The (Gross Profitability) Trend is Your Friend

Author

Temi Oyeniyi, CFA
312-233-7151
toyeniyi@spglobal.com

Trend strategies based on changes in stock price or earnings are widely used by investors. In this report, we examine the performance of a trend strategy derived from gross profitability ("GP"). Gross profitability trend ("GPtrend"), was proposed by Akbas et al.[1] who argued that the trajectory of a firm's profitability is just as important as the level (GP). We define GPtrend as the year-on-year difference in either quarterly or trailing twelve month GP, where GP is calculated as revenue minus cost of goods sold, divided by total assets. Our back-tests confirm that GPtrend has historically been an effective stock selection signal globally, with the added benefit of low to moderate correlation with commonly used investment strategies. Our findings include:

- **GPtrend generated statistically significant average annualized long-only and long-short excess returns[2] in five of the six regions we tested the signal** (Table 1). Performance was strongest (long-short basis) in Asia ex-Japan (6.68%), Europe ex-U.K. (6.66%) and the U.S. (6.50%), and weakest in Japan (1.15%).

- **Gross profitability trend was effective across multiple investment style categories** (Table 2), indicating that the factor can be beneficial to a value, growth or core and large/small cap investment process.

- **GPtrend's performance is not subsumed by gross profitability, earnings revision or price momentum:** GPtrend retains its ability to separate winner stocks from loser stocks, after controlling for GP (Table 3). The average annualized return of the most attractive GP/GPtrend interaction portfolio minus the least attractive interaction portfolio is 12.19%. The factor's excess return is also still significant after controlling for both earnings and price momentum (Table 4).

- **Performance was robust to several methodologies of determining trend**: We computed gross profitability trend using six different methods and all six trend metrics generated statistically significant average annualized long-short excess returns in the Russell 3000 universe (Table 5).

1. Introduction

Novy-Marx (2013) documented a positive relationship between gross profitability and future stock return[3]. He found that gross profitability factors ("GP") generated value-like excess returns, even though they were growth strategies. Akbas, Jiang and Koch ("AJK") in their 2017 paper examined a different aspect of a firm's profitability – GP trajectory, rather than GP level.

Consider two companies (Figure 1) operating in the same industry with identical profitability levels (10%) as at fiscal year end 2017. AJK contend that it is important to understand how each company arrived at its current profitability level, as it demonstrates the evolving competitive environment in which the entity operates. A company that is not able to sustain

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[1] Akbas, Jiang and Koch (2017), "The Trend in Firm Profitability and the Cross-Section of Stock Returns".
[2] Long-only excess return is the equal weighted return of the top 20% (quintile) or 33% (tertile) of stocks (based on a metric) in a universe minus the equal-weighted return of the universe. Long-short excess return is the equal weighted return of the top quintile or tertile minus the equal-weighted return of the bottom decile or tertile. Excess returns are calculated after controlling for market, value and size risk factors.
[3] Novy-Marx, R., (2013) "The Other Side of Value: The Gross Profitability Premium".

its competitive advantage would most likely see that advantage erode over time (Company B), while a firm that can boost productivity and gain market share, would likely experience improving profitability levels (Company A).

Figure 1: Hypothetical Gross Profitability Trajectory for Two Companies In the same Industry
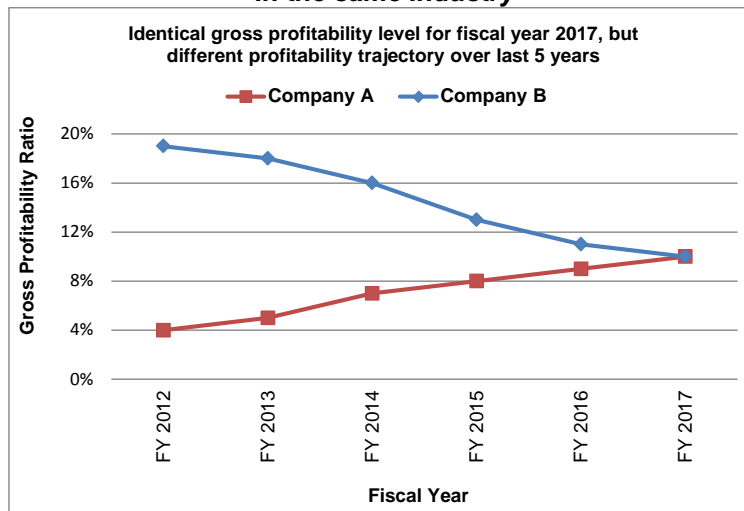
Source: S&P Global Market Intelligence Quantamental Research. Hypothetical data as at 04/12/2018.

AJK proposed that a firm's gross profitability trajectory can be determined by fitting a trend line through the company's gross profitability values over the last 8 quarters.

$$GPQ_{iq} = \propto_{iq} + \beta_{iq}t + \gamma_1 D_1 + \gamma_2 D_2 + \gamma_3 D_3 + \varepsilon_{iq}$$

Where:

- GPQ_{iq} is quarterly gross profitability (quarterly sales minus quarterly cost of goods sold, deflated by total assets) for firm i in quarter q
- t = 1,2,…8, designates the previous 8 quarters of GPQ_{iq} data
- D_1, D_2 and D_3 are quarterly dummies to account for seasonality
- β_{iq} = GPtrend (coefficient of the trend line)
- $\propto_{iq}, \gamma_1, \gamma_2, \gamma_3$ = regression constant, coefficients of dummy variables and ε_{iq} = regression error

AJK's trend metric is difficult to calculate globally where firms may not report quarterly. For this reason, we adopted the following approach to estimate GPtrend in the US and globally:

GPtrend (U.S) = GPQ_{iqt} - $GPQ_{iq\ t-4}$ (the year-on-year difference in GPQ_{iq}).
GPtrend (Global ex U.S) = GP_{it} - $GP_{i\ t-1}$ (the year-on-year difference in trailing twelve month GP).

2. Global Factor Performance

GPtrend's back-test results (sector-neutral ranking, excluding financials) are displayed in Table 1 for six countries/regions. Long-only and long-short returns are presented in USD, equal-weighted and adjusted for market, size and value risk factors (Fama-French 3-factor adjusted). Canadian and U.K. results are based on tertiles, while the other countries/regions are based on quintiles.

GPtrend's long-only return, long-short return, information coefficient (IC), and hit rates[4] are statistically significant at the 1% level in four of six countries/regions – U.S, Developed Markets Europe ex-U.K., Canada and Developed Markets Asia ex-Japan.

Japan is the only country with an average 1-month IC and long-short return that is not significant at any level. The superiority of value type strategies in Japan over other strategies, such as momentum and growth is well documented[5]. For example, while book-to-price delivered an average annualized long-short return of 13% between Jan 1990 - March 2018 (BMI Japan universe), the return to 1-year change in earnings per share was -2.16%[6]. We document GPtrend's growth-like characteristics in Section 2.4.

Table 1: GPtrend: Global Performance Summary (Start Date – February 2018)

Universe	Back-test Start Date	Average Quintile/ Tertile Count	1-month Information Coefficient (IC)	Annualized Long-Only Active Return	Annualized Information Ratio (Long-Only Active Return)	Hit Rate (Long-Only Active Return)	Annualized Long-Short Return	Annualized Information Ratio (Long-Short Return)	Hit Rate (Long-Short Return)
U.S (Russell 3000)	Jan 1988	457	0.016***	2.72%***	0.94	62%***	6.50%***	1.62	70%***
Canada (S&P/TSX)	April 1997	67	0.020***	2.96%***	0.78	59%***	4.84%***	0.76	54%
U.K (BMI U.K)	Jan 1996	109	0.008**	0.96%	0.33	54%	2.02%**	0.42	56%*
BMI Dev. Markets Europe ex U.K	Jan 1996	175	0.020***	2.58%***	0.92	60%***	6.66%***	1.51	70%***
Japan (BMI Japan)	June 1998	194	0.006	1.15%*	0.37	56%	1.15%	0.22	60%***
BMI Dev. Markets Asia ex Japan	June 1998	137	0.018***	3.05%***	0.89	60%***	6.68%***	1.25	65%***

*** statistically significant at 1% level; ** statistically significant at 5% level; * statistically significant at 10% level.
Source: S&P Global Market Intelligence Quantamental Research. For all exhibits, all returns and indices are unmanaged, statistical composites and their returns do not include payment of any sales charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results. Data as at 04/12//2018.

2.1. Performance by Investment Style

GPtrend's performance in value/growth and large/small cap style categories (Table 2), documents the factor's effectiveness across multiple investment styles. Back-test results (long-only, long-short return and IC) are similar in both value and growth (including core, presented in Table 1) style categories, indicating that the factor can be beneficial to a value, growth or core investment process.

Table 2: GPtrend: Style Performance Summary (January 1988 – February 2018)

Universe	Back-test Start Date	Average Quintile Count	1-month Information Coefficient (IC)	Annualized Long-Only Active Return	Annualized Information Ratio (Long-Only Active Return)	Hit Rate (Long-Only Active Return)	Annualized Long-Short Return	Annualized Information Ratio (Long-Short Return)	Hit Rate (Long-Short Return)
Russell 3000 Value	Jan 1988	281	0.018***	2.77%***	0.77	61%***	6.28%***	1.42	69%***
Russell 3000 Growth	Jan 1988	315	0.016***	2.90%***	0.96	61%***	6.34%***	1.34	66%***
Russell 1000	Jan 1988	154	0.011***	1.46%**	0.47	57%**	2.74%***	0.61	58%***
Russell 2000	Jan 1988	300	0.019***	3.28%***	0.93	63%***	7.88%***	1.56	66%***

*** statistically significant at 1% level; ** statistically significant at 5% level; * statistically significant at 10% level.
Source: S&P Global Market Intelligence Quantamental Research. For all exhibits, all returns and indices are unmanaged, statistical composites and their returns do not include payment of any sales charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results. Data as at 04/12//2018.

[4] Information Coefficient (IC) is the rank correlation of a metric to forward stock return. Hit Rate is the count of monthly positive long-only active returns divided by the count of the entire monthly history.
[5] Fama, E., and French, K., (1998); Asness, C., (2011)
[6] Source S&P Global Market Intelligence - Alpha Factor Library (BMI Japan Universe): January 1990 to March 2018.

Although factor performance is stronger in the small-cap space (Russell 2000) compared to the large-cap segment (Russell 1000), performance metrics in the large-cap spectrum are significant at least at the 5% level.

2.2. Controlling for Gross Profitability, Earnings Revision and Price Trend

The Quantamental Research Group documented the efficacy of gross profitability in our **January 2015 paper**, where the average annualized long-short spread to GP was 7.90% (Fama-French adjusted) in the Russell 3000 universe[7]. Since GPtrend tracks the trend in gross profitability, it is possible that the returns we presented in in Table 1 can be explained, or are subsumed by GP.

We use a 3 by 3 dependent sort to determine if GPtrend is still effective after controlling for GP in Table 3. We first rank by GP into 3 tertiles (rows), and then within each GP tertile, rank by GPtrend (columns).

Table 3: Average Annualized Excess Return Using 3 by 3 Dependent Sort: Russell 3000 (January 1988 – February 2018)

	GPTrend			
	Tertile 1	Tertile 2	Tertile 3	Long-Short
GP Tertile 1	5.85%***	3.04%***	0.23%	5.62%***
GP Tertile 2	3.68%***	0.60%	-1.32%*	4.99%***
GP Tertile 3	-2.87%***	-3.76%***	-6.34%***	3.47%***

*** statistically significant at 1% level; ** statistically significant at 5% level; * statistically significant at 10% level.
Source: S&P Global Market Intelligence Quantamental Research. For all exhibits, all returns and indices are unmanaged, statistical composites and their returns do not include payment of any sales charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results. Each of the nine portfolios has approximately 255 securities on average. Data as at 04/12//2018.

GPtrend is still an effective stock selection signal after controlling for GP, as indicated by the monotonic excess returns across each GP tertile row. The average annualized long-short returns (tertile 1 – tertile 3) across all three GP tertiles are also significant at the 1% level. Stocks with attractive GP and GPtrend levels (upper left portfolio, 5.85%) outperform stocks with poor GP and GPtrend levels (lower right portfolio, -6.34%) by over 12% annually.

Sell-side analysts are astute at identifying trends, and can revise their earnings per share estimate based on their view of a company's profitability trajectory. GPtrend's excess returns could therefore be diminished after accounting for the returns to earnings revision and price momentum[8].

The monthly return to GPtrend is 0.36% (significant at the 1% level) after regressing out the long-short returns to earnings revision and price momentum (Table 4), indicating that the excess returns to GPtrend are not subsumed by both factors.

$$GPtrend_m = intercept + earningsRevision_m + priceMomentum_m + \varepsilon_m$$
where $GPtrend_m$, $earningsRevision_m$, $priceMomentum_m$ are monthly long-short returns

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[7] Russell 3000 (Jan 1996 – Aug 2014). The long-short return to GP is 9.74% when we use a Jan 1988 – Feb 2018 test period.
[8] Earnings revision is calculated as the 3-month change in consensus FY1 earnings per share divided by price. Price momentum is calculated as the stock return over the previous 12-months, skipping the most recent month.

Table 4: GP Trend Monthly Excess Return Adjusted for Fama-French 3-Factors Plus Earnings Revisions and Price Momentum Russell 3000 (April 1999 – February 2018)

Variable	Coefficient
Intercept	0.36%***
earningsRevision	0.15***
priceMomentum	-0.02

*** statistically significant at 1% level; ** statistically significant at 5% level; * statistically significant at 10% level.
Source: S&P Global Market Intelligence Quantamental Research. For all exhibits, all returns and indices are unmanaged, statistical composites and their returns do not include payment of any sales charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results. Data as at 04/12//2018.

2.3. Is GPtrend's Performance Robust to Different Trend Formulations?

We tested five additional gross profitability trend metrics (Table 5) to ensure that the result in Table 1 was not due to the methodology we used to determine gross profitability trajectory.

Table 5: Performance Summary of Gross Profitability Trend Strategies: Russell 3000 Universe (January 1988 – February 2018)

Factor	Defintion	1-month Information Coefficient (IC)	Annualized Long-Only Active Return	Annualized Information Ratio (Long-Only Active Return)	Hit Rate (Long-Only Active Return)	Annualized Long-Short Return	Annualized Information Ratio (Long-Short Return)	Hit Rate (Long-Short Return)
GPtrend	Difference in year-on-year quarterly GP (GPQ)	0.016***	2.72%***	0.94	62%***	6.50%***	1.62	70%***
GPtrendDemean	Curent GPtrend demeaned by GPtrend values over last 12 quarters	0.018***	3.17%***	1.13	61%***	5.96%***	1.40	66%***
GPTTM_Trend	Difference in year-on-year trailing 12-month GP	0.011***	1.34%**	0.46	58%***	3.89%***	0.90	62%***
GPTTM_TrendDemean	Curent GPTTM_Trend demeaned by GPTTM_Trend values over last 3 years	0.011***	1.69%***	0.62	59%***	3.62%***	0.86	63%***
TrendLine8Q	AJK formulation (trend line through 8 quarters of GPQ values)	0.011***	3.03%***	1.08	65%***	4.40%***	1.01	60%***
TrendLine12Q	AJK formulation (trend line through 12 quarters of GPQ values)	0.013***	2.86%***	1.02	63%***	4.55%***	1.12	63%***

Source: S&P Global Market Intelligence Quantamental Research. For all exhibits, all returns and indices are unmanaged, statistical composites and their returns do not include payment of any sales charges or fees an investor would pay to purchase the securities they represent. Such costs would lower performance. It is not possible to invest directly in an index. Past performance is not a guarantee of future results. Data as at 04/12//2018.

Performance metrics of the five additional gross profitability trend metrics (row 1 is a repeat of results presented in Table 1), including the AJK formulations (last 2 rows), were significant at either the 1% or 5% levels. These results demonstrate that gross profitability trend can be estimated multiple ways, without losing its efficacy, indicating robustness. All the gross profitability trend metrics are correlated (see Appendix A for correlation matrix).

2.4. Correlation with Popular Investment Strategies

GPtrend has growth-like characteristics (Table 6), as the only strategy it has a significant rank correlation with is earnings growth (1-year change in earnings per share). The factor's average correlation with value (earnings yield), operating efficiency (return on assets), quality (accruals) and leverage (debt to assets) is close to zero. This low correlation with other non-growth strategies provides diversification benefits for investors seeking to include the factor in an existing multi-factor stock selection strategy.

Table 6: GPtrend Average Rank Correlation with Investment Strategies
Russell 3000 Universe (January 1988 – February 2018)

	Earnings Growth	Earnings Yield	Operating Cash Flow to Assets	Return on Assets	Debt to Assets	Accruals
GP Trend	0.18***	-0.08	0.01	-0.03	-0.04	0.08

*** statistically significant at 1% level; ** statistically significant at 5% level; * statistically significant at 10% level.
Source: S&P Global Market Intelligence Quantamental Research. Data as at 04/12//2018.

It is also important to note that even though GPtrend has a moderate correlation with earnings growth, it has historically delivered superior average annualized long-short returns: 6.50% for GPtrend vs. 3.76% for earnings growth, with an information ratio that is twice as large.

3. Gross Profitability Trend and Future Gross Profitability Level

According to the dividend discount model, higher expected profitability implies higher expected returns. AJK proposed that GPtrend is a proxy for expected future profitability and this explains its relationship with forward stock return. To test this hypothesis, they estimated Fama-MacBeth coefficients for several predictors (including GPtrend) of future gross profitability, and found GPtrend to be important. We confirm AJK's findings[9] in Table 7 using the regression equation below:

$$GP_{it+1} = \beta_0 + \beta_1 AG_{it} + \beta_2 BG_1 + \beta_3 SIZE_{it} + \beta_4 GPtrend_{it} + \beta_5 GP_{it} + \beta_6 RET6M_{it} + \varepsilon_{it}$$

Where AG (1-year growth in total assets), BP (log of book-to-price), size (log of market capitalization), GPtrend (z-score), GP (z-score) and RET6M (stock return over the last 6 months) are the predictors, and one-year ahead gross profitability is the dependent variable.

Table 7: Coefficients of Predictors of One-year Ahead Gross Profitability:
Russell 3000 (December 1988 – December 2017)

Variable	Coefficient
Intercept	0.344***
Asset Growth	-0.020***
Log Book-to-Price	-0.005***
Log Size	0.002**
GPtrend	0.013***
Gross profitability (GP)	0.254***
6-month Return	0.029***

*** statistically significant at 1% level; ** statistically significant at 5% level; * statistically significant at 10% level.
Source: S&P Global Market Intelligence Quantamental Research. Adjusted R^2 = 0.87. Data as at 04/12//2018.

4. Data

S&P Capital IQ Premium Financials and Compustat North America packages were the sources of fundamental data for this study. Both are point-in-time databases, eliminating any look-ahead bias in our backtests. We used the Russell 3000 universe as the basis for our U.S. tests, the S&P/TSX for Canadian analysis and the S&P BMI (broad market index) sub-indices for all other countries/regions covered in this paper.

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[9] AJK's regression included two liquidity metrics. Our conclusions are qualitatively similar if we include both liquidity metrics.

5. Conclusion

We document GPtrend's effectiveness as a stock selection signal in five of six countries/regions where we tested the factor. Even though gross profitability trend is derived from changes in gross profitability level (GP), GPtrend's average long-only and long-short excess returns were still significant after controlling for GP. Stocks with attractive GP and GPtrend levels outperformed stocks with poor GP and GPtrend levels by over 12% annually.

Our results were also robust to different methods of determining gross profitability trend. GPtrend has a low correlation with value, quality, capital efficiency and leverage strategies. Investors with global/regional/country and/or style (value/growth/core) mandates may find including GPtrend beneficial to their overall investment process.

APPENDIX A: Rank Correlation Matrix of Different Gross Profitability Trend Formulations Russell 3000 (January 1988 – February 2018)

	GPtrend	GPtrend_Demean	GPTTM_Trend	GPTTM_Trend_Demean	Trend Line8Q	Trend Line12Q
GPtrend	1	0.59***	0.63***	0.39***	0.63***	0.35***
GPtrend_Demean		1	0.60***	0.80***	0.58***	0.69***
GPTTM_Trend			1	0.70***	0.89***	0.63***
GPTTM_Trend_Demean				1	0.65***	0.84***
TrendLine8Q					1	0.69***
TrendLine12Q						1

Source: S&P Global Market Intelligence Quantamental Research. Data as at 04/12//2018.

Factor	Defintion
GPtrend	Difference in year-on-year quarterly GP (GPQ)
GPtrendDemean	Curent GPtrend demeaned by GPtrend values over last 12 quarters
GPTTM_Trend	Difference in year-on-year trailing 12-month GP
GPTTM_TrendDemean	Curent GPTTM_Trend demeaned by GPTTM_Trend values over last 3 years
TrendLine8Q	AJK formulation (trend line through 8 quarters of GPQ values)
TrendLine12Q	AJK formulation (trend line through 12 quarters of GPQ values)

Source: S&P Global Market Intelligence Quantamental Research. Data as at 04/12//2018.

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Our Recent Research

May 2018: <u>Buying the Dip: Did Your Portfolio Holding Go on Sale?</u>

Buy the Dip' ("BTD"), the concept of buying shares after a steep decline in stock price or market index, is both a Wall Street maxim, and a widely used investment strategy. Investors pursuing a BTD strategy are essentially buying shares at a "discounted" price, with the opportunity to reap a large pay-off if the price drop is temporary and the stock subsequently rebounds. In this report, we examine the stock performance of the 'Buy the Dip' (BTD) strategy within the Russell 1000 Index from January 2002 through October 2017. We find:

- A strategy of investing in securities that fell more than 10% relative to the broader market index, during a single day, significantly outperforms the index between 2002 and 2017 in the subsequent periods.
- Though many large sell-offs may result from earnings disappointments and guidance changes, these events do not seem to impact a BTD strategy.
- A group of stock selection signals including institutional ownership, price trend and valuation, help to improve the overall performance of the BTD strategy

March 2018: <u>In the Money: What Really Motivates Executive Performance?</u>

In this report, we explore what types of compensation motivate top executives to boost shareholder returns, and the fundamental characteristics of companies in which executives are motivated to boost stock performance. Our research findings include:

- We find no link between high levels of incentive compensation, alone, and higher-than-average shareholder returns.
- Companies where CEOs hold large (negligible) amounts of stock option holdings tend to outperform (underperform) peers.
- Companies where CEOs hold large amounts of options repurchase more shares and issue more debt than industry peers, and engage in less merger & acquisition activity. These companies also have higher long-term sales, earnings per share, and cash flow growth rates than industry peers.

February 2018: <u>The Art of the (no) Deal: Identifying the Drivers of Canceled M&A Deals</u>

Terminated deals impact capital market participants in various ways. Predicting deals that are likely to be canceled is of interest to both M&A advisers and equity investors. This report identifies several drivers of cancelled deals, including size, deal proportionality, perceived price discount, CEO age, and regulatory risk, and concludes with a model built from four of these drivers.

January 2018: <u>U.S Stock Selection Model Performance Review</u>

Starting with the U.S. Election in November 2016, the S&P 500 Index has registered 14 consecutive months of positive returns. Only once has the S&P 500 had a longer run of positive returns since 1959. Coincident with strong equity returns, U.S. stocks began to trade on the basis of their own idiosyncratic factors, as opposed to sector or common factor risk.

All 4 of our U.S strategy models returned positive long-only returns in 2017. This report reviews the performance of all 4 models during the year.

September 2017: [Natural Language Processing - Part I: Primer](#)

Given the growing interest in NLP among investors, we are publishing this primer to demystify many aspects of NLP and provide three illustrations, with accompanying Python code, of how NLP can be used to quantify the sentiment of earnings calls. The paper is laid out into four sections:

- **What is NLP:** We demystify common NLP terms and provide an overview of general steps in NLP.
- **Why is NLP Important:** Forty zettabytes (10^{21} bytes) of data are projected to be on the internet by 2020, out of which more than eighty percent of the data are unstructured in nature, requiring NLP to process and understand
- **How can NLP help me:** We derive insights from earnings call transcripts measuring industry-level trends or language complexity.
- **Where do I start:** Code for each use is enclosed, enabling users to replicate the sentiment analysis

July 2017: [Natural Language Processing Literature Survey](#)

In client conversations, Natural Language Processing (NLP) and the analysis of unstructured data is a topic of regular conversation. S&P Global Market Intelligence offers several unstructured datasets garnering market attention. The first is earnings call transcripts, with unique speaker id's to identify who is speaking on the call. The second data set is the text content in the 10-K. In advance of a publication of Quantamental primer on NLP next month which will take readers through the process of handling unstructured data and generating sentiment scores, we offer this literature survey. What follows are ten papers that the team has identified as being of particular interest to investors on this topic.

June 2017: [Research Brief: Four Important Things to Know About Banks in a Rising Rate Environment](#)

With the Fed signaling further rate hikes ahead, bank investors may want to know which investment strategies have worked best in a rising rate environment historically. This paper leverages our empirical work on the SNL Bank fundamental data to aid investors in selecting bank stocks as rates rise.

April 2017: [Banking on Alpha: Uncovering Investing Signals Using SNL Bank Data](#)

March 2017: [Capital Market Implications of Spinoffs](#)

January 2017: [U.S. Stock Selection Model Performance Review 2016](#)

November 2016: [Electrify Stock Returns in U.S. Utilities](#)

October 2016: [A League of their Own: Batting for Returns in the REIT Industry - Part 2](#)

September 2016: [A League of their Own: Batting for Returns in the REIT Industry - Part 1](#)

August 2016: [Mergers & Acquisitions: The Good, the Bad and the Ugly (and how to tell them apart)](#)

July 2016: [Preparing for a Slide in Oil Prices -- History May Be Your Guide](#)

June 2016: [Social Media and Stock Returns: Is There Value in Cyberspace?](#)

April 2016: [An IQ Test for the "Smart Money" – Is the Reputation of Institutional Investors Warranted?](#)

March 2016: [Stock-Level Liquidity – Alpha or Risk? - Stocks with Rising Liquidity Outperform Globally](#)

February 2016: [U.S. Stock Selection Model Performance Review - The most effective investment strategies in 2015](#)

January 2016: [What Does Earnings Guidance Tell Us? – Listen When Management Announces Good News](#)

December 2015: [Equity Market Pulse – Quarterly Equity Market Insights Issue 6](#)

November 2015: [Late to File - The Costs of Delayed 10-Q and 10-K Company Filings](#)

October 2015: [Global Country Allocation Strategies](#)

September 2015: [Equity Market Pulse – Quarterly Equity Market Insights Issue 5](#)

September 2015: [Research Brief: Building Smart Beta Portfolios](#)

September 2015: [Research Brief – Airline Industry Factors](#)

August 2015: [Point-In-Time vs. Lagged Fundamentals – This time i(t')s different?](#)

August 2015: [Introducing S&P Capital IQ Stock Selection Model for the Japanese Market](#)

July 2015: [Research Brief – Liquidity Fragility](#)

June 2015: [Equity Market Pulse – Quarterly Equity Market Insights Issue 4](#)

May 2015: [Investing in a World with Increasing Investor Activism](#)

April 2015: [Drilling for Alpha in the Oil and Gas Industry – Insights from Industry Specific Data & Company Financials](#)

March 2015: Equity Market Pulse – Quarterly Equity Market Insights Issue 3

February 2015: U.S. Stock Selection Model Performance Review - The most effective investment strategies in 2014

January 2015: Research Brief: Global Pension Plans - Are Fully Funded Plans a Relic of the Past?

January 2015: Profitability: Growth-Like Strategy, Value-Like Returns - Profiting from Companies with Large Economic Moats

November 2014: Equity Market Pulse – Quarterly Equity Market Insights Issue 2

October 2014: Lenders Lead, Owners Follow - The Relationship between Credit Indicators and Equity Returns

August 2014: Equity Market Pulse – Quarterly Equity Market Insights Issue 1

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