SITJOURNAL
Security Intelligence Terrorism Journal

Security Intelligence Terrorism Journal (SITJ), Vol. 03 No. 01 (2026), pp. 32-42
Research Article
doi: https://doi.org/10.70710/sitj.v3i1.87

Do Surges in Civil Mobilization Serve as Early Warnings for Political Conflict?

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Article Info
Received: 26-Jan-2026
Revised: 23-Feb-2026
Accepted: 23-Feb-2026

Keywords
Counter-Intelligence; Demonstrations; Early Warning Index; Fatalities; Political Violence

Abstract
Political conflict and mass violence are major threats to security stability, especially in developing countries such as Indonesia. Civil mobilization through demonstrations is often considered an expression of social dissatisfaction, but its role as an early indicator of political violence escalation has not been analyzed quantitatively across countries and time. This study aims to explore the temporal relationship between an increase in demonstrations, the escalation of political violence, and the number of fatalities, as well as to develop an Early Warning Index as a counterintelligence tool. Using cross-country ACLED panel data from 1997 to 2026, the study applies a fixed effects model with one and two period lags, logarithmic transformation, and Granger causality tests to assess temporal causal relationships. The results show that a surge in demonstrations in the previous period significantly predicts an increase in political violence (coefficient = 0.592, $t = 11.62$, $p < 0.001$) and fatalities (coefficient = 0.475, $t = 6.90$, $p < 0.001$). The Granger causality test confirmed that demonstrations systematically led to an escalation in violence and fatalities. The Early Warning Index shows significant variations in risk, with maximum values indicating high social pressure that can serve as an early signal of conflict escalation. These findings fill a gap in quantitative research on the role of demonstrations as a leading indicator of political conflict. The index provides counterintelligence decision makers with an analytical tool for proactively detecting the risk of destabilization, particularly in the pre-election period or when sensitive identity-based issues arise.

1. Introduction

Mass mobilization through demonstrations is a common political phenomenon in various countries, including Indonesia, and often arises as a response to social, economic, or political dissatisfaction (Lane, 2009). Demonstrations are not only an expression of the legitimacy of society's politics, but can also serve as an early indicator of social tensions that have the potential to develop into wider conflicts (Casquete, 2006). Therefore, a systematic understanding of civil mobilization patterns is crucial to maintaining national stability and security. Political violence and armed conflict continue to pose significant challenges in the geopolitical context, both globally and nationally, especially when interactions between community groups, political actors, and security forces are not managed effectively. From a counterintelligence perspective, the ability to detect early signs of socio-political escalation is crucial to preventing destabilization, armed violence, and disturbances to public order (Kurylo et al., 2024; Rana, 2025). The development of a quantitative data-based early warning system can help the government and security forces predict the risk of conflict more accurately and improve the effectiveness of mitigation measures, especially during sensitive periods such as pre-elections or when issues of identity, religion, and ethnicity

are heightened in the public sphere. Analysis of the relationship between civil mobilization, political violence, and potential casualties provides the basis for developing an evidence-based early warning system model that can be applied across time and allows for cross-country comparisons. This research is highly relevant in supporting the development of proactive counterintelligence strategies, as it utilizes empirical data to identify patterns and trends related to national security stability. With systematic quantitative modeling, strategic decision-making in conflict mitigation can be more targeted, thereby minimizing the risk of escalating violence and maintaining public security.

The study aims to analyze the temporal relationship between the number of demonstrations and the level of political violence across countries and to test whether a surge in demonstrations can serve as an early indicator of conflict escalation. The study also evaluates the impact of increased civil mobilization on the number of fatalities to understand the potential for deadly violence to escalate, while developing and validating the Early Warning Index as a quantitative tool for detecting the early stages of socio-political destabilization. In addition, this study examines the causal relationship between demonstrations, political violence, and fatalities, both temporally and simultaneously, thereby providing a relevant analytical framework for counterintelligence and national security contexts, particularly in dealing with the risk of instability in the pre-election period or sensitive issues based on identity, religion, and ethnicity. The benefit of this research lies in providing empirical evidence that a surge in demonstrations is not merely an expression of social dissatisfaction, but serves as an early warning signal for the escalation of political conflict and deadly violence. These findings reinforce our understanding of the early stages of the destabilization process, enabling governments and security agencies to design timely mitigation interventions. In addition, the Early Warning Index provides a quantitative data-based analytical tool for systematically monitoring security risks at the national or regional level, offering strategic insights in the context of counterintelligence, and is practically relevant for monitoring security in Indonesia, particularly in the run-up to elections or when facing sensitive socio-political issues that have the potential to trigger conflict.

This study has several limitations that should be noted. The data used is aggregated at the country level per year, so it does not capture local or sub-national dynamics that may differ in terms of the intensity of demonstrations, political violence, and fatalities. The main data source, ACLED, is based on media reports and OSINT, so there is a possibility of underreporting or reporting bias, especially in countries with limited press freedom. The fixed effects model applied controls for each country's fixed characteristics, but does not take into account rapidly changing external factors such as sudden security policies, international intervention, or specific geopolitical events. Logarithmic transformation helps reduce skewness, but assumes a proportional and linear relationship, so extreme behavior or outliers may not be fully captured. The use of one and two period lags is arbitrary and may not reflect more complex long-term or non-linear effects. In addition, Granger causality and VAR tests were conducted on global aggregates, so that the results of temporal causality may only show general trends across countries and may not necessarily apply specifically to Indonesia or certain regions. The Early Warning Index developed is a standardized statistical tool, so its interpretation as a counterintelligence indicator still requires empirical validation in the field and adjustment to the local context, especially for sensitive issues such as SARA or pre-election issues.

Based on the results of this study, previous research in the field of the relationship between demonstrations, political violence, and fatalities has largely emphasized descriptive aspects or specific cases, but there is still a lack of research that combines cross-country panel quantitative analysis with a counterintelligence perspective as an early warning system. Previous studies have tended to focus on analyzing incidents of violence or protests separately, often with a single national scope or limited time frame, thus failing to capture systematic temporal patterns and causal links between socio-political indicators globally. Using the extensive ACLED dataset, this study fills this important gap by combining a fixed effects panel model, lag transformations for demonstrations, and cross-country Granger causality tests, thereby enabling the detection of mass mobilization as an early indicator of conflict escalation that has not been systematically measured in the security and counterintelligence literature.

The novelty of this research lies in several aspects. First, this study introduces an Early Warning Index that utilizes demonstration lags to predict political violence and fatalities, making it not only descriptive but also predictive, providing a practical analytical tool for counterintelligence agencies. Second, this study quantitatively proves the temporal and simultaneous causal relationship between demonstrations, political violence, and the number of fatalities, which has rarely been analyzed across countries and over time using a panel approach. Third, this study places the findings in a counterintelligence framework,

showing that systematic repeated spikes in demonstrations can be understood as an early phase of destabilization that requires strategic mitigation. Thus, this study contributes new insights to the global security literature while providing an applicable methodology for risk analysis in the Indonesian context, particularly during the pre-election period or when sensitive issues of identity and ethnicity, religion, and race (SARA) arise, which have not been integrated into previous cross-country quantitative panel studies.

2. Literature Review

In modern security studies, conflict analysis cannot be separated from the intelligence perspective, particularly in understanding the dynamics of mass mobilisation as an early indicator of political instability. Contemporary intelligence literature emphasises that changes in social and political patterns can often be detected through non-military indicators such as demonstrations, public mobilisation, and increased social pressure on the state (Johnson & Margulies, 2025; Kalin et al., 2022).

2.1. Demonstrations as an Early Warning Signal

Within the framework of strategic intelligence theory, one of the main functions of intelligence is to provide early warning of potential threats to national security (Briggs et al., 2022; Pemmasani, 2023). SisEarly warning systems in intelligence studies emphasise the importance of detecting patterns of conflict escalation before they reach the stage of open violence. According to the literature on security and conflict, conflict escalation rarely occurs suddenly, but develops through stages that can be observed empirically (Carlson, 1995; Leng, 2004). An increase in demonstrations can be understood as an early indicator of changing political dynamics that have the potential to develop into more serious conflict. In the literature on contentious politics, demonstrations are not only seen as expressions of social discontent, but also as mobilisation mechanisms that can expand the space for conflict if political demands are not accommodated by state institutions (Johnston, 2011; Walton, 1998).

The grievance-based conflict theory explains that demonstrations often arise as a result of accumulated social and political dissatisfaction that has not been resolved (Muliavka, 2021; Shadmehr, 2014). In situations like this, demonstrations can become an arena for power struggles exploited by political actors, radical groups, or violent networks to expand their influence (Casquete, 2006; Oyebode, 2022). This is in line with empirical findings from previous studies using global conflict data such as ACLED and UCDP, which show that periods of high protest intensity are often followed by an increase in incidents of political violence, especially in countries with limited state capacity (Svensson et al., 2022; Yusuf, 2025).

2.2. Counter-Intelligence Analysis and Mass Mobilisation in the Dynamics of Political Destabilisation

In addition to being an early indicator of conflict, intelligence literature also highlights that mass mobilisation is often linked to the dynamics of influence operations, hybrid warfare, and political destabilisation efforts (Qureshi, 2020; Yeager, 2012). In contemporary security studies, public mobilisation can be used as an instrument to increase social pressure on the state and undermine political stability through a combination of information operations, social polarisation, and identity issue manipulation (Shaholli, 2025).

The dynamics of mass mobilisation need to be analysed not only as a social phenomenon, but also as part of the security and counter-intelligence dimension. A surge in demonstrations can signify conditions in which high social pressure opens the door to intervention by external actors, political manipulation, or infiltration by violent groups exploiting the situation of instability. In conflict escalation theory, an increase in demonstrations not only increases the frequency of violence, but also its intensity, including an increase in casualties (Collins, 2012; Gustafson, 2020). This indicates a shift from low-intensity conflict towards more destructive conflict. Security studies also emphasise that a state's failure to manage social tensions at an early stage often increases the probability of armed conflict with significant casualties (Khorram-Manesh et al., 2021).

The finding that an increase in demonstrations in the preceding period can predict an increase in political violence and casualties indicates that this phenomenon has a systematic temporal pattern. This is

in line with the analytical approach in intelligence studies that emphasises data modelling and trend analysis to identify security threats early on.

The results of the Early Warning Index analysis in the study can show variations in the pressure of demonstration mobilisation that can be measured systematically to identify high-risk periods. This approach is in line with the concept of early warning systems in security studies, which emphasises the use of trend-based indicators to detect potential conflicts before they escalate significantly (Persaud, 2022).

2.3. Protest Mobilization and the Escalation of Political Violence

One important concept was put forward by Charles Tilly in his book Contentious Performances, which states that:

> "Contentious politics occurs when ordinary people make collective claims that bear on someone else's interests or government policies."

This view explains that demonstrations are not merely spontaneous expressions of social discontent, but rather a form of organised political contestation with implications for power and public policy (Tilly, 2008, 2017). This concept reinforces the argument that the mobilisation of demonstrations can be part of broader political conflict dynamics.

This understanding is further explored in Dynamics of Contention, written by Doug McAdam, Sidney Tarrow, and Charles Tilly (McAdam et al., 2003). The book states that:

> "Episodes of contention frequently evolve through mechanisms that escalate conflict and transform protest into more violent forms of collective action."

This statement indicates that episodes of protest often develop through certain mechanisms that encourage the escalation of conflict, so that demonstrations can transform into more intense forms of collective violence. The theory of relative deprivation proposed by Ted Robert Gurr in his book Why Men Rebel provides an explanation of the psychological and structural roots of mass mobilisation (Gurr, 2015). Gurr stated that:

> "Relative deprivation is the perceived discrepancy between men's value expectations and their value capabilities."

In other words, demonstrations are often mobilised when the public perceives a gap between their expectations of the socio-political conditions and the actual ability to achieve them. In this study, the surge in demonstrations can be understood as a reflection of the accumulation of social dissatisfaction that has not been effectively channelled through institutional mechanisms. The process of conflict escalation is also explained in the civil war literature by Stathis N. Kalyvas in his work The Logic of Violence in Civil War (Kalyvas, 2006). He emphasised that:

> "Violence in civil war is often the outcome of a dynamic interaction between political actors, local grievances, and opportunities for mobilization."

This statement emphasises that violence does not arise suddenly, but is the result of complex interactions between political actors, local grievances and opportunities for mass mobilisation. In the context of this study, demonstrations can become a space for interaction that brings these factors together, thereby increasing the potential for escalation of violence. Furthermore, the dimensions of political instability and early warning systems are explained by Jack A. Goldstone in his book Revolutions: A Very Short Introduction (Goldstone, 2023). Goldstone stated that:

> "Periods of increased protest activity often signal deeper structural crises within a political system."

This view emphasises that a surge in demonstrations is often an indication of a deeper structural crisis within the political system.

In their study of civil resistance and the dynamics of non-violent conflict, Erica Chenoweth and Maria J. Stephan, in their book Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict, also explain that:

"Nonviolent campaigns can escalate when state repression or political polarization increases."

This statement indicates that non-violent campaigns such as demonstrations can escalate when the state responds with repression or when political polarisation increases (Stephan & Chenoweth, 2008). This reinforces research findings that civil mobilisation does not always stop at peaceful forms of expression, but has the potential to escalate into more intense conflict. A micro-sociological approach to violence also provides perspective in understanding the dynamics of conflict. In his book Violence: A Micro-sociological Theory, Randall Collins states that :

"Violence is not constant but emerges through specific interactional processes and escalating confrontations."

This view emphasises that violence arises through a specific process of interaction that intensifies over time (Collins, 2008). Thus, demonstrations can be understood as a stage of social interaction which, under certain conditions, encourages more intense confrontation. In addition to theoretical foundations, empirical evidence based on conflict data also supports the relationship between demonstrations and political violence. Research conducted by Clionadh Raleigh and colleagues in the study Introducing ACLED: An Armed Conflict Location and Event Dataset states that:

"Protest events often precede episodes of political violence, especially in fragile political environments."

These findings indicate that protests often precede political violence, particularly in countries with fragile political conditions (Raleigh et al., 2010). This is highly relevant to the cross-country panel analysis in this study, which shows that demonstrations can serve as an early indicator of increasing political conflict and casualties.

3. Method

The study uses a quantitative approach with a cross-country and cross-time panel data design to analyze the relationship between demonstration mobilization, political violence, and casualties as a basis for developing an early warning system from a counterintelligence and geopolitical security perspective. The data used was sourced from the Armed Conflict Location & Event Data Project (ACLED), specifically the annual aggregate dataset covering the number of demonstrations, the number of political violence incidents, and the number of fatalities reported at the country-year level (ACLED, 2019).

The unit of analysis in this study is country (i) in year (t), so that the data structure forms an unbalanced panel that reflects the spatial and temporal variation in the dynamics of global political conflict. To minimize heteroscedasticity bias and accommodate the right-skewed distribution of the data, all main variables are transformed into logarithmic form as follows:

$$\text{Demo}_{it} = \log\left(\text{Demonstrations}_{it}+1\right) \quad (1)$$

$$\text{Viol}_{it} = \log\left(\text{Political Violence}_{it}+1\right) \quad (2)$$

$$\text{Fatal}_{it} = \log\left(\text{Fatalities}_{it}+1\right) \quad (3)$$

This transformation allows for the interpretation of coefficients in terms of elasticity and reduces the influence of extreme values that often appear in conflict data. To capture the temporal dynamics and potential delayed effects of demonstration mobilization, this study constructs one- and two-period lag variables for demonstrations, formulated as:

$$\text{Demo}_{i,t-k} = \log\left(\text{Demonstrations}_{i,t-k}+1\right), k = 1,2 \quad (4)$$

The relationship between demonstrations and political violence is analyzed using a fixed effects panel model, which is designed to control for unobserved heterogeneity that is constant within each country, such as institutional characteristics, political culture, and state capacity. The main empirical model is formulated as:

$$\text{Viol}_{it} = \alpha_i + \beta_1 \text{Demo}_{i,t-1} + \beta_2 \text{Demo}_{i,t-2} + \varepsilon_{it} \quad (5)$$

Where (α_i) representing the fixed effects of the state and (ε_{it}) adis an idiosyncratic error term. A similar model is used to analyze the impact of demonstrations on the number of fatalities, with the equation:

$$\text{Fatal}_{it} = \alpha_i + \gamma_1 \text{Demo}_{i,t-1} + \gamma_2 \text{Demo}_{i,t-2} + u_{it} \quad (6)$$

Parameter estimation was performed using the within estimator (fixed effects estimator), with standard errors corrected using a heteroskedasticity-consistent covariance matrix (HC1) to ensure robust statistical inference (Li et al., 2017).

To test the direction of the temporal causal relationship, this study applies a Granger causality test based on a Vector Autoregression (VAR) model to global annual aggregate data (Siggiridou & Kugiumtzis, 2015). Formally, demonstrations are said to cause political violence or fatalities in Granger's sense if the historical value of demonstrations significantly increases the predictive power of conflict variables in the future, after controlling for their own historical values. VAR models can generally be written as:

$$Y_t = A_1 Y_{t-1} + A_2 Y_{t-2} + \cdots + A_p Y_{t-p} + \epsilon_t, \quad (7)$$

Where (Y_t) is a vector that includes demonstrations, political violence, and fatalities.

As a key methodological contribution, this study developed an Early Warning Index (EWI) to identify socio-political pressures that could potentially lead to conflict escalation. This index was constructed by combining the standardized values (z-scores) of demonstrations delayed by one and two periods, formulated as:

$$EWI_{it} = Z(\text{Demo}_{i,t-1}) + Z(\text{Demo}_{i,t-2}), \quad (8)$$

where the standardization function is defined as:

$$Z(X) = \frac{X - \mu_X}{\sigma_X} \quad (9)$$

With this construction, the index values have a mean of zero and a standard deviation of one, so that positive values indicate a higher level of risk than normal conditions, while negative values represent conditions of relative stability.

This methodological approach allows for the integration of panel econometric analysis, temporal causality, and early warning indices into a single coherent analytical framework. From a counterintelligence perspective, this method is designed not only to explain historical causal relationships, but also to provide relevant predictive instruments for the early detection of security vulnerabilities, particularly in the context of democratic countries with high levels of mass mobilization such as Indonesia.

4. Results and Discussion

4.1. Results

Based on the estimation results using the fixed effects model, an increase in the number of demonstrations has a positive and statistically significant relationship with an increase in the level of political violence in the following period. The coefficient of the delayed demonstration variable for one period of 0.592 indicates that an increase in the intensity of demonstrations in the previous year is substantially followed by an increase in political violence in the current year, after controlling for unobserved country-specific characteristics. The very high t-statistic value of 11.615 and the significance level well below the 1 percent threshold indicate that the relationship is very strong and unlikely to occur by chance. The findings show a clear temporal link between demonstration mobilization and the escalation of political violence across countries.

Based on the results of the analysis, it is confirmed that demonstrations are not merely an expression of temporary social dissatisfaction, but serve as an early indicator of escalating political conflict. From a counterintelligence perspective, this pattern suggests that increased civil mobilization can be seen as the initial phase of a broader destabilization process, in which accumulated social pressure can develop into political violence if not managed effectively by the state. The results of the fixed effects panel estimation show that an increase in the number of demonstrations in the previous period has a positive and statistically significant effect on the number of fatalities in the following period. The coefficient of the demonstration lag variable of 0.475 indicates that an increase in demonstrations in the previous year correlates with an increase in fatalities in the current year, after controlling for the fixed characteristics of each country. The study uses logarithmic transformation, which can be interpreted as meaning that every 1 percent increase in demonstration intensity is followed by an increase in fatalities of around 0.47 percent in the following period, ceteris paribus.

The high t-statistic value (6.90) and very strong significance level ($p < 0.001$) show that this relationship is not coincidental, but rather shows a consistent systematic pattern across countries and time. Civil mobilization in the form of demonstrations does not stop as a non-violent political expression, but has the potential to become the initial phase of conflict escalation, which in the next stage manifests itself in violence with fatalities. Thus, demonstrations serve as a leading indicator of increasing intensity of deadly conflict. From a counterintelligence and security perspective, the findings reinforce the argument that a surge in demonstrations should be understood as an early warning sign of security vulnerability, especially when it is not followed by effective conflict mitigation and management mechanisms. This is particularly relevant for Indonesia, especially in the pre-election period or when sensitive issues such as identity, religion, and ethnicity are gaining traction in the public sphere.

The Granger causality test results show that the number of demonstrations has a significant temporal causal relationship with political violence and the number of fatalities. The F-test value of 4.5183 with a p-value of 0.002844 causes the null hypothesis, which states that demonstrations do not cause (in the Granger sense) political violence and fatalities, to be statistically rejected. The findings indicate that an increase in demonstration activity in the previous period systematically signals an increase in political violence and fatalities in the following period. Thus, demonstrations serve as an early warning signal for escalating security instability. In addition to this temporal causal relationship, the results of the instantaneous causality test also show a significant correlation in the same time period, as indicated by a Chi-squared value of 12.845 with a p-value of 0.001625. This indicates that demonstrations, political violence, and fatalities are not only sequentially connected in the dimension of time, but are also simultaneously interrelated in the same annual dynamics. These findings imply a close structural interaction between mass mobilization and the escalation of violence, in which a surge in demonstrations can occur simultaneously with an increase in the intensity of violence and casualties.

The results of the Early Warning Index analysis show that the distribution of the early warning index is within a fairly wide range, with a minimum value of −3.01 and a maximum value of 5.30. This range indicates significant variation in the intensity of cross-border demonstration mobilization pressure and timing. The median value, which is very close to zero (0.0068), and the mean value, which is exactly zero, reflect that the index has been well standardized, so that positive and negative deviations can be interpreted symmetrically as higher or lower risk levels compared to normal conditions.

Substantively, index values in the lower quartile (up to −1.68) represent periods and countries with relatively low and stable levels of demonstration mobilization, which from a counterintelligence perspective can be understood as a phase of controlled social security. Conversely, values in the upper quartile (above 1.45) up to a maximum value of 5.30 indicate a phase of high social pressure, where a surge in demonstrations in the previous one to two years could potentially serve as an early signal of escalating political conflict and violence. This condition reinforces the argument that consistently increasing civil mobilization can be an early indicator of a broader process of destabilization.

Thus, the Early Warning Index serves not only as a statistical measure, but also as an analytical tool relevant to the context of security and counter-intelligence. This index enables the identification of critical periods prior to an increase in political violence and casualties, and can therefore be used to support strategic decision-making, particularly in the context of pre-election monitoring and sensitive issues such as identity mobilization or SARA-based conflicts.

4.2. Discussion

The results of this study provide strong empirical evidence of the link between the mobilization of demonstrations and the escalation of transnational political violence. The finding that an increase in the number of demonstrations in the previous period was positively and significantly associated with an increase in political violence in the following period is consistent with the theoretical framework in studies of political conflict and security, which views mass mobilization as the initial phase of conflict escalation (Lacher, 2022). In conflict literature, as stated by (Gustafson, 2020), Demonstrations are understood as a form of contentious politics which, under certain conditions, can develop from non-violent expressions of dissatisfaction into open violence when institutional channels are unable to absorb the political demands of the people. The findings of a large and significant demonstration lag coefficient in the fixed effects model reinforce this argument by showing that this dynamic is systematic and recurrent across countries, rather than an incidental phenomenon.

From the perspective of relative deprivation and grievance-based conflict theory, the surge in demonstrations reflects the accumulation of unresolved social and political grievances (Siroky et al., 2020). When demands expressed through demonstrations do not receive an adequate response, social tensions tend to increase and open up space for political actors, radical groups, or violent networks to exploit the situation. In this context, demonstrations are no longer merely an indicator of dissatisfaction, but have become an arena for power contests that can trigger an escalation of conflict. The results of this study reinforce previous findings from studies based on ACLED and Uppsala Conflict Data Program (UCDP) data, which show that periods of high protest intensity are often followed by an increase in incidents of political violence, especially in countries with limited state capacity or weak political legitimacy (Lewis & Favell, 2025; Svensson et al., 2022).

The positive and significant relationship between delayed demonstrations and the number of fatalities in the following period broadens our understanding of the mechanisms of conflict escalation. These findings show that civil mobilization not only leads to an increase in the frequency of violence, but also to an increase in the level of lethal violence. Within the framework of conflict escalation theory, this shows a shift from low-level conflict to higher-intensity conflict, where the use of force becomes more brutal and has a direct impact on human safety (Kaufman & Hartnett, 2016). Previous research by (Khorram-Manesh et al., 2021) emphasizes that a state's failure to manage early tensions often increases the probability of armed conflict with significant casualties. The results of this study are consistent with this argument and confirm that demonstrations can serve as a leading indicator of deadly conflict.

From a counterintelligence and security perspective, these findings have very important implications. A significant increase in demonstrations can be understood as an early signal of security vulnerability, particularly in contexts where there are indications of political polarization, politicization of identity, or intervention by external actors. Modern security literature, including studies on hybrid warfare and influence operations, highlights that mass mobilization is often used as an instrument to undermine state stability through sustained social pressure (Qureshi, 2020; Yeager, 2012). Thus, the results of this study support the view that demonstration analysis needs to be placed as an integral part of the national security early warning system.

The findings of the Granger causality test further strengthen the temporal validity of the relationship between demonstrations, political violence, and fatalities. The rejection of the null hypothesis in the Granger causality test shows that information about an increase in demonstrations in the previous period can systematically predict an increase in violence and fatalities in the following period. These results are in line with previous studies that emphasize the importance of the time dimension in conflict analysis, where escalation rarely occurs suddenly, but rather through stages that can be observed and modeled quantitatively (Allwood & Ahlsén, 2015; Collins, 2012). In other words, demonstrations serve as early warning signals that contain important predictive information for security analysts and policymakers.

In addition to temporal causal relationships, the existence of significant simultaneous causal relationships indicates that demonstrations, political violence, and fatalities are also interrelated in the same time frame. This suggests that in some contexts, a surge in demonstrations can occur alongside an increase in violence and fatalities, revealing a state of acute instability in which various forms of conflict occur in parallel. These findings are consistent with structural approaches to conflict studies that emphasize that mass mobilization and violence are often part of the same conflict system, influenced by structural factors such as institutional weakness, elite fragmentation, and low public trust in the state (Jackson, 2002; Kadivar, 2018).

The Early Warning Index analysis complements these findings by providing a quantitative instrument capable of capturing variations in the pressure of demonstrations across countries and over time. The symmetrical and standardized distribution of the index shows that this indicator can be used to clearly distinguish between stable and high-risk periods. High index values indicate a phase of increasing social pressure, in which demonstrations one to two years earlier have the potential to trigger an escalation of political conflict and violence. This is in line with the early warning systems approach in security studies, which emphasizes the importance of trend-based indicators over single events (Nikander, 2002).

In the Indonesian context, the results of this study are highly relevant. Empirical experience shows that the pre-election period or phase of increased identity politicization is often marked by a surge in demonstrations. The findings of this study indicate that this pattern cannot be viewed solely as a normal democratic dynamic, but also as a potential early warning sign of security vulnerabilities if not followed by effective conflict mitigation mechanisms.

5. Conclusion

This study shows that the dynamics of demonstrations are more than just non-violent political expression; demonstrations serve as the initial phase of conflict escalation which, if not managed institutionally, can develop into political violence and loss of life. The surge in demonstrations reflects the accumulation of socio-political dissatisfaction, consistent with grievance-based conflict theory, relative deprivation, and the contentious politics framework. The Granger causality test confirms that conflict escalation is systematic and predictable, while the simultaneous relationship between demonstrations, violence, and fatalities supports the structural view of conflict that mass mobilization and violence are part of an interconnected system.

In practical terms, the Early Warning Index provides reliable quantitative indicators for monitoring the risk of cross-border conflict, enabling security forces, intelligence analysts, and policymakers to identify critical periods before further escalation. From a counterintelligence perspective, a surge in demonstrations is an early signal of security vulnerabilities that can be exploited through destabilization or identity politicization strategies. For the Indonesian context, especially in the pre-election period and with sensitive identity-based issues, this research emphasizes the importance of a preventive approach, proactive conflict mitigation, and systematic monitoring of civil mobilization, while maintaining a balance between security stability and civil liberties.

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