Economic Narratives and Realities of Geopolitical Risk*

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Abstract

This paper examines the relationship between economic narratives surrounding geopolitical events and their actual economic impacts. By employing a large-language model on a large set of newspaper articles, we identify whether the narrative of a geopolitical risk (GPR) shock is seen as acting on the supply or on the demand side. For the classification of the narrative, we equip the large-language model with a questionnaire to analyze the event's economic characterization. A Vector Autoregression model allows us to validate our GPR narrative indices by assessing whether the narratives align with economic realities. By identifying the nature of the geopolitical risk shocks in real time, central banks can more easily gauge the inherent risk to inflation and thus make better informed decisions.

Keywords: geopolitical risk, narratives, textual analysis, shock transmission

JEL classification: E32, E71, F51, G41.

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1 Introduction

Geopolitical events can impact financial markets and the macroeconomy through a variety of channels. For central banks, it is important to assess whether a geopolitical shock is likely to drive up inflation – acting on the supply side – or whether geopolitical news leads to a fall in investor and consumer confidence, reducing demand and thereby rather dampening price pressures. Or will a geopolitical event instead trigger a fiscal stimulus – e.g. in the form of defense spending – large enough to instead raise domestic demand and inflation? This assessment of the nature of geopolitical risk shocks is difficult, especially in real time.[1] For instance, there has been a lively debate on the driving forces of the post-pandemic inflation surge, of which geopolitical risk is one.[2] Giannone and Primiceri (2024) and Bergholt et al. (2024) argue that the inflation surge was mainly due to demand factors, while others instead point to geopolitical tensions, trade fragmentation, supply chain disruptions and other supply side factors (Blanchard and Bernanke, 2023; Beaudry et al., 2024).

Figure 1 shows the geopolitical risk index of Caldara and Iacoviello (2022) together with the 'I-index', which is the share of newspaper articles mentioning the word 'inflation', at a monthly frequency from 1985 onward. This index is modeled on *The Economist's* 'R-index' measuring occurrences of the word 'recession' in newspaper articles.[3]

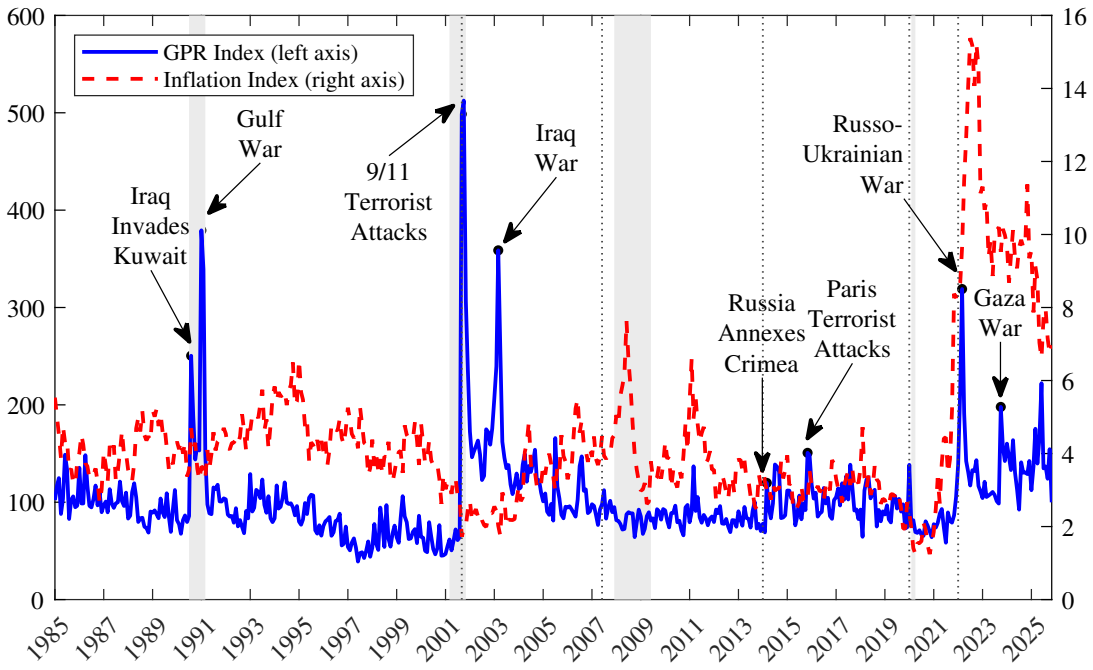

Figure 1: Geopolitical Risk and Inflation Reporting over Time

Overall, the GPR index and the I-index appear to co-move. However, let us focus

[1] Hofmann et al. (2024) stress the importance of decomposing inflation into a supply- and a demand-driven component in real time.

[2] For an overview of the debate, see Lansing (2025).

[3] Figure A.1 in the appendix shows the GPR index together with *The Economist's* R-index.

on two important events distinguishable as spikes in the GPR index: the 9/11 terrorist attacks in September 2001 and Russia's invasion of Ukraine (March 2022). The first of those two geopolitical events was accompanied by a *fall* in the I-index, while the second clearly triggered inflation fears in the US as conveyed by news reports. This suggests that the relationship between GPR shocks and inflation may be event-specific.

In this paper, we propose to enhance our understanding of geopolitical risk by capturing the narrative conveyed in newspaper articles on the subject. Building on Caldara and Iacoviello (2022), who offer a foundational measure of geopolitical risk by counting the number of articles related to this topic, our aim is to analyze the content of these articles. More specifically, we evaluate the narrative transported by an article covering a geopolitical event, as indicated by references to different economic transmission channels.

To achieve this, more specifically, we build on the search query developed by Caldara and Iacoviello (2022) to identify relevant articles from the same ten English-language newspapers. Our approach then involves applying machine learning techniques to analyze each article and obtain a detailed assessment of its inherent narrative.

By identifying geopolitical narratives, we uncover the channels through which geopolitical risk shocks impact financial markets and the macroeconomy. Articles about geopolitical events can then be classified according to their references to effects on the supply or demand side. A particular advantage of the text-based approach is that it provides a real-time assessment of whether a geopolitical event is more likely to increase or decrease inflation. In this way, it provides an important input into the monetary policy making process.

Beyond improving measurement, our central question is conceptual: Do narrative-based geopolitical risk shocks – extracted from the language of newspaper coverage – accurately reflect the true macroeconomic nature of the events they describe? Put differently, when the media frames a geopolitical event as demand- or supply-driven, does the actual economic response behave accordingly? To answer this, we develop a dual empirical strategy that allows us to disentangle perception from reality: we first identify structural shocks from known geopolitical events using only macroeconomic data, and then test whether the media narratives match the underlying economic mechanisms. This allows us to assess whether text-based indicators provide structurally meaningful information – or whether they blur the distinction between different transmission channels.

Pinchetti (2025) decomposes GPR shocks into those disrupting energy markets and those leading to an economic contraction unrelated to energy prices. The author applies high-frequency and narrative sign restrictions to identify (contractionary) shocks that are inflationary vs. those that are deflationary. Thus, he distinguishes between different GPR episodes due to their differing consequences for inflation, as we do in this paper. However, by only focusing on energy markets, Pinchetti (2025) covers just one potential channel through which GPR shocks can have a negative supply effect. Here, our aim is to

provide a broader measure of the supply and demand side transmission channels of GPR. Hodula et al. (2024) identifies two main channels through which GPR affects the macro-financial stability: the financial channel (operating through heightened uncertainty and increased risk aversion), and the real economy channel, by affecting trade, supply chains and commodity markets. Our focus is rather on distinguishing between demand and supply factors in the transmission of geopolitical risk. Brignone et al. (2024) uncover significant non-linearities in the effects of GPR shocks, with large GPR shocks having disproportionately larger effects.

Our paper also contributes to the recent literature on identifying economic narratives. While Andre et al. (2021) and Andre et al. (2024) follow a survey approach to identify household's narratives on reasons for the latest surge in inflation, Trebbi (2024) uses natural language processing to identify supply and demand narratives in newspaper articles. Kwon et al. (2025) employ a large language model to construct growth and inflation sentiment indices from articles in the *Wall Street Journal*. They show that the information contained in their time series improves forecasting performance.

The remainder of the paper is structured as follows. In Section 2, we review the transmission channels of GPR shocks that have been discussed in the literature. We argue that these channels can be classified as either supply and demand narratives of geopolitical risk. Based on this classification, we design prompts to extract references to demand and supply narratives of a particular geopolitical event from the way it is reported in newspaper articles. In Section 3, we inspect the resulting narrative GPR indices and examine their correlation with other relevant time series. We then present and estimate a BSVAR model to validate our indices: do the narrative GPR shocks have the expected effects on output and inflation? Section 4 analyzes the transmission of two types of narrative GPR shocks on additional variables. Finally, we zoom in on the geopolitical events that we singled out in Figure 1 above: 9/11 and the Russian attack on Ukraine in 2022. We show that these two events were framed by very different narratives. Section 5 concludes.

2 Characterizing economic narratives of geopolitical risk

Economics as a social science is concerned with human behavior in an environment of scarce resources. Historians, meanwhile, argue that stories (or narratives) play an important role in human evolution (Harari, 2015). And thus, recently, economists have recognized that narratives play a significant role also in the dismal science. The work by Robert Shiller, in particular Shiller (2017), can be seen as instrumental for establishing narrative economics as a distinct sub-field of economics. Shiller (2020) defines economic

narratives as "stories that offer interpretations of economic events, or morals, of hints of theories about the economy".

In the case of geopolitical events, the economic consequences are oftentimes not immediately apparent. One could go further and argue that these consequences depend on the dominant narrative related to a particular event. Which narrative becomes the dominant one is shaped, in turn, by the way media report about the event (Bondarenko et al., 2024). Through their effect on human behavior, narratives can become active drivers of economic activity (Roos and Reccius, 2024).

2.1 Theory on transmission of GPR shocks

Geopolitical risk can be defined as a threat to, or outright disruption in, the relation between countries. As has been shown in the literature, unexpected increases in GPR have important adverse consequences for macroeconomic and financial aggregates (Caldara and Iacoviello, 2022; Caldara et al., 2023; Bondarenko et al., 2024). While the aggregate effects have been extensively documented, what is lacking is a more precise analysis of the economic transmission channels of such shocks.

In the following, we characterize the possible transmission channels that have been put forward in the literature. As we take the US perspective, some effects of geopolitical risk appear less relevant due to the fact that the US has not seen any wars on its soil. For instance, the loss of human life and the destruction of physical capital through traditional warfare is a consequence of GPR that – arguably – has relatively little impact on the US. However, more modern forms of warfare such as cyber attacks do pose a threat to US infrastructure.

Let us start with supply-side transmission channels that lower output and raise prices. First, as argued above, cyber attacks on US infrastructure capital may disrupt economic activity and raise production costs. Second, the disruption of supply chains and the diversion of international trade also increases production and transportation costs as intermediate input prices, commodity prices, and energy prices increase. Third, firms faced with greater production uncertainty may engage in precautionary pricing (Fernández-Villaverde et al., 2015) or they may take measures to be able to adjust prices more flexibly (Khalil and Lewis, 2024); firms may also make larger price adjustment in times of distress (Aruoba et al., 2024), which would push up prices and thereby reduce demand.

Second, there exist negative demand-side transmission channels that tend to lower both output and prices. First, through precautionary savings motives, greater uncertainty about future profits and income is likely to reduce investment and (durable goods) consumption, respectively.Second, financial frictions can exacerbate this channel, as lower aggregate demand decreases net worth and thus raises the default probability of borrowers (firms, households, banks). Third, safe-haven financial flows lead to appreciation of

US dollar. As US goods and services become less competitive, expenditure-switching reduces the demand for US exports. Simultaneously, US prices fall as imports become cheaper.

Finally, there may be positive demand-side transmission channels that raise output and prices. Most importantly, increases in military spending boost economic activity at home, which pushes up prices as aggregate demand increases. Another possible favorable demand effect is that, as international trade links are severed, production activities return to the US. Our baseline analysis focuses on demand and supply channels that have adverse output effects. In a robustness exercise, we identify also a positive demand channel of geopolitical risk.

2.2 Identifying demand and supply narratives of geopolitical risk

We select the newspaper articles that form the basis of the geopolitical risk (GPR) indicator of Caldara and Iacoviello (2022). Their indicator is the share of articles (out of all articles that appear in a set of English-language newspapers over a given time period) that contain one or more words out of a well-specified list of words pertaining to geopolitical threats or actions. We retrieve these articles from the Factiva Analytics database, covering a sample spanning from January 1985 to March 2025. In total we obtain 222,485 articles from the following seven news outlets: *USA Today, Chicago Tribune, The Globe and Mail, The Daily Telegraph, The Guardian, The Wall Street Journal,* and *The Washington Post*. With this dataset, we are able to replicate the GPR index by Caldara and Iacoviello (2022) and achieve a sample correlation of 0.95.

Then, we construct four geopolitical narrative indices, two reflecting demand narratives, and one reflecting supply narratives as outlined in the previous subsection. We do this by using a large language model (LLM), namely GPT-4.1-nano by OpenAI (henceforth ChatGPT), to classify each individual article automatically. For the sake of transparency, we design a prompt mimicking a questionnaire, with which the LLM is supposed to answer precise and simple yes or no questions on each article. Each question, if answered with 'yes', indicates one of the three demand and supply narratives. We then classify the articles into the narratives as soon as one question can be answered with 'yes'. Note, that one article can be classified into multiple narratives, depending on what is mentioned in the text, which makes our sub-indices not adding up to the overall GPR index. To create the final sub-indices, we normalize the article counts per narrative by the total number of articles published in the considered set of news outlets and multiply by 100.

Our prompt that we use to instruct the LLM consists of three parts (see Table 1). The first part describes the overall task which is to answer the following questions with yes or

no solely based on the article's content. It also provides some background information on the nature of a negative supply or demand, or a positive demand shock. The second part is the body of questions of which the first three questions are supposed to be indicators of a negative supply narrative. This includes asking about rising input or goods prices, supply chain disruptions, or the redirection of trade flows to be explicitly mentioned in the article as a cause of geopolitical events. Questions 4 and 5 point out a positive demand narrative, characterized by articles covering increases of military spending or an increased demand of US goods. The last two questions identify a negative demand narrative by capturing if articles talk about a reduction in consumer or investor confidence, or an overall decrease of demand for goods and services. Finally, the last part of the prompt instructs the model to return the answers in the displayed JSON format, in order to increase the probability of getting structured answers, as well as to facilitate the subsequent data work.

For our baseline we use a prompt which is relatively restrictive in its formulations—making sure an article gets classified only if it *explicitly* mentions certain aspects of the supply or demand narratives. As an alternative we also design a second prompt that has less precise questions in the questionnaire. The trade-off between the two prompt versions is that of precision versus recall. We might get more relevant classifications with the baseline prompt, while the second version will find more true *and* false positives. We report the prompt as well as its results in the appendix. The resulting indices look very similar, even though produced with different prompts which speaks in favor of the robustness of our approach.

Table 1: Questionnaire for Identifying Geopolitical Risk Narratives

You classify news articles about geopolitical events purely by their macroeconomic impact on the United States.
canonical shocks:
negative supply = raises production costs or reduces available output
negative demand = lowers U.S. aggregate demand

INSTRUCTIONS:
Read the article. Think step by step; do NOT reveal your reasoning. Answer each sub-question with exactly "yes" or "no" (lowercase, no punctuation). Return only the JSON, no extra text, no trailing commas.

QUESTIONS:
Negative supply:
1. Does the article explicitly or clearly imply that prices of goods and services in the US have risen or will rise because of the event?
2. Does the article explicitly mention supply-chain disruptions affecting the U.S. economy?
3. Does the article explicitly mention trade flows being redirected?
Negative demand:
4. Does the article explicitly say U.S. consumer, business, or investor confidence has fallen (or will fall)?
5. Does the article explicitly say U.S. consumer, business, or investor demand has fallen (or will fall)?

OUTPUT JSON SCHEMA:

```
{
  "negative_supply":{
    "price_increase":{"yes|no"},
    "supply_chain_disruption":{"yes|no"},
    "trade_flow_redirection":{"yes|no"}
  },
  "negative_demand": {
    "confidence_decrease":{"yes|no"}
    "demand_decrease":{"yes|no"}
  }
}
```

Newspaper Article:

3 Inspection and validation of geopolitical risk narratives

Figure 2 depicts our supply and demand narratives based GPR indices. Overall, one can see that most articles got classified into the negative demand narrative, while negative supply and positive demand narratives seem to be equally prevalent in the reporting on geopolitical events. While the outbreak of the Gulf War in August 1990 is predominantly classified as a negative supply GPR event, for the 9/11 terrorist attacks the negative demand narrative is the most prominent one. This likely reflects the sudden uncertainty and fear triggered by this event. When Russia annexes the Crimea in March 2014 as well after the invasion of Ukraine in February 2022, again the negative supply narrative dominates the news reporting. This mirrors well the nature of these events as sanctions against Russia induced temporary shortages of oil and gas, and as military spending needed to increase to support Ukraine's armed forces.

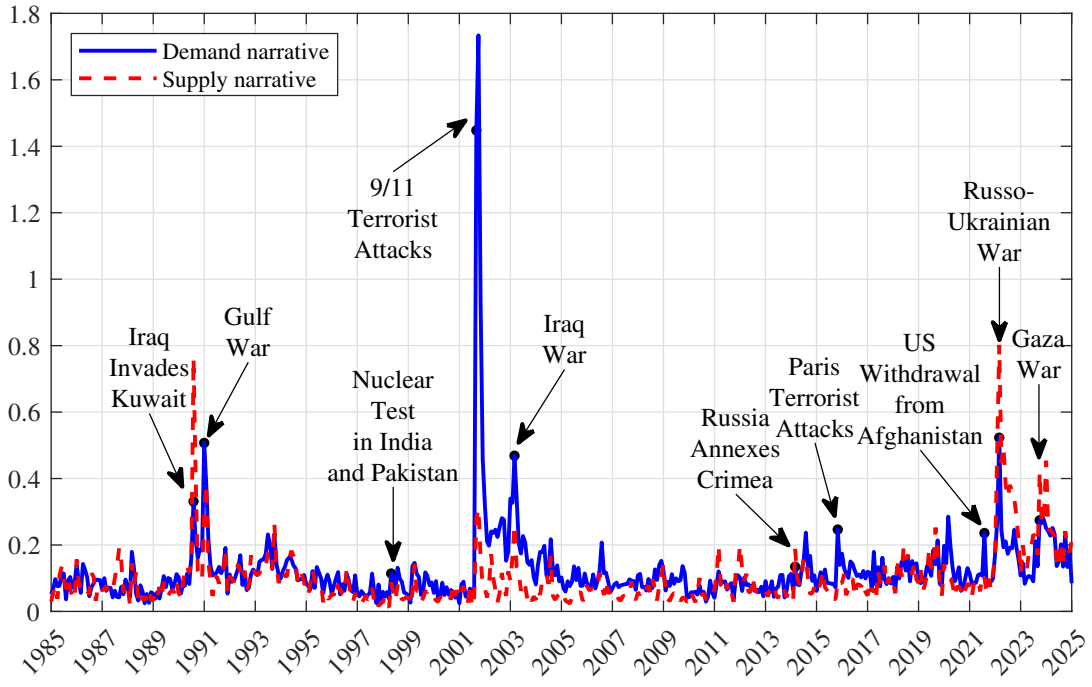

Figure 2: Monthly narrative GPR indices capturing the supply (inflationary) and demand (disinflationary) channels of geopolitical risk.

To set our GPR narrative indices in a further perspective, we compute correlations with existing related indices. These comprise the Shortages Index constructed by Caldara et al. (2023), the Anglosphere Sanctions Index by Bondarenko et al. (2024), the Trade Policy Uncertainty Index (TPU) and the Economic Policy Uncertainty Index (EPU), both compiled by Baker et al. (2016). We report the results in Figure 3.

One can see that the overall GPR index is highly correlated, i.e. with a correlation coefficient above 0.5, with the Sanctions index and the I-index. The supply narrative

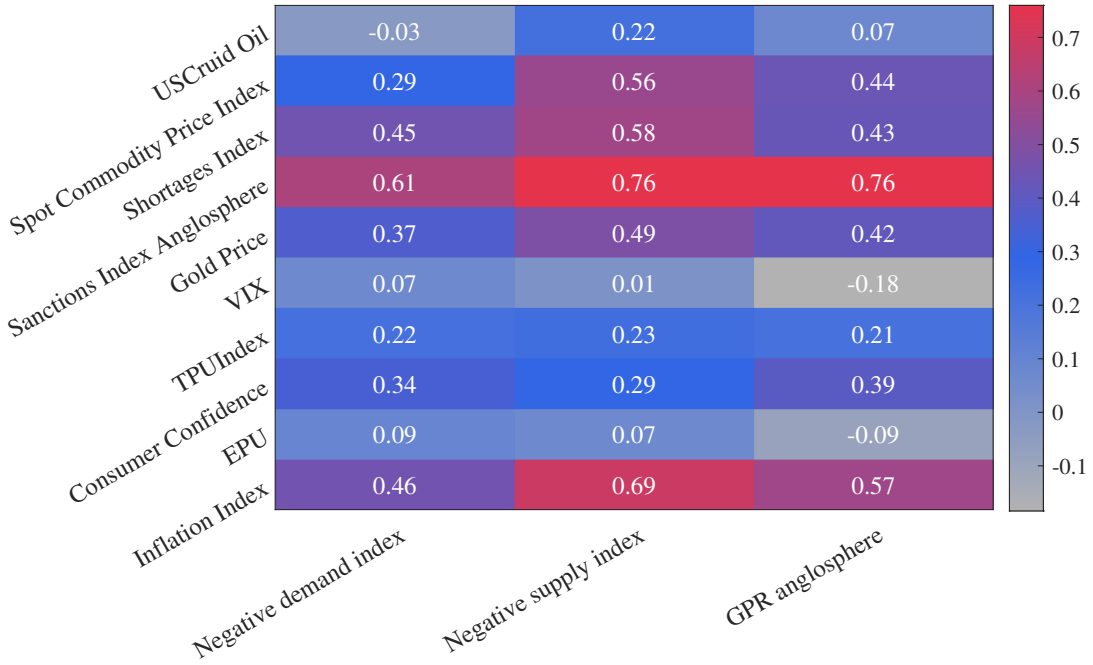

Figure 3: Contemporaneous sample correlations between the Anglosphere GPR index and the two narrative GPR indices (horizontal axis) and related indices (vertical axis).

GPR index is also highly correlated with those two variables, and it also exhibits a strong correlation with Shortages and commodity prices. The demand narrative GPR index is strongly correlated only with the Sanctions indicator. The correlations between the Economic Policy Uncertainty (EPU) index and the VIX with the three GPR indices is fairly low. The oil price is (somewhat) correlated only with the supply narrative GPR index.

3.1 Do narrative GPR shocks have the expected effects?

To validate the narrative GPR indices, we verify that a shock to the supply narrative GPR index increases inflation, while a shock to the negative demand narrative GPR index decreases it.

More specifically, we estimate the effect of a shock in the two GPR narrative indices using a Bayesian structural vector autoregression (BSVAR) model following the specification of Caldara and Iacoviello (2022) and Bondarenko et al. (2024). Our data set employed in this model spans from January 1990 to December 2021 and comprises real GDP, the personal consumption expenditure index (PCE) as our measure of prices, the Fed's shadow rate, as well as the WTI crude oil index for which we report the impulse responses in Figure 4. Additionally, we include a set of financial variables, namely the S&P500 index, the VIX, the real exchange rate, a measure of house prices and the total credit volume, as well as a recessions and COVID-19 dummy to correct for outliers. All variables are in real terms and seasonally adjusted, and enter the model in monthly

frequency as we interpolate those available in quarterly frequency with a cubic spline.

We identify a structural shock to the GPR narrative indices by imposing a Cholesky identification scheme. The ordering of the variables follows Bondarenko et al. (2024) and Caldara and Iacoviello (2022) by putting one of the two GPR sub-indices first, assuming that a geopolitical shock is exogenous, affecting all other variables contemporaneously, but economic or financial shocks cannot affect GPR in the same month. For further discussion and details, see Bondarenko et al. (2024). In addition, one can interpret the GPR indices as internal instrument for the true unobserved geopolitical shock in which case Plagborg-Møller and Wolf (2021) argue that when ordering such an instrument first in a VAR, this yields valid impulse responses, even if the shock itself is potentially non-invertible.

Due to the monthly frequency we set the lag lengths to 12 and estimate the model with the Gibbs sampler (Waggoner and Zha, 2003) employing the Minnesota prior for all variables. The hyperparameter setting, in the notation of Sims and Zha (1998), also follows the specification of Bondarenko et al. (2024): $\lambda_0 = 0.6$, $\lambda_1 = 2$, $\lambda_2 = 1.0$, $\lambda_3 = 1.2$, $\lambda_4 = 0.1$, $\mu_5 = 1.0$, and $\mu_6 = 1.0$. We produce 15,000 draws, of which 5000 are discarded as burn-in draws.

Figure 4 reports the resulting impulse response functions (IRF) with each column containing the results for a one-standard deviation shock to either GPR narrative index. The IRFs are plotted on a horizon of 24 months with 68% highest density regions. One can see that while both types of shocks trigger a negative GDP response, which is most severe in the case of a negative supply GPR shock, the responses of inflation vary across the two indices. For a GPR shock portrayed as a negative supply event, there is a significantly positive response in the PCE, which is insignificant for the events framed by a negative demand narrative. This is just as one would expect the two channels to look like in theory.

Summing up, shocks to the GPR narrative indices trigger responses in macroeconomic variables that are very much in line with what a negative supply and a negative demand shock would look like in a theoretical model.

3.2 A more formal validation exercise

Another way to validate our GPR narrative indices is to examine the posterior draws we obtain for our impulse responses. Which fraction of draws fulfill the sign restrictions that we conventionally impose to identify supply versus demand shocks? In other words, output and prices must move in opposite direction to be consistent with a supply narrative, and must move in the same direction to be consistent with a demand narrative.

Under a Cholesky-based classification of impulse responses into supply- versus demand-consistent patterns, we obtain the following results. Using the overall GPR index, the

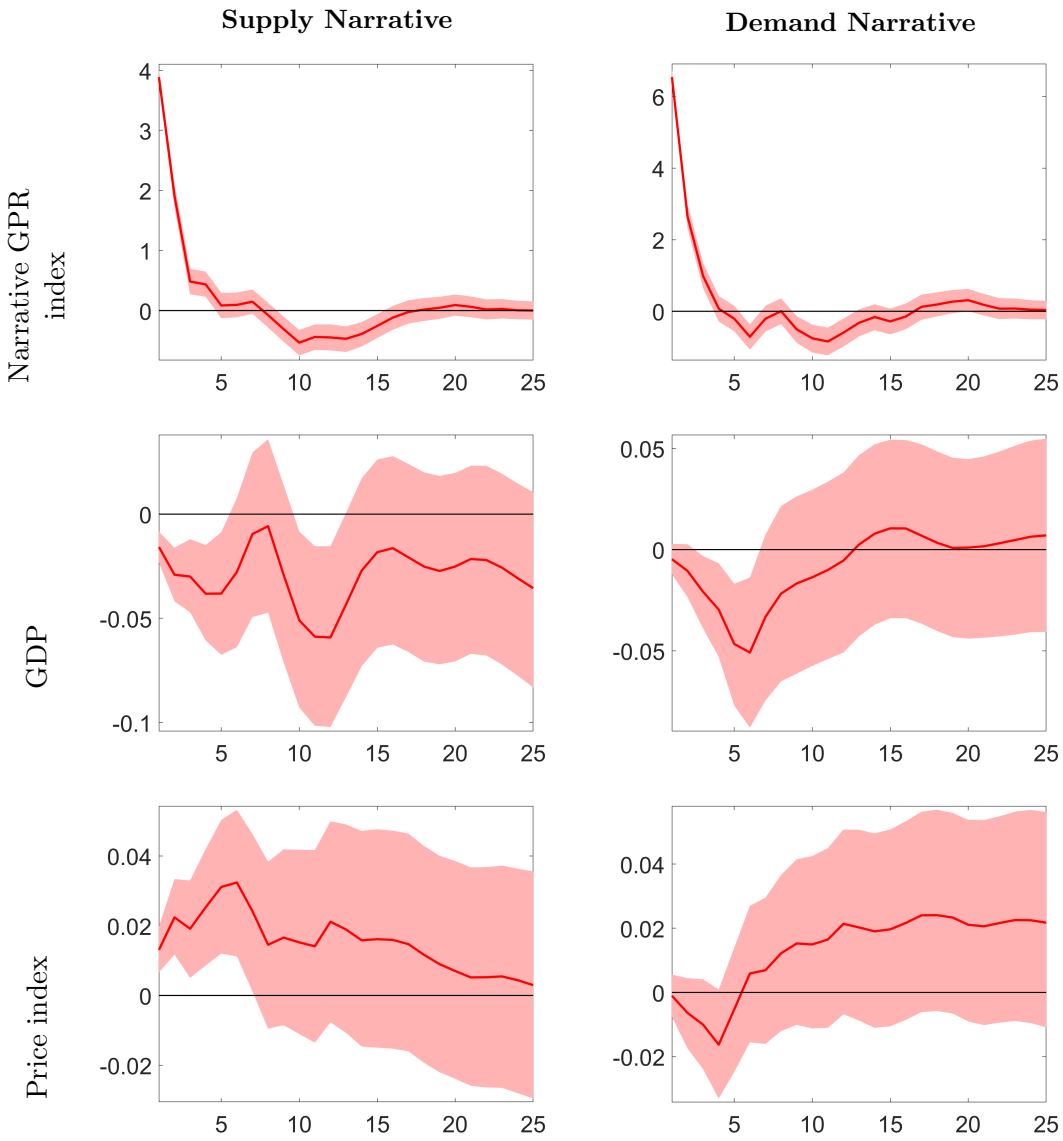

Figure 4: Impulse responses of GDP and prices to a shock in the negative supply and negative demand narrative GPR indices reported with 68% highest density regions.

posterior draws split as follows: 45% are consistent with a demand shock and 48% are consistent with a supply shock. When using our demand-focused GPR index, the balance shifts somewhat: 58% consistent with demand, while 39% consistent with supply. The most striking result emerges for the supply-focused GPR index: only 1% of draws are consistent with demand; 98% of draws are consistent with supply.

To sum up, the supply shock narratives of geopolitical risk align very well with macroeconomic patterns typically associated with supply shocks. In contrast, the demand narratives of GPR show a much weaker alignment with demand-type macro responses — at least under this identification.

4 Transmission of GPR narratives

First, we analyse the transmission of the narrative GPR indices to other macroeconomic and financial variables using VAR analysis. Second, we contrast two important geopolitical events that had very different effects on the US economy.

4.1 Monetary policy response and oil prices

Figure 5 shows the response of the shadow rate and oil prices to demand and supply narratives of geopolitical risk.

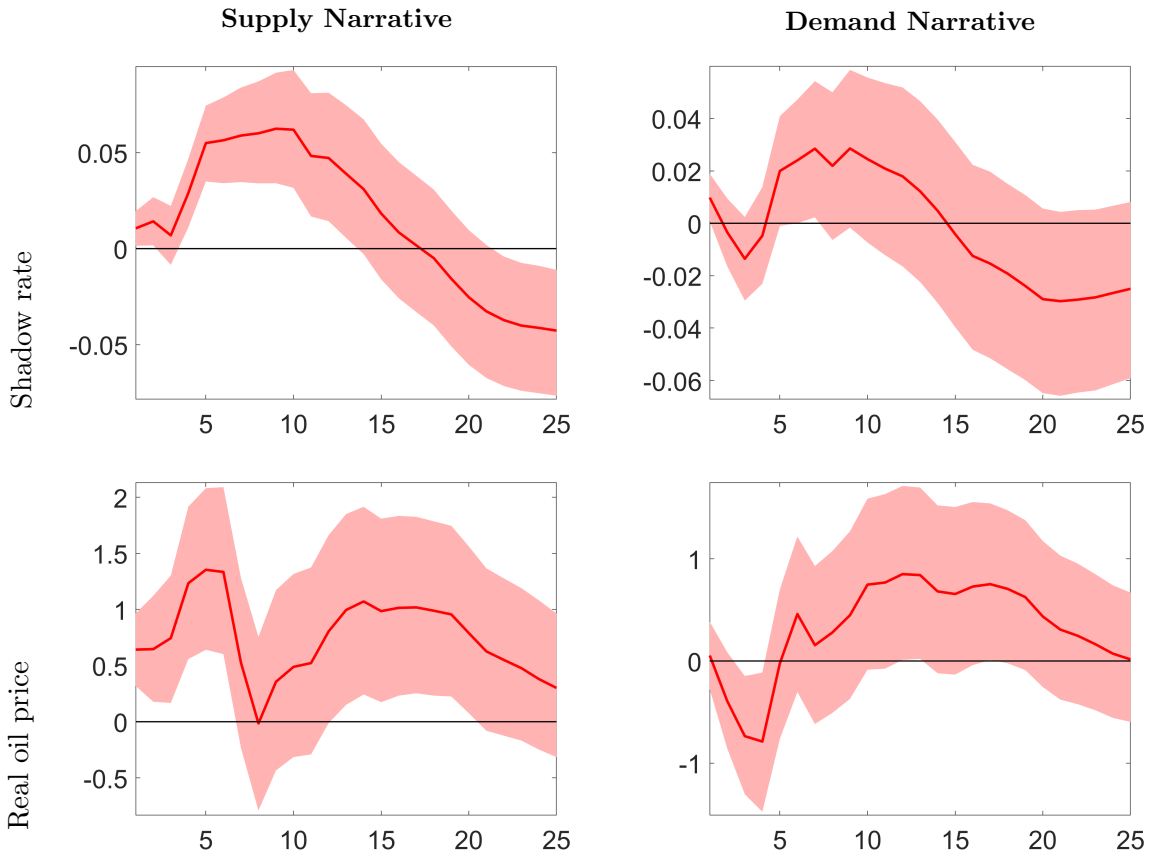

Figure 5: Impulse responses of Fed's shadow rate and the WT crude oil price index to a shock in the negative supply and negative demand narrative GPR indices reported with 68% highest density regions.

The shadow rate response indicates that the Fed tightens monetary policy in response to inflationary GPR shocks and loosens its policy stance in response to a disinflationary GPR shock. Oil prices react positively to negative supply GPR events, while there is a temporary negative reaction for negative demand GPR shocks.

4.2 Two events framed by different narratives

We now compare and contrast two geopolitical events that had a major impact on the US economy, but that were framed very differently in English-language news media: the 9/11 terrorist attacks on the US in September 2001, and the Russian attack on Ukraine in February 2022.

The terrorist attacks on the World Trade Center and the Pentagon on 11th September 2001 were widely seen as an adverse demand shock in the US. This can be seen from the following newspaper headlines and policy reports.

"Spending Weakens as Confidence Wanes. Conference Board reports consumer confidence index fell to 97. New York Times, 26th September 2001

"Retail stores suffered through one of their weakest Septembers in decades, with the terrorist attacks on the World Trade Center and the Pentagon adding to already high consumer anxiety." The Washington Post, 12th October 2001

"More evidence emerged today that the Sept. 11 terrorist attacks caused a severe deterioration in the nation's already-weak economy, as consumer demand contracted more sharply than Wall Street anticipated. New York Times, 25th October 2001

"Retail sales followed much the same pattern throughout the country . . . In the week following the attack, consumer spending dropped sharply [. . .]" Federal Reserve Bank "Beige Book", 24th October 2001

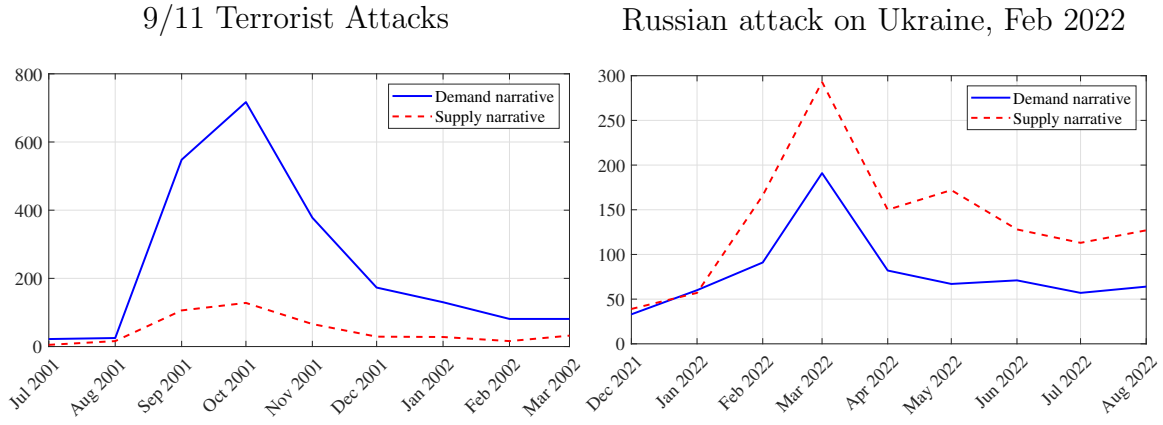

Figure 6: Weekly standardized number of articles per GPR narrative. Blue: inflationary, yellow: disinflationary.

News reporting was rather different following the Russian attack on Ukraine on 22nd February 2022. As the following headlines show, much emphasis was on the surging commodity prices and inflation

"Ukraine crisis: commodities prices surge as stock markets slump", The Guardian, 24th February 2022

"US inflation reached 7.9% in February hitting new 40-year high" Financial Times, 10th March 2022

"Ukraine War Means Another Supply Shock to Global Economy, the Last Thing It Needs" Wall Street Journal, 25th February 2022

"How War in Ukraine Drives Up Inflation at U.S. Farms, Supermarkets, Retailers" Wall Street Journal, 6th March 2022

Figure 6 depicts our inflationary and disinflationary GPR indices in the wake of these two geopolitical events. The diverging narratives that we can glean from the small selection of articles above are clearly reflected in the very different behaviors of the two indices across the two periods. After 9/11, the disinflationary GPR rises three times as much as the inflationary GPR index, see the left hand subplot. The opposite pattern can be seen on the right hand side of Figure 6 showing the two GPR indices surrounding the Russian attack on Ukraine; the inflationary GPR index spikes in March 2022, the peak being twice as high as the disinflationary GPR index.

To summarize, the 9/11 terrorist attack on the US was a geopolitical shock that was transmitted via the demand channel, while the Russian invasion of Ukraine instead propagated through the supply channel.

5 Conclusion

We propose an enhanced measurement of geopolitical risk (GPR) that deepens our understanding of how GPR shocks are transmitted through the economy, which is critical for policymakers. We use ChatGPT to automatically detect supply and demand narratives in the news surrounding geopolitical events. In a BSVAR model we show that the narrative indices we construct are able to explain differing responses in real variables due to geopolitical shocks and hence demonstrate that the real effects depend on the nature of the underlying shock. Our methods therefore creates a tool that allows policy makers to gauge in real-time how inflationary a GPR shock is likely to be.

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A Geopolitical risk and recession reporting

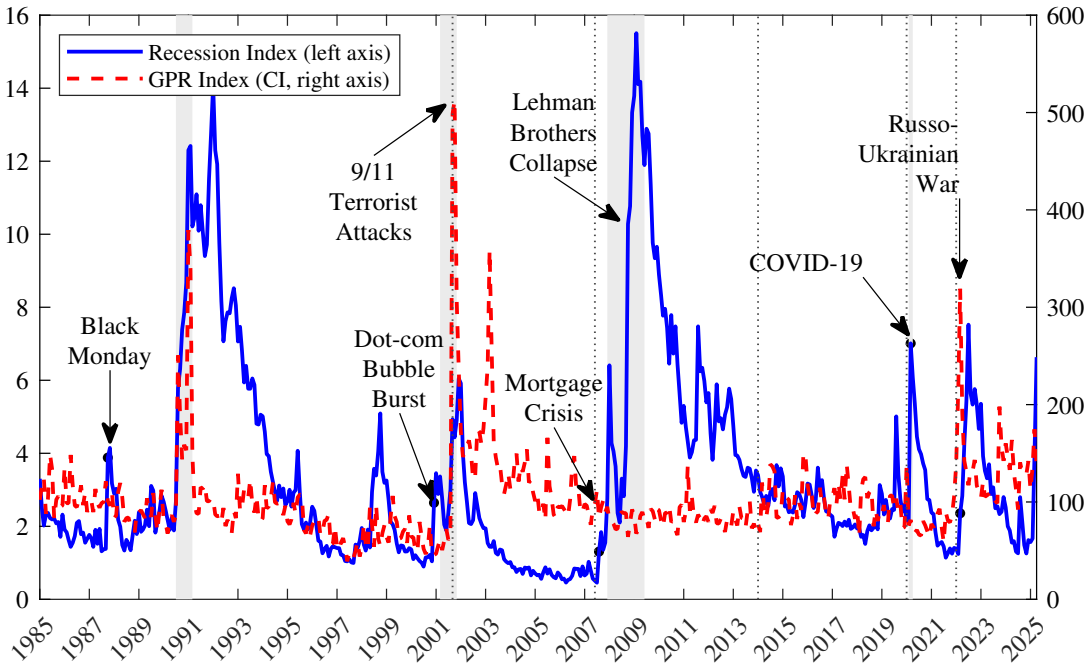

Figure A.1: Geopolitical Risk and Recession Reporting over Time

Table 1: Correlation between GPR index and R-index

Period	**Sub-sample**	**Correlation**
Pre-9/11 period	January 1985 – August 2001	0.015
Post-9/11 Terrorist Attacks	September 2001 – May 2007	-0.542
Great Financial Crisis	June 2007 – December 2013	0.148
Pre Covid-19 period	January 2014 – December 2019	0.023
Covid-19 and pre-war period	January 2020 – December 2021	0.316
Russo-Ukrainian War	January 2022 until now	0.172

As shown in Table 1, the correlation between the GPR index and the R-index has weakened and has turned negative since the onset of the Covid-19 pandemic. During two sub-samples, the GPR index was high and volatile: after the 9/11 terrorist attacks and after the Russian attack on Ukraine. Yet, the correlation between the GPR index and the R-index was high and positive in the former period and negative in the latter. This may suggest that the transmission of geopolitical risk shocks (or the importance of geopolitical risk for the US business cycle) has changed over time.

B Identifying three geopolitical risk narratives

Table 1: Questionnaire for Identifying GPR Narratives, incl. Positive Demand

You classify news articles about geopolitical events purely by their macroeconomic impact on the United States.
canonical shocks:
negative supply = raises production costs or reduces available output
positive demand = raises U.S. aggregate demand
negative demand = lowers U.S. aggregate demand

INSTRUCTIONS:
Read the article. Think step by step; do NOT reveal your reasoning. Answer each sub-question with exactly "yes" or "no" (lowercase, no punctuation). Return only the JSON, no extra text, no trailing commas.

QUESTIONS:
Negative supply:
1. Does the article explicitly or clearly imply that prices of goods and services in the US have risen or will rise because of the event?
2. Does the article explicitly mention supply-chain disruptions affecting the U.S. economy?
3. Does the article explicitly mention trade flows being redirected?
Negative demand:
4. Does the article explicitly say U.S. consumer, business, or investor confidence has fallen (or will fall)?
5. Does the article explicitly say U.S. consumer, business, or investor demand has fallen (or will fall)?
Positive demand:
6. Does the article explicitly or clearly imply U.S. military spending or defense production is increasing or planned to increase?
7. Does the article explicitly or clearly imply higher demand for U.S. goods/services because of disruptions to trade or relative price changes?

OUTPUT JSON SCHEMA:

```
{
  "negative_supply":{
    "price_increase":{"yes|no"},
    "supply_chain_disruption":{"yes|no"},
    "trade_flow_redirection":{"yes|no"}
  },
  "positive_demand": {
    "military_spending_increase":{"yes|no"},
    "foreign_demand_increase":{"yes|no"}
  },
  "negative_demand": {
    "confidence_decrease":{"yes|no"}
    "demand_decrease":{"yes|no"}
  }
}
```

Newspaper Article:

C Impulse responses

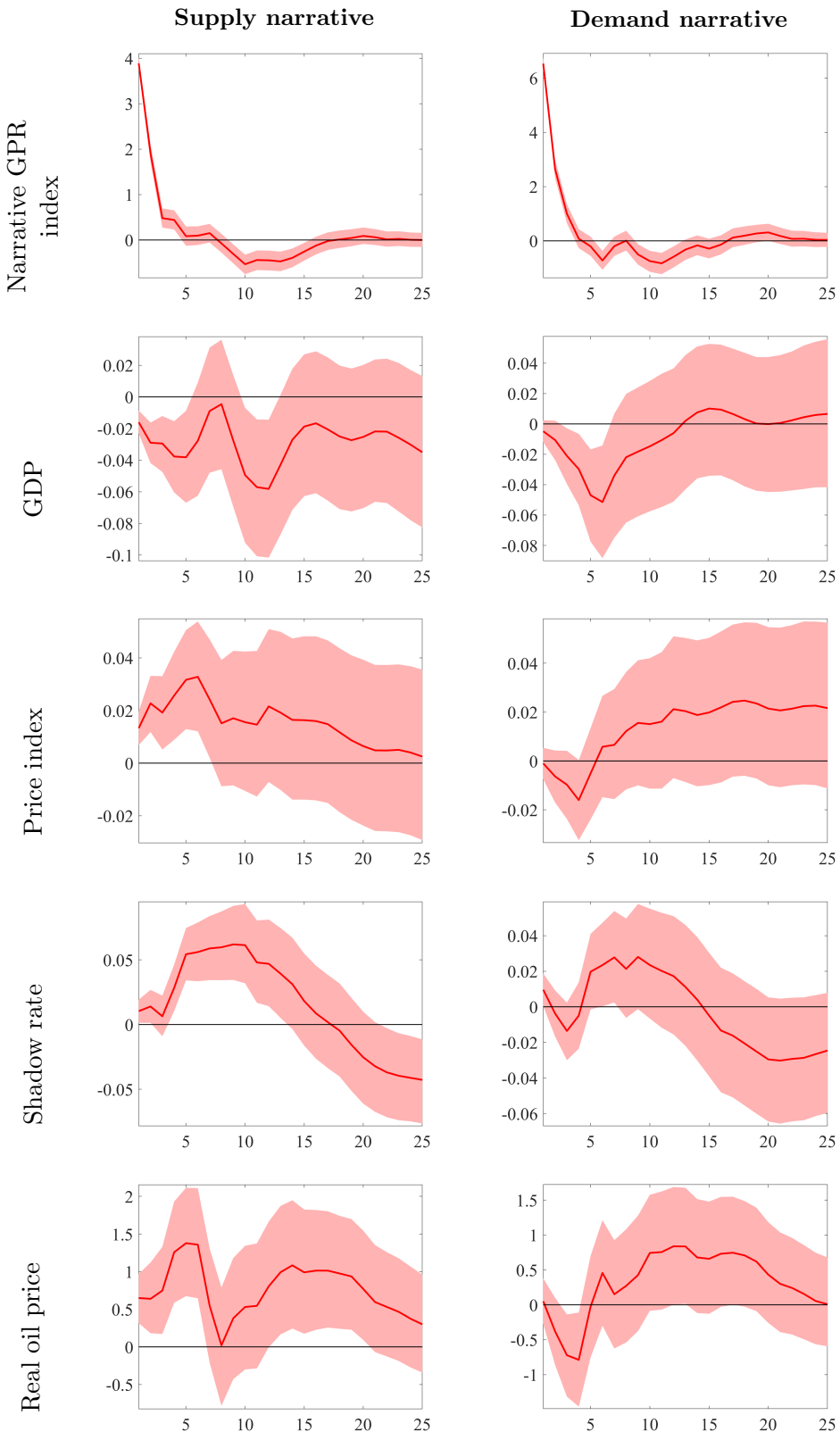

Figure C.1: Impulse responses of GDP, PCE, the Fed's shadow rate and the WT crude oil index to a shock in the negative supply and negative demand GPR sub-indices reported with 68% highest density regions.