"WHEN GOVERNANCE FORSAKES JUSTICE, UNREST BECOMES THE CURRENCY OF THE OPPRESSED"

-DataBAEs, 2024

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Overview

Our project, **Analyzing Economic Indicators and Political Violence in the Philippines**, applies Data Science concepts to real-world data within the theme 'Pilipinas in a Nutshell (PiNut) 2023'. We aim to leverage our acquired skills to gain insights and address practical challenges, aligning with Sustainable Development Goal (SDG) 16: Peace, Justice, and Strong Institutions. Through this, we contribute to societal betterment within the country.

MOTIVATION

The Philippines has long been riddled by persistent social issues such as poverty, unemployment, crime, and political violence, among others. Different administrations have attempted to resolve these issues through varying strategies and efforts. Economic indicators serve as crucial metrics for assessing the performance of government leaders in addressing the financial concerns and state of the country. Moreover, we believe that strengthening financial institutions would enhance the delivery of essential services to citizens, thereby alleviating hardships in areas such as healthcare, employment, and education. Consequently, this could mitigate the necessity for protests to advocate for these rights, leading to increased citizen satisfaction.

PROBLEM

Political violence in the Philippines is a multifaceted issue fueled by various social, economic, and political factors. Stemming from deep-seated social inequalities, dissatisfaction with government performance, and economic instability, it manifests as a means for marginalized communities to voice grievances and demand change. Economic hardship exacerbates tensions, while inadequate government services compound citizen dissatisfaction, creating unrest. Addressing these root causes necessitates comprehensive strategies that prioritize social justice, economic development, and good governance.

SOLUTION

Utilizing data science techniques, we propose a solution that aims to identify correlations between economic indicators and political violence in the Philippines. By analyzing datasets of recorded political violence and economic indicators in the Philippines, we will uncover key factors influencing the occurrence of political violence and develop predictive models to anticipate its likelihood based on economic changes. These insights will empower policymakers to implement targeted interventions, fostering social stability and inclusive development.

Background Study

Carothers and Feldman (2022) illuminated the global landscape of protests, with a particular focus on the pervasive influence of economic grievances as drivers of social unrest. The widespread surge in protests driven by rising citizen anger over economic problems, notably surging inflation, has led to an increase in antigovernment demonstrations worldwide. They also emphasized that while economic protests were prevalent across various regions, they often manifested under different banners, such as labor unions or political parties, advocating for greater government intervention to address underlying economic challenges. Furthermore, they note the short-lived nature of many economic protests, suggesting a lack of clear solutions and the complexity of economic disruptions.

For more information, refer to Economic Anger Dominated Global Protests in 2022.

Objectives

1. To identify and analyze the correlation between various economic indicators (such as the PHP exchange rate, external debt, foreign investment, GDP, GNI, etc.) and the occurrence of political violence in the Philippines.
2. To understand the underlying factors contributing to the relationship between economic conditions and political violence, including socio-economic disparities, inequality, and grievances.
3. To promote peace and stability in the community by providing actionable insights to mitigate the occurrence of political violence and contribute to Sustainable Development Goal 16 (Peace, Justice, and Strong Institutions).
4. To assist the government in addressing the issue of reducing political violence by offering evidence-based recommendations and policy measures informed by data-driven analysis.

Research Hypothesis

Null Hypothesis (H0)

None of the Philippines' economic indicators are correlated with the number of recorded political violence in the country.

Alternative Hypothesis (H1)

At least one Philippine economic indicator is correlated with the number of recorded political violence in the country.

Data

We looked at publicly available and credible databanks.

Specifically, we looked at ACLED by using their data export tool, and we looked at World Bank's data catalog labeled as Global Economic Monitor.

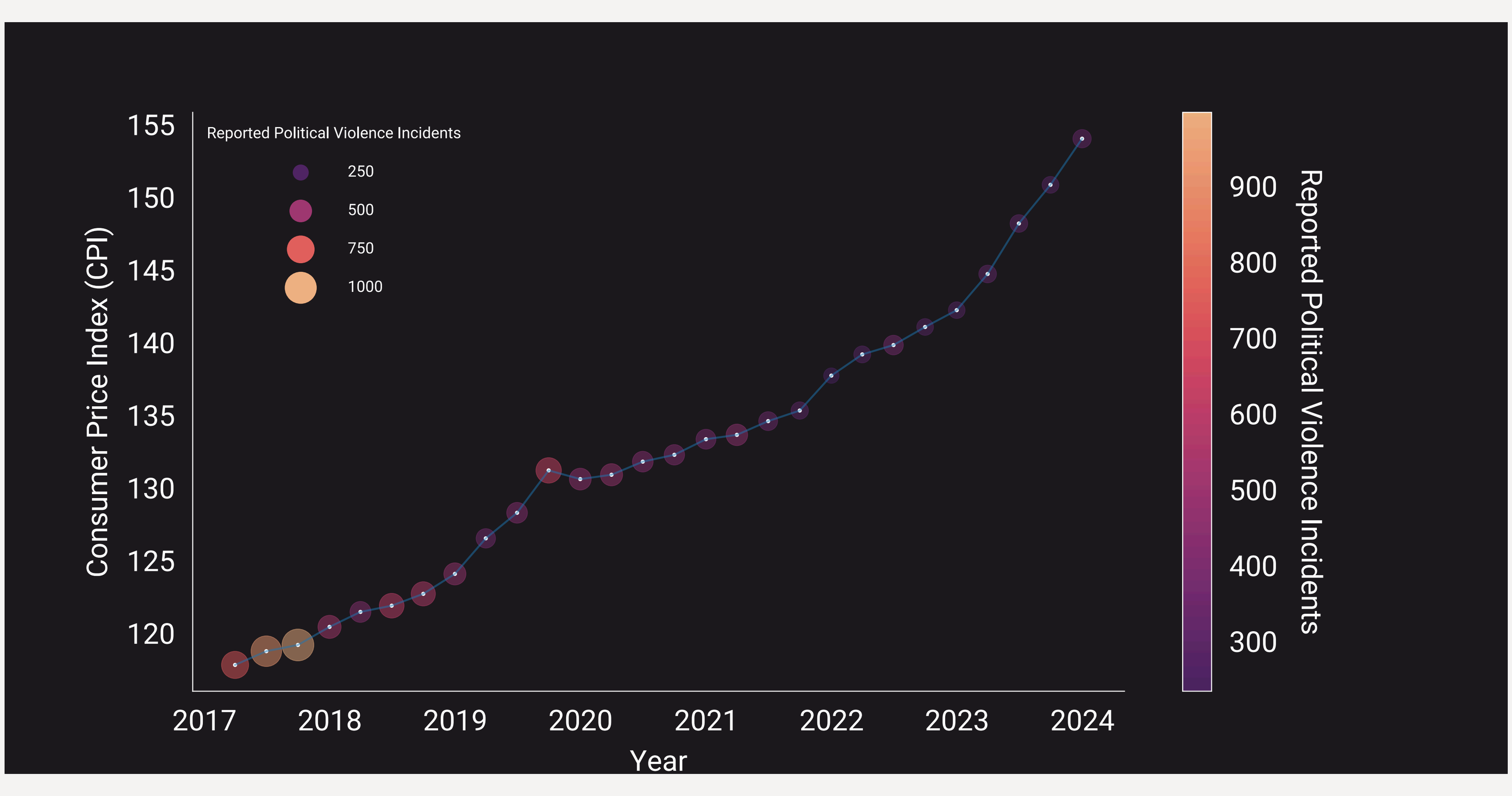
The dataset includes political violence in the Philippines from 2016 up to the present, which amounts. Each data point records pertinent information on the nature of the political violence: date, time, location, fatalities, and many more.

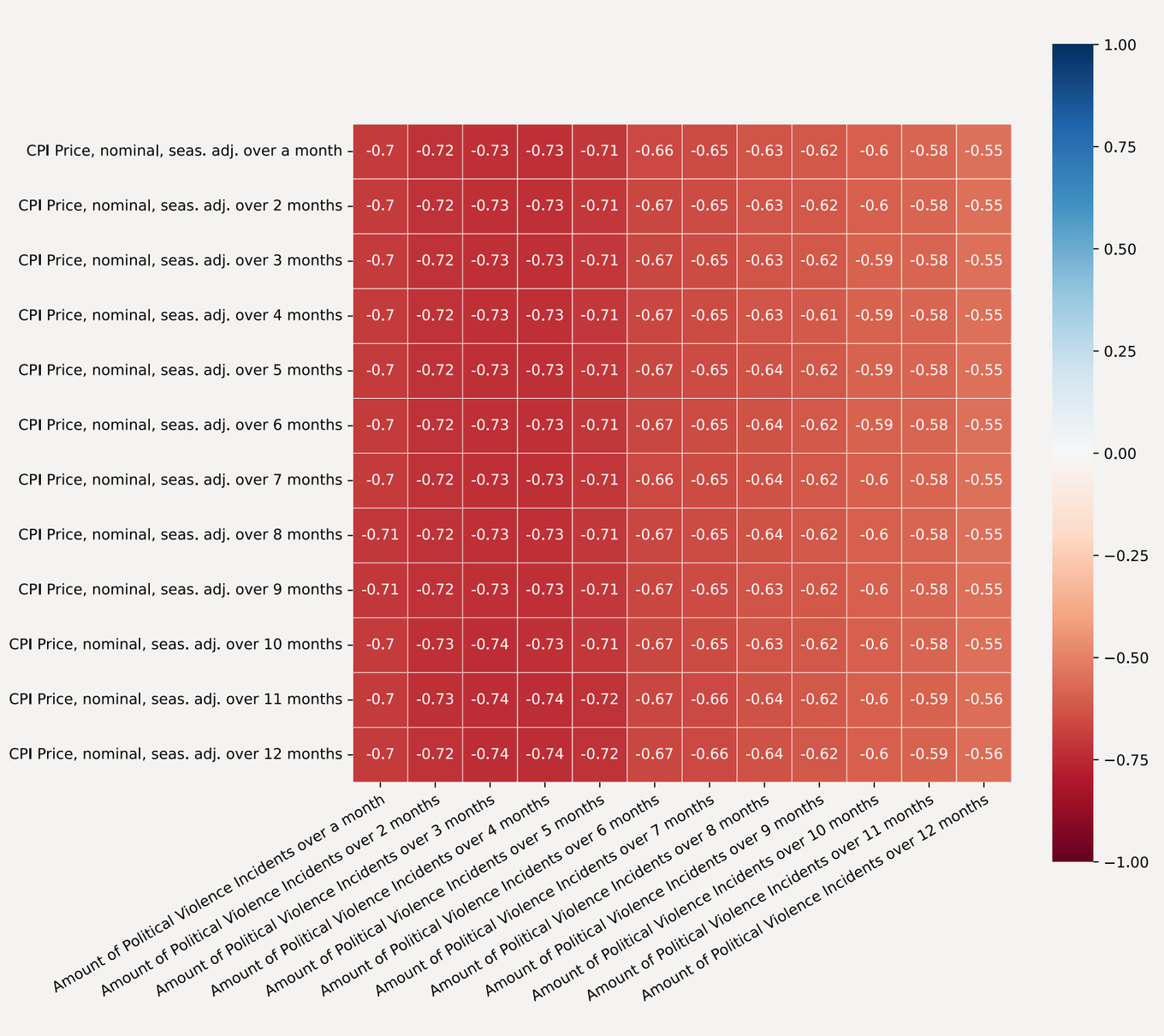
View our dataset

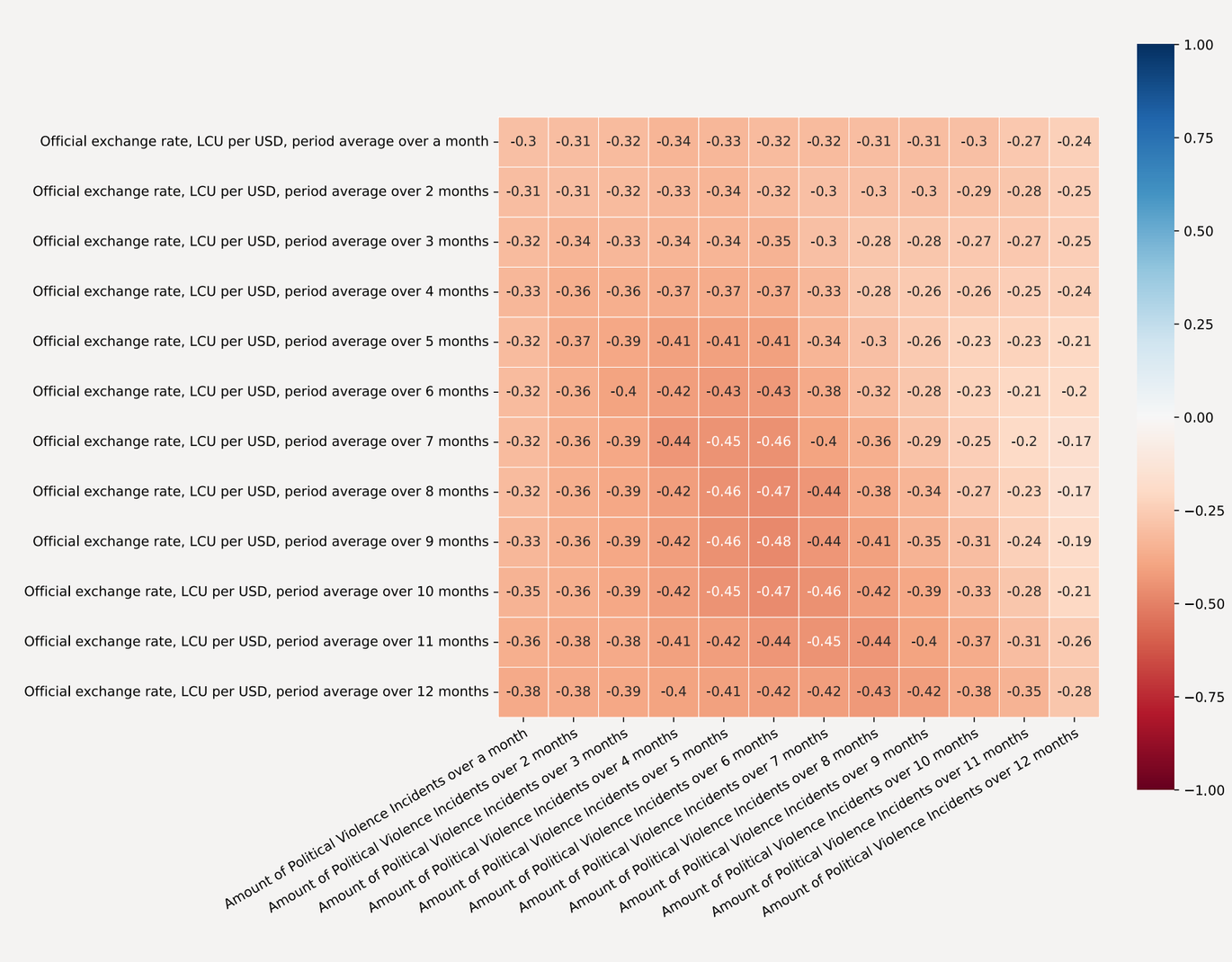
PLOTS

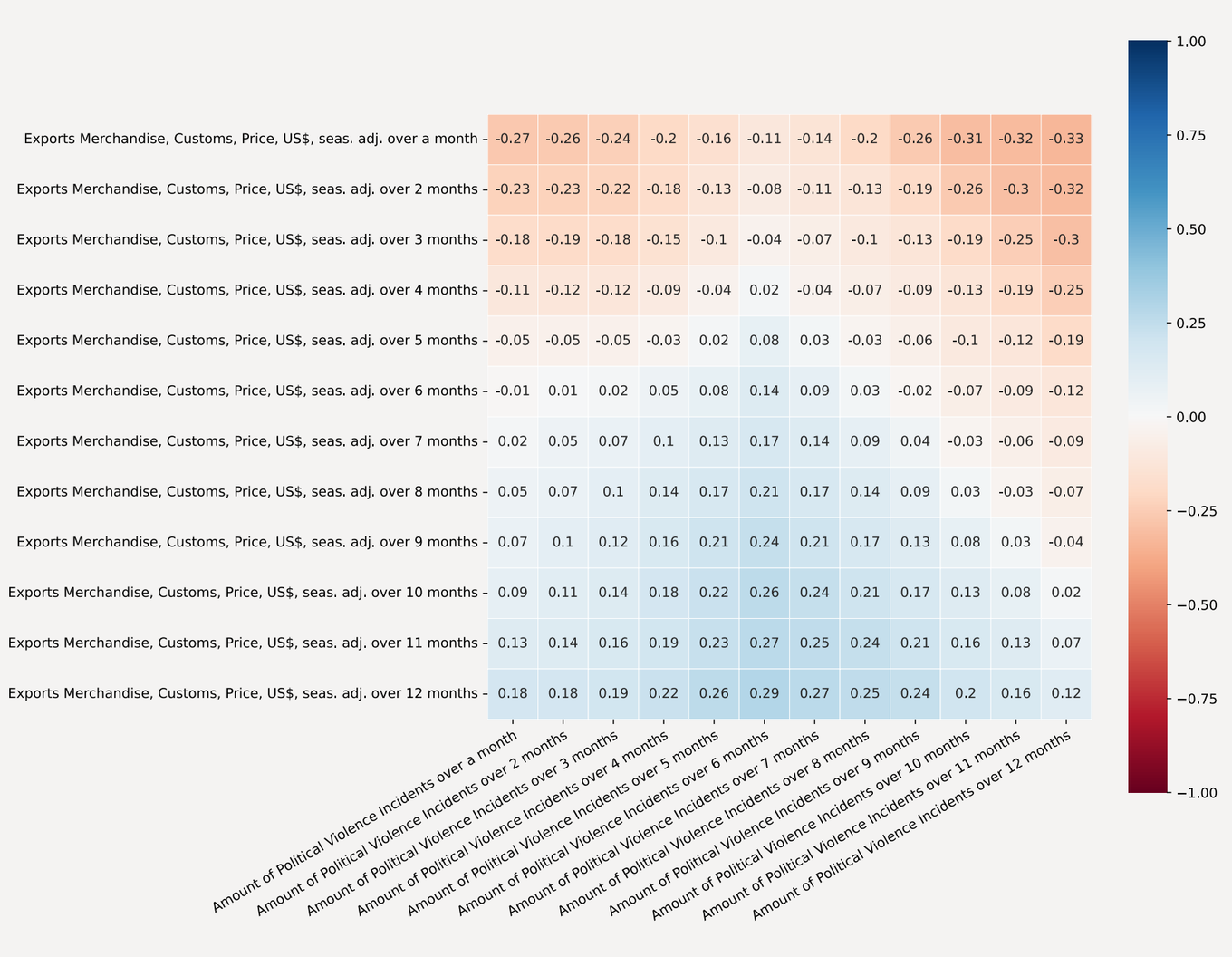
Exploratory Data Analysis

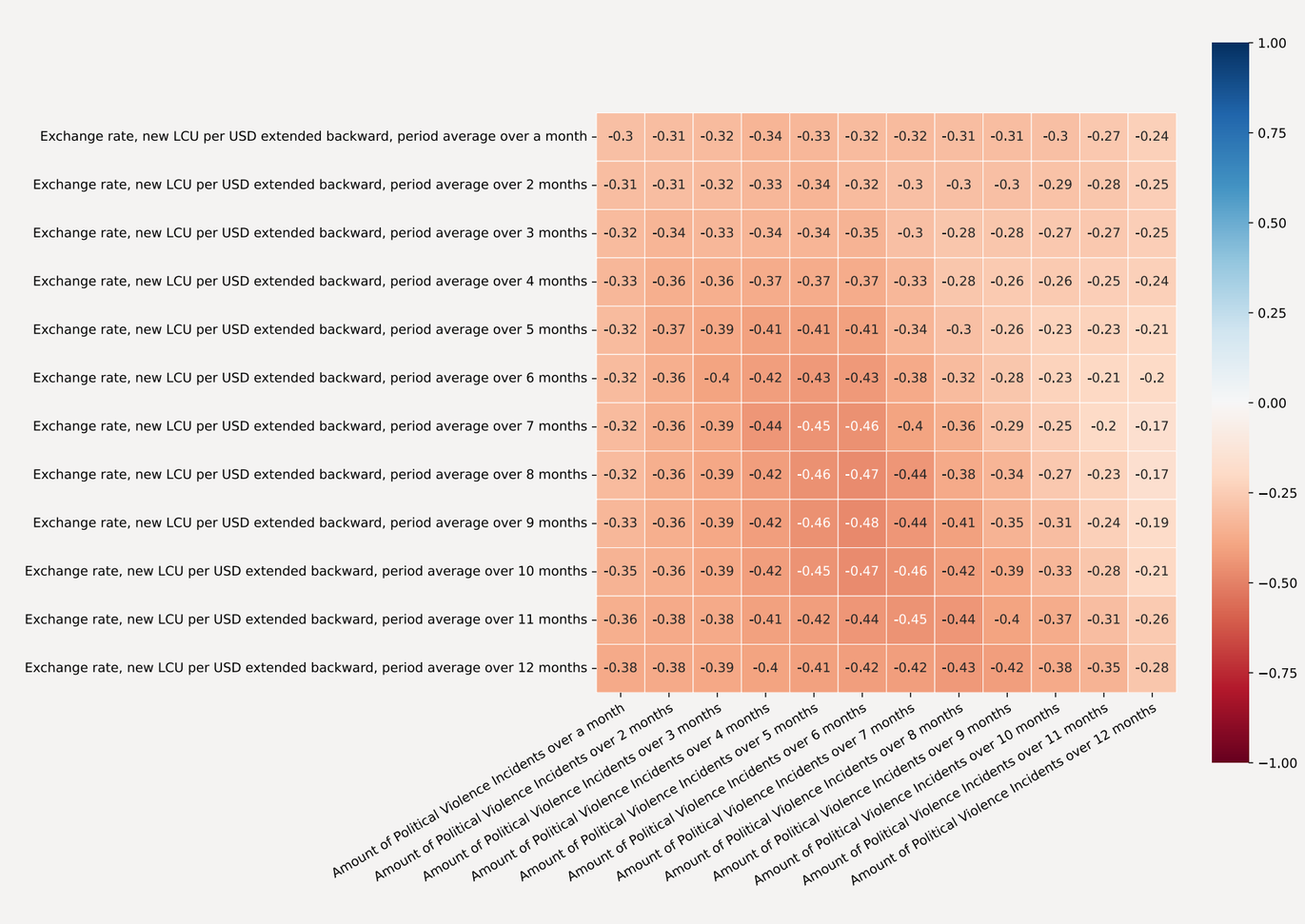
All Nutshell Correlation -

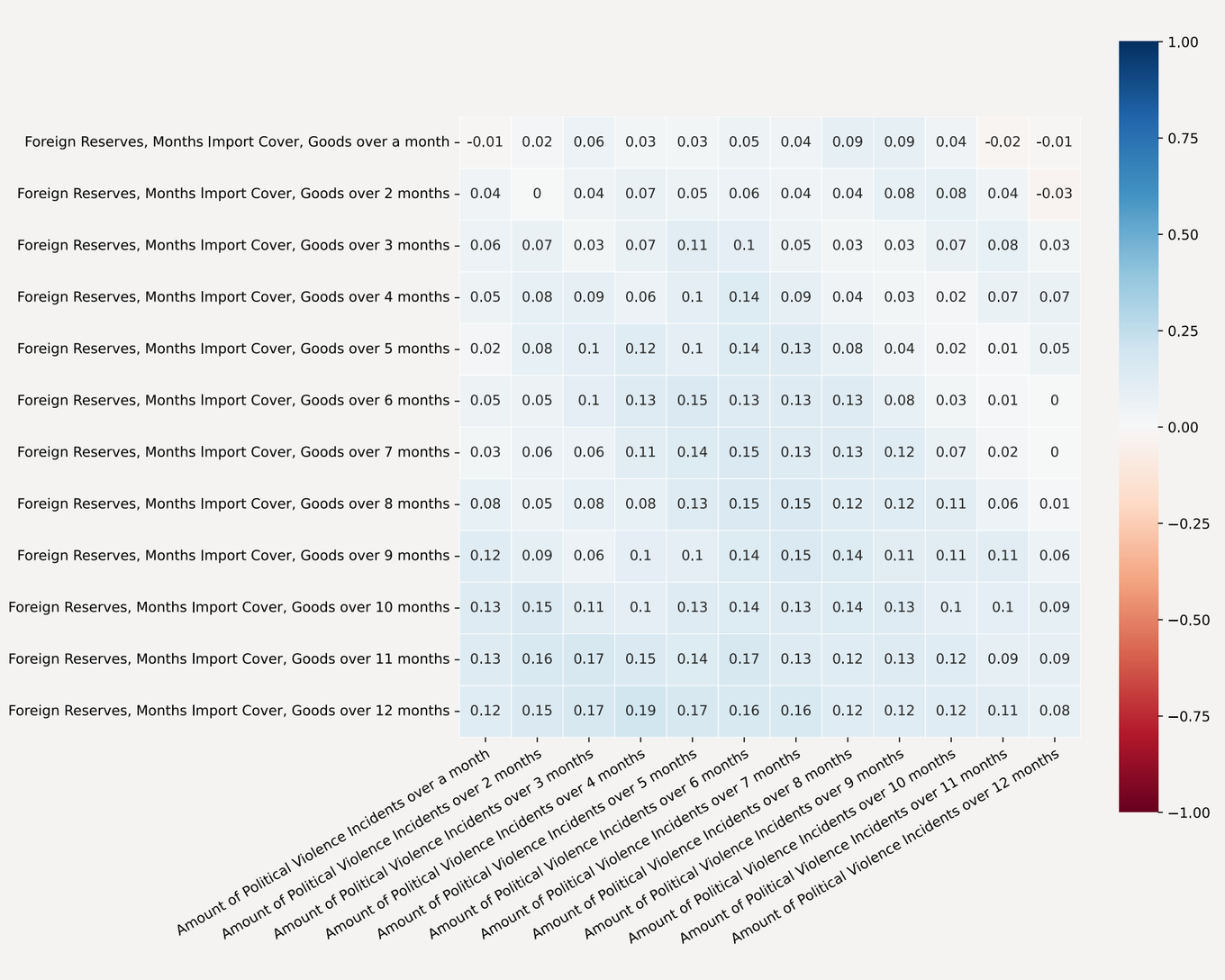


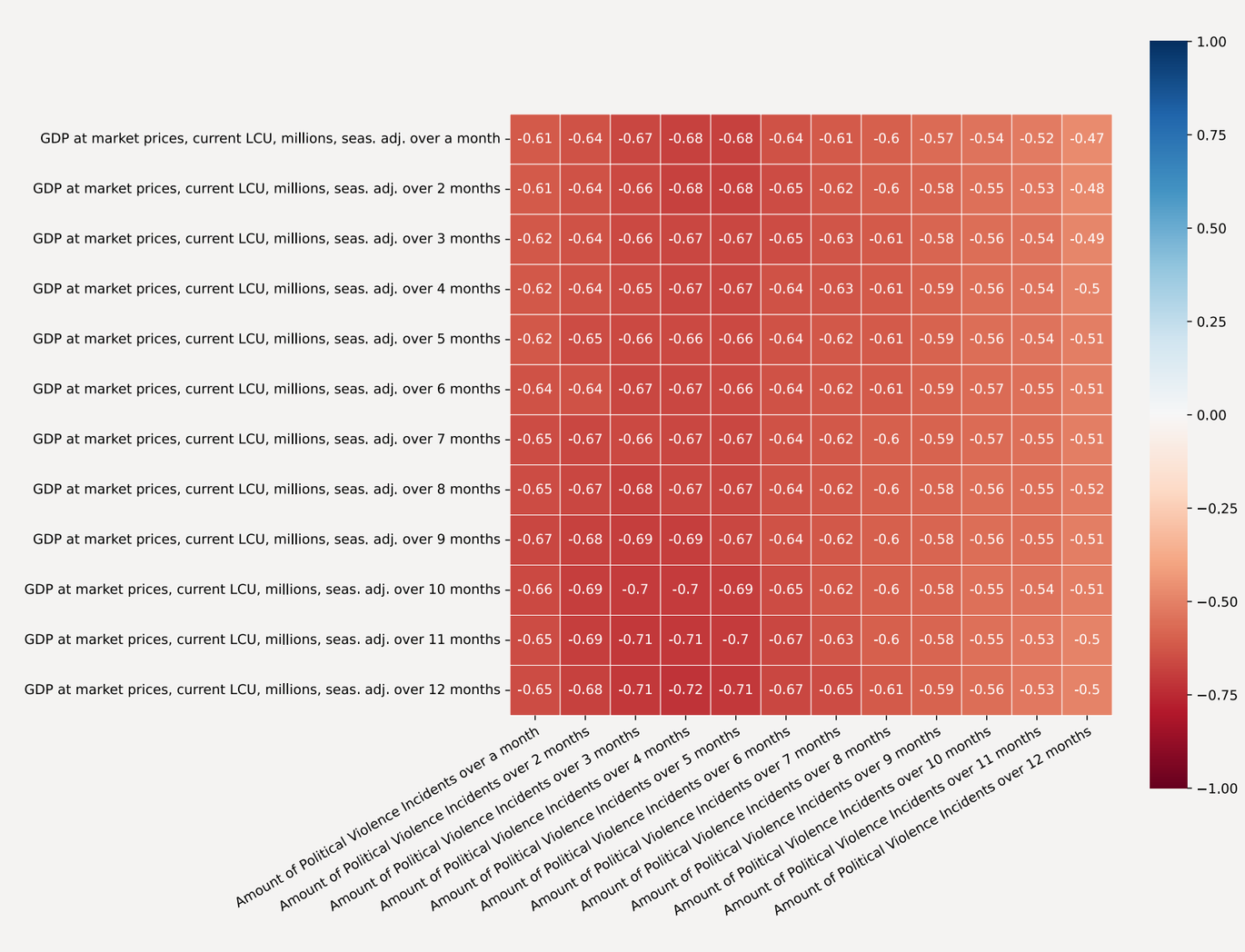


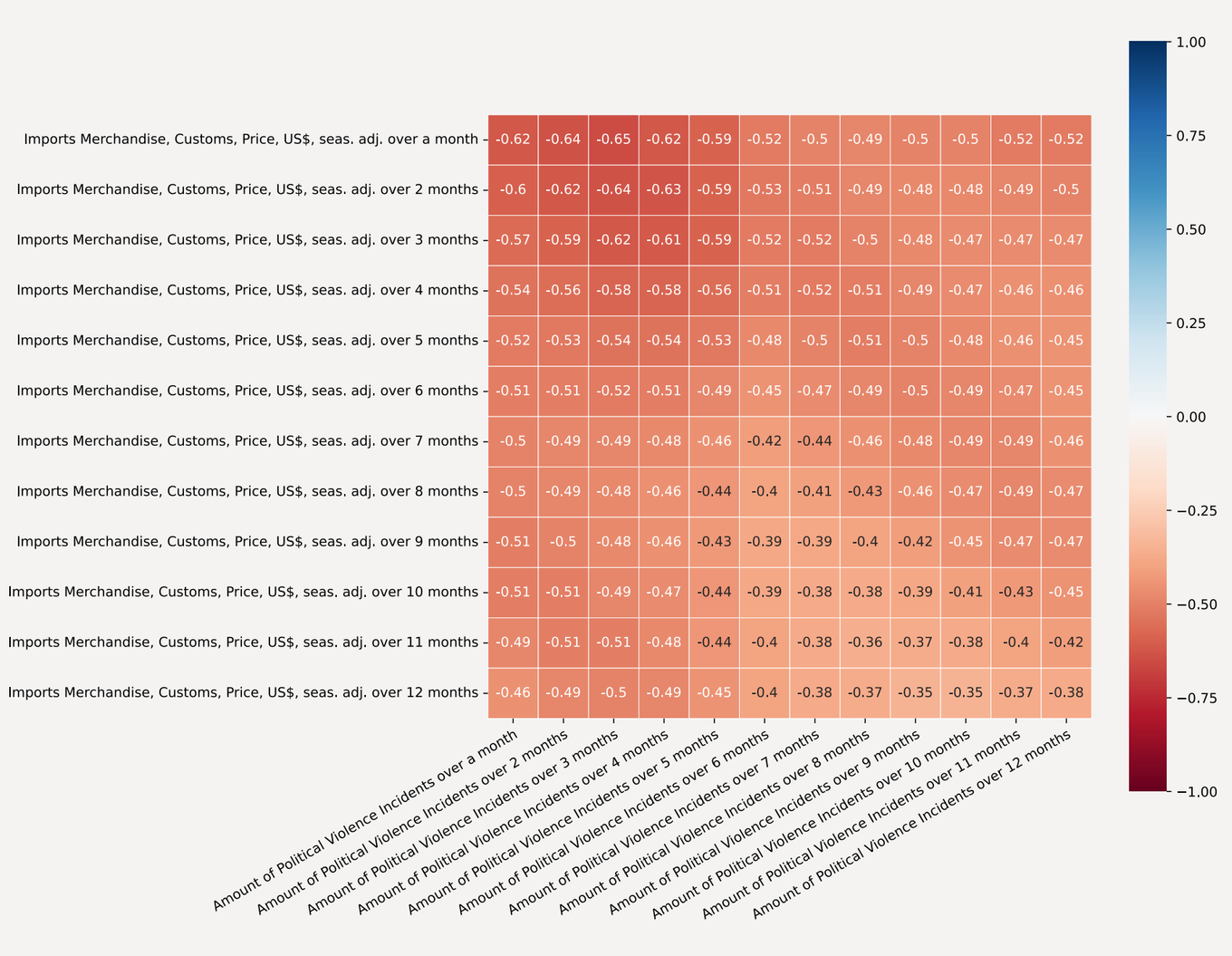


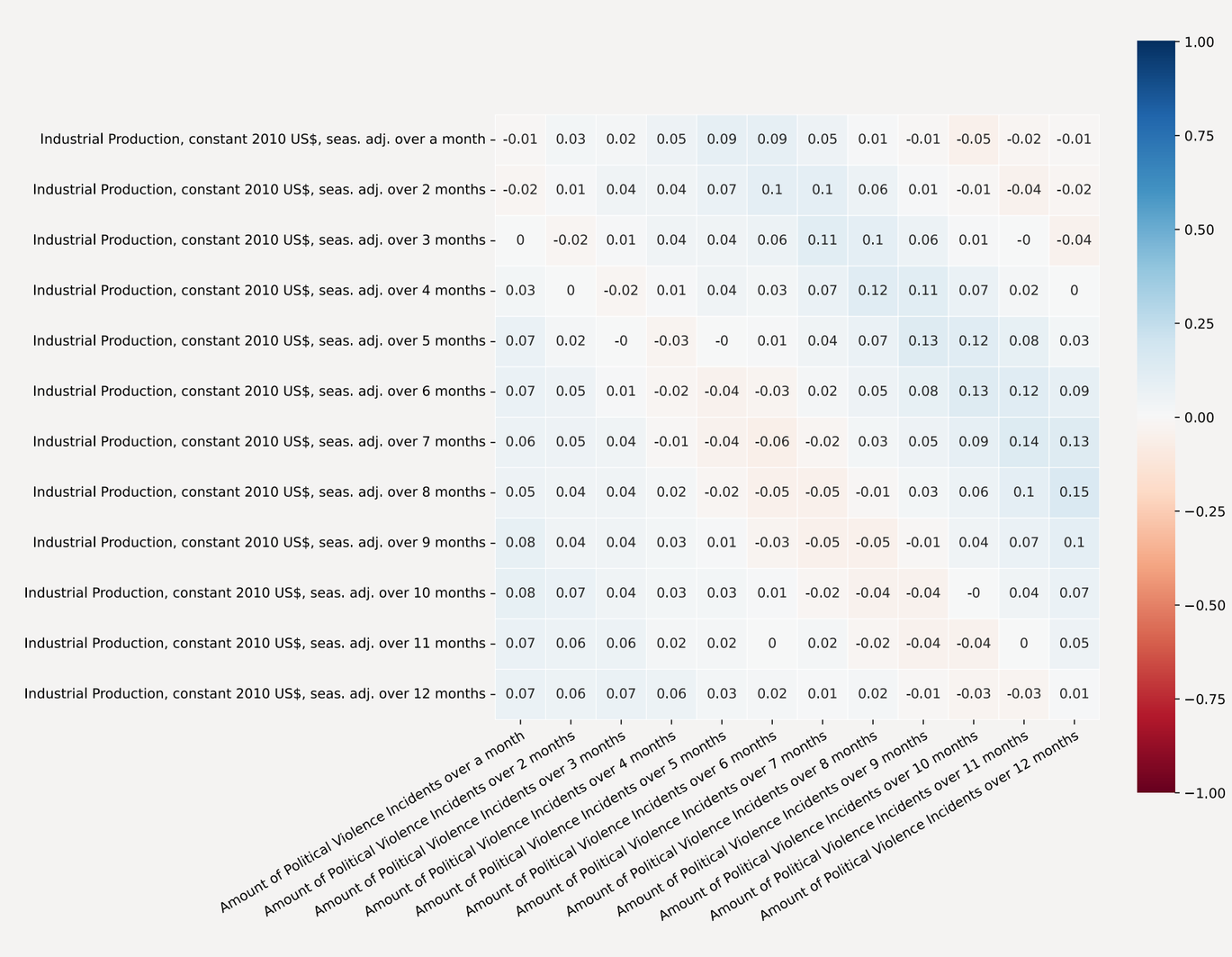


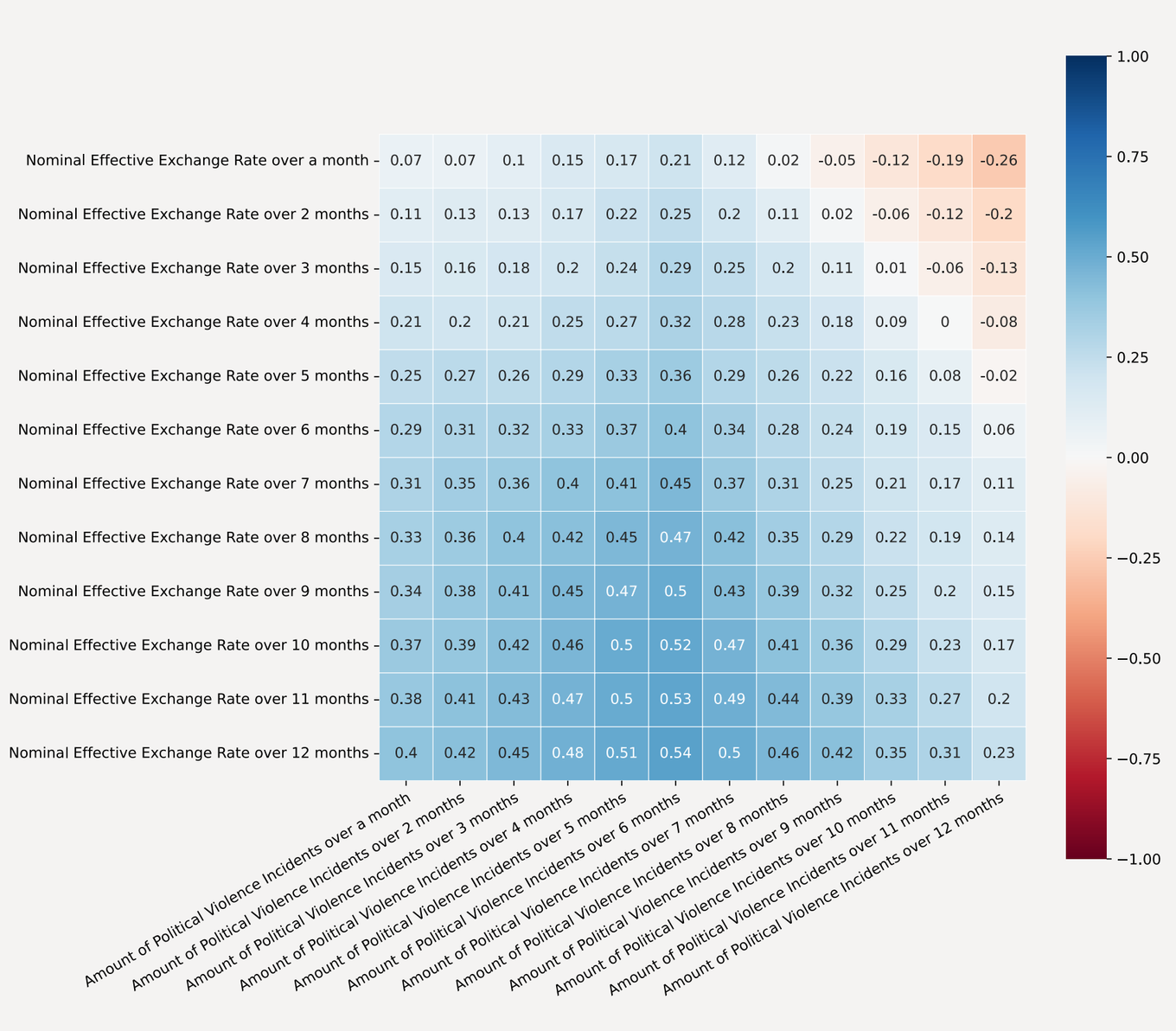


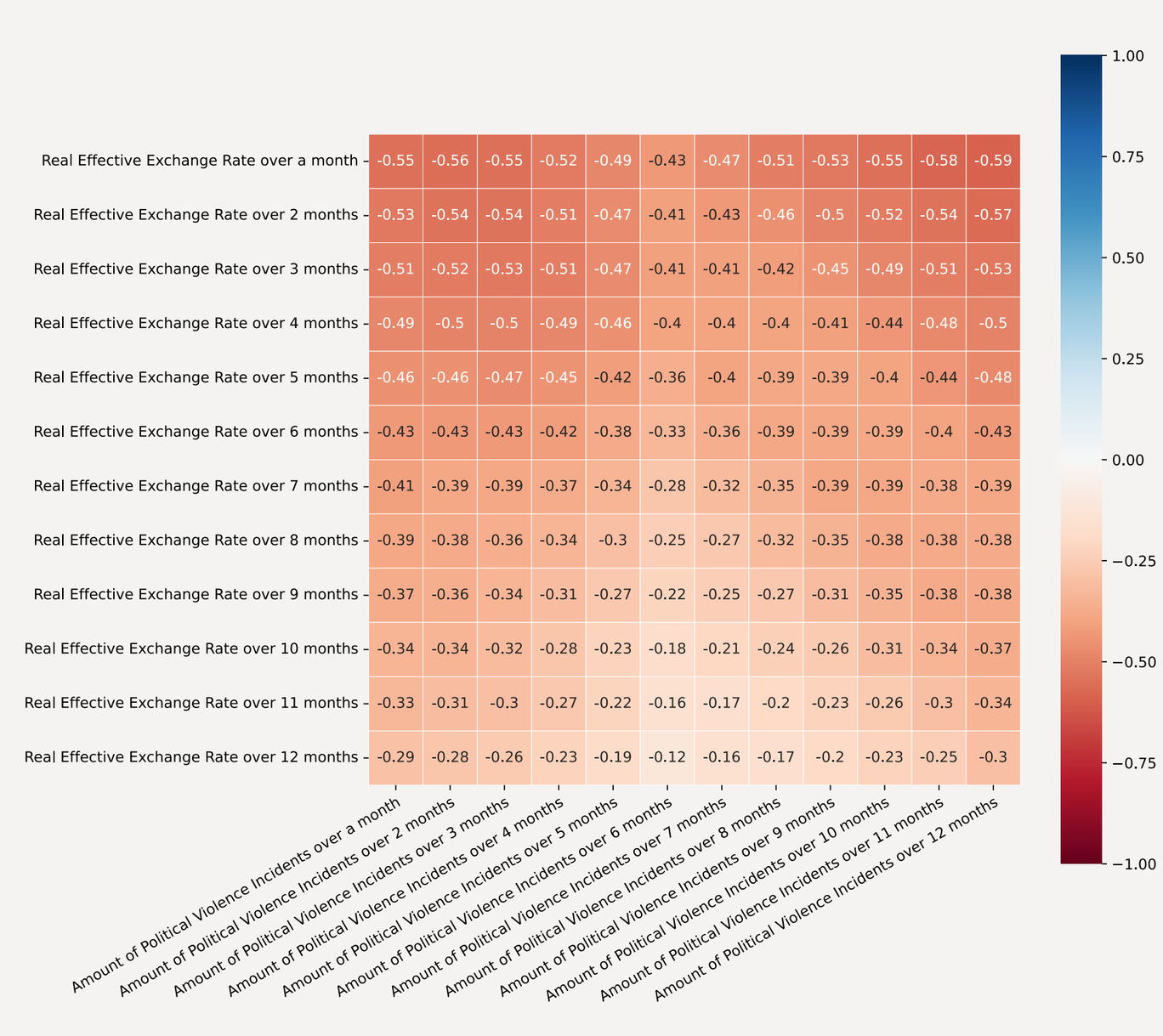


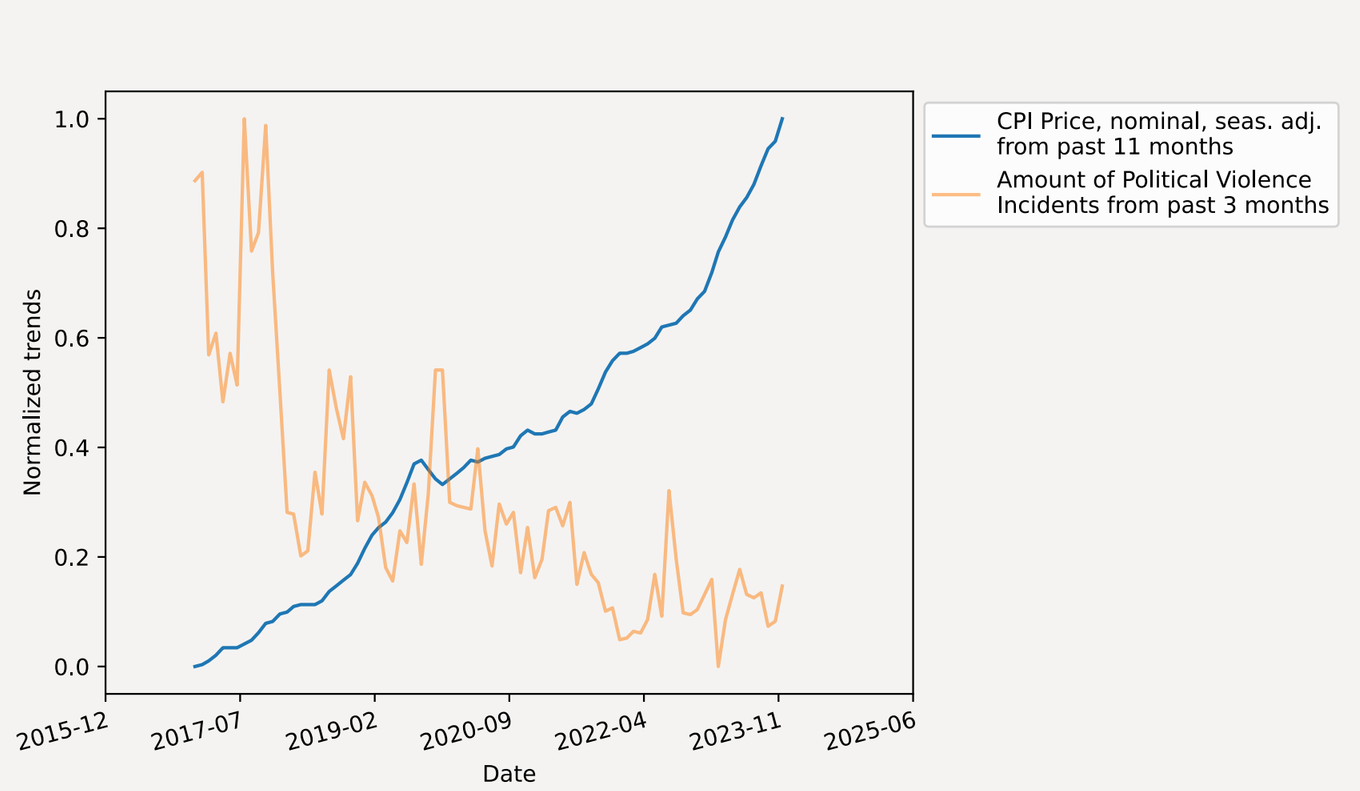


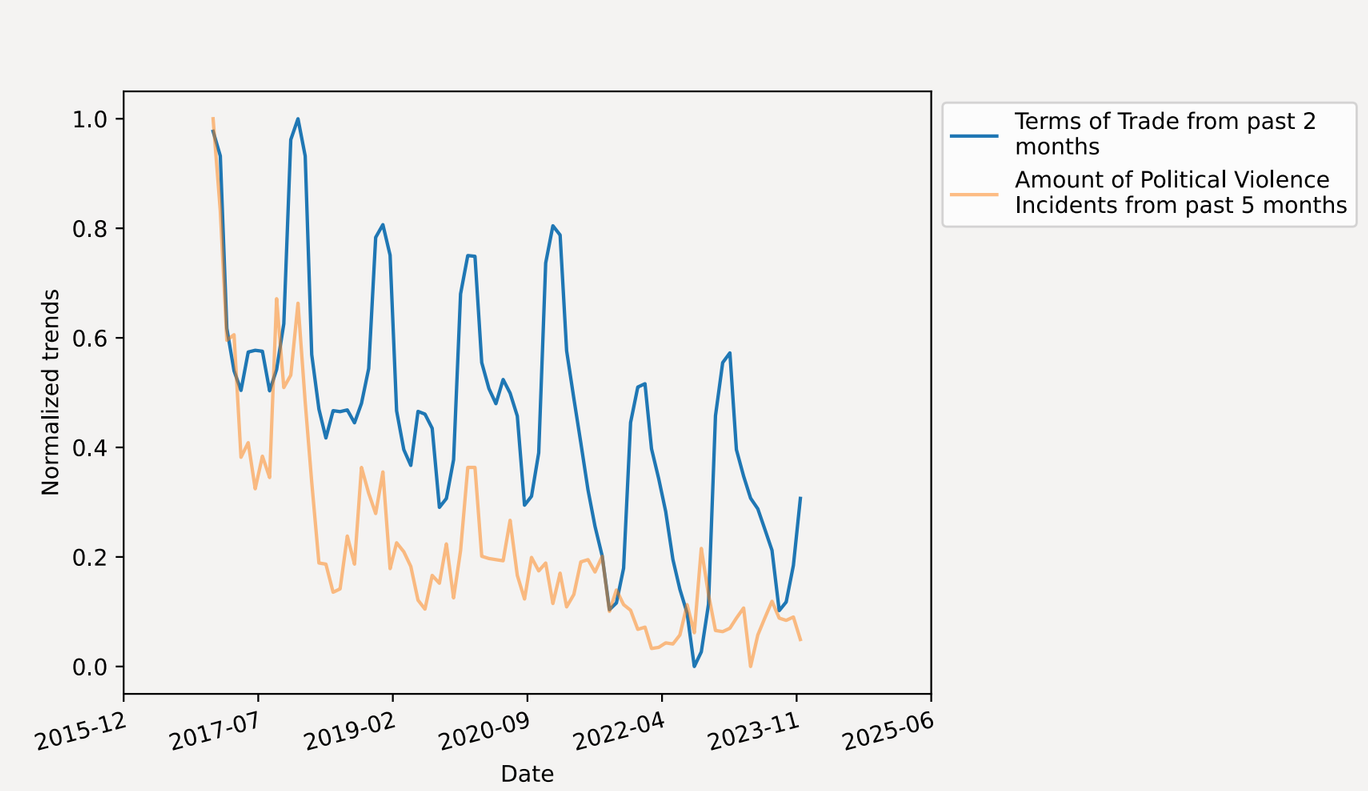


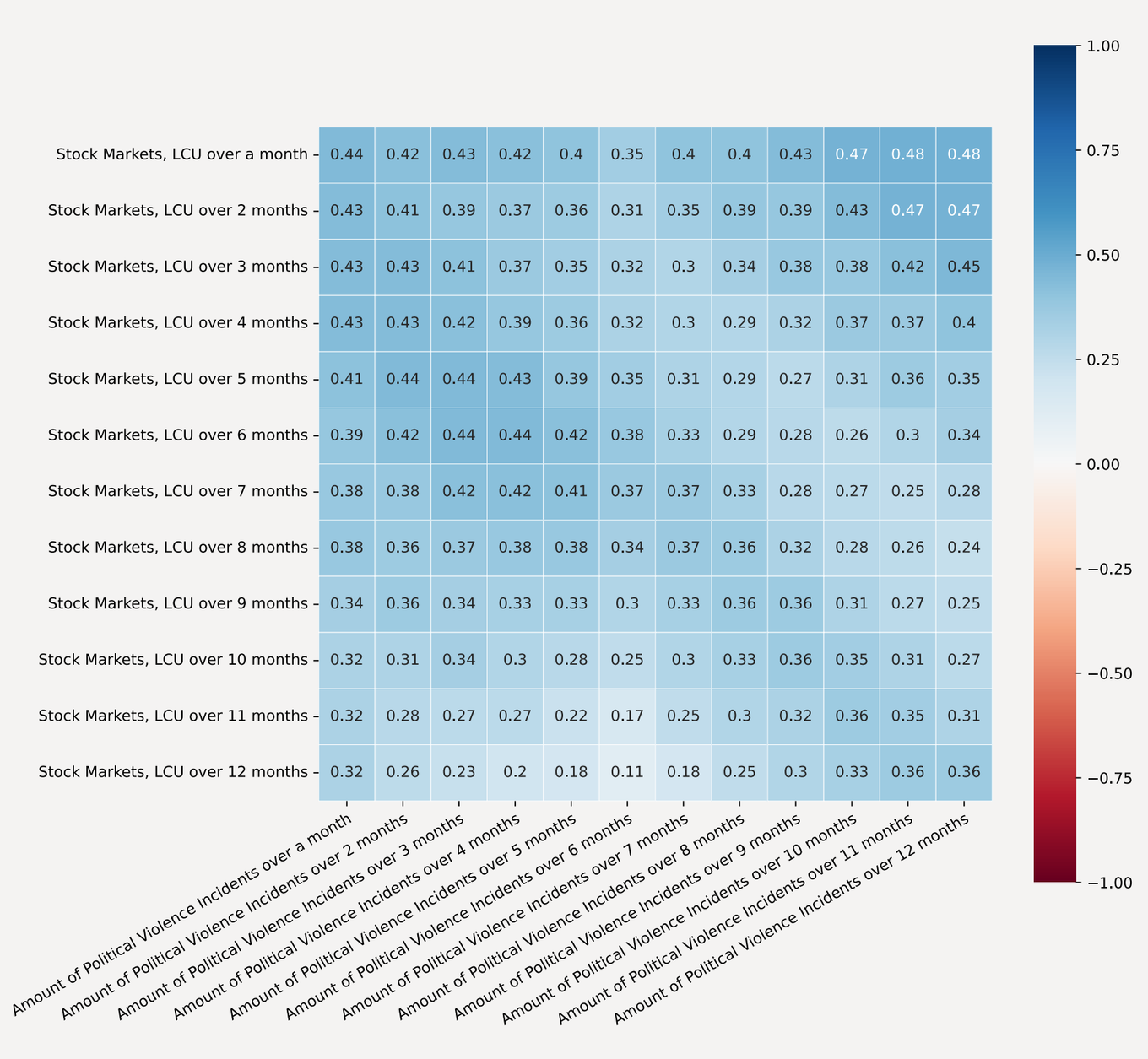


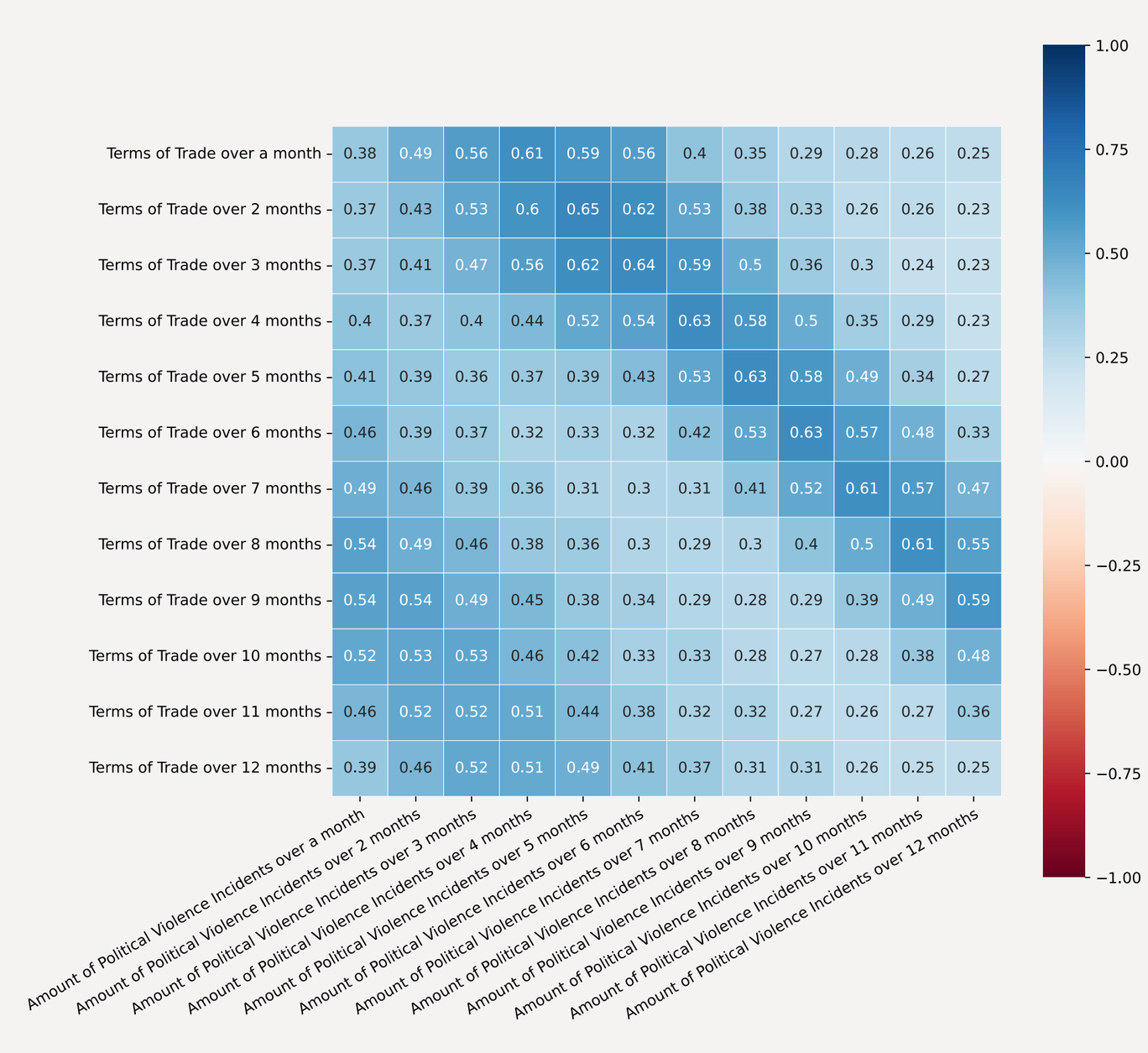


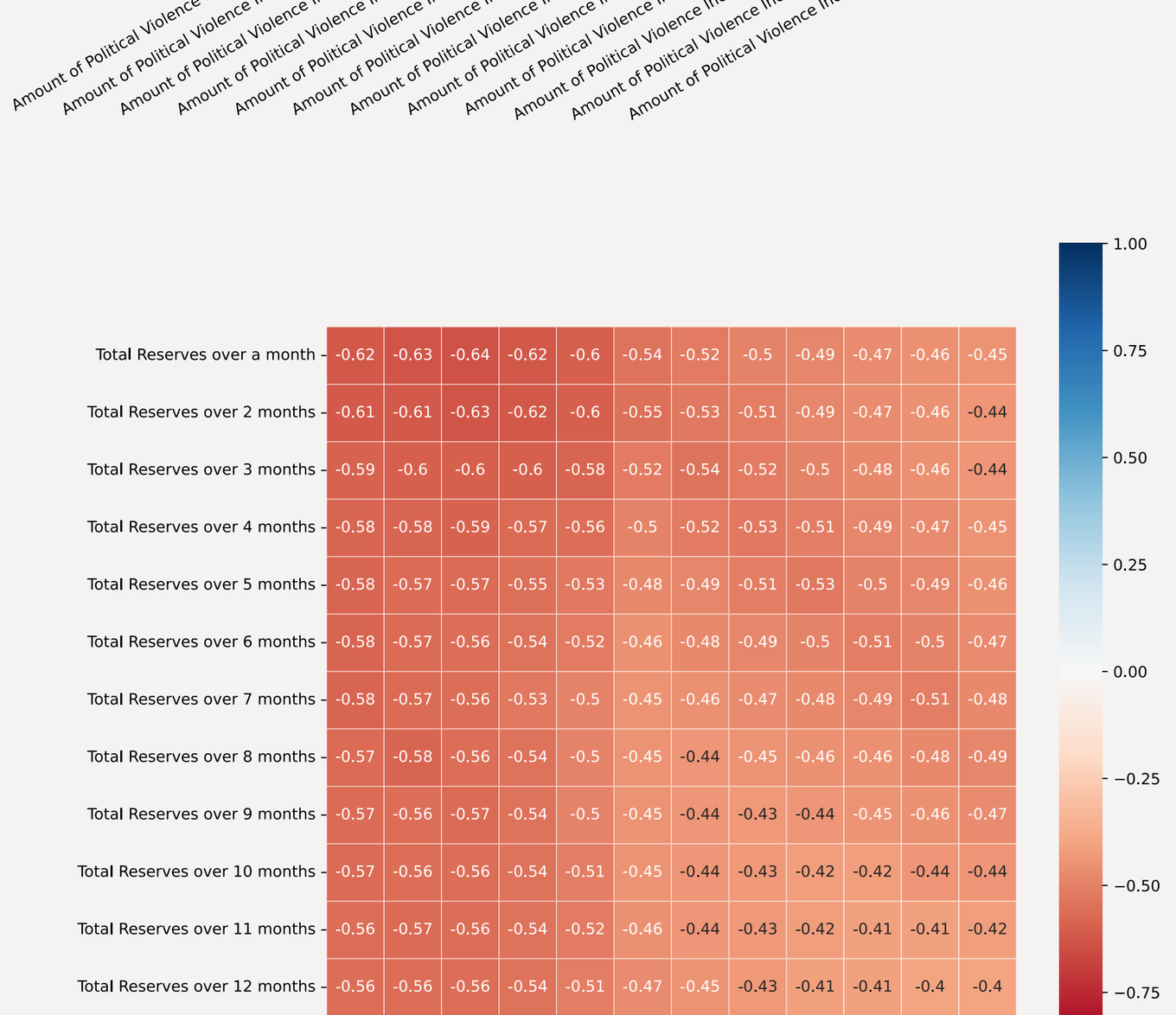


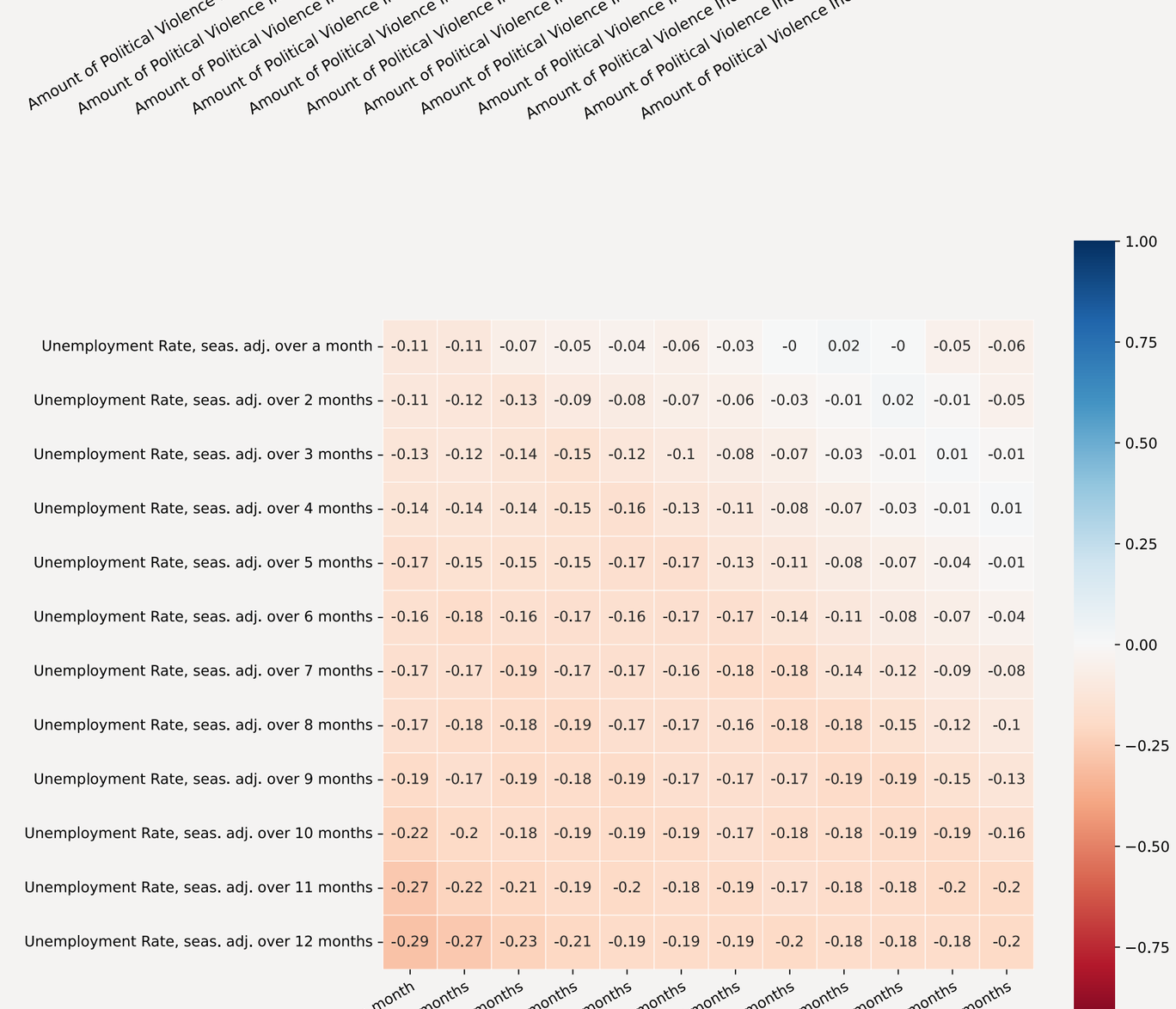












Methods

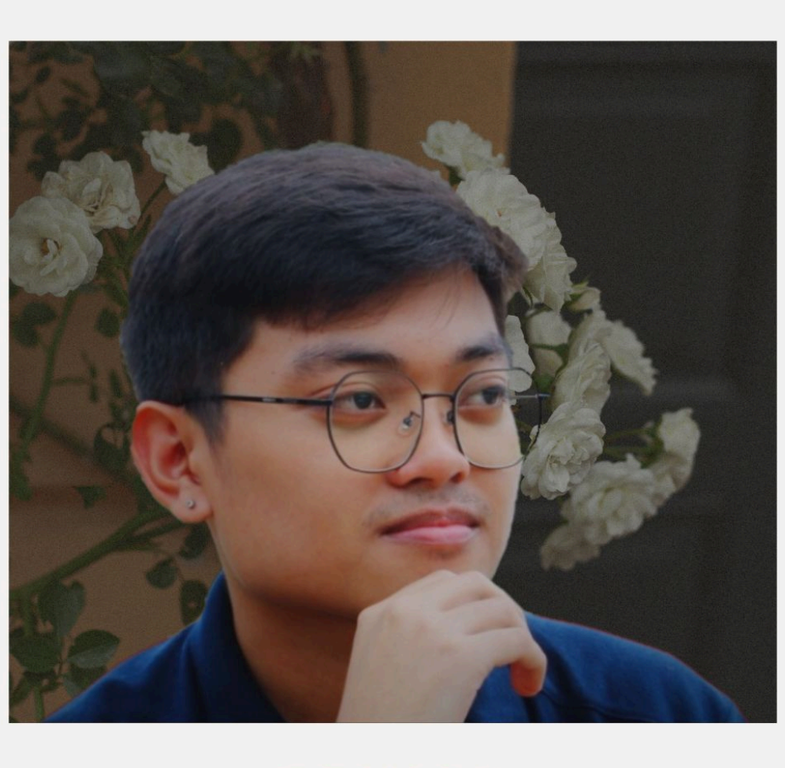
methods

Results

results

DATABAES

Get to know our team.



BRYLLE

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Brylle is a 4th year BS Computer Science major in the University of the Philippines Diliman. He is a member of the UP Center for Student Innovations Organization and is currently perforing his thesis under the Department of Computer Science - Alogrithms and Complexity Laboratory. While the whole team works toegther for this project in every aspect, Brylle is mainly responsible for the website content.

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CS 199 Project: **Political Violence and Economic Indicators**