Three Tools for Trump Tariffs 2.0

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Tariffs create uncertainty for investors, executives, and policymakers. In an unpredictable environment, leveraging data effectively offers a competitive advantage. Here, we explore three tools designed to monitor and anticipate the impacts of potential tariffs enacted during President Donald Trump's second term in office.
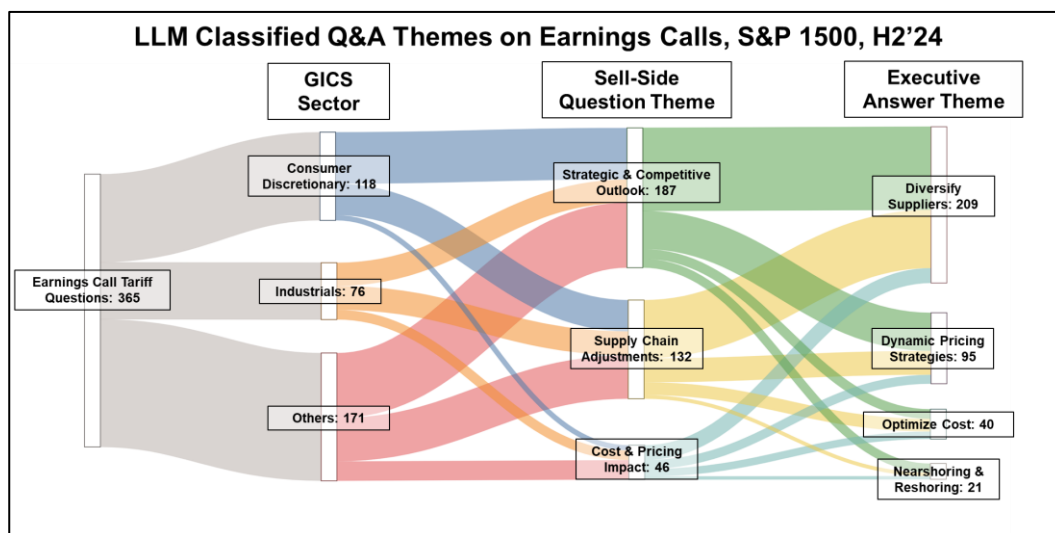

Figure 1 Source: S&P Global Market Intelligence Quantitative Research & Solutions (QRS). Data as of 1/17/2025.

- **Tool 1: Headcount Analytics + Geo-Segment Revenue.** Companies with sizeable international operations and significant U.S. sales are disproportionately affected by U.S. tariffs, often underperforming their peers. This tool provides stakeholders a company-level, or aggregated view, into relative exposure and how firms are responding to tariffs.

- **Tool 2: Company Connections from Business Relationships.** Industries affected by tariffs typically experience greater disruptions in their supply chains compared to their counterparts. Timely monitoring of supply chain changes provides stakeholders with the opportunity to act on disruption.

- **Tool 3: ProntoNLP AI.** Earnings calls serve as a platform for executives to address risks and outline strategies. Utilizing AI to parse call transcripts offers an efficient mechanism to monitor the questions investors and analysts are asking, as well as how executives are responding.

Headcount Analytics + Geo-Segment Revenue
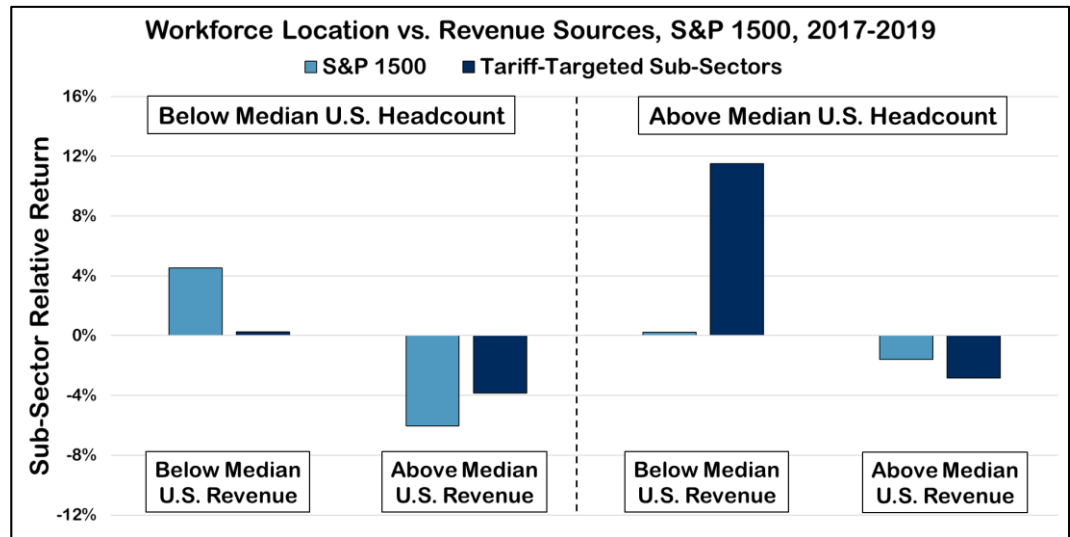
The Tool: Headcount analytics, integrated with geo-segment revenue data, offers insights into the geography of a company's operations and customer base. When operations are not collocated, products must cross borders to reach customers. Companies with significant operations outside the U.S. (indicated by below-median U.S. headcount) and substantial U.S. sales (indicated by above-median U.S. revenue) are particularly vulnerable to the impacts of U.S. tariffs.

Key Takeaways:

- Companies with a high percentage of international headcount and significant U.S. revenue underperformed their peers by 386 basis points from 2017-2019.

- Conversely, firms with above-median U.S. headcount and below-median U.S. revenue outperformed peers by more than 11%, indicating that domestic operational advantages outweighed the risks of retaliatory tariffs.

Table 1: Headcount Analytics + Geo-Segment Revenue Tariff Use Cases by Persona

Policymaker	Utilizes the tool to benchmark and track the effectiveness of reshoring initiatives by monitoring changes in U.S. headcount and assessing the relative economic activity through U.S. revenue metrics.
Corporate Executive	Leverages this tool to gain competitive intelligence by benchmark headcount exposure and geo-segment revenue within a peer group, as well as monitor changes over time.
Investor	Incorporates relative tariff exposure into investment theses by recognizing that firms with operating international but selling domestically underperformed during the first Trump administration.

Figure 2 and Table 1 Source: S&P Global Market Intelligence Quantitative Research & Solutions (QRS). Past performance is not a guarantee of future results. Data as of 1/17/2025.

Company Connections from Business Relationships (CC-BR)
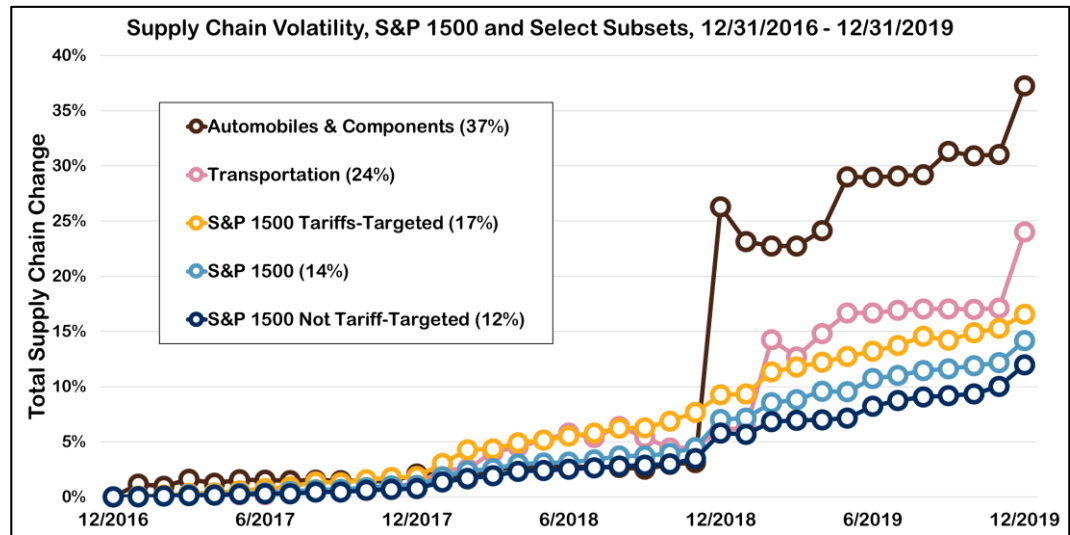
The Tool: Company Connections from Business Relationships is a compilation of disclosed business-to-business (B2B) relationships from regulatory filings, enhanced through a patented[1] process to estimate economic significance when not disclosed. This tool provides insights into company-level supply chain specifics and allows for monitoring net changes in a firm's or industry's overall supply chain strategy.

Key Takeaways:

* Tariff-targeted firms exhibited approximately 17% supply chain perturbation from 2017 to 2019, which is 5% more than non-target peers. Some targeted industries experienced even larger disruptions, such as Automobiles & Components at 37%.

Table 2: Connections from Business Relationships Tariff Use Cases by Persona

Policymaker	Utilizes this tool to monitor tariff-induced supply chain disruptions. By drilling into individual companies' suppliers and customers, policymakers can develop targeted strategies to mitigate adverse effects while achieving desired tariff outcomes.
Corporate Executive	Benchmarks company supply chain resilience against peers to identify vulnerabilities. Understanding competitors' spending patterns with suppliers can provide insights into market positioning and diversification strategies.
Investor	Monitors supply chain instability as an early warning signal for operational challenges and potential cost increases, facilitating more informed investment decisions.

Figure 3 and Table 2 Source: S&P Global Market Intelligence Quantitative Research & Solutions (QRS). Past performance is not a guarantee of future results. Data as of 1/17/2025.

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[1] U.S. Patent No. 9,092,821, "Method for Estimating Flows Between Economic Entities," filed November 17, 2011, by Eric McGill, assigned to Ashbury Heights Capital, LLC. Available at: USPTO Patent Search.

ProntoNLP Large Language Modeling (LLM) + Machine-Readable Transcripts
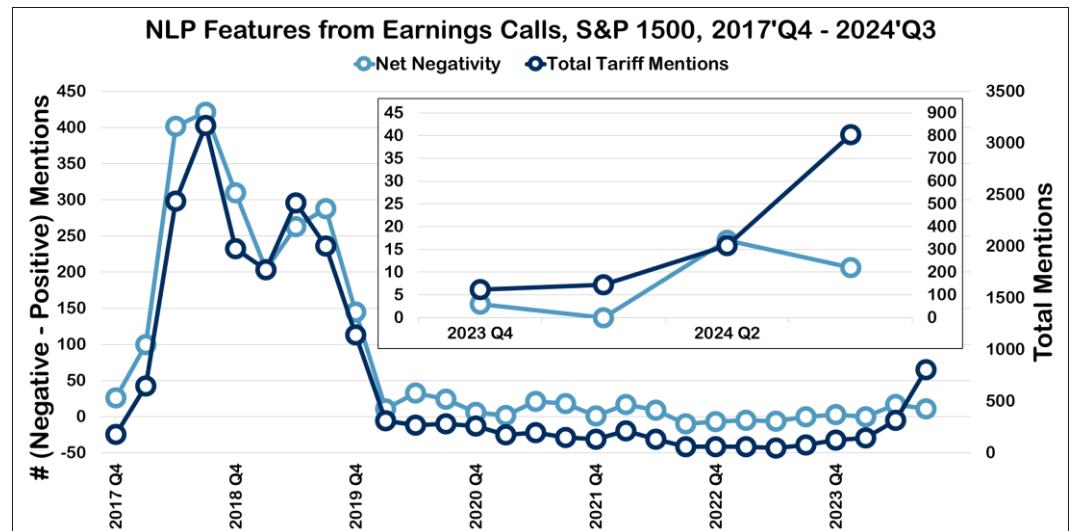
The Tool. Earnings call transcripts processed with the novel large language model, ProntoNLP LLM, provides bespoke features that quantify topics of interest. For example, tariff talk can be semantically grouped (Figure 1) or assessed for sentiment (Figure 4).

Key Takeaways

- Executives overwhelmingly emphasized supplier diversification in response to questions about tariffs (Figure 1), with 57% of responses highlighting this strategy. Discussions of supplier diversification have surged by 50.7% since the start of the post pandemic period.

- Despite a significant increase in tariff discussions in Q3 2024, the net negativity associated with these mentions remains muted. After surpassing a negativity threshold of 400 in Q3 2017, the value sharply declined leading into the COVID-19 pandemic lockdown and has remained below 20 since Q1 2021.

- With tariff mentions spiking, all eyes are on sentiment. The net negativity spiked from 0 in Q1 to 17 in Q2, before falling back to 11 in Q3. The on-going Q4 season, as of the writing of this paper, will be telling and is already accumulating mentions.

Table 3: ProntoNLP AI Tariff Use Cases by Persona

Policymaker	Leverages insights from earnings call analyses to assess corporate sentiment on tariffs, guiding policy decisions and highlighting opportunities for targeted support and strategic engagement with stakeholders.
Corporate Executive	Analyze industry trends and peer sentiment, informing strategic responses to tariffs and strengthening competitive positioning.
Investor	Evaluates sentiment trends related to tariffs, integrating this analysis into investment strategies and risk assessments to uncover valuable insights for informed decision-making.

Figure 4 and Table 3 Source: S&P Global Market Intelligence Quantitative Research & Solutions (QRS). Past performance is not a guarantee of future results. Data as of 1/17/2025.

Case Study: Ciena vs. Comtech Telecommunications

Workforce Location vs. Revenue Source
S&P 1500 Comms. Equip. Sub-Industry, as of 12/31/2016

Operations Ex-US, Revenue US = More Tariff Sensitive

NYSE:CIEN

NASDAQ:CMTL

Operations US, Revenue Ex-US = Retaliatory Tariff Sensitive

U.S.-Based Revenue (y-axis: 0% to 100%)
U.S.-Based Headcount (x-axis: 30% to 100%)

Supply Chain Volatility, 12/31/2016 - 12/31/2019

NYSE:CIEN · S&P 1500 Comms. Equip. Sub-Ind · NASDAQ:CMTL

Total Supply Chain Change (y-axis: 0% to 60%)
(x-axis: 12/2016, 12/2017, 12/2018, 12/2019)

Aggregate Tariff Sentiment on Earnings Calls, NYSE:CIEN

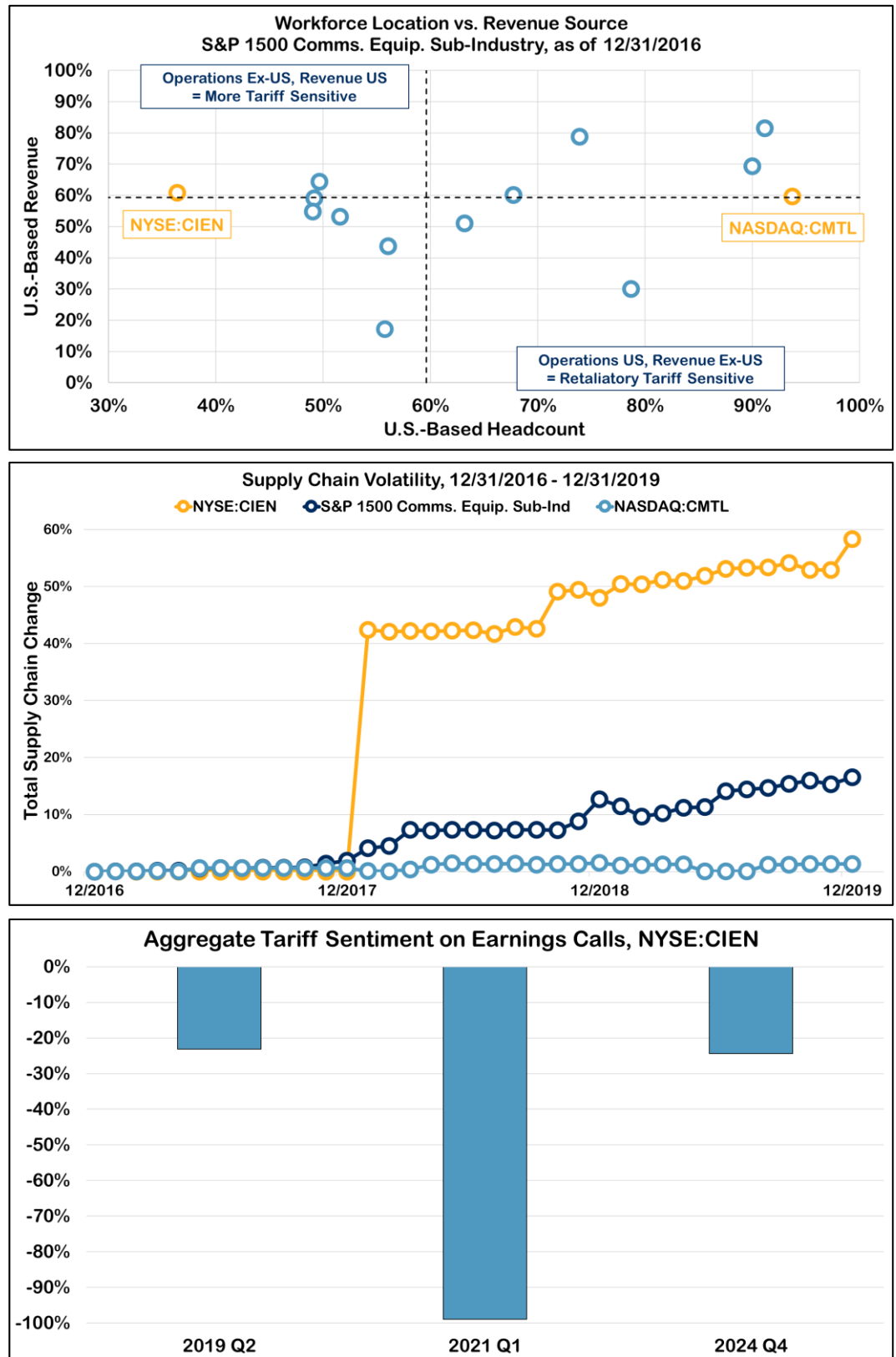(y-axis: 0% to -100%)
2019 Q2 · 2021 Q1 · 2024 Q4

Figure 5-7 Source: S&P Global Market Intelligence Quantitative Research & Solutions (QRS). Data as of 1/17/2025.

In this case study, three fictitious scenarios are presented in which each persona—policymaker, corporate executive, and investor—uses S&P Global Market Intelligence tools to make data-informed decisions. All data presented on the companies—Ciena Corp (CIEN) and Comtech Telecommunications Corp (CMTL)—is accurate and reflects real data as of the analysis date depicted in Figures 5-7. While the company data is accurate, the scenarios are for illustrative purposes only, demonstrating how each persona can generate value from the toolkit.

Investor
In 2017, a fictional investor aimed to capitalize on differences between companies affected by the Trump Administration tariffs. The investor turned to Headcount Analytics. Here, they noticed that Ciena Corp (CIEN) and Comtech Telecommunications Corp (CMTL) were both in communications equipment and had a similar percentage of U.S. revenue. However, Ciena had a lower relative U.S. headcount. The investor probed further for vulnerability to tariffs.

The investor then employed the CC-BR tool. This analysis uncovered Ciena's heavy reliance on suppliers in tariff-targeted regions. Finally, the ProntoNLP tool revealed that Ciena had mentioned tariffs 17 times, with predominantly negative sentiment. In contrast, Comtech had not mentioned tariffs at all.

After integrating this information into an investment mosaic, the investor took a long position in Comtech and a short position in Ciena. This strategy proved profitable as Comtech's stock rose 216%, compared to Ciena's 36%.

Corporate Executive
In 2017, a fictional corporate executive at a major telecommunications firm was tasked with evaluating potential acquisition targets, CIEN and CMTL, amidst the current tariff environment. With cash reserves available, the executive needed to assess which company could enhance the firm's technological capabilities. They also aimed to increase profitability while minimizing risks.

The executive consulted S&P Global tools to make a data-informed decision. They advocated for acquiring Comtech. The executive emphasized that this acquisition would bolster the company's capabilities and mitigate tariff-related risks. Comtech's gross profit relative to assets ratio grew 14% from 2017 to 2019, while Ciena's remained flat at 1%.

Policymaker
In 2017, a fictional policymaker conducted research on their district in Hanover, Maryland. The policymaker aimed to understand how Trump Administration tariffs could impact local businesses, particularly Ciena Corporation, which is headquartered in her region. Armed with comprehensive data on potential headwinds facing companies in her area, the policymaker proposed mitigating legislation. The policymaker celebrated this win, as she effectively used data to inform decision-making and support her community.

Data and Methodology

President Donald Trump took office for the second time on January 20, 2025. His last term, the non-adjacent period from 2017-2020, can serve as a natural experiment to study how tools and data could be valuable in a similar situation. Here, the period is pre-maturely truncated at year-end 2019, to avoid conflating results with impacts from the COVID pandemic.

Headcount Analytics

The Headcount Analytics dataset provides a comprehensive view of a company's workforce composition, trends, and metrics. It includes detailed insights into over 220 million employees worldwide, with monthly updates since 2010 covering more than 3.8 million entities. The dataset features geographic distribution of headcount and revenue data, enabling users to assess the operational structure of companies.

Methodology:

To construct the Headcount Analytics tool, companies were grouped by subsector. The median percentage of U.S. headcount and revenue was calculated for each group, along with the average three-year forward stock returns. By comparing a company's headcount and revenue to the median values for its industry, we can identify companies with relatively low or high U.S. revenue and headcount. Our hypothesis posits that companies with low U.S. headcount (indicating operations abroad) and high U.S. revenue (indicating sales primarily in the U.S.) will be more adversely affected by tariffs than their peers.

- Tariff Target Sub-Sectors: Automobiles & Components, Capital Goods, Consumer Durables & Apparel, Consumer Staples Distribution & Retail, Food, Beverage & Tobacco, Household & Personal Products, Semiconductors & Semiconductor Equipment, Technology Hardware & Equipment, Transportation

- Non-Tariff Sub-Sectors: Banks, Commercial & Professional Services, Consumer Discretionary Distribution & Retail, Consumer Services, Energy, Equity Real Estate Investment Trusts (REITs), Financial Services, Health Care Equipment & Services, Insurance, Materials, Media, Pharmaceuticals, Biotechnology & Life Sciences, Software & Services, Telecommunication Services, Utilities

Company Connections from Business Relationships (CC-BR)

The Company Connections dataset captures disclosed business-to-business (B2B) relationships from regulatory filings. It includes information on partnerships, supplier relationships, and customer connections, providing insights into the dynamics that influence corporate performance and strategy. The dataset is enhanced through a patented process to estimate the economic significance of relationships, when that information is non-disclosed.

Methodology:
Using CC-BR, a vector can be created,

$$Suppliersi_t = [Supplier1_{it} \quad Supplier2_{it} \quad ...]$$

where $Suppliers_{it}$ represents company i's supply chain at time t; and $SupplierN_{it}$ is the USD-magnitude of the relationship between company i and company N.

Cosine similarity is a metric used to measure the similarity between two vectors based on the angle between them in a multidimensional space. It calculates the cosine of the angle by computing the dot product of the two vectors, with a value of 1 indicating identical directions (completely similar), 0 indicating orthogonality (no similarity), and -1 indicating opposite directions (completely dissimilar). By computing cosine similarity from a reference period (12/31/2016) onward, we can monitor supply chain perturbations. This method effectively captures both allocation changes and supplier changes. For instance, if a company shifts its supplier allocation from A (80%) and B (20%) to A (20%) and B (80%), this change is reflected in the vector. Additionally, we are robust to proportional scale changes—if a customer scales their suppliers proportionally, no change is recorded.

Pronto NLP
The ProntoNLP dataset processes earnings call transcripts to extract vital insights and generate key performance indicators (KPIs) for corporate performance. It utilizes Natural Language Processing (NLP) techniques to analyze textual data, identifying and scoring important phrases while filtering out irrelevant information. The dataset includes tagged paragraphs from earnings calls across the Russell 3000 universe.

Methodology:
EquityLLM: EquityLLM is a Llama 3 model fine-tuned on 10,000 expertly tagged paragraphs from earnings call transcripts across the Russell 3000 universe since 2010. This fine-tuning enhances the model's ability in understanding complex nuances of equity analysis.

Aspects Signal: EquityLLM categorizes specific occurrences or announcements within a company's earnings call into events called 'Aspects'. These events are classified into seven categories: Current State, Forecast, Strategic Position, Surprise, Fluff, Filler, and Other.

When provided with an earnings call, EquityLLM splits the transcript into smaller sections. Each section is then labeled with one of the seven Aspects and assigned both a sentiment and an important level. This dynamic approach enables comprehensive screening of all financial events.

The 'net negativity' of an earnings season was calculated by aggregating all the tariff mentions in that season and subtracting the number of positive mentions from the number of negative mentions.

Machine-Readable Transcripts
The Machine-Readable Transcripts dataset aggregates data from earnings calls in a format suitable for Natural Language Processing (NLP) applications, complete with metadata tagging. This database covers over 13,600 entities, with historical data dating back to 2004. It provides a rich resource for analyzing corporate communications and sentiment over time.

Our Recent Research

January 2025: Questioning the Answers: LLMs Enter the Boardroom

Earnings call Q&A sessions offer a unique lens into executive behavior. This paper analyzed 192,000 earnings calls using Large Langue vector embeddings to evaluate executive proactiveness and alignment with discussion topics. The finding highlights the long-term value created by transparent and well-prepared response. A long/short strategy, based on firms with proactive/reactive and on/off topic executives, generated statistically significant alpha, with low correlation to other NLP-derived factors.

January 2025: Banking on Industry Data: Navigating the Ebbs and Flows of the Banking Sector

Over the past two decades, the U.S. banking sector has experienced periods of both exuberance and turbulence, shaped by historic events such as the 2000s housing boom, the subsequent subprime crisis, the passage and eventual easing of Dodd-Frank, regional bank runs, and, more recently, expectations of a more favorable regulatory environment and pro-growth policies.

December 2024: From Compliance to Competitive Edge: How Tech CEOs Changed Their Tune on Sustainability Initiatives

Technology is transforming at a breakneck speed. Artificial Intelligence (AI) is everywhere, and every firm wants a bigger slice of the market. But there is another conversation unfolding in parallel, less glamorous yet just as urgent: sustainability. Data centers gulp down energy. New tech initiatives come with a cost to the planet. An analysis of earnings calls from U.S. and European technology giants over the last eight years reveals a shift in mindset. Sustainability is no longer a checkbox—it's a strategy, and it's shaping the future of tech.

October 2024: Goldilocks and the Three Market Trends Shaping Q3 2024: Earnings, AI Adoption, Price Stability Take Center Stage

Q2 2024 marked the light at the end of the tunnel. Inflation fears subsided, and the economy stabilized. Deflation concerns and contraction risks appeared to be under control. Sentiment across S&P 500 firms hovered at a 15-year high. As the Q3 earnings season commences, key market trends to monitor are: i) Will the overall sentiment continue to hover at a 15-year high? ii) Can firms meet the robust financial outlook from the Q2 earnings season? iii) Will AI deliver the promised economic boost, or will geopolitical unrest and exogenous shocks -- such as the ILA port strike and its temporary postponement –take the U.S. economy on a detour from entering a Goldilocks state?

August 2024: Bonding with Style Investing: Value and Momentum in Corporate Bonds

The application of 'smart beta' strategies is expanding into corporate bonds, beyond its equity roots. This paper explores value, momentum, and short-term reversal styles in fixed income, highlighting the potential to enhance returns and diversify portfolios. The analysis shows that value and momentum strategies in iBoxx U.S. investment-grade (USIG) and high-yield (USHY) bonds generated statistically significant alpha, with low correlations to the comparable equity styles and markets premia.

July 2024: Calm Markets, Confident PE Executives: Private Equity Earnings Calls Reflect Renewed Optimism in Q1'24

Stable public markets are the secret to private equity (PE) optimism. An NLP analysis of publicly-traded PE firms' Q1'24 earnings call transcripts reveals a significant rebound in PE confidence over the last two years. After peaking in Q3'21, PE executives' sentiment declined in 2022 as inflation, geopolitics and fed-driven volatility ended a post-COVID calm. However, with rates finding footing, Global PMI at a 12-month high and volatility subsiding, PE sentiment in Q1'24 reflects renewed optimism. This quarter, PE executive sentiment surged to its second-highest level in 57 earnings seasons, underscoring the inverse relationship between market turbulence and PE industry morale.

April 2024: Data Arbitrage with Proprietary Dividend Forecasts - Historically Precise Updates Led to U.S. Outperformance

Sell-side forecasts tend to focus on the top- and bottom-line and are often slow to reflect new dividend policies. Our empirical results have shown that S&P Global Market Intelligence's Dividend Forecasting dataset has historically captured these dividend revisions in both a precise and timely manner, providing investors with an informational edge. This publication details how practitioners can leverage the dataset for equity investing in the U.S. market when the in-house FQ1 forecasts diverge from their sell-side counterparts.

March 2024: Executives Exuberant Amid "Rightsizing" Workforce - An NLP Analysis of the Q4'23 Earnings Season

AI, geopolitics, labor 'rightsizing' (and other layoff euphemisms), and a sanguine tone characterized the Q4'23 earnings season. Nvidia is riding the AI wave and pulling its connected network along with it. An NLP analysis of earnings call transcripts was used to quantify the discussion.

March 2024: Elusive Parity: Key Gender Parity Metric Falls for First Time in 2 Decades

The growth in women's representation among senior corporate positions, once a bright spot for gender parity, potentially faces an alarming turning point. Exponential growth over a decade is showing signs of losing momentum. Growth no longer appears exponential. A waning focus on diversity initiatives suggests a potential inflection point and calls our previous gender parity estimates into question.

February 2024: Deal Sourcing: A Data Science Approach - Impact of Financial Characteristics on Acquisition Likelihood

Deal sourcing is hard. Finding a target for acquisition has been likened to finding 'a needle in a haystack'. Firm financials are a valuable starting point for systematic identification of acquisition targets. This publication provides actionable insights and a detailed blueprint on how practitioners can leverage computational finance for deal sourcing. Specifically, five firm-level financial dimensions are identified that differentiate targets from their comparable non-targets based on global data from the most recent 10 years.

February 2024: The Ripple Effect – Finding Company Estimates from Detailed Estimates

Intel's (NASDAQ: INTC) share price jumped 9.3% on Friday, Oct. 27, 2023, after the company reported strong earnings. Cadence Design Systems (NASDAQ: CDNS), which announced earlier in the week, was flat. Over the next 2 weeks (Oct 30 – Nov 14), CDNS would outperform INTC by 544 bps, as investors connected the dots between the two. INTC and CNDS do not share a GICS industry, however the two firms share something potentially more meaningful: sell-side analysts.

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