

ET Professional Monitors

April 2019



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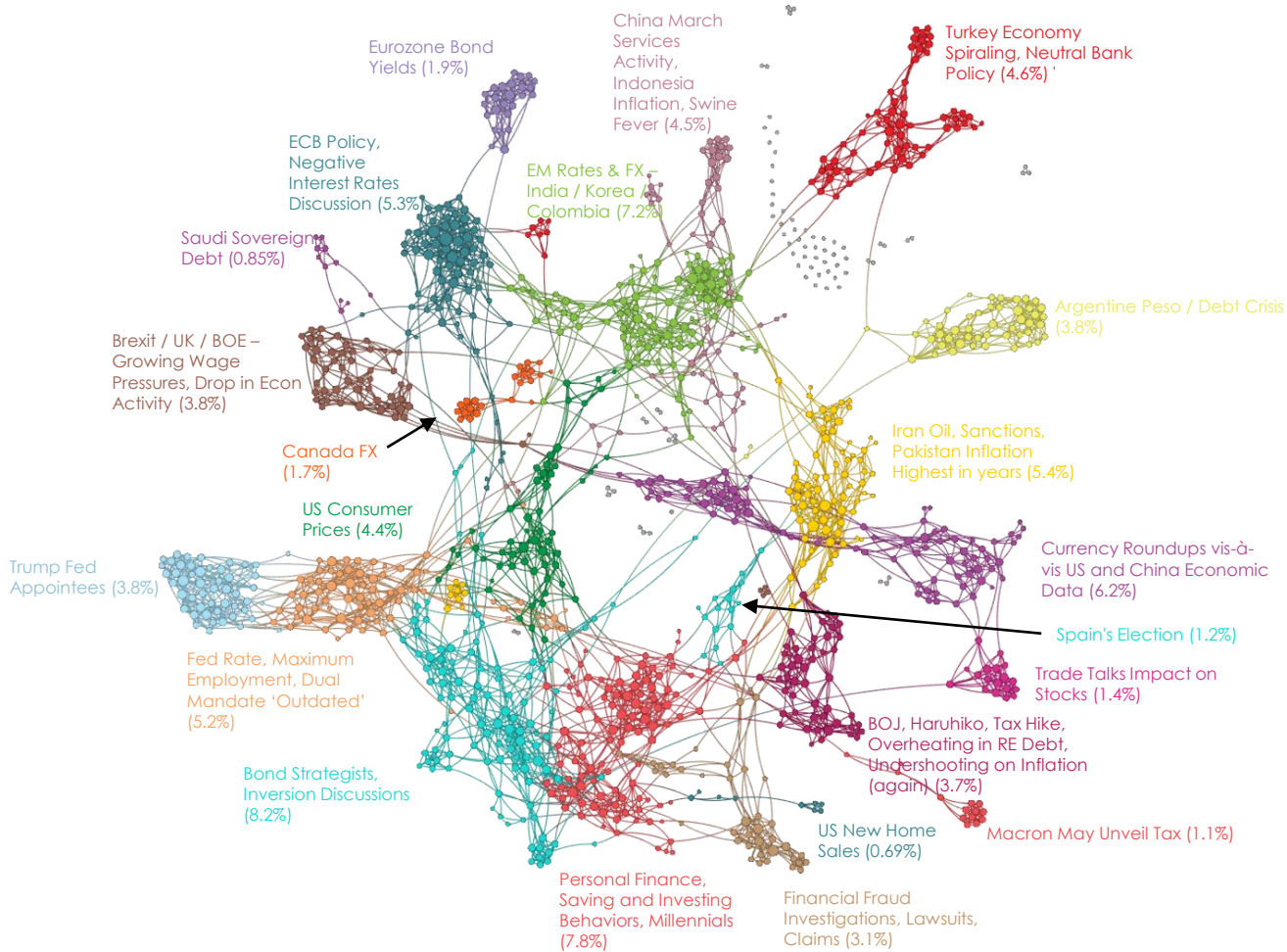


Inflation Commentary

- Inflation language remains at a low-to-moderate level, but outside of central bank policy discussions and discussions of health care and education (esp. student loans), attention – its influence on broader narratives – is limited.
- Consistent with prior updates - and despite our belief in the long-term shift in Zeitgeist toward inflation - we do not think there is a coherent short-term inflation narrative at this time.
- Inflation discussions persist with somewhat higher intensity than usual in the usual pockets in emerging markets. Latin America and Middle East have become more central to EM inflationary narratives.
- We found it noteworthy in April that the language used in media to describe US inflation and central banking is *most similar* to language used to describe BOJ (relative to BOE/ECB/EM banks).



Inflation Network Map – April 2019



Inflation Attention – April 2019

Full network reflects all articles referencing stocks/equities. Bold-faced nodes represent articles discussing inflation, producer prices, wage pressures and costs.

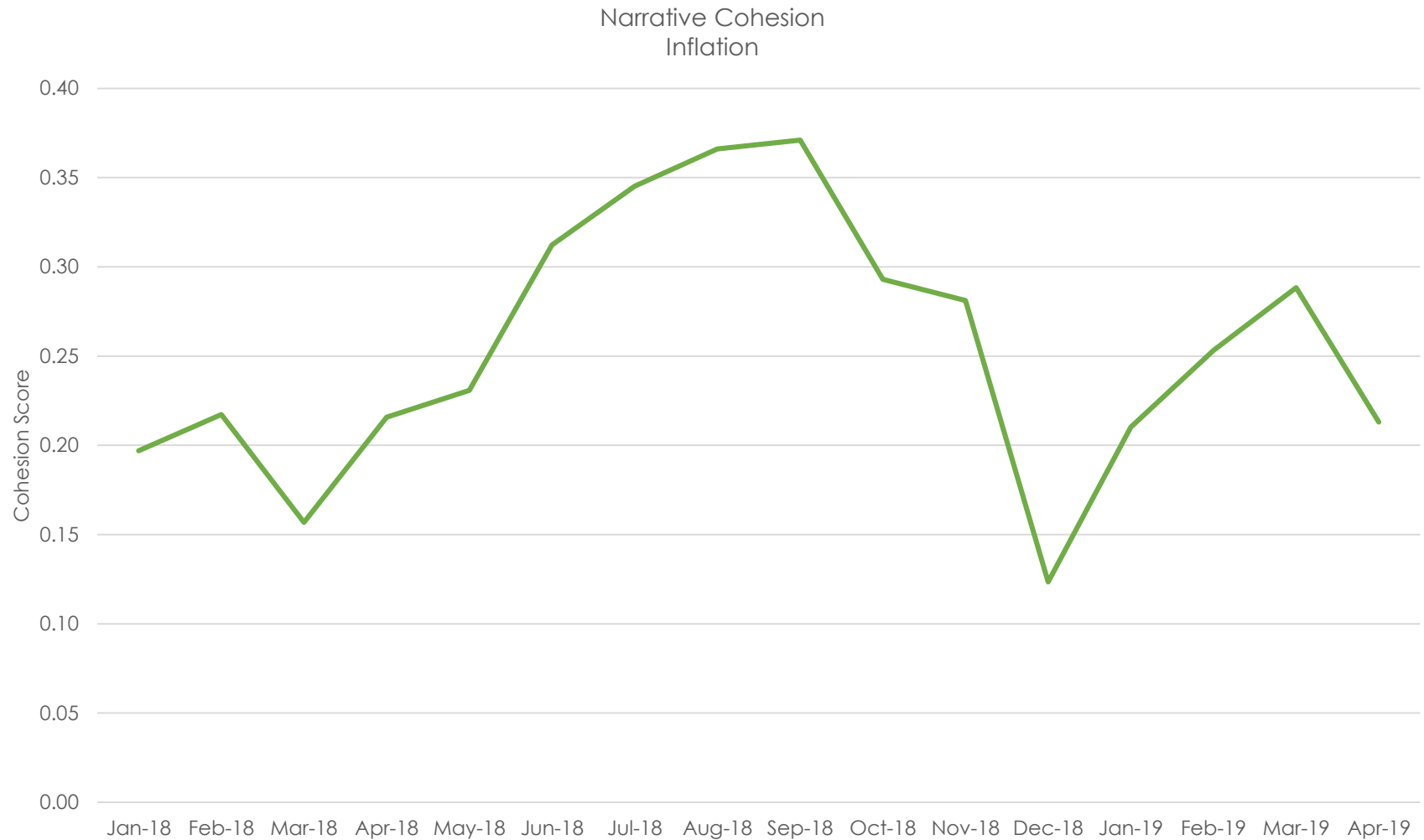


Inflation Attention Monitor – April 2019

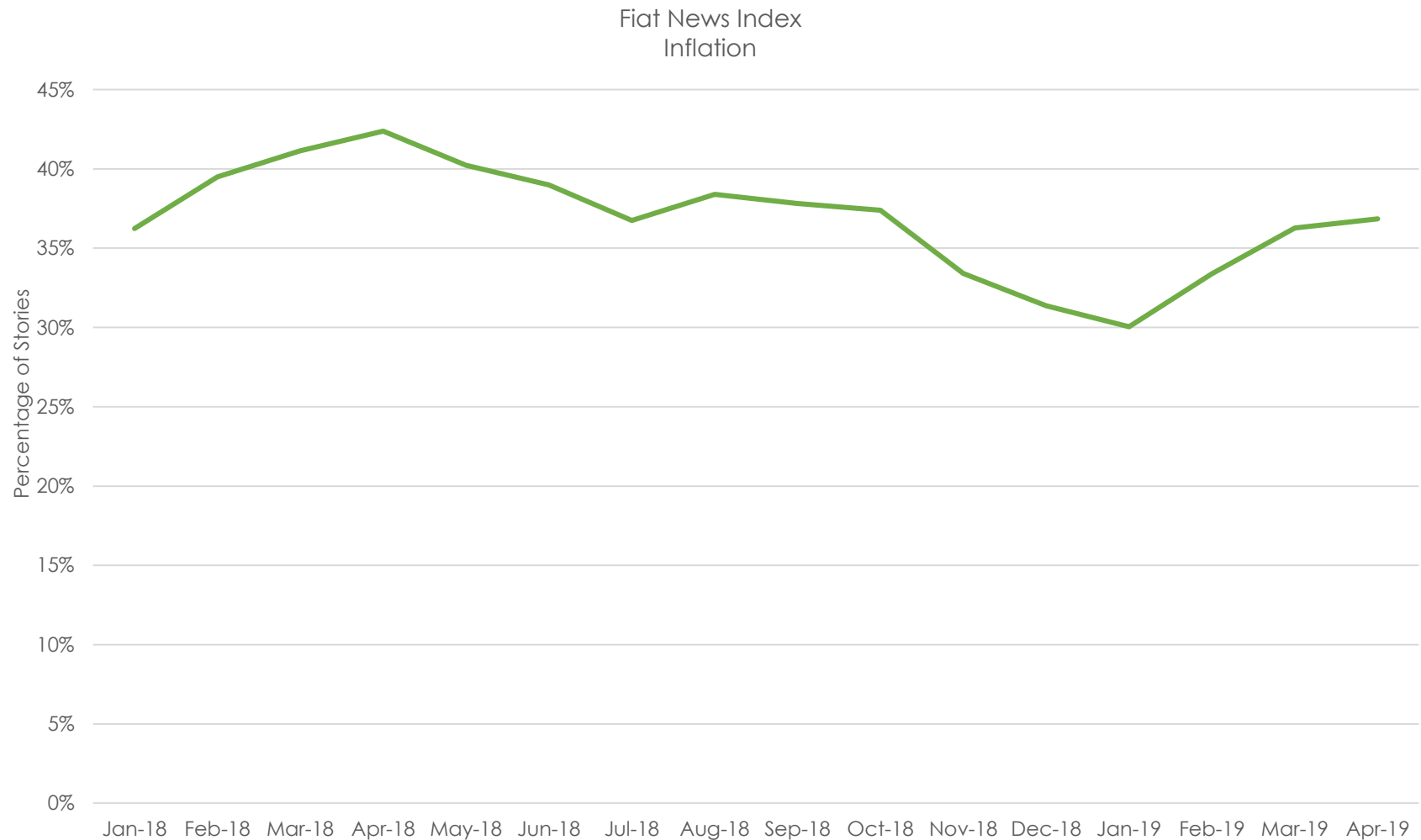
Inflation Narrative Attention



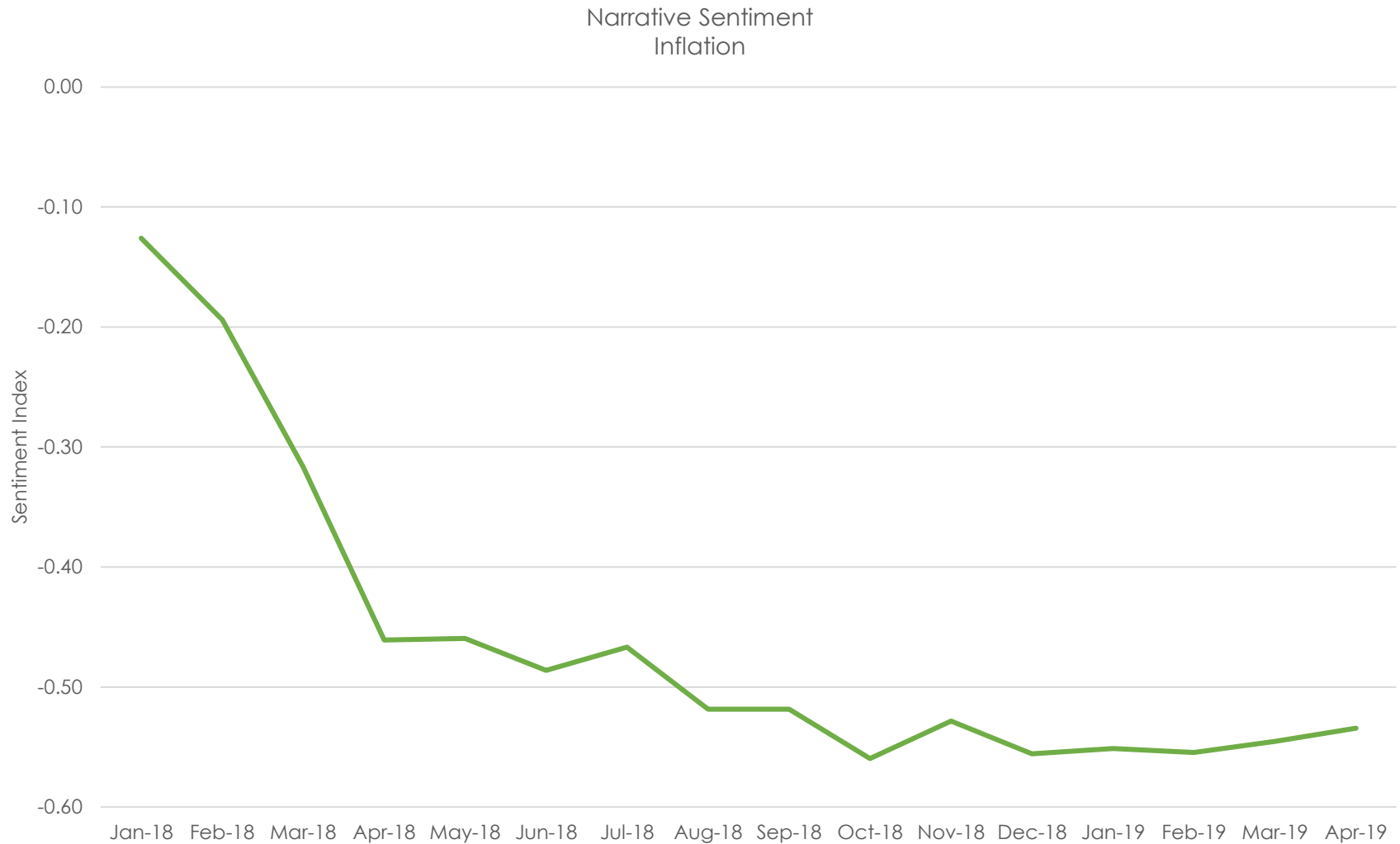
Inflation Cohesion Monitor – April 2019



Inflation Fiat News Monitor – April 2019



Inflation Sentiment Monitor – April 2019

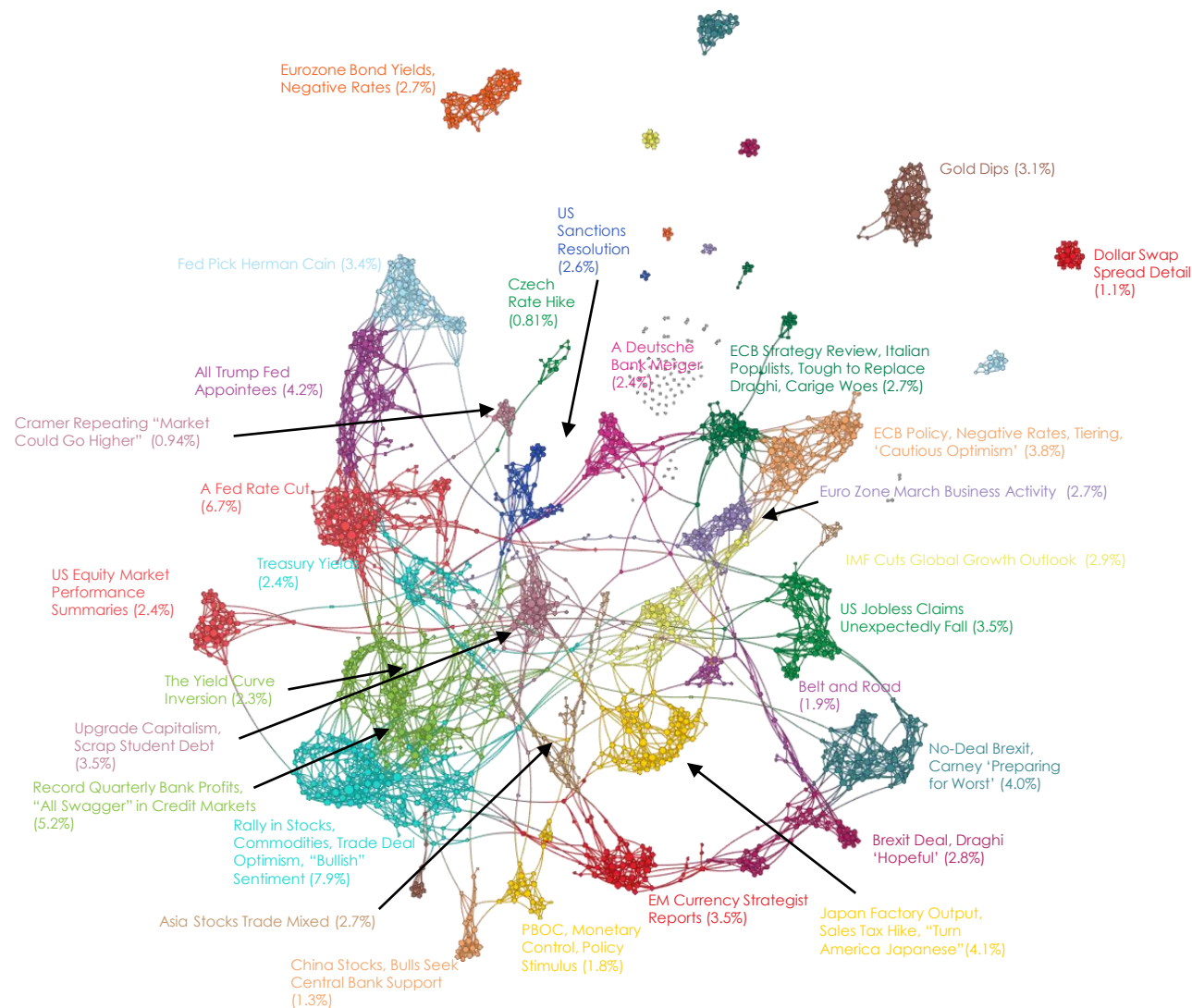


Central Bank Omnipotence Commentary

- Our measures of both attention and cohesion of central bank omnipotence narratives flagged slightly in April.
- We think this is generally the result of (1) increasing separation in policy imperatives within the narratives surrounding the major central banks and (2) the brief emergence of a new (and separate) view on a potential rate cut in the US.
- Regardless, we continue to think that Central Bank Omnipotence is the primary governing narrative of risky asset markets in the US – with Trade and Tariffs emerging from complacency much more recently.
- We also note the recent emergence of a *central* cluster relating to inequality, ‘failures of capitalism’, student loan debt and other issues making the rounds in US election politics. These are surprisingly well connected across articles in the CBO dataset. We think shifting political pressures on central bank narratives are worthy of long-term monitoring.

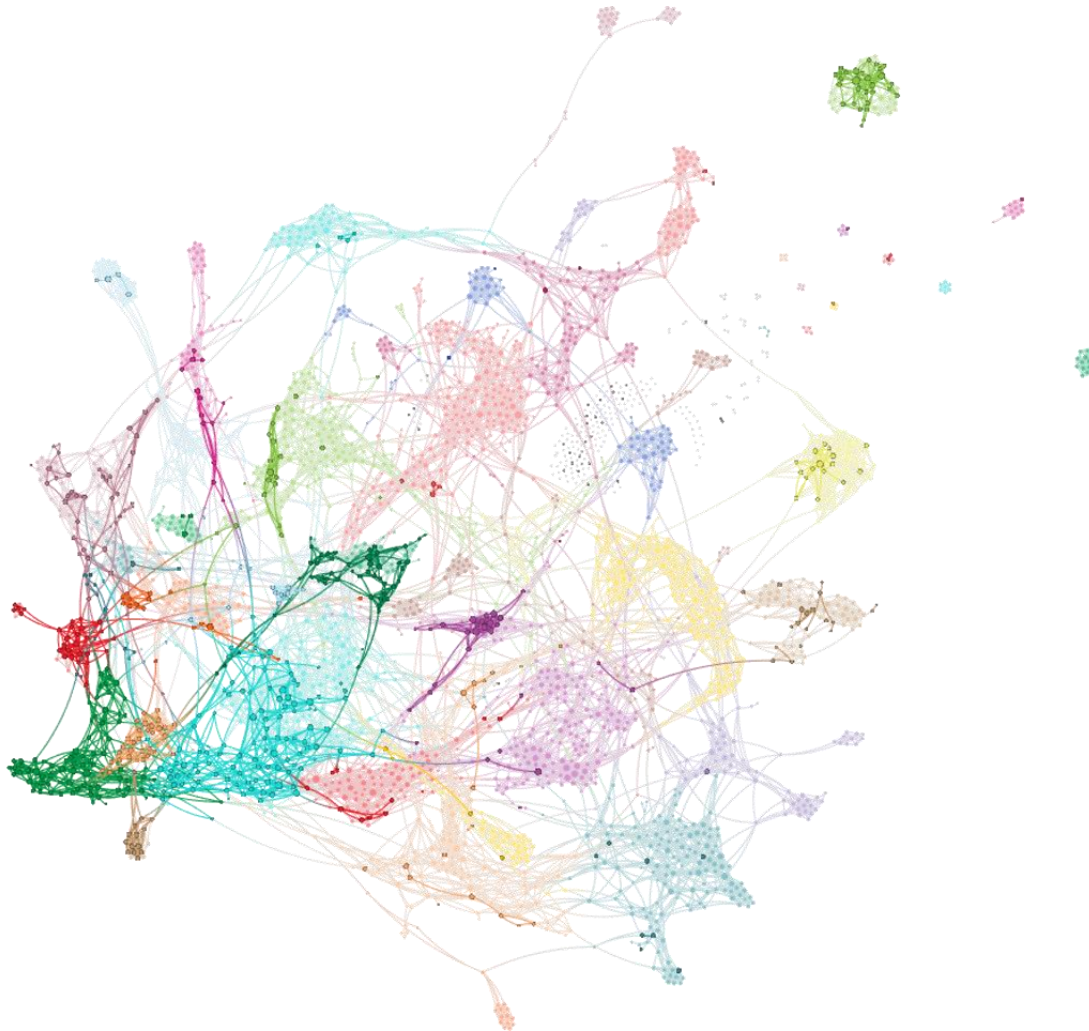


Central Bank Omnipotence Network Map – April 2019

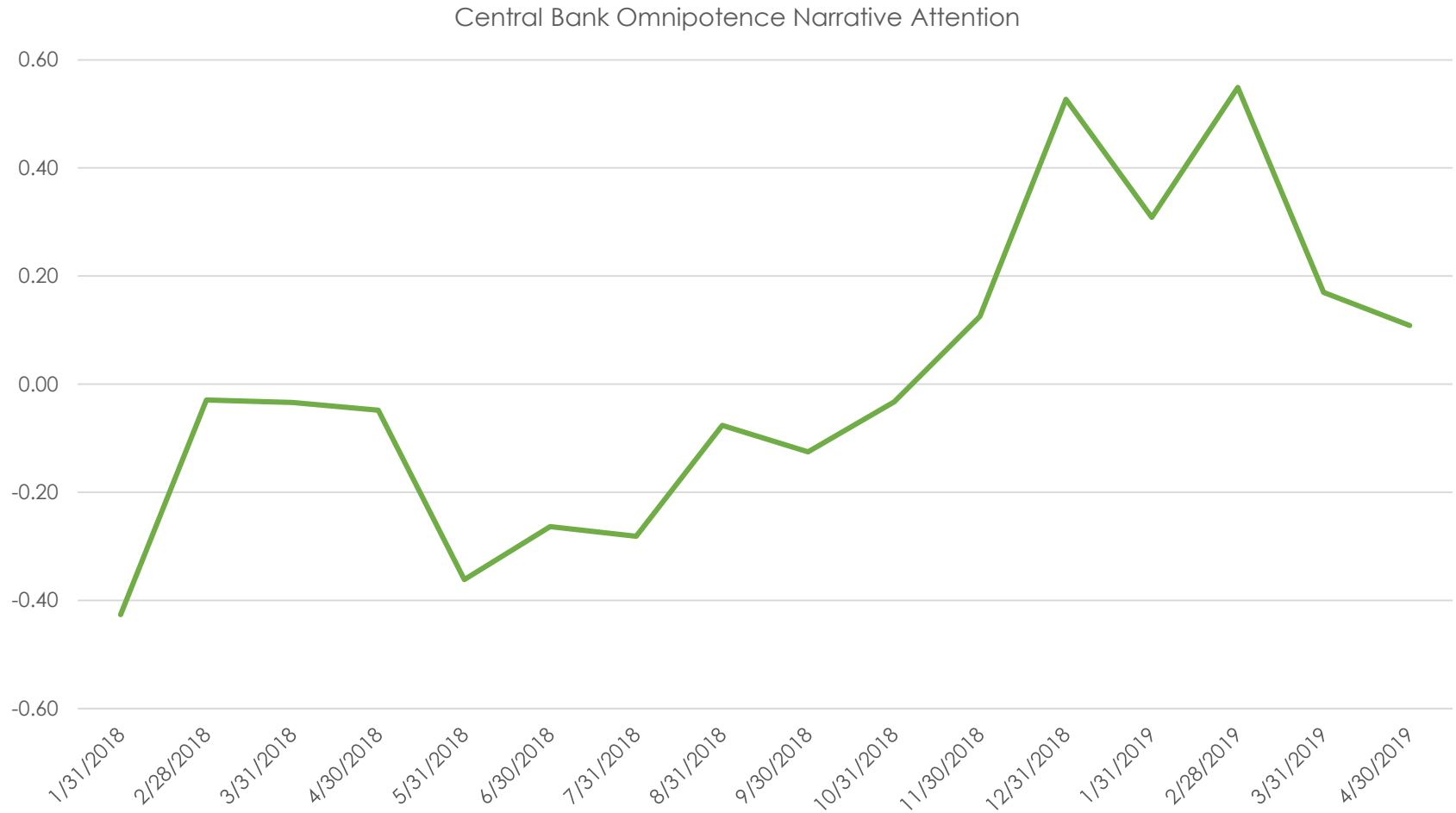


Central Bank Omnipotence Attention – April 2019

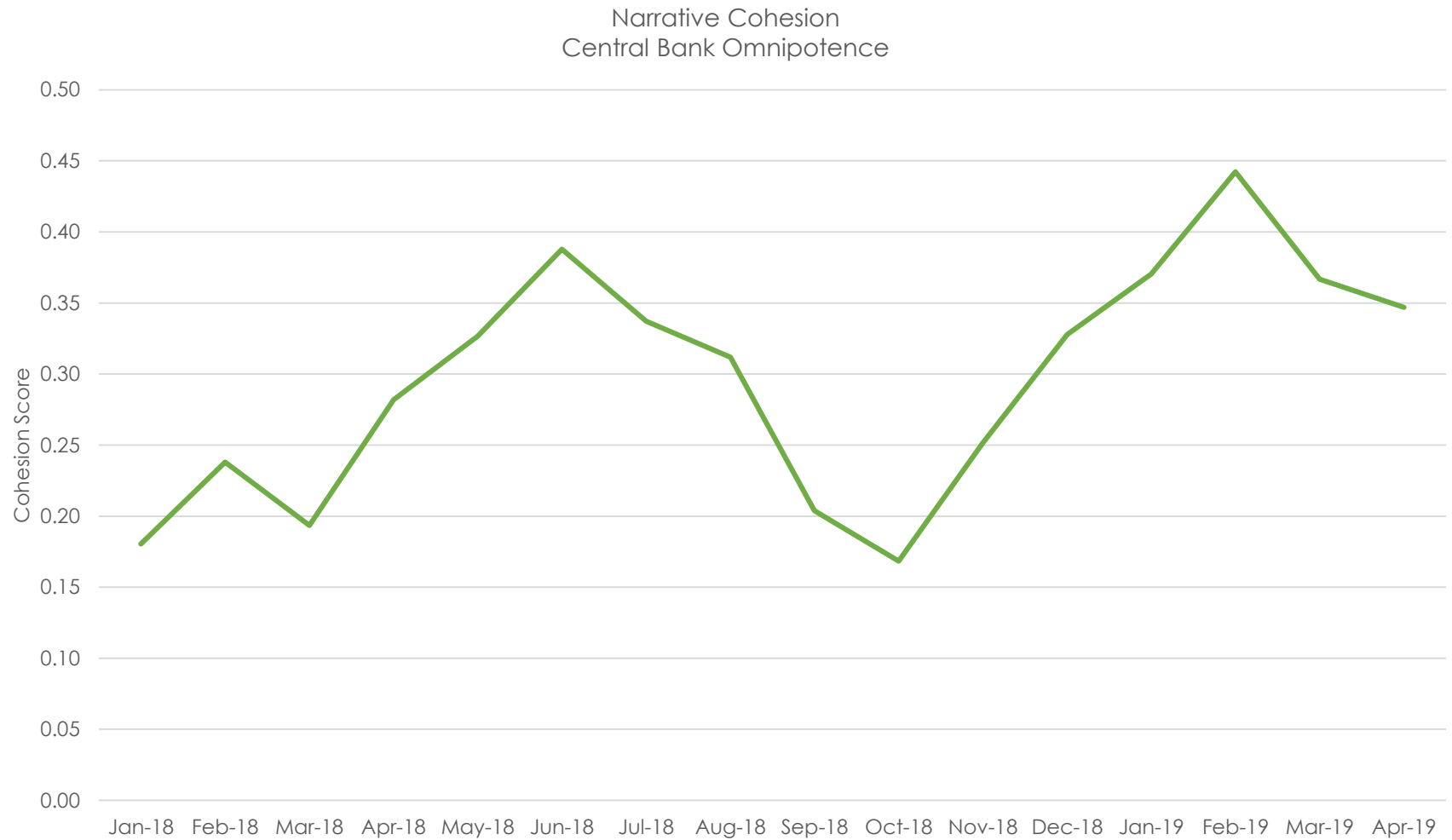
Full network reflects all articles referencing stocks/equities. Bold-faced nodes represent articles discussing the Fed, ECB, BOJ, BOE and other global central banking policy.



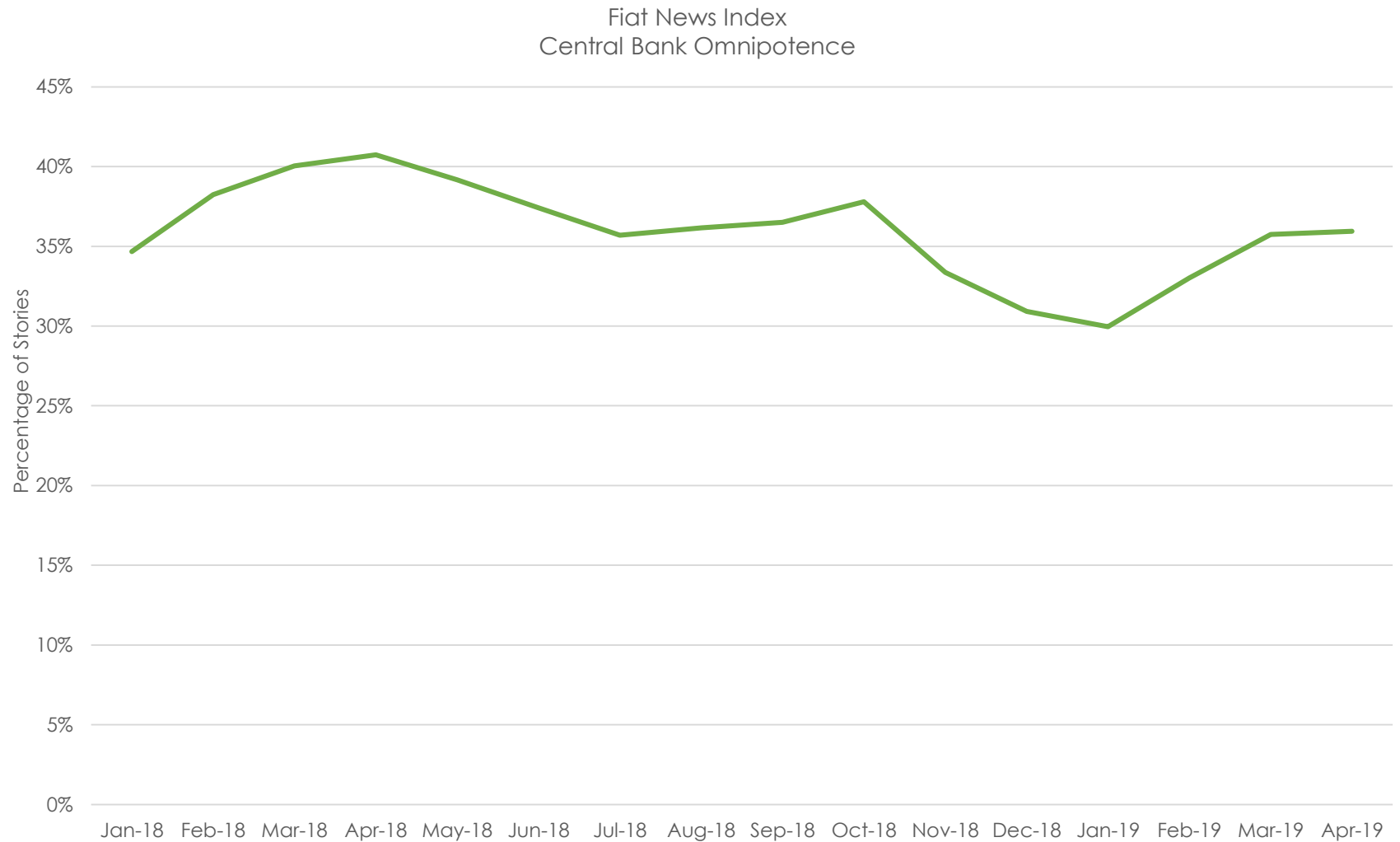
Central Bank Omnipotence Attention Monitor – April 2019



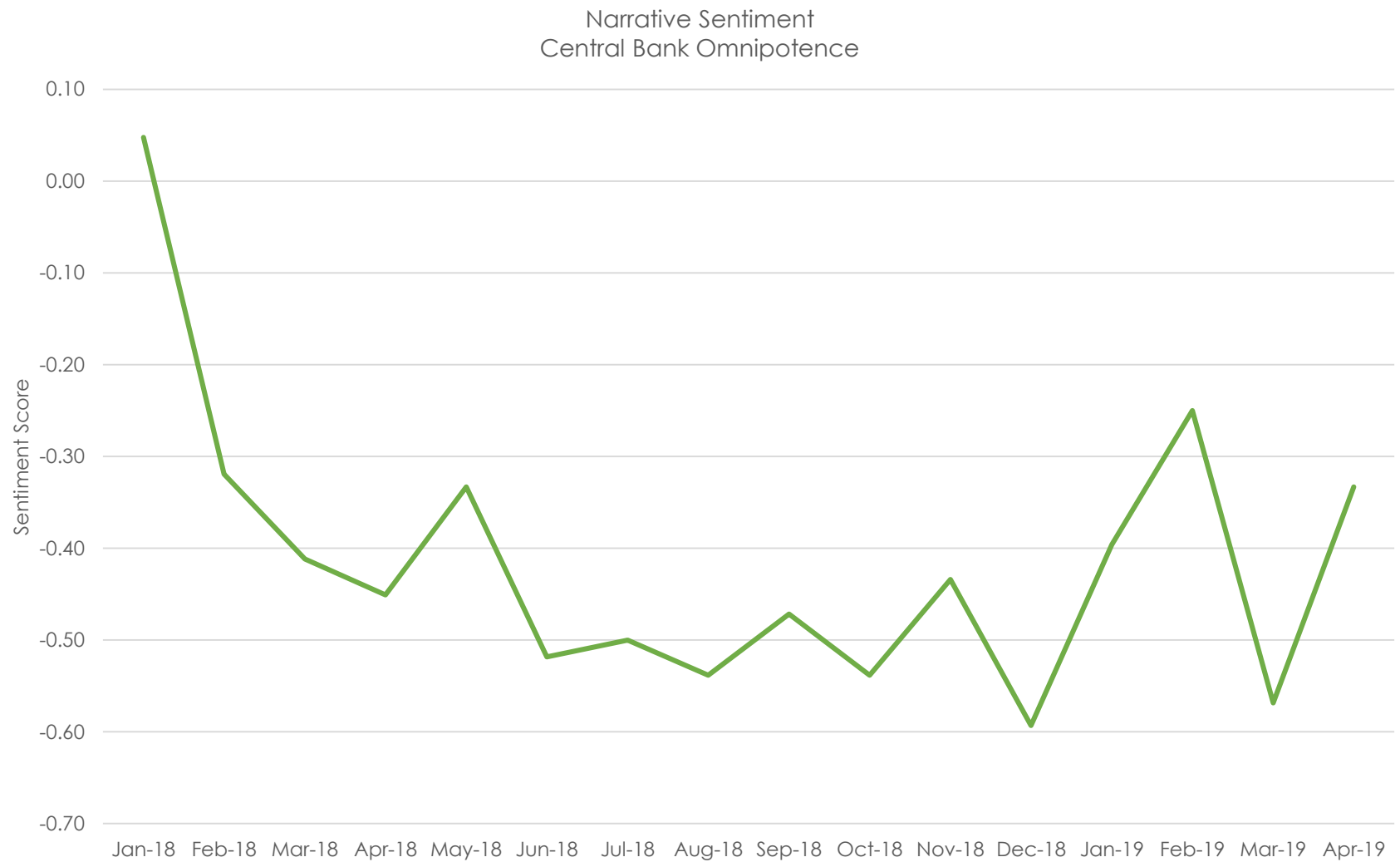
Central Bank Omnipotence Cohesion Monitor – April 2019



Central Bank Omnipotence Fiat News Monitor – April 2019



Central Bank Omnipotence Sentiment Monitor – April 2019

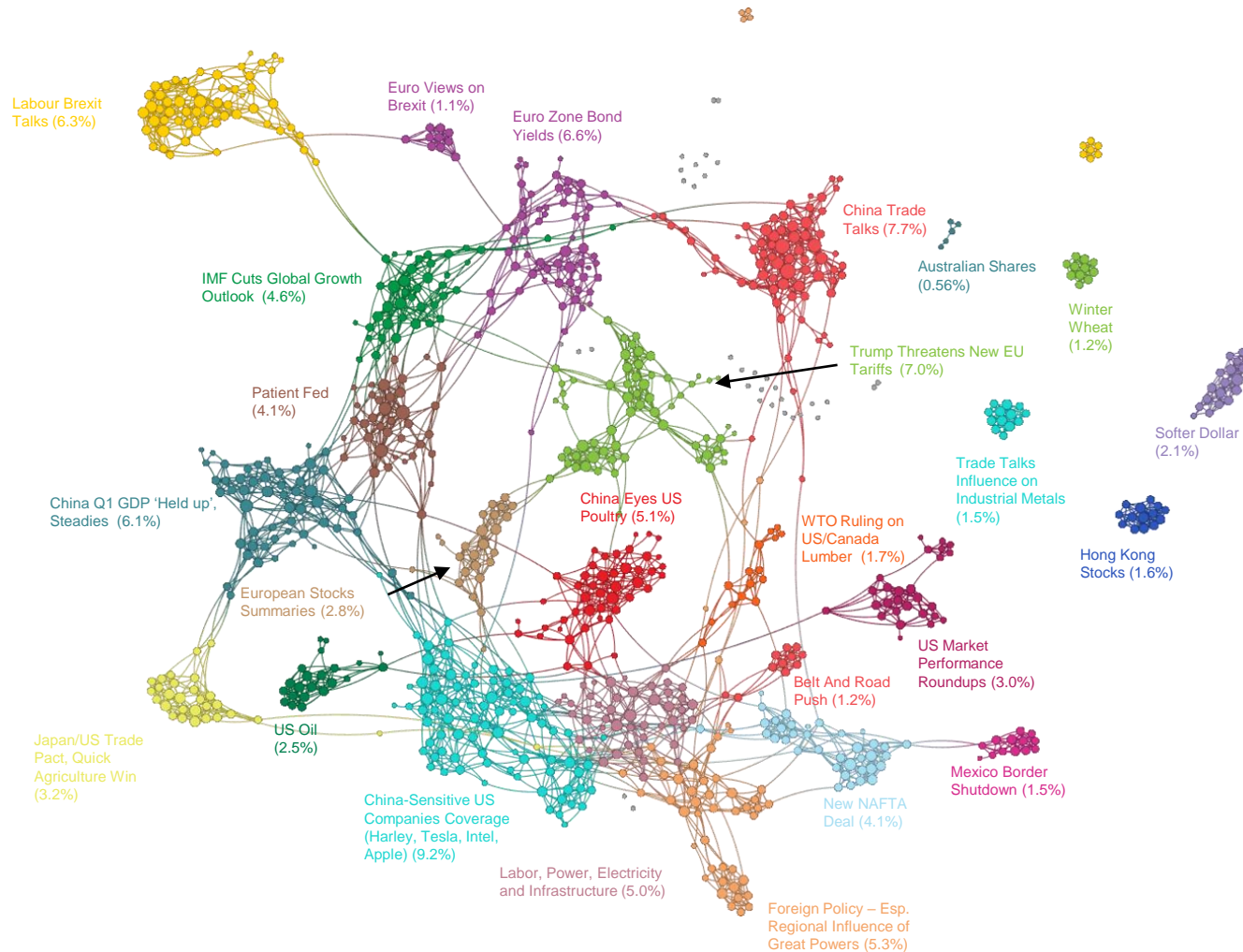


Trade and Tariffs Commentary

- For much of April, cohesion continued to drift downward, as trade and tariffs discussions splintered further into distinct Europe, North America, China and now US/Japan trade clusters.
- Meanwhile, sentiment remained noticeably more positive than in the recent past, leading us to believe that the narrative structure was still highly complacent.
- In early May, a couple well-placed tweets from President Trump very briefly showed some measure of the volatility-inducing potential of negative surprises on this complacent narrative structure.
- We suspect that focus *will* return to China/US trade discussions in May, and we would not be surprised to see sentiment retreat somewhat.
- Will the complacency about a positive outcome stick around? We think it will be heavily influenced by whether the additional tariff threat is a true negative surprise or a manufactured “wall of worry.” We lean toward the latter, but that is opinion and *not* something we necessarily see in the narrative data.



Trade and Tariffs Network Map – April 2019



Trade and Tariffs Attention – April 2019

Full network reflects all articles referencing stocks/equities. Bold-faced nodes represent articles discussing trade, tariffs, duties and associated agreements and negotiations.



Trade and Tariffs Attention Monitor – April 2019

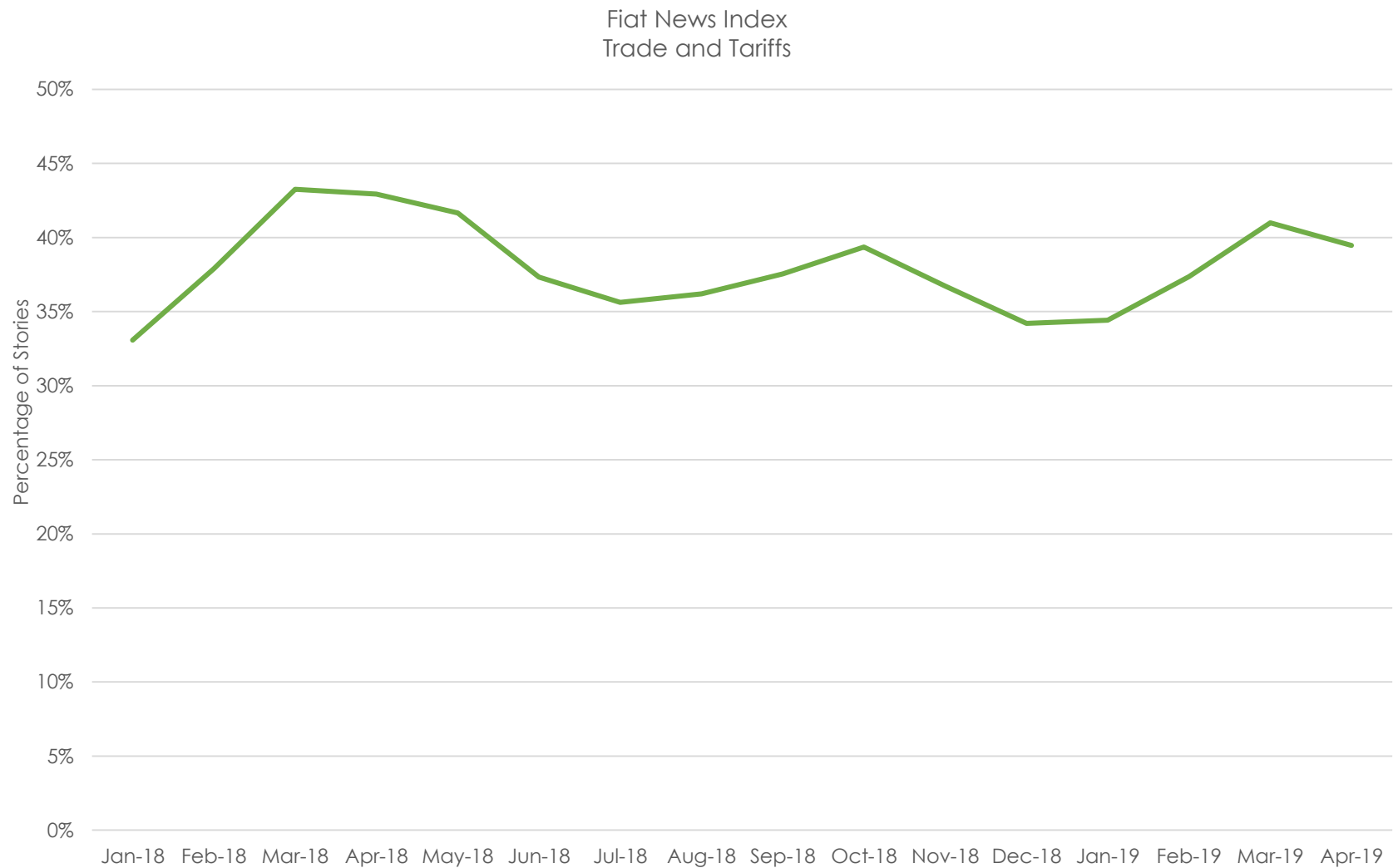
Trade & Tariffs Narrative Attention



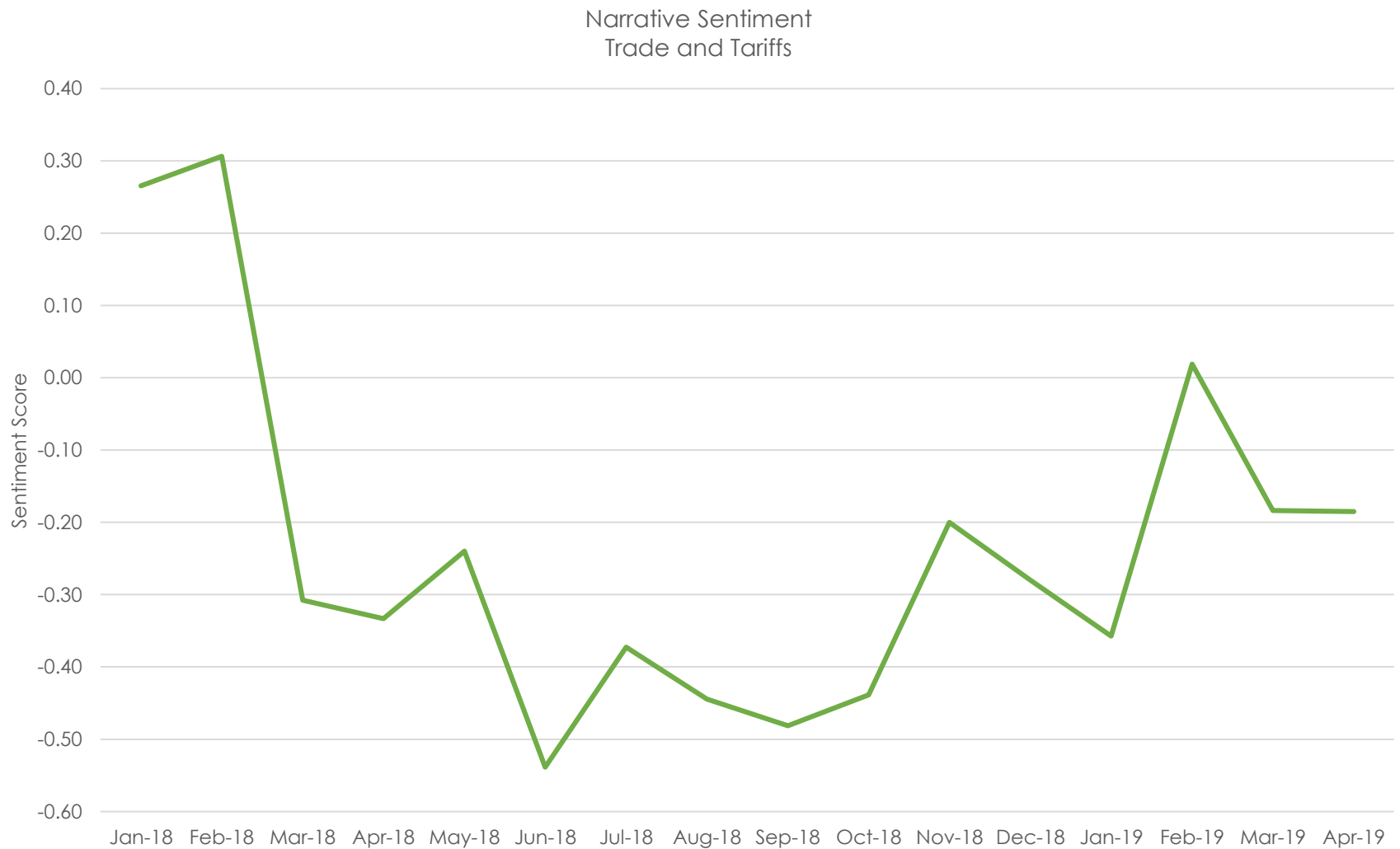
Trade and Tariffs Cohesion Monitor – April 2019



Trade and Tariffs Fiat News Monitor – April 2019



Trade and Tariffs Sentiment Monitor – April 2019

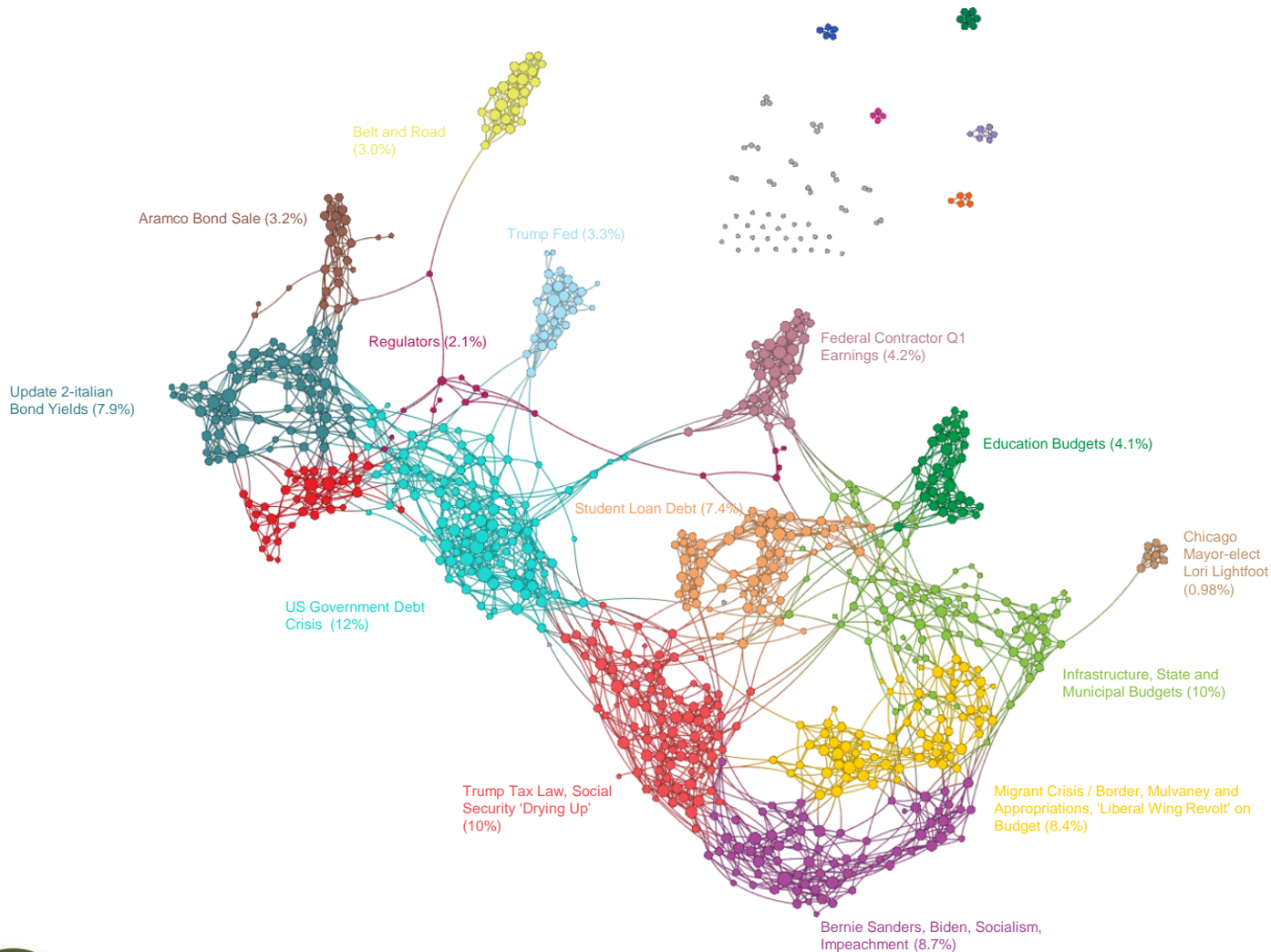


US Fiscal Policy Commentary

- Rising sentiment and cratering cohesion in US Fiscal Policy narratives appear to be the result of electoral politics – wide-ranging, optimistic plans in popular areas (e.g. student loan debt retirement, medicare-for-all, infrastructure)
- There is, however, no central governing narrative, and financial market attention on fiscal policy narratives remains below historical levels. We don't think it's an overstatement to say that financial markets simply do not care about US fiscal policy at this time.
- Of interest: as covered elsewhere on Epsilon Theory, language used in articles about student loan debt continues to be among the most well-connected in the US Fiscal Policy dataset.
- While you may note a cluster of articles focused on the 'US Federal Debt Crisis' topic, we note that most refer to it as a *non-existent* crisis. It includes many pro-MMT style opinion and analysis pieces.



US Fiscal Policy Network Map – April 2019

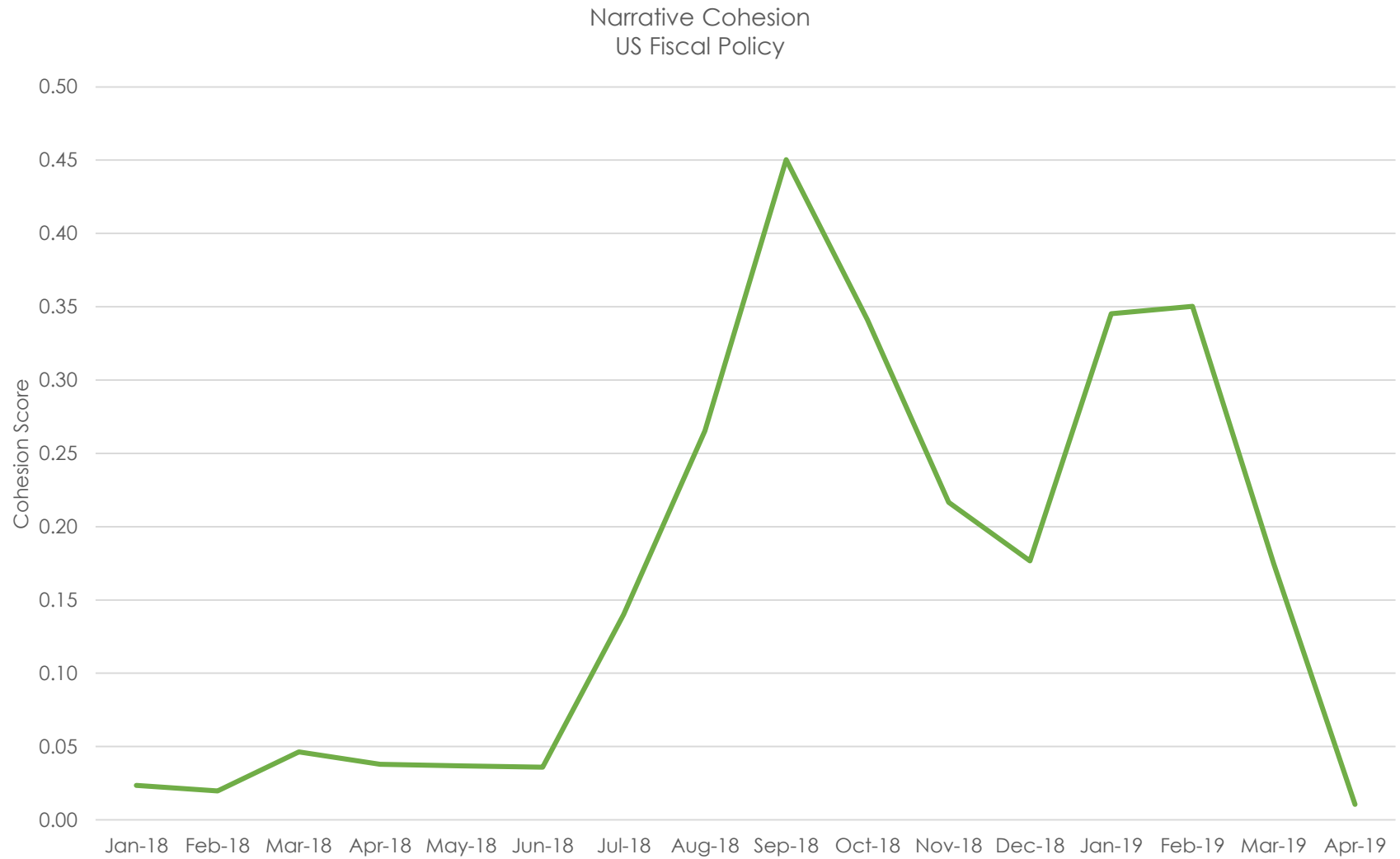


US Fiscal Policy Attention – April 2019

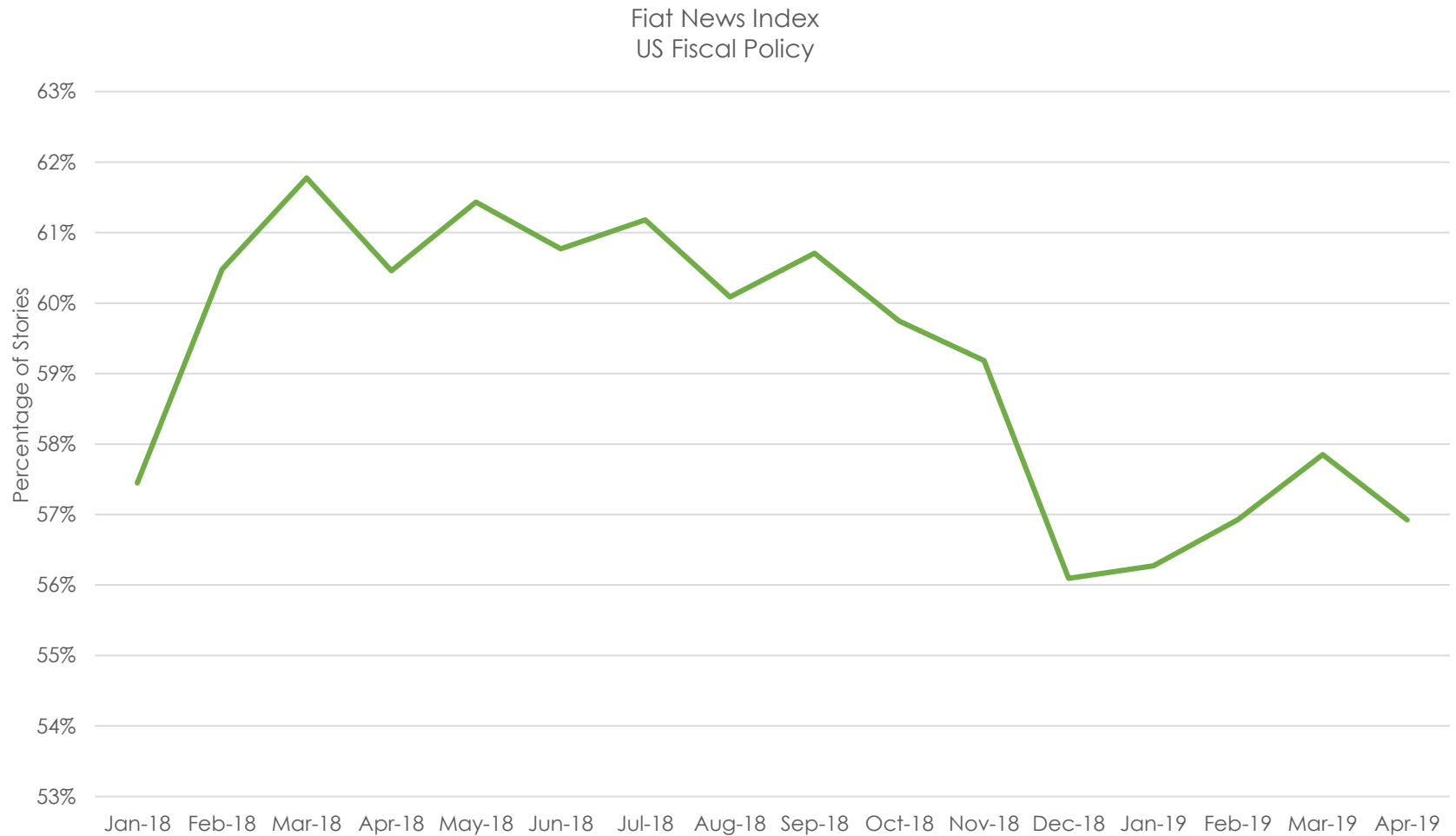
Full network reflects all articles referencing stocks/equities. Bold-faced nodes represent articles discussing fiscal deficits, the US federal budget and national debt matters.



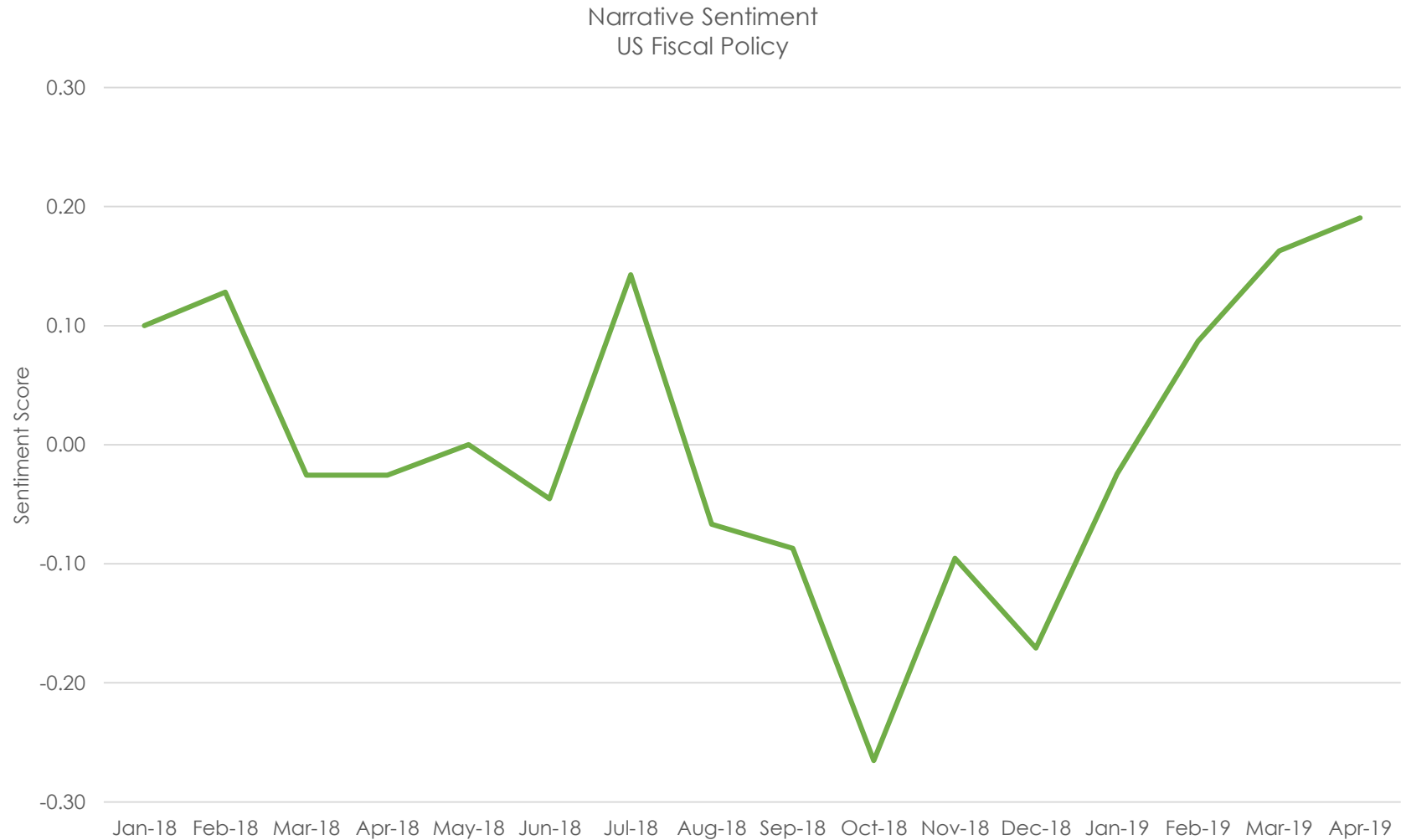
US Fiscal Policy Cohesion Monitor – April 2019



US Fiscal Policy Fiat News Monitor – April 2019



US Fiscal Policy Sentiment Monitor – April 2019

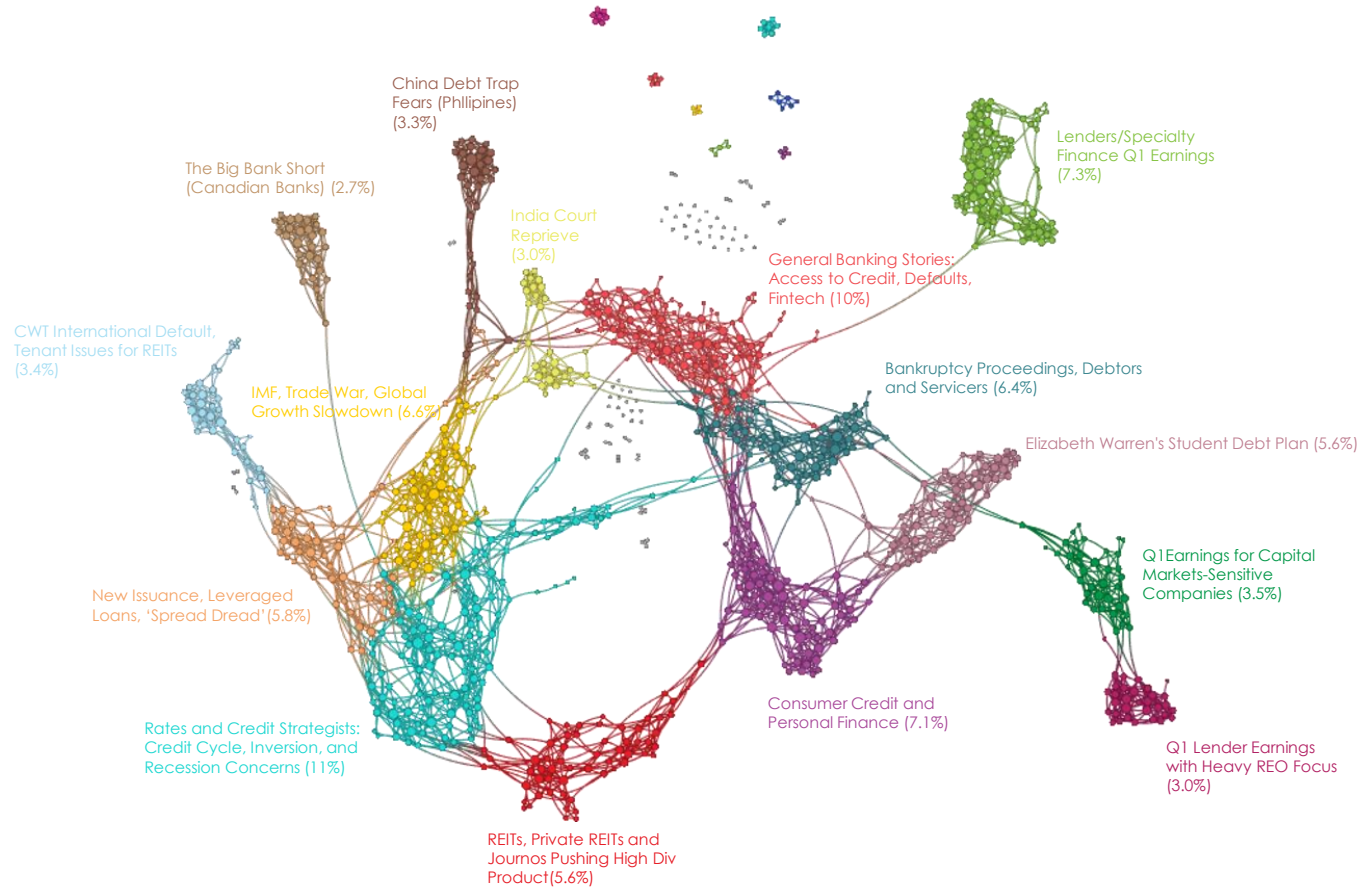


Credit Cycle Commentary

- We are now comfortable characterizing the credit market narrative structure as *complacent*.
- There is very little overall structure to any one narrative about risks to credit markets, defaults or liquidity, and general coverage continues to be quite positive in sentiment about lending.
- In addition, each of the notable credit events large enough to merit a cluster of articles is visibly separate from the core of financial journalism.
 - In other words, the only people talking about Canadian Banks, China Debt Traps in the Philippines, or HNA's CWT International are people talking about those specific issues.
 - They are not being pulled into broader discussions of fixed income and credit markets.
- As noted elsewhere, the student debt market continues to be central to most coverage of credit markets.



Credit Cycle Network Map – April 2019

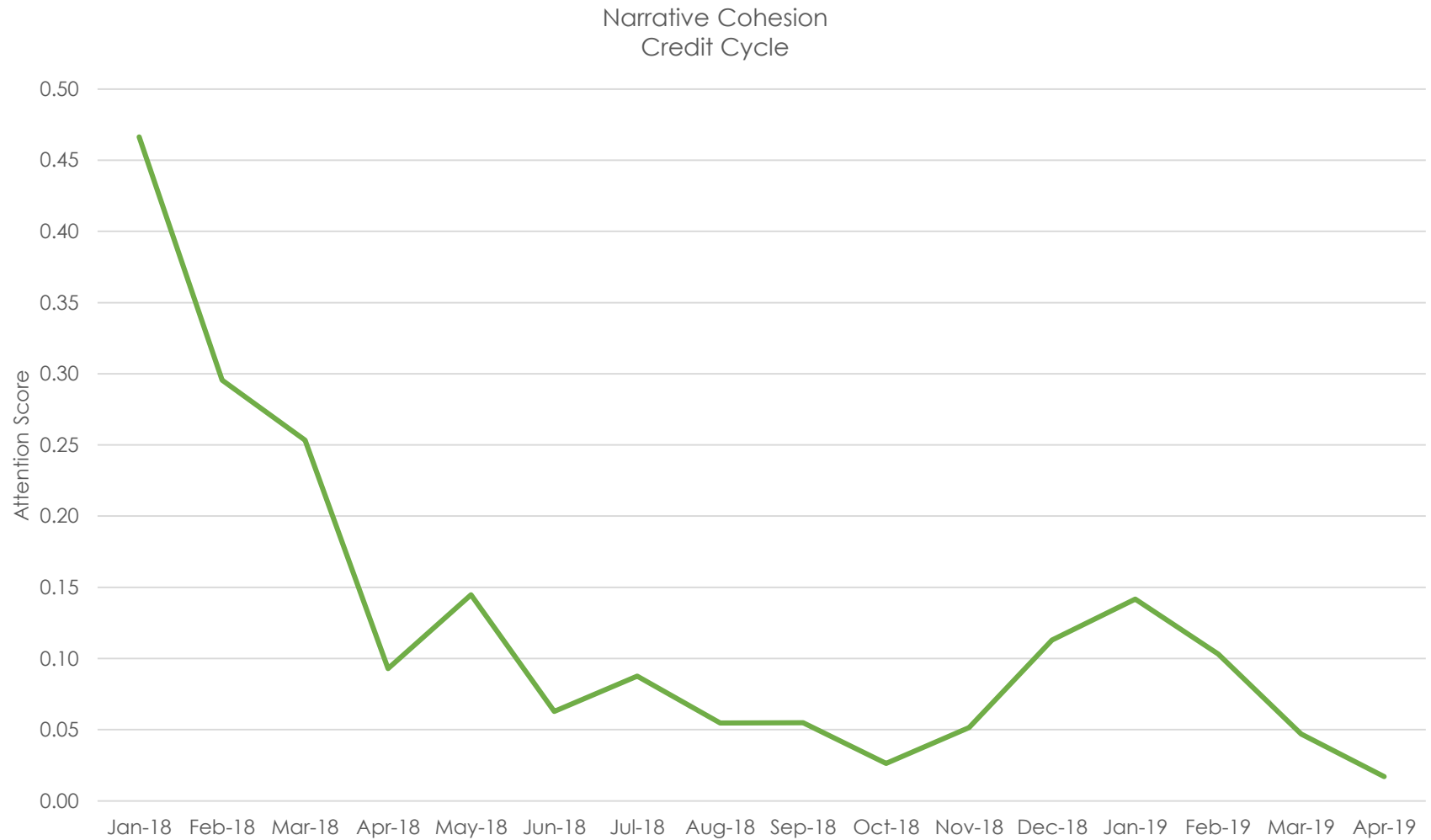


Credit Cycle Attention – April 2019

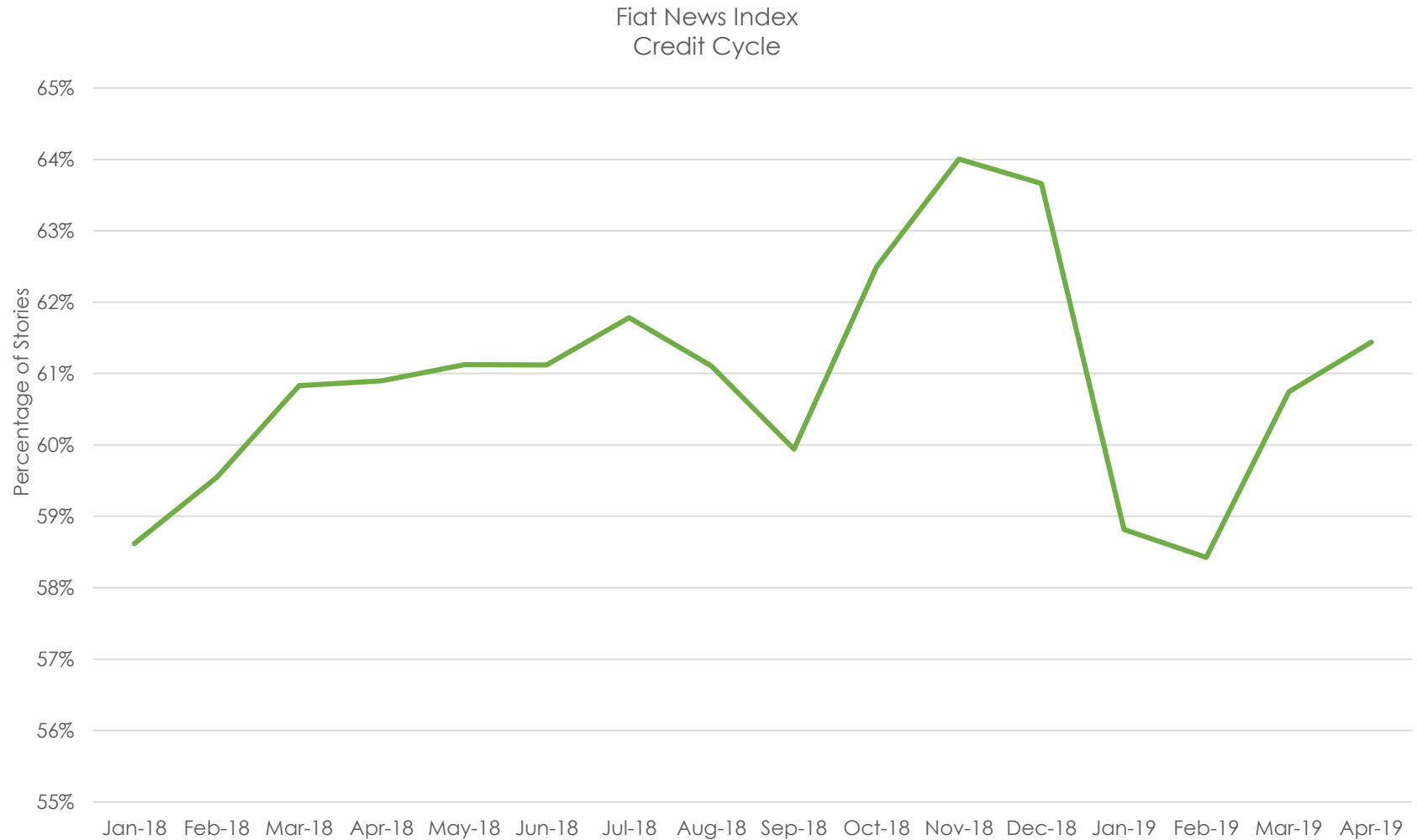
Full network reflects all articles referencing the credit cycle, changes in spreads, liquidity, debt issuance and defaults / delinquencies.



Credit Cycle Cohesion Monitor – April 2019



Credit Cycle Fiat News Monitor – April 2019



Credit Cycle Sentiment Monitor – April 2019



Text Analytics Background



Quid reads any text to identify key words, phrases, people, companies and institutions.



Then it compares words from each document to create links between them based on similar language.



Quid repeats the process at immense scale, producing a network that shows how similar all the documents are to one another.

How to Read a Network

Quid creates a visual map to represent the landscape. Example network: sized by degree, colored by cluster.

Each node represents a document. A node sized by degree represents the number of connections, or similarity, to other nodes

Connections represent similar language used across nodes

A node bridging two clusters can indicate a document that intersects two concepts

Spread-out clusters contain highly differentiated documents

Dense clusters contain highly similar documents

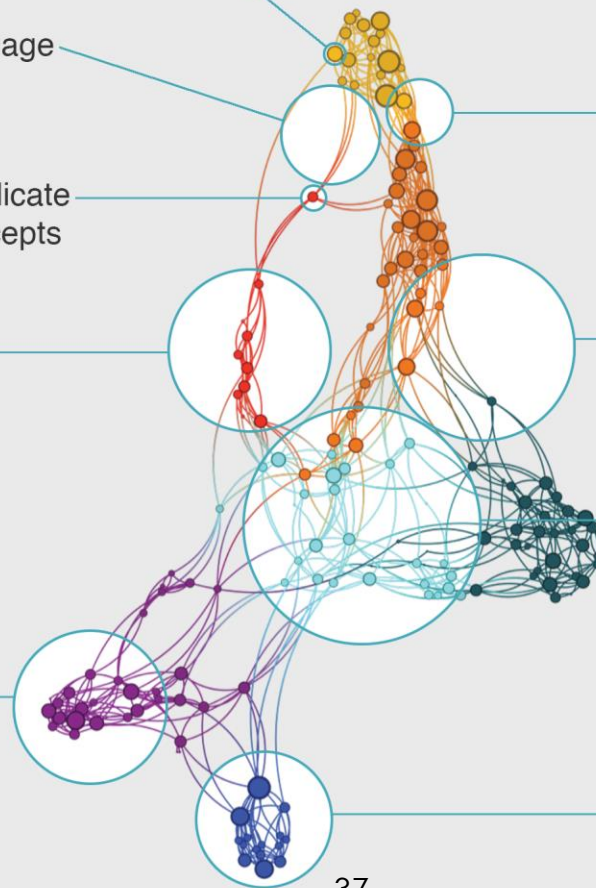
Similar nodes typically group together into one cluster. Each cluster grouping is represented by a different color.

Less distance between clusters indicates a high number of inter-related documents

Greater distance between clusters indicates a low number of interrelated documents

Centrally located nodes are core to the overall network, indicating central topics and bridging ideas

Peripheral clusters are less central to the overall network but could represent a niche interpretation on the topic



ET Professional Terminology

Cohesion is an Epsilon Theory-only measure which uses a Dijkstra Algorithm to find the shortest distance between each node (article) pair, and measures the normalized harmonic centrality of the entire network of those pairs. Think of it as a measure of the similarity between all articles on a topic. It is measured between 0-1, and should *not* be compared between topics, which may be naturally more or less similar because of the nature of the topic as defined.

Attention is an Epsilon Theory measure which calculates each node's centrality from the *Cohesion* of the broad universe. It then maps those nodes to individual topics (e.g. Inflation or Trade), and calculates whether the number of articles of high influence on the broader financial market network is higher or lower than the historical average for that topic. Attention is scored between -1 and +1, where a positive value indicates that the topic has produced a greater share of central, high influence articles in the broad network than that topic's historical average.

Sentiment is a Quid-based measure based on scores of the positive or negative characteristics of each n-gram (phrases, words, etc.). Our measure is calculating as $(\% \text{ net positive} - \% \text{ net negative}) / (\% \text{ either positive or negative})$.

Fiat News is an Epsilon Theory-only measure of the use of words or phrases which communicate assertions of causality, value judgments or self-evidence (e.g. "obviously"). We use it to measure the aggregate tendency of articles to *explain* content, which can sometimes be related to periods of heightened narrative promotion.

Narrative Maps are Quid-driven content, but the categories and cluster titles are based on Epsilon Theory analysis of the underlying articles' content and Quid-identified n-grams.



Disclaimers and Use

This analysis is prepared as general research and commentary, and is not a recommendation to buy or sell any security. It does not take into account individual facts and circumstances, and should be supplemented by additional such analysis to guide any investment decisions.

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