

Geospatial & Social Intelligence

High-Volume Discourse Analysis on Policy Events

Michael Vincent Sebastian Handojo

Sept 2025

Introduction

Overview

Between 25 August and 5 September 2025, major Indonesian cities saw intense public discussions in response to legislative policy debates. This project showcases a system that analyzes unstructured social data to support Strategic Business Intelligence and assess Market Volatility.

Goals

- Capture the primary narratives and perception of policy events.
- Analyze public sentiment on social media.
- Assess short-term economic impacts (losses, market signals, inflation).
- Provide data-driven insights for wider audiences.

Approach

- **Data Journalism:** Structure protest events with 5W+1H.
- **Sentiment Analysis:** Classify social media reactions.
- **Economic Analysis:** Track IHSG, Rupiah, and inflation trends.

Research Questions

- 1. What are the dominant narratives and topics within the public discourse?**
- 2. How did activity density correlate with short-term market volatility?**
- 3. How does public sentiment unfold on digital platforms (e.g., TikTok)?**

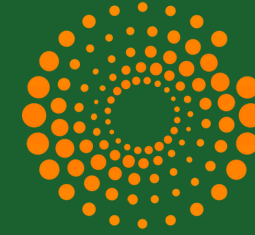
Data Sources

Media Reports

TEMPO The Guardian



The Jakarta Post



Public Sentiment



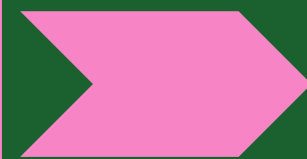
Economic Indicators



Event Timeline

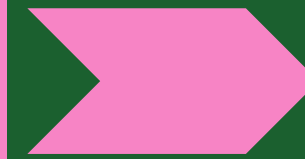
25 Aug

The beginning of the surge in social media volume in Jakarta.



26–27 Aug

Smaller follow-up rallies, minor clashes.

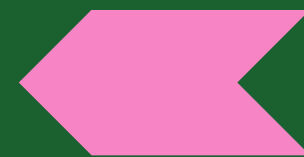


28 Aug

Workers join, larger crowds, tensions rise.

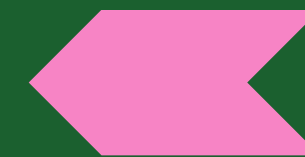
1–5 Sep

Smaller but persistent protests, calls for reform, early dialogue with government.



30–31 Aug

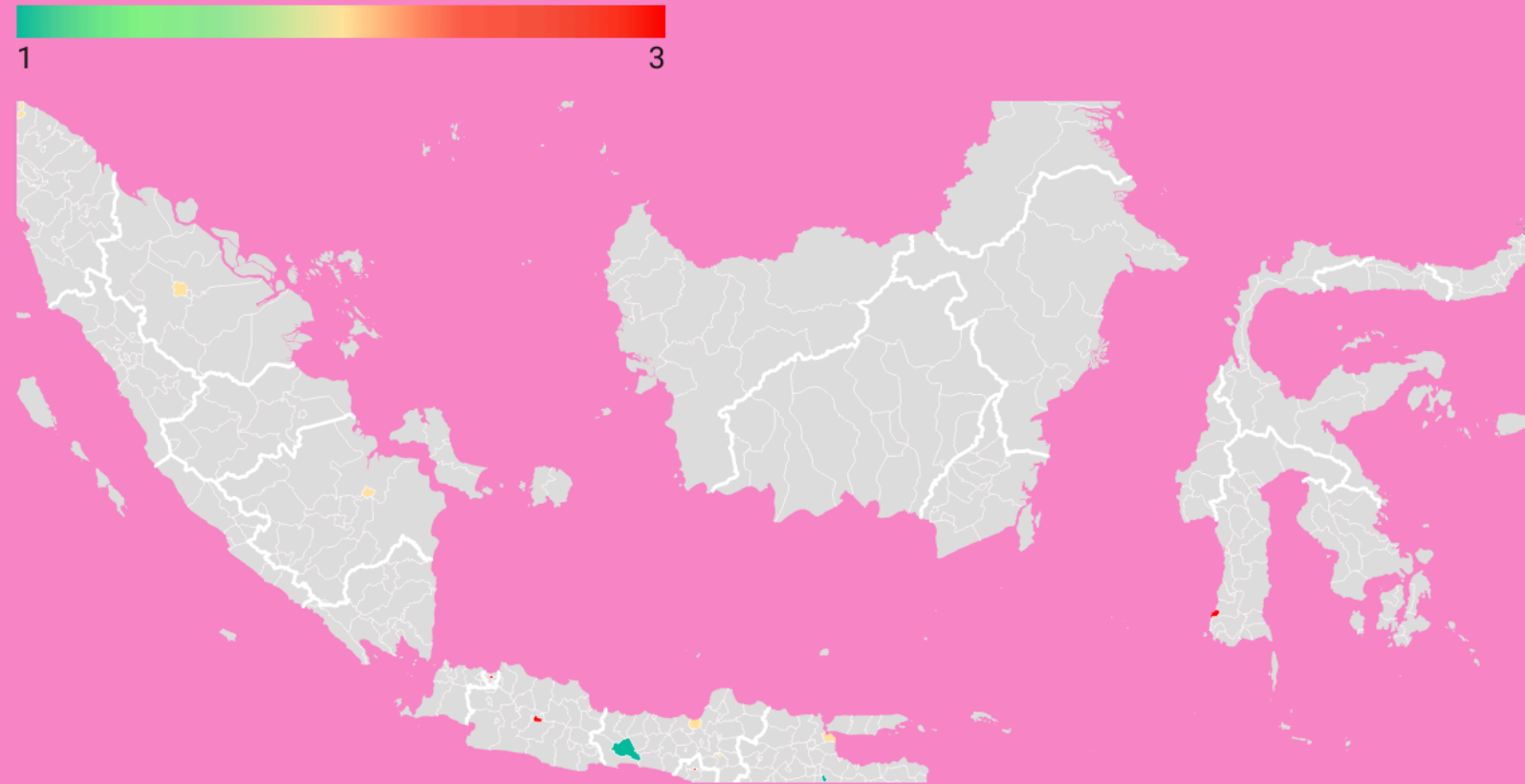
Protests continue, focus shifts to justice for victims, arrests begin.



29 Aug (Peak)

The volume of digital activity and media exposure reached its peak.

Geospatial Activity Density



Map data: © OCHA • Created with Datawrapper

****Click the map for more details***

Level 3

(High Activity):

Jakarta, Makassar, Bandung.

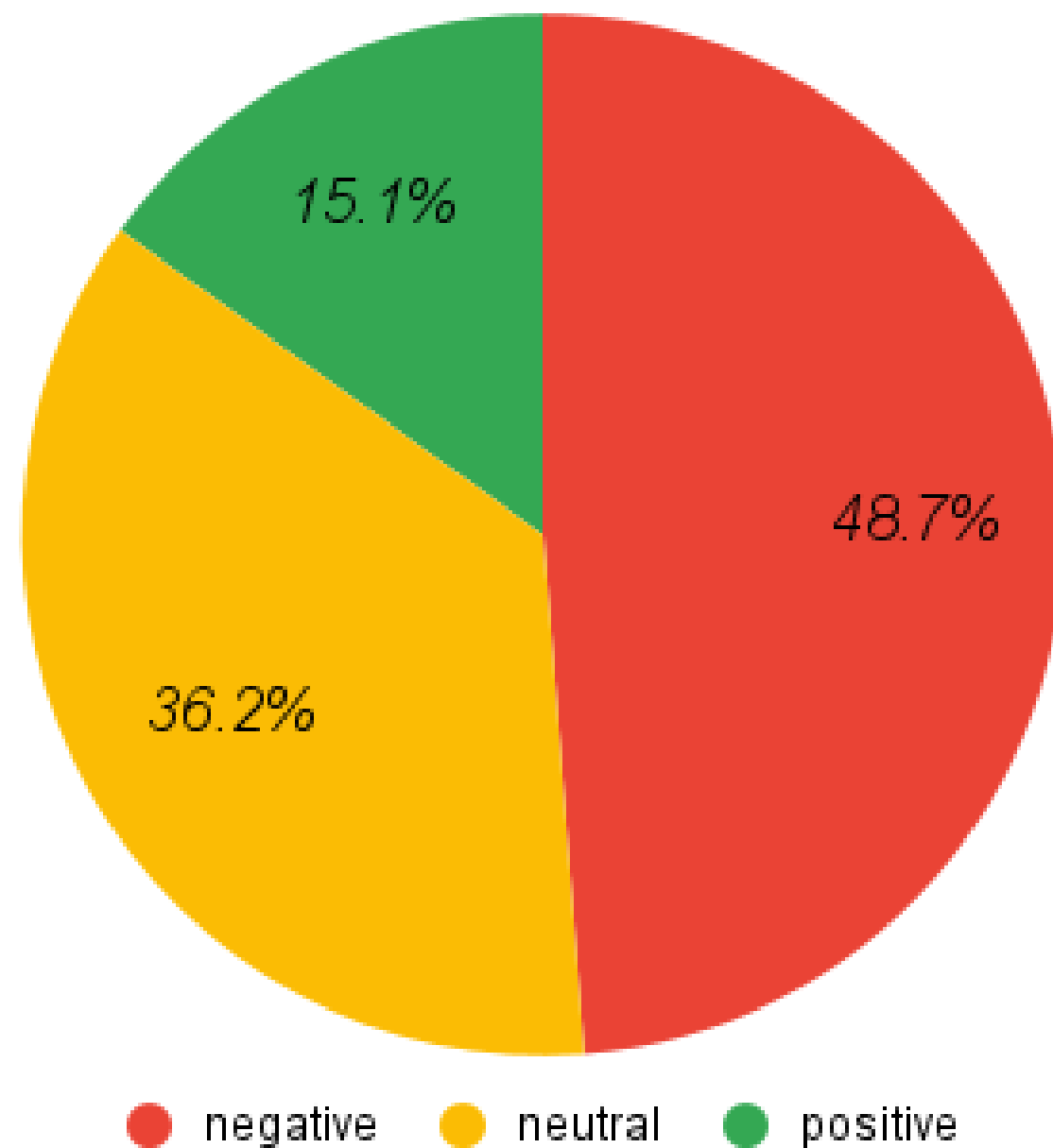
Level 1 – 2

(Moderate to Low Activity):

Surakarta, Yogyakarta,
Semarang, Surabaya, Malang,
Banyumas, Palembang,
Pekanbaru, Medan, Manado.

Public Sentiment

Sentiment Distribution



***Click the Chart for more details**

Volume:

199 Comments

Output:

Positive: Support, empathy, reform demands

Negative: Criticism of violence, disruption, politics

Neutral: Info, jokes/memes, unrelated

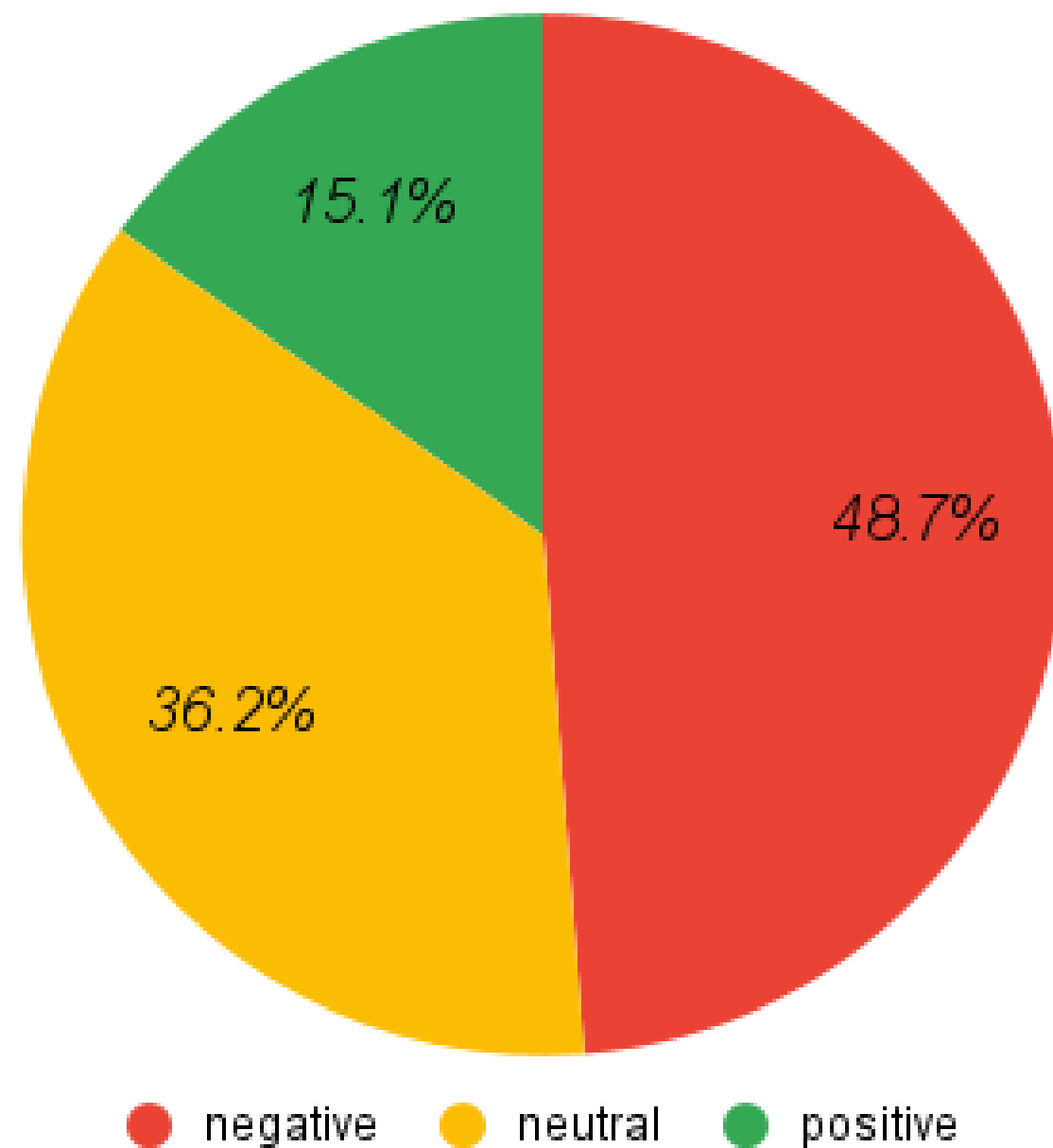
Unclassified: Unclear comments AI could not categorize

Limitation:

This sentiment analysis was conducted using a **free Gemini API key**, which provides a quota of **200 requests**.

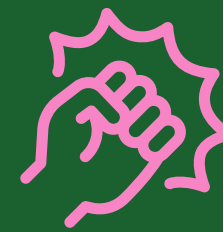
Public Sentiment

Sentiment Distribution



[*Click the Chart for more details](#)

Why Negative Sentiment Dominates the Comments?



Violence & Casualties – Anger over deaths, injuries, and alleged police repression.



Public Disruption – Daily life disturbed: transport halted, businesses affected.

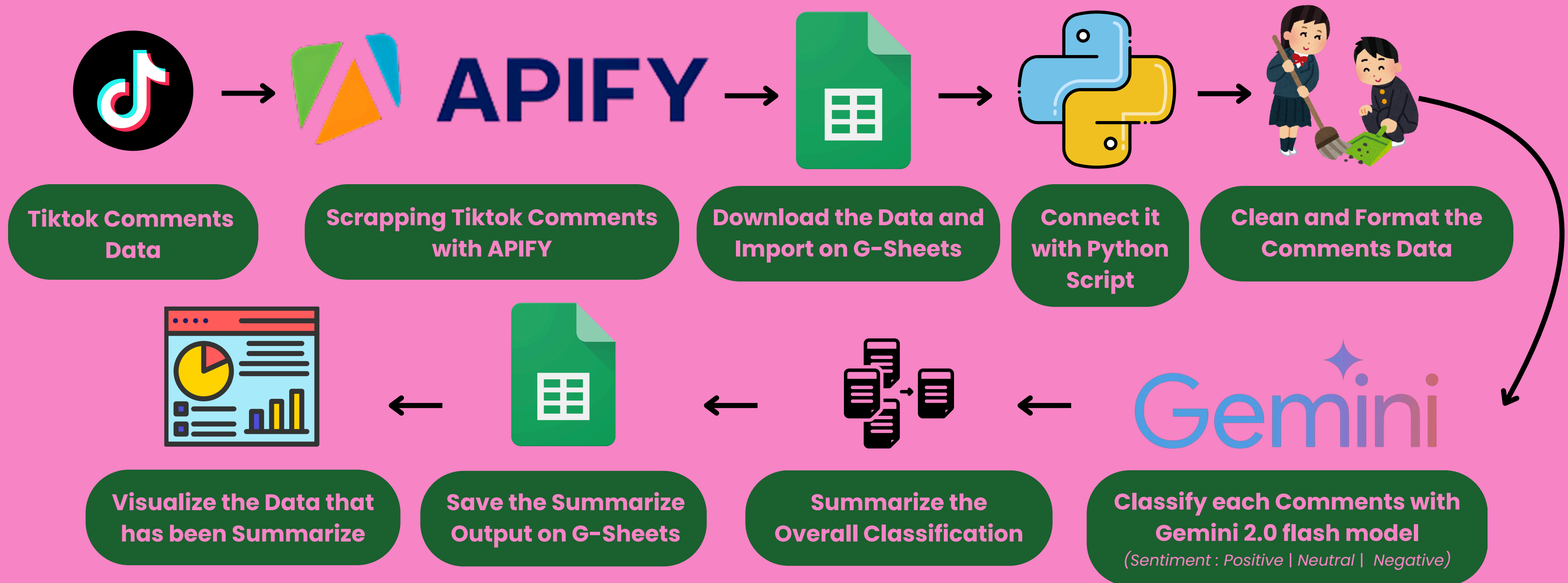


Distrust in Government – Criticism of DPR's spending and controversial bills.

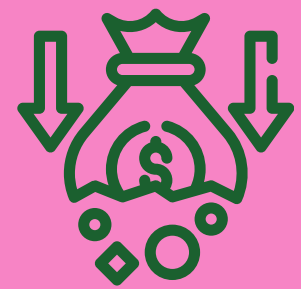


Political Exploitation – Perception of protests being hijacked by certain interests.

Sentiment Analysis Workflow

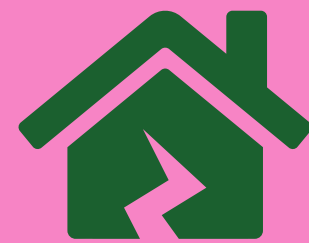


Economic Impact



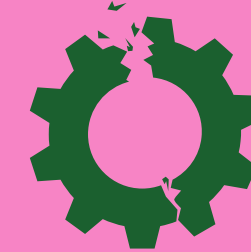
Financial Shock

High-volume public discourse directly correlated with short-term market volatility (e.g., **IHSG -4.35%**, **Rupiah -1.45%**). This validates the need for a Social Intelligence Early Warning System.



Public Damages

The events led to damage to critical public infrastructure (**e.g., bus stops, public facilities**), placing an unbudgeted financial burden on regional government recovery funds.



Operational Damage

Estimated national economic losses of nearly **IDR 900 Billion** due to *paralyzed logistics* and *temporary business closures* in urban centers.

Impact on IDX Composite



“IHSB reflects investor sentiment, short-term panic selling → quick rebound.”

Price Actions



(-4.35%, 28 Aug – 1 Sept):
Investor panic triggered sell-off due to political unrest.



(+3.45%, 1 – 8 Sept):
Market confidence partly returned after initial shock.



Protests fueled investor **anxiety**, triggering capital outflows and a **4.35% stock drop** – wiping market value and signaling higher risk for Indonesia’s economy.



Impact on Rupiah



“Rupiah movement indicates capital outflow → higher pressure on inflation.”

Price Actions

(+1.45%, 25–29 Aug):



Investors pulled money out, weakening the Rupiah.



A weaker Rupiah makes imports more expensive and risks higher inflation.



Rupiah's **1.45%** drop signaled capital outflow and short-term market stress, serving as a warning for potential inflation if depreciation persisted.

Conclusion & Actions

Risk Modeling: Strengthen correlation models between high-volume public discourse and short-term market volatility (IHSG, Rupiah).

Geospatial Intelligence: Implement real-time geospatial monitoring to anticipate business and logistics disruption in high-density urban areas.

Asset Strategy: Advise investors on strategic asset diversification to mitigate economic shocks during periods of policy uncertainty.

Thank You

Discussion is welcome!

vincentmichael514@gmail.com