

Data North Star: Navigating Through Information Darkness

Authors

David Pope, CFA
MD Quantamental Research
(617) 530-8112
dpope@spglobal.com

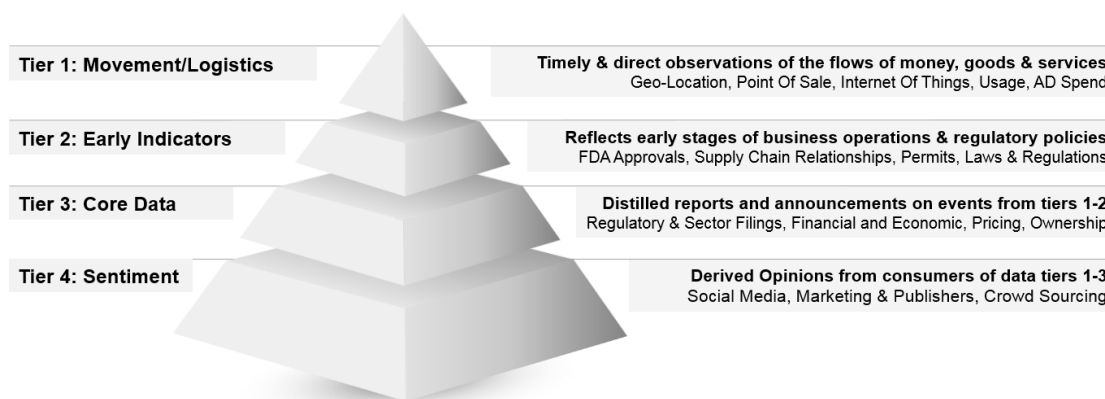
Alex Ronning
Quantamental Research
(617) 530-8167
Alexandra.Ronning@spglobal.com

Crisis creates uncertainty. Familiar landmarks lose their value and decision makers are left to navigate on partial information. Following the outbreak of the COVID-19 pandemic, this is the environment in which investors and corporate decision-makers now suddenly find themselves.

Investors relying on company guidance and financial reports may have to wait 45 days longer as the [SEC has extended filing deadlines](#). Auditors and accountants will struggle to assess inventory, account receivables, and revenues. When reports are ultimately filed, they may reflect an environment from the recent past which bears little resemblance to current conditions. Corporate decision-makers often lack visibility into their own supply chains as the situation on the ground is so fluid that they lack the tools to make reliable forecasts. This brief **initiates a series that will aid decision-makers** in navigating this uncertain environment.

Following such a structural break, there is a need for timely, forward-looking information that may fill the gap left by the absence of familiar tools. Classes of corporate and market information can be conceptualized into four categories as depicted in Figure 1. Decision-makers are well served to focus on data contained within the top two categories, Movement/Logistics and Early Indicators, as current events will determine tomorrow's winners and losers.

Figure 1. Data Hierarchy



Source: S&P Global Quantamental Research

The top tier is most closely tied to the situation on the ground, capturing real-time activity. In order to understand the direction companies are heading, timely and granular data is most valuable. Near real-time information sources such as Internet of Things devices, geo-location services, and supply chain intelligence can shed light on key questions:

- **Where and when is foot traffic (a proxy for sales) returning? What are the demographic characteristics of that traffic?**
- **Where are supply-chain disruptions most pronounced: by geography, product or company?**
- **Which industries are most impacted by Congressional stimulus?**
- **Where are activist and institutional investors taking positions?**

Decision-makers leveraging intelligence within non-traditional data categories detailed within Tiers 1-3 will realize visibility into the information gap created by the current crisis (Figure 2).

Figure 2. Marketplace Data and Associated Sample Insights

Data Category		Polaris Insights	
Tier 1: Movement/Logistics			
Supply Chain	<ul style="list-style-type: none">Determine which companies/industries have exposure to geographic supply chain disruptionsEvaluate supply chain fragility and the availability of alternative suppliers		
Foot Traffic	<ul style="list-style-type: none">Understand where and when foot traffic is rebounding as well as the demographics of the traffic that returnsIdentify companies that can more quickly adjust business models to compensate		
Weather	<ul style="list-style-type: none">Assess the impact of weather on fixed assetsForecast the implication of humidity/temperature on COVID transmission by location		
Tier 2: Early Indicators			
Regulatory & Legislative Changes	<ul style="list-style-type: none">Monitor the impact of US Congressional legislation, regulation suspension and stimulus by industry		
FDA Approval for Drugs and Devices	<ul style="list-style-type: none">Track approvals of COVID therapeutics/vaccines/testing/medical devicesDig into drug / device pipelines complemented by adverse events		
Building Permits	<ul style="list-style-type: none">Observe which municipalities are re-opening for construction permittingTrack geographical construction activity		
Guidance & Estimates	<ul style="list-style-type: none">Monitor company guidance withdrawals / revisionsFollow where analysts have visibility to make earnings forecast revisions		
Institutional Ownership	<ul style="list-style-type: none">Measure where the Smart money has been taking/liquidating positions		
Tier 3: Core Data			
Patent & Trademark Ownership	<ul style="list-style-type: none">Track owners of drug patents relevant to COVID treatmentsIdentify Intellectual Property exposure to critical futuristic technologies		
Machine Readable Transcripts & Filings	<ul style="list-style-type: none">Evaluate Management Discussion and Analysis assessment of current risks via Machine Readable filings broken out by sectionMonitor timeliness of filings in light of the SEC's 45 day extension		

Decisions are made as multiple sources of information converge, empowering people to apply their own insights, experience, expertise and tools to take reasoned action. S&P Global Market Intelligence's data philosophy is to source, structure, link, and deliver comprehensive data to our clients. S&P Global is committed to delivering timely, granular, and complementary data sets through its [Data Marketplace](#) where content is linked and available through a number of flexible delivery options. We believe the intersection of differentiated and clean data is the key to rich insights that drive your business decisions.

Our Recent Research

March 2020: [Long Road to Recovery: Coronavirus Lessons from Supply Chain and Financial Data](#)

COVID-19 continues to disrupt global supply chains in unprecedented ways. Leveraging maritime shipping data from Panjiva, this report includes a review of trade and financial data to analyze the impact of the SARS-CoV-2 / COVID-19 coronavirus outbreak.

This report takes two approaches to analyzing the fallout from the SARS-CoV-2 / COVID-19 coronavirus outbreak on global trade and corporate supply chains. The first part of the report identifies 11 themes emerging on an event-driven basis from over 50 Panjiva Research reports. The second section considers the impact of exposures to Asia in firms' U.S. supply chains on sector-neutral stock returns since the start of 2020.

Findings include:

- Second-order supply chain effects are also emerging with the apparel industry now seeing a shortage of materials globally due to earlier outages in China.
- Retailers including Costco and Target are gaining from increased sales of health- and personal care products. Yet, supply shortages are rapidly emerging in part due to medical supply export restrictions in several countries.
- There is a notable, but not statistically significant, relationship with firms with higher exposure to Asia having seen a weaker sector neutral stock price performance.

February 2020: [Ship to Shore: Mapping the Global Supply Chain with Panjiva Shipping Data in Xpressfeed™](#)

World merchandise trade accounted for an estimated \$19.7 trillion in 2018, about 90% of which is by sea. While financial data tells us “how a company has done in the past,” shipping data provides a closer-to-real time indicator of “what a company is doing now.” Panjiva's shipping data allows investors to track trends, identify anomalies, and assess risks for companies engaged in international trade. This paper illustrates how to find investment insights in Panjiva's US seaborne and Mexican datasets using the US auto parts industry as a case study.

Findings include:

- Shipment trends often lead fundamentals: Rising shipments amid flat or declining fundamentals may signal future financial trend reversal
- Growth in the number of a company's suppliers and in the types of products it imports may signal strengthening demand and/or product line diversification.
- Tracking industry-level product-line trends can help identify companies with significant exposure to rising or declining product lines.

January 2020: [Natural Language Processing – Part III: Feature Engineering Applying NLP Using Domain Knowledge to Capture Alpha from Transcripts](#)

Unstructured data is largely underexplored in equity investing due to its higher costs. As a result, the information content remains largely untapped and offers an investment edge for investors. One particularly valuable unstructured data set is S&P Global Market Intelligence's machine readable earnings call transcripts. This newest publication, the third in the series (NLP I, NLP

II), introduces new stock selection ideas in the areas of I) Topic identification, II) Call transparency and III) Call sentiment using more advanced NLP techniques.

- Topic Identification – Firms that referenced the most positive descriptors around their financials outperformed historically.
- Transparency – Firms that provided greater call transparency exhibited by executives' behaviors and decisions outperformed historically.
- Weighted Average Sentiment – Quantifying call sentiment using a weighted average construct led to better returns and less volatility historically.
- Additive Forecasting Power – The newly introduced signals demonstrated additive forecasting power above commonly used alpha and risk signals historically.

December 2019: The “Trucost” of Climate Investing: Managing Climate Risks in Equity Portfolios

Does sustainable investing come at a “cost”, and is the fear of investors around the performance concessions of “green” portfolios warranted? Our latest research suggests investors' fears are misplaced – carbon-sensitive portfolios have similar returns and significantly better climate characteristics than portfolios constructed without carbon emission considerations. Other findings include:

- Highly profitable firms are likely to be leaders in reducing their carbon emission levels.
- There is no degradation in fundamental characteristics for the carbon-sensitive portfolios compared to the baseline portfolio, even though the difference in constituents can be as high as 20%.
- Carbon-sensitive portfolios were observed as having significant reductions in water use, air pollutants released and waste generated.

October 2019: #ChangePays: There Were More Male CEOs Named John than Female CEOs

This report examines the performance of firms that have made female appointments to their CEO and CFO positions. Our research finds that firms with female CEOs and/or CFOs:

- Are more profitable and generated excess profits of \$1.8 trillion over the study horizon.
- Have produced superior stock price performance, compared to the market average.
- Have a demonstrated culture of Diversity and Inclusion, evinced by more females on the company's board of directors.

June 2019: Looking Beyond Dividend Yield: Finding Value in Cash Distribution Strategies

Examines the relationship between yield-oriented strategies (dividend yield, buyback yield, and combined shareholder yield) and future stock return, across multiple countries/regions. Also provides insights into two additional topics:

- Which company fundamental characteristics support and enhance future shareholder payouts?
- Under which interest rate environment should investors favor yield-oriented strategies?

June 2019: The Dating Game: Decrypting the Signals in Earnings Report Dates

The first part of this report focuses on companies that deviate from a historical reporting pattern, while the second part examines a related topic – the market's reaction to companies that postpone a previously scheduled (announced) earnings release date.

- “Advancers” (companies that advance their earnings report date by at least 6 days) are likely to report improving year-year on sales, better earnings surprises, and more positive conference call sentiment readings than their industry group peers and “delayers” (companies that delay their earnings report date by at least 6 days).
- Advancers outperform delayers by over 7% on an annualized basis (Russell 3000). This return rises to 8.80% (Russell 2000) and falls to 2.21% (Russell 1000).
- The annualized return to stocks identified as buy candidates and tagged as advancers is 10.77%, compared to 6.29% for buy candidates tagged as delayers.
- Companies that postpone a previously announced earnings release date underperform the broad market by 2.44% in the 3 days surrounding the announcement. These companies are also likely to report deteriorating fundamentals.

May 2019: Bridges for Sale: Finding Value in Sell-Side Estimates, Recommendations, and Target Prices

February 2019: U.S Stock Selection Model Performance Review

February 2019: International Small Cap Investing: Unlocking Alpha Opportunities in an Underutilized Asset Class

January 2019: Value and Momentum: Everywhere, But Not All the Time

November 2018: Forging Stronger Links: Using Supply Chain Data in the Investing Process

September 2018: Their Sentiment Exactly: Sentiment Signal Diversity Creates Alpha Opportunity

September 2018: Natural Language Processing – Part II: Stock Selection: Alpha Unscripted: The Message within the Message in Earnings Calls

July 2018: A Case of ‘Wag the Dog’? - ETFs and Stock-Level Liquidity

June 2018: The (Gross Profitability) Trend is Your Friend

May 2018: Buying the Dip: Did Your Portfolio Holding Go on Sale?

March 2018: In the Money: What Really Motivates Executive Performance?

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

January 2018: U.S Stock Selection Model Performance Review

September 2017: Natural Language Processing - Part I: Primer

July 2017: Natural Language Processing Literature Survey

June 2017: Research Brief: Four Important Things to Know About Banks in a Rising Rate Environment

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

July 2014: Factor Insight: Reducing the Downside of a Trend Following Strategy

May 2014: Introducing S&P Capital IQ's Fundamental China A-Share Equity Risk Model

April 2014: Riding the Coattails of Activist Investors Yields Short and Long Term Outperformance

March 2014: Insights from Academic Literature: Corporate Character, Trading Insights, & New Data Sources

February 2014: Obtaining an Edge in Emerging Markets

February 2014: U.S Stock Selection Model Performance Review

January 2014: Buying Outperformance: Do share repurchase announcements lead to higher returns?

October 2013: Informative Insider Trading - The Hidden Profits in Corporate Insider Filings

September 2013: Beggar Thy Neighbor – Research Brief: Exploring Pension Plans

August 2013: Introducing S&P Capital IQ Global Stock Selection Models for Developed Markets: The Foundations of Outperformance

July 2013: Inspirational Papers on Innovative Topics: Asset Allocation, Insider Trading & Event Studies

June 2013: Supply Chain Interactions Part 2: Companies – Connected Company Returns Examined as Event Signals

June 2013: Behind the Asset Growth Anomaly – Over-promising but Under-delivering

April 2013: Complicated Firms Made Easy - Using Industry Pure-Plays to Forecast Conglomerate Returns.

March 2013: Risk Models That Work When You Need Them - Short Term Risk Model Enhancements

March 2013: Follow the Smart Money - Riding the Coattails of Activist Investors

February 2013: Stock Selection Model Performance Review: Assessing the Drivers of Performance in 2012

January 2013: Research Brief: Exploiting the January Effect Examining Variations in Trend Following Strategies

December 2012: Do CEO and CFO Departures Matter? - The Signal Content of CEO and CFO Turnover

November 2012: 11 Industries, 70 Alpha Signals -The Value of Industry-Specific Metrics

October 2012: Introducing S&P Capital IQ's Fundamental Canada Equity Risk Models

September 2012: Factor Insight: Earnings Announcement Return – Is A Return Based Surprise Superior to an Earnings Based Surprise?

August 2012: Supply Chain Interactions Part 1: Industries Profiting from Lead-Lag Industry Relationships

July 2012: Releasing S&P Capital IQ's Regional and Updated Global & US Equity Risk Models

June 2012: Riding Industry Momentum – Enhancing the Residual Reversal Factor

May 2012: The Oil & Gas Industry - Drilling for Alpha Using Global Point-in-Time Industry Data

May 2012: Case Study: S&P Capital IQ – The Platform for Investment Decisions

March 2012: Exploring Alpha from the Securities Lending Market – New Alpha Stemming from Improved Data

January 2012: S&P Capital IQ Stock Selection Model Review – Understanding the Drivers of Performance in 2011

January 2012: Intelligent Estimates – A Superior Model of Earnings Surprise

December 2011: Factor Insight – Residual Reversal

November 2011: Research Brief: Return Correlation and Dispersion – All or Nothing

October 2011: The Banking Industry

September 2011: Methods in Dynamic Weighting

September 2011: Research Brief: Return Correlation and Dispersion

July 2011: Research Brief - A Topical Digest of Investment Strategy Insights

June 2011: A Retail Industry Strategy: Does Industry Specific Data tell a different story?

May 2011: Introducing S&P Capital IQ's Global Fundamental Equity Risk Models

May 2011: Topical Papers That Caught Our Interest

April 2011: Can Dividend Policy Changes Yield Alpha?

April 2011: CQA Spring 2011 Conference Notes

March 2011: How Much Alpha is in Preliminary Data?

February 2011: Industry Insights – Biotechnology: FDA Approval Catalyst Strategy

January 2011: US Stock Selection Models Introduction

January 2011: Variations on Minimum Variance

January 2011: Interesting and Influential Papers We Read in 2010

November 2010: Is your Bank Under Stress? Introducing our Dynamic Bank Model

October 2010: Getting the Most from Point-in-Time Data

October 2010: Another Brick in the Wall: The Historic Failure of Price Momentum

July 2010: Introducing S&P Capital IQ's Fundamental US Equity Risk Model

RESEARCH BRIEF: DATA NORTH STAR – NAVIGATING THROUGH INFORMATION DARKNESS

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