



Institute of  
Development Studies

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Development Studies

**Conflict drivers:  
research gaps and data**

# Outline

1. Internal and Global Drivers of Conflict
2. Cross-country literature
3. Limitations of the literature
  - Data issues
  - Econometric concerns
  - Lack of theory
4. New frontier
  - Better articulation between theory of conflict and empirical analyses  
(Ex: Polarisation, Inequalities, Fragmentation)
  - Subnational studies
  - Micro-Level approach  
(Ex: poverty)

# Internal conflict drivers

- Natural resources (see Ross 2004)
- Inequality/Polarisation/Fractionalisation (e.g. Esteban & Ray 2008, 2011, Kanbur 2007, Sen 2008, Stewart et al. 2008)
- Resource scarcity (Homer Dixon, Urdal)
- Poverty/Low GDP per capita/Slow growth (Collier et al, Miguel, Satyanath & Sergenti, Dube & Vargas, Goodhand 2001, Justino 2009)
- Weak states/Inadequate institutions (Fearon & Laitin 2003)

# Global conflict drivers

- Climate change
- Trans-border armed groups and refugees
- Military intervention
- International system (Kayvas and Balcells 2010)
- Trade in arms, drugs and minerals
- Global economic situation and governance (eg. prices fluctuations)

# Methods

- Mainly cross country regressions, but also case studies
- Type of political violence: i.e civil wars, armed conflict...
- Dependent variable: conflict onset, incidence or duration
- Covariates capturing all possible drivers, lagged
- Underlying logic: Greed v Grievances
- Robust findings: GDP per capita, rough terrain, slow growth, large population, political instability, war-prone neighbours, small government militaries (Hegre and Sambanis 2006)

# Greed v grievance: is there a resource curse?

- Availability of natural resources increases probability of war (greed – looting and predation)
- Natural resources increase inequalities, damage environment, breed corruption and bad governance
- What we know (Ross)
  - Oil increases the likelihood of conflict, particularly separatist conflict
  - ‘Lootable’ commodities (gemstones and drugs) lengthen existing conflicts
  - No link between legal agricultural commodities and war (but some evidence on prices)
  - Non-robust association between primary commodities and onset of civil war
- Greed or grievances?

# Flaws of macro literature

Blattman and Miguel (2010):

- Insufficiently grounded in theory
- Limited or inadequate data
- Aggregation problems
- Econometric concerns
- Unable to discriminate between competing theories of conflict



# Theory

- Why fighting rather than negotiating?
- How do groups form?
- How do they achieve cohesion?
- How and why do groups coalesce and split?
- Conflict: competition for resources between groups (e.g. Skaperdas 1992, Esteban & Ray 1999)
- A CSF determines how fighting efforts relate to probability to win
- When embedded in general equilibrium models, actors choose between appropriation and production
- Technology of combat and productivity determine equilibrium levels of conflict and production

# Need for more theory

Rational war occurs if bargaining fails

- Information asymmetries (especially in multi player models, Esteban & Ray 2001, Ray 2009)
- Commitment problems (eg. weak institutions for conflict resolution)
- Indivisibility issues

Relaxing unitary actors assumption (group formation, collective action, alliances, within group interactions)

Non rational causes of war (overconfidence, leadership role)

Empirical literature should draw from theory and inform on theory

# Data issues

- Comparability of certain variables between countries is dubious
- Crudeness: ex institutions
- Aggregation issues:
  - actors are groups (rebels, government) but we only observe results of their interaction at country level.
  - Countries heterogeneous (ex Indonesia and Aceh)

# Econometric concerns

- Plausible endogeneity of all drivers (ex: conflict increases dependency on natural resources; natural resources favour corruption and autocracy etc)
- Yet single-equation methods are used with little attention paid to these interrelations
- To tackle endogeneity, lagging covariates is not enough
- Need to use more structural models with clear exclusion restrictions (simultaneous equations methods as used by Gurr and Moore (1997)) or come up with credible and valid sources of exogeneity in single equation framework

# What could be the new frontier?

- Articulate theory and empirics more closely (empirics based on theory and results inform in return on conflict theory)
- Collect finer data (even at cost of smaller N)
- Quasi-natural experiments (credible identification strategies)
- Subnational studies
- Micro-level studies

# Example: Inequalities, Polarisation and Fractionalisation

- Inter-personal inequalities not a robust predictor of civil wars
- Shifted focus on ethno-linguistic (religious) fragmentation (Easterly and Levine, Alesina, Baqir and Easterly)
- Horizontal inequalities: what matters is inequalities between groups rather than between individuals

All lack theoretical underpinnings linking groups or individuals' behaviours and conflict

# Polarisation

- Polarisation (Duclos, Esteban and Ray 1994)
- Model of conflict (Esteban and Ray 1999) linking polarisation with maximal investment in conflict
- Montalvo and Reynal-Querol (2005): empirical confirmation that polarisation (contrary to fractionalisation) explains conflict
- Esteban and Ray (2008): polarisation maximises conflict intensity, fractionalisation maximises conflict occurrence
- Esteban and Ray (2011): Gini, Herfindhal and Polarisation

# Sub-national studies

1. Geographic patterns within countries (e.g. Buhaug and Rod 2006)
2. Comparability across units (share common national institutions)
3. Easier to unpack/interpret variables such as institutions
4. Easier to identify sources of exogenous variations (history, geography)



# Limitations

1. Match between SES data and conflict data not always feasible (or at high level of aggregation)
2. Which conflict data? (bias)
3. Ecological fallacy
4. External validity

# Micro-level approach

- Not suited for uncovering conflict drivers per se  
Conflict is the result of the interactions between individuals, groups and the environment
- But useful at informing building blocks of the theory
- Example: poverty and conflict (how rebel groups overcome free-riding):
  - By studying motivations for enlisting in armed groups, we discovered importance of socio-emotional factors (vengeance, empowerment), influence of coercion (children) and costs of non participation (on top of selective incentives)
  - Vital knowledge since collective action is a main theoretical issue in modelling conflict

# Micro-level approach: Riots in India

- Several competing theories: political mobilisation, resource scarcity, polarisation, unequal growth etc
- Difficult to disentangle econometrically
- Theories have different views on nature of violence (spontaneous v planned, selective v random), its instrumental role, consequences on and agency of individuals
- Survey of 1100 households in urban Maharashtra (of whom 13% were affected by riots)
- Give clues as to who is victimised (individual characteristics, neighbourhood characteristics), what are the welfare impact

# Violent conflict and household behaviour

- Interactions between armed groups, the state and civilians
- Individuals have agency, they make choices given their environment (production, safety)
- Armed groups influence local governance (rather than state failure) which in turn impact on the individuals
- The result of this interaction shapes the conflict (i.e. when armed groups become entrenched in local economic, social and institutional spheres)
- Missing link in economics conflict literature