Read the Footnotes and MD&A.

## Traditional P&L

---

Revenues
- operating expenses

---

= pretax earnings
- taxes

---

= Reported Profit
-------------------

## Economic P&L

---

Revenues
- operating expenses
- <b>Hidden Incomes/Charges</b>

---

= pretax earnings
- taxes

---

= Profit
- <b>capital charge/hidden liabilities and assets</b>

---

= Economic Profit
-------------------



## Scouring the Footnotes and MD&A of 10-Ks

- Hidden Expenses/Income
- Unrecorded Goodwill
- Impairments
- Unconsolidated Subsidiaries
- Minority Interests
- Unrealized Gains/Losses
- Changes in Accounting Rules
- Derivatives Exposure
- Customer Concentration
- FASB 159
- Employee Stock Options
- Option Valuation Assumptions
- Operating Leases
- Loan Loss/LIFO Reserves
- Pension Assumptions
- Excess Cash
- Pension Over/Under Funding
- Auditor's Opinions
- Carrying Value vs Fair Value
- Mid-year acquisitions

# GETTING TO THE ECONOMICS

## Measuring Key Results



- **NOPAT** → core operating earnings after-tax
- **Invested Capital** → all cash invested in the business
- **WACC** → rent management must pay for use of capital

Return on Invested Capital = NOPAT/Invested Capital

Economic Profit = (ROIC – WACC) \* Invested Capital

Free Cash Flow = NOPAT – change in Invested Capital

**Economic Profit Margin = ROIC - WACC**

# Part III

## Why do economic earnings matter?

# ECONOMICS DRIVE PERFORMANCE

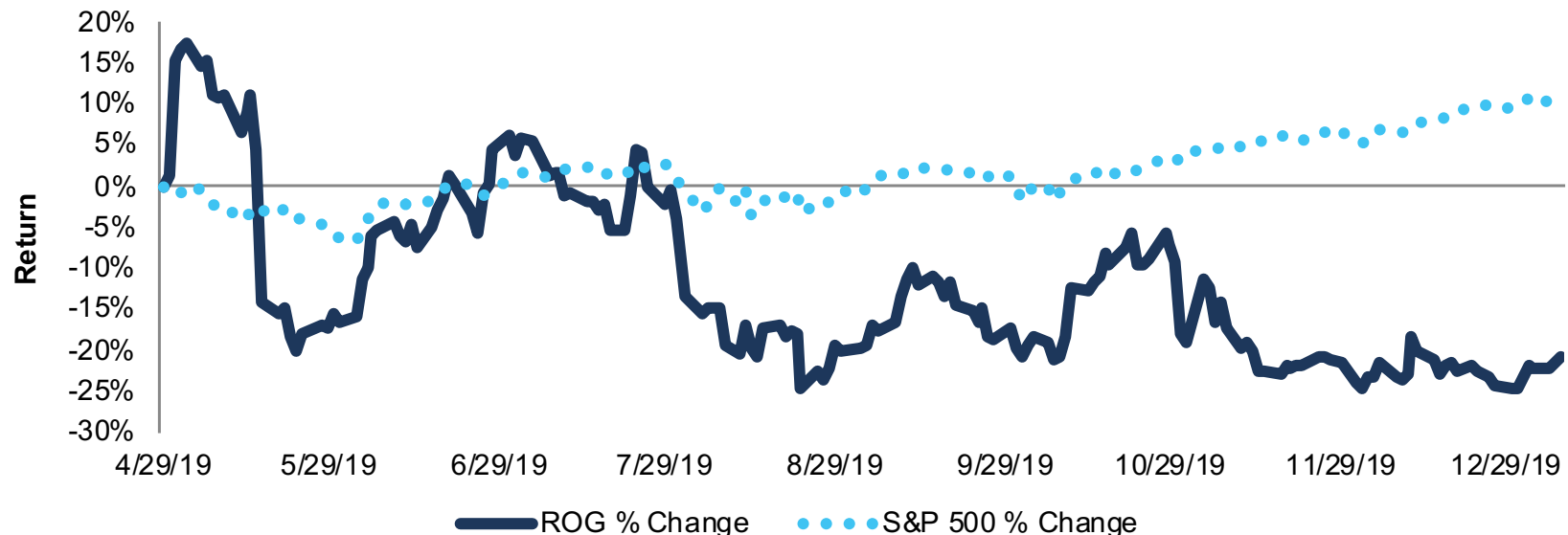
Warned on 4/29/2019: Rogers Corporation (ROG)



## “Avoid These Overvalued Momentum Stocks”

1. “High-Low Fallacy” allows acquisitions to grow GAAP EPS while destroying value.
2. ROG was the 2<sup>nd</sup> best performing stock in the S&P 500 in 2019 (up 72%) when we warned investors the momentum would run out.
3. Down 21% while SPY was up 11%, still Unattractive rated – open position.

## ROG Underperformed the S&P by 32%



\*This graph was created based on information collected and analyzed by New Constructs, LLC. New Constructs regularly gathers information from over 3,000 companies' 10Ks, including the Notes to the Financial Statements and MD&A.

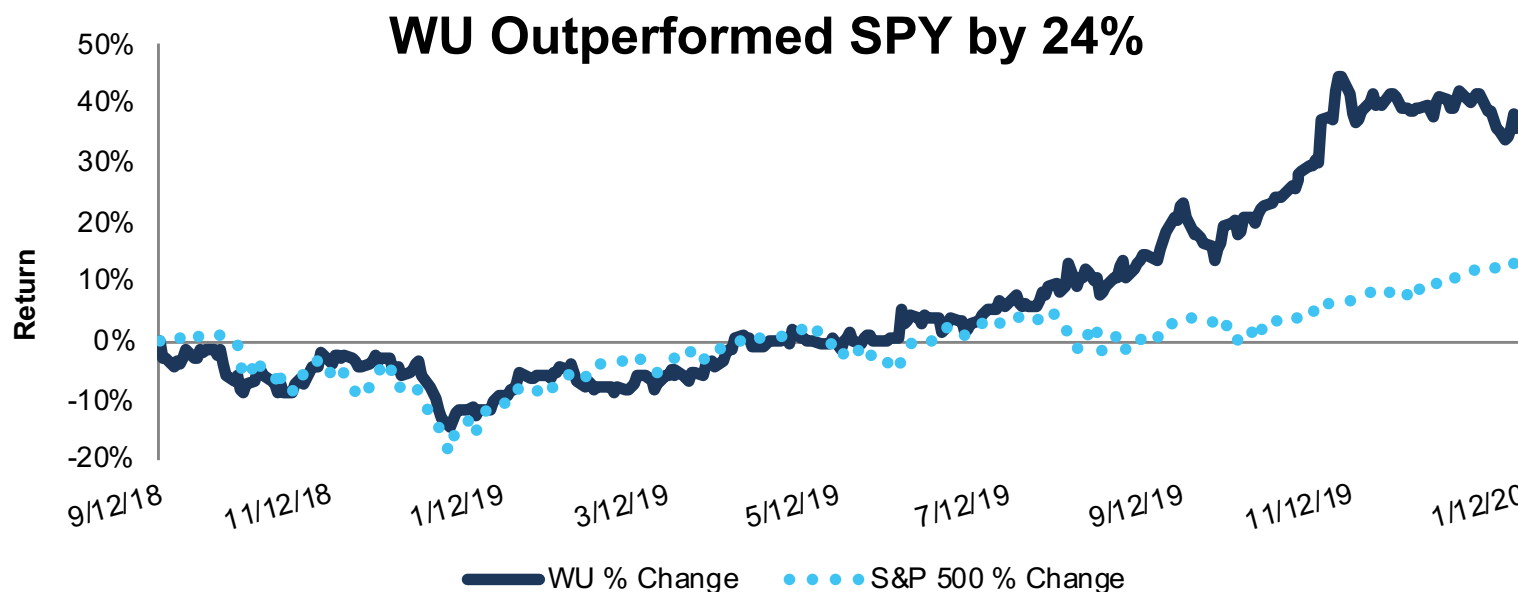
# ECONOMICS DRIVE PERFORMANCE

Buy Call on 9/12/2018: Western Union (WU)



## “High-Yielding Stock with an Underrated Moat”

1. 2017 GAAP earnings impacted by \$1.3 billion in one-time impairment and tax charges.
2. Underrated barriers to entry allow company to maintain 20+% ROIC.
3. Up 38% vs. SPY up 14% and superior dividend yield of 3% vs. 1.9% for SPY. Still recommending.



\*This graph was created based on information collected and analyzed by New Constructs, LLC. New Constructs regularly gathers information from over 3,000 companies' 10Ks, including the Notes to the Financial Statements and MD&A.

# ECONOMICS DRIVE PERFORMANCE

## Expectations out of sync with reality

### Autodesk, Inc. (ADSK)

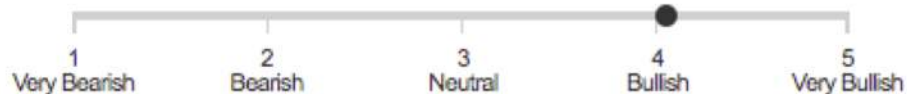
1. Consensus Outperform rating, 18 out of 27 sell-side analysts rate “Buy”
2. We rate Unattractive
3. All the upside/good news is already priced in

ADSK Sell Side Rating

**Bullish**

AVERAGE ANALYST RATING

**4.07**



27 ANALYST RATINGS

Very Bullish:	14
Bullish:	4
Neutral:	6
Bearish:	3
Very Bearish:	0



\*Source: [Seeking Alpha](#)

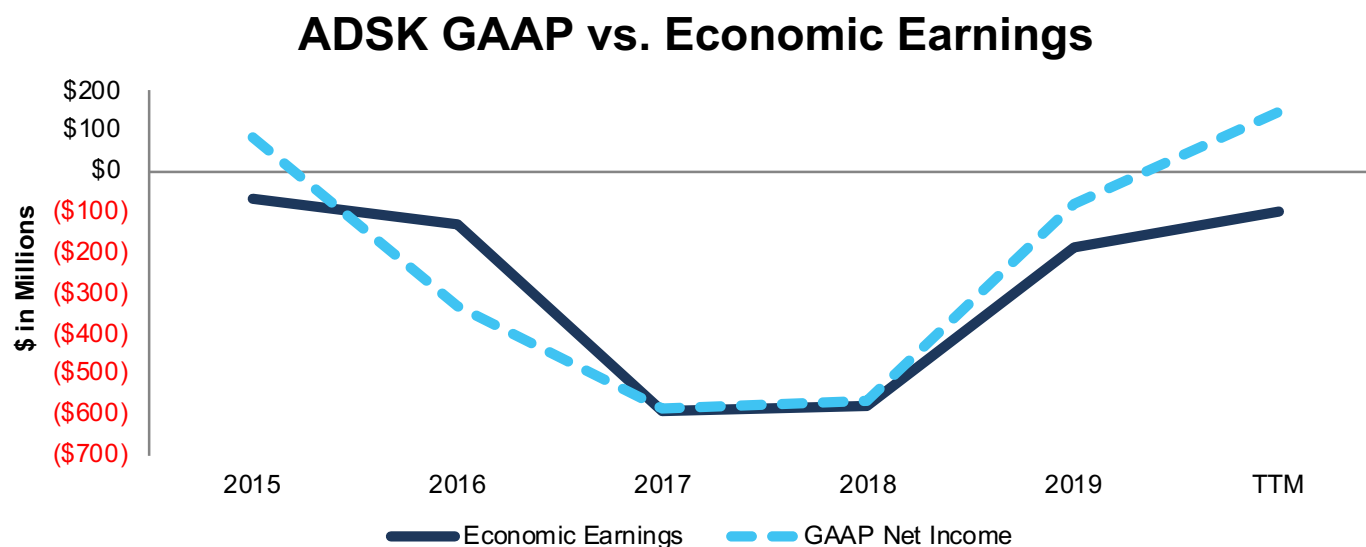
# UNDERSTAND THE ECONOMICS OF EXPECTATIONS

## Forensic Accounting Adjustments - Not Alarming



### AutoDesk, Inc. (ADSK)

1. Positive TTM GAAP earnings driven in part by \$1.1 billion in acquisitions last year
2. GAAP net income ignores capital charge for these acquisitions. Economic earnings, which account for the cost of capital, are still negative.
3. Both GAAP and EE bottomed out in 2017 due to shift to subscription-based model, bullish ratings based on recent improvement.



\*This graph was created based on information collected and analyzed by New Constructs, LLC. New Constructs regularly gathers information from over 3,000 companies' 10Ks, including the Notes to the Financial Statements and MD&A.

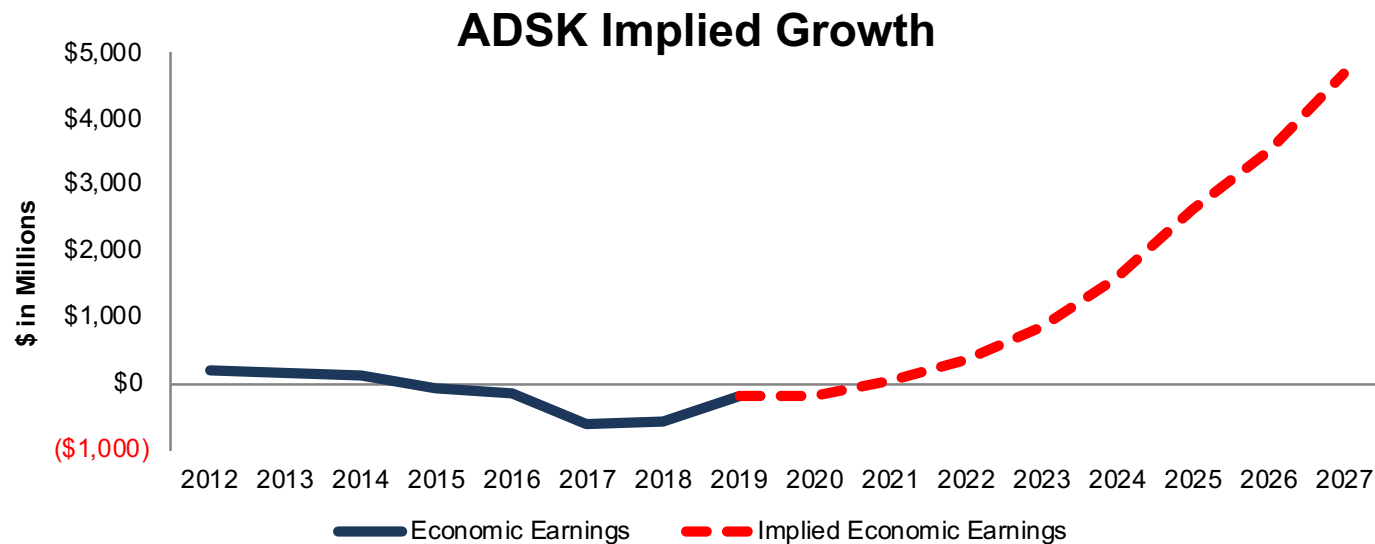
# UNDERSTAND THE ECONOMICS OF EXPECTATIONS

## Dynamic DCF Reveals Unrealistic Expectations



### Autodesk, Inc. (ADSK)

1. Transition to subscription-based model helped drive 28% year-over-year revenue growth in most recent quarter.
2. Achieved operating profitability, NOPAT margin of 6% TTM.
3. Our DCF shows that the \$190/share stock price implies they can maintain revenue growth of 30% annually for 8 years PLUS reach long-term pre-tax margins of 30%, equal to competitor Adobe (ADBE).



\*This graph was created based on information collected and analyzed by New Constructs, LLC. New Constructs regularly gathers information from over 3,000 companies' 10Ks, including the Notes to the Financial Statements and MD&A.



# UNDERSTAND THE ECONOMICS OF EXPECTATIONS

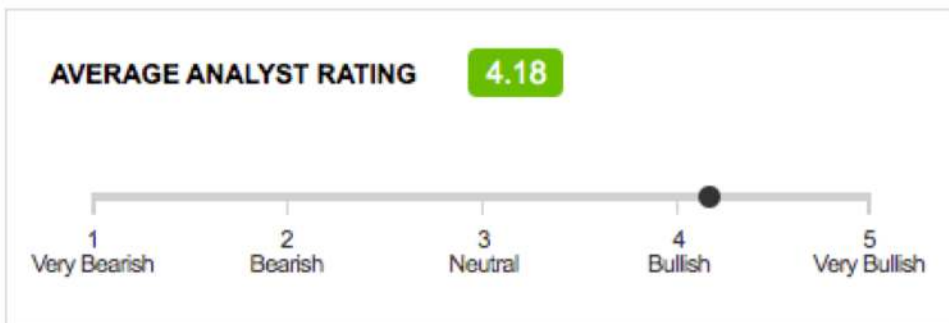
## Expectations out of sync with reality

### Nike, Inc. (NKE)

1. Consensus Outperform rating, 24 out of 33 sell-side analysts rate “Buy” or better
2. We rate Neutral
3. Forensic accounting adjustments show economic earnings growing slower than GAAP net income
4. Premium valuation compared to peers

NKE Sell Side Rating

**Bullish**



\*Source: [Seeking Alpha](#)

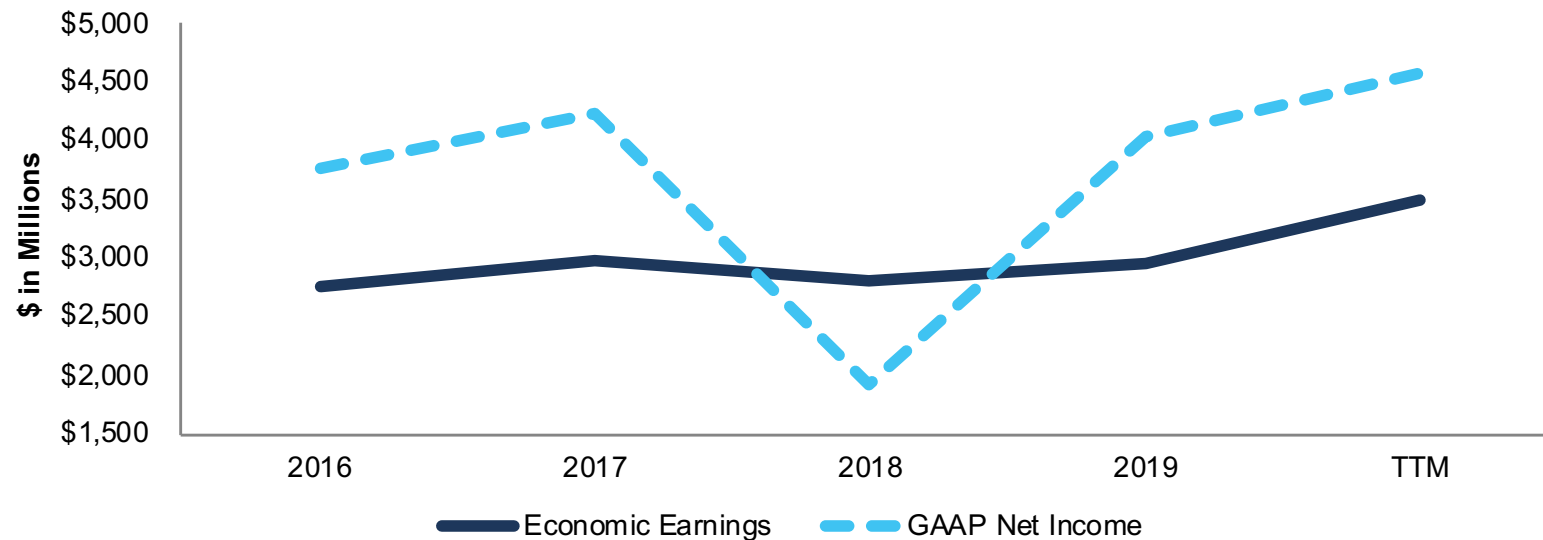
# UNDERSTAND THE ECONOMIC OF EXPECTATIONS

## Forensic Accounting Adjustments - Not Alarming

### Nike (NKE)

1. GAAP EPS up 117% TTM, economic earnings per share up just 17%
2. Previous year GAAP earnings impacted by \$2 billion (5% of revenue) non-recurring tax charge
3. Invested Capital increased 9% year-over-year in TTM

### NKE GAAP vs. Economic Earnings



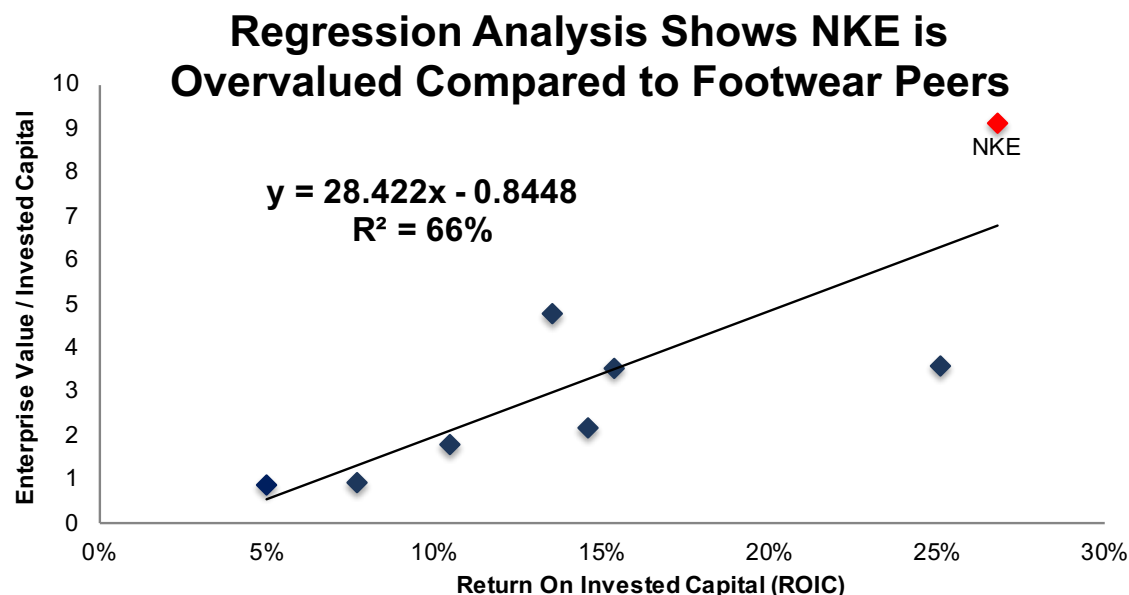
\*This graph was created based on information collected and analyzed by New Constructs, LLC. New Constructs regularly gathers information from over 3,000 companies' 10Ks, including the Notes to the Financial Statements and MD&A.

# UNDERSTAND THE ECONOMICS OF EXPECTATIONS

## ROIC Drives Valuation

### Nike, Inc. (NKE)

1. Valuation analysis needs to account for \$4.2 billion in employee stock options (2% of enterprise value).
2. ROIC explains 66% of the difference in enterprise value/invested capital (a cleaner version of price to book) for the eight footwear stocks we cover.
3. Valued at a 38% premium to its implied EV/IC on the trend line.
4. Arguably deserves its premium due to its status as the most-profitable company in the industry.



\*This graph was created based on information collected and analyzed by New Constructs, LLC. New Constructs regularly gathers information from over 3,000 companies' 10Ks, including the Notes to the Financial Statements and MD&A.

# Part IV

## How do you make \$ using economic earnings?

# HOW HAS INVESTING CHANGED OVER THE YEARS?

## Shorter Holding Periods for Stocks

- Until mid-1960' s average holding period was seven years
- Today, average holding period is less than one year and annual portfolio turnover is more than 100%<sup>1</sup>

## Major Reactions to Quarterly Earnings

- Stock prices make large moves in response to earnings surprises
- Suggests that long-term cash flows are less important

## Amateur Individual Investors - Growth Market

- Schwab, TD Waterhouse, Scottrade
- Day trading

## Media - Growth Market

- TV: Mad Money, CNBC Squawk Box, and Squawk on the Street
- Print: Wall Street Journal, Investors Business Daily, local newspapers
- Web: Motley Fool, TheStreet.Com, CBS MarketWatch

<sup>1</sup>Rappaport, Alfred. "The Economics of Short-Term Performance Obsession." *Financial Analysts Journal*, vol. 61, no. 3 (May/June): 65-79.

# WHICH ARE YOU: INVESTOR OR SPECULATOR?

## Speculator

“If you are a speculator, your decision to buy or sell is based on what you believe about the near-term direction of price.”  
- Ben Graham

“...speculation is the activity of forecasting the psychology of the market.”  
- John Maynard Keynes

Vs.

## Investor

“If you are an investor, your decision to buy and sell is based on the underlying economics of the stock you own.”  
- Ben Graham

“Investing is an activity of forecasting the yield on assets over the life of the asset...”  
- John Maynard Keynes

# ONLY 3 WAYS TO - CONSISTENTLY - BEAT THE MARKET



## Better Data - difficult and expensive to obtain

- Gathering and analyzing data from the Notes to the Financial Statements provides a competitive advantage.

## Better Analysis - not just your neighbor, one must out-think the entire market

- Better data means better models.
- Better models provide better analysis.

## Better Discipline - stick to your guns, don't follow the herd.

- Long and short strategy is built on specific, quantifiable thresholds derived from a model we can trust.
- Our models do all the number crunching to supply our human capital with superior information and decision-making capabilities.

# Part V

## Why you need protection now more than ever.



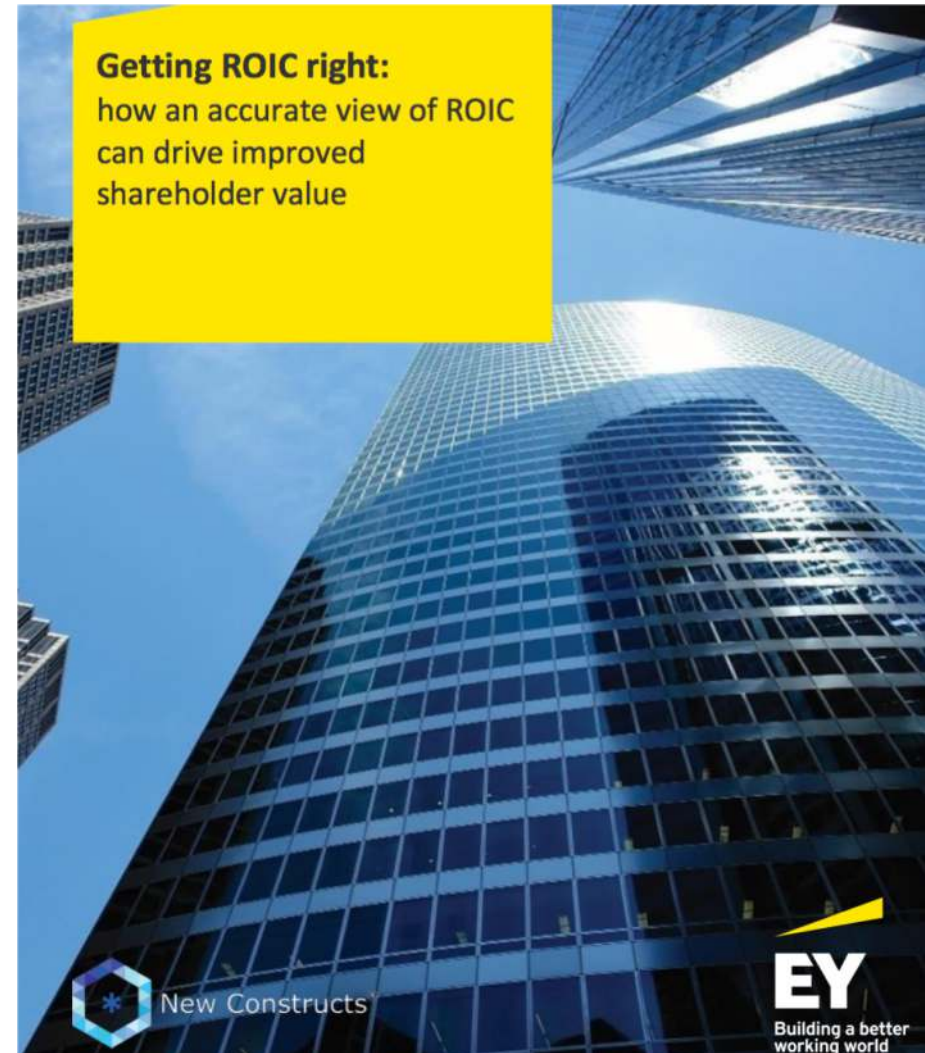
# ERNST & YOUNG SHOWS OUR RIGOR MATTERS

## White Paper: Investors Deserve Better Data



- It's not often that a big 4 accounting firm like E&Y features the material superiority of a research firm's analytics.
- **Our data is materially better. The white paper proves it.**
- The white paper provides specific examples for specific companies.
- Google "Revenue 48,778", "long-term debt 16,215" to see which company is "Peer 1".

Click [here](#) for a copy.



# POWERFUL RESEARCH AUTOMATION HAS ARRIVED

## Technology Provides Only Solution Big Data



Harvard Business School Case Study features our Research Automation technology.  
**“Disrupting Fundamental Analysis with Robo-Analysts”**

Click [here](#) for a copy.



### **New Constructs: Disrupting Fundamental Analysis with Robo-Analysts**

CEO David Trainer and COO Lee Moneta-Koehler of New Constructs had just met with a potential client. Their pitch was simple: New Constructs “leverages the only parsing technology capable of reviewing every detail of every 10-K and 10-Q” to deliver quality fundamental analysis at scale. After the presentation, the client responded, “You know, you might be right. Your data probably is better. But, as long as everybody’s using the same bad data, I’m OK with that.” This was a familiar response to Trainer and Moneta-Koehler: they were frustrated by investors who did not see the value of New Constructs’ data or technology. They were concerned about the role of quality fundamental analysis in a market increasingly focused on more technical and other short-term trading strategies.

#### **New Constructs**

Trainer began working on Wall Street at Credit Suisse First Boston (CSFB) as a stock analyst in 1996, where he honed his skills in financial modeling and fundamental analysis. At CSFB, he spearheaded an effort to develop a consistent framework for measuring, comparing, and analyzing the economic earnings and profitability across all firms and industries globally. After reading through thousands of corporate filings, he realized that “the complexities of what’s going on in modern day business are so much greater than what the current accounting standards can capture in the income statement and balance sheet.” To construct a more accurate economic picture of the firm and to facilitate more meaningful comparisons of performance, his financial models incorporated quantitative details hidden in footnotes and the management’s discussion and analysis (MD&A) section, such as operating lease obligations or components of income or expenses that are transitory in nature.

Although these adjustments were often meaningful to his overall assessment of a firm’s operating performance and valuation, integrating these details into financial models was not the norm among many sell-side analysts. Trainer believed this was due to a few reasons. For one, the increasing length and complexity of corporate filings and the differences in the application of accounting rules across firms for similar transactions made the execution of such detailed financial models impractical. Even for Trainer, this mode of analysis was difficult to scale.

Professor Charles C.Y. Wang and Research Associate Kyle Thomas prepared this case. It was reviewed and approved before publication by a company designate. Funding for the development of this case was provided by Harvard Business School and not by the company. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

Copyright © 2018 President and Fellows of Harvard College. To order copies or request permission to reproduce materials, call 1-800-545-7885, write Harvard Business School Publishing, Boston, MA 02163, or go to [www.hbsp.harvard.edu](http://www.hbsp.harvard.edu). This publication may not be digitized, photocopied, or otherwise reproduced, posted, or transmitted, without the permission of Harvard Business School.

# THE TECHNOLOGY WORKS = DILIGENCE WITH SCALE

## 3<sup>rd</sup>-Party Validation By Harvard Business School & MIT Sloan



## 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

January 2020

### Abstract

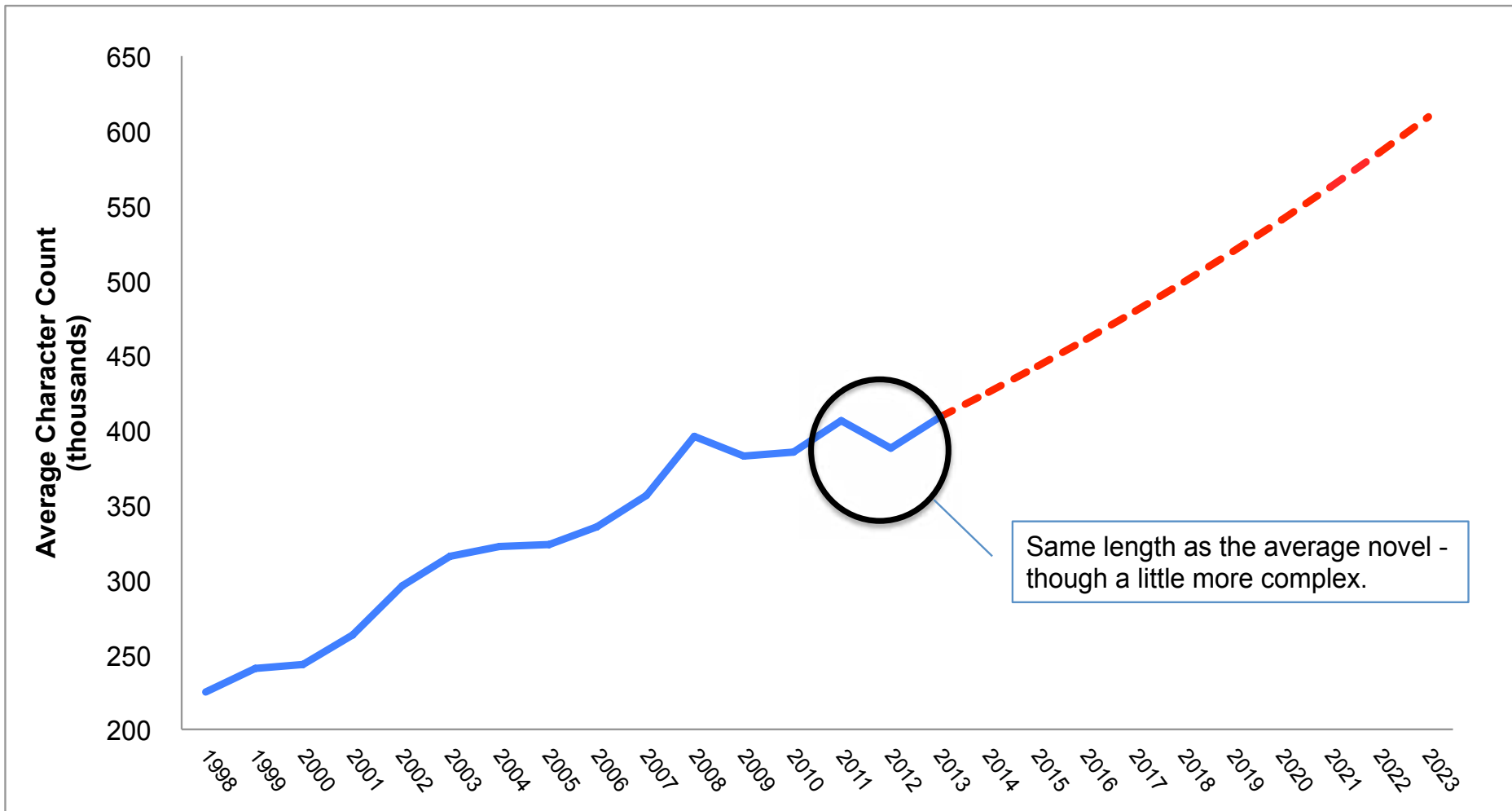
Using a novel dataset that comprehensively classifies the quantitative financial disclosures in firms' 10-Ks, including those hidden in the footnotes and the MD&A, we show that disclosures of non-operating and less persistent income-statement items are both frequent and economically significant, and increasingly so over time. Adjusting GAAP earnings to exclude these items creates a measure of core earnings that is highly persistent and that forecasts future performance. Street earnings for firms that meet or just beat analyst expectations are more likely to selectively exclude these items. Analysts and market participants also are slow to impound the implications of these items. Trading strategies that exploit cross-sectional differences in firms' transitory earnings produce abnormal returns of 7-to-10% per year.

## Quotes from the paper:

- “The implications of these findings are potentially far-reaching for investors and researchers.”
- “...many of the income-statement-relevant quantitative disclosures collected by NC do not appear to be easily identifiable in Compustat...”
- “Core Earnings [calculated using New Constructs’ novel dataset] provides predictive power for various measures of one-year-ahead performance...that is incremental to their current-period counterparts.”
- “Trading strategies that exploit cross-sectional differences in firms’ transitory earnings produce abnormal returns of 7-to-10% per year.”

# FILINGS GETTING LONGER & LONGER

## Keeping Up With Disclosures Is Nearly Impossible



# DISCLOSURE TRENDS ARE NOT YOUR FRIEND

## More Data, More Noise, More Complexity

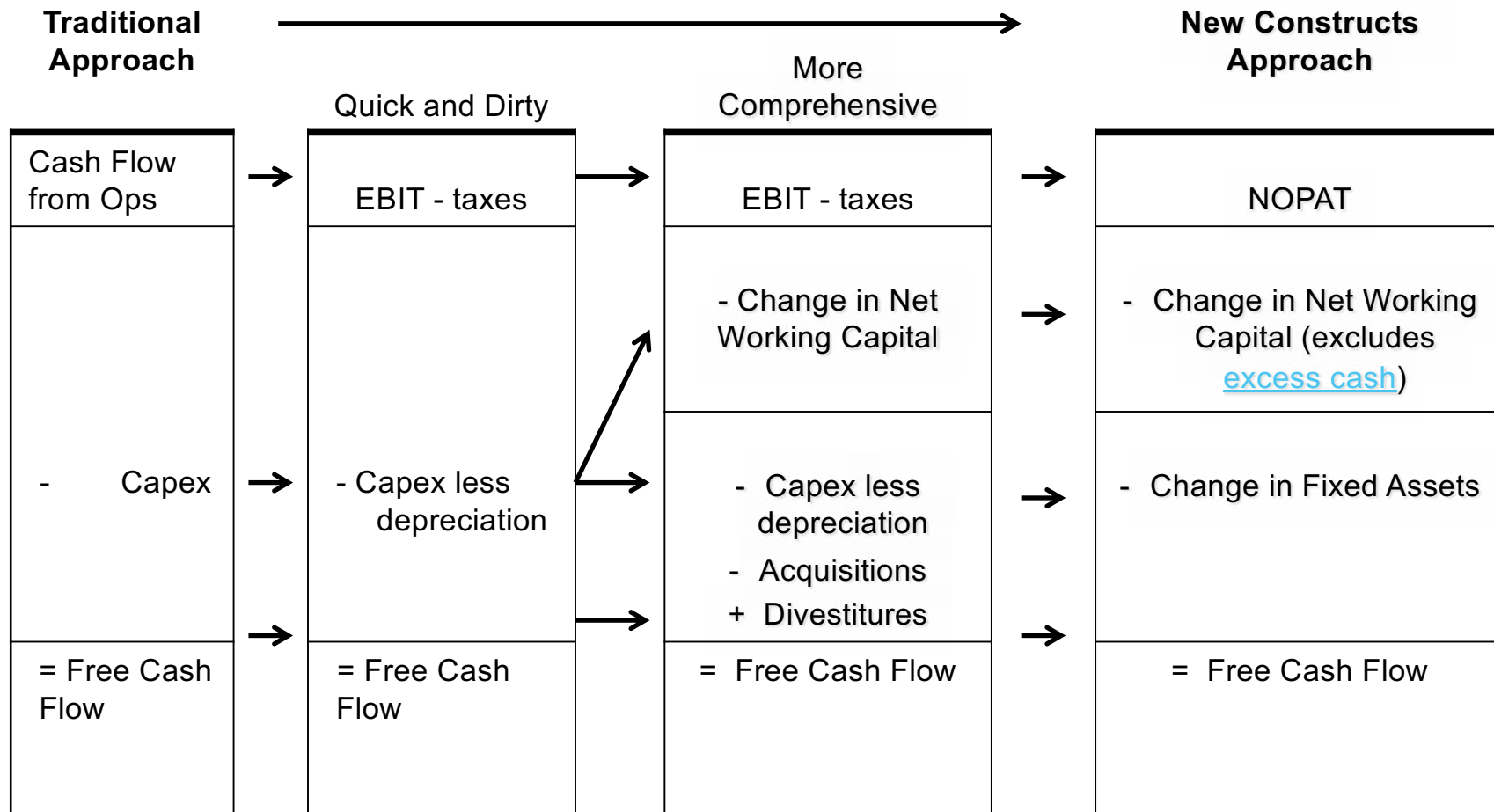
- Filings have grown to **200+ pages**  
*(That's longer than the average novel.)*
- Increasingly complex and time-consuming work
- Accounting rules are constantly changing



# Appendix

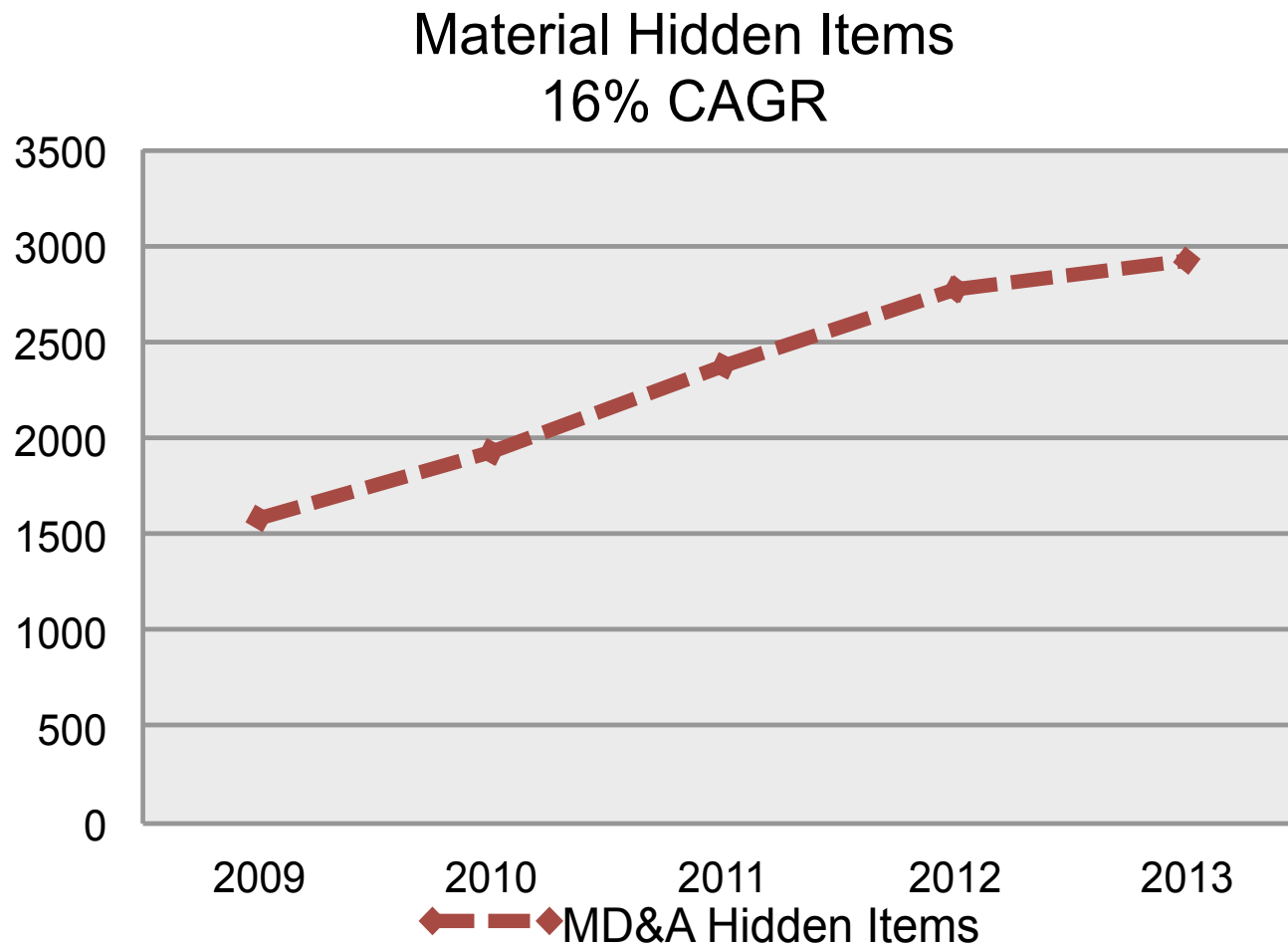
# CALCULATIONS: ATTENTION TO DETAILS

## Free Cash Flow: NOPAT minus Change in Invested Capital *How We Compare to traditional approaches to FCF*





# BIGGER HAYSTACKS, MORE NEEDLES



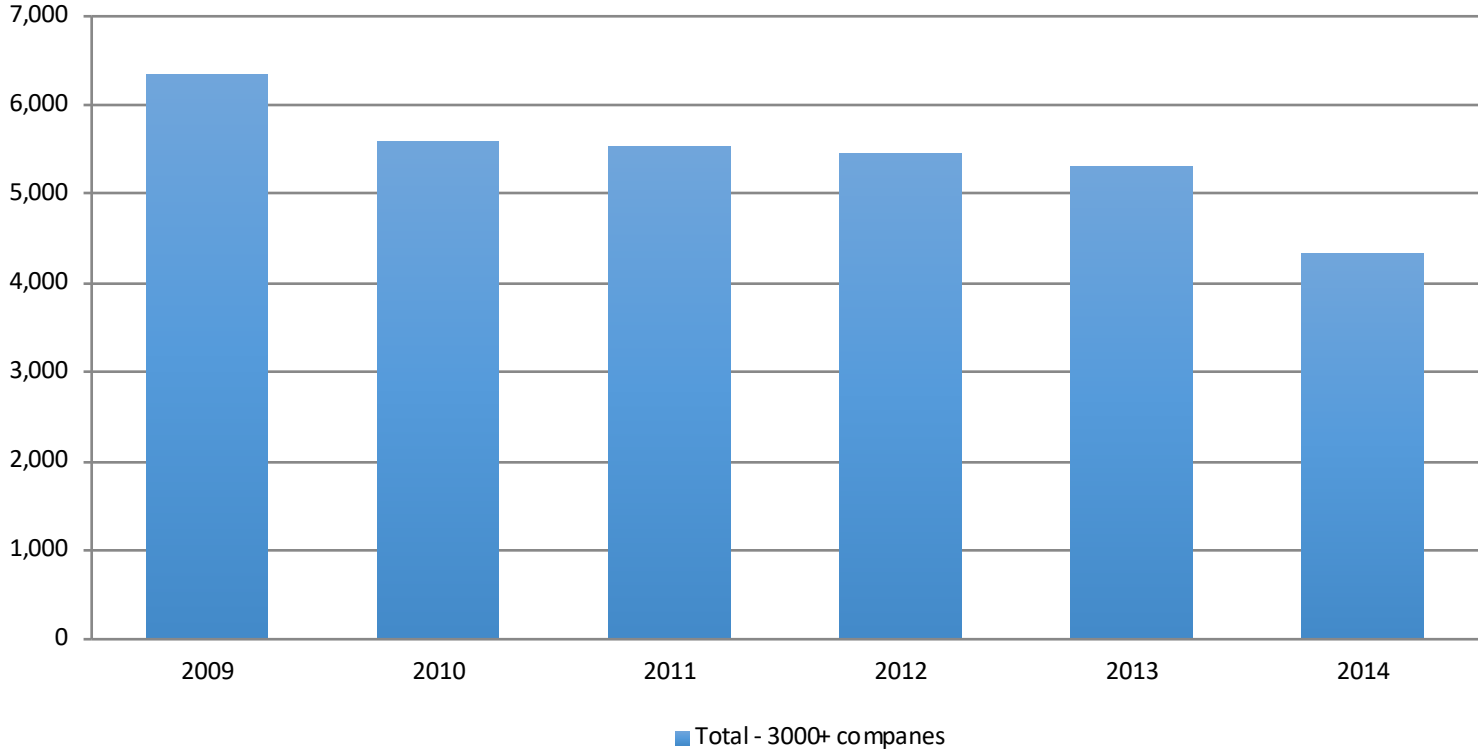
Items found only in the MD&A (e.g. gains, charges, deferred items, etc) that distort income statement results are rising rapidly.

# ASSET WRITE-DONWS ARE A RED FLAG

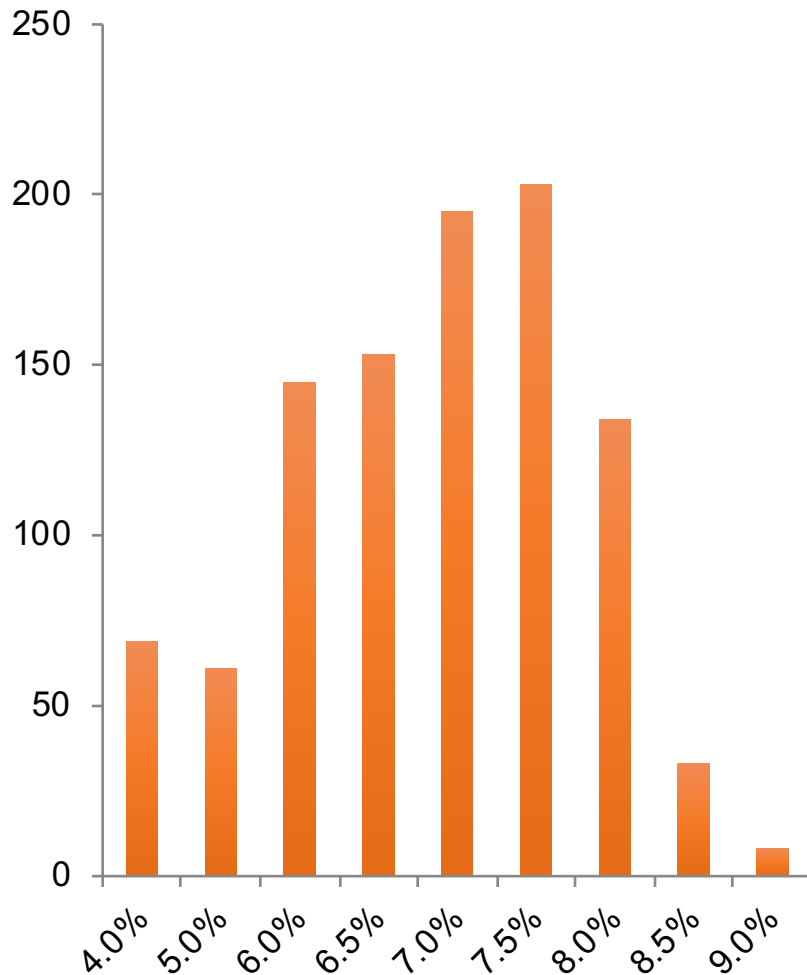
# 32,583

Over the last 5+ Years, we found 32,583 write-downs.

# of Write-Downs



## Distribution of Return On Plan Asset Assumptions



*Auditors & investors need to know this data.*

- Raising the expected Return on Plan Assets (EROPA) reduces reported pension expense.
- The mean EROPA for 2014 was 6.5%. Roughly 55% of companies expect a long-term return on plan assets between 6.5% and 7.5%.
- Virtusa Corp (VRTU) has the most aggressive assumptions, with EROPA of 10.38%, followed by Exlservice Holdings (EXLS) at 9%.

New Constructs has no trading, corporate or banking ties – no conflicts.

- *Morningstar gets paid by fund companies. Fund companies must license ratings from Morningstar to use them in marketing materials.*

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

# DISCLOSURES & DISCLAIMERS

New Constructs<sup>®</sup>, LLC (together with any subsidiaries and/or affiliates, New Constructs<sup>®</sup>) 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 15 days after New Constructs issues a report on that security.

New Constructs is affiliated with Novo Capital Management, LLC, the general partner of a hedge fund. At any particular time, New Constructs' research recommendations may not coincide with the hedge fund's holdings. However, in no event will the hedge fund receive any research information or recommendations in advance of the information that New Constructs provides to its other clients.

## *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.