Undergraduate Dissertation: Cold Calculations - How Conflict Characteristics Shape External Support in Armed Conflicts

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Data availability statement

All analyses were conducted in R (R Core Team (2025)), with the analytic code and input data made publicly available on GitHub to ensure transparency and facilitate replication.

Abstract

Despite its relevance to violence, victimisation, and state power, Criminology has historically neglected the study of armed conflicts (Hagan (2015); Jamieson (2003); Ruggiero (2015); McGarry and Walklate (2015)). This dissertation aims to bridge this gap, using random and fixed effects logistic regression to examine the impact of conflict characteristics on the provision of external support. It seeks to provide insights into the motives and strategies of external supporters, essential for discussions around liability and responsibility in armed conflicts. Aligning with existing literature, the findings of this study suggest that external supporters tailor the provision of specific indirect support to specific conflict dynamics (Schultz (2010); Bapat (2012); Sawyer et al. (2015)). Based in criminological research on violence (Collins (2008) in Rafter (2016)) this suggests a 'cold', calculated approach to the provision of external support, where external supporters consider the conflict dynamics and the potential for escalation before providing support. This research contributes to a more comprehensive understanding of the interplay between external interventions and conflict dynamics, bridging critical gaps in criminology and offering a starting point for criminological discussion around the liability and responsibility of external supporters.

Introduction

Despite a reduction in conflicts and deaths, the past decade remains the most violent on record (Davies et al. (2024)). Today, although conflicts are largely fought by developing nations, they rely heavily on advanced military equipment produced by industrial countries, reinforcing military over social investments (Sivard (1996)). The prevalence and complexity of external support (ES) in armed conflicts (AC) have grown significantly over the past decades. From 1975 to 2017, 80% of intrastate conflicts involved at least one instance of ES, with state actors being the predominant supporters (Meier et al. (2023)). Recent years have seen systemic shifts in ES, characterised by the rise of multilateral coalitions and collaborative interventions. Nearly one-third of all support instances now involve such coalitions, emphasising burden-sharing and legitimacy (Meier et al. (2023)). However, recent developments, such as the United States cutting off significant amounts of its financial and military support for Ukraine, and humanitarian aid to Syria (Sandefur and Kenny (2025); UN (2025)), cast doubt on the future of military alliances and joint defence initiatives like the North Atlantic Treaty Organisation (NATO), as well as the accountability and durability of assistance. With many geopolitical tensions and conflicts ongoing, discussions around AC and ES are crucial to the political environment and international relations, raising questions around the responsibility and accountability of external supporters, especially when military actions turn into war crimes.

While an extremely timely topic, Criminology has historically neglected AC (Hagan (2015); Jamieson (2003); Ruggiero (2015); McGarry and Walklate (2015)), let alone ES. But even in research on ES, the content of interventions remains underexplored, despite its impact on conflict trajectories (see for example Cunningham (2016); Karlén (2017); Aydin and Regan (2012)). This research adopts an interdisciplinary approach, integrating Criminology, Peace and Conflict Studies, and Economics to examine whether conflict characteristics affect the provision of ES and identify trends and conditions under which ES is provided. By distinguishing between support types, it aims to provide a more robust understanding of the role of external supporters and their motives, essential for further discussions around liability and responsibility. In doing so, it bridges critical gaps in Criminology, contributing to a more comprehensive understanding of the interplay between external interventions and conflict dynamics.

This dissertation addresses three research questions: (1) Do conflict characteristics influence the provision of ES? (2) Do they affect the form of support provided? (3) Does coalition-based support influence what type of support is provided? The data comes from two Uppsala Conflict Data Program (UCDP) datasets: the Dyadic Dataset (Version 18.1), covering conflict characteristics between 1946 and 2018 (Harbom et al. (2008); Pettersson and Eck (2018)), and the External Support Dataset (Version 18.1), which captures ten forms of ES between 1975 and 2017 (Meier et al. (2023)). Together, these sources provide a robust foundation for quantitatively analysing the relationship between conflict characteristics and ES. To answer the research questions, the study uses fixed and random effects logistic regression models, allowing for the examination of both within- and between-dyad variation. These methods are well suited to the dyadic nature of AC data and support the identification of strategic patterns in support provision—insights essential for discussions on the liability and responsibility of external actors. Therefore, this dissertation contributes to a more nuanced understanding of the interplay between external interventions and conflict dynamics, addressing critical gaps in criminological literature on accountability in AC. The dissertation is structured as follows: First, existing literature on AC and ES is reviewed, highlighting gaps in criminological scholarship and introducing the conceptual lens of 'hot' versus 'cold' mass violence. The research design and theoretical framework are then described, followed by the methodology, data, and operationalisation. Following the presentation of the findings, it finishes with the discussion and concluding reflections.

Literature Review

The landscape of AC has shifted in recent decades, with a rise in internationalised intrastate conflicts where external states support non-state actors opposing governments (Davies et al. (2024)). AC herein is defined as 'a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in

a calendar year' (Themnér (2018), p.2). The primary parties in such conflicts include governments, which control the state capital, and opposition organisations, which are formally organised groups using armed force to influence the outcome of the incompatibility.

Although developing nations fight most of today's conflicts, they are often fought with weapons from industrialised countries, reflecting 20th-century technological advancements (Sivard (1996)). As geopolitical tensions rise, the role of ES in these conflicts has become a central topic of discussion (Federle et al. (2024)). ES, defined as militarily relevant assistance provided by outside parties to active conflicts, is distinct from peacetime activities like arms trade or security reforms (Meier et al. (2023); Meier (2022)). This support aims to enhance the recipient's military capabilities and is provided with the clear intent of facilitating military victory over the opposing side (Cunningham (2010); Gregory (2000)). It includes materiel, knowledge, or services directly aiding warfare but excludes unintentional support like sanctions that weakens a conflict party but is not intended to support the other side. Additionally, diplomatic efforts, humanitarian aid, and mediation offers do not qualify as ES since they do not directly contribute to the military outcome (Meier (2022)). The external nature of support is determined by whether the provider is not a primary warring party in the conflict, even if present in the same territory.

Foreign military operations, though a small portion of defence spending, are pivotal in defining international relations and interventions (Marín (2021)). Understanding why and how states intervene and the consequences of different types of support is vital to analysing external involvement. The interplay between conflict characteristics and ES is complex, with interventions - whether direct military actions or indirect aid - often prolonging hostilities and complicating peace efforts (Sawyer et al. (2015); Karlén (2023); Regan (2002)). This research seeks to explore these themes, examining how conflict characteristics shape external interventions.

The study of armed conflicts in Criminology

Like many other social sciences, Criminology has historically neglected AC, despite its relevance to violence, victimisation, and state power (Hagan (2015); Jamieson (2003); Ruggiero (2015); McGarry and Walklate (2015)). Following the so-called 'century of peace' (1815-1914), war violence has persisted across continents, yet inquiry in the social sciences has failed to match its prevalence or significance.

States, through their 'legitimate monopoly of violence' (Weber (1919) in McGarry and Walklate (2019)), justify violence via bureaucratic rationality, framing war as a noble endeavour to solidify authority and autonomy (Malešević (2010) in Walklate and McGarry (2019)). Internationally, economic imperatives often guide responses to war, reducing it to a developmental obstacle. Historically, war was driven by imperial capitalist expansion, which fuels conflicts through profit-driven globalisation (Ruggiero (2023); Bonger (1916) in Walklate and McGarry (2019); Klein (2011)). This global economic system blurs lines between legitimate but harmful actions, exacerbating violence (Ruggiero (2005)). Critical criminologists therefore view war as a form of state crime legitimised by dominant powers who shape international norms to justify past and future conflicts (Kramer and Michalowski (2005); Bonanate (2011) in Ruggiero (2023)). Despite millions of legitimate killings in war, criminology has been reluctant to challenge the legitimacy of such violence or address its broader systemic causes (Ruggiero (2005)). Wartime atrocities are reframed as patriotic acts, aligning with state narratives through techniques of neutralisation (Sykes and Matza (1957); Ruggiero (2005)). These dynamics underscore the importance of rethinking state authority, as legality and illegality are often strategically maneuvered in the pursuit of power (Heyman (1999) in Ruggiero (2005)). As war can weaken social bonds, fosters disorganisation, and perpetuates cycles of violence, criminologists have a unique opportunity to address its multifaceted impacts and advocate for systemic reforms, including peaceful conflict resolution and global resource redistribution (Jamieson (1998) in McGarry et al. (2016); Ruggiero (2005)). Due to its central role to conflicts, examining ES is essential to understanding underlying dynamics of AC. It further raises critical questions about complicity and liability for war crimes, and whether ES escalates violence or fosters peace.

To examine the dynamics of ES, offering insights into the motives and strategies of external intervention, this study analyses ES through the lens of 'hot' and 'cold' conflicts, a principle first developed by Collins ((2008)

in Rafter (2016)). According to Collins ((2008) in Rafter (2016), p.98), whether fighting actually breaks out in violent confrontations between individuals or groups depends on 'a series of conditions or turning-points that shape the tension and fear in particular directions, reorganising the emotions as an interactional process involving everyone present: the antagonists, audience, and even ostensibly disengaged bystanders'. These turning points operate as triggers for later (but still contingent) behaviours and signal a break with the feelings of the past. Criminological studies on mass violence (MV) have looked at the situational dynamics of such acts, distinguishing between 'hot' and 'cold' acts of MV (Rafter (2016)), reflecting their underlying emotional dynamics. 'Hot' MV is characterised by 'forward panic' (Collins (2008) in Rafter (2016)), a highly aroused emotional state where prolonged tension and fear suddenly erupt into explosive violence. This emotional rush carries perpetrators into a cycle of aggression, elation, and hysteria, often leading to actions they would not commit in calmer moments. MV tends to escalate when strong emotional momentum is achieved. However, not all MV is driven by intense emotions — some unfolds in a more calculated, bureaucratic manner, devoid of immediate emotional frenzy, therefore being described as 'cold' MV. In reality, conflicts are not purely 'hot' or 'cold' but may fluctuate between these emotional states over time. This study attempts to apply this concept to the provision of ES in ACs, exploring whether ES is correlated with conflict characteristics and might thereby be determined to be a calculated, rational choice.

The economic cost of conflict

War and AC profoundly impact parties involved, with ordinary civilians disproportionately suffering due to fatalities, displacement, and long-term public health crises from destroyed infrastructure (Hoeffler and Reynal-Querol (2003)). War-torn countries face reduced growth, higher poverty rates, and weakened institutions, with recovery dependent on robust policy reforms (Hoeffler and Reynal-Querol (2003)). High-intensity violence during conflicts lowers economic growth, life expectancy, and educational attainment, with these effects often persisting long-term (Le et al. (2022)). However, economic impacts vary by context. Domestic wars typically reduce growth, while wars fought abroad can stimulate mild economic expansion through increased military spending and investments in related sectors (Federle et al. (2024); Chupilkin and Kóczán (2022)). War economies sometimes exhibit resilience, particularly in developed states where increased labour and capital utilisation mitigate conflict's effects (Rasler and Thompson (1985)). Nonetheless, countries experiencing war on their territory often face catastrophic economic fallout, with non-initiators and losers suffering the largest GDP declines (Chupilkin and Kóczán (2022)). Wars and ACs generate significant spillover effects, with severity influenced by geographic proximity and economic ties to the conflict zone. Neighbouring countries often face adverse economic consequences, while distant nations experience milder effects due to limited trade links and geographic distance (Federle et al. (2024)). Weak trade integration can shield distant countries from severe supply shocks, and increased military spending may even stimulate economic activity in specific sectors (Federle et al. (2024)). However, regions with stronger economic ties to the conflict zone experience amplified negative impacts, including disrupted stability and heightened uncertainty (Fang et al. (2020); Le et al. (2022)). While inflation and output remain stable in distant countries, the ripple effects of war challenge interconnected global economies, highlighting the complex dynamics between conflict and economic stability (Federle et al. (2024)). The enduring economic and social costs of war underscore its profoundly criminogenic nature.

External support to armed conflicts

Research on ES in ACs highlights its significant impact on conflict dynamics and outcomes. External actors, including state and non-state supporters, play pivotal roles by shaping conflict processes through diverse forms of assistance, such as military training and direct intervention (Gleditsch (2007); Salehyan (2010); Toukan (2019)). The type and target of ES often align with intervening parties' strategic interests. Governments typically receive training and troop assistance, while rebel groups rely on material aid, including light weaponry and technical expertise (Meier et al. (2023); Berlin and Malone (2023)). Rebel sponsorship is more common when governments also receive support, reflecting the interconnected and escalating nature of interventions (Salehyan et al. (2011)). Nonetheless, support dynamics vary by conflict intensity, geographic

proximity, and the relative strength of involved parties (Goldman and Abulof (2016); Meulewaeter (2021); Olson Lounsbery (2016)). Rebel groups seen as either too strong or too weak are less likely to attract aid due to their perceived ability to succeed or fail independently (Salehyan et al. (2011)). The Cold War intensified conflicts through superpower support, but its end shifted patterns, reducing insurgencies and prolongation, while rebel groups lost aid, leading many conflicts to peter out or end in settlements (Testerman (2015); Kalyvas and Balcells (2010) in Roberts (2019)).

Over recent decades, the number of actors providing ES has grown, despite only a slight rise in total conflicts (Meier et al. (2023)). This proliferation adds veto players, complicating bargaining and potentially prolonging conflicts (Cunningham (2010)). By 2017, 77% of active conflict-dyads featured state support for governments alone, driven in part by the post-9/11 counterterrorism focus, which stigmatised support for non-state actors (Meier et al. (2023)). Multilateral counter-extremism efforts, often led by UN Security Council members, have reinforced this trend (Meier et al. (2023)). The internationalisation of intrastate conflicts highlights notable trends. While troop support has declined, the total number of external interventions continues to grow, reflecting persistent interest in shaping conflict trajectories through both direct and indirect means (Davies et al. (2024); Chang and Sellak (2022)). States that sponsor armed groups tend to back multiple organisations, with an average of 10.36 groups supported per state (Berlin and Malone (2023)). Training and expertise remain the most frequent forms of support, while material aid dominates assistance to rebel groups (Meier et al. (2023); Berlin and Malone (2023)). While foreign troops are deployed in less than 20% of conflicts, they are often associated with heavy force models, including strategic bombing and civilian protection (Sullivan and Karreth (2019)). These evolving dynamics underscore ES's dual role as both an escalatory factor and a mechanism for resolution.

External supporters engage in civil conflicts for diverse and strategic reasons, including geopolitical, economic, and ideological motives, as well as specific foreign policy objectives (Findley and Teo (2006); Meier et al. (2023)). Economic interests often drive involvement, with external powers seeking to protect trade benefits or access resources by backing domestic victors (Regan (1998); Kathman (2011)). In some instances, involvement appears benevolent, such as facilitating peace talks (Bhattarai (2016)). However, third-party intervention is rarely altruistic; states often aim to weaken adversaries, prevent conflict spillover, or maintain influence in post-colonial regions (Cunningham (2010); Gregory (2000)). Strategically, sponsoring militant groups enables states to destabilise rivals or gain leverage without direct conflict. Delegating violence minimises costs while exploiting the instability inflicted on adversaries (Schultz (2010); Bapat (2012)). However, this approach carries risks, including retaliation, escalation, and the possibility that armed groups will pursue independent agendas (Schultz (2010); Maoz and San-Akca (2012)).

Shared ethnic or ideological ties between sponsors and armed groups signal shared goals and reduce the risk that resources will be misused (Berlin and Malone (2023); Salehyan (2010)) and are among the strongest predictors of ES (Salehyan et al. (2011); Sozer (2016)). Common cultural or ideological ground facilitates communication and enhances trust, improving cooperation (San-Akca (2016); Bacon (2018)). Democratic states often support each other in combating rebels, reflecting shared values and interests in stability (Goldman and Abulof (2016)). However, relying on such ties can oversimplify sponsorship decisions, especially in contexts with multiple potential recipients or competing priorities (Berlin and Malone (2023)). Ultimately, prior research suggests that ES is a calculated foreign policy tool used to influence conflict outcomes while advancing sponsors' strategic goals.

The effects of external support on conflicts

ES profoundly influences AC, shaping its onset (Cunningham (2016); Regan and Meachum (2014)), duration (Aydin and Regan (2012); Anderson (2019)), outcomes (Sawyer et al. (2015)), and recurrence (Karlén (2017)). Many contemporary conflicts are recurrences of previous ones, particularly territorial disputes, which are prone to persistence due to entrenched incompatibilities (Quinn et al. (2007)). In such cases, ES is often limited, as most states favour preserving territorial status quos. Interventions, whether direct (troops) or indirect (weapons, logistics, training), frequently prolong conflicts by altering the cost-benefit calculations of belligerents (Fearon (2004) in Testerman (2015); Lacina (2006)). Although external aid can alter power dynamics, it frequently intensifies conflicts, complicates negotiations, and reduces the likelihood

of peaceful resolutions (Olson Lounsbery (2016)). It also internationalises conflicts, introducing new veto players and complicating bargaining dynamics (Zartman (1992) in Saideman (2002); Salehyan et al. (2011)). When foreign states support rebel groups, they not only supply material resources but also confer political legitimacy, further complicating resolution efforts and prolonging violence (Petrova (2019)). ES's impact extends to post-conflict dynamics. Rebel groups with sustained backing are more likely to remobilise, anticipating future assistance, thereby increasing conflict recurrence (Karlén (2017)). Although ES can improve the odds of military victory (Balch-Lindsay et al. (2008)), it often exacerbates humanitarian crises, with rebels exploiting moral hazards to attract further intervention (Rauchhaus (2009)). Thus, while ES can alter power dynamics and sustain resistance, it frequently intensifies violence, complicates negotiations, and reduces the chances of a peaceful resolution, underscoring its complex and paradoxical role in ACs.

Limitations of past research

The study of ES in ACs has provided critical insights but is hindered by several limitations. Much research focuses predominantly on support for non-state armed groups, particularly rebel organisations, sidelining other actors and minor armed engagements (Walter (2004); Quinn et al. (2007)). Additionally, studies often emphasise the initial decision to delegate support (Salehyan (2010); San-Akca (2016)), neglecting how support dynamics evolve throughout a conflict's lifecycle and the strategic factors influencing its continuation or cessation (Karlén (2019); Tokdemir et al. (2021)). The content of interventions remains underexplored, despite its impact on conflict trajectories. Differentiating between support types - military training, material aid, or safe havens - can highlight distinct effects on outcomes (Roberts (2019)). Furthermore, the multi-actor dimension of support is frequently overlooked, despite evidence that sponsors selectively support specific groups within fragmented conflicts (Berlin and Malone (2023)). A focus on rebel groups introduces methodological challenges and selection bias, limiting generalisability to other armed organisations (Abrahms et al. (2018); Phillips (2019)). This neglect obscures patterns of ES across diverse settings, undermining frameworks linking organisational attributes to state sponsorship. Moreover, qualitative approaches dominate the literature, often at the expense of quantitative or mixed method analyses better suited to capturing temporal and contextual variations in support dynamics (Petrova (2019)). This research addresses these limitations by examining the interplay between conflict characteristics and different types of ES from a quantitative criminological angle, aiming to provide a starting point for further criminological discussions around the liability and responsibility of external supporters in ACs.

Research Design

The study aims to test several hypotheses regarding the relationship between conflict characteristics and ES. These hypotheses are grouped based on the type of relationship they examine, focusing on whether conflict characteristics influence the provision of ES, the form of support provided, and the impact of support coalitions on the type of assistance. These conflict characteristics are considered to be strategical factors influencing the provision of ES. Thereby, this study aims to examine whether external supporters follow a 'cold', rational approach to ES. The hypotheses are as follows:

Hypothesis Group 1 (HG1): Conflict Characteristics affect whether ES is provided to a conflict party.

a) Conflict intensity affects whether ES is provided.

b) Territorial incompatibility affects whether ES is provided.

c) The cumulative duration of conflict affects whether ES is provided.

d) The type of conflict affects whether ES is provided.

e) Whether a conflict is taking place before or after 9/11 affects whether ES is provided.

f) Whether a conflict is taking place during or after the Cold War affects whether ES is provided.

Hypothesis Group 2 (HG 2): Conflict characteristics influence what kind of ES is provided.

a) Conflict intensity affects what kind of ES is provided.

b) Territorial incompatibility affects what kind of ES is provided.

c) The cumulative duration of conflict affects what kind of ES is provided.

d) The type of conflict affects what kind of ES is provided.

e) Whether a conflict is taking place before or after 9/11 affects what kind of ES is provided.

f) Whether a conflict is taking place during or after the Cold War affects what kind of ES is provided.

Hypothesis 3 (H3): Whether support is provided in a coalition or as bilateral support affects what kind of ES is provided.

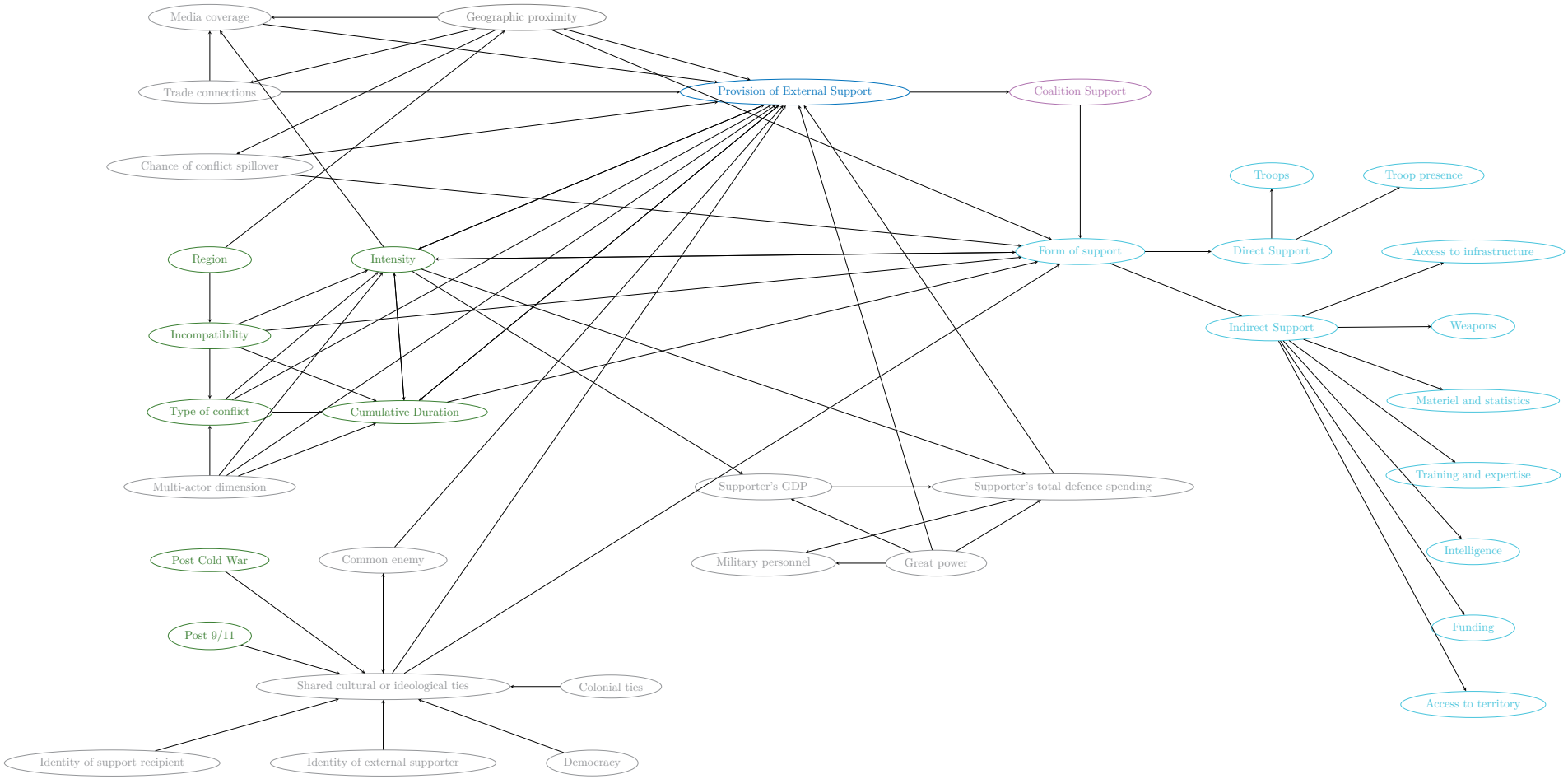


Figure 1: Directed Acyclic Graph on Conflict Characteristics and External Support.
OliveGreen = Independent variables (H1 and H2); Orchid = Independent variable (H3); RoyalBlue = Dependent variable (H1); SkyBlue = Dependent variables (H2 and H3); Gray = Not included in the analysis.

Based on the outlined Literature, Figure 1 portrays the underlying assumptions and relationships between conflict characteristics and ES. Directed Acyclic Graphs visually represent the researcher's theoretical assumptions about causal mechanisms, sources of bias, and pathways influencing an outcome, allowing systematic identification of control variables to estimate causal effects and clarification of relationships between observed and unobserved variables based on theory and prior evidence (Fleischer and Diez Roux (2008)). The dependent variable 'provision of ES' is assumed to be both directly and indirectly influenced by independent conflict characteristics (incompatibility, type of conflict, intensity, region, cumulative duration, point in time of the conflict), as well as the identity of the external supporter, the support recipient and their relationship with one another (i.e., colonial ties, shared cultural/ideological ties, a common enemy) and economic and political factors such as trade connections. These independent factors are not only assumed to have a direct or indirect effect on the provision of ES but also on the kind of ES that is provided to one of the conflict parties. A limitation of this conceptual model is the absence of temporal dynamics, which could influence the provision and kind of ES. Despite these limitations, the model provides a structured framework for testing the hypotheses outlined above.

Methodology

Data and operationalisation

This study draws on two key datasets from the Uppsala Conflict Data Program (UCDP): the UCDP Dyadic dataset (Version 18.1) (Harbom et al. (2008); Pettersson and Eck (2018)) and the UCDP External Support dataset (ESD) (Version 18.1) (Meier et al. (2023)). The UCDP Dyadic dataset provides data on ACs, focusing on dyads — pairs of primary warring parties — and spans from 1946 to 2018, with the unit of analysis being the dyad-year. The dataset includes 2,935 observations across 25 variables, capturing various conflict characteristics such as the type of conflict, incompatibilities, and combatants. The ESD, covering the period from 1975 to 2017, focuses specifically on ES provided to conflict parties, detailing ten types of support such as military assistance, training, and funding. It offers 2,272 observations of 96 variables, coded from open-source material and subjected to intercoder reliability checks.

The two datasets were merged using the common identifiers 'dyad_id' and 'year'. Prior to merging, the datasets were checked for uniqueness to ensure the absence of duplicate rows. The merging process ensured the removal of duplicates, retaining only the necessary columns for analysis. The underlying unit of analysis remains the dyad-year. The final dataset includes 2234 observations of 123 variables on 472 dyads in 212 conflicts from 1975-2017. The comprehensive information on both conflict characteristics and characteristics of ES allows the study to address research questions about the relationship between the two and the types of support provided by external actors.

Despite their comprehensive nature, these datasets present several limitations. The availability of data on ES restricts the analysis to 1975–2017, excluding recent geopolitical developments. However, the period includes major historical phases - such as the Cold War, the post-Cold War era, and the aftermath of 9/11 - during which ES provision changed significantly (Testerman (2015); Kalyvas and Balcells (2010) in Roberts (2019); Meier et al. (2023)). The large sample enables comparative analysis across time, regions, and conflict types, which would be difficult to replicate through primary data collection. Still, UCDP's state-based definition of AC includes only incompatibilities over government or territory, potentially overlooking underlying causes. Conflicts with fewer than 25 battle-related deaths per year are excluded, as are cases with uncertainty around key variables like incompatibility, actors, or intensity. Geographic precision is also lacking, as location is defined by the government side in a dyad (Themnér (2018)) rather than where the conflict occurs. The ESD only records first-degree supporters - those directly aiding a conflict party -, while second-degree supporters (e.g., states providing logistical assistance or funding regional coalitions) are omitted (Meier (2022)). Although the dataset distinguishes ten types of support, the categorisation simplifies complex, evolving interactions. Non-state troop support is consistently coded as zero, and support from international organisations, diaspora groups, businesses, or religious institutions is excluded (Meier (2022)). Lastly, the ESD's minimum threshold for recording assistance may result in underreporting minor interventions, potentially affecting the accuracy of conclusions about ES provision.

The study incorporates dependent, independent, and control variables (Table 1), categorised based on their measurement scales. All nominal independent variables were factorised to improve analytical clarity. Conflict characteristics were kept as per their original categorisation, while cumulative duration was derived using a time-based formula. The order of conflict type was changed so that 'intrastate' instead of 'interstate' would be the reference group to allow for clearer interpretation in conducted regression analyses. The dependent variables measuring ES, as defined in the Literature Review (see Meier et al. (2023); Meier (2022)), were expanded to differentiate between types of support (ext_category, ext_type).

Table 1: Variables used in the analysis

Category	Variable	Description	Measurement Scale	Proportion / Mean
Dependent Variables				
	ext_sup	External support provided (1 = Yes)	Binary	81.6
	ext_x	Troop support (1 = Yes)	Binary	18.93
	ext_p	Foreign troop presence (1 = Yes)	Binary	1.97
	ext_y	Access to infrastructure/joint operations (1 = Yes)	Binary	22.61
	ext_w	Weapons support (1 = Yes)	Binary	58.59
	ext_m	Materiel and logistics support (1 = Yes)	Binary	56.62
	ext_t	Training and expertise support (1 = Yes)	Binary	61.59
	ext_f	Funding support (1 = Yes)	Binary	46.42
	ext_i	Intelligence support (1 = Yes)	Binary	16.43
	ext_l	Access to territory (1 = Yes)	Binary	33.8
	ext_o	Other support (1 = Yes)	Binary	7.34
	ext_u	Unknown support (1 = Yes)	Binary	4.57
	ext_category	Categorisation of the form of external support provided (i.e., whether no support, one individual form or several forms of support are provided)	Ordinal	72.65
	ext_type	Categorisation of external support as direct, indirect, or no support	Nominal	
		Indirect		60.92
		Direct		0.98
		Direct and indirect		19.07
Independent Variables				
	type	Type of conflict (1 = Extrasystemic)	Nominal	
		Intrastate (3)		78.74
		Interstate (2)		3.13
		Internationalised intrastate (4)		18.13
	intensity	Conflict intensity (1 = Minor conflict, 2 = War)	Binary	20.1
	incompatibility	Conflict incompatibility	Nominal	
		Territory (1)		45.48
		Government (2)		54.03
		Territory and government (3)		0.49
	territorial	Conflict incompatibility is about territory (1 = Yes)	Binary	45.97
	cumulative_duration	Cumulative years of conflict (Years since first observed conflict year)	Ratio	7.892
	region	Region of conflict	Nominal	
		Europe (1)		5.33
		Middle East (2)		14.28
		Asia (3)		37.51
		Africa (4)		33.44
		Americas (5)		9.27
Control Variables				

Table 1: Variables used in the analysis *(continued)*

Category	Variable	Description	Measurement Scale	Proportion / Mean
	cold_war	Cold War status (0 = Cold War, 1 = Post-Cold War)	Binary	58.55
	nine_eleven	Period relative to 9/11 (0 = Before 9/11, 1 = After 9/11)	Binary	35
	ext_coalition	Coalition support (0 = Bilateral support, 1 = Coalition support)	Binary	6.22

Missing data analysis identified few cases of missing values for the variables used in the analysis. However, while the underlying data and computed variables cover most independent factors included in the theoretical framework outlined above (Figure 1), several important control variables are missing, as their computation is beyond the scope of this dissertation. These include geographic proximity, which influences cross-border spillover effects and logistical feasibility of support (Federle et al. (2024)), and major power status, as powerful states are more likely to intervene due to strategic interests (Goldman and Abulof (2016)). Other omitted factors include military capability differences, historical adversarial relationships, trade dependencies, former colonial ties, and the ideological alignment between external supporters and violent non-governmental organisations (NGOs). The exclusion of these variables limits the study's ability to fully capture why certain conflicts receive ES while others do not.

Data analysis

Descriptive statistical methods were employed to summarise and analyse the data. This included the calculation of total conflict counts per year, as well as the summarisation of conflict intensity and the mean and median conflict durations by region. These statistics were visualised through various graphical methods, providing a clear depiction of temporal trends in conflict characteristics and support dynamics.

Regression analysis, utilising random (RE) and fixed effects (FE) models, was conducted to investigate factors influencing the provision of various forms of ES in AC. For each form of support, FE and RE logistic regression models were fitted to test the hypotheses that conflict characteristics and coalition support influence ES provision. FE models control for conflict dyad-level heterogeneity by accounting for within-dyad variation, thus removing time-invariant confounders specific to each dyad (Huntington-Klein (2023)). In contrast, RE models assume individual effects are drawn from a random distribution (typically normal), which allows for estimating both within- and between-dyad variation, increasing precision and reducing standard errors (Huntington-Klein (2023)). The decision to include both RE and FE effects models was driven by the need to account for both within-dyad and between-dyad variations, as this enables a more comprehensive assessment of how conflict characteristics influence external support, addressing both specific within-conflict dynamics and broader patterns across conflicts. Although hybrid models capturing both dimensions exist (Fairbrother (2014); Mundlak (1978)), time constraints limited the analysis to the more conventional FE and RE specifications.

As the dependent variables are binary, binomial logistic regression was considered the most appropriate approach. However, for robustness, all support types were initially analysed through four model types: RE linear, RE logistic, FE linear, and FE logistic. The core independent variables included incompatibility, conflict type, intensity, cumulative duration, coalition support, and historical periods such as the post-Cold War and post-9/11 eras. Region was initially included but later excluded due to high multicollinearity with conflict type (Appendix 3), which led to convergence issues in several models. Preliminary analyses and variable assessment (Table 1) supported the overall functional validity of the dependent variables. However, the 'incompatibility' variable was recoded to focus on territorial disputes, avoiding instability caused by low case counts in the combined 'territory and government' category. Following initial estimation, logistic regression was selected for final interpretation, as it provided more robust results than linear models across several support types (Table 3a; Table 3b; Appendix 6). All final models were estimated based on the corresponding FE or RE logistic regression equations:

FE Logistic Regression:

$$\begin{aligned}\log\left(\frac{\text{provision of support}}{\text{no provision of support}}\right) = \alpha + \beta_1 \cdot \text{territorial incompatibility} + \beta_2 \cdot \text{type} + \\ \beta_3 \cdot \text{intensity} + \beta_4 \cdot \text{duration} + \beta_5 \cdot \text{nine eleven} + \\ \beta_6 \cdot \text{cold war} + \beta_7 \cdot \text{coalition support} + \gamma_{\text{dyad\_id}}\end{aligned}$$

where $\log\left(\frac{\text{provision of support}}{\text{no provision of support}}\right)$ is the natural logarithm of the odds of the dependent variable occurring, α is the intercept, β is the coefficient for each independent variable, and $\gamma_{\text{dyad\_id}}$ represents the fixed effect for each dyad.

RE Logistic Regression:

$$\log\left(\frac{\text{provision of support}}{\text{no provision of support}}\right) = \alpha_i + \beta_1 \cdot \text{territorial incompatibility} + \beta_2 \cdot \text{type} + \beta_3 \cdot \text{intensity} + \beta_4 \cdot \text{duration} + \beta_5 \cdot \text{nine eleven} + \beta_6 \cdot \text{cold war} + \beta_7 \cdot \text{coalition support}$$

where $\log\left(\frac{\text{provision of support}}{\text{no provision of support}}\right)$ is the natural logarithm of the odds of the dependent variable occurring, α_i is the intercept varying between dyads (i), and β is the coefficient for each independent variable.

Both RE and FE models for the overall provision of support, troop support, and foreign troop presence failed to converge and were consequently re-estimated using Poisson Pseudo Maximum Likelihood (PPML) models.[1] The refitted PPML models used the same set of independent variables as the logistic regressions, with the dependent variable defined as the provision of each respective form of external support and were estimated using the following equations:

FE PPML Regression:

$$\mathbb{E}(Y_i \mid X_i, \gamma_i) = \exp\Big(\gamma_i + \beta_1 \cdot \text{Territorial Incompatibility}_i + \beta_2 \cdot \text{Type}_i + \beta_3 \cdot \text{Intensity}_i + \beta_4 \cdot \text{Duration}_i + \beta_5 \cdot \text{Post 9/11}_i + \beta_6 \cdot \text{Cold War}_i + \beta_7 \cdot \text{Coalition Support}_i\Big)$$

$\mathbb{E}(Y_{it} \mid X_{it}, \gamma_i)$ is the expected count outcome (e.g. probability of receiving support) for unit i and γ_i represents the dyad-specific fixed effects. The exponentiation is key to PPML, as the model estimates log-linear coefficients using a Poisson-based pseudo-likelihood, even when the dependent variable is not truly count data. Different to the RE model, γ_i is treated as a parameter to be estimated, rather than a random draw from a distribution.

RE PPML Regression:

$$\mathbb{E}(Y_i \mid X_i, \alpha_i) = \exp\Big(\alpha_i + \beta_1 \cdot \text{Territorial Incompatibility}_i + \beta_2 \cdot \text{Type}_i + \beta_3 \cdot \text{Intensity}_i + \beta_4 \cdot \text{Duration}_i + \beta_5 \cdot \text{Post 9/11}_i + \beta_6 \cdot \text{Cold War}_i + \beta_7 \cdot \text{Coalition Support}_i\Big)$$

where $\mathbb{E}(Y_{it} \mid X_{it}, \alpha_i)$ is the expected count outcome (e.g. probability of receiving support) for unit i, conditional on covariates and random effect, and α_i is the dyad-specific random effect. These analyses provide an overview of trends in the provision of ES without making inferential claims about causal relationships.

Due to persistent non-convergence in the FE model for troop presence, particularly with the 9/11 variable, this variable was removed to ensure model convergence. While ensuring a working model, it prevents analysis of 9/11's effect on troop presence and comparison with other models. Model fit was assessed throughout using the Bayesian Information Criterion (BIC), Akaike Information Criterion (AIC) for RE models, and Adjusted Pseudo R-Squared for FE models, with lower values indicating better fit (Gelman and Hill (2006)). Recoding the incompatibility variable to focus on territorial disputes and removing the region variable had no effect on FE BIC values but slightly increased AIC and BIC in RE models. Despite the marginal decline

[1] PPML is widely endorsed in the methodological literature for producing consistent estimates under conditions where logistic models with FE often encounter separation or quasi-complete separation issues (Silva and Tenreyro (2006)). It is also robust to heteroscedasticity and handles high-dimensional FE efficiently - an important feature for longitudinal dyadic conflict data (Correia et al. (2020)). Given these advantages, PPML offers a methodologically sound alternative to logistic regression in contexts prone to convergence problems.

in model fit, these adjustments were necessary for convergence. Similarly, refitting models for troop support and foreign troop presence as PPML led to higher BIC values, but the approach was retained as it enabled model estimation.

An overall comparison of conflict characteristics' effects on ES was conducted between and within conflicts, with troop support and intelligence models selected for detailed analysis. These were chosen due to the strength of their associations with conflict characteristics in either the RE or FE models. They also enabled exploration of how different conflict characteristics correlate with the provision of direct versus indirect support. However, the use of distinct model types across support forms (due to convergence issues) limits the direct comparability between direct and indirect support provisions.

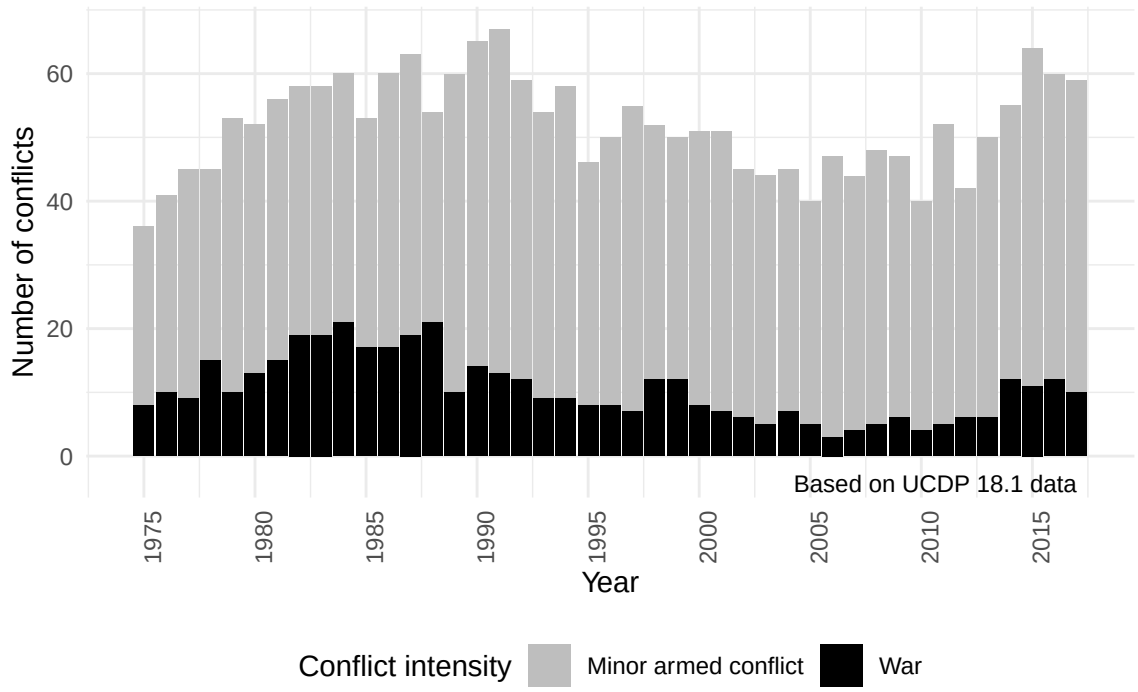
Logistic regression results were interpreted using odds ratios, reflecting the change in odds of receiving support for a one-unit increase in the predictor. PPML results were interpreted through incidence rate ratios (IRR), indicating the change in expected count of ES provision for a one-unit increase in the independent variable. While the dependent variables are binary, PPML models treat them as count variables—an accepted compromise to allow valid estimation. To enhance interpretability, logistic regression coefficients were exponentiated. Despite discussions on redefining statistical significance (Benjamin et al. (2018)), this report rejects the null hypothesis that the population's estimated coefficient is zero when $p < .05$. Multicollinearity was not expected due to the distinct nature of the conflict characteristics. Nevertheless, variance inflation factors (VIFs) were calculated for RE models where applicable. Standard regression assumptions were tested across models to ensure validity and reliability. However, as most predictors were categorical, the linearity assumption did not apply to them, and due to the logistic nature of the models, homoscedasticity and residual normality were not relevant.

Findings

Overall trends in conflict characteristics

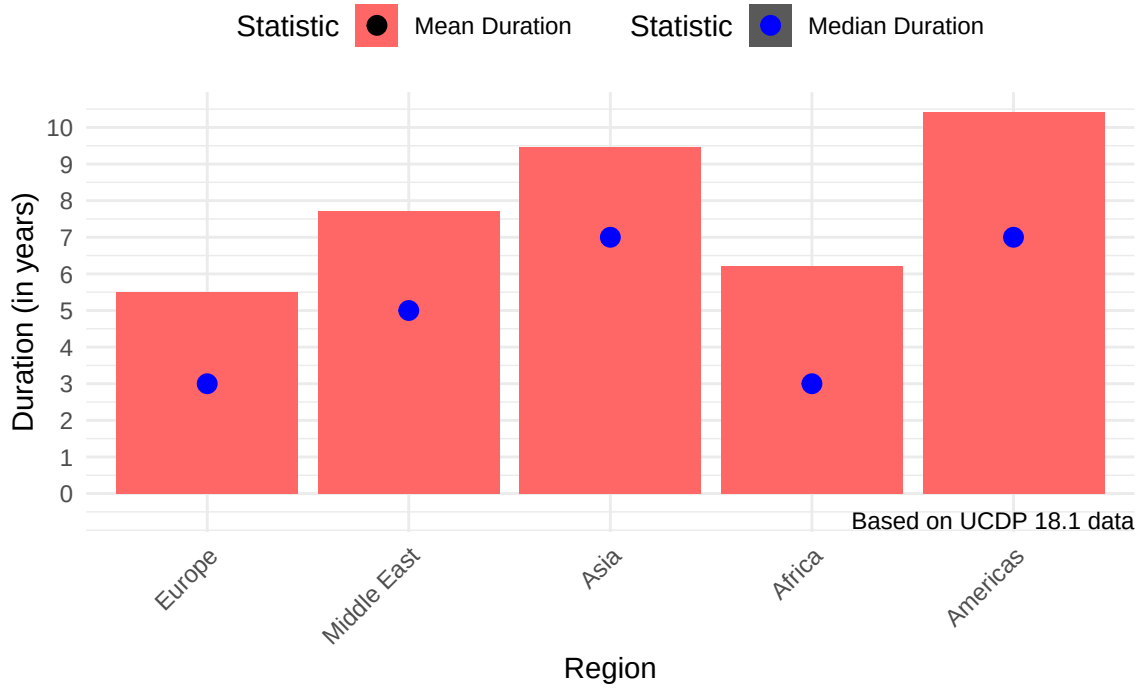
Although the total number of conflicts has decreased and minor ACs make up the majority of ACs, recent years have seen a rise in wars (Figure 2).

Figure 2: World armed conflicts by intensity level



While most conflicts are fought in Asia and Africa, the number of conflicts fought in the Middle East is growing (Appendix 1), with conflicts in Asia and the Americas portraying longer duration (Figure 3).

Figure 3: Mean and Median Conflict Duration by Region



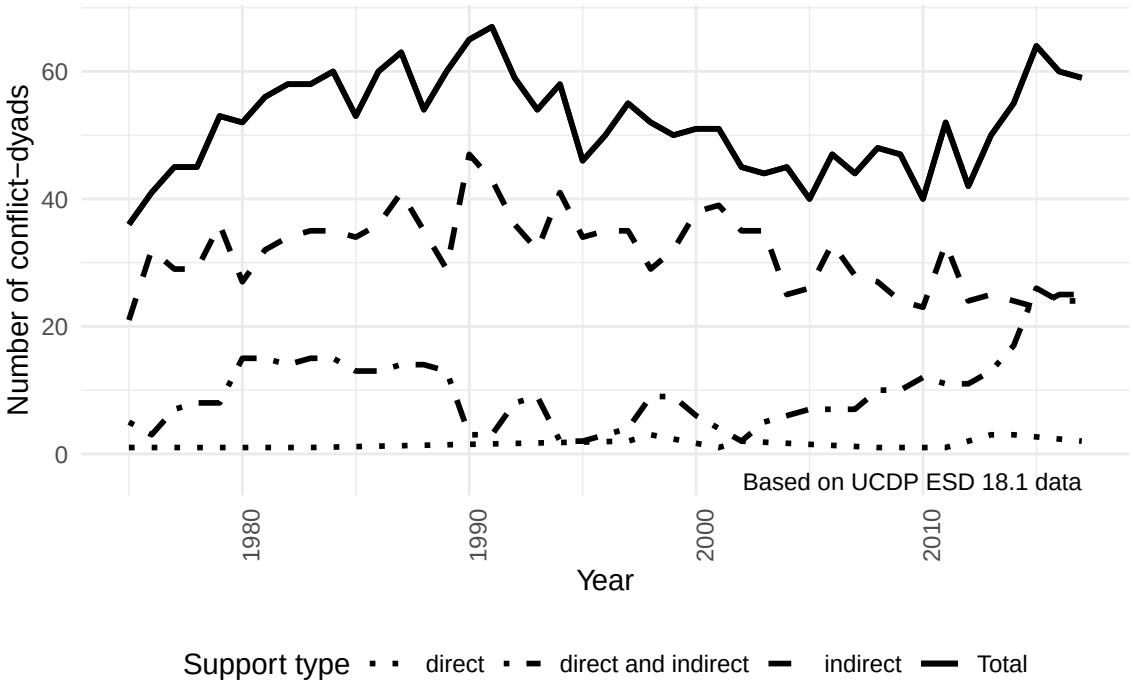
Intrastate conflicts are the most common type of conflict, followed by internationalised intrastate conflicts, whose number has been growing since the early 2000s (Appendix 2). While there is fluctuation between the

incompatibility types 'territory' and 'government', most conflicts in 2017 were about territory and hardly any about territory and government (Appendix 4).

The provision of external support

The provision of ES has risen, with indirect support being the most common (Figure 4) and supporters providing three forms of support on average (Median: 4). The provision of support in a coalition has increased over time (Appendix 5).

Figure 4: Direct and Indirect Support, 1975–2017



The models for the provision of ES (Table 2) show no statistically significant results. However, the results of the regression analyses for individual forms of support reveal distinct patterns in the relationship between conflict characteristics and the provision of ES, with notable differences between RE and FE models.

Table 2: Regression Results – External Support Determinants

	Random Effects (PPML)	Fixed Effects (PPML)
(Intercept)	1.000	
	[0.890, 1.124]	
Type (interstate)	1.003	
	[0.657, 1.531]	
Type (internationalised intrastate)	1.005	1.005
	[0.873, 1.157]	[0.996, 1.015]
Num.Obs.	1451	1449
R2		0.002
R2 Adj.		−0.220
R2 Within		0.000
R2 Within Adj.		−0.004
AIC	2921.6	3538.7
BIC	2974.4	5248.9
RMSE	0.10	0.07
Std.Errors		by: dyad_id
FE: dyad_id		X

In the RE logistic regression (Table 3a), the type of conflict — particularly internationalised intrastate conflicts — emerges as strongly correlated to the provision of ES, showing significance in seven of the nine models. Other influential factors include conflict intensity and the post-Cold War period, which are strongly correlated with multiple forms of support. Intelligence provision appears to be the most sensitive to conflict characteristics, with six out of seven independent variables reaching statistical significance. Medium-level correlations are observed for access to infrastructure, weapons, materiel and logistics, training and expertise, and funding, while troop support and troop presence exhibit the weakest correlations. While troop support was correlated to the type of conflict, troop presence was correlated to the post-Cold War and post-9/11 eras.

Table 3a: Statistical Significance in the RE Logistic Regression Models

Independent Variable	Troop Support	Troop Presence	Access to Infrastructure	Weapons	Materiel and Statistics	Training and Expertise	Funding	Intelligence	Access to Territory
Intercept	***	***	***	***	***	***		***	**
Territorial dispute					.			.	
Type of conflict	*** (Interstate); *** (Internationalised intrastate)		** (Internationalised intrastate)	* (Internationalised intrastate)	** (Internationalised intrastate)	* (Interstate); * (Internationalised intrastate)	* (Interstate); * (Internationalised intrastate)		. (Interstate)
Intensity		. (War)		*** (War)	*** (War)		*** (War)	* (War)	
Duration			*			.	.	*	
9/11		* (After)		* (After)		* (After)		*** (After)	
Cold War			*** (After)	*** (After)	* (After)	** (After)	** (After)	** (After)	. (After)
Coalition Support			*** (Coalition)				. (Coalition)	* (Coalition)	** (Coalition)
N	1451	1451	1451	1451	1451	1451	1451	1451	1451
AIC	949.6	326.5	1250.3	1094.5	1210.8	1066.9	1317.5	922.5	1294.9
BIC	1002.4	379.3	1303.1	1147.3	1263.6	1119.7	1370.3	975.3	1347.7

Table 3b: Statistical Significance in the FE Logistic Regression Models

Independent Variable	Troop Support	Troop Presence	Access to Infrastructure	Weapons	Materiel and Statistics	Training and Expertise	Funding	Intelligence	Access to Territory
Type of conflict	*** (Internationalised intrastate)					. (Internationalised intrastate)			
Intensity				* (War)	. (War)		* (War)	. (War)	
Duration				*			*	.	
9/11		*** (After)		* (After)					. (After)
Cold War		*** (After)		. (After)		. (After)		* (After)	
Coalition Support									
N	646	181	612	557	603	515	683	513	681
BIC	1625.5	328.1	1074.7	949.6	1051.2	885.2	1128.9	795.6	1113.8
Adjusted Pseudo R-squared	0.09521	-0.021449	0.04485	0.157779	0.071311	0.030282	0.179317	0.208345	0.169719

Within conflicts, as captured by the FE models (Table 3b), the provision of ES is overall less correlated to conflict characteristics than in the comparison between conflicts (RE). The era post-Cold War, as well as conflict intensity, show the most significance across FE models. However, conflict intensity is correlated with the provision of indirect ES but not with the provision of direct support. The provision of weapons and intelligence are correlated with most conflict characteristics, with conflict intensity, duration, and the post-Cold War era being significant in both. The provision of troop support is only correlated to the type of conflict, while troop presence is correlated to conflict duration. Access to infrastructure is not correlated to any conflict characteristics and the provision of materiel and statistics, training and expertise, funding, and access to territory are only correlated to one or two conflict characteristics.

All models were tested against standard regression assumptions to ensure validity and reliability. UCDP data was deemed appropriate for addressing the research questions, as it comprehensively captures AC and ES characteristics, although empirical datasets rarely meet all theoretical criteria perfectly (Gelman and Hill (2006)). Table 1 confirmed the functionality of the dependent variables. Multicollinearity was assessed in RE models using VIFs, with all values below 5, indicating no significant collinearity issues (O'Brien (2007)). As most predictors were categorical, the linearity assumption did not apply. For the sole continuous variable, cumulative duration, linearity was assessed where possible (RE models). The assumption of independent errors was violated due to repeated observations per conflict and dyad. Homoscedasticity and residual normality were not applicable to logistic models. The binary nature of the dependent variable confirmed the appropriateness of logistic regression for the analysis.

Discussion

The findings of this study align with existing literature on conflict dynamics and external interventions. Over time, the number of wars has slightly increased, indicating a shift towards more intense conflicts, while conflict duration has increased, suggesting that many conflicts persist rather than being resolved. These trends are consistent with research highlighting the protracted nature of modern ACs (Quinn et al. (2007)). The nature of ES has also evolved. While troop support has declined, the total number of external interventions continues to rise (Figure 4), demonstrating a persistent strategic interest in shaping conflict trajectories through both direct and indirect means (Davies et al. (2024); Chang and Sellak (2022)). Recent years have seen a shift toward multilateral coalitions and collaborative interventions (Appendix 5), with nearly one-third of all support instances involving such coalitions, reflecting a greater emphasis on burden-sharing and legitimacy (Meier et al. (2023)).

The findings from the regression analysis suggest that while structural conflict factors are correlated to the provision of ES, temporal and contextual elements play a decisive role within individual conflicts. This aligns with existing literature on the provision of ES, which emphasises the importance of conflict characteristics in shaping external intervention strategies (Berlin and Malone (2023); Davies et al. (2024)). While the models examining HG1 show no statistically significant results, regression analyses for individual forms of support reveal distinct patterns in the relationship between conflict characteristics and the provision of ES, with notable differences between the RE and FE models.

RE models show that the provision of indirect support is more correlated to conflict characteristics than direct support, with intelligence provision being the most sensitive to these factors. This finding aligns with existing literature suggesting that indirect forms of support are often more prevalent in contemporary conflicts (Meier et al. (2023); Berlin and Malone (2023)). Especially the provision of intelligence is strongly correlated with conflict characteristics, suggesting that external actors tailor intelligence support to specific conflict dynamics rather than adopting a one-size-fits-all approach. While no trends could be discovered in the provision of direct forms of support and the correlation to different conflict characteristics of troop presence and troop support might seem counter intuitive at first, it could indicate an escalation in the provision of ES with the former being a precondition for the latter. Conflict intensity (RE), and the post-Cold war era, as well as conflict duration (FE) might be first incentives for external supporters to provide more direct support but once troops are already present, the type of conflict might then become a more important factor in the decision to provide troop support. Therefore, HG1 cannot be completely rejected

but the results rather indicate that the provision of ES is not only correlated to conflict characteristics but that it may further be dependent on the form of support provided.

For HG2, which explores whether conflict characteristics influence the type of ES provided, results reveal that conflict intensity (H2a) is significantly correlated to the provision of weapons, materiel and statistics, funding, and intelligence in both FE and RE models. This aligns with the argument that higher-intensity conflicts are more likely to receive ES due to concerns about spillover effects and escalation (Cunningham (2010); Gregory (2000)). However, intensity does not appear to significantly impact the provision of troop support, suggesting that external actors may not relate the intensity of a conflict to increased levels of direct support.

Besides intensity, the provision of access to infrastructure, weapons, materiel and statistics, training and expertise, funding, and access to territory show consistent correlations with conflict duration (H2c), the type of conflict (H2d), and whether a conflict is taking place after 9/11 (H2e) or after the Cold War (H2f) in the RE models. Particularly internationalised intrastate conflicts are strongly correlated with the provision of ES. Within a conflict, conflict intensity, duration, and the post-Cold War era seem to be more correlated with the provision of indirect ES. These findings are consistent with prior research suggesting that the Cold War significantly shaped patterns of external intervention. During this period, superpowers engaged in proxy conflicts, fueling insurgencies and prolonging wars, whereas the post-Cold War era saw a shift towards more selective and strategic forms of ES (Testerman (2015); Kalyvas and Balcells (2010) in Roberts (2019)). The significance of the periods after the Cold War and 9/11, and conflict intensity in both FE and RE models, suggests that broader geopolitical shifts and conflict dynamics may play a crucial role in shaping ES provision, whether within one ongoing or between different conflicts. This divergence highlights the complexity of ES dynamics and suggests that different forms of support may be influenced by different factors.

On the other hand, territorial incompatibility (H2b) is not significantly correlated with the provision of most ES, suggesting that this factor plays a less prominent role in shaping external intervention strategies. The lack of significant correlations between territorial incompatibility with ES provision is surprising, as previous research has highlighted the importance of this factor in shaping conflict dynamics and external interventions (Cunningham (2010); Gregory (2000)). The absence of a significant relationship between cumulative conflict duration and the provision of support further challenges assumptions that protracted conflicts necessarily attract sustained external intervention.

Findings suggest that coalition support (H3) is significantly associated with access to infrastructure, funding, intelligence, and access to territory in the RE model. However, in the FE model, it shows no statistical significance at all. This suggests that coalition dynamics play a more prominent role in shaping the types of ES provided across different conflicts than within individual conflicts.

Model-specific results further illustrate these patterns: troop support is most strongly correlated to the type of conflict, whereas intelligence provision shows broader but less consistent correlations with conflict characteristics. Already presented in Table 3, these models were selected for detailed analysis to explore how different conflict characteristics correlate with the provision of direct versus indirect support. In the RE model (Table 4a), the IRR of foreign troop support is 13.79 units higher for interstate conflicts, and 72.77 units higher for internationalised intrastate conflicts compared to intrastate conflicts, holding all other conflict characteristics constant. Due to issues with collinearity, the category of interstate conflicts was excluded from the FE model (Table 4b), making a comparison impossible. The average IRR of troop support for internationalised intrastate conflicts is 70.27 units higher than for intrastate conflicts, holding all other factors constant. The closeness of coefficients between the RE and FE models suggests that conflict type has roughly the same effect on the provision of troop support, both between and within conflicts. This suggests that the type of conflict could be a significant factor in determining the provision of troop support, with interstate and internationalised intrastate conflicts being more likely to receive this form of support than intrastate conflicts. The significance of especially internationalised intrastate conflicts might be explained by the fact that they are often more complex and involve multiple actors, which creates opportunities for external actors to provide support to one side or another, depending on their interests and objectives.

Table 4a: RE Logistic and PPML Regression Results

	Troop Support (RE PPML)	Intelligence (RE Logit)
(Intercept)	0.014***	0.000***
	[0.008, 0.026]	[0.000, 0.002]
Type (interstate)	13.792***	2.740
	[4.431, 42.930]	[0.077, 97.090]
Type (internationalised intrastate)	72.768***	2.172
	[41.080, 128.897]	[0.835, 5.646]
Num.Obs.	1451	1451
R2 Marg.		0.140
R2 Cond.		0.922
AIC	949.6	922.5
BIC	1002.4	975.3
ICC		0.9
RMSE	0.11	0.23

Table 4b: FE Logistic and PPML Regression Results

	Troop Support (FE PPML)	Intelligence (FE Logit)
Type (internationalised intrastate)	70.265***	1.686
	[19.269, 256.225]	[0.287, 9.925]
Num.Obs.	646	513
R2	0.295	0.361
R2 Adj.	0.091	0.208
R2 Within	0.174	0.190
R2 Within Adj.	0.162	0.168
AIC	1080.1	562.4
BIC	1625.5	795.6
RMSE	0.10	0.38
Std.Errors	by: dyad_id	by: dyad_id
FE: dyad_id	X	X

For intelligence support, both models find that the odds for wars are lower than that for minor ACs to receive this form of aid (odds = 0.44 in RE; 0.33 in FE), holding all other factors constant. Both models further indicate that conflicts occurring after the Cold War are correlated with the provision of intelligence, although the effect is stronger in the FE model (odds = 8.41) than in the RE model (odds = 6.4). The odds of receiving intelligence support increase with each year in conflict duration (by 1.06 in RE and 1.12 in FE models). While the RE model suggests that intelligence provision is correlated to the time period after 9/11 (odds = 8.27) and coalition support (odds = 4.49), holding all other variables constant, these effects do not emerge as statistically significant in the FE model. These results could suggest that external actors tailor intelligence support to specific conflict dynamics and supporting the notion that intelligence-sharing plays a crucial role in modern conflict interventions, allowing external supporters to shape conflict outcomes strategically (Schultz (2010); Bapat (2012); Sawyer et al. (2015)). The findings highlight key theoretical implications for Criminology and conflict studies. The weak correlation between direct support and conflict characteristics suggests that direct military interventions may be driven by factors beyond conflict characteristics alone, such as diplomatic or geopolitical considerations.

The inability to control for regional variation or geographic proximity limits the generalisability of the findings, as well as their interpretation from a criminological perspective. Tobler (1970) law, 'everything is related to everything else, but near things are more related than distant things' suggests that geographic proximity may play a significant role in shaping the dynamics of ES. Not controlling for geographic proximity might thereby ignore important contextual factors that influence the provision of ES. Despite this, the results confirm existing theories that ES provision is influenced by conflict characteristics—particularly intensity and duration—yet also underscore that different forms of support respond to these characteristics in distinct ways. This supports a 'cold logic' interpretation, in which state actors rationally assess the strategic value of conflict before engaging, rather than reacting emotionally. This aligns with prior research suggesting intervention

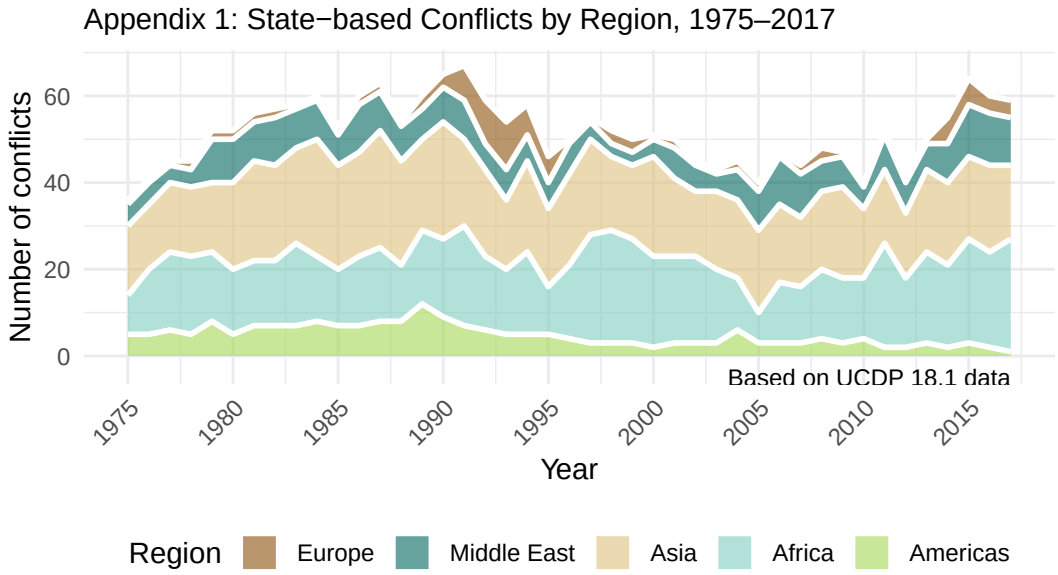
decisions are based on a rational assessment of costs, benefits, and political alignment (Schultz (2010); Bapat (2012); Sawyer et al. (2015)). However, the absence of data on shared cultural ties or geographic proximity prevents assessment of whether certain interventions also follow a 'hot' logic, where emotional or identity-driven factors—such as shared ethnicity or history—play a role. This opens an important avenue for future research that more explicitly incorporates emotional, symbolic, and identity-based motivations.

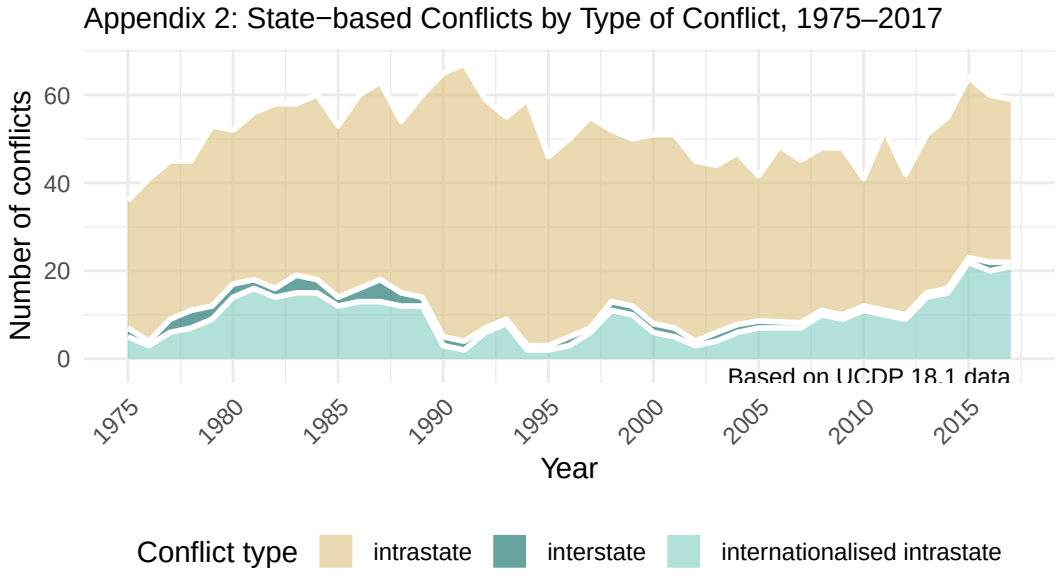
Further limitations arise from the dataset's focus on state-based conflicts, which omits the growing influence of non-state actors and transnational networks in modern conflict. Additionally, provider and recipient characteristics—key to understanding the criminological dynamics of power, ideology, and legitimacy—could not be tested due to data constraints. Reverse causality also poses a risk: rather than resolving conflict, ES may prolong it by altering the incentives for continued violence (Fearon (2004) in Testerman (2015); Lacina (2006)). While model refitting and variable exclusion (i.e., 9/11 in the FE model for foreign troop presence) were necessary to achieve convergence, these changes limit comparability across models. The exclusive use of quantitative methods further restricts insight into the lived experiences and micro-level effects of ES. Future research should therefore enhance this study by incorporating qualitative data and case studies to provide a more comprehensive understanding of the relationship between ES and conflict dynamics.

Conclusion

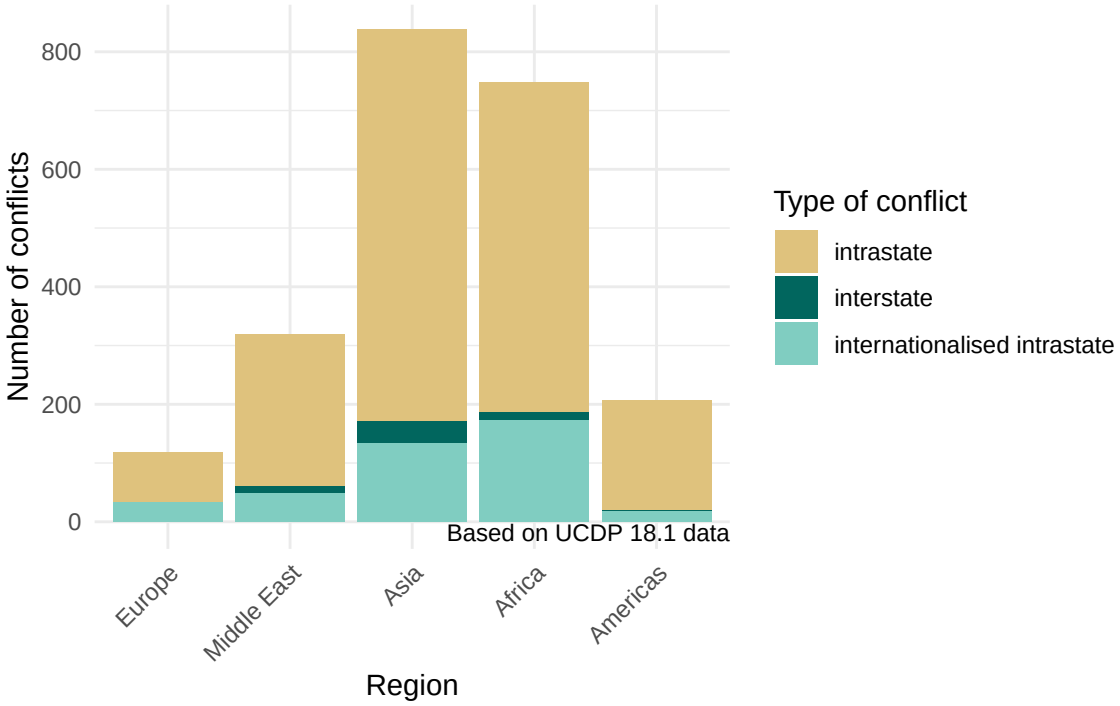
This study set out to examine how characteristics of AC shape the provision of ES, offering new insights into the strategic logic underlying state interventions. Contemporary examples such as Russia's invasion of Ukraine, evidence the limitations of pacifist responses. But while military interventions can at times stabilise volatile regions, they often risk escalating violence or prolonging conflict (Fearon (2004) in Testerman (2015); Lacina (2006); Olson Lounsbery (2016)). The findings show that ES—particularly indirect forms—is significantly influenced by conflict characteristics, suggesting a calculated, 'cold' approach to intervention. Rather than being random or purely humanitarian, ES appears to reflect strategic assessments of conflict dynamics, reinforcing existing literature on the instrumental use of support in warfare (Schultz (2010); Bapat (2012); Sawyer et al. (2015)). Crucially, the type of support provided varies with conflict characteristics, indicating that ES is not a one-size-fits-all strategy. These results have important implications for criminology. If states make informed, strategic decisions to intervene in armed conflicts, they may bear greater responsibility for the violence and crimes that unfold in these contexts. Yet, this dimension of liability and complicity remains underexplored in criminological research. This study offers a starting point for engaging with ES as a site of criminological concern, where questions of accountability, harm, and power intersect. By broadening its focus to include the indirect consequences of state interventions, criminology can contribute to more effective policy responses and a deeper understanding of the global production and regulation of violence.

Appendices

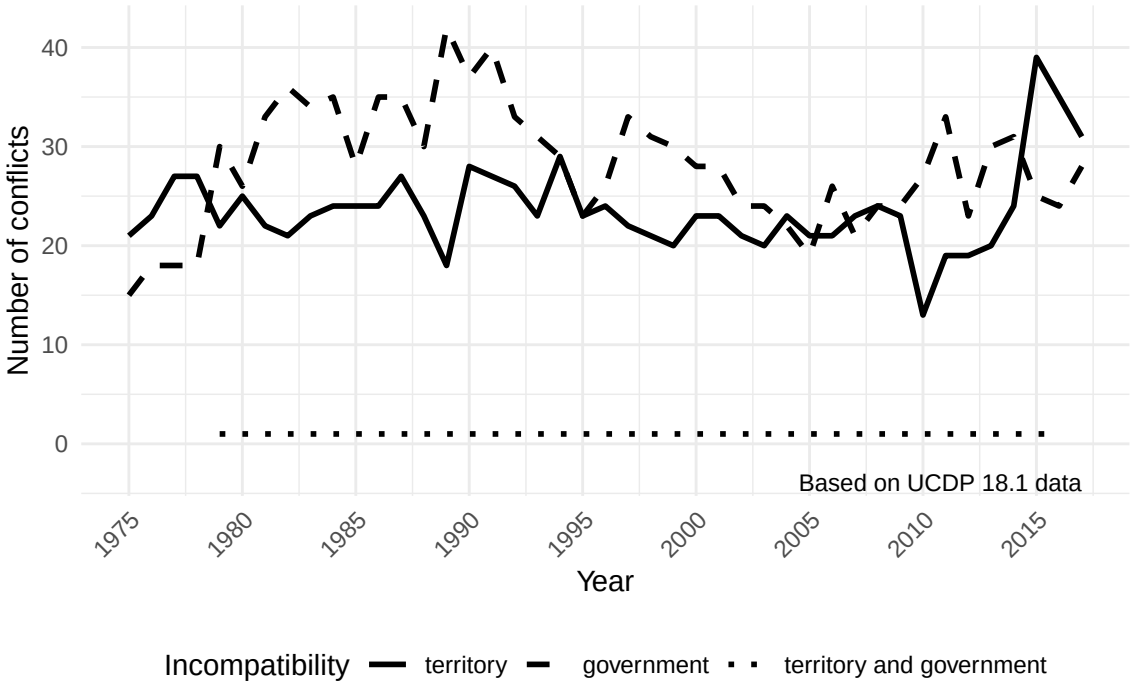

Appendix 1: State−based Conflicts by Region, 1975–2017
Number of conflicts
0
20
40
60
1975
1980
1985
1990
1995
2000
2005
2010
2015
Year
Based on UCDP 18.1 data
Region
Europe
Middle East
Asia
Africa
Americas


Appendix 2: State−based Conflicts by Type of Conflict, 1975–2017
Number of conflicts
0
20
40
60
1975
1980
1985
1990
1995
2000
2005
2010
2015
Year
Based on UCDP 18.1 data
Conflict type
intrastate
interstate
internationalised intrastate

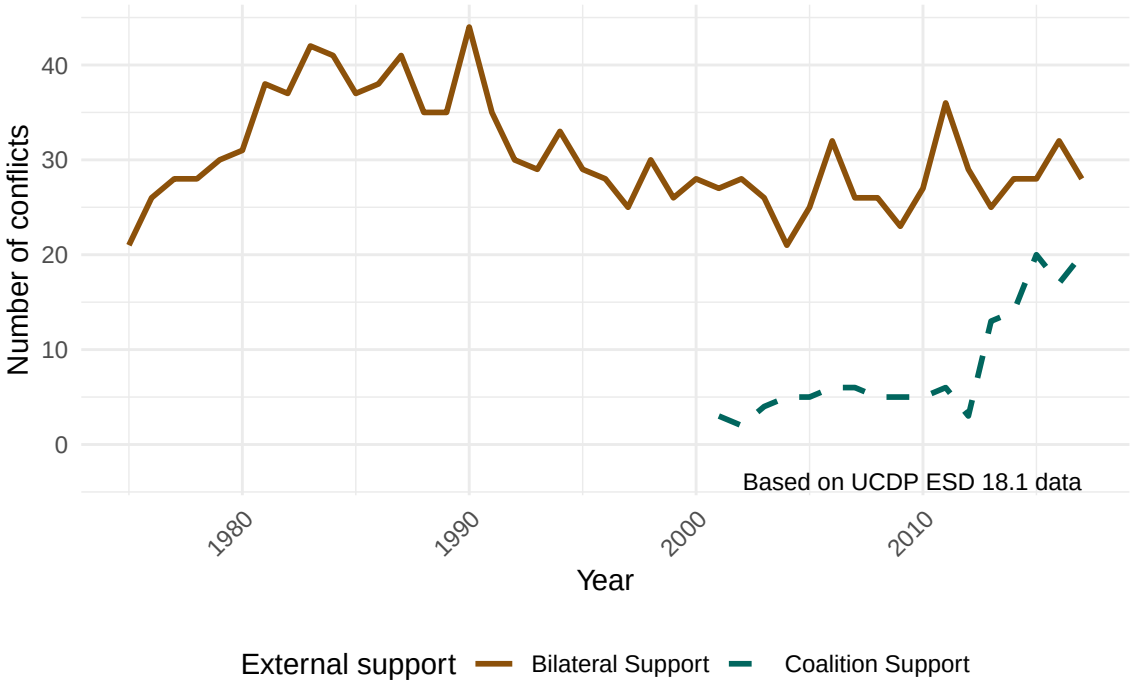
Appendix 3: Conflict Type by Region



Appendix 4: Evolution of State−based Conflicts by Incompatibility, 1975–2017



Appendix 5: Evolution of External Support: Bilateral vs Coalition



Appendix 6: Statistical Significance in the RE Linear Regression models

Independent Variable	Troop Support	Troop Presence	Access to Infrastructure	Weapons	Materiel and Statistics	Training and Expertise	Funding	Intelligence	Access to Territory
Intercept	***	***	***	***	***	***		***	**
Territorial dispute					.			.	
Type of conflict	*** (Interstate); *** (Internationalised intrastate)		** (Internationalised intrastate)	* (Internationalised intrastate)	** (Internationalised intrastate)	* (Interstate); * (Internationalised intrastate)	* (Interstate); * (Internationalised intrastate)		. (Interstate)
Intensity		. (War)		*** (War)	*** (War)		*** (War)	* (War)	
Duration			*			.	.	*	
9/11		* (After)		* (After)		* (After)		*** (After)	
Cold War			*** (After)	*** (After)	* (After)	** (After)	** (After)	** (After)	. (After)
Coalition Support			*** (Coalition)				. (Coalition)	* (Coalition)	** (Coalition)
N	1451	1451	1451	1451	1451	1451	1451	1451	1451
AIC	949.6	326.5	1250.3	1094.5	1210.8	1066.9	1317.5	922.5	1294.9
BIC	1002.4	379.3	1303.1	1147.3	1263.6	1119.7	1370.3	975.3	1347.7

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