



CAMA

Centre for Applied Macroeconomic Analysis

Fiscal Policy, Asset Prices, and Economic Sentiment

CAMA Working Paper 27/2026

April 2026

Ufuk Can

Central Bank of the Republic of Turkey
Centre for Applied Macroeconomic Analysis, ANU
Economic Research Forum

Abstract

This paper examines how expansionary fiscal policy shapes asset prices and economic sentiment in the United States. I estimate a daily heteroskedastic VAR within a Bayesian framework, in which fiscal shocks, capturing changes in government spending and tax policy, are identified through shifts in volatility. The model includes stock prices, implied volatility, a text-based daily economic sentiment index, the one-year Treasury yield, and the corporate bond spread. The empirical findings show that expansionary fiscal shocks generate a persistent increase in equity valuations, a pronounced decline in implied volatility and uncertainty, and a sustained improvement in news-based economic sentiment. Corporate credit spreads narrow, signaling easier external financing conditions, while short-term yields rise, consistent with expectations of subsequent monetary tightening. These results point to a clear risk-on response driven by risk-premium and confidence channels. Fiscal actions quickly reprice risk and credit conditions, offering valuable guidance for policymakers, investors, and portfolio managers assessing the macro-financial effects of discretionary fiscal measures. By combining high-frequency fiscal identification with both market-based and text-based indicators, the paper provides a more nuanced perspective on the transmission of fiscal policy to financial markets.

Keywords

fiscal policy, asset prices, economic sentiment, uncertainty, Bayesian VAR

JEL Classification

E62, C22, G12

Address for correspondence:

(E) cama.admin@anu.edu.au

ISSN 2206-0332

[The Centre for Applied Macroeconomic Analysis](#) in the Crawford School of Public Policy has been established to build strong links between professional macroeconomists. It provides a forum for quality macroeconomic research and discussion of policy issues between academia, government and the private sector.

The Crawford School of Public Policy is the Australian National University's public policy school, serving and influencing Australia, Asia and the Pacific through advanced policy research, graduate and executive education, and policy impact.

Fiscal Policy, Asset Prices, and Economic Sentiment

Ufuk Can^{a,b,c}

^a*Central Bank of the Republic of Türkiye 01010, Adana, Türkiye*

^b*Centre for Applied Macroeconomic Analysis, Australian National University ACT
2601, Canberra, Australia*

^c*Economic Research Forum 12311, Cairo, Egypt*

Abstract

This paper examines how expansionary fiscal policy shapes asset prices and economic sentiment in the United States. I estimate a daily heteroskedastic VAR within a Bayesian framework, in which fiscal shocks, capturing changes in government spending and tax policy, are identified through shifts in volatility. The model includes stock prices, implied volatility, a text-based daily economic sentiment index, the one-year Treasury yield, and the corporate bond spread. The empirical findings show that expansionary fiscal shocks generate a persistent increase in equity valuations, a pronounced decline in implied volatility and uncertainty, and a sustained improvement in news-based economic sentiment. Corporate credit spreads narrow, signaling easier external financing conditions, while short-term yields rise, consistent with expectations of subsequent monetary tightening. These results point to a clear risk-on response driven by risk-premium and confidence channels. Fiscal actions quickly reprice risk and credit conditions, offering valuable guidance for policymakers, investors, and portfolio managers assessing the macro-financial effects of discretionary fiscal measures. By combining high-frequency fiscal identification with both market-based and text-based indicators, the paper provides a more nuanced perspective on the transmission of fiscal policy to financial markets.

Keywords: Fiscal policy, Asset prices, Economic sentiment, Uncertainty, Bayesian VAR

JEL Codes: E62, C22, G12

1. Introduction

In the wake of the Global Financial Crisis and, more recently, the Covid-19 pandemic, governments deployed fiscal support on an unprecedented scale. The Group of Twenty (G20) economies alone committed about 15 trillion US dollars, nearly 14 percent of global gross domestic product, in discretionary fiscal measures in 2020. These interventions reignited long-standing debates about how fiscal policy is transmitted to financial markets, risk premia, and economic sentiment. Traditionally, macroeconomists have focused on the effects of government spending and taxation on output and employment. However, the sharp and frequent repricing of financial assets around fiscal announcements suggests that investors continually reassess not only expected cash flows, but also the uncertainty and risk compensation associated with fiscal actions. Understanding these channels is crucial for evaluating the broader macro-financial consequences of active fiscal policy.

A large body of research shows that asset prices are closely linked to real economic activity and policy-related news. Classic studies demonstrate that stock returns reflect revisions in expectations about real activity and discount rates, underscoring the close interaction between macroeconomic fundamentals and equity valuations (Fama, 1990; Schwert, 1990). At the same time, fiscal policy has been shown to exert powerful, state-dependent effects on output, with multipliers that are typically larger during recessions than during economic expansions (Auerbach and Gorodnichenko, 2012; Batini et al., 2014). More recent work on uncertainty shocks and political risk highlights that time-varying uncertainty carries a risk premium and affects both the level and volatility of asset prices (Pástor and Veronesi, 2013; Jurado et al., 2015; Basu and Bundick, 2017). Moreover, a growing body of literature emphasizes the role of macroeconomic and policy news in driving asset price dynamics, including bond and equity risk premia, often using high-frequency or narrative identification strategies (Gertler and Karadi, 2015; Jarociński and Maćkowiak, 2018).

The existing evidence leaves several important questions unanswered. Most empirical studies of fiscal policy rely on quarterly data and focus primarily on macroeconomic aggregates, such as output, consumption, and employment, while treating financial variables as secondary outcomes or omitting them altogether (Caldara and Kamps, 2017; Ramey, 2019). When financial markets are examined, the emphasis is often on average stock returns or long-horizon bond yields, which provide limited information about the short-

run dynamics of risk premia and uncertainty (Bernanke and Kuttner, 2005; Brunnermeier and Sannikov, 2016). The few studies that analyze the interaction between fiscal and monetary policy and asset prices, such as Geske and Roll (1983), generally predate the recent literature on uncertainty and sentiment and therefore do not incorporate modern text-based indicators or implied volatility measures (Bloom, 2009; Baker et al., 2016). Consequently, we still know relatively little about how expansionary fiscal actions propagate through financial markets on a day-to-day basis and how they shape investors’ beliefs and confidence.

This paper addresses these gaps by examining how asset prices and economic sentiment respond to expansionary fiscal policy shocks in the United States. Using a daily heteroskedastic vector autoregression (VAR) estimated within a Bayesian framework, I identify shocks associated with changes in government spending and tax policy and trace their effects on equity prices, implied volatility, a text-based daily economic sentiment index, the one-year Treasury yield, and the 10-year Treasury term spread. The motivation is twofold. First, high-frequency data allow fiscal events to be aligned closely with market reactions, mitigating identification challenges that arise in lower-frequency settings. Second, by modeling prices, volatility, sentiment, and credit conditions jointly, I illuminate the risk-premium and confidence channels through which fiscal policy influences financial markets. The paper contributes new evidence that expansionary fiscal shocks trigger a persistent risk-on response, characterized by higher equity valuations, lower implied volatility, more optimistic news-based sentiment, and compressed corporate credit spreads, accompanied by a gradual increase in short-term interest rates.

Focusing on the United States (U.S.) is particularly salient. The U.S. remains the world’s largest economy and the issuer of the dominant reserve currency, and U.S. Treasury securities anchor global risk-free rates. Consequently, U.S. fiscal actions are closely monitored by investors and policymakers worldwide and exert disproportionate spillover effects on global financial conditions. The depth and liquidity of U.S. financial markets also make them an ideal setting for studying the high-frequency transmission of fiscal shocks. Market prices adjust quickly to new information, and a rich set of financial and sentiment indicators is available at the daily frequency. Insights drawn from the U.S. context are therefore highly relevant not only for domestic policy discussions but also for understanding international financial linkages and the global transmission of fiscal policy.

The analysis is of direct interest to a wide range of stakeholders. For

fiscal authorities, the results show that expansionary measures do more than stimulate aggregate demand; they also reshape market-based expectations, risk premia, and credit conditions in real time. For investors and portfolio managers, recognizing the systematic pattern of asset price, volatility, and spread responses to fiscal news can improve event-driven strategies, risk management, and asset-allocation decisions. For central banks, evidence on the behavior of short-term rates and credit spreads following fiscal shocks informs the monetary–fiscal policy mix and the potential need for coordination. Finally, for academics, the findings underscore the value of combining high-frequency financial data with text-based sentiment measures when analyzing fiscal policy transmission.

Methodologically, the paper employs a daily heteroskedastic VAR estimated within a Bayesian framework, with identification based on shifts in the volatility of fiscal shocks across regimes. This approach exploits heteroskedasticity in the data to disentangle fiscal innovations from other macro-financial disturbances while preserving a flexible dynamic structure. The model includes government spending and tax variables, along with the key financial indicators described above, enabling the estimation of impulse responses of asset prices, uncertainty, and sentiment to identified expansionary fiscal shocks. The daily frequency makes it possible to capture immediate market reactions to fiscal events and to trace subsequent adjustments over horizons of several years.

The remainder of the paper is organized as follows. Section 2 describes the dataset and the identification of fiscal events. Section 3 outlines the empirical strategy. Section 4 presents the empirical findings, and Section 5 concludes.

2. The Data

2.1. Dataset

The dataset spans the period from January 1, 1990, to June 20, 2025. Using daily observations provides a clearer view of how fiscal events transmit to asset prices and economic sentiment. The sample period is determined by data availability. In particular, the implied volatility index is not available before 1990. In addition, our event definition imposes a further constraint: no fiscal events meet our criteria before 2001. To maintain consistency across variables and events, I therefore set 1990 as the start of the sample.

The model includes five variables. The S&P 500 index serves as the primary U.S. stock market indicator and captures first-order effects on equity valuations. The CBOE Volatility Index (VIX) measures implied volatility in the U.S. equity market and is widely used as a proxy for economic uncertainty. The one-year Treasury constant-maturity rate (DGS1), i.e., the yield on the most frequently auctioned one-year Treasury security, is used as a proxy for the stance of monetary policy. The spread between BAA-rated corporate bond yields and the 10-year Treasury yield (BAA10Y) serves as a proxy for the external finance premium. The Sentiment News Index (Sentiment) is a daily, text-based measure of economic sentiment constructed from the content of economic and financial newspaper articles.

All data are obtained from the Federal Reserve Bank of St. Louis (FRED) database, except for the sentiment index, which is taken from Shapiro et al. (2022). The S&P 500 and VIX are expressed in logarithms, while all other variables are in levels.¹

2.2. Identification of Fiscal Events

Since this study focuses on the effects of fiscal policy shocks on asset returns and economic sentiment, accurately identifying fiscal events is critical. The identification strategy exploits the fact that, on days with fiscal policy announcements, the variance of fiscal-policy shocks is higher than on other days, while the variance of all other shocks remains unchanged.

I obtain fiscal news from the stock market jump-trigger dataset constructed by Baker et al. (2021). In this dataset, the authors identify the cause of every stock market jump from 1990 through the end of 2022. A jump is defined as an absolute movement in the S&P 500 exceeding 2.5 percent. The cause of each jump is determined by reading the lead article on the episode in the following day’s (or the same evening’s) newspapers. This 2.5 percent threshold is sufficiently large that newspapers the next day almost always include an article discussing the previous day’s jump.²

Each jump is randomly assigned to multiple coders, who classify it into one or more of 17 predefined categories, including monetary and fiscal policy,

¹Following Baker et al. (2016), I use the logarithm of the VIX so that impulse response functions can be interpreted directly in percentage terms.

²A threshold of 2.5 percent, up or down, for the U.S. stock market cover only 3.5 percent of trading days but nearly 20 percent of total daily variation and half of daily quadratic variation.

the macroeconomic outlook, corporate earnings, elections, commodities, and terrorist attacks or wars. For each jump, coders identify a primary reason within one of these categories and, when warranted by the article, a secondary reason. If an article cites multiple reasons without clearly indicating which is most important, the order in which the reasons appear is used as a tiebreaker.

From the dataset of Baker et al. (2021), I retain only those days on which all coders identify “Government spending” or “Taxes” as the primary driver of the asset-price jump. This procedure yields 24 event days associated with fiscal announcements, as reported in Table 1. Fiscal events are notably more frequent during the Global Financial Crisis and the Covid-19 pandemic.

The Baker et al. (2021) dataset has three features that make it particularly well suited to our identification strategy. First, it focuses on high-profile events associated with large asset-price jumps, which by construction increase systemic volatility, as required for our heteroskedastic identification. Second, although jumps may have multiple causes, I retain only those events for which all coders agree that the primary driver is a fiscal policy announcement, thereby minimizing the risk that other shocks account for the observed variance shift on event days. Third, using this dataset eliminates the need for intraday data, which are costly to obtain and often have limited historical coverage.

3. Estimation Strategy

3.1. Daily Heteroskedastic VAR

To quantify the effects of fiscal policy news on financial markets and economic sentiment, I estimate a structural vector autoregression (VAR) at the daily frequency. The approach combines an event-study design with identification through heteroskedasticity, following Rigobon (2003), Wright (2012), and Miescu and Mumtaz (2024).

The VAR model is specified in the following general form.

$$y_t = c + A_1 y_{t-1} + \cdots + A_p y_{t-p} + u_t \quad (1)$$

where $y_t = [S\&P500 \ VIX \ Sentiment \ BAA10Y \ DSG1]'$ is the vector of endogenous variables, c is a vector of intercepts, A_1 is a matrix of coefficients, and u_t is the vector of reduced-form innovations.

The reduced-form errors are assumed to be Gaussian, with a covariance matrix that depends on whether day t is a fiscal event day:

Table 1: Labels, definitions and measures of the variables.

Date	Primary Category	S&P500 Jump (%)
10/04/2001	Taxes	2.74
17/09/2008	Government spending	-4.70
22/09/2008	Government spending	-3.79
29/09/2008	Government spending	-8.71
30/09/2008	Government spending	5.40
13/10/2008	Government spending	11.5
24/11/2008	Government spending	6.34
26/11/2008	Government spending	3.56
08/12/2008	Government spending	3.80
02/01/2009	Government spending	3.18
06/02/2009	Government spending	2.72
10/02/2009	Government spending	-4.86
05/03/2009	Government spending	-4.16
23/03/2009	Government spending	7.03
10/05/2010	Government spending	4.36
07/09/2011	Government spending	2.90
10/10/2011	Government spending	3.41
27/10/2011	Government spending	3.44
01/11/2011	Government spending	-2.78
02/01/2013	Taxes	2.56
10/03/2020	Taxes	4.93
23/03/2020	Government spending	-2.86
24/03/2020	Government spending	9.26
26/03/2020	Government spending	6.21

$$\begin{aligned}
u_t &\sim \mathcal{N}(0, \Sigma_1) \quad \text{if } t \in \mathcal{T}_1 \text{ (Fiscal announcement days)} \\
u_t &\sim \mathcal{N}(0, \Sigma_0) \quad \text{if } t \in \mathcal{T}_0 \text{ (All other days)}
\end{aligned} \tag{2}$$

where $\mathcal{T}_1 \cup \mathcal{T}_0$ covers the full sample.

The corresponding structural form is given by the following:

$$u_t = A\varepsilon_t \tag{3}$$

where A is the contemporaneous impact matrix, $\Omega_r = \text{Var}(\varepsilon_t \mid t \in \mathcal{T}_r)$ is the diagonal covariance matrix for regime $r \in \{0, 1\}$, and $\varepsilon_t = (\varepsilon_{1t}, \dots, \varepsilon_{nt})$ is a vector of mutually uncorrelated structural shocks.

The reduced-form covariance matrices satisfy this condition for each regime r .

$$\Sigma_r = A\Omega_r A' \quad (4)$$

The key identifying assumption is that only one structural innovation, namely, the fiscal policy shock, changes its variance between event and non-event days, while the variances of all other shocks remain constant. Let a_1 denote the column of A associated with this shock, and let σ_{1r} denote its variance in regime r . Then,

$$\Omega_1 - \Omega_0 = \text{diag}(\sigma_{11} - \sigma_{10}, 0, \dots, 0) \quad (5)$$

implies,

$$\Sigma_1 - \Sigma_0 = A(\Omega_1 - \Omega_0)A' = a_1 a_1' (\sigma_{11} - \sigma_{10}) \quad (6)$$

Because only the product $a_1 a_1' (\sigma_{11} - \sigma_{10})$ is identified, I normalize $(\sigma_{11} - \sigma_{10}) = 1$, which yields the following.

$$\Sigma_1 - \Sigma_0 = a_1 a_1' \quad (7)$$

Given the estimates $\hat{\Sigma}_0$ and $\hat{\Sigma}_1$, the impact vector a_1 is obtained by solving the following minimum-distance problem (Rigobon, 2003; Wright, 2012):

$$\hat{a}_1 = \arg \min_{a_1} \left[\text{vech}(\hat{\Sigma}_1 - \hat{\Sigma}_0) - \text{vech}(a_1 a_1') \right]' \left(\hat{V}_0 + \hat{V}_1 \right)^{-1} \left[\text{vech}(\hat{\Sigma}_1 - \hat{\Sigma}_0) - \text{vech}(a_1 a_1') \right] \quad (8)$$

where $\text{vech}(\cdot)$ stacks the distinct elements of a symmetric matrix, and $\hat{V}_r$ denotes the estimated covariance matrix of $\text{vech}(\hat{\Sigma}_1)$. This procedure yields the contemporaneous effects of the identified expansionary fiscal shock on all variables in the system.

3.2. Bayesian Estimation

The VAR with regime-specific covariance matrices is estimated within a Bayesian framework, which is well suited to high-dimensional daily data

(Sims and Zha, 1998; Giannone et al., 2015). Writing the model in regression form,

$$y_t = X_t \beta + u_t \quad (9)$$

where $X_t = (y'_{t-1}, \dots, y'_{t-p}, 1)$ and β stacks all coefficients, I assume a conjugate normal-inverse-Wishart prior conditional on Σ_0 and Σ_1 :

$$\beta \mid \Sigma_0, \Sigma_1 \sim \mathcal{N}(\beta_0, V_0 \otimes I_n) \Sigma_r \sim \mathcal{IW}(S_{0r}, \nu_{0r}), \quad r \in 0, 1 \quad (10)$$

with β_0 and V_0 calibrated to impose Minnesota-type shrinkage towards a random-walk specification for persistent variables (Koop et al., 2010).

Posterior inference is performed using a Gibbs sampler tailored to heteroskedastic VARs. Each iteration consists of: (i) drawing the coefficients, β , from their conditional multivariate normal posterior given Σ_0 , Σ_1 , and the allocation of days to regimes; (ii) drawing the covariance matrices, Σ_0 and Σ_1 , from their inverse-Wishart posteriors using residuals from the current draw of β on event and non-event days; and (iii) computing $\hat{\Sigma}_0$ and $\hat{\Sigma}_1$ for that draw and solving the minimum-distance problem to obtain a draw of a_1 .

Repeated iterations generate posterior draws for $(\beta, \Sigma_0, \Sigma_1, a_1)$. For each draw, structural shocks are recovered as $(\epsilon_t = A^{-1}u_t)$, where A contains a_1 as its first column and is completed with an orthogonal basis spanning the remaining shocks. Impulse responses to an expansionary fiscal policy shock are then computed recursively and summarized using the posterior median, along with 68 and 90 percent credible intervals.

3.3. Parametrization

I adopt a natural conjugate prior for the VAR parameters, implemented via dummy observations. Specifically, the prior means are set equal to the OLS estimates from AR(1) regressions for each endogenous variable. The prior on the VAR coefficients is specified with a tightness parameter of 1, while the prior on the constant is set to 1/10,000, effectively yielding an almost non-informative prior for the intercept.³

I also impose a prior on the sum of the lagged dependent variables by adding dummy observations. The implied prior for the VAR error covariance

³For the sake of fluency of the paper, detailed explanations are not presented here but are available upon request.

matrix induced by these dummies follows an inverse-Wishart distribution. Posterior estimates are based on 10,000 draws from the Gibbs sampler, with the first 5,000 discarded as burn-in. The VAR lag length is set to 10.

4. Empirical Findings

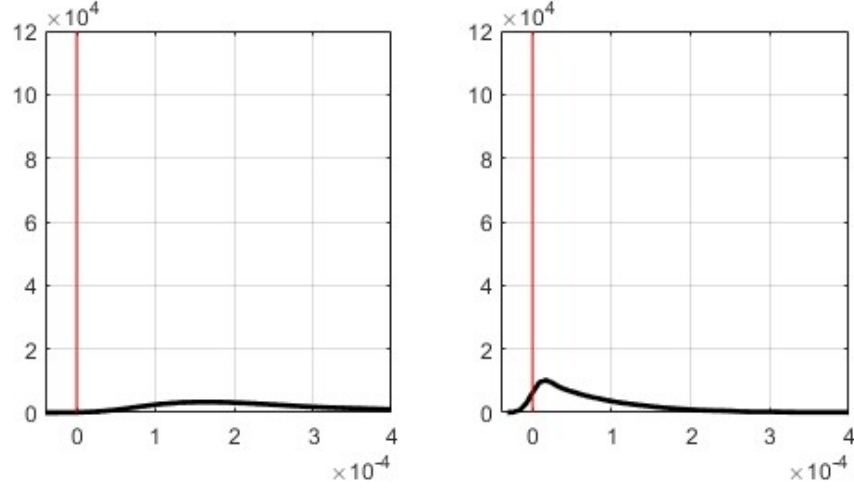
4.1. Preliminary Analysis

Our identification strategy rests on two conditions. First, the variance–covariance matrix of the residuals must be larger on event days than on non-event days. This condition is necessary for identification because it indicates the presence of heteroskedasticity on event days. To assess this requirement, I compute, for each saved draw from the Gibbs sampler, the difference between the variance–covariance matrices for event and non-event days. If the two matrices were not statistically different, the posterior distribution of this difference would be concentrated around zero. The left panel of Figure 1 shows that this is not the case: the kernel density is clearly not centered at zero, supporting our identification assumption.

Second, I require that the difference between the variance–covariance matrices be well approximated by a rank-one structure. This implies that the change in the variance–covariance matrix between event and non-event days can be attributed to a single orthogonal shock, which I interpret as the fiscal policy shock. I verify this requirement by computing, for each saved draw, the component of the difference that is not explained by a single factor. This condition is satisfied if the posterior distribution of the residual component is concentrated around zero, as suggested by the right panel of Figure 1.

4.2. Daily Bayesian VAR Estimation

Figure 2 shows the impact of expansionary fiscal policy shocks on the selected variables. An expansionary fiscal shock increases stock prices by around 1 percent and improves credit conditions, as evidenced by a decline in the credit spread of more than 30 basis points. The effect on stock prices persists for more than four years after the initial disturbance. This sustained rise in stock prices, together with the substantial increase in the sentiment index, points to a broad-based strengthening of financial confidence. I also find that the fiscal-shock-induced stock market expansion is accompanied by a decline in uncertainty of more than 1.5 percent, while short-term interest rates rise in the medium term. The latter result is consistent with investors



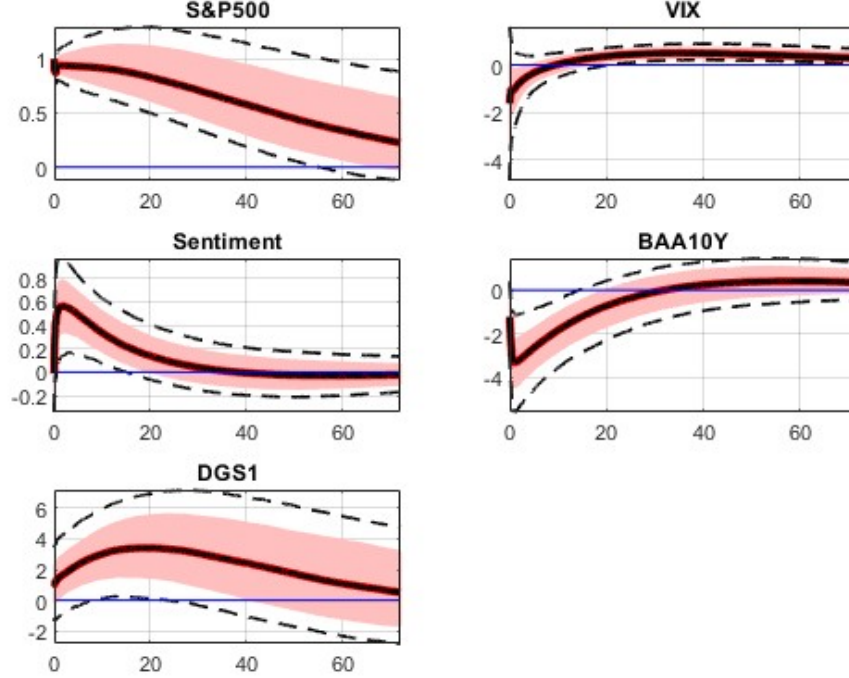
Note: The figure displays kernel density estimates based on 5,000 posterior draws. The left panel reports the variance–covariance matrix of the residuals, while the right panel shows the difference between the variance–covariance matrices for event and non-event days.

Figure 1: Kernel density functions

anticipating monetary policy tightening in response to expansionary fiscal developments.

Figure 2 is broadly consistent with the standard risk-on interpretation of expansionary fiscal policy shocks identified in VARs à la Blanchard and Perotti (2002) and Ramey (2011). An unexpected increase in government spending or a tax cut acts as an aggregate-demand shock that raises expectations of real economic activity and is immediately priced into equity valuations, risk premia, and short-term interest rates.

The positive response of stock prices suggests that fiscal expansions are perceived as good news for future cash flows and as reducing required discount rates. In a present-value framework, both higher expected earnings and a temporarily lower equity risk premium raise equity valuations. The contemporaneous decline in implied volatility indicates that the dominant channel is a compression in risk compensation and uncertainty: investors shift into riskier assets, and option-implied variance falls. This pattern is consistent with the view that looser macroeconomic policy reduces both risk aversion and expected volatility (Caldara et al., 2016; Ludvigson et al., 2021). The fiscal shock appears to play a similar stabilizing role in financial markets, with the impulse responses showing an immediate drop in implied volatility



Note: The figure presents the impulse response functions of the selected variables from the daily Bayesian VAR. The solid black line represents the posterior median response, while the shaded areas and dotted lines denote the 68 percent and 90 percent credible sets, respectively.

Figure 2: Response of the variables to expansionary fiscal policy shocks.

that gradually mean-reverts as the effect of the shock dissipates. The co-movement of higher stock prices and lower implied volatility also aligns with models in which expansions relax financial constraints and reduce the probability of tail events, thereby lowering the equity volatility premium and other risk spreads (Gilchrist and Zakrajšek, 2012; Adrian et al., 2013). The relatively rapid adjustment of both stock prices and volatility in the first few periods, followed by a slower convergence back to baseline, is theoretically plausible: prices respond on impact to news, whereas uncertainty and risk premia take longer to normalize as new macroeconomic information arrives.

The positive and persistent response of the text-based economic sentiment index aligns with the narrative that fiscal expansions improve macroeconomic expectations, as reflected in newspaper coverage. This is analogous to the behavior of news-based policy uncertainty indices constructed by Baker et al.

(2016), where favorable policy developments are associated with lower uncertainty and more optimistic language in the press. From a behavioral finance perspective, a sustained improvement in sentiment can reinforce the equity response by shifting investors’ beliefs and risk tolerance, consistent with the role of sentiment in asset pricing documented by Baker and Wurgler (2006). The fact that the sentiment measure responds strongly, and in the same direction as stock prices, yet remains elevated beyond the initial horizon supports interpreting sentiment as both a reaction to fiscal news and a mechanism that helps propagate its effects.

The one-year Treasury yield provides information on how the term structure incorporates expectations of future short-term rates and risk premia following a fiscal expansion. An increase in this yield is consistent with standard crowding-out logic: higher government spending raises expected real interest rates or inflation, leading markets to price in some degree of future monetary tightening. In a New Keynesian framework, an expansionary fiscal shock that widens the output gap typically elicits a positive response of policy rates as the central bank acts to stabilize inflation (Laubach, 2009; Plante et al., 2025).

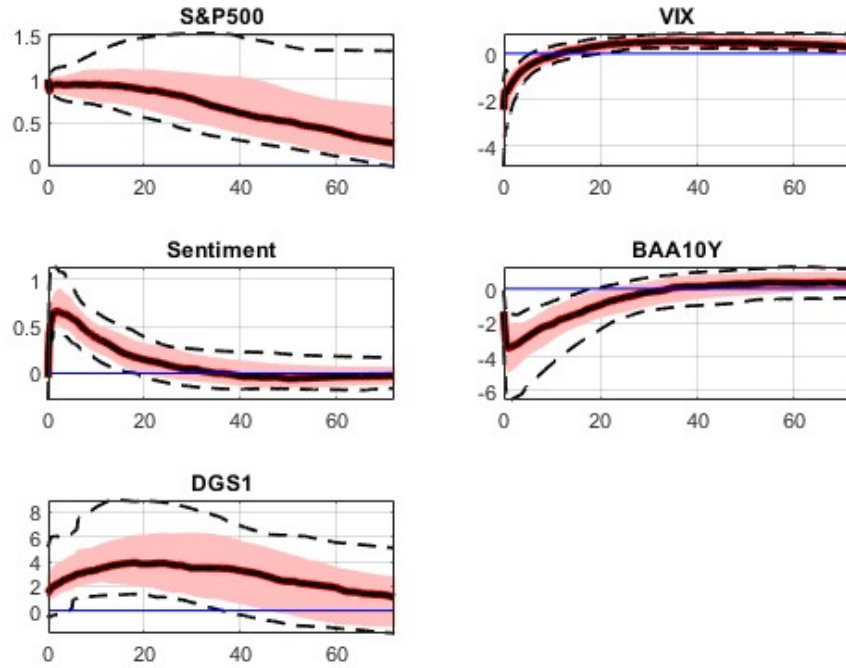
The decline in the 10-year Treasury spread following the fiscal shock is consistent with models in which fiscal expansions alleviate financial frictions. In the framework of Gilchrist and Zakrajšek (2012), credit spreads can be decomposed into expected default risk and an excess bond premium that captures time-varying risk appetite. An expansionary fiscal shock that improves growth prospects reduces expected default probabilities, while the accompanying decline in implied volatility and increase in stock prices point to a lower excess bond premium. The net effect is a narrower corporate spread, signaling easier external financing conditions for firms. The shape of the impulse response, an immediate compression in the spread followed by gradual mean reversion, suggests that the fiscal shock primarily shifts near-term perceptions of credit risk and risk tolerance, rather than permanently altering the structural level of the external finance premium.

4.3. Robustness Checks

The daily heteroskedastic VAR, estimated in a Bayesian framework, yields statistically significant and intuitively plausible results. However, I acknowledge that the empirical analysis is sensitive to specification choices such as lag length, sample period, burn-in, priors, and the estimation sample. For

this reason, I conduct a series of robustness checks.⁴

Figure 3 shows the effects of expansionary fiscal policy shocks on the selected variables through 2000. Because no fiscal events meet our criteria before 2001, I present impulse response functions beginning in early 2000 as a robustness check. Figure 3 further corroborates the results in Figure 2. Moreover, statistical significance is even more pronounced in this subsample, likely because the system is exposed to shocks more frequently over a shorter horizon.



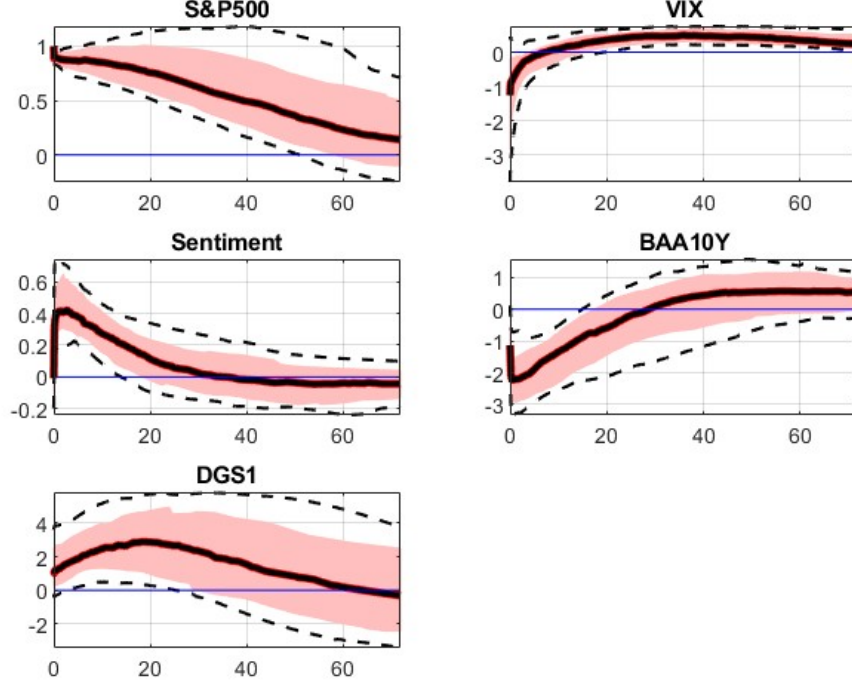
Note: The figure presents the impulse response functions of the selected variables from the daily Bayesian VAR. The solid black line shows the posterior median response, while the shaded areas and dotted lines indicate the 68 percent and 90 percent credible intervals, respectively.

Figure 3: Response of the variables to expansionary fiscal policy shocks since 2000.

Figure 4 shows the effects of expansionary fiscal policy shocks on the

⁴To save space, I do not report sensitivity analyses for the burn-in, priors, or estimation sample here. These results are available from the author upon request.

selected variables using a lag length of five. The results further corroborate the findings in Figure 2. In particular, the impulse response functions exhibit similar signs and levels of statistical significance.



The figure presents the impulse response functions of the selected variables in the daily Bayesian VAR. The solid black line shows the posterior median response, while the shaded areas and dotted lines indicate the 68 percent and 90 percent credible intervals, respectively.

Figure 4: Response of the variables to expansionary fiscal policy shocks at five lag length.

5. Concluding Remarks

This paper examines how stock prices respond to expansionary fiscal policy in the United States. Using a daily heteroskedastic VAR estimated in a Bayesian framework, I identify fiscal shocks associated with changes in government spending and tax policy and trace their effects on equity prices, implied volatility, a text-based daily economic sentiment index, the one-year Treasury yield, and the 10-year Treasury spread. The high-frequency nature of the data, combined with the heteroskedastic identification strategy, allows

me to link discrete fiscal policy events to the joint dynamics of asset prices, uncertainty, and credit conditions over the sample period.

The empirical results indicate a clear risk-on pattern following expansionary fiscal shocks. Increases in government spending or tax cuts lead to a persistent rise in stock prices, a pronounced improvement in news-based economic sentiment, and a measurable decline in market-implied uncertainty. At the same time, corporate credit spreads narrow and short-term interest rates edge higher, consistent with easier external financing conditions and expectations of subsequent monetary tightening. By documenting these effects at a daily frequency and incorporating a text-based sentiment measure, the paper contributes to the fiscal policy literature by underscoring the importance of risk-premium and confidence channels in the transmission of fiscal actions to financial markets.

These findings have several implications for policymakers and market participants. For fiscal authorities, the results suggest that well-timed expansionary interventions can bolster financial market confidence, compress risk premia, and support credit supply—particularly during periods of elevated uncertainty. However, the associated rise in short-term rates underscores the need for coordination and clear communication with monetary authorities to avoid an overly rapid tightening of financial conditions. For portfolio managers and investors, the evidence indicates that fiscal news is a systematic driver of asset returns, volatility, and credit spreads. Incorporating fiscal policy surprises into risk management, asset allocation, and event-driven strategies may therefore enhance portfolio performance and improve the assessment of macro-financial risks.

Like most studies, this paper has some limitations. The analysis is confined to a single country and a specific set of fiscal events, which may restrict the external validity of the results across institutional environments and policy regimes. The daily heteroskedastic VAR framework, while rich in dynamics, cannot fully disentangle the relative roles of expectations, risk aversion, and balance-sheet channels, nor can it capture heterogeneous responses across sectors and investor types. Future work could extend the approach to cross-country panels, alternative identification strategies, and intraday or sectoral data, as well as explore nonlinearities related to the business cycle, public debt levels, and the prevailing monetary policy regime.

References

- Adrian, T., Crump, R.K., Moench, E., 2013. Pricing the term structure with linear regressions. *Journal of Financial Economics* 110, 110–138.
- Auerbach, A.J., Gorodnichenko, Y., 2012. Measuring the output responses to fiscal policy. *American Economic Journal: Economic Policy* 4, 1–27.
- Baker, M., Wurgler, J., 2006. Investor sentiment and the cross-section of stock returns. *The Journal of Finance* 61, 1645–1680.
- Baker, S., Bloom, N., Davis, S.J., Sammon, M.C., 2021. What triggers stock market jumps? Technical Report. National Bureau of Economic Research Cambridge, MA.
- Baker, S.R., Bloom, N., Davis, S.J., 2016. Measuring economic policy uncertainty. *The Quarterly Journal of Economics* 131, 1593–1636.
- Basu, S., Bundick, B., 2017. Uncertainty shocks in a model of effective demand. *Econometrica* 85, 937–958.
- Batini, N., Eyraud, L., Forni, L., Weber, A., 2014. Fiscal multipliers: Size, determinants, and use in macroeconomic projections. *International Monetary Fund*.
- Bernanke, B.S., Kuttner, K.N., 2005. What explains the stock market’s reaction to federal reserve policy? *The Journal of Finance* 60, 1221–1257.
- Blanchard, O., Perotti, R., 2002. An empirical characterization of the dynamic effects of changes in government spending and taxes on output. *The Quarterly Journal of Economics* 117, 1329–1368.
- Bloom, N., 2009. The impact of uncertainty shocks. *Econometrica* 77, 623–685.
- Brunnermeier, M.K., Sannikov, Y., 2016. The I theory of money. Technical Report. National Bureau of Economic Research.
- Caldara, D., Fuentes-Albero, C., Gilchrist, S., Zakrajšek, E., 2016. The macroeconomic impact of financial and uncertainty shocks. *European Economic Review* 88, 185–207.

- Caldara, D., Kamps, C., 2017. The analytics of svars: a unified framework to measure fiscal multipliers. *The Review of Economic Studies* 84, 1015–1040.
- Fama, E.F., 1990. Stock returns, expected returns, and real activity. *The Journal of Finance* 45, 1089–1108.
- Gertler, M., Karadi, P., 2015. Monetary policy surprises, credit costs, and economic activity. *American Economic Journal: Macroeconomics* 7, 44–76.
- Geske, R., Roll, R., 1983. The fiscal and monetary linkage between stock returns and inflation. *The Journal of Finance* 38, 1–33.
- Giannone, D., Lenza, M., Primiceri, G.E., 2015. Prior selection for vector autoregressions. *Review of Economics and Statistics* 97, 436–451.
- Gilchrist, S., Zakrajšek, E., 2012. Credit spreads and business cycle fluctuations. *American Economic Review* 102, 1692–1720.
- Jarociński, M., Maćkowiak, B., 2018. Monetary-fiscal interactions and the euro area’s malaise. *Journal of International Economics* 112, 251–266.
- Jurado, K., Ludvigson, S.C., Ng, S., 2015. Measuring uncertainty. *American Economic Review* 105, 1177–1216.
- Koop, G., Korobilis, D., et al., 2010. Bayesian multivariate time series methods for empirical macroeconomics. *Foundations and Trends® in Econometrics* 3, 267–358.
- Laubach, T., 2009. New evidence on the interest rate effects of budget deficits and debt. *Journal of the European Economic Association* 7, 858–885.
- Ludvigson, S.C., Ma, S., Ng, S., 2021. Uncertainty and business cycles: exogenous impulse or endogenous response? *American Economic Journal: Macroeconomics* 13, 369–410.
- Miescu, M.S., Mumtaz, H., 2024. Corporate earnings announcements and economic activity. *International Economic Review* 65, 1777–1793.
- Pástor, L., Veronesi, P., 2013. Political uncertainty and risk premia. *Journal of Financial Economics* 110, 520–545.

- Plante, M., Richter, A.W., Zubairy, S., 2025. Revisiting the interest rate effects of federal debt. FRB of Dallas Working Paper No:2513 .
- Ramey, V.A., 2011. Identifying government spending shocks: It's all in the timing. *The Quarterly Journal of Economics* 126, 1–50.
- Ramey, V.A., 2019. Ten years after the financial crisis: What have we learned from the renaissance in fiscal research? *Journal of Economic Perspectives* 33, 89–114.
- Rigobon, R., 2003. Identification through heteroskedasticity. *Review of Economics and Statistics* 85, 777–792.
- Schwert, G.W., 1990. Stock returns and real activity: A century of evidence. *The Journal of Finance* 45, 1237–1257.
- Shapiro, A.H., Sudhof, M., Wilson, D.J., 2022. Measuring news sentiment. *Journal of Econometrics* 228, 221–243.
- Sims, C.A., Zha, T., 1998. Bayesian methods for dynamic multivariate models. *International Economic Review* 39, 949–968.
- Wright, J.H., 2012. What does monetary policy do to long-term interest rates at the zero lower bound? *The Economic Journal* 122, F447–F466.