STOCK PICKS AND PANS

9/14/17

How Accounting Adjustments Contribute to Alpha Generation

This purpose of this report is to show investors how New Constructs' proprietary forensic accounting research empowers them to identify alpha-generating investment ideas more efficiently than traditional manual approaches. The report highlights ideas written by our publishing team based on insights our research technology automatically provides on a firm's true <u>return on invested capital</u> (ROIC) and <u>economic earnings</u>.

Forensic Accounting That You Can Audit

We know from <u>numerous case studies</u> that changes in ROIC are <u>directly correlated to changes in market value</u>. As such, getting ROIC right is an important part of the investment decision making process. Our <u>Robo-Analyst technology</u> enables us to perform forensic accounting with scale and provide the rigorous <u>research needed</u> to fulfill fiduciary duties and meet sophisticated clients' needs.

In order to reverse accounting distortions and derive <u>true recurring cash flows (NOPAT)</u>, an accurate <u>invested capital</u>, and perform accurate valuations analysis, our technology makes adjustments to income statements and balance sheets for nearly <u>3,000 stocks</u>.

All of these adjustments are fully auditable back to the original 10-Ks and 10-Qs.

Quantifying the Value of Our Forensic Accounting

Below, we highlight five Long Ideas and three Sell Warnings dating back to 2011 to show how our unique insights into true profits created alpha. We provide more Long Idea than Sell Warning examples because investors tend to focus more on long ideas. For all of our <u>Long Ideas</u> and <u>Sell Warnings</u>, our research team writes an ad-hoc report based primarily on the analytics from our research.

These reports show how investors can use our technology to work for them.

Figure 1: Example Stock Pick Summary

Long Idea	Open	Close	Stock	S&P	Return	ROIC	ROIC	ROIC
Ticker	Date	Date	Return	Return	Difference	(NC)	(GAAP)	Difference
ACN	1/4/11	11/5/12	41%	12%	29%	65%	62%	3%
CSCO	8/14/12	9/11/13	42%	20%	22%	17%	14%	3%
MSFT	9/28/10	7/29/16	130%	90%	40%	43%	18%	24%
NVDA	9/24/15	5/18/16	86%	6%	80%	79%	29%	50%
WDC	12/4/12	4/7/15	180%	47%	133%	20%	13%	7%

Sell Warning Ticker	Open Date	Close Date	Stock Return	S&P Return	Return Difference	ROIC (NC)	ROIC (GAAP)	ROIC Difference
VRX	2/27/16	4/24/17	-90%	22%	-112%	5%	8%	-3%
PANW	2/27/17	9/14/17	-7%	5%	-12%	-22%	-16%	-6%
TLRD	2/23/15	12/15/16	-47%	7%	-54%	5%	8%	-3%



Long Idea: Accenture, PLC (ACN): +41% vs S&P +12%

Accenture was featured as a Long Idea in <u>January, 2011</u>. Our research revealed that ACN was among a very small group of firms (71 out of 3,000) where economic earnings exceeded accounting earnings (<u>detail</u>). Our research also indicated that ROIC under our methodology was rising faster than <u>GAAP-based ROIC</u> (<u>detail</u>). Both of these factors were influenced by ACN's superior balance sheet efficiency (<u>detail</u>), or invested capital turns (revenue/average invested capital).

At the same time, our calculation of economic book value showed the stock's price to economic book value (PEBV) was implying a permanent 10% decline in after-tax profit (NOPAT).

During the 671-day holding period, ACN stock gained 41% compared to 12% for the S&P 500.

Historical adjustments overview: income statement and balance sheet.

Figure 2: ACN Performance During Holding Period





Long Idea: Cisco Systems (CSCO): +42% vs S&P +20%

Cisco Systems was featured as a Long Idea in <u>August, 2012</u>. Our research revealed that CSCO's economic earnings were growing much faster than GAAP earnings during 2012 (<u>detail</u>). Our research also indicated that ROIC under our methodology was higher, and rising faster, than GAAP-based ROIC (<u>detail</u>).

At the same time, our calculation of economic book value showed CSCO was trading at the largest discount in 15 years (detail). The PEBV ratio implied a permanent 30% decline in after-tax profit (NOPAT).

Our subsequent review of <u>CSCO's 2012 annual report</u> confirmed that GAAP results were in fact understating profitability and growth.

During the 393-day holding period, CSCO stock gained 42% compared to 20% for the S&P 500.

Historical adjustments overview: income statement and balance sheet.

Figure 3: CSCO' Performance During the Holding Period





Long Idea: Microsoft (MSFT): +130% vs S&P +90%

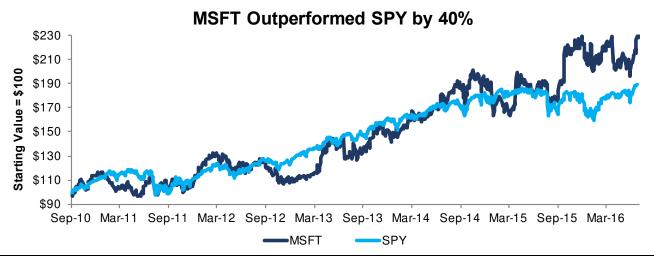
Microsoft was featured as a Long Idea in <u>September, 2010</u>. Our research revealed that MSFT's GAAP-based ROIC grossly understated the true ROIC. During the five-year period from 2010-2014, ROIC under our methodology averaged 68% compared to 30% for GAAP-based ROIC (<u>detail</u>), primarily due to our invested capital adjustments for growing excess cash balances (<u>detail</u>). The trajectory of economic earnings also confirmed the quality of MSFT's GAAP earnings growth (<u>detail</u>).

At the time of selection, our calculation of MSFT's economic book value showed that the stock's (PEBV) valuation was implying a permanent 20% decline in after-tax profit (NOPAT).

During the nearly six-year holding period, MSFT stock gained 130% compared to 90% gain for S&P 500.

Historical adjustments overview: income statement and balance sheet.

Figure 4: MSFT's Performance During the Holding Period



Long Idea: NVIDIA (NVDA): +86% vs S&P +6%

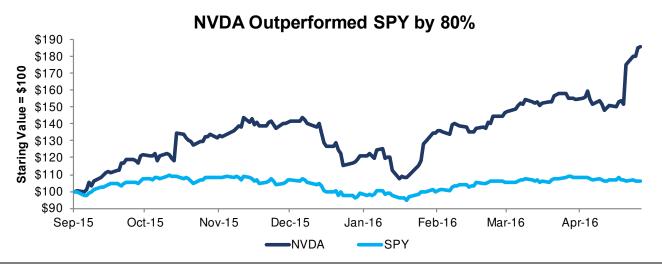
NVIDIA was featured as a Long Idea in <u>September, 2015.</u> Our research revealed that NVDA's true ROIC, as well as its rate of change, was significantly understated by GAAP-based ROIC. From 2014-2016, ROIC under our methodology increased from 16% to 41% compared to an 8% to 12% increase in GAAP-based ROIC (<u>detail</u>). Over the same period, economic earnings increased from \$0.34/share to \$1.32/share (288%) while GAAP earnings increased from \$0.74/share to \$1.08/share (46%) (<u>detail</u>).

At the time of selection, our calculation of NVDA's economic book value showed that the stock's (PEBV) valuation was implying after-tax profit (NOPAT) growth of only 10% over the firm's remaining life.

During the 237-day holding period, NVDA stock gained 86% compared to 6% for the S&P 500.

Historical adjustments overview: income statement and balance sheet.

Figure 5: NVDA's Performance During the Holding Period







Long Idea: Western Digital (WDC): +180% vs S&P +47%

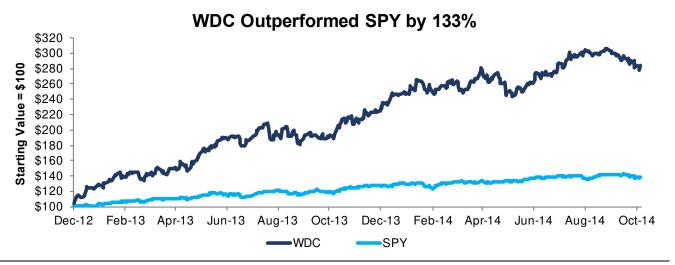
Western Digital was featured as a Long Idea in <u>December, 2012.</u> WDC represented a straight forward deep value call based on our analysis of economic book value (<u>detail</u>). WDC's very low PEBV valuation (<u>detail</u>) implied that after-tax profit (NOPAT) would permanently decline by 70%, which was unduly pessimistic.

NOPAT fell by only a fraction of the market's expectations (17%) over the next three years. Further, WDC's 2013-2015 ROIC averaged 23% under our methodology compared to 16% for GAAP-based ROIC (detail).

During the 854-day holding period, WDC stock gained 180% compared to 47% for the S&P 500.

Historical adjustments overview: income statement and balance sheet.

Figure 6: WDC's Performance During the Holding Period





Sell Warning: Valeant Pharmaceuticals (VRX): -90% vs S&P +22%

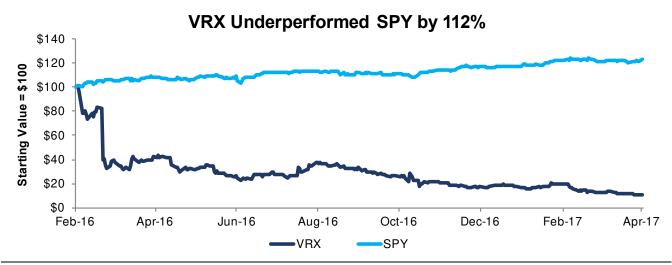
Valeant Pharmaceuticals has declined 93% since we first started cutting through the firms dubious accounting in <u>June 2014</u>. VRX was later featured as a <u>Danger Zone</u> pick in <u>February 2016</u>. Our research uncovered a deep long-term decline in ROIC (<u>detail</u>) and economic earnings which ran counter to management's claims of value-creating acquisitions and "non-GAAP" earnings growth (<u>detail</u>). Our research also showed that GAAP-based NOPAT and ROIC overstated profitability, and missed the downward inflection point, at a crucial time for investors (<u>detail</u>).

In addition to poor and misleading fundamentals, future profit expectations embedded in the stock price were very high. To justify the \$84/share price, our model showed that VRX had to grow NOPAT by 15% compounded annually for the next 10 years.

During the 422-day holding period, VRX stock fell 90% compared to a 22% gain for the S&P 500.

Historical adjustments overview: income statement and balance sheet.

Figure 7: VRX's Performance during the Holding Period





Sell Warning: Palo Alto Networks (PANW): -7% vs S&P +6%

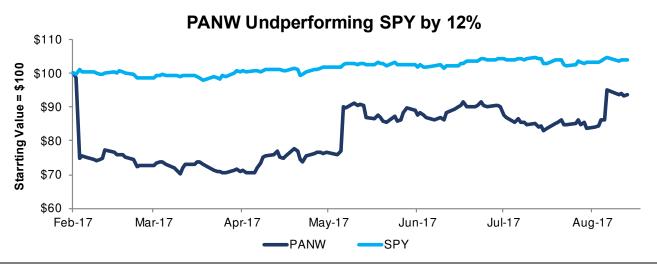
Palo Alto Networks was featured as a Danger Zone pick in <u>February 2017</u>. Our research revealed a significant disconnect between strong reported revenue growth and deteriorating NOPAT (<u>detail</u>). Our research also identified a diverging trend between "non-GAAP" net income and economic earnings (<u>detail</u>). Further, PANW's 2016 ROIC of -25% indicated profitability was worse than the -14% implied by GAAP-based ROIC (<u>detail</u>).

In addition to deteriorating fundamentals, future profit expectations embedded in the stock price were very high. To justify the \$155/share price, our model showed that PANW had to increase NOPAT margin (from -12% to 5%) and grow revenue 31% compounded annually for eleven years.

Shortly after publication, PANW missed earnings expectations and fell 24% in one day. During the 197-day holding period, PANW has fallen 7% compared to a 6% gain for the S&P 500.

Historical adjustments overview: income statement and balance sheet.

Figure 8: PANW's Performance During the Holding Period





Sell Warning: Tailored Brands (TLRD): -47% vs S&P +7%

Tailored Brands (Men's Warehouse at the time) was featured as a Danger Zone pick in <u>February 2015</u>. Our research uncovered that the bidding war culminating in the 2014 acquisition of Joseph A. Bank was a value-destroying proposition for shareholders. ROIC declined from 7% in 2014 to 5% in 2016. The GAAP-based ROIC was 8% in both periods (<u>detail</u>). Even worse, total debt costs, including implied interest from operating leases, consumed 79% of NOPAT in 2016 compared to 30% in 2014.

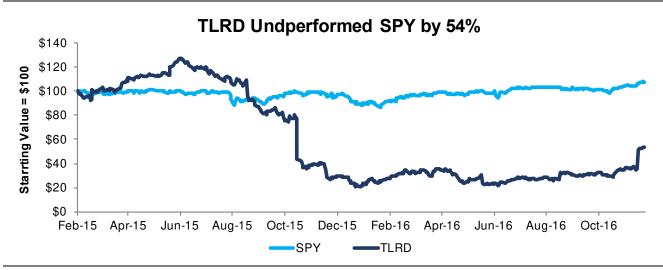
Funding 90% of the \$1.8 billion acquisition with debt damaged the balance sheet. Further, TLRD's crippling debt load was understated by GAAP-based ROIC which excluded \$750 million in off-balance sheet operating leases (detail). Invested capital turns, or balance sheet efficiency, declined to 0.9 by 2016 from 1.3 in 2014.

Our research also showed that TLRD's valuation had significantly diverged from economic book value (detail).

During the 661-day holding period, TLRD stock fell 47% compared to a 7% gain for the S&P 500.

Historical adjustments overview: income statement and balance sheet.

Figure 9: TLRD's Performance During the Holding Period



Sources: New Constructs, LLC and company filings

This report originally published on September 14, 2017.

Disclosure: David Trainer, Kenneth James, and Kyle Guske II 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.



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

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.