

Danger Zone: Fund Managers That Don't Analyze Details in 10-Ks

Check out this week's **Danger Zone interview** with Chuck Jaffe of Money Life.

Investing in a company without thoroughly analyzing all of its 10-Ks and 10-Qs is like hiking in unfamiliar terrain without a map or GPS. Even if you're physically fit, you're putting yourself at unnecessary risk by not being as informed as you should be about the journey you've undertaken.

A <u>new study</u> from Alan Crane, Kevin Crotty, and Tarik Umar of Rice University shows just how important reading financial filings can be. The authors found that funds accessing SEC filings in a given month averaged 1.5% higher annualized returns than those that didn't download any filings. Sadly, the study also found that some funds hardly ever download SEC filings.

Nevertheless, downloading filings is less than half the battle. The more important task for responsible investors is thoroughly analyzing all the information in the filings.

Investors deserve more diligence from fund managers, so we are putting those that don't read SEC filings or lack the technology needed to thoroughly analyze those filings in the <u>Danger Zone</u>.

The Devil Is in The Details in Filings

SEC filings, especially 10-Ks and 10-Qs, contain huge amounts of valuable data, much of which is buried in the "fine print" or <u>financial footnotes and management discussion and analysis</u> (MD&A). Traditional data feeds, like Compustat, do not collect most of this buried information, and the data they do provide is often incomplete or incorrect. Consequently, any investment process that aims to fulfill the fiduciary duty of care requires thorough analysis of 10-Ks and 10-Qs by experts.

As we wrote in "<u>Al Has a Big (Data) Problem</u>", the notion that dirty data can be "cleaned" is a fallacy. The only way to ensure data sets are accurate and complete is to collect directly from the source. Fund managers that rely on flawed third-party data feeds cannot get an accurate picture of a company's profitability or stock's valuation.

Figure 1 highlights how flawed data can give investors a misleading picture of corporate profitability. It shows that GAAP net income increased by 16% in 2017 even as economic earnings declined by 13%.

Economic Earnings Decreasing While GAAP Increases \$600 \$1,200 \$500 Earnings (\$billions) \$1,000 \$400 Net Income (\$billions) \$800 \$300 \$200 \$600 \$100 Economic \$400 \$0 -\$100 \$200 -\$200 \$0 -\$300 2000 2001 2002 2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 - GAAP Net Income Economic Earnings

Figure 1: Economic Earnings and GAAP Net Income Since 2000

Sources: New Constructs, LLC and company filings

Increasing Complexity in Filings Makes the Job Nearly Impossible

DILIGENCE PAYS 4/9/18

While Crane, Crotty, and Umar found a performance advantage for funds that downloaded filings, this advantage declined significantly as the complexity of filings increased. This finding suggests that fund managers struggle to process the information buried in longer 10-Ks.

This problem continues to grow as corporate filings continue to <u>increase in length and complexity</u>. The amount of important data in these filings makes it impossible for any human to perform rigorous analysis for more than a small handful of companies.

The solution to this problem is the Robo-Analyst. Featured by Harvard Business School, the Robo-Analyst uses machine-learning technology to automate large portions of the research process. It can read through 200+ page filings in seconds, automatically collect routine data points and flag unusual items for human subject matter experts to review. Importantly, Robo-Analyst technology is built on the painstaking work of experts manually parsing 120,000 10-Ks and 10-Qs in a machine learning environment. It is not a black box of "fancy" algorithms that magically figure out how to interpret the data in filings.

Figure 2 shows the amount of work the Robo-Analyst performed during the <u>recent 10-K filing season. From</u> mid-February through March, it analyzed 2,013 filings and collected 286,576 data points. Our analyst team uses this data to make 46,201 forensic accounting <u>adjustments</u> to our valuation models with a dollar value of \$17.8 trillion. The adjustments were applied as follows:

- 19,872 income statement adjustments with a total value of \$1.3 trillion
- 18,732 balance sheet adjustments with a total value of \$8.1 trillion
- 7,597 valuation adjustments with a total value of \$8.3 trillion

Figure 2: Filing Season Diligence

	_	Data Points Collected		Total Value of Adjustments (\$Billions)
Filing Season Total	2,013	286,576	46,201	\$17,795

Sources: New Constructs, LLC and company filings

We believe this research is necessary to fulfill the <u>Fiduciary Duty of Care</u>. Ernst & Young's recent white paper, "<u>Getting ROIC Right</u>", demonstrates how these adjustments contribute to meaningfully superior models and metrics.

The Dangers of Ignoring Complexity

The single most complicated filing we've analyzed so far in 2018 belonged to Pfizer (PFE). We made 63 different adjustments based on PFE's 10-K with a total value of \$296 billion.

We made 37 adjustments to the income statement alone with a dollar value of \$23 billion (105% of GAAP net income). Our most significant adjustment was a \$10.7 billion one-time gain due to the impact of tax reform.

While this adjustment is widely known, there were many other non-operating items that were more hidden. We made 14 adjustments based on pension data, which was buried on page 114. Due in part to its high expected return on plan assets of 8%, PFE earned \$1 million from its pension plans in 2017 compared to spending \$39 million in 2016.

When we account for all adjustments, we find that PFE's after-tax operating profit (NOPAT) declined by 16% in 2017 even as reported GAAP net income nearly tripled.

The 18 balance sheet adjustments we made, which totaled \$187 billion, showed that <u>average invested capital</u> increased by 5% in 2017. PFE's return on invested capital (<u>ROIC</u>) decreased from 5% to 4% in 2017. <u>Other data providers</u> that don't make these adjustments show PFE earning an ROIC of 45%.

Finally, we made 8 valuation adjustments with a dollar value of \$86 billion. These adjustments deceased PFE's valuation by \$34 billion. Our largest adjustment was \$48 billion in <u>adjusted total debt</u>, which includes \$1.3 billion in <u>off-balance sheet debt</u>.

The declining profitability and significant liabilities revealed by our adjustments earn PFE our Unattractive rating.

The Next Step: Leveraging the Latest in Technology

DILIGENCE PAYS 4/9/18

The fact that funds can outperform just by downloading SEC filings, even if they struggle to process more complicated filings, suggests that many of their competitors are not taking advantage of all available resources. The study authors found that the average fund download amount was 672 per month, but the median was just 4, which means that half of all funds are barely downloading any SEC filings in a given month.

As a result, funds can thrive based solely on simple information signals. They don't need to have a competitive advantage at processing data if their competitors aren't even looking at the data in the first place. Figure 3 shows the top 5 funds by total SEC downloads, and the types of forms they're downloading.

Figure 3: SEC Download Activity Since 2003

		Form Type				
Firm Name	Total Downloads	10-K/Q	8-K	4	13-D/F/G	AUM (\$mm)
Renaissance Technologies	4,016,439	3.5%	2.0%	85.8%	1.3%	\$50,941
PanAgora Asset Management	3,969,668	24.2%	21.6%	10.9%	27.1%	\$42,798
BlackRock	3,704,596	3.5%	0.7%	92.4%	0.4%	\$5,689,273
Hutchin Hill Capital	3,044,555	3.7%	4.7%	8.8%	0.2%	\$3,300
Tradeworx	2,068,017	11.2%	5.6%	51.4%	31.2%	\$61

Sources: Crane, Crotty, and Rice

The type of filings being accessed further supports the idea that these funds are profiting off simple information signals. They are downloading a significant number of 10-Ks and 10-Qs – 3.5% of Renaissance Technologies 4 million downloads accounts for over 140 thousand filings – but they're focused more on Form 4s (insider trades) and 13-D/F/Gs (institutional trades). These are simple data points that can be easily collected without the need for sophisticated technology.

Unfortunately for the funds in Figure 3, this advantage is unlikely to persist. Recent developments, such as the <u>acquisition of research firm EVA Dimensions by proxy advisor ISS</u>, show the increased demand for fundamental diligence. More and more investors are starting to take advantage of the available data. To stay ahead, the funds in Figure 3 need to improve their analysis of complex filings.

BlackRock (BLK) is already making an effort to improve its fundamental diligence through technology, as we wrote about last year in "Crossing the Chasm 2.0: Rise of the Robo Analyst." The company transitioned \$30 billion from actively managed funds into funds that rely on algorithms and models. CEO Larry Fink emphasized the need to leverage big data and analytics.

Crossing the Chasm 1.0 refers to Charles Schwab (SCHW) managers <u>crossing the Golden Gate Bridge</u> in 1999 to commemorate the company's transition to an online brokerage. It represents the democratization of information that gave almost everyone the tools they need to invest.

Almost 20 years later, it's remarkable how many fund managers are still relying on sentiment, technical analysis, and flawed third-party data feeds when all this information is at their fingertips. As these stragglers finally cross the first chasm, the next 20 years will be defined by those who cross the second chasm by using technology to better analyze the wealth of data available in corporate filings.

This article originally published on April 9, 2018.

Disclosure: David Trainer, Kyle Guske II, and Sam McBride 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.



New Constructs® - Research to Fulfill the Fiduciary Duty of Care

Ratings & screeners on 3000 stocks, 450 ETFs and 7000 mutual funds help you make prudent investment decisions.

New Constructs leverages the latest in machine learning to analyze structured and unstructured financial data with unrivaled speed and accuracy. The firm's forensic accounting experts work alongside engineers to develop proprietary NLP libraries and financial models. Our investment ratings are based on the best fundamental data in the business for stocks, ETFs and mutual funds. Clients include many of the top hedge funds, mutual funds and wealth management firms. David Trainer, the firm's CEO, is regularly featured in the media as a thought leader on the fiduciary duty of care, earnings quality, valuation and investment strategy.

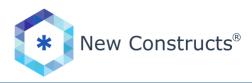
To fulfill the Duty of Care, research should be:

- 1. **Comprehensive** All relevant publicly-available (e.g. 10-Ks and 10-Qs) information has been diligently reviewed, including footnotes and the management discussion & analysis (MD&A).
- 2. **Un-conflicted** Clients deserve unbiased research.
- 3. **Transparent** Advisors should be able to show how the analysis was performed and the data behind it.
- 4. **Relevant** Empirical evidence must provide <u>tangible</u>, <u>quantifiable correlation</u> to stock, ETF or mutual fund performance.

Value Investing 2.0: Diligence Matters: Technology is Key to Value Investing With Scale

Accounting data is only the beginning of fundamental research. It must be translated into economic earnings to truly understand profitability and valuation. This translation requires deep analysis of footnotes and the MD&A, a process that our <u>robo-analyst technology</u> empowers us to perform for thousands of stocks, ETFs and mutual funds.





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 15 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.