Trump Tariffs and Stock Prices

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April 13, 2025

Abstract: This paper investigates the effects of Trump tariffs and the corresponding trade policy uncertainty on U.S. stock prices. The investigation is based on a structural vector autoregression model, where the changes in global oil prices, economic activity, inflation, exchange rates, and the spread between 10-year Treasury constant maturity and the federal funds rates are controlled for. The empirical results show that stock prices represented by the S&P 500 Index, the Nasdaq Composite Index, and the Dow Jones Industrial Average respond positively to tariff shocks in the short run but negatively in the long run. Shocks to trade policy uncertainty reduce stock prices in the long run, with mostly statistically insignificant effects in the short run. Shocks to tariffs and trade policy uncertainty collectively contribute up to 35% to the volatility of the S&P 500 Index, up to 20% to the volatility of the Nasdaq Composite Index, and up to 54% to the volatility of the Dow Jones Industrial Average. Important policy suggestions follow.

JEL Codes: F13, F44, G15
Keywords: Tariffs; Stock Prices; S&P 500; Nasdaq; Dow Jones

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1 Introduction

Trade policy can affect stock prices through interconnected economic and financial channels that primarily influence expected corporate profits and investor risk perception (Liu et al., 2025). Economically, tariffs, as a tool of trade policy, can directly increase costs for companies reliant on imported inputs, potentially squeezing profit margins (Huang et al., 2023). They can also trigger retaliatory tariffs from trading partners, reducing export sales and revenues for domestic firms (Jensen, 2007). Furthermore, tariffs can disrupt established supply chains, forcing costly adjustments, and potentially lead to higher consumer prices, which could dampen overall demand or spur inflation concerns (Asadollah et al., 2024).

Trade policy uncertainty, on the other hand, can primarily affect economic activity by causing businesses to delay or cancel investment projects and hiring due to an inability to reliably forecast future costs, market access, and trade rules (Bianconi et al., 2021). This deferred economic activity lowers expectations for future corporate growth and earnings (Lee and Wen, 2023). Financially, both tariffs and trade policy uncertainty can affect stock valuations, where reduced profit expectations can directly lower perceived company value (Dhingra and Sampson, 2022). Moreover, trade policy uncertainty can significantly elevate the risk premium demanded by investors, increasing the discount rate applied to future earnings and thus lowering present stock values (Chiang, 2020). Heightened uncertainty can also fuel market volatility, further discouraging risk-taking (Hoque et al., 2023). Therefore, both concrete tariffs and the ambiguity surrounding trade

policy can depress stock prices by negatively impacting expected future cash flows and increasing the perceived risk associated with holding equities.

Based on this background, this paper investigates the effects of Trump tariffs and the corresponding trade policy uncertainty on U.S. stock prices measured by the S&P 500 Index, the Nasdaq Composite Index, and the Dow Jones Industrial Average. The investigation is based on a structural vector autoregression model, where changes in global oil prices, economic activity, inflation, exchange rates, and the spread between 10-year Treasury constant maturity and the federal funds rates are controlled for. The empirical analysis shows that U.S. stock prices react positively to tariff shocks in the short term, but negatively in the long term. Shocks attributed to trade policy uncertainty also reduce stock prices significantly in the long run, although their short-run impacts are generally statistically insignificant. Together, these tariff and trade policy uncertainty shocks are major contributors to stock market fluctuations, jointly explaining up to 35%, 20%, and 54% of the volatility in the S&P 500, Nasdaq, and Dow Jones indices, respectively.

Building upon existing academic studies that have separately examined the impacts of tariffs versus trade policy uncertainty on financial markets, this paper offers several key contributions. Its primary distinction lies in employing a unified structural vector autoregression framework to simultaneously analyze and directly compare the dynamic effects of both implemented tariffs (specifically from the Trump administration era) and concurrent trade policy uncertainty on multiple major U.S. stock indices (S&P 500, Nasdaq, Dow Jones), while controlling for a comprehensive set of macroeconomic factors. This integrated approach allows for a clearer disentanglement of the often-confounded

impacts of policy action versus policy ambiguity. Crucially, the findings contribute by revealing distinct temporal patterns: tariffs elicited a short-run positive but long-run negative stock market response, whereas the negative effects of trade policy uncertainty exist primarily in the long run with insignificant short-term effects. Furthermore, this study provides novel quantitative evidence on the joint contribution of these two factors to market instability, demonstrating through forecast error variance decomposition that tariffs and trade policy uncertainty together explain a substantial portion (up to 20-54%, depending on the index) of stock market volatility during the examined period. This nuanced understanding of the differential timing, direction, and volatility impacts enhances the literature by providing a more complete picture of how recent U.S. trade policy developments have permeated equity valuations and market risk.

The rest of the paper is organized as follows. Section 2 introduces the empirical methodology and data. Sections 3 and 4 investigate the effects of tariffs and trade policy uncertainty on U.S. stock prices. Section 5 concludes by providing policy suggestions.

2 Empirical Investigation

This section provides the technical details of the empirical investigation.

2.1 Estimation Methodology and Data

To estimate the effects of tariffs and trade policy uncertainty on stock prices, the structural vector autoregression (SVAR) model is defined as $z_t = (tpu_t, tar_t, oil_t, ip_t, inf_t, int_t, nxr_t, sto_t)'$. In this model, tpu_t represents the percentage changes in trade policy uncertainty index (borrowed from Caldara et al., 2020) reflecting text-search results of the electronic archives of seven leading newspapers discussing trade

policy uncertainty: Boston Globe, Chicago Tribune, Guardian, Los Angeles Times, New York Times, Wall Street Journal, and Washington Post; tar_t represents changes in the U.S. effective tariff rates obtained from the DataWeb system of the United States International Trade Commission (defined as the calculated duties divided by the dutiable value); oil_t represents percentage changes in the West Texas Intermediate crude oil prices obtained from the Federal Reserve Economic Data (FRED); ip_t represents percentage changes in the U.S. industrial production index obtained from FRED; inf_t represents inflation measured as percentage changes in the U.S. personal consumption expenditures (chain-type price index) obtained from FRED; int_t represents changes in the U.S. 10-year Treasury constant maturity minus federal funds rate obtained from FRED; nxr_t represents percentage changes in the U.S. nominal effective exchange rate obtained from the Bank for International Settlements; and sto_t represents percentage changes in the U.S. stock prices measured by three alternative major indices for robustness purposes, namely the S&P 500 Index, the Nasdaq Composite Index, and the Dow Jones Industrial Average, all obtained from https://www.investing.com.

All variables enter the estimations in monthly terms covering the period between 2015 and 2024 to focus on the effects of Trump tariffs and the corresponding trade policy uncertainty on the U.S. stock prices. Descriptive statistics are provided in Figure 1. In technical terms, the structural form of the SVAR model used for estimation is defined as $A_o z_t = a + \sum_{k=1}^{12} A_k z_{t-k} + u_t$, with u_t representing structural innovations that are assumed to be uncorrelated. The corresponding reduced form model is given by $z_t = b + \sum_{k=1}^{12} B_k z_{t-k} + e_t$ with $b = A_o^{-1} a$, $B_k = A_o^{-1} A_k$ for all k for estimation purposes. The

number of lags is set equal to twelve based on the deviance information criterion, where a recursive structure assumed for the structural impact matrix A_o^{-1} allows for $e_t = A_o^{-1}u_t$, representing the decomposition of reduced form errors.

2.2 Identification Strategy

The recursive structure of the impact matrix is implemented using the variable ordering specified in $z_t = (tpu_t, tar_t, oil_t, ip_t, inf_t, int_t, nxr_t, sto_t)'$. In this specification, while the dynamic interactions between variables unfold with a one-period lag following a shock, structural identification hinges on the assumed contemporaneous relationships between the variables and the underlying shocks. In particular, as the main objective of this paper is to investigate the effects of Trump tariffs and the corresponding trade policy uncertainty on the U.S. stock prices, these two variables are ordered first in the SVAR model, whereas stock prices are ordered last as the main variable of interest. It is important to emphasize that alternative orderings of these variables yield highly similar results that are available upon request.

2.3 Additional Technical Details

The estimations utilize a Bayesian framework via the BEAR toolbox (Dieppe et al., 2016), assuming Independent Normal-Wishart priors, where we generate 2,000 posterior samples and discard the first 1,000 for burn-in. For each remaining draw from the reduced-form posterior, we identify the structural model by constructing the impact matrix through triangular factorization of the error covariance matrix, standardizing structural shocks to unit variance. These 1,000 structural posterior draws allow for the computation of cumulative impulse responses and forecast error variance decompositions. We report the

posterior median as the Bayesian point estimate and the 16th-84th percentile range as the 68% credible set, adhering to standard practice in the literature.

3 Tariffs and Stock Prices

The effects of tariffs on stock prices are measured as the cumulative response of stock prices to one standard deviation of a shock in tariffs, whereas the contribution of tariffs to stock price volatility is based on the forecast error variance decomposition analysis. It is important to emphasize that these empirical results control for the effects of global oil prices, economic activity, inflation, exchange rates, and the spread between 10-year Treasury constant maturity and the federal funds rates according to the SVAR model.

3.1 Response of Stock Prices to Tariffs

The cumulative responses of stock prices to tariff shocks are given in Table 1 and Figure 2 for the alternative stock price indices, where the effects of tariffs are positive in a statistically significant way in the short run (i.e., up to six months), whereas the effects become negative after about one year. Specifically, one standard deviation of a shock in tariffs results in about 0.26% of a contemporaneous increase in the S&P 500 Index, 0.28% of a contemporaneous increase in the Nasdaq Composite Index, and 0.35% of a contemporaneous increase in the Dow Jones Industrial Average. In comparison, the same shock reduces the S&P 500 Index by about 2.03%, the Nasdaq Composite Index by about 2.43%, and the Dow Jones Industrial Average by about 4.40% after eighteen months, suggesting that the long-run effects of tariffs on stock prices are negative in a statistically significant way.

3.2 Contribution of Tariffs to Stock Price Volatility

Based on the forecast variance decomposition analyses, the contributions of tariffs to stock price volatility are given in Table 2 and Figure 3, where the contributions are up to 18.3% contemporaneously for the S&P 500 Index, and they are up to 33.5% for the Dow Jones Industrial Average after eighteen months. It is implied that a significant portion of stock price volatility is explained by tariffs during the sample period, independent of the stock price index considered.

4 Trade Policy Uncertainty and Stock Prices

The effects of trade policy uncertainty on stock prices are measured as the cumulative response of stock prices to one standard deviation of a shock in the trade policy uncertainty index, whereas the contribution of trade policy uncertainty to stock price volatility is based on the forecast error variance decomposition analysis. Once again, it is important to emphasize that these empirical results control for the effects of global oil prices, economic activity, inflation, exchange rates, and the spread between 10-year Treasury constant maturity and the federal funds rates according to the SVAR model.

4.1 Response of Stock Prices to Trade Policy Uncertainty

The cumulative responses of stock prices to the shocks in trade policy uncertainty are given in Table 3 and Figure 2, where the effects on the Dow Jones Industrial Average are positive contemporaneously, and the effects on the S&P 500 Index are positive one month after the shock. In comparison, the corresponding effects on the Nasdaq Composite Index are statistically insignificant for up to three months. Nevertheless, all stock prices respond negatively to the shocks in trade policy uncertainty in the long run, where one standard

deviation of a shock results in about 3.1% of a reduction in the S&P 500 Index, 3.8% of a reduction in the Nasdaq Composite Index, and 4.7% of a reduction in the Dow Jones Industrial Average after eighteen months.

4.2 Contribution of Trade Policy Uncertainty to Stock Price Volatility

Based on the forecast variance decomposition analyses, the contributions of trade policy uncertainty to stock price volatility are given in Table 4 and Figure 3, where the contributions are up to 1.1% contemporaneously and up to 22.5% for the Dow Jones Industrial Average after one year. Although these contributions are relatively lower compared to those of tariffs, it is still implied that a significant portion of stock price volatility is explained by trade policy uncertainty during the sample period, especially in the long run, independent of the stock price index considered.

5 Concluding Remarks and Policy Suggestions

The empirical results reveal important insights into how U.S. stock markets respond to tariffs and trade policy uncertainty, indicating that while the immediate market reaction may differ—tariff shocks generate a temporary positive stock price response, whereas shocks to trade policy uncertainty have muted initial effects—both factors ultimately result in a statistically significant and economically substantial negative pressure on major stock indices over the long run. Furthermore, both implemented tariffs and heightened trade policy uncertainty contribute significantly to stock market volatility, where, collectively, they contribute up to 35% to the volatility of the S&P 500 Index, up to 20% to the volatility of the Nasdaq Composite Index, and up to 54% to the volatility of the Dow Jones Industrial Average.

These empirical results suggest critical considerations for policymakers. First, the consistent finding of adverse long-run stock market consequences associated with both tariffs and trade policy uncertainty underscores the need for a long-term perspective in trade policy decisions. Actions that impose tariffs or strategies that prolong uncertainty about future trade rules carry significant potential costs reflected in equity market valuations and stability. Therefore, policymakers aiming to foster sustained economic health, as mirrored in market performance, should carefully weigh these detrimental long-term effects. Promoting a stable and predictable international trade environment appears crucial for mitigating significant market downturns and reducing the volatility directly linked to these policy factors in our analysis.

Second, the distinct short-run market dynamics observed—a brief rally following tariff shocks versus a lack of clear initial direction from shocks to trade policy uncertainty—highlight that market participants process concrete policy actions differently than ambiguity. Policymakers should be aware of this difference when navigating trade negotiations or implementing new measures. While resolving uncertainty by imposing tariffs might yield a different immediate market reaction compared to letting uncertainty persist, this study finds that neither approach can ultimately prevent negative long-run stock market outcomes. Awareness of these varying temporal responses can aid in managing market expectations during periods of trade policy uncertainty, but the fundamental long-term challenge identified by our results remains regardless of the short-term path.

Finally, the magnitude of the estimated long-run market impacts and the substantial share of volatility attributed to tariffs and trade policy uncertainty warrants careful consideration. Given that these trade policy factors are shown to significantly depress major stock indices and explain a large fraction of their fluctuations, even after accounting for other macroeconomic drivers, their influence on financial markets is evidently substantial. This reinforces the suggestion that stability and predictability in international trade relations are very important for financial markets. Policies that minimize trade friction and reduce ambiguity about future rules are, based on the evidence presented here, most likely to support stable and well-performing equity markets, benefiting investors and reflecting broader economic confidence.

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Table 1 - Response of Stock Prices to Tariffs

	S&P 500 Index	Nasdaq Composite Index	Dow Jones Industrial Average
Contemporaneous	0.260*	0.279*	0.347*
After One Month	0.546*	0.472*	0.625*
After Three Months	0.688*	0.236	0.788*
After Six Months	0.671*	-0.329	0.607*
After One Year	-0.389	-1.784*	-1.521*
After Eighteen Months	-2.034*	-2.427*	-4.404*
After Two Years	-1.648*	-0.885	-4.848*

Notes: The numbers represent the cumulative impulse response of stock prices to one standard deviation shocks in tariffs. * represents statistical significance based on the 68% credible sets.

Table 2 - Contribution of Tariffs to Stock Price Volatility

	S&P 500 Index	Nasdaq Composite Index	Dow Jones Industrial Average
Contemporaneous	18.3%	9.2%	17.3%
After One Month	23.4%	8.8%	16.6%
After Three Months	11.6%	4.7%	12.4%
After Six Months	8.7%	4.2%	11.1%
After One Year	11.0%	5.7%	20.5%
After Eighteen Months	18.1%	6.0%	33.5%
After Two Years	18.4%	8.5%	32.6%

Notes: The numbers represent the percentage contribution of tariffs to stock price volatility based on the forecast error variance decomposition.

Table 3 - Response of Stock Prices to Trade Policy Uncertainty

	S&P 500 Index	Nasdaq Composite Index	Dow Jones Industrial Average
Contemporaneous	0.047	0.043	0.083*
After One Month	0.110*	0.086	0.102
After Three Months	-0.007	-0.041	-0.197
After Six Months	-0.624*	-0.969*	-1.079*
After One Year	-2.201*	-3.091*	-3.404*
After Eighteen Months	-3.122*	-3.806*	-4.687*
After Two Years	-2.259*	-2.250*	-3.896*

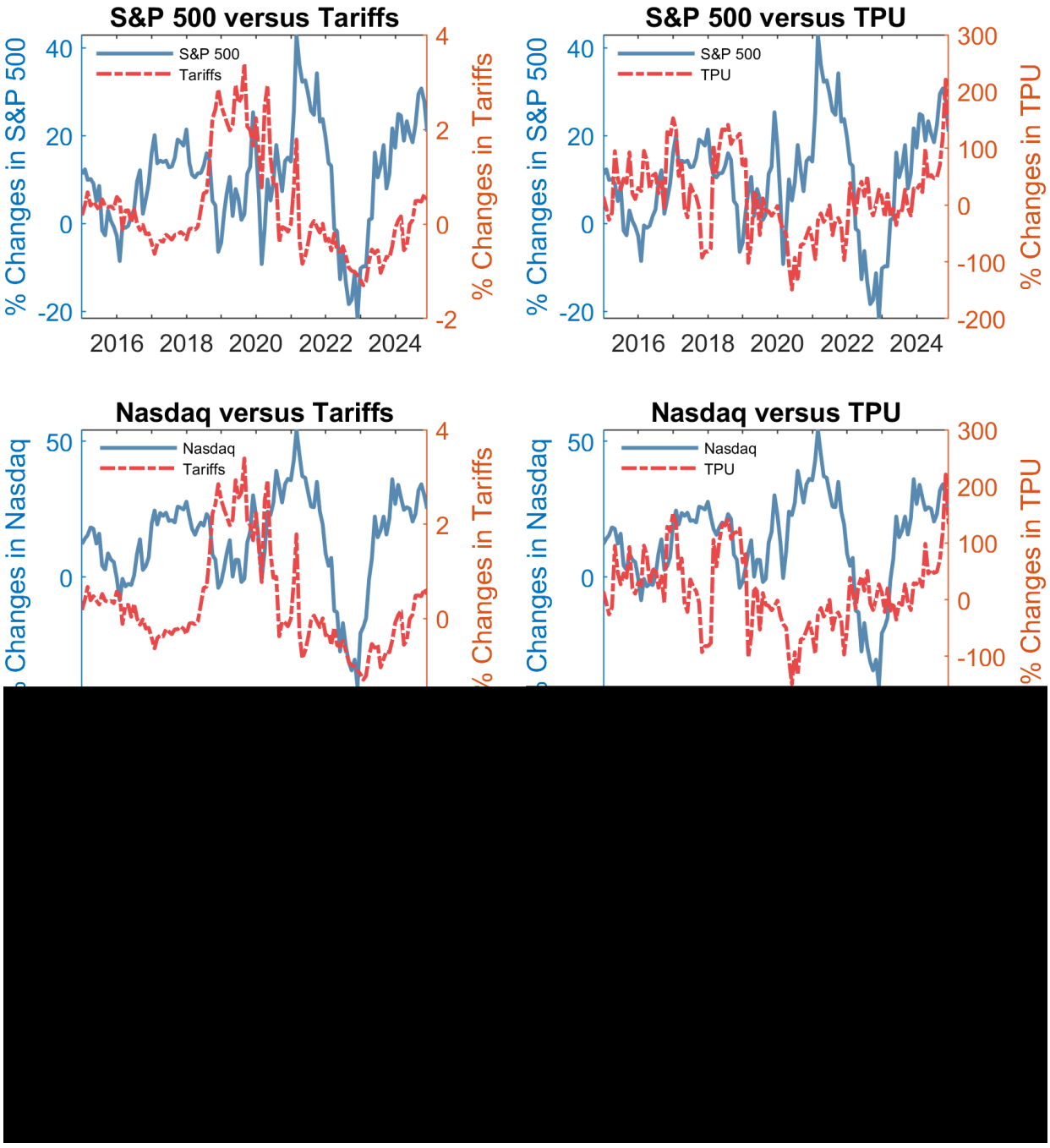
Notes: The numbers represent the cumulative impulse response of stock prices to one standard deviation shocks in trade policy uncertainty. * represents statistical significance based on the 68% credible sets.

Table 4 - Contribution of Trade Policy Uncertainty to Stock Price Volatility

	S&P 500 Index	Nasdaq Composite Index	Dow Jones Industrial Average
Contemporaneous	0.8%	0.5%	1.1%
After One Month	1.2%	0.7%	1.0%
After Three Months	2.1%	1.6%	4.1%
After Six Months	6.4%	4.5%	12.7%
After One Year	14.4%	9.2%	22.5%
After Eighteen Months	15.3%	9.7%	21.0%
After Two Years	16.4%	11.3%	21.1%

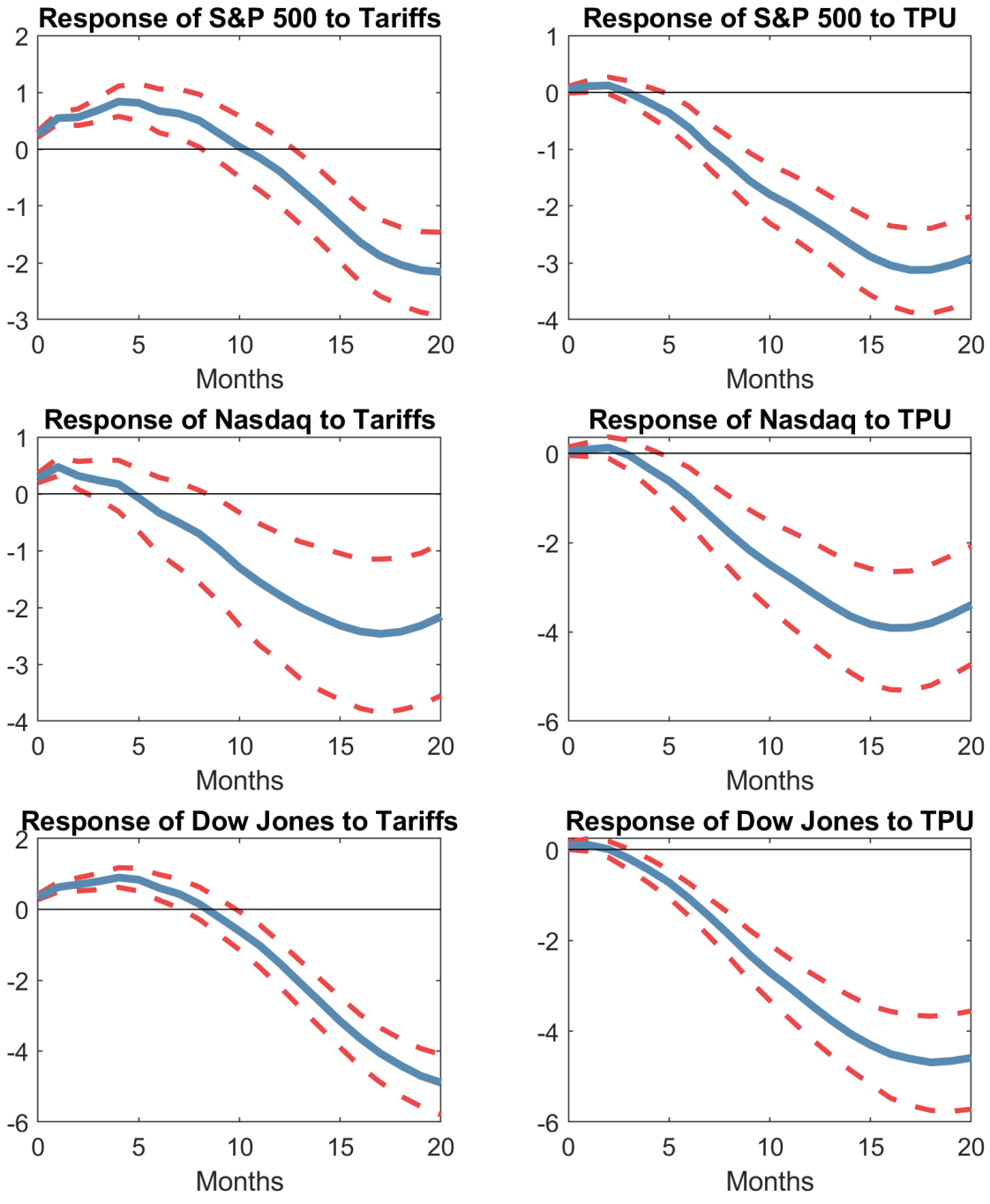
Notes: The numbers represent the percentage contribution of tariffs to stock price volatility based on the forecast error variance decomposition.

Figure 1 – Descriptive Statistics



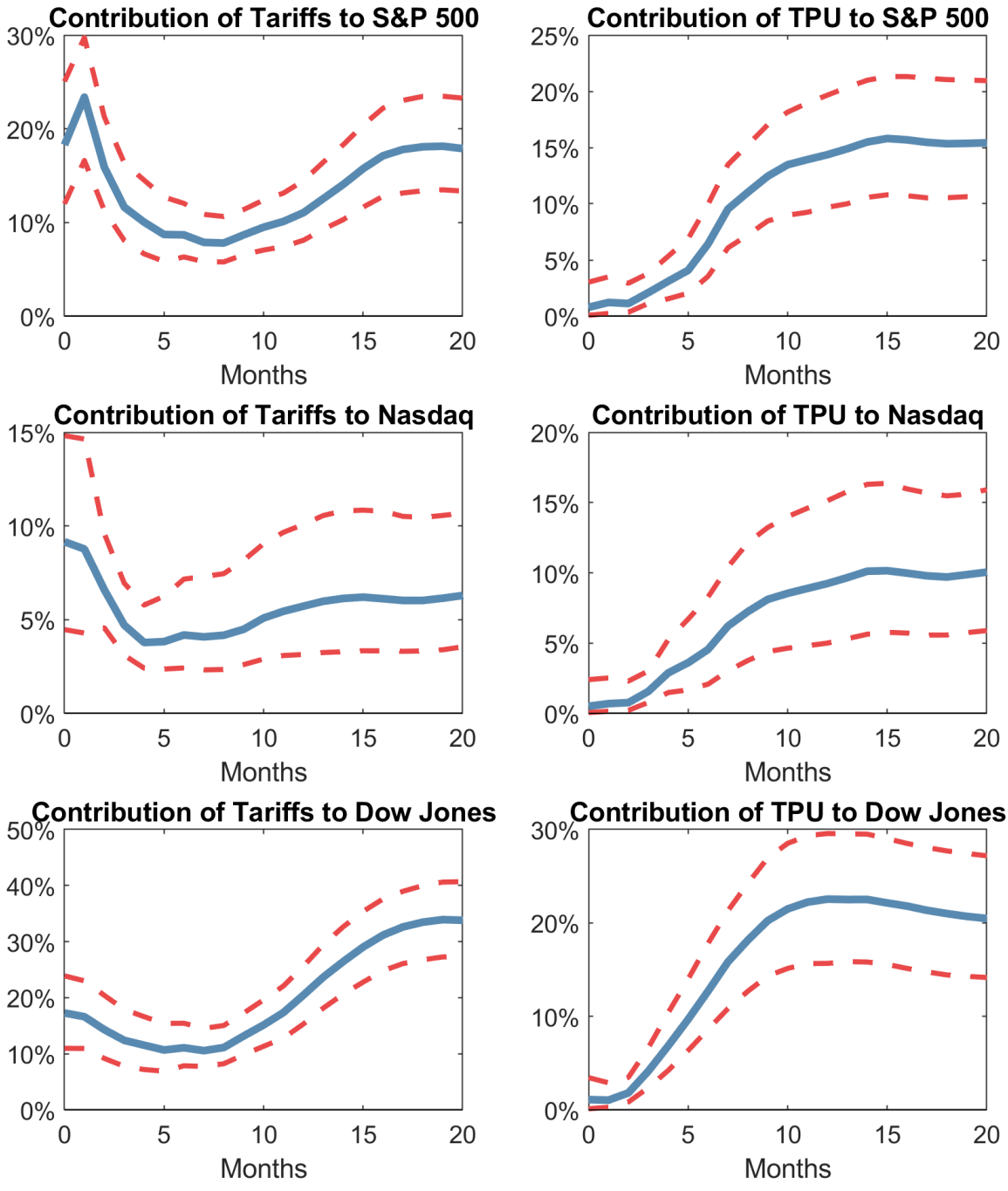
Notes: The solid lines represent the percentage changes in stock prices, whereas dashed lines represent percentage changes in tariffs or trade policy uncertainty (TPU).

Figure 2 – Response of Stock Prices to Tariffs and TPU



Notes: The solid lines represent the cumulative impulse response of stock prices to one standard deviation shocks in tariffs or trade policy uncertainty (TPU), whereas the dashed lines represent the 68% credible sets.

Figure 3 – Contribution of Tariffs and TPU to Stock Price Volatility



Notes: Based on the forecast error variance decomposition analyses, the solid lines represent the contribution of tariffs or trade policy uncertainty (TPU) to stock prices, whereas the dashed lines represent the 68% credible sets.