

Conflict

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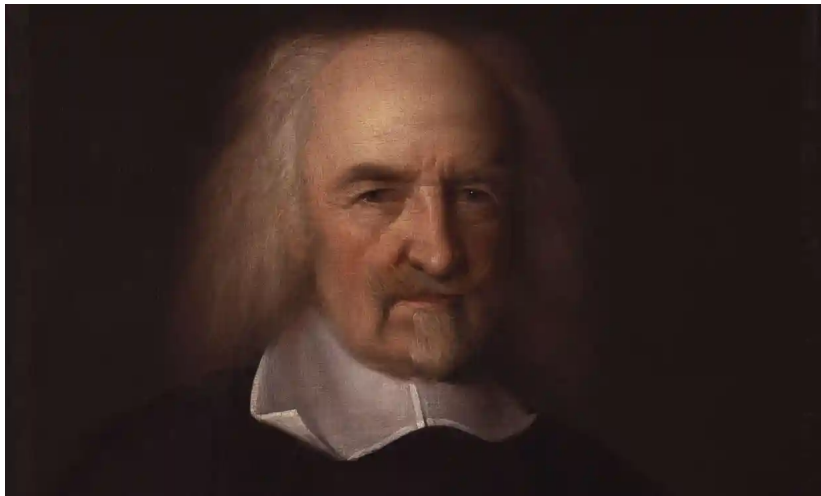
Introduction

- I will focus my lecture on causes of conflict in economic history.
- This is my half of an in-progress handbook chapter that reviews the literature on the economics of conflict in history. I will focus on:
 - Causes in the cross section.
 - Causes in the panel.
 - Future directions.
- I have not included a bibliography in these slides: it is long, so I will send it to Cecilia so that she can upload it on Moodle.

- 1 Introduction
- 2 Causes of Conflict in Economic History

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 - Causes in the Cross Section
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 - Future Directions

Overview



Source: www.theguardian.com

- Hobbes (1651) wrote that there are “three principall causes of quarrel. First, Competition; Secondly, Diffidence; Thirdly, Glory.”
- These map reasonably well into conventional models of conflict, e.g. contest models, war of attrition games, and “Colonel Blotto” games (Kimbrough, Laughren and Sheremeta 2020).
- These incorporate several common elements: a valuable prize, probabilities of victory that depend on resources expended, alternative uses of resources devoted to violence, costs of coordination...
- Theories like these guide empirical work on conflict, as do more recent contributions, such as work by Caselli, Morelli and Rohner (2015) linking the probability of war to the location of resources relative to the border, Dal Bó and Dal Bó (2011) on the effects of exogenous changes in the prices of labor-intensive and capital-intensive goods.
- I will focus (mostly) on empirical work in economics that looks at the “causes” of historical conflict, even if not all work I discuss convincingly establishes causation.
- I will divide these causes mostly into slowly changing variables that are used in cross-sectional analyses of conflict, and those that stand out for being time-varying, and so have been examined largely in panel data.

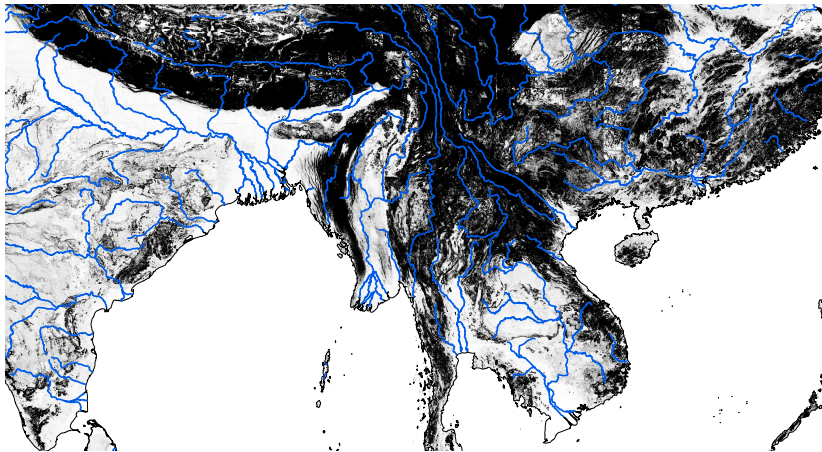
Biology



Source: www.bbc.co.uk

- War is old. It originated independently in many locations, no later than 7500 BC in Jericho (Cioffi-Revilla 1996). Intergroup conflict likely predates agriculture (Glowacki, Wilson and Wrangham 2020).
- Indeed, it predates humans. There is a literature that models conflict among e.g. cichlid fish and ants (Rusch and Gavrilets 2020), and non-human primates often live in “troops” that clash violently (Glowacki, Wilson and Wrangham 2020).
- Humans and chimpanzees may have diverged less than 6.3 million years ago (Patterson et al. 2006); both Pinker (2011) and Morris (2014) thus devote several pages to the neuroscience of violence, e.g. the “fear” and “rage” circuits between the periaqueductal gray, hypothalamus, and amygdala.
- Psychological theories of conflict stress traits like social dominance orientation and parochial altruism (Böhm, Rusch and Baron 2020).
- While these may have a neurological basis, many popular views are oversimplified; testosterone, for example, only increases aggression if aggression is rewarded with status (Sapolsky 2018).
- But: even if warfare involves “evolved” traits, these can reflect cultural, rather than genetic group selection (Glowacki, Wilson and Wrangham 2020).

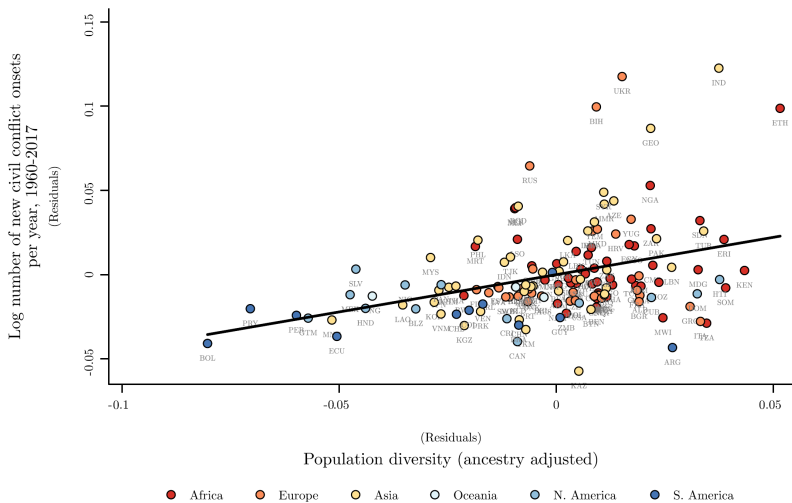
Geography



Source: James made this with data from Nunn and Puga (2011) and Natural Earth Data.

- Studies on the correlates of war since 1945 find conflict is correlated with ruggedness, hinterlands, and certain resources (e.g. Collier and Hoeffler 1998, 2004; Fearon and Laitin 2003).
- One branch of the historical literature contrasts united China and fragmented Europe (Dincecco and Wang 2018; Ko, Koyama and Sng 2018; Fernández-Villaverde et al. 2020).
- Another connects China's vastness to its ineffective responses to nineteenth century imperialism (Koyama, Moriguchi and Sng 2018).
- In Africa, more rugged countries better escaped the violence of the slave trade (Nunn and Puga 2012). Political scientists (Herbst 2014; Reid 2012) argue low population densities led to raiding wars that left scope for future conflict.
- A theme unexplored by economists is the relationship between the environment, horses, war, and the state (Goody 1969; Webb, 1995).
- Geography shapes conflict by constraining the reach of the state: Centeno (2002) notes that Latin America's frontiers are often far from population and hostile to military logistics. In the middle east and southeast Asia, states in riverine lowlands have fought stateless peoples on their fringes (Scott 2009; 2017).

Diversity



Source: Arbaliti et al (2020, p. 746)

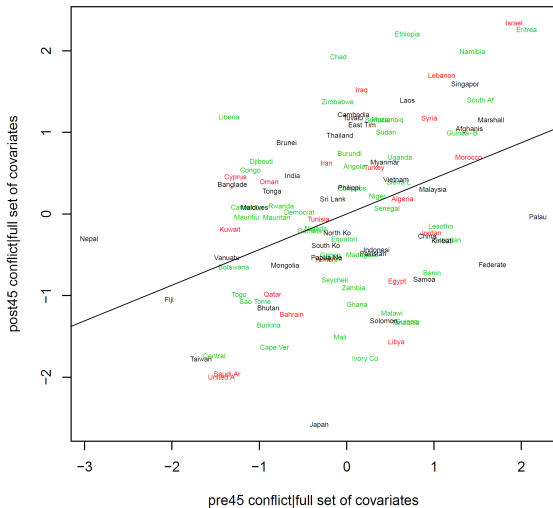
- Since 1945, there has been more conflict within more fractionalized or polarized societies (e.g. Bazzi and Gudgeon 2021; Esteban, Mayoral and Ray 2012).
- Theory: ethnic markers made it hard to pass as a member of the side that wins; similar and dissimilar preferences shape contests over public and private goods differently (e.g. Caselli and Coleman 2013; Esteban and Ray 2011).
- Some of these patterns have been shown in the past:
 - Genetic distance reduced conflict, 1816 to 1900 (Spolaore and Wacziarg 2016).
 - Genetic diversity increased conflict, 1400 and 1799 (Arbalti et al. 2020)
 - Birthplace polarization in papal conclaves increased conflict (Pino and Vidal-Robert 2020).
 - Rainfall shocks in mandate Palestine that increased inequality led to more Arab attacks on Jews (Panza and Swee 2020).
- Further, fractionalization and polarization are often products of history (e.g. Michalopoulos and Papaioannou 2016; Whatley and Gillezeau 2011)
- For later work: what happens as the level of aggregation changes (Montalvo and Reynal-Querol 2021)?

Culture



- Popular narratives often link culture to conflict, e.g. Pinker (2011)'s view that the “feminization” of the west helps explain the decline of violence – less violent policy preferences, movement away from a culture of manly honor...
- ... a narrative that seems to hold in cross-country correlations since 1945 (e.g. Caprioli 2000; Caprioli and Boyer 2001) and is consistent with the relationship Grosjean (2014) finds between a history of Scots-Irish settlement and homicide.
- Yet: Dube and Harish (2020) have shown in a difference-in-difference framework that European states ruled by queens between 1400 and 1900 engaged in more conflict.
- Many economic studies of religious conflicts stress strategic motives rather than highlighting any direct role of religion – examples include fighting between Catholics and Protestants (Iyigun 2008), temple desecrations (Ticku, Shrivastava and Iyer 2018), and pogroms (Becker and Pascali 2019).
- But: there are studies arguing culture matters directly, e.g. stressing how Confucianism shaped responses to crop failures and eclipses (Kung and Ma 2014; Miao, Ponticelli and Shao 2020).

Persistence



Source: Fearon and Laitin (2014, p. 43)

- Regions (basically, continents) that experienced more conflict before 1914 have had less conflict since 1945, while conditioning on region fixed effects reveals instead a pattern of persistence (Fearon and Laitin 2014).
- Anti-persistence is often driven by state capacity (Morris 2014).
 - Within India, regions that experienced more conflict before 1757 have been more peaceful since 1947 (Dincecco et al. 2020).
 - The legacy of Stalinist repression for anti-Soviet resistance in Ukraine has flipped sign based on the credibility of retribution from Moscow (Rozenas and Zhukov 2019).
- Persistence, instead, often works through beliefs, identities, and development.
 - Black death pogroms in Germany solidified anti-Semitic attitudes that were reinforced by e.g. passion plays (Voigtländer and Voth 2012).
 - Within Africa, conflict persistence may be driven by mistrust, ethnic identities, and development failure (Besley and Reynal-Querol 2014).
 - Both the transatlantic slave trade (e.g. Inikori 1977; Whatley 2018) and the violence of colonialism (e.g. Verghese 2016; Garcia-Ponce and Wantchekon 2017) have failed to produce anti-persistence.

Negative Economic Shocks



Source: Isaacs (1836, p. 57)

- Theory: the opportunity cost channel in Dal Bó and Dal Bó (2011).
- Droughts have been linked to e.g. peasant revolts in China between 1470 and 1900 (Jia 2014), civil unrest in colonial Nigeria (Papaioannou 2016), and insurgency during the Mexican revolution (Dell 2012).
- Cooler temperatures have been linked to e.g. conflict in Europe, 1400-1900 (Iyigun, Nunn and Qian 2017), peasant revolts in 1789 France (Waldinger 2020) and French social conflicts (Chambru 2019).
- While economists focus on panel data, others (e.g. Xiao et al. 2015; Zhang et al. 2006; Zhang et al. 2007) examine time-series data, often for China.
- Is this mono-causal? No. Consider the literature on the *mfecane*.
- Is the underlying data poor? Yes. Studies should account for this.
- Another branch of this literature has looked at plague outbreaks, and in particular their influence on anti-Jewish pogroms (e.g. Jedwab, Johnson and Koyama 2019).
- Yet another has looked at changes in the status or opportunities of specific social groups, e.g. threshers (Caprettini and Voth 2020), or those for whom the Chinese civil service exam had been a path to upward mobility (Bai and Jia 2016).

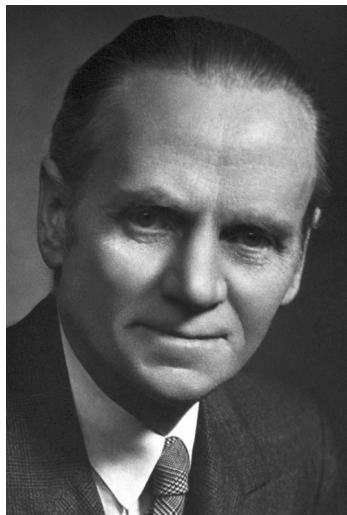
Positive Economic Shocks



Source: www.allrecipes.com

- Theory: the “rapacity” channel in Dal Bó and Dal Bó (2011).
- Frankema, Williamson and Woltjer (2018) link rising West African terms of trade to the “Scramble” for Africa.
- One branch of the literature looks at the effect of the Columbian exchange, in Asia (Dincecco, Fenske and Menon 2020), Africa (Cherniwchan and Moreno-Cruz 2019), and China (Chen and Kung 2016). Scott (2009) emphasizes the role of “escape crops.”
- There is now a literature on what moderates both positive and negative shocks:
 - New crops mitigate weather shocks (Jia 2014; Iyigun, Nunn and Qian 2017; Papaioannou and de Haas 2017).
 - Pogroms responded most to weather shocks and the Black Death with weak states (Anderson, Johnson and Koyama 2017; Finley and Koyama 2018; Grosfeld, Sakalli and Zhuravskaya 2020) .
 - Culture shapes the role of earthquakes (contrast Bai 2021 with Belloc, Drago and Galbiati 2016).

Trade



Source: www.nobelprize.org

- Norman Angell's (1910) "The Great Illusion" claimed economic interdependence would make conflict unlikely. It was praised ... until 1914.
- Several empirical studies have looked at the era since 1945, finding that interdependence reduces conflict (Gartzke, Li and Boehmer, 2001; Jackson and Nei, 2015; Polachek, 1980), particularly among democracies (Gelpi and Grieco, 2008).
- But: theories and historical interpretations differ – e.g. Pinker (2011) vs. Bariberi (2002).
- Theory can be subtle; e.g. Martin, Mayer and Thoenig (2008) show that greater multilateral openness can increase war by reducing a country's dependence on any one trade partner.
- Empirical evidence from history?
 - Harrison and Wolf (2012): since 1870, openness has correlated negatively with the frequency of war, once the growing number of countries in the world is accounted for.
 - Ahsan, Panza and Song (2020): market integration between Europe and the New World, 1640 and 1896, predicts less conflict in Europe.
- Within South Asia, Jha (2013, 2014) links a history of inter-ethnic complementarities to reduced sectarian conflict today.

Institutions



Source: www.bl.uk

- Theory and evidence both focus on state capacity; e.g. in the Besley and Persson (2010) model, there is no risk of conflict in common interest states. In redistributive states, high fiscal capacity relative to wages creates a prize to fight over.
- States in Europe made war (Tilly 1975, 2018) ...
 - Hoffman (2015): England from 1688-1770 spent 48% of government revenue on the military in the median year; for France from 1600 to 1688 this number is 73%, and for Prussia from 1688-1789 it is 90%.
- ... but then they made peace:
 - For Findlay and O'Rourke (2007), hegemons, be they Mercian, Mongol, or British, have imposed the order needed to sustain trade.
 - A dense network of dynastic marriages reduced the frequency of war in Europe (Benzell and Cooke 2018).
 - Depetris-Chauvin (2016) has shown a negative correlation between a history of exposure to state institutions and contemporary civil conflict within Sub-Saharan Africa.
 - A period of relative peace in China between the 1680s and 1780s coincided with rising Qing silver reserves (Ma 2013).
- But states are tools: during the Rwandan genocide and Nazi rule, state capacity that normally suppressed violence was used to mobilize it (Heldring 2020; 2021).

Military Technology



Source: From the auction description, "The photographer is F. A. Wendell of Livermore Falls, Maine. Possibly unpublished but certainly rare and historic."

- Theory? In standard models of conflict, these will change the costs of conflict, the probabilities of victory, and the destructiveness of violence.
- Chassang and Padró i Miquel (2010): with incomplete information, accumulation of weapons can increase the incentive for pre-emption.
- Giving military technology a causal role is standard in military history, e.g. Parker's (1988) description of Europe's "military revolution" based on gunpowder weapons and fortifications.
- There are fewer examples from economic historians:
 - Turchin et al. (2013) simulate a model in which military technologies such as chariots, mounted archers, heavy cavalry, and stirrups shape the probability that a successful attack is decisive. Adding the diffusion of military technologies across societies increases the model's power to explain the variance in the presence of large-scale societies in the Old World from 16% to 60%.
 - Using data from 13 great powers since 1600, Onorato, Scheve and Stasavage (2014) show that armies grew larger once the railway made it possible to deploy and support them, and then shrank once technologies like the gyroscope, radar, laser, and satellite made it possible to deliver explosive force over great distances.

Future Directions



Source: Qureshi (1958)

- A small and recent literature has brought individuals back into the picture. Individual leaders matter:
 - More competent European rulers acquired more territory (Ottinger and Voigtländer 2021).
 - Zeng Guofan's personal network was instrumental in mobilizing the army that suppressed the Taiping Rebellion (Bai, Jia and Yang 2021).
- The experiences of combatants also matter:
 - During South Asia's partition, districts whose veterans had gained more experience in combat during the Second World War experienced more ethnic cleansing (Jha and Wilkinson 2012).
 - Men exposed to greater New Deal spending were more likely to enlist during the Second World War, and to win medals (Caprettini and Voth 2020).
- Dysfunctional violence can still matter, even if it is irrational:
 - The writings of individual soldiers often reveal an enjoyment of face-to-face killing (Bourke 1999).
 - In his account of the First World War, Ferguson (1998) states that "men fought because they did not mind fighting" – morale came from the ordinary comforts of "warm clothing, habitable billets, food, alcohol, tobacco, rest, leisure, sex, and leave."