



Financial Market Implications of the Trade War between the United States and China

Ali Ozdagli

Abstract:

This paper finds that the trade war between the United States and China has had a significant impact on high-yield spreads, long-term interest rates, and stock prices. The event dates associated with news about the trade war can explain a large portion of the increase in high-yield spreads and the decline in yields on long-term Treasury debt that has occurred since early 2018. While FOMC statements and minutes suggest that the trade war has been a factor driving the recent rate cut decisions, the relationship between the trade war and financial market movements in 2019 is comparable to 2018, a period when monetary policy had tightened significantly. Moreover, the inversion of the spread between the 10-year and the two-year Treasury rates in August, which generated significant media chatter about a looming recession, does not seem to be influenced by news about the trade war.

Keywords: trade war, financial markets, monetary policy

JEL Codes: F13, G12

Ali Ozdagli is a senior economist in the research department of the Federal Reserve Bank of Boston. His e-mail address is ali.ozdagli@bos.frb.org.

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This paper presents preliminary analysis and results intended to stimulate discussion and critical comment. The views expressed herein are those of the author and do not indicate concurrence by the Federal Reserve Bank of Boston, the principals of the Board of Governors, or the Federal Reserve System.

This paper, which may be revised, is available on the web site of the Federal Reserve Bank of Boston at <http://www.bostonfed.org/economic/current-policy-perspectives/index.htm>.

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I. Introduction

Fears that the ongoing trade war between the United States and China will trigger a recession are growing. There are many different channels through which the risks associated with the trade war can materialize for the U.S. economy. Higher import tariffs can raise consumer prices, thereby lowering real income and consumption in the United States. Such effects could be partially offset by a shift in demand towards domestic goods. Nevertheless, firms can become more pessimistic about the economic outlook, which could reduce their hiring, investment, and production. Even without inducing such pessimism, the increased policy uncertainty may cause firms to delay any capital expenditures involving large fixed costs until the uncertainty is resolved. Furthermore, those firms that cannot easily replace their inputs sourced from China with inputs from other countries may experience higher costs and supply chain disruptions, and thereby reduce their economic activities.

Despite this plethora of channels through which the trade war can be transmitted to the macroeconomy, the estimated total effects coming from these channels are rather small. For example, an August report by Goldman Sachs estimates that the total peak effect from all these channels will amount to 0.2 percent of GDP (Hatzius et al. 2019).¹ Accordingly, former U.S. Treasury secretary Lawrence Summers has commented that the large gyrations in financial markets that are attributed to the trade war are puzzling (Summers 2019). Nevertheless, it is possible that trade tensions have raised risk premia, thereby tightening financial conditions, as argued recently by Mark Carney, the governor of the Bank of England (Carney 2019, p. 4).

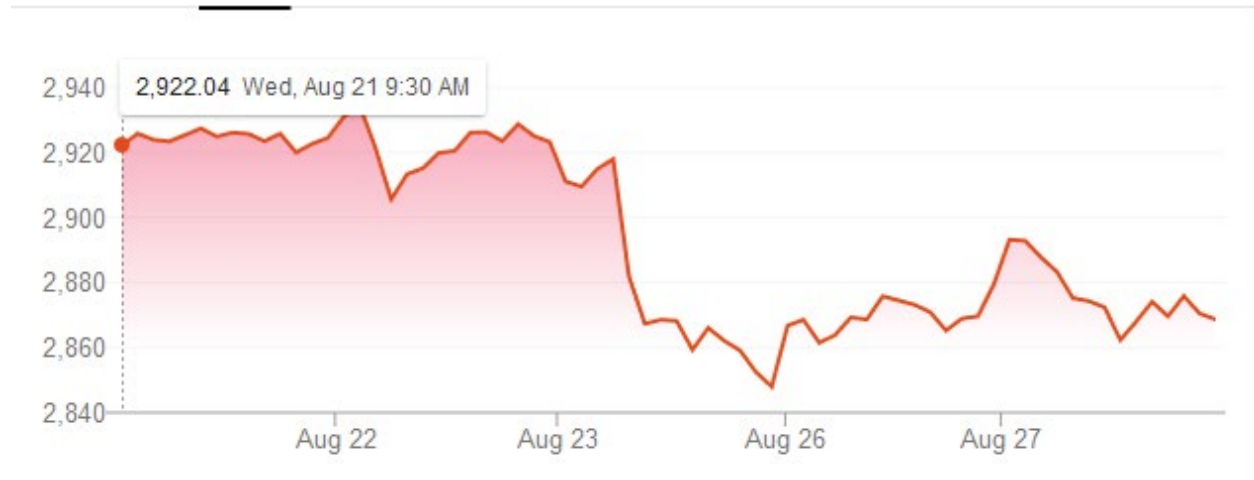
This paper establishes that the trade war's effect on financial markets is indeed economically and statistically significant. In particular, the trade war has had a significant impact on high-yield spreads, long-term Treasury rates, and stock prices. While FOMC statements and minutes suggest that the trade war has been a factor driving the recent rate cut decisions, the relationship between the trade war and financial market movements in 2019 is comparable to 2018, a period when monetary policy had tightened significantly. Moreover, the inversion of the spread between the 10-year and the two-year Treasury rates in August, which generated significant media chatter about a looming recession, does not seem to be influenced by news about the trade war.

¹ Hatzius et al. (2019) estimates an additional 0.4 percent drop in GDP due to financial conditions.

The Effect of the Trade War on Financial Markets

Anecdotal evidence suggests that news related to the trade war can have a significant effect on financial markets. For example, Figure 1 shows how the S&P 500 index reacted immediately after the new information released on the morning of August 23, 2019, increased trade tensions with China. That day, the U.S. stock market closed down about 2.5 percent.

Figure 1: S&P 500 Index around Trump's Tweet on August 23, 2019 (Source: Google.)



Obviously, a single event does not provide enough evidence to argue that the trade war has had a significant effect on financial markets. A more comprehensive analysis is needed in order to make this determination. We use public sources to create a timeline of events related to the trade war and identify 28 event days during the period from January of 2018 through August of 2019. Out of these 28 event days, 19 are taken from the timeline created by Reuters/CNBC, while the remaining ones come from the timeline in Wikipedia, which we cross-checked with other sources.² Moreover, since the daily event study is intended to improve the precision of the estimates, it is important to check if the events occurred after trading hours. For this purpose, Factiva is used to check the earliest time stamp of each news event. The details of these events are described in the Appendix.

During the period from January 2018 through August 2019, these news events related to the trade war account for an increase of 50 basis points (of the total 70 basis points rise) in the high-yield spread, and about 65 basis points of the 145 basis points decline in the 10-year minus

² Using only those events from Reuters/CNBC does not materially change the results.

three-month Treasury spread. Both the high-yield spread and the Treasury spread are financial indicators that may predict future recessions.³ In unreported regressions, we find that since the beginning of 2018, the changes that occur on event days related to the trade war differ from the changes taking place on other days in a statistically and economically significant way.

However, to make a more precise assessment of the effect that the uncertainty induced by the trade war has on U.S. financial markets, we also need to make sure that the markets are moving in the direction we expect them to move on the event days. In particular, we expect that news about the escalating trade war that raises market uncertainty would push the long-term rates and stock prices down and high-yield spreads up. Pinpointing this effect is a challenging problem because it is hard to quantify market changes related to uncertainty stemming from the trade war, since multiple factors can affect asset prices on any given day. Therefore, we follow the event study approach of Rigobon and Sack (2005).⁴

Rigobon and Sack (2005) assume that the daily changes in financial variables can be characterized by a system of linear equations. If we let z_1 be trade war shocks, z_2 be all other shocks, and Δy_1 and Δy_2 be changes in the values of two financial market variables, we can write the equations that determine these day-by-day changes as:

$$\Delta y_1 = \alpha_1 z_1 + \alpha_2 z_2 + e_1,$$

$$\Delta y_2 = \beta_1 z_1 + \beta_2 z_2 + e_2,$$

where e_1 and e_2 are idiosyncratic shocks.

There are two identification challenges to overcome when using this method. First, the variable z_1 is an unobservable variable, in that on any given day, the news related to the trade war cannot be precisely quantified. However, we can let y_1 be an asset that we believe to be significantly affected by trade uncertainty, such as the Chicago Board Options Exchange's Volatility Index (VIX), and y_2 to be an asset whose reaction to the trade news we want to study,

³ The 10-year minus two-year spread, which generated significant recession chatter in August, did not move much on the trade news dates; we study this phenomenon in more detail in the next section. The high-yield spread refers to the Bank of America Master II Option-Adjusted Spread. Bond data come from the Federal Reserve Bank of St Louis FRED database, whereas the stock market data come from Yahoo Finance.

⁴ This method is an extension of their earlier papers (Rigobon and Sack 2003; 2004). Alternatively, one could use an intraday event study approach. However, it is difficult to figure out the precise minute that a trade news event occurred, with the exception of the timing associated with the President's tweets. However, the President's tweets do not always reveal new information so, at best, any identification is weak.

such as long-term rates.⁵ Then we can answer the question: “What is the effect of a trade war shock that moves the VIX by 1 percentage point per annum on 10-year Treasury yields?” In other words, although one cannot directly measure z_1 , and hence its effect β_1 , even if news about the trade war were the only factor driving movements in the financial variables, it is possible to identify β_1/α_1 to gauge the significance of the effect that trade war shocks have on financial markets.

The system of linear equations also illustrates the second identification challenge. Asset prices are affected by factors other than just news related to the trade war. Therefore, if we were to simply regress the daily change in long-term rates on the daily change in the VIX, the resulting coefficient would not be informative about what significance should be attributed to news events related to the trade war. This problem is addressed by employing the heteroskedasticity-based estimator in Rigobon and Sack (2005). Their approach uses a set of event and non-event dates and two identification assumptions: (i) the variance of the trade-related news (z_1) is higher on event dates, (ii) the variance of other news and the variance of the idiosyncratic shocks on event dates are equal to their counterparts on non-event dates. Intuitively, this identification scheme allows for all types of news to be present on any given day, but assumes that any difference in the magnitude of the movements in the financial variables occurring on event dates, relative to non-event days, is attributable to news about the trade war.⁶

Rigobon and Sack (2005) show that under these two identification assumptions, running the following instrumental variable regression using the set of event and non-event dates,

$$\Delta y = \beta \Delta \text{VIX} + \epsilon,$$

and instrumenting $\Delta \text{VIX} = (\Delta \text{VIX}_{\text{event}}, \Delta \text{VIX}_{\text{nonevent}})$ with $\text{IV} = (\Delta \text{VIX}_{\text{event}}, -\Delta \text{VIX}_{\text{nonevent}})$, gives an unbiased estimator for β_1/α_1 , where Δy is the change in the financial variable of interest. Intuitively, using non-event dates cleans out the effect of the movements in the VIX stemming from shocks unrelated to the trade war on event days. To see this mathematically, note that the instrumental variables estimate of β is given by:

⁵ One could choose alternative assets instead of the VIX if one would like to focus on channels other than financial market uncertainty. Our conclusions do not depend on the choice of assets used in the identification procedure.

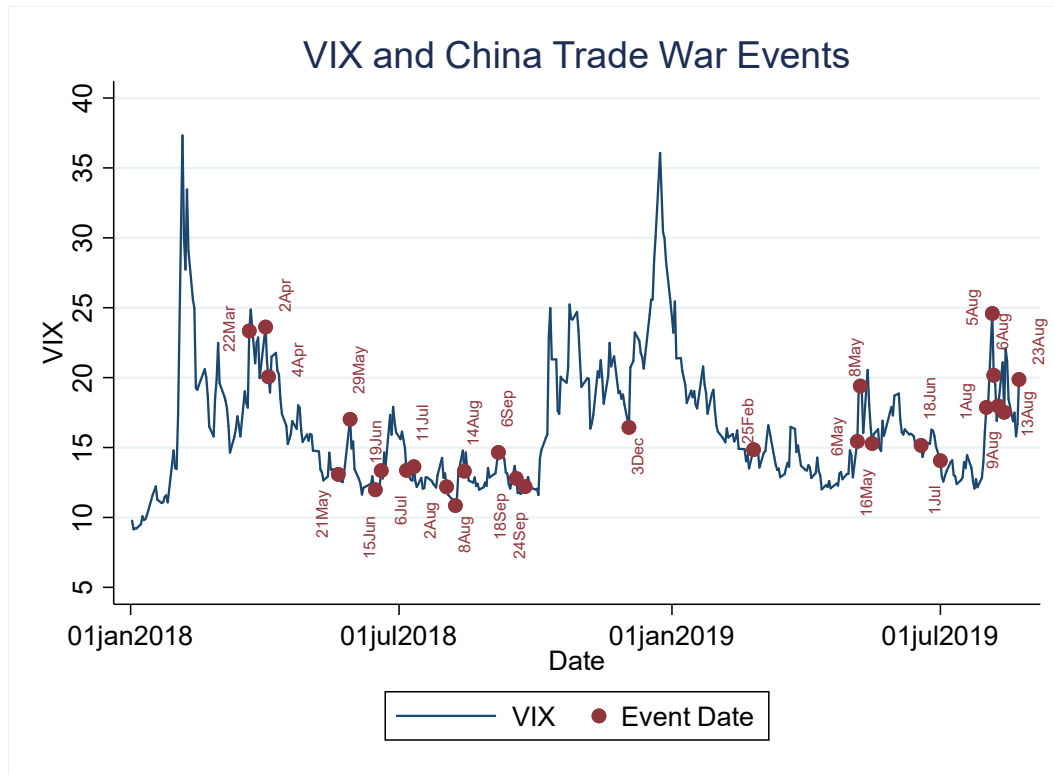
⁶ This assumption can fail, for example, if news about the trade war is actually systematically driven by other shocks that can move financial variables. One such case can be that the news is revealed to systematically divert public attention from other events happening around the same time. Although the results should be interpreted with this possibility in mind, it is unlikely that the majority of the news related to the trade war fits this category, especially since this paper is studying high-frequency (daily) event windows.

$$E[\hat{\beta}_{IV}] = \frac{\text{cov}(\Delta y, IV)}{\text{cov}(\Delta VIX, IV)} = \frac{\text{cov}(\Delta y, \Delta VIX)_{\text{event}} - \text{cov}(\Delta y, \Delta VIX)_{\text{non-event}}}{\text{var}(\Delta VIX)_{\text{event}} - \text{var}(\Delta VIX)_{\text{non-event}}}$$

Here, we replace ΔVIX and Δy with Δy_1 and Δy_2 in the linear system of equations described earlier. Since only the variance related to news about the trade war is different on event dates when compared to non-event dates, all the other sources of variance in Δy and ΔVIX on event dates get cleaned out, leading to an unbiased estimate of β_1/α_1 .

Figure 2 presents the VIX time series since January of 2018, along with the 28 event dates listed in the Appendix. We choose each of the non-event days as the same weekday, but two weeks before the given event date, in order to have a sufficient time interval between event and non-event dates.⁷ The main results are not affected by using alternative choices for these non-event dates.⁸

Figure 2: VIX and China Trade War Events (Source: St. Louis FRED.)



⁷ In the case of the event date for August 23, 2019, the non-event day two weeks prior overlaps with another event related to the trade war that occurred on August 9, 2019. Therefore, August 2, 2019, was chosen as the non-event date corresponding to August 23, 2019.

⁸ One implication of the two identifying assumptions is that financial market variables should be more volatile on event dates. See the summary statistics in the Appendix for evidence confirming this expectation.

Table 1 summarizes the results for news events related to the trade war that move the VIX by one unit, meaning a 1 percentage point increase in annualized implied volatility, roughly half a standard deviation for the sample period. We see that such news would increase high-yield spreads, measured as the Bank of America Merrill Lynch U.S. High Yield Master II Option-Adjusted Spread, by 3.5 basis points. It would also flatten the yield curve by 12 basis points (column 2), an effect that mainly stems from changes in the 10-year Treasury rate (column 3). Moreover, in the longer end of the yield curve, we do not see any flattening, as indicated by the results shown in columns 4 and 5. Finally, column 6 suggests that the S&P 500 index would move about 0.46 percent.

Table 1: The Effect of Trade War Shocks

	(1)	(2)	(3)	(4)	(5)	(6)
	Δ HY	Δ (T10-T3m)	Δ T10	Δ T2	Δ (T10-T2)	Δ SP500
Δ VIX	0.035*** (0.007)	-0.012*** (0.004)	-0.013*** (0.004)	-0.017*** (0.005)	0.004 (0.002)	-0.465*** (0.045)
<i>N</i>	56	56	56	56	56	56
adj. <i>R</i> ²	0.518	0.258	0.323	0.346	-0.017	0.793

Heteroskedasticity-robust standard errors are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. HY refers to high-yield spreads, measured as the Bank of America Merrill Lynch U.S. High Yield Master II Option-Adjusted Spread. T10 (T2) refers to 10-year (two-year) Treasury yield, T3m refers to the three-month Treasury yield, and SP500 refers to the S&P 500 index.

II. Policy Implications

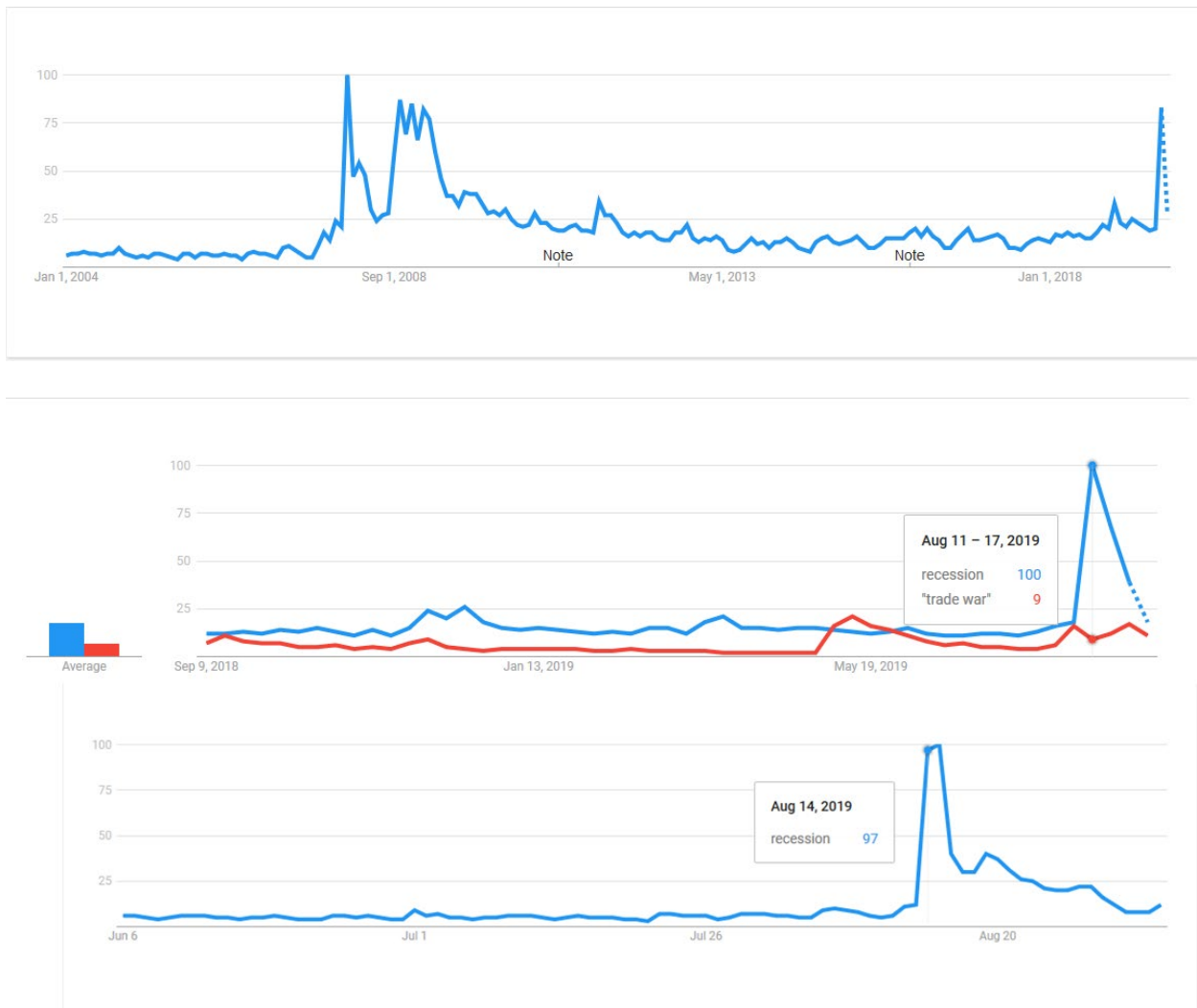
These results suggest that the U.S. trade war with China has significantly affected financial markets since 2018. Therefore, a natural question to ask is whether the recent increase in chatter about an upcoming recession can be attributed to trade-related news. In particular, Figure 3 shows the Google Trends result for the search term “recession” using monthly data—indeed, we see a spike in August of 2019 that is comparable to the time period before the onset of the 2008 financial crisis.⁹ However, we see that this spike is not associated with a similar spike for the search term “trade war.” If anything, the search term “trade war” trended in the opposite direction during the week when the search term “recession” spiked.

When we view the data at the daily level in the bottom panel of Figure 3, we see that the spike for “recession” occurred on August 14, 2019, the day of the yield curve inversion, when the

⁹ We see a similar pattern when we look at the “recession” word count from Factiva. See the Appendix.

10-year Treasury rate fell below the two-year yield. We see from Table 1 that trade-war news does not have a significant effect on the 10-year minus the two-year Treasury spread, further suggesting that it is hard to argue that the trade war was the main culprit behind the recent recession worries.

Figure 3: Google Trends Results for the Search Term “Recession” (top, Monthly Frequency), “Recession” and “Trade War” (middle, Weekly Frequency), and “Recession” (bottom, Daily Frequency)



Finally, one could argue that we should still be worried that the trade war could trigger a recession because the trade war's effect on financial markets has become stronger in 2019. As a test of this argument, Table 2 shows that news related to the trade war has not been more impactful in 2019 compared to 2018. None of the differential reactions is statistically significant. More importantly, their signs do not uniformly point to trade news having a stronger effect on financial markets in 2019.

Table 2: Effect of Trade War Shocks, 2018 versus 2019

	(1)	(2)	(3)	(4)	(5)	(6)
	Δ HY	Δ (T10-T3m)	Δ T10	Δ T2	Δ (T10-T2)	Δ SP500
post2018* Δ VIX	0.011 (0.015)	0.004 (0.011)	0.002 (0.009)	-0.002 (0.011)	0.004 (0.005)	0.138 (0.103)
Δ VIX	0.028** (0.013)	-0.014 (0.010)	-0.014* (0.008)	-0.015 (0.010)	0.001 (0.005)	-0.554*** (0.086)
post2018	-0.009 (0.015)	0.006 (0.011)	0.002 (0.009)	-0.003 (0.010)	0.005 (0.005)	0.063 (0.126)
N	56	56	56	56	56	56
adj. R^2	0.550	0.240	0.294	0.336	0.038	0.764

Heteroskedasticity-robust standard errors are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. HY refers to high-yield spreads, measured as the Bank of America Merrill Lynch U.S. High Yield Master II Option-Adjusted Spread. T10 (T2) refers to 10-year (two-year) Treasury yield, T3m refers to three-month Treasury yield, and SP500 refers to S&P 500 index.

The total effect of the events in 2018 compared with 2019 paints a similar picture. Overall, of the 28 event days, 16 of them occurred in 2018 and 12 took place in 2019. The events in 2018 coincide with a 40 basis point inversion of the yield curve (the 10-year minus the three-month spread), whereas the events in 2019 coincide with about a 32 basis point inversion of the yield curve (the 10-year minus the three-month spread). On average, there is no evidence that the spread between the 10-year Treasury and the two-year Treasury is systematically affected by the trade war in either year. Moreover, the events in 2018 coincide with a 34 basis point increase in the high-yield spread, whereas the events in 2019 coincide with a 13 basis point increase in the high-yield spread.

In 2018, the FOMC regularly increased rates at every meeting followed by a press conference. These four 25-basis-points rate increases were actually more than what the FOMC

participants projected at the end of 2017.¹⁰ While FOMC statements and minutes suggest that the trade war has been a factor driving the recent rate cut decisions, the relationship between the trade war and financial market movements in 2019 is comparable to 2018, a period when monetary policy had tightened significantly.

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¹⁰ The median of the projected appropriate policy path by the FOMC participants at the December 13, 2017, meeting indicated a 0.7 percentage point increase in the federal funds rate over the course of 2018, which corresponds to three 25 basis point rate hikes. <https://www.federalreserve.gov/monetarypolicy/fomcprojt20171213.htm>.

Appendix: Summary Statistics of Financial Variables on Event and Non-Event Dates

Panel A. Event Dates

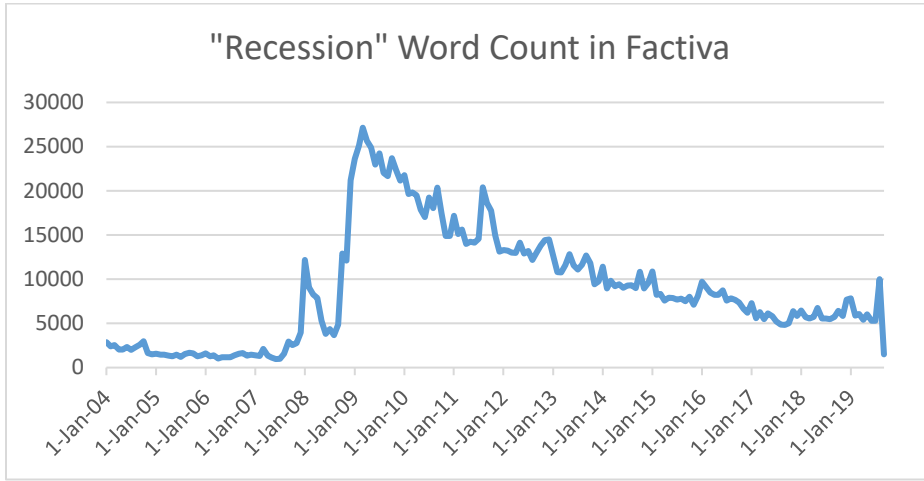
Variable	Obs.	Mean	Std. Dev.	Min	Max
Δ HY	28	0.017	0.104	-0.150	0.340
Δ (T10-T3m)	28	-0.023	0.052	-0.190	0.050
Δ T10	28	-0.020	0.051	-0.160	0.060
Δ T2	28	-0.014	0.058	-0.160	0.080
Δ (T10-T2)	28	-0.006	0.023	-0.060	0.040
Δ SP500	28	-0.162	1.232	-2.978	1.513
Δ VIX	28	0.524	2.505	-4.420	6.980

Panel B. Non-Event Dates

Variable	Obs.	Mean	Std. Dev.	Min	Max
Δ HY	28	-0.001	0.054	-0.170	0.100
Δ (T10-T3m)	28	0.000	0.034	-0.040	0.070
Δ T10	28	0.000	0.029	-0.040	0.060
Δ T2	28	0.004	0.031	-0.060	0.070
Δ (T10-T2)	28	-0.004	0.021	-0.040	0.040
Δ SP500	28	0.222	0.561	-0.728	2.143
Δ VIX	28	-0.420	0.920	-1.970	1.850

HY refers to high-yield spreads, measured as the Bank of America Merrill Lynch U.S. High Yield Master II Option-Adjusted Spread. T10 (T2) refers to 10-year (two-year) Treasury yield, T3m refers to three-month Treasury yield, and SP500 refers to S&P 500 index.

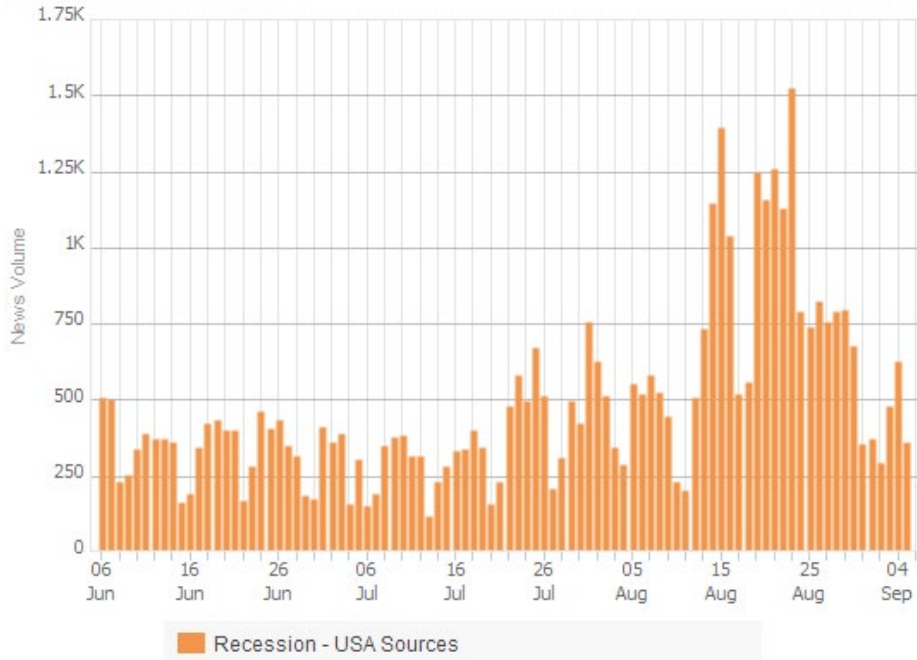
Appendix: Factiva Word Count for the Term “Recession,” Monthly and Daily



Recession - USA Sources

06 Jun 2019 — 05 Sep 2019

ANALYSIS BY **FACTIVA**



Publications, Web, Blogs, and Boards

Appendix: U.S.-China Trade War Timeline

Unless indicated otherwise, all events are taken from Reuters/CNBC timeline, which report important milestone dates and (sometimes multiple) events happening on that date, unless otherwise indicated. All events are checked for the first time stamp in Factiva to see if these occurred before or after trading hours. <https://www.cnbc.com/2019/08/23/reuters-america-timeline-key-dates-in-the-u-s-china-trade-war.html>.

March 22, 2018: Trump asked the United States trade representative (USTR) to investigate applying tariffs on US\$50–60 billion worth of Chinese goods. (Source: Wikipedia/CNN, <https://www.cnn.com/2018/03/22/politics/donald-trump-china-tariffs-trade-war/>.)

April 2, 2018: China imposes tariffs of up to 25 percent on 128 U.S. products.¹¹

April 4, 2018: On April 3 (after trading hours), Trump unveils plans for 25 percent tariffs on about \$50 billion of Chinese imports. On April 4, China responds with plans for retaliatory tariffs on about \$50 billion of U.S. imports.

May 19/20, 2018 (weekend): Chinese officials agreed to “substantially reduce” America's trade deficit with China by committing to “significantly increase” its purchases of American goods. As a result, Treasury Secretary Steven Mnuchin announced that “We are putting the trade war on hold”. (Source: Wikipedia/AP News, <https://www.apnews.com/41443aaca704426b9f35b16607271a60>).

May 29, 2018: The White House announced that it would impose a 25 percent tariff on \$50 billion of Chinese goods with “industrially significant technology;” the full list of products affected to be announced by June 15, 2018. (Wikipedia/CNN, <https://money.cnn.com/2018/05/29/news/economy/china-tariffs/index.html>).

¹¹ On March 8, 2018, Trump ordered 25 percent tariffs on steel imports and 10 percent on aluminum from all suppliers—not just on China. Since this announcement was not explicitly related to China, it has been eliminated.

June 15, 2018: The United States sets an effective date of July 6 for 25 percent levies on \$34 billion of Chinese imports. It says 25 percent tariffs will also kick in on an additional \$16 billion of goods after a public comment period. China responds in kind with tariffs on \$34 billion of U.S. goods.

June 18, 2018 (after trading hours): The White House declared that the United States would impose additional 10 percent tariffs on another \$200 billion worth of Chinese imports if China retaliated against these U.S. tariffs. China retaliates, threatening its own tariffs on \$50 billion of U.S. goods, and stating that the United States had launched a trade war. (Wikipedia/CNN, <https://money.cnn.com/2018/06/18/news/economy/trump-china-tariffs-retaliation/>)

July 6, 2018: American tariffs on \$34 billion of Chinese goods came into effect. China imposed retaliatory tariffs on US goods of a similar value. (Source: Wikipedia/BBC, <https://www.bbc.com/news/business-44707253>).

July 10, 2018 (after trading hours): The United States unveils plans for 10 percent tariffs on \$200 billion of Chinese imports.

August 1, 2018 (after trading hours): Trump orders the USTR to increase the tariffs on \$200 billion of Chinese imports to 25 percent from the originally proposed 10 percent.

August 7, 2018 (after trading hours): The United States releases the list of \$16 billion of Chinese goods to be subject to 25 percent tariffs. China retaliates with 25 percent duties on \$16 billion of U.S. goods.

August 14, 2018: China filed a complaint with the World Trade Organization (WTO), stating that U.S. tariffs on foreign solar panels clash with WTO ruling and have destabilized the international market for solar PV products. (Source: Wikipedia/Reuters, <https://www.reuters.com/article/us-usa-trade-china-solar/china-says-u-s-solar-tariffs-violate-trade-rules-lodges-wto-complaint-idUSKBN1L001K>)

September 6, 2018: Trump threatens tariffs on \$200 billion more of Chinese imports. (Originally reported as September 7 by Reuters, corrected using Factiva.)

September 18, 2018: On September 17 (after trading hours): the United States announced its 10 percent tariff on \$200 billion worth of Chinese goods would begin on September 24, 2018, increasing to 25 percent by the end of the year. China promptly responded with 10 percent tariffs on \$60 billion of U.S. imports. (Source: Wikipedia/CNBC, <https://www.cnbc.com/2018/09/18/china-says-new-tariffs-on-us-goods-worth-60-billion-effective-sept-24.html>)

September 24, 2018: The United States implements 10 percent tariffs on \$200 billion of Chinese imports. The administration says the rate will increase to 25 percent on Jan. 1, 2019. China answers with duties of its own on \$60 billion of U.S. goods.

December 1, 2018 (Saturday): The United States and China agree on a 90-day halt to new tariffs. Trump agrees to put off the Jan. 1 scheduled increase of tariffs on \$200 billion of Chinese goods until early March while talks between the two countries take place. China agrees to buy a “very substantial” amount of U.S. products.

February 24, 2019 (Sunday): Trump extends the March 1 deadline, leaving the tariffs on \$200 billion of Chinese goods at 10 percent on an open-ended basis.

May 5, 2019 (Sunday): Trump tweets that he intends to raise the tariff rate on \$200 billion of Chinese goods to 25 percent on May 10.

May 8, 2019: The Trump administration gives formal notice of its intent to raise tariffs on \$200 billion of Chinese imports to 25 percent from 10 percent, effective May 10. Earlier, Reuters reported that China had backtracked on almost all aspects of a draft trade pact with the United States.

May 15, 2019 (after trading hours): President Trump signed an executive order Wednesday that allows the U.S. to ban telecommunications network gear and services from foreign adversaries, in a measure widely believed to be aimed at China and telecom companies including Huawei Technologies Co. and ZTE Corp. (Source: Wikipedia/CNBC, <https://www.cnbc.com/video/2019/05/15/trump-signs-executive-order-targeting-huawei.html>).

June 18, 2019: Trump and Xi speak by phone, and the two sides agree to rekindle trade talks ahead of a planned meeting between the two leaders scheduled for the Group of 20 (G20) summit in Japan at the end of June.

June 29, 2019 (Saturday): At the G20 meeting in Osaka, the United States and China formally agree to restart trade talks after concessions from both sides. Trump agrees to no new tariffs and an easing of restrictions on Chinese telecom powerhouse Huawei Technologies Co Ltd. China agrees to unspecified new purchases of U.S. farm products.

August 1, 2019: After two days of trade talks with little progress and complaints by Trump that China has not followed through on a promise to buy more U.S. farm products, he announces 10 percent tariffs on \$300 billion worth of Chinese imports, in addition to the 25 percent tariffs already levied on \$250 billion worth of Chinese goods. Trump says the talks between Washington and Beijing would continue despite the new tariffs, and that the rate could be increased above 25 percent in stages.

August 5, 2019: China's Commerce Ministry responds to the latest U.S. tariffs by halting purchases of U.S. agricultural products, and the Chinese currency, the yuan, weakens past the seven yuan per one dollar level, sending equity markets sharply lower. After U.S. markets close, the U.S. Treasury says it has determined for the first time since 1994 that China is manipulating its currency, knocking the U.S. dollar sharply lower and sending gold prices to a six-year high.

August 6, 2019: China's central bank, the People's Bank of China, says Beijing has not and will not use the yuan to respond to trade frictions. A senior Trump aide says U.S.-China trade talks are still planned in Washington in September, and the latest tariffs could still be changed if talks go well, a message that helps calm markets.

August 9, 2019: Trump says he is not ready to make a deal with Beijing and suggests he may cancel in-person trade talks with China scheduled for Washington in September.

August 13, 2019: Trump delayed some of the tariff increases that he had announced earlier. Trump and his advisors, Peter Navarro, Wilbur Ross and Larry Kudlow, conceded that the higher tariffs were postponed to avoid harming American consumers during the Christmas shopping season.

(Source: Wikipedia/CNBC, <https://www.cnbc.com/2019/08/13/trump-says-he-delayed-tariffs-because-of-concerns-over-christmas-shopping-season.html>)

August 23, 2019: China announced that it will impose additional retaliatory tariffs against about \$75 billion worth of U.S. goods. Trump tweeted that he “hereby ordered” American companies to “immediately start looking for an alternative to China.” Furthermore, tariffs are to be raised from 25 percent to 30 percent on the existing \$250 billion worth of Chinese goods beginning on October 1, 2019, and from 10 percent to 15 percent on the remaining \$300 billion worth of goods beginning on December 15, 2019.