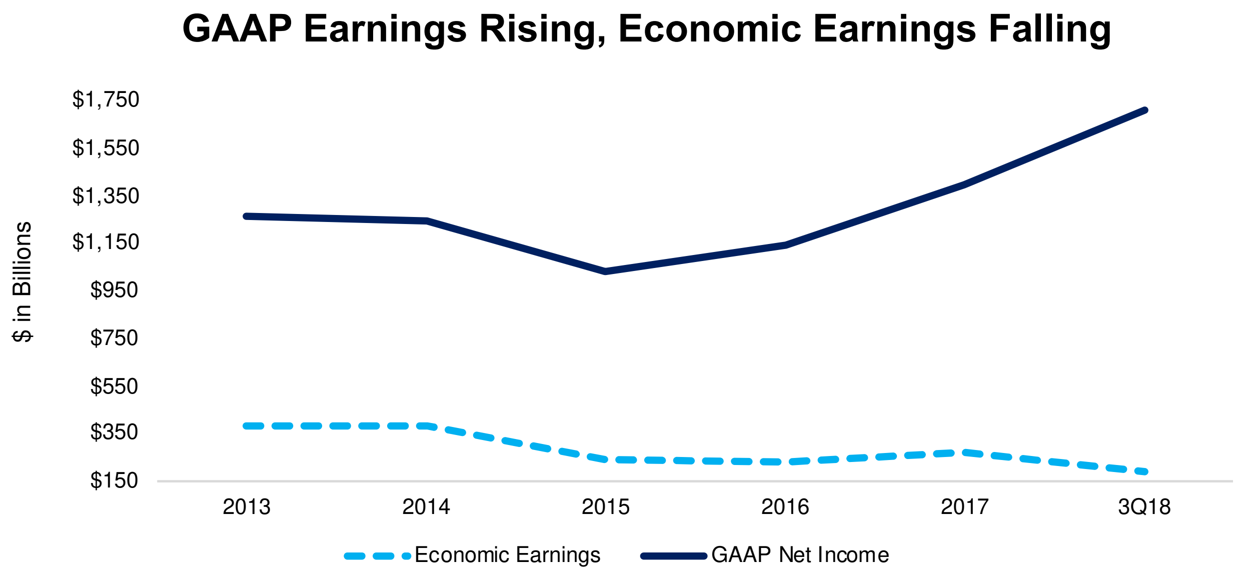
The "Earnings Recovery" Remains an Accounting Mirage

On January 11, 2018, we showed that the "earnings recovery" is an illusion. U.S. equities[1] may have rebounded from 2015 lows, but to date, economic earnings – which reverse accounting distortions and account for the weighted average cost of capital (WACC) – remain in a persistent downturn. Figure 1 shows this trend.

Figure 1: Economic vs. GAAP Earnings



Sources: New Constructs, LLC and company filings.

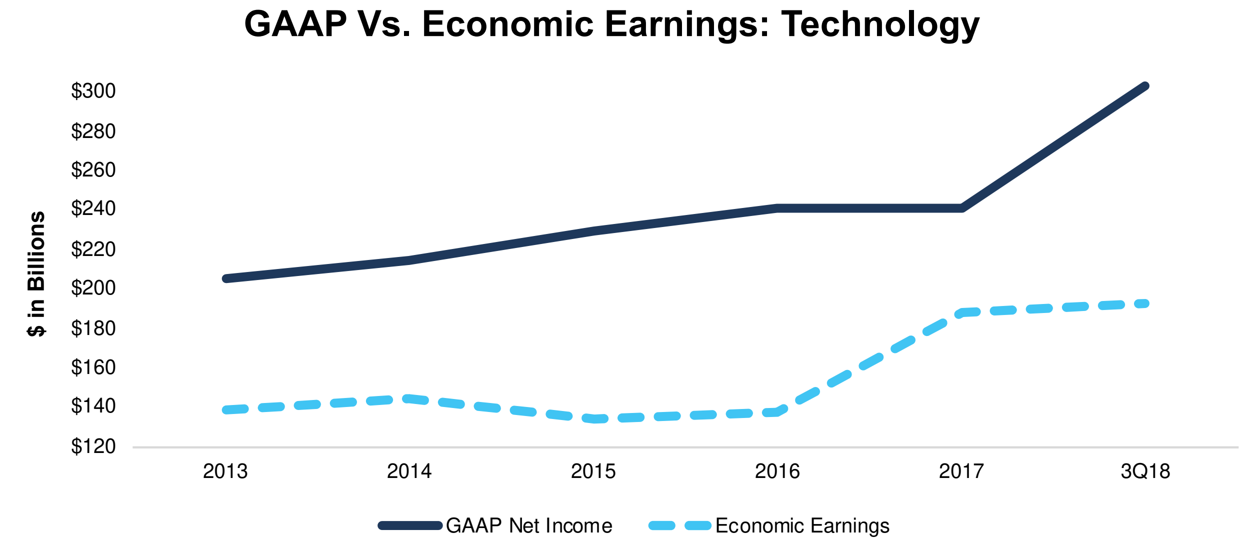
This disconnect between accounting earnings and economic earnings is not just due to a handful of companies. 6 out of 11 sectors have misleading earnings (GAAP rising and economic earnings falling) in the last fiscal year. Over the last twelve months, six sectors have negative economic earnings, and just two sectors, Technology and Healthcare, have positive and rising economic earnings.

The breadth of this decline in economic earnings suggests that the majority of U.S. public companies are unable to earn a return on invested capital (ROIC) greater than their WACC on new investments. In other words, the majority of U.S. companies are struggling to find profitable ways to allocate capital.

As Figure 2 shows, the Tech sector is one of only two sectors with rising and positive economic earnings. But, the economic earnings picture is not as rosy as GAAP earnings would suggest. While GAAP net income has risen 9% over the past five years, economic earnings are only up 7%. Tech companies also have the most excess cash of any sector, at $1.1 trillion, a sign that they are also struggling to find profitable growth opportunities.

[1] With a combined market cap of ~$38 trillion, 2,600+ companies for which we have quarterly data represent the vast majority of the U.S. equity market as well as a handful of international companies.

Figure 2: Economic vs. GAAP Earnings: Information Technology



Sources: New Constructs, LLC and company filings.

Figure 2 explains why tech has "taken over the market." It's been the only option for investors that want real earnings growth.

For example, Microsoft (MSFT) has more than tripled the return on the S&P 500 over the past five years. Its economic earnings have grown by 32% compounded annually since 2016 compared to a flatlining net income.

However, many investors are quick to buy into the illusory earnings growth in the rest of the market, which we see as a result of the meteoric increase in the number of noise traders.

The disconnect between accounting and economic earnings in the market stems from two primary issues:

1. **Income statement manipulation**: managers exploit accounting loopholes to overstate accounting profits. GAAP net income has grown 6% over the past five years for the companies in Figure 1, but net operating profit after tax (NOPAT) is up only 4% over that timeframe.
2. **GAAP earnings overlook balance sheets and the cost of equity capital.** Over the past five years, the companies in Figure 1 have increased their balance sheets, i.e. invested capital, by 32%. Their weighted average cost of capital (WACC) is up from 5.7% to 6.9% over the same time. Economic earnings decline when the cost and amount of capital rise faster than NOPAT.

Economic earnings equal NOPAT - (WACC*Invested Capital). When NOPAT grows slower than net income while invested capital and WACC grow faster, economic earnings decline. Figure 3 details the adjustments we make to calculate the current NOPAT and invested capital values for the whole market.[2]

[2] Details on the adjustments for all 11 sectors can be found in the Appendix.

Figure 3: Reconciling GAAP Earnings with Economic Earnings: NOPAT and Invested Capital

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$1,709**
Hidden Non-Operating Items	$5
Reported Non-Operating Items	$517
Change in Reserves	$11
Implied Interest for Off-Balance Sheet Debt	$56
Non-Operating Tax Adjustment	($300)
After Tax Non-Operating Expense	$47
NOPAT	**$2,046**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$65,056**
Non-Interest-Bearing Current Liabilities	($41,108)
Reported Net Assets	**$23,947**
Short-Term Debt	$774
Excess Cash	($2,147)
Total Reserves	$161
Unconsolidated Subsidiaries	$5
Discontinued Operations	($104)
Deferred Compensation	($11)
Deferred Taxes	($367)
Over Funded Pensions	($38)
Off-Balance Sheet Operating Leases	$1,097
Accumulated Unrecorded Goodwill	$733
Accumulated Goodwill Amortization	$90
Accumulated Asset Write-Downs	$2,422
Other Comprehensive Income	$840
Invested Capital	**$27,385**
Average Invested Capital	**$28,190**

Sources: New Constructs, LLC and company filings.

Our biggest adjustment on the NOPAT side is to strip out non-operating items that are reported directly in the financial statements, such as interest expense, preferred dividends, and minority interest income. Our Robo-Analyst also uncovered a net $5 billion in non-operating expenses hidden in the footnotes.

On the balance sheet side, we added back $2.4 billion in accumulated asset write-downs that companies tried to scrub off their balance sheet. Adding back accumulated write-downs holds companies accountable for all the capital invested in the business over its life.

Only by making these adjustments can you reverse accounting distortions and reveal true profitability[3].

Figure 4 provides a quick summary of the sector whose accounting income is most overstated.[4] Figures 5-14 compare economic earnings to GAAP net income for each sector.

[3] Ernst & Young's recent white paper "Getting ROIC Right" proves the superiority of our measure of NOPAT, invested capital and ROIC along with other financial ratios.
[4] Details on change in GAAP net income and economic earnings by sector can be found in the Appendix.

Figure 4: TTM Economic Vs. GAAP Earnings: All Sectors ($ in billions)

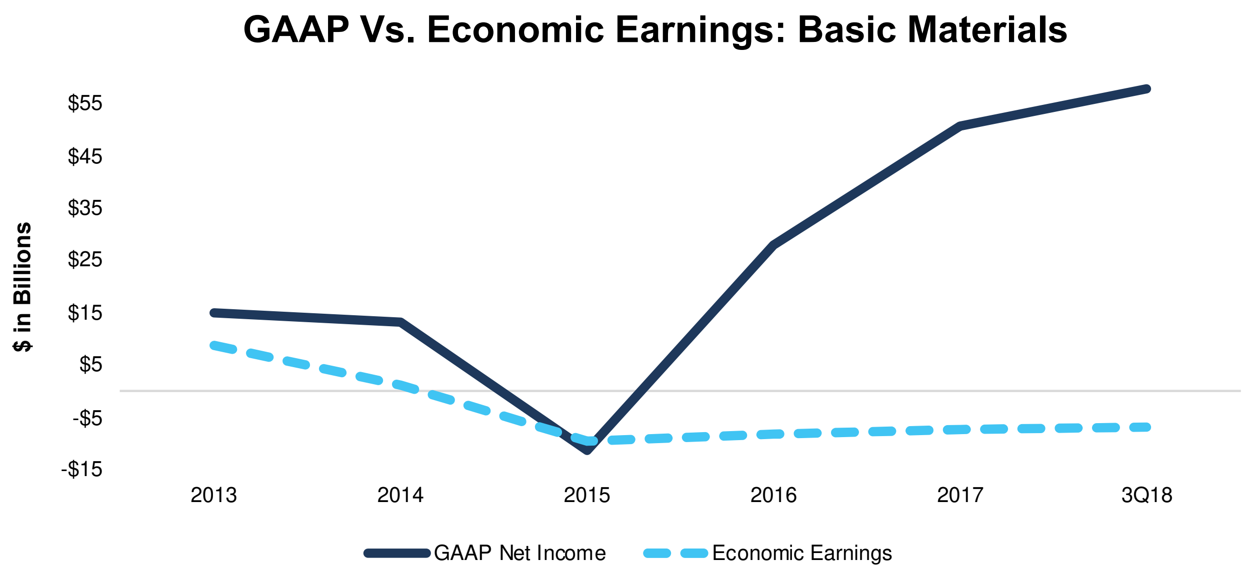
Sector	GAAP Net Income	Economic Earnings	Most Overstated Earnings
Financials	$374	($35)	($409)
Energy	$149	($63)	($211)
Consumer Cyclicals	$245	$69	($177)
Telecom Services	$95	($79)	($174)
Industrials	$165	$27	($139)
Technology	$303	$193	($110)
Healthcare	$123	$46	($77)
Basic Materials	$58	($7)	($65)
Consumer Non-cyclicals	$114	$56	($57)
Utilities	$41	($14)	($55)
Real Estate	$41	($5)	($46)

Sources: New Constructs, LLC and company filings.

Basic Materials Sector

GAAP earnings show a large rebound after the commodities rout caused significant write-downs in 2015. Economic earnings show that this sector still has a long road ahead to recovery. Over the trailing twelve months, DowDuPont Inc. (DWDP) has the largest discrepancy between reported net income and economic earnings. GAAP net income of $2.1 billion vastly overstates the firm's profitability while economic earnings, at -$5.4 billion reveal significant losses.

Figure 5: Economic vs. GAAP Earnings: Basic Materials

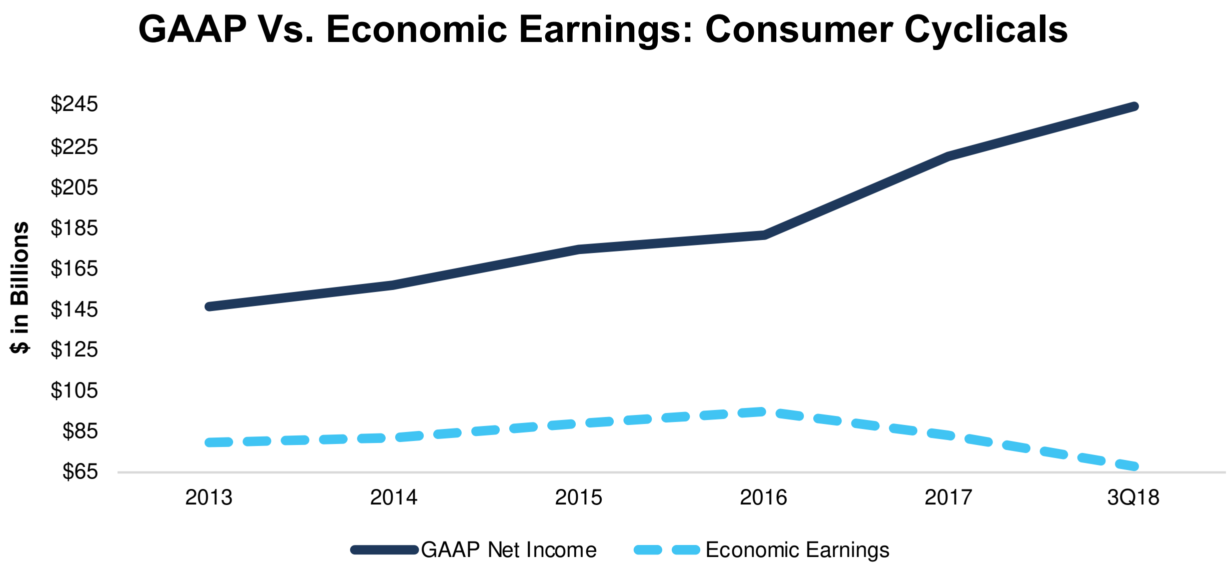


Sources: New Constructs, LLC and company filings.

Consumer Cyclicals Sector

Part of the significant gap between GAAP net income and economic earnings for the Consumer Cyclicals sector can be explained by off-balance sheet operating leases that constitute a hidden (although not for long) form of invested capital. Operating leases account for 9% of all invested capital in the sector, compared to just 5% for the whole market.

Figure 6: Economic vs. GAAP Earnings: Consumer Cyclicals

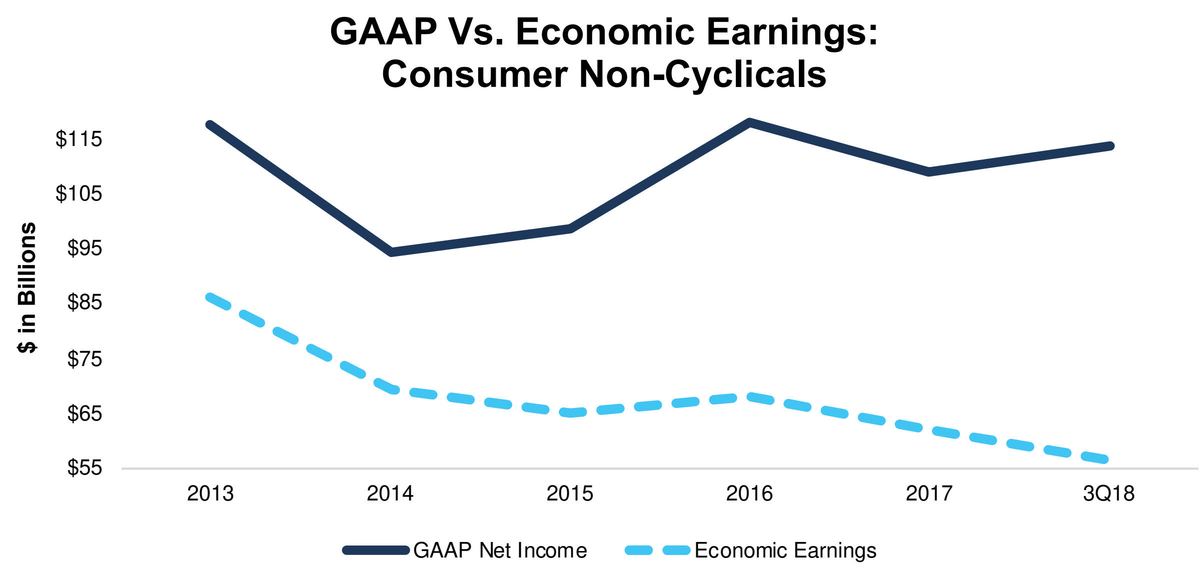


Sources: New Constructs, LLC and company filings.

Consumer Non-Cyclicals Sector

The disconnect between net income and economic earnings has widened significantly over the past few years. Trailing twelve months net income is 20% higher than it was four years ago, while economic earnings are 19% lower. The Coca-Cola Company (KO) has actually bucked this trend in recent years. While GAAP net income has fallen 27% compounded annually since 2015, economic earnings have grown 6% compounded annually.

Figure 7: Economic vs. GAAP Earnings: Consumer Non-Cyclicals

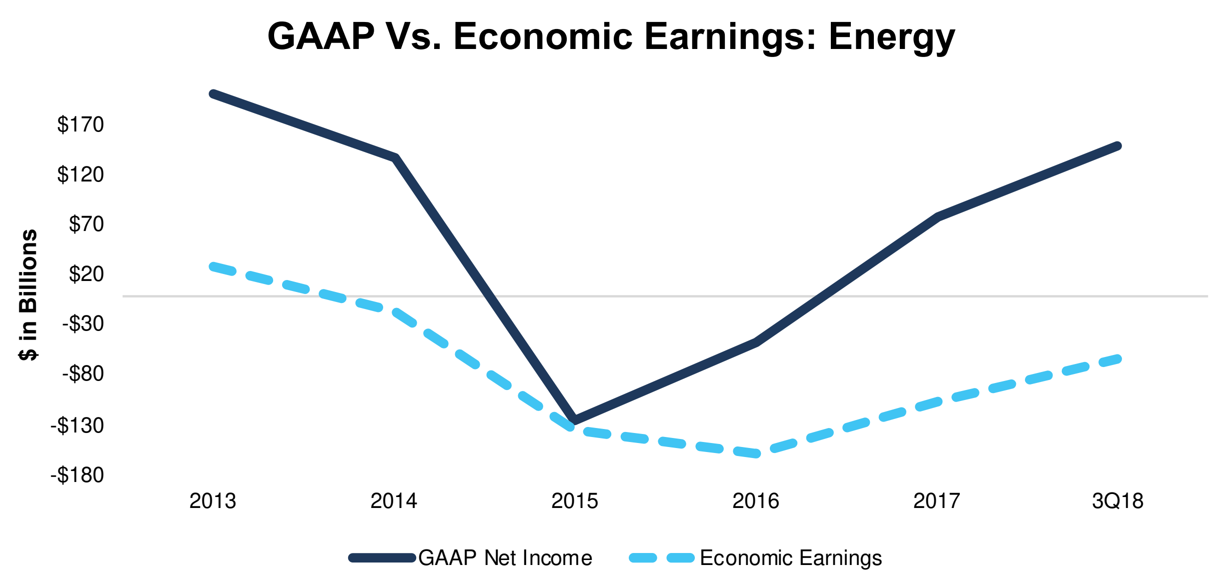


Sources: New Constructs, LLC and company filings.

Energy Sector

While the Energy sector returned to GAAP profitability last year, and continued through the TTM period, Figure 8 shows economic earnings still remain far away from breaking even.

Figure 8: Economic vs. GAAP Earnings: Energy

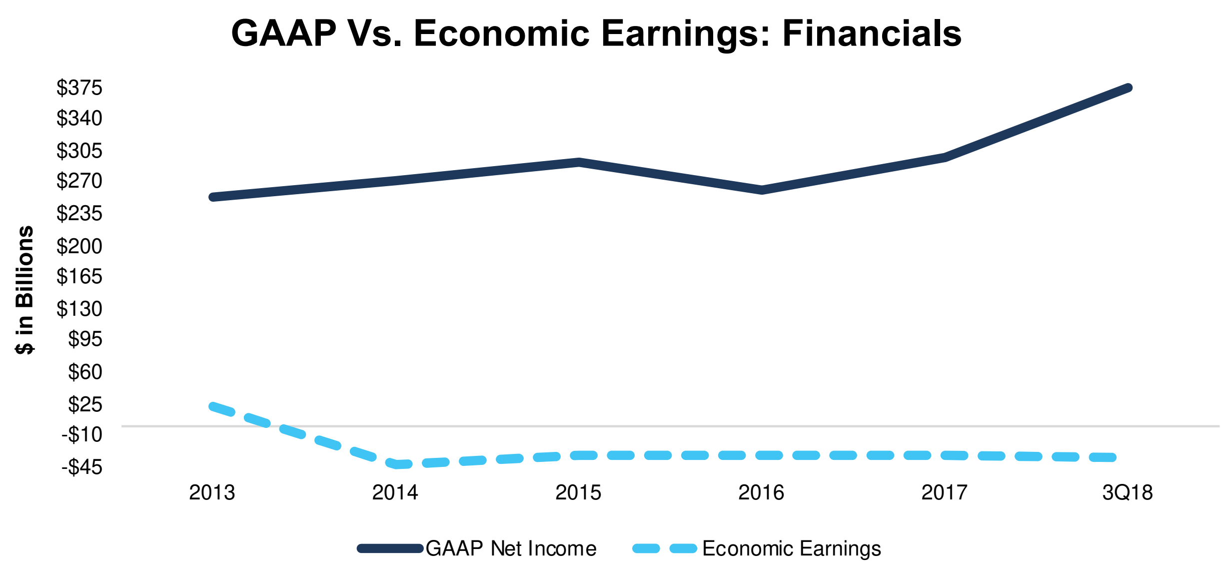


Sources: New Constructs, LLC and company filings.

Financials Sector

The Financials sector has only earned positive economic earnings on aggregate in one of the past six years. The past twelve months have seen the divergence between GAAP and economic earnings widen even further, as GAAP earnings are up 26% from 2017 while economic earnings (which are already negative) are down 13%.

Figure 9: Economic vs. GAAP Earnings: Financials

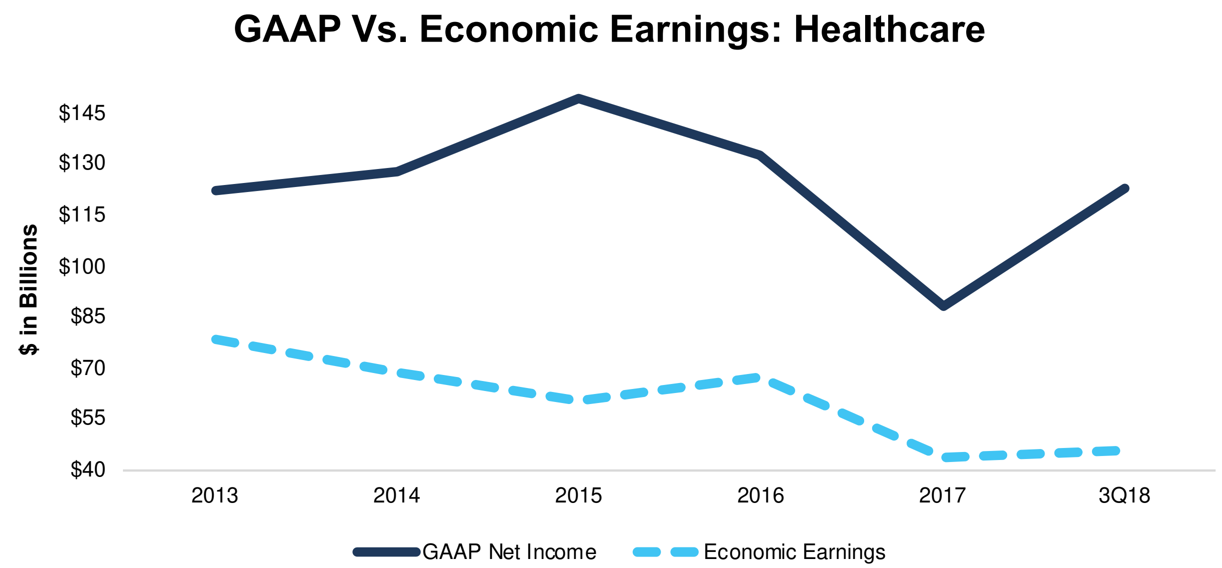


Sources: New Constructs, LLC and company filings.

Healthcare Sector

In recent years, GAAP earnings were declining closer to the level of economic earnings in the Healthcare sector. However, the TTM period has seen a return to growth in both GAAP net income and economic earnings. TTM economic earnings are up 5% while net income is up 40% over last year.

Figure 10: Economic vs. GAAP Earnings: Healthcare

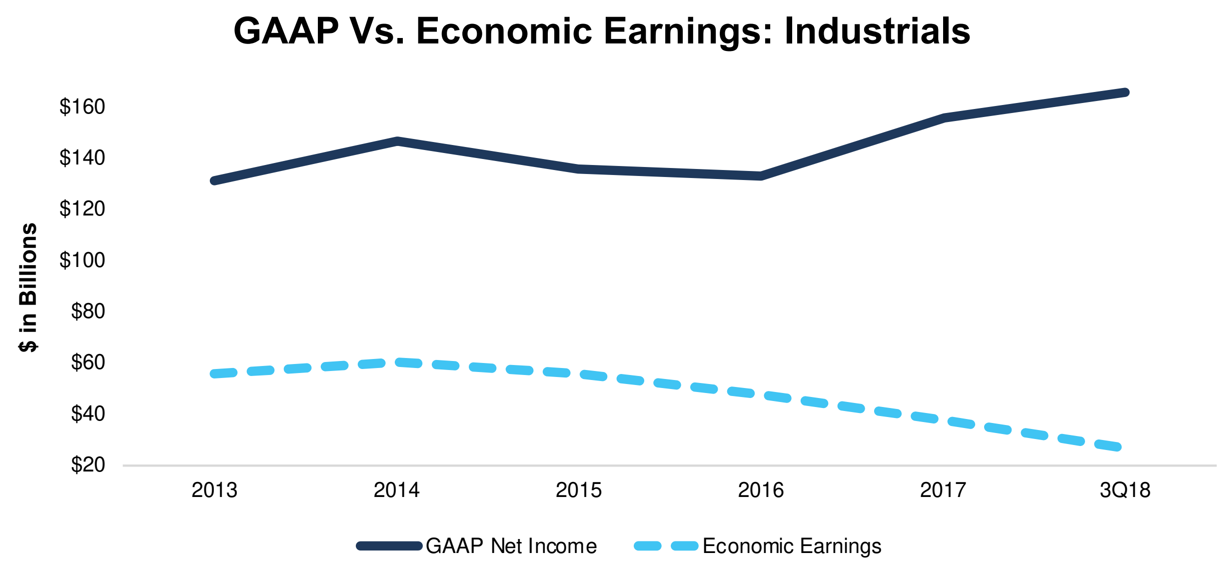


Sources: New Constructs, LLC and company filings.

Industrials Sector

Few sectors have as wide a divergence as Industrials. GAAP earnings continue a steady increase even as economic earnings are down 29% from their 2017 levels over the past twelve months. Waste Management (WM) has one of the largest discrepancies between net income and economic earnings in the entire Industrials sector. TTM net income is up 18% over 2017 while economic earnings are down over 104%. This disconnect earns WM our Unattractive rating.

Figure 11: Economic vs. GAAP Earnings: Industrials

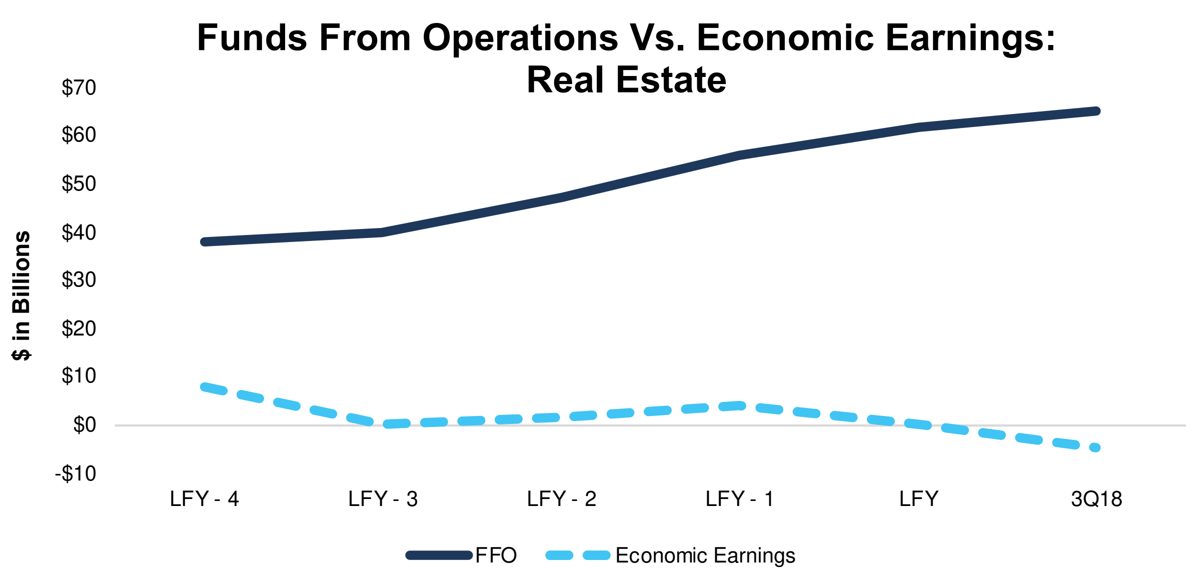


Sources: New Constructs, LLC and company filings.

Real Estate Sector

Real Estate has seen a significant divergence over the last three years. After trending higher from 2014-2016, economic earnings have turned negative and are down 211% since 2016. Meanwhile, funds from operations ("FFO") are up 16% over the same time.

Figure 12: Economic Earnings vs. Funds from Operations: Real Estate

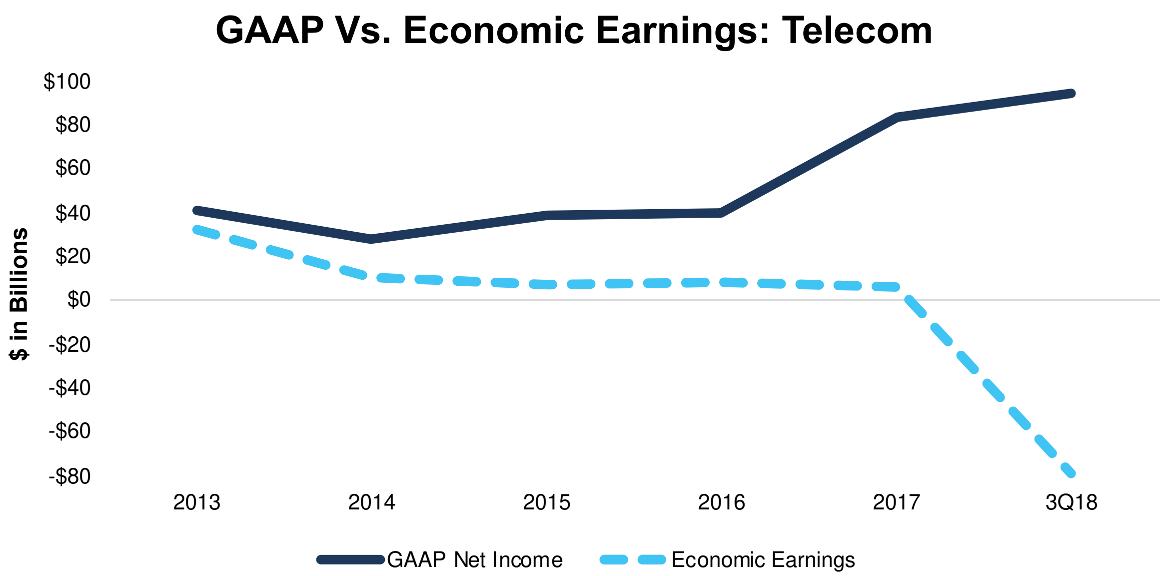


Sources: New Constructs, LLC and company filings.

Telecom Sector

The Telecom sector earns its reputation as an oligopolistic industry. Three large companies in the industry – Verizon (VZ), BCE Inc. (BCE) and Nippon Telegraph and Telephone (NTTYY) – earned $10.5 billion in positive economic earnings over the trailing twelve months. The other 36 companies had a combined economic loss of $89 billion.

Figure 13: Economic vs. GAAP Earnings: Telecom

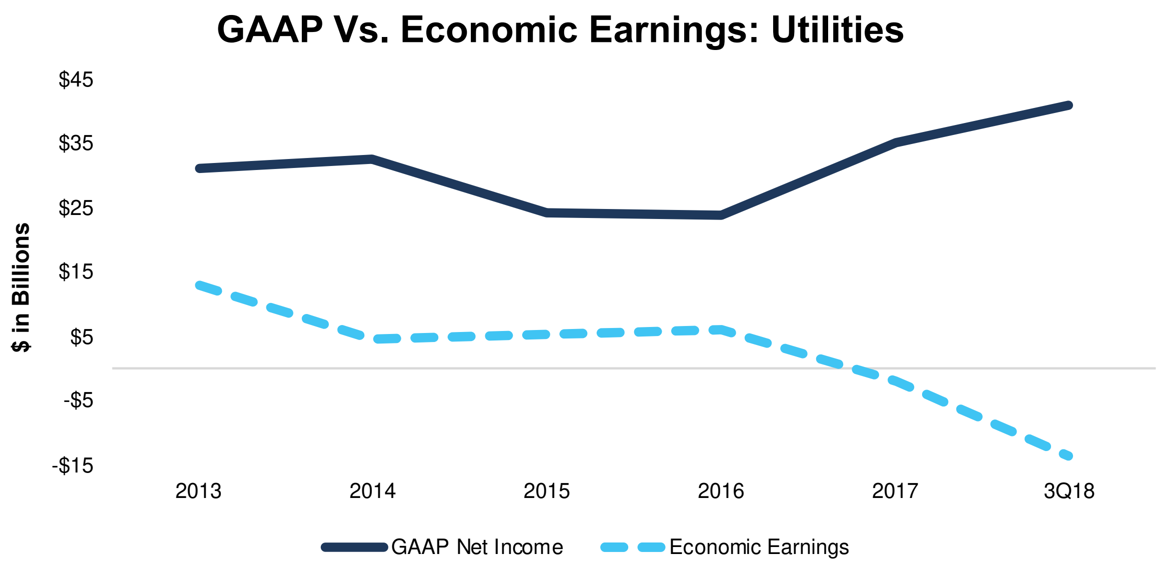


Sources: New Constructs, LLC and company filings.

Utilities Sector

The Utilities sector is another sector with GAAP earnings growth in the double digits even as economic earnings continue lower. Almost all the reported growth comes from the fact that GAAP earnings were artificially depressed by write-downs in 2016. NOPAT is flat, while invested capital and the weighted average cost of capital are rising, leading to the decline in economic earnings.

Figure 14: Economic vs. GAAP Earnings: Utilities



Sources: New Constructs, LLC and company filings.

The Need for Diligence Has Arrived

The breadth of the decline in economic earnings should give investors pause. Almost every sector is experiencing this decline, and even for the Technology sector GAAP earnings overstate the profit growth.

Now more than ever investors need unconflicted and comprehensive fundamental research. Only by analyzing the footnotes and MD&A can one find companies that buck the trend of rising GAAP earnings and falling economic earnings. These are the stocks that will hold up when this bull market finally does come to an end.

To see our Sector ratings and reports, click here.

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Disclosure: David Trainer and Sam McBride receive no compensation to write about any specific stock, style, or theme.

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Appendix

Figure I: Year-Over-Year Change in GAAP Net Income Vs. Economic Earnings

Sector	YoY Change in GAAP Net Income	YoY Change in Economic Earnings	Earnings Discrepancy
Real Estate	13%	-1668%	-1681%
Telecom Services	13%	-1351%	-1364%
Utilities	16%	-612%	-628%
Energy	93%	42%	-51%
Financials	26%	-13%	-39%
Industrials	7%	-29%	-36%
Healthcare	40%	5%	-35%
Consumer Cyclicals	12%	-18%	-29%
Technology	26%	2%	-24%
Consumer Non-cyclicals	4%	-9%	-13%
Basic Materials	15%	8%	-7%

Sources: New Constructs, LLC and company filings.

Figure II: Aggregate Adjustments for NOPAT and Invested Capital: Basic Materials

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$48**
Hidden Non-Operating Items	$0
Reported Non-Operating Items	$28
Change in Reserves	$2
Implied Interest for Off-Balance Sheet Debt	$1
Non-Operating Tax Adjustment	($14)
After Tax Non-Operating Expense	$1
NOPAT	**$66**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$962**
Non-Interest-Bearing Current Liabilities	($143)
Reported Net Assets	**$820**
Short-Term Debt	$21
Excess Cash	($37)
Total Reserves	$2
Unconsolidated Subsidiaries	$0
Discontinued Operations	($4)
Deferred Compensation	($1)
Deferred Taxes	($11)
Over Funded Pensions	($0)
Off-Balance Sheet Operating Leases	$18
Accumulated Unrecorded Goodwill	$9
Accumulated Goodwill Amortization	$4
Accumulated Asset Write-Downs	$163
Other Comprehensive Income	$53
Invested Capital	**$1,037**
Average Invested Capital	**$1,023**

Sources: New Constructs, LLC and company filings.

Figure III: Aggregate Adjustments for NOPAT and Invested Capital: Consumer Cyclicals

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$241**
Hidden Non-Operating Items	$1
Reported Non-Operating Items	$60
Change in Reserves	$0
Implied Interest for Off-Balance Sheet Debt	$14
Non-Operating Tax Adjustment	($70)
After Tax Non-Operating Expense	$9
NOPAT	**$255**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$4,122**
Non-Interest-Bearing Current Liabilities	($1,449)
Reported Net Assets	**$2,672**
Short-Term Debt	$121
Excess Cash	($249)
Total Reserves	$3
Unconsolidated Subsidiaries	$0
Discontinued Operations	($20)
Deferred Compensation	($3)
Deferred Taxes	($68)
Over Funded Pensions	($1)
Off-Balance Sheet Operating Leases	$280
Accumulated Unrecorded Goodwill	$19
Accumulated Goodwill Amortization	$9
Accumulated Asset Write-Downs	$274
Other Comprehensive Income	$79
Invested Capital	**$3,116**
Average Invested Capital	**$3,038**

Sources: New Constructs, LLC and company filings.

Figure IV: Aggregate Adjustments for NOPAT and Invested Capital: Consumer Non-Cyclicals

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$114**
Hidden Non-Operating Items	$1
Reported Non-Operating Items	$46
Change in Reserves	($0)
Implied Interest for Off-Balance Sheet Debt	$4
Non-Operating Tax Adjustment	($29)
After Tax Non-Operating Expense	$1
NOPAT	**$137**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$1,707**
Non-Interest-Bearing Current Liabilities	($481)
Reported Net Assets	**$1,226**
Short-Term Debt	$88
Excess Cash	($70)
Total Reserves	$7
Unconsolidated Subsidiaries	$3
Discontinued Operations	($7)
Deferred Compensation	($1)
Deferred Taxes	($11)
Over Funded Pensions	($2)
Off-Balance Sheet Operating Leases	$85
Accumulated Unrecorded Goodwill	$43
Accumulated Goodwill Amortization	$8
Accumulated Asset Write-Downs	$82
Other Comprehensive Income	$129
Invested Capital	**$1,576**
Average Invested Capital	**$1,546**

Sources: New Constructs, LLC and company filings.

Figure V: Aggregate Adjustments for NOPAT and Invested Capital: Energy

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$126**
Hidden Non-Operating Items	$0
Reported Non-Operating Items	$88
Change in Reserves	$5
Implied Interest for Off-Balance Sheet Debt	$7
Non-Operating Tax Adjustment	($41)
After Tax Non-Operating Expense	$5
NOPAT	**$190**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$3,274**
Non-Interest-Bearing Current Liabilities	($543)
Reported Net Assets	**$2,731**
Short-Term Debt	$91
Excess Cash	($112)
Total Reserves	$8
Unconsolidated Subsidiaries	$1
Discontinued Operations	($13)
Deferred Compensation	($0)
Deferred Taxes	($43)
Over Funded Pensions	($0)
Off-Balance Sheet Operating Leases	$134
Accumulated Unrecorded Goodwill	$43
Accumulated Goodwill Amortization	$2
Accumulated Asset Write-Downs	$652
Other Comprehensive Income	$44
Invested Capital	**$3,537**
Average Invested Capital	**$3,542**

Sources: New Constructs, LLC and company filings.

Figure VI: Aggregate Adjustments for NOPAT and Invested Capital: Financials

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$370**
Hidden Non-Operating Items	$0
Reported Non-Operating Items	$20
Change in Reserves	($2)
Implied Interest for Off-Balance Sheet Debt	$7
Non-Operating Tax Adjustment	($26)
After Tax Non-Operating Expense	$33
NOPAT	**$409**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$39,582**
Non-Interest-Bearing Current Liabilities	($34,742)
Reported Net Assets	**$4,839**
Short-Term Debt	$5
Excess Cash	($35)
Total Reserves	$127
Unconsolidated Subsidiaries	$0
Discontinued Operations	($7)
Deferred Compensation	($0)
Deferred Taxes	($48)
Over Funded Pensions	($31)
Off-Balance Sheet Operating Leases	$135
Accumulated Unrecorded Goodwill	$183
Accumulated Goodwill Amortization	$9
Accumulated Asset Write-Downs	$199
Other Comprehensive Income	$134
Invested Capital	**$5,510**
Average Invested Capital	**$5,442**

Sources: New Constructs, LLC and company filings.

Figure VII: Aggregate Adjustments for NOPAT and Invested Capital: Healthcare

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$121**
Hidden Non-Operating Items	$1
Reported Non-Operating Items	$90
Change in Reserves	$0
Implied Interest for Off-Balance Sheet Debt	$4
Non-Operating Tax Adjustment	($19)
After Tax Non-Operating Expense	$4
NOPAT	**$200**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$2,851**
Non-Interest-Bearing Current Liabilities	($597)
Reported Net Assets	**$2,254**
Short-Term Debt	$87
Excess Cash	($286)
Total Reserves	$0
Unconsolidated Subsidiaries	$0
Discontinued Operations	($11)
Deferred Compensation	($2)
Deferred Taxes	($48)
Over Funded Pensions	($0)
Off-Balance Sheet Operating Leases	$70
Accumulated Unrecorded Goodwill	$142
Accumulated Goodwill Amortization	$9
Accumulated Asset Write-Downs	$238
Other Comprehensive Income	$78
Invested Capital	**$2,530**
Average Invested Capital	**$2,515**

Sources: New Constructs, LLC and company filings.

Figure VIII: Aggregate Adjustments for NOPAT and Invested Capital: Industrials

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$160**
Hidden Non-Operating Items	$0
Reported Non-Operating Items	$73
Change in Reserves	$2
Implied Interest for Off-Balance Sheet Debt	$7
Non-Operating Tax Adjustment	($44)
After Tax Non-Operating Expense	($9)
NOPAT	**$187**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$3,002**
Non-Interest-Bearing Current Liabilities	($924)
Reported Net Assets	**$2,078**
Short-Term Debt	$78
Excess Cash	($138)
Total Reserves	$9
Unconsolidated Subsidiaries	$0
Discontinued Operations	($29)
Deferred Compensation	($2)
Deferred Taxes	($39)
Over Funded Pensions	($2)
Off-Balance Sheet Operating Leases	$129
Accumulated Unrecorded Goodwill	$21
Accumulated Goodwill Amortization	$24
Accumulated Asset Write-Downs	$183
Other Comprehensive Income	$170
Invested Capital	**$2,481**
Average Invested Capital	**$2,454**

Sources: New Constructs, LLC and company filings.

Figure IX: Aggregate Adjustments for NOPAT and Invested Capital: Real Estate

GAAP Earnings Adjustments	$ (in Billions)
Funds From Operations	**$65**
Hidden Non-Operating Items	$0
Reported Non-Operating Items	$7
Change in Reserves	$0
Implied Interest for Off-Balance Sheet Debt	$2
Non-Operating Tax Adjustment	($2)
After Tax Non-Operating Expense	$3
NOPAT	**$50**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$1,473**
Non-Interest-Bearing Current Liabilities	($536)
Reported Net Assets	**$937**
Short-Term Debt	$8
Excess Cash	($22)
Total Reserves	$0
Unconsolidated Subsidiaries	$0
Discontinued Operations	($0)
Deferred Compensation	($1)
Deferred Taxes	($1)
Over Funded Pensions	($0)
Off-Balance Sheet Operating Leases	$31
Accumulated Unrecorded Goodwill	$0
Accumulated Goodwill Amortization	$1
Accumulated Asset Write-Downs	$25
Other Comprehensive Income	$12
Invested Capital	**$991**
Average Invested Capital	**$979**

Sources: New Constructs, LLC and company filings.

Figure X: Aggregate Adjustments for NOPAT and Invested Capital: Technology

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$289**
Hidden Non-Operating Items	$1
Reported Non-Operating Items	$13
Change in Reserves	($0)
Implied Interest for Off-Balance Sheet Debt	$4
Non-Operating Tax Adjustment	$42
After Tax Non-Operating Expense	($6)
NOPAT	**$343**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$3,670**
Non-Interest-Bearing Current Liabilities	($918)
Reported Net Assets	**$2,752**
Short-Term Debt	$110
Excess Cash	($1,096)
Total Reserves	$1
Unconsolidated Subsidiaries	$0
Discontinued Operations	($1)
Deferred Compensation	($0)
Deferred Taxes	($62)
Over Funded Pensions	($0)
Off-Balance Sheet Operating Leases	$88
Accumulated Unrecorded Goodwill	$69
Accumulated Goodwill Amortization	$16
Accumulated Asset Write-Downs	$245
Other Comprehensive Income	$70
Invested Capital	**$2,183**
Average Invested Capital	**$2,057**

Sources: New Constructs, LLC and company filings.

Figure XI: Aggregate Adjustments for NOPAT and Invested Capital: Telecom

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$97**
Hidden Non-Operating Items	$0
Reported Non-Operating Items	$34
Change in Reserves	$0
Implied Interest for Off-Balance Sheet Debt	$4
Non-Operating Tax Adjustment	($63)
After Tax Non-Operating Expense	$4
NOPAT	**$74**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$1,590**
Non-Interest-Bearing Current Liabilities	($241)
Reported Net Assets	**$1,349**
Short-Term Debt	$58
Excess Cash	($29)
Total Reserves	$0
Unconsolidated Subsidiaries	$0
Discontinued Operations	($0)
Deferred Compensation	($0)
Deferred Taxes	($17)
Over Funded Pensions	($0)
Off-Balance Sheet Operating Leases	$83
Accumulated Unrecorded Goodwill	$117
Accumulated Goodwill Amortization	$1
Accumulated Asset Write-Downs	$83
Other Comprehensive Income	$20
Invested Capital	**$1,665**
Average Invested Capital	**$2,848**

Sources: New Constructs, LLC and company filings.

Figure XII: Aggregate Adjustments for NOPAT and Invested Capital: Utilities

GAAP Earnings Adjustments	$ (in Billions)
Net Income	**$43**
Hidden Non-Operating Items	($0)
Reported Non-Operating Items	$33
Change in Reserves	$0
Implied Interest for Off-Balance Sheet Debt	$1
Non-Operating Tax Adjustment	($18)
After Tax Non-Operating Expense	$1
NOPAT	**$60**

Balance Sheet Adjustments	$ (in Billions)
Total Assets	**$1,715**
Non-Interest-Bearing Current Liabilities	($198)
Reported Net Assets	**$1,517**
Short-Term Debt	$78
Excess Cash	($15)
Total Reserves	$0
Unconsolidated Subsidiaries	$0
Discontinued Operations	($11)
Deferred Compensation	($1)
Deferred Taxes	($1)
Over Funded Pensions	($2)
Off-Balance Sheet Operating Leases	$20
Accumulated Unrecorded Goodwill	$6
Accumulated Goodwill Amortization	$2
Accumulated Asset Write-Downs	$125
Other Comprehensive Income	$14
Invested Capital	**$1,733**
Average Invested Capital	**$1,714**

Sources: New Constructs, LLC and company filings.

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 tangible, quantifiable correlation 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 robo-analyst technology empowers us to perform for thousands of stocks, ETFs and mutual funds.

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