Economic development and instability

Week 2 of POLS3033 Environment, Human Security and Conflict

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Today's question

How does **money** affect state, non-state, and individual decisions?

Today's puzzle

Grievances are everywhere but conflict is rare.

Evidence suggests that grievances lead to **action** due to opportunistic actors who have the resources or realistic chance at success.

Greed is ubiquitous as well.

Greed is also enabled by opportunistic actors in areas with weak institutions, parallel sources of power, or high stakes.

I. Conflict, redux

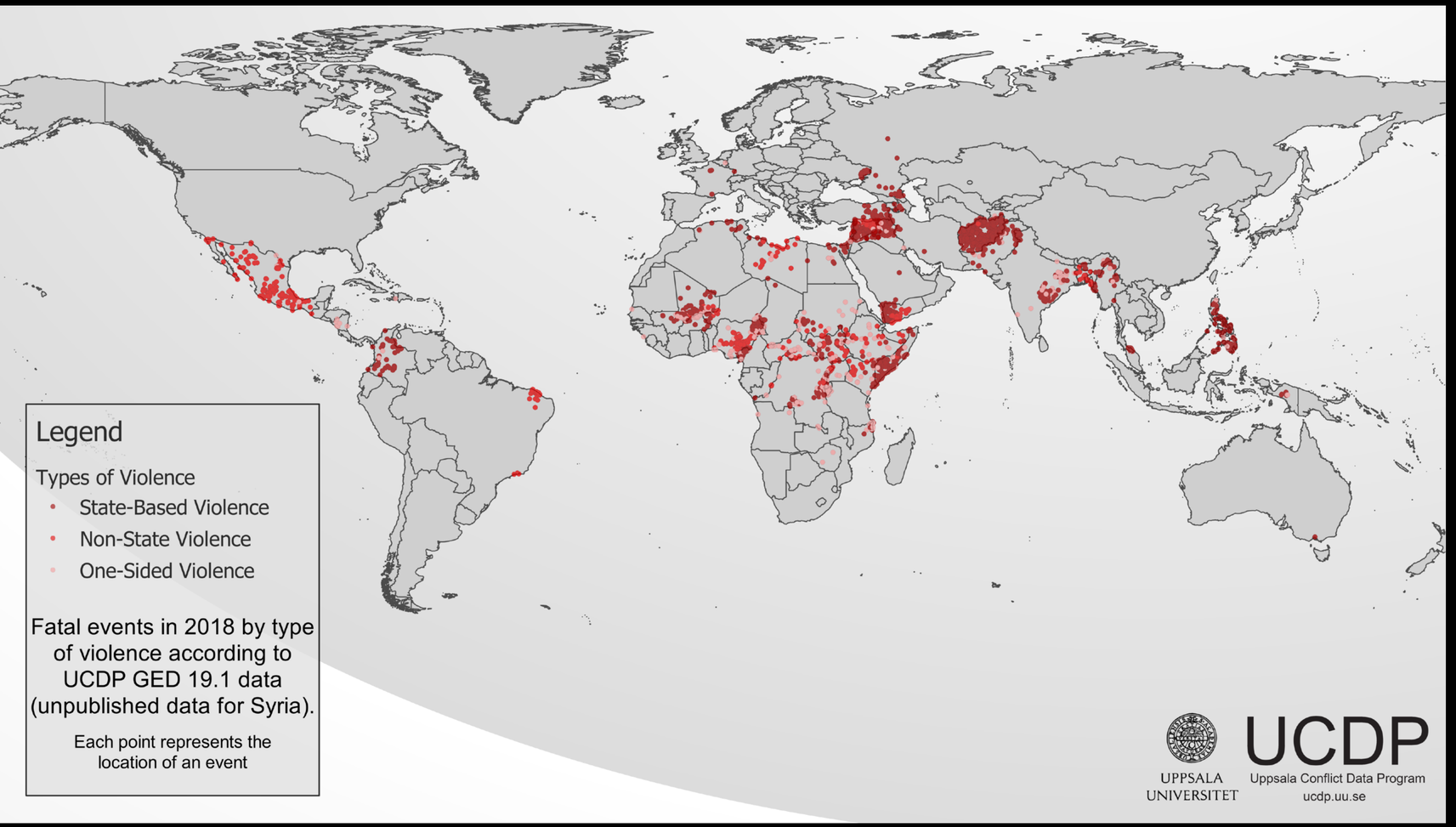
Francisco Goya. 1814. *The Third of May 1808*. Prado Museum

Google Books Ngram Viewer

Graph these comma-separated phrases: civil conflict,interstate conflict case-insensitive

between 1800 and 2008 from the corpus English (2009) with smoothing of 3. Search lots of books

(click on line/label for focus)


Legend
Types of Violence
State-Based Violence
Non-State Violence
One-Sided Violence
Fatal events in 2018 by type of violence according to UCDP GED 19.1 data (unpublished data for Syria).
Each point represents the location of an event
UPPSALA UNIVERSITET
UCDP
Uppsala Conflict Data Program
ucdp.uu.se

Journal of Economic Literature 2010, 48:1, 3–57
http:www.aeaweb.org/articles.php?doi=10.1257/jel.48.1.3

Civil War

Christopher Blattman and Edward Miguel*

Most nations have experienced an internal armed conflict since 1960. Yet while civil war is central to many nations' development, it has stood at the periphery of economics research and teaching. The past decade has witnessed a long overdue explosion of research into war's causes and consequences. We summarize progress, identify weaknesses, and chart a path forward. Why war? Existing theory is provocative but incomplete, omitting advances in behavioral economics and making little progress in key areas, like why armed groups form and cohere, or how more than two armed sides compete. Empirical work finds that low per capita incomes and slow economic growth are both robustly linked to civil war. Yet there is little consensus on the most effective policies to avert conflicts or promote postwar recovery. Cross-country analysis of war will benefit from more attention to causal identification and stronger links to theory. We argue that micro-level analysis and case studies are also crucial to decipher war's causes, conduct, and consequences. We bring a growth theoretic approach to the study of conflict consequences to highlight areas for research, most of all the study of war's impact on institutions. We conclude with a plea for new and better data. (*JEL* D72, D74, O17)

1. *Civil War and the Study of Economics*

Internal civil conflict has been commonplace during the past half-century, a fact that, until recently, escaped the notice of most economists. Civil *wars*, or those internal conflicts that count more than 1,000 battle deaths in a single year, have afflicted a third of all nations. Counting civil *conflicts*, or those that count at least twenty-five battle deaths per annum, increases the incidence to more than

* Blattman: Yale University. Miguel: University of California, Berkeley and NBER. We thank Ana Arjona, Karen Ballentine, Bob Bates, Tim Besley, David Card, Ernesto Dal Bó, Jesse Driscoll, Bill Easterly, Jim Fearon, Karen Ferree, Mary Kay Gugerty, Anke Hoeffler, Patricia Justino, Stathis Kalyvas, David Leonard, Jason Lyall, Andrew Mack, Daniel Maliniak, Gerard Padro-i-Miquel, Torsten Persson, Dan Posner, Robert Powell, Vijaya Ramachandran, Debraj Ray, Marta Reynal-Querol, Gérard Roland, Shanker Satyanath, Jacob Shapiro, Ryan Sheely, Stergios Skaperdas, Abbey Steele, Julia Strauss, Dennis de Tray, Philip Verwimp, Barbara Walter, Jeremy Weinstein, our anonymous referees and the editor, Roger Gordon, for comments and discussion. We are deeply grateful to our coauthors on related research: Jeannie Annan, Samuel Bazzi, Bernd Beber, John Bellows, Khristopher Carlson, John Dykema, Rachel Glennerster, Dyan Mazurana, Gerard Roland, Sebastian Saiegh, Shanker Satyanath, and Ernest Sergenti. Camille Pannu, Abbey Steele, and Melanie Wasserman provided superb research assistance.

Blattman & Miguel's (2010) limitations

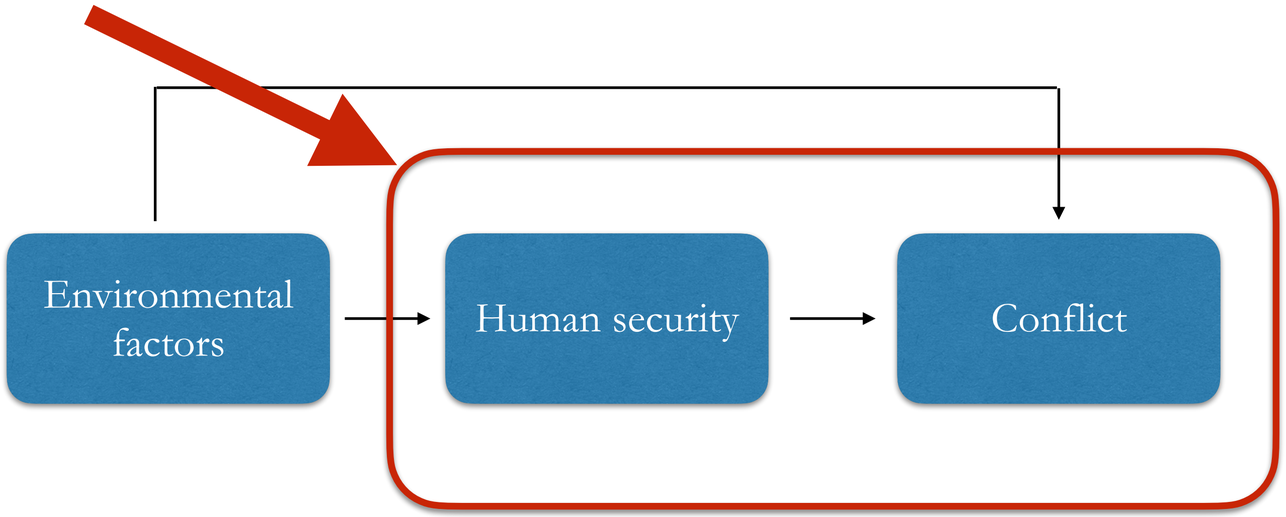
They may be right, but finding good **proxies** for almost anything in social science is difficult.

Idiosyncratic causes can be important. Chance can make detecting patterns impossible (Gartzke 1999).

Leaders make **mistakes** and overestimate chance of winning or have short shadow of the future.

One interesting point Blattman & Miguel (2010: 18) do make is that "the economic motivations for conflict are better theorized than psychological or sociological factors."

Today



The greed vs. grievance debate

Greed—economic factors motivate actors

- Seizing lootable natural resources
- Control of distribution of government assets
- Separating to control areas of relative wealth
- Benefits from ongoing fighting may prolong war.

Grievance—dissatisfaction with current power distribution or leadership

Grievances of a particular subgroup or individuals over their economic or political circumstances

On economic causes of civil war

By Paul Collier* and Anke Hoeffler†

* Centre for the Study of African Economies, St Antony's College, Oxford University, and World Bank
† Centre for the Study of African Economies, 21 Winchester Road, Oxford OX2 6NA and Balliol College, Oxford University; e-mail: anke.hoeffler@balliol.oxford.ac.uk

We investigate whether civil wars have economic causes. The model is based on utility theory, rebels will conduct a civil war if the perceived benefits outweigh the costs of rebellion. Using probit and tobit models the propositions are tested empirically. Four variables, initial income, ethno-linguistic fractionalisation, the amount of natural resources, and initial population size are significant and strong determinants of the duration and the probability of civil wars. One important finding is that the relationship between civil wars and ethnic diversity is non-monotonic; highly fractionalised societies have no greater risk of experiencing a civil war than homogenous ones.

1. Introduction

This paper investigates whether civil wars have economic causes. Explanations of particular civil wars often invoke such causes. For example, the war in Rwanda has been attributed to pressure on land, while that in Angola has been interpreted as a contest for natural resources. The subject has not, to our knowledge previously been investigated. A related study by Bennett and Stam (1996) investigates the duration of international wars in terms of political and military variables. We utilise a comprehensive data set of civil wars (Singer and Small, 1982, 1994) and attempt to explain why they occurred in terms of underlying economic variables. Section 2 discusses the variables used in the analysis, basing them on a simple analytic framework. Section 3 presents the results, and Section 4 concludes.

C & H's (1998) main argument

Considered one of the first (and most influential) statements of the **rational model** of civil conflict

Main point: civil wars have economic causes.

Grievances are universal but wars are not.

Wars break out when **benefits exceed the costs**.

Costs of conflict

There are **opportunity costs** for fighting instead of working a job.

Warfare disrupts **economic activity**.

Wealthier countries, therefore, have more to lose because they have more economic activity.

Longer conflicts, then, are more costly.

Benefits of conflict

Incentives for rebellion are contingent on the **probability of victory**.

The **rewards** of winning are, in part, determined by how much money the government brings in (and then reallocates)—the **tax base**, in other words.

The tax base also determines how strong the **state** is when fighting potential rebels.

Rebel utility can be specified as

$$U_w = \int_{t=D}^{\infty} \frac{p(T) \cdot G(T,P)}{(1+r)^t} dt - \int_{t=0}^{t=D} \frac{(f(Y)+C}{(1+r)^t} dt \qquad (1)$$

where p = the probability of rebel victory, T = the taxable capacity of the economy, G = gain conditional upon victory, P = the size of the population, D = expected duration of warfare, Y = *per capita* income , C = coordination costs, and r = the discount rate.

Collier & Hoeffler (1998: 565)

Benefit

Cost

Rebel utility can be specified as

$$U_w = \int_{t=D}^{\infty} \frac{p(T) \cdot G(T,P)}{(1+r)^t} dt - \int_{t=0}^{t=D} \frac{(f(Y)+C}{(1+r)^t} dt \qquad (1)$$

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Collier & Hoeffler (1998: 565)

Proxies for benefits

Probability of winning shaped by taxable capacity (T):

Per capita income, which shapes government military expenditure

Natural resource endowment—% primary commodities in GDP

Gains conditional upon victory

Size of population (P)

Per capita income as a reward to distribute (and keep)

Proxies for costs

Transaction costs of coordinating

Cultural distinctness—ethnolinguistic fractionalisation

Size—population (P)

Opportunity costs of fighting

Per capita income

Critiques of Collier & Hoeffler (1998)

Too quickly dismisses **grievances**

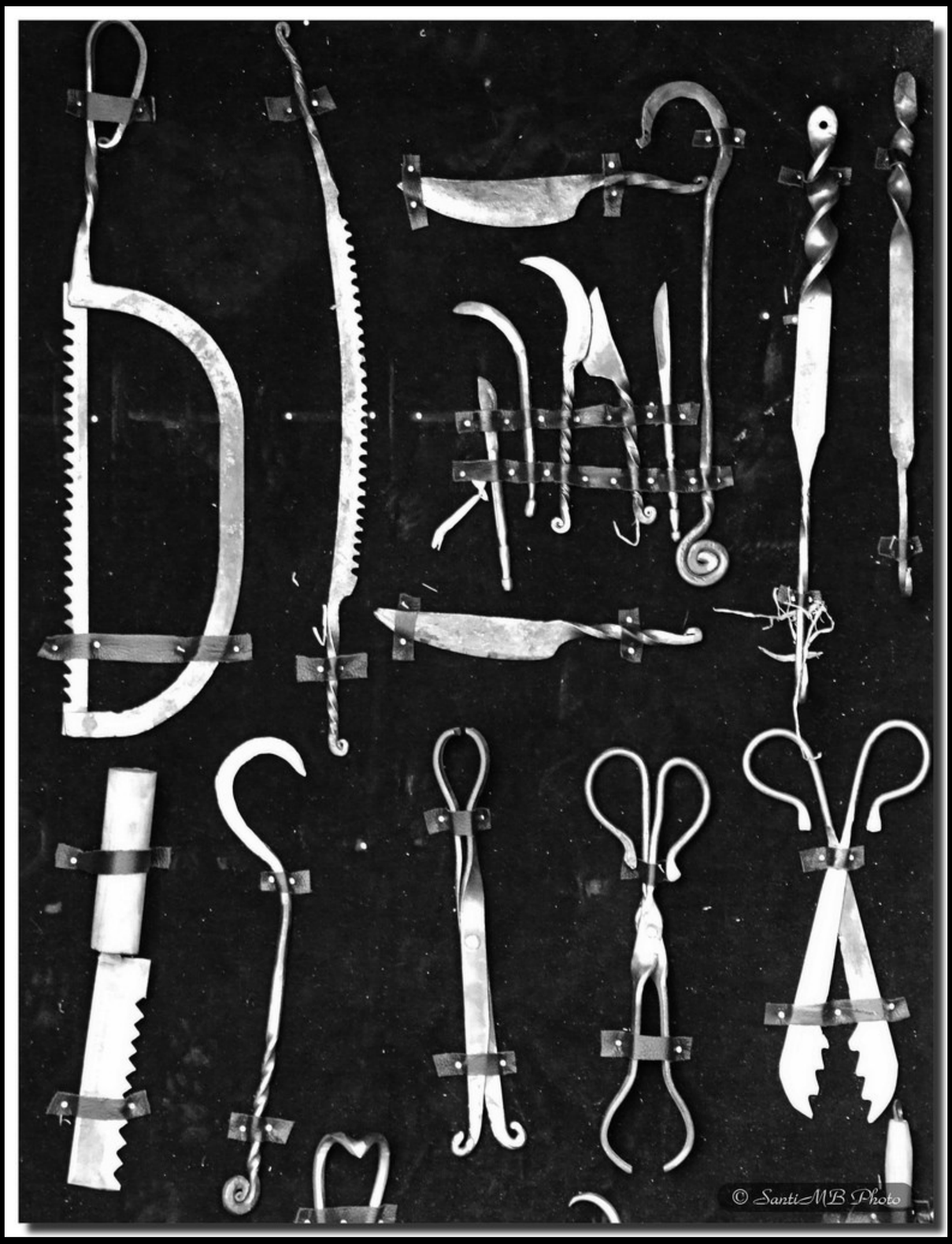
Cross-sectional model

Very different interpretation of **per capita income** than Fearon & Laitin (2003).

Multiple theoretical uses of per capita income and **population**

By **not logging** values models give more weight to extreme values

Links between onset and **duration** unproven

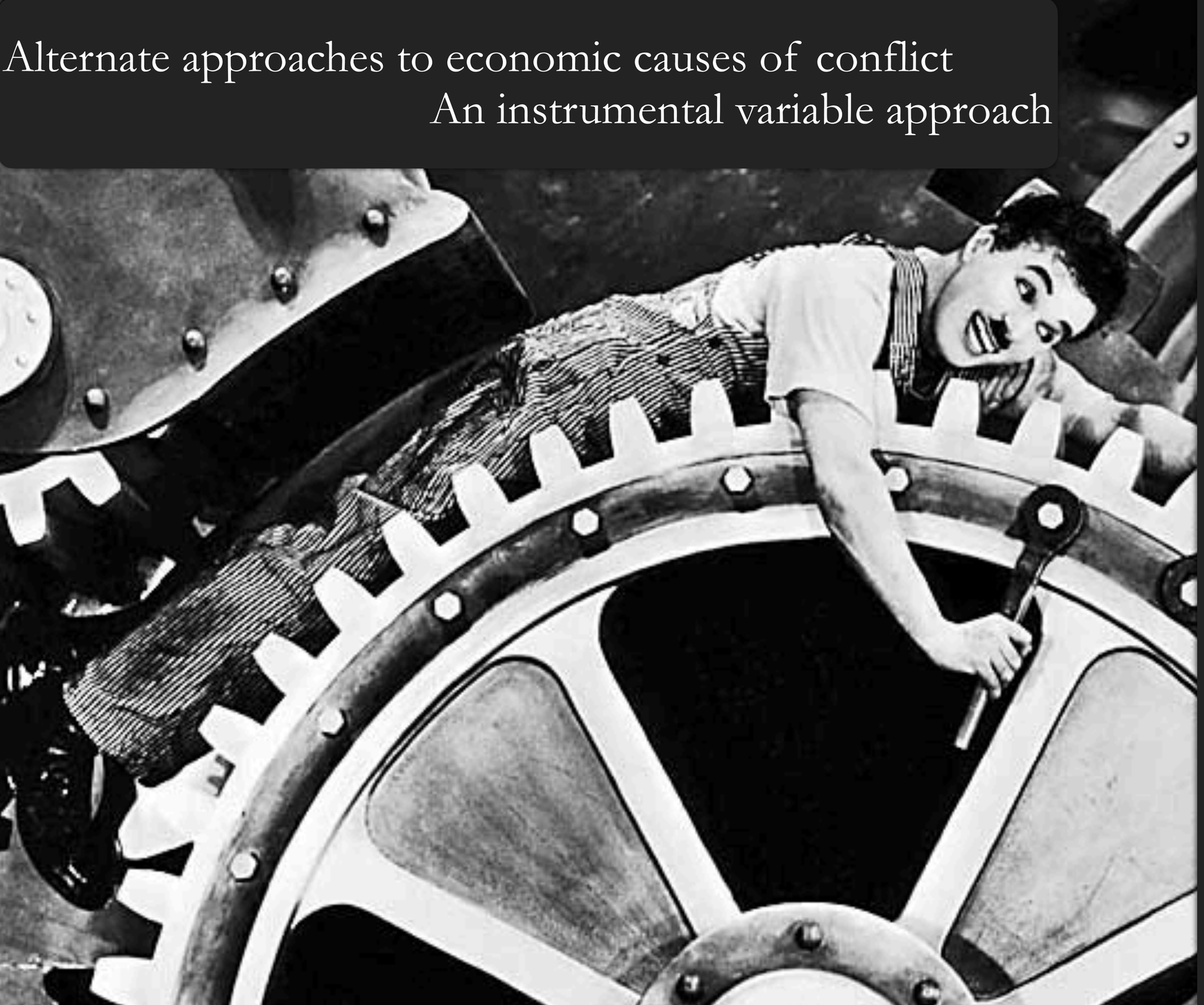

© SantiMB Photo

Lecture question #1

Do you find "**greed**" an intuitive explanation for conflict? Why or why not?

Please post your answer on Wattle or in the comments below.

Alternate approaches to economic causes of conflict
An instrumental variable approach



Economic Shocks and Civil Conflict: An Instrumental Variables Approach

Edward Miguel

University of California, Berkeley and National Bureau of Economic Research

Shanker Satyanath and Ernest Sergenti

New York University

Estimating the impact of economic conditions on the likelihood of civil conflict is difficult because of endogeneity and omitted variable bias. We use rainfall variation as an instrumental variable for economic growth in 41 African countries during 1981–99. Growth is strongly negatively related to civil conflict: a negative growth shock of five percentage points increases the likelihood of conflict by one-half the following year. We attempt to rule out other channels through which rainfall may affect conflict. Surprisingly, the impact of growth shocks on conflict is *not* significantly different in richer, more democratic, or more ethnically diverse countries.

I. Introduction

Miguel et al.'s (2004) main points

Previous civil war models were **flawed**.

Some don't appreciate that economics and violence are interrelated (i.e. **endogeneous**).

Some important factors are overlooked (i.e. **omitted variables**):

> Governmental institutional quality might affect both economics and the probability of violence.

Miguel et al.'s (2004) main contributions

They estimate economic shocks and conflict simultaneously

Rainfall shocks affect economic **growth** in Africa but not conflict directly.

Country fixed effects and time trends

Substantive finding: 5% decline in growth leads to a 12% increased probability of conflict in Africa

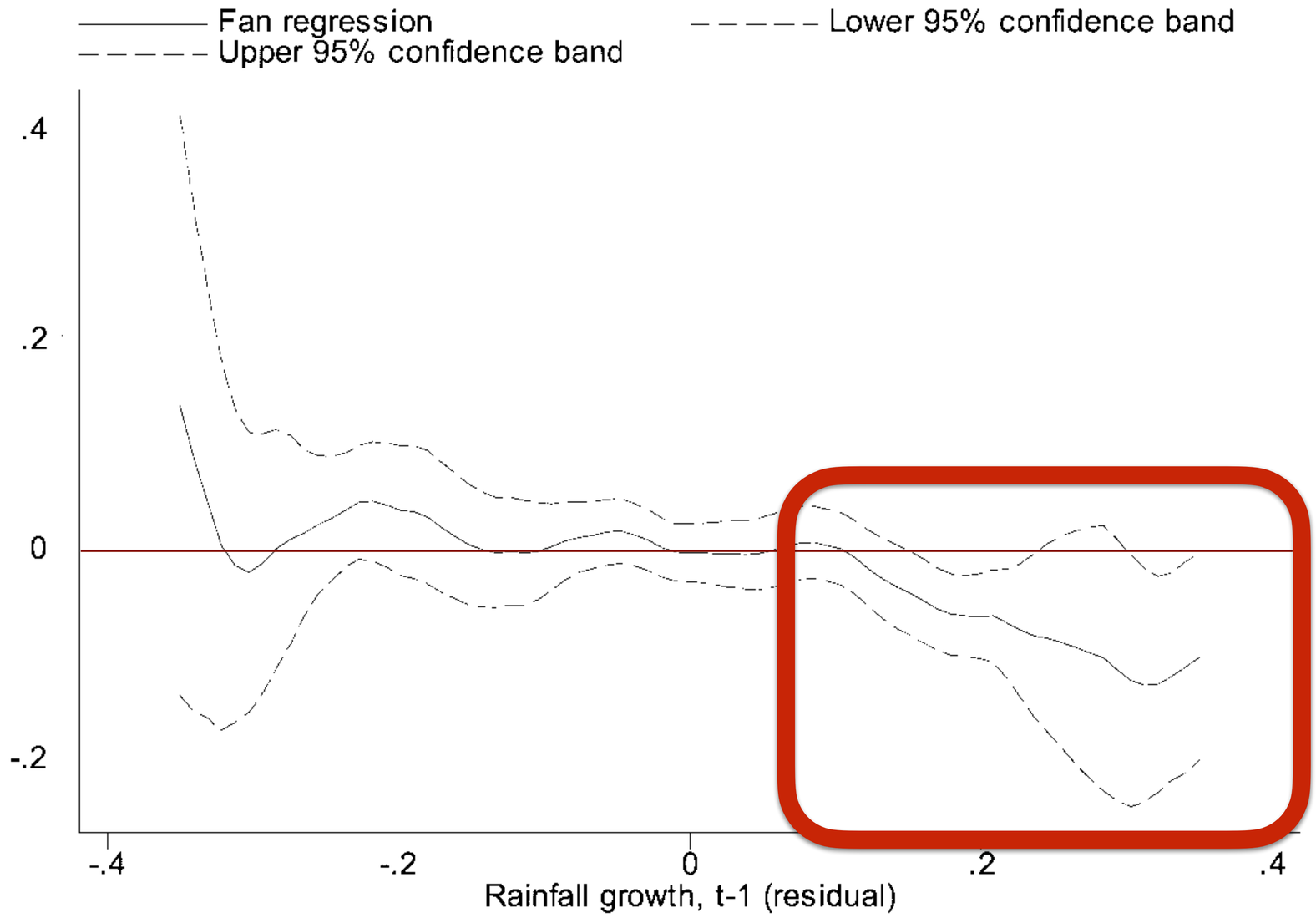
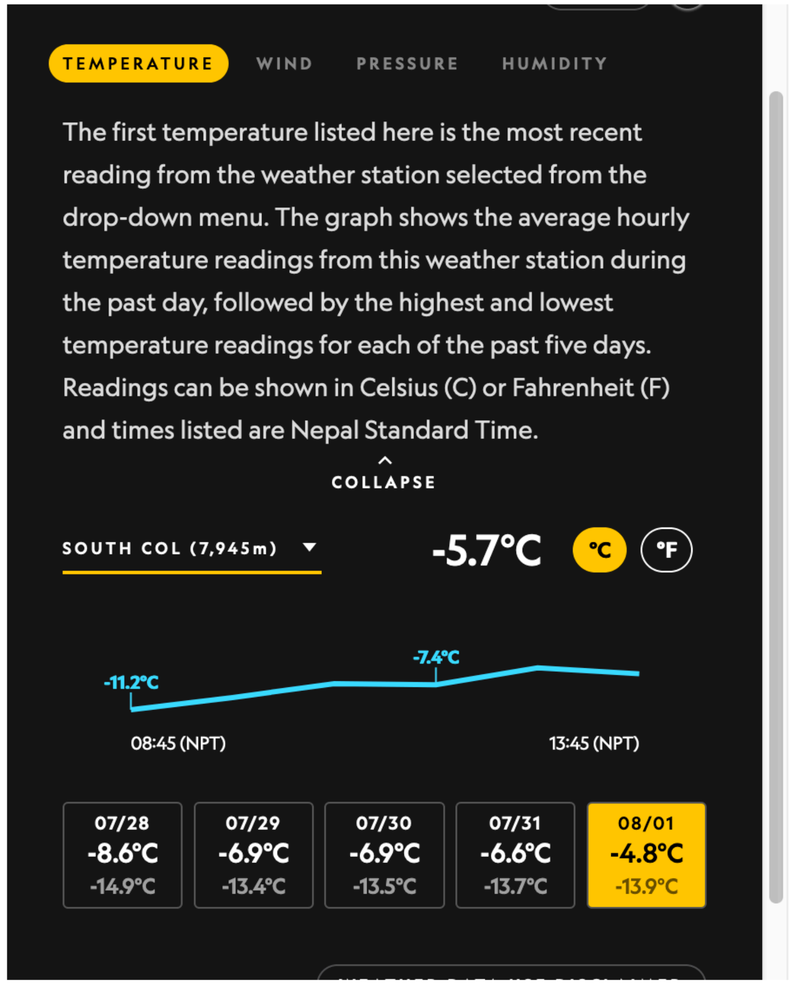


FIG. 2.—Current likelihood of civil conflict (≥25 battle deaths) on lagged rainfall growth. Nonparametric Fan regression, conditional on current rainfall growth, country fixed effects, and country-specific time trends.

Weather stations on Everest



Sources: Kornei, Katherine. 2019. "What Is It Like to Install a Weather Station at the Top of the World." *Science Magazine* (https://www.sciencemag.org/news/2019/12/what-s-it-install-weather-station-top-world) and National Geographic (https://www.nationalgeographic.com/environment/perpetual-planet/).

Weather stations on Mt. Everest

Sources: Kornei, Katherine. 2019. "What Is It Like to Install a Weather Station at the Top of the World." *Science Magazine* (https://www.sciencemag.org/news/2019/12/what-s-it-install-weather-station-top-world) and National Geographic (https://www.nationalgeographic.com/environment/perpetual-planet/).

AJPS AMERICAN JOURNAL of POLITICAL SCIENCE

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October 201
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ARTICLE

Is Temperature Exogenous? The Impact of Civil Conflict on the Instrumental Climate Record in Sub-Saharan Africa

Kenneth A. Schultz, Justin S. Mankin

First published: 28 March 2019 | https://doi.org/10.1111/ajps.12425 | Citations: 1

We would like to acknowledge helpful comments on earlier drafts from Frances Moore, Zeke Hausfather, and the anonymous reviewers. We also benefited from the advice and assistance of Tufa Dinku of Columbia University, Karen McCourt of the United Kingdom Meteorological Office, Bernard Gomez of the World Meteorological Organization, and Andrew Lederman of the United States Department of State.

Abstract

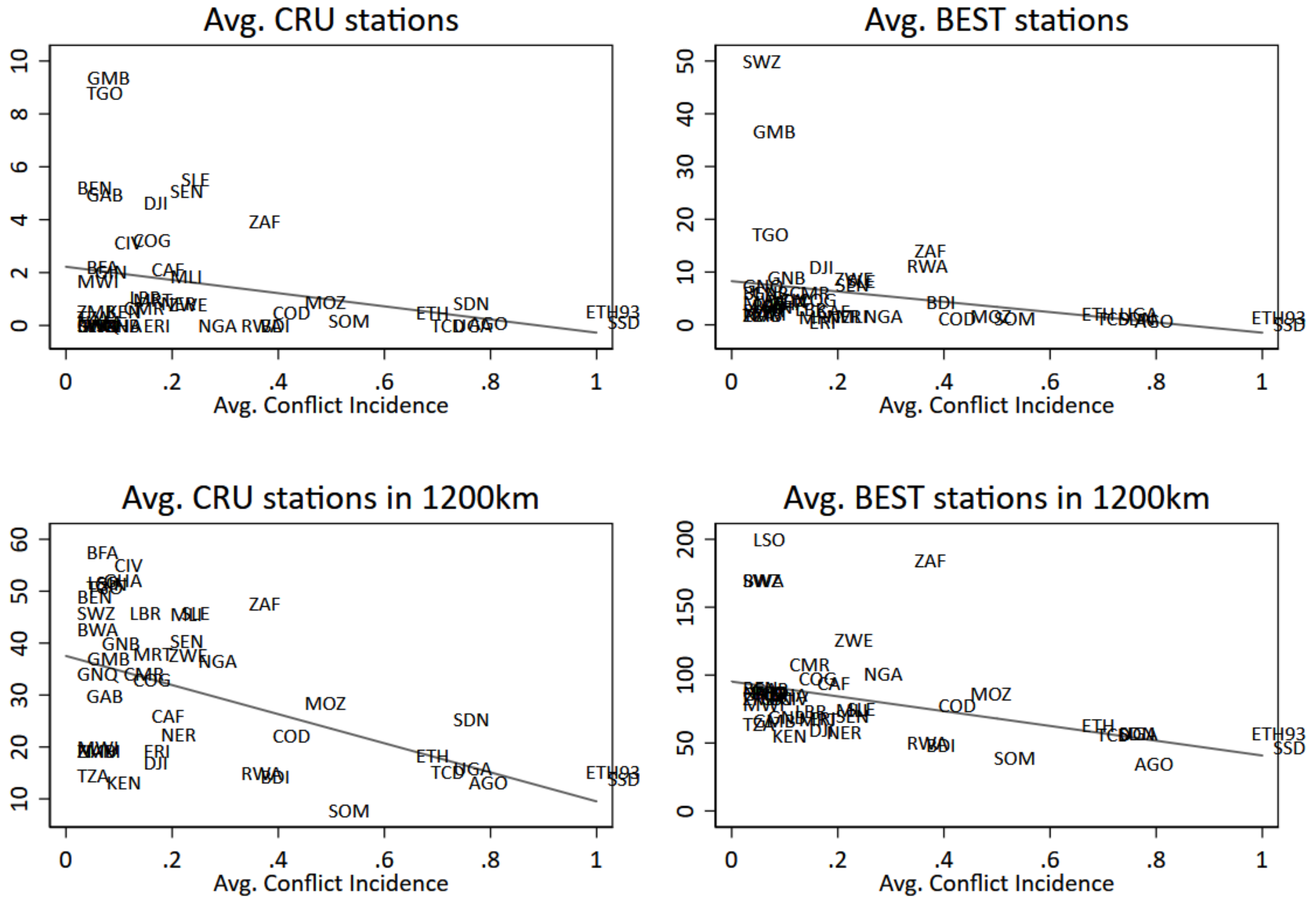
Research into the effects of climate on political and economic outcomes assumes that short-term variation in weather is exogenous to the phenomena being studied. However, weather data are derived from stations operated by national governments, whose political capacity and stability affect the quality and continuity of coverage. We show that civil conflict risk in sub-Saharan Africa is negatively correlated with the number and density of weather stations contributing to a country's temperature record. This effect is both cross-sectional—countries with higher average conflict risk tend to have poorer coverage—and cross-temporal—civil conflict leads to loss of weather stations. Poor coverage induces a small downward bias in one widely used temperature data set, due to its interpolation method, and increases measurement error, potentially attenuating estimates of the temperature–conflict relationship. Combining multiple observational data sets to reduce measurement error almost doubles the estimated effect of temperature anomalies on civil conflict risk.

Publication History

Issue Online:
18 October 2019

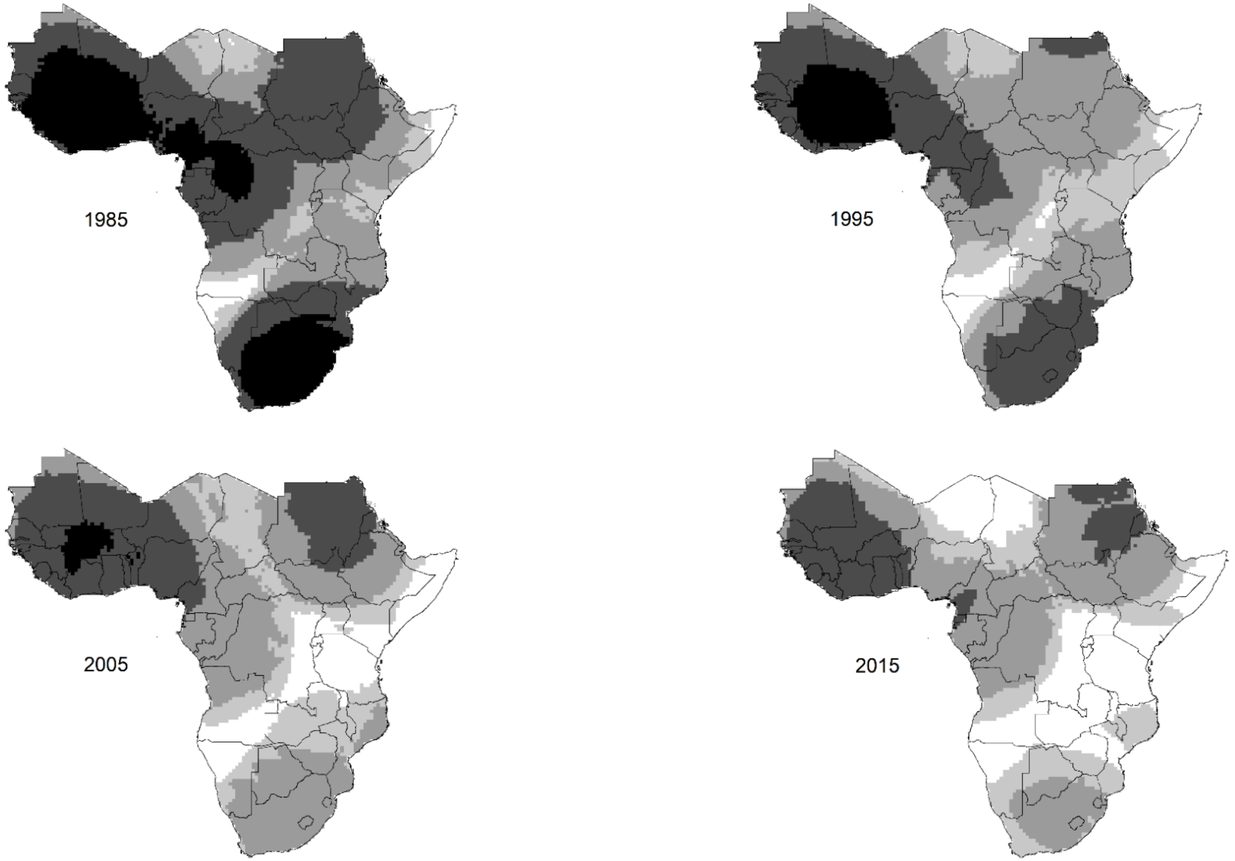
Version of Record online:
28 March 2019

Figure 4. Average Coverage and Civil Conflict Incidence, 1946-2016



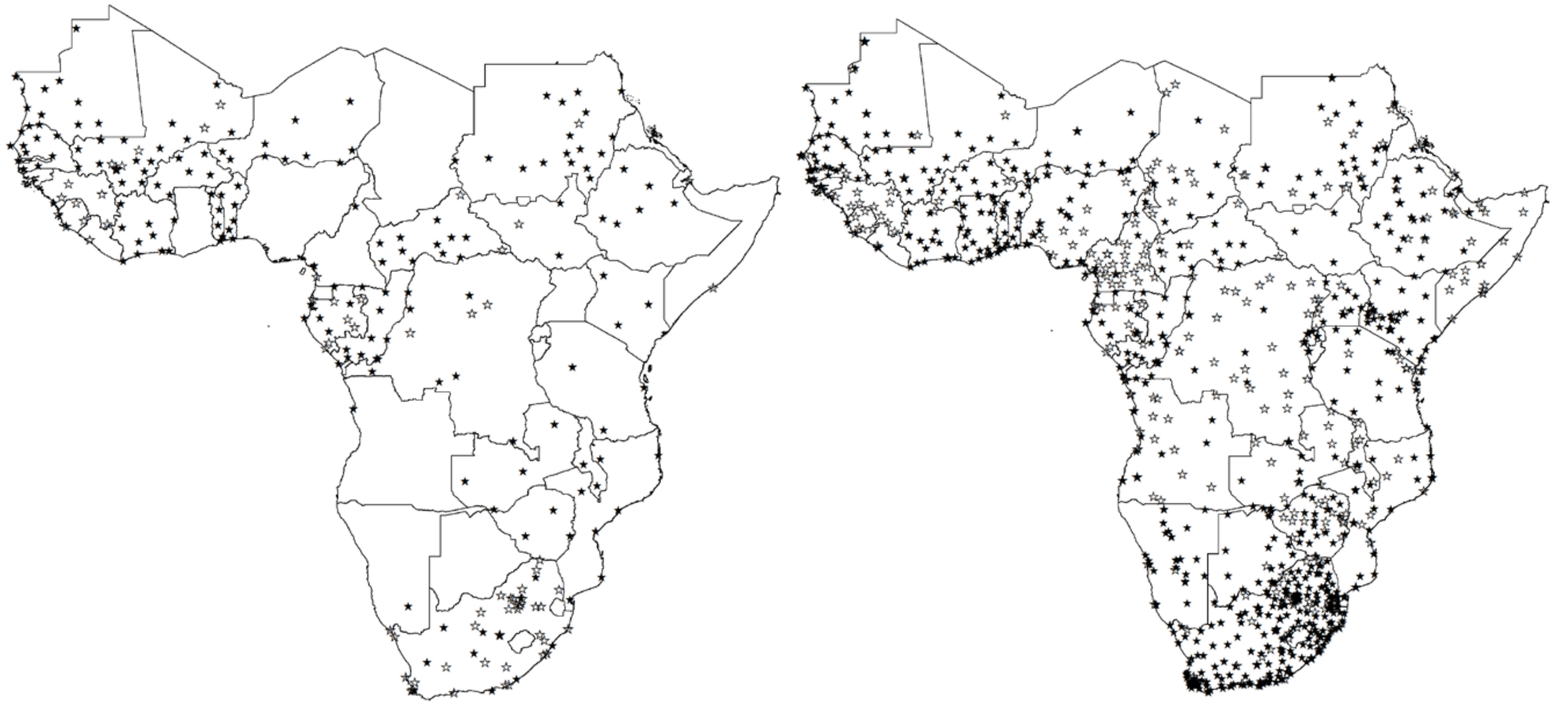
ote: The figures show the cross-sectional relationship between each coverage measure and the proportion of years that a country xperienced civil conflict as an independent state in the period 1946-2016. Station counts in the top row are per 100,000 sq. km. of ountry area. Station counts in the bottom row report the average number of stations with 1200km of each grid cell in the country.

Figure 3. The Evolution of Coverage in the CRU Data



Note: The maps show for each 0.5° grid cell the number of stations with 1200km of the cell that reported a temperature in January of the indicated year.

Figure 2. Locations of Active and Defunct Weather Stations

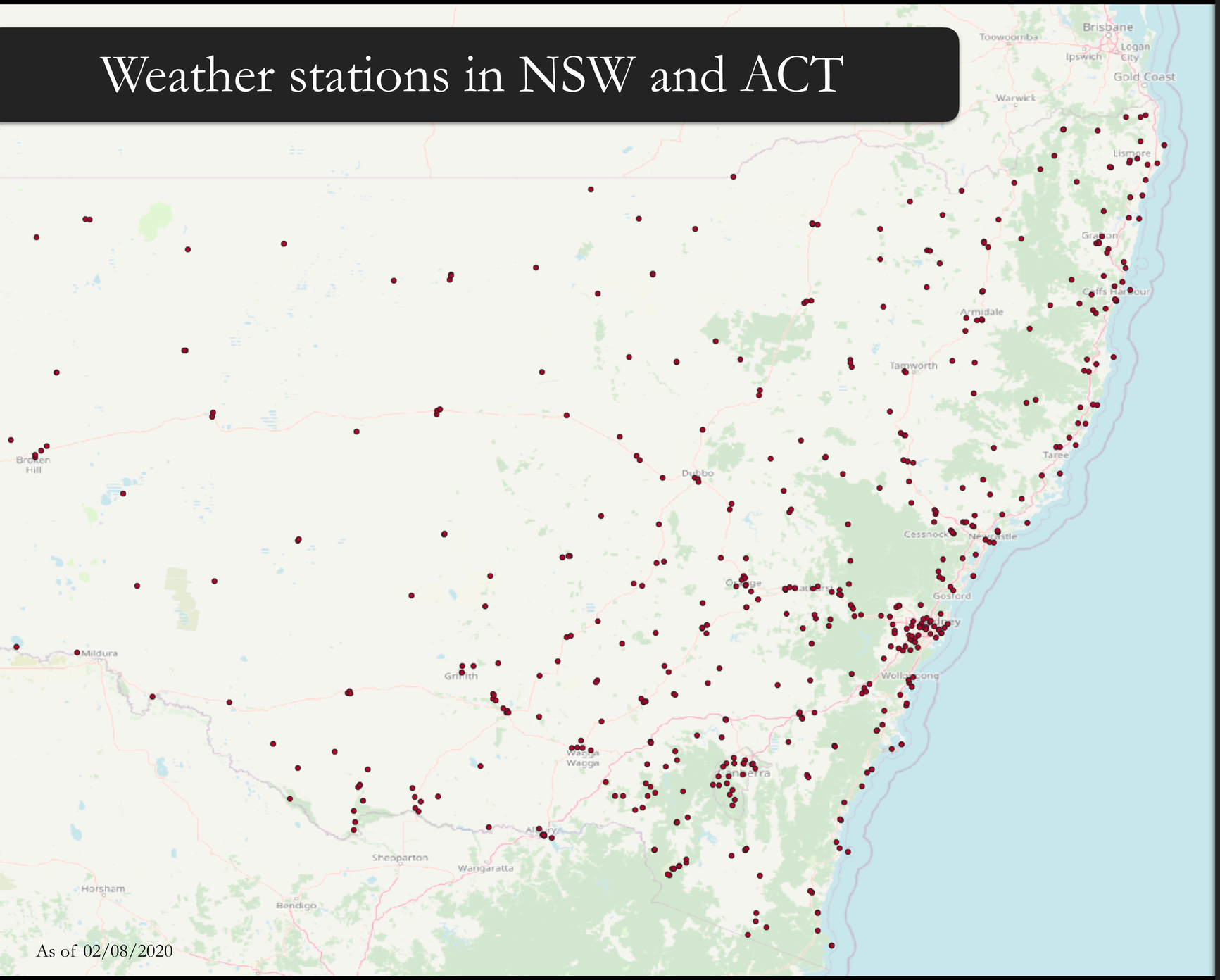


(a) CRU

(b) BEST

Note: The maps show the location of weather stations that contributed to CRU (panel a) and BEST (panel b) high resolution times series temperature data in the period 1946-2016. Solid stars indicate stations that reported at least once in the period 2010-16; hollow stars show stations that did not report in this period.

Weather stations in NSW and ACT



As of 02/08/2020

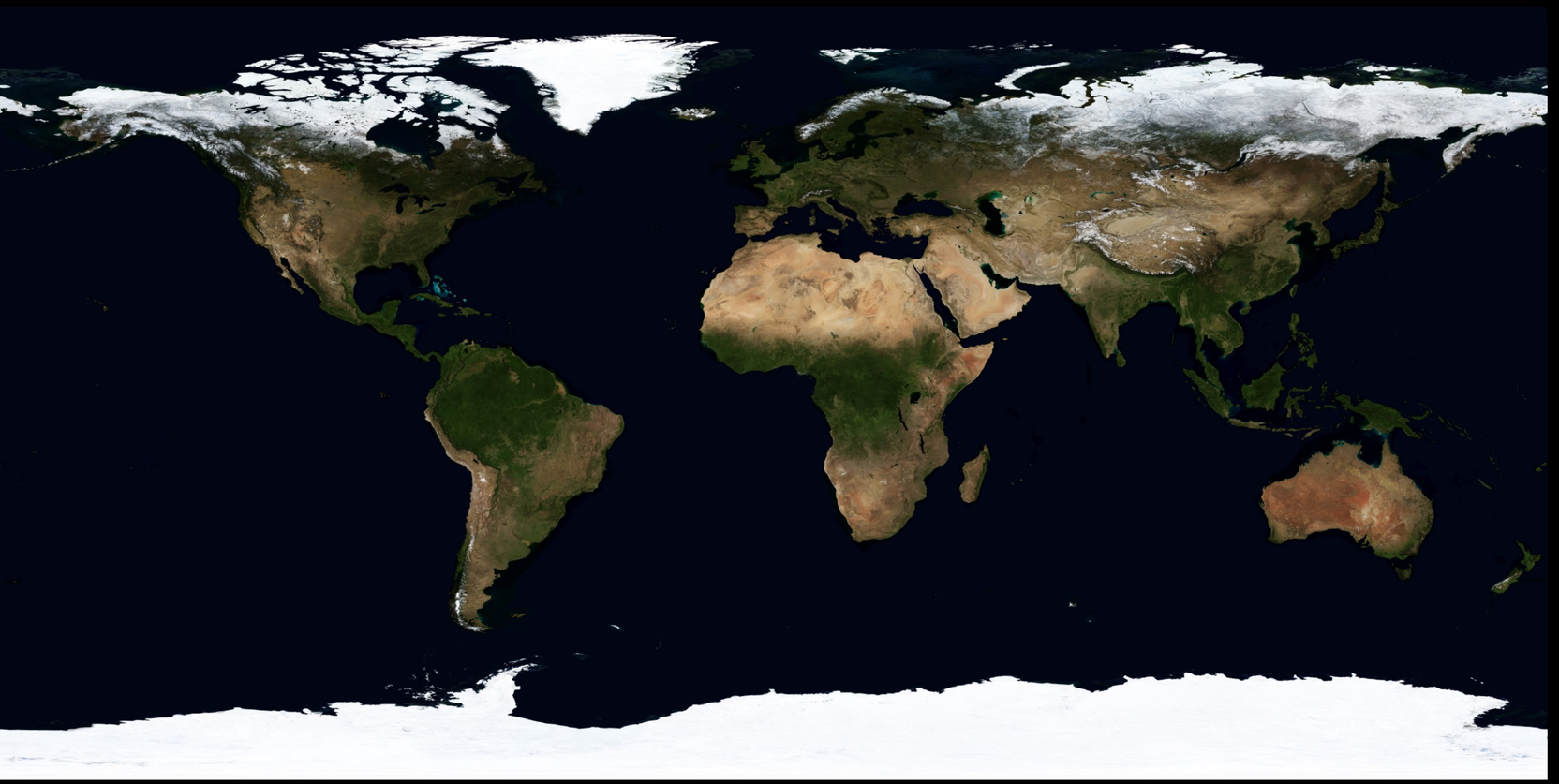
JOHN CASSIDY

THE REINHART AND ROGOFF CONTROVERSY: A SUMMING UP

By John Cassidy
April 26, 2013

In one of life's little ironies, last Friday's disappointing G.D.P. figures, which reflected a sharp fall in government spending, appeared on the same day that the economists Carmen Reinhart and Kenneth Rogoff published an Op-Ed in the *Times* defending their famous (now infamous) research that conservative politicians around the world had seized upon to justify penny-pinching policies. Addressing a new paper by three lesser lights of their profession from the University of Massachusetts, Amherst, which uncovered data omissions, questionable methods of weighting, and elementary coding errors in Reinhart and Rogoff's original work, and which went around the world like a viral video, the Harvard duo dismissed the entire brouhaha as "academic kerfuffle" that hadn't vitiated their main points.

Really? Even somebody living in a bubble stretching over Harvard Yard would have difficulty believing that. For all of the illuminating work Reinhart and Rogoff have done on the history of financial crises and their aftermaths, including their popular 2011 book "This Time Is Different: Eight Centuries of Financial Folly," their most influential claim was that rising levels of government debt are associated with much weaker rates of economic growth, indeed negative ones. In undermining this claim,



Source: NASA (https://www.nasa.gov/vision/earth/features/bmng_gallery_6.html)

Lecture question #2

Can you think of (and briefly describe) an **endogenous** relationship between conflict and another causal factor (not economic growth) we have discussed so far?

Absolute & relative poverty and conflict

Journal of Conflict Resolution
55(5) 814-840

DOI: 10.1177/0022002711408011
http://jcr.sagepub.com

It's the Local Economy, Stupid! Geographic Wealth Dispersion and Conflict Outbreak Location

Halvard Buhaug[1], Kristian Skrede Gleditsch[1,2], Helge Holtermann[1,3], Gudrun Østby[1], and Andreas Forø Tollefsen[1,4]

Abstract

Income varies considerably within countries and the locations where conflicts emerge are rarely typical or representative for states at large. Yet, most research on conflict has only examined national income averages and neglected spatial variation. The authors argue that civil conflicts are more likely to erupt in areas with low absolute income, even if a country's gross domestic product (GDP) per capita is not necessarily low, and in areas with large deviations from national averages. The authors test these hypotheses empirically using spatially disaggregated data on the location of conflict outbreaks and per capita income estimates. The authors find that areas with absolute poverty indeed see more outbreaks of conflict, and they find some evidence that inequality increases the risk of conflict. Subnational information can improve on conventional country-based measures and help our understanding of how local features and variation can give rise to mobilization and violence.

Bauhaus et al.'s (2011) main argument

Criticism of existing literature:

Income varies within states.

Where conflict happens is not typical of the larger context.

Argument:

Conflict likely to break out in areas with low **absolute** income.

Conflict likely to break out in areas with large **deviations** (in both directions) from national averages.

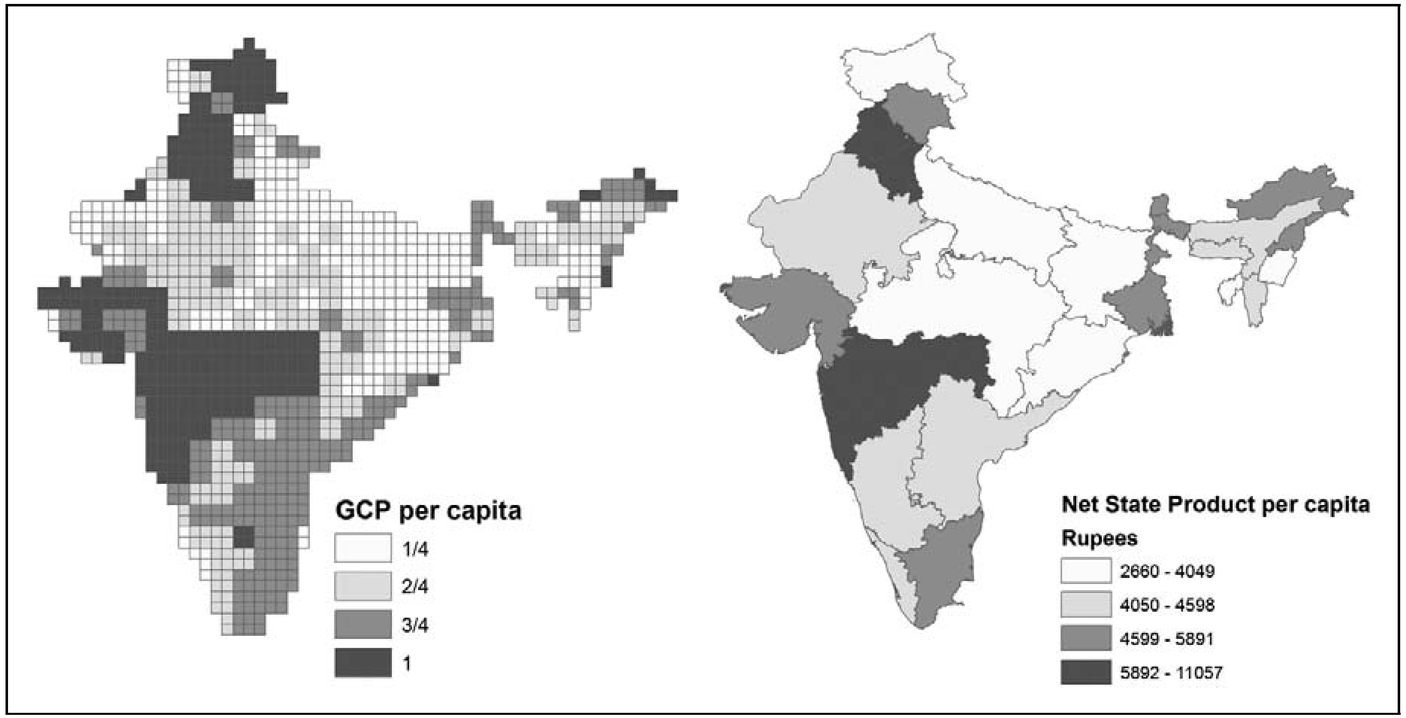


Figure 2. Maps displaying GCP per capita 1990 in India (left) and net state product per capita in 1990 (right) by the quartiles of the respective distributions

PRIO-GRID 2.0

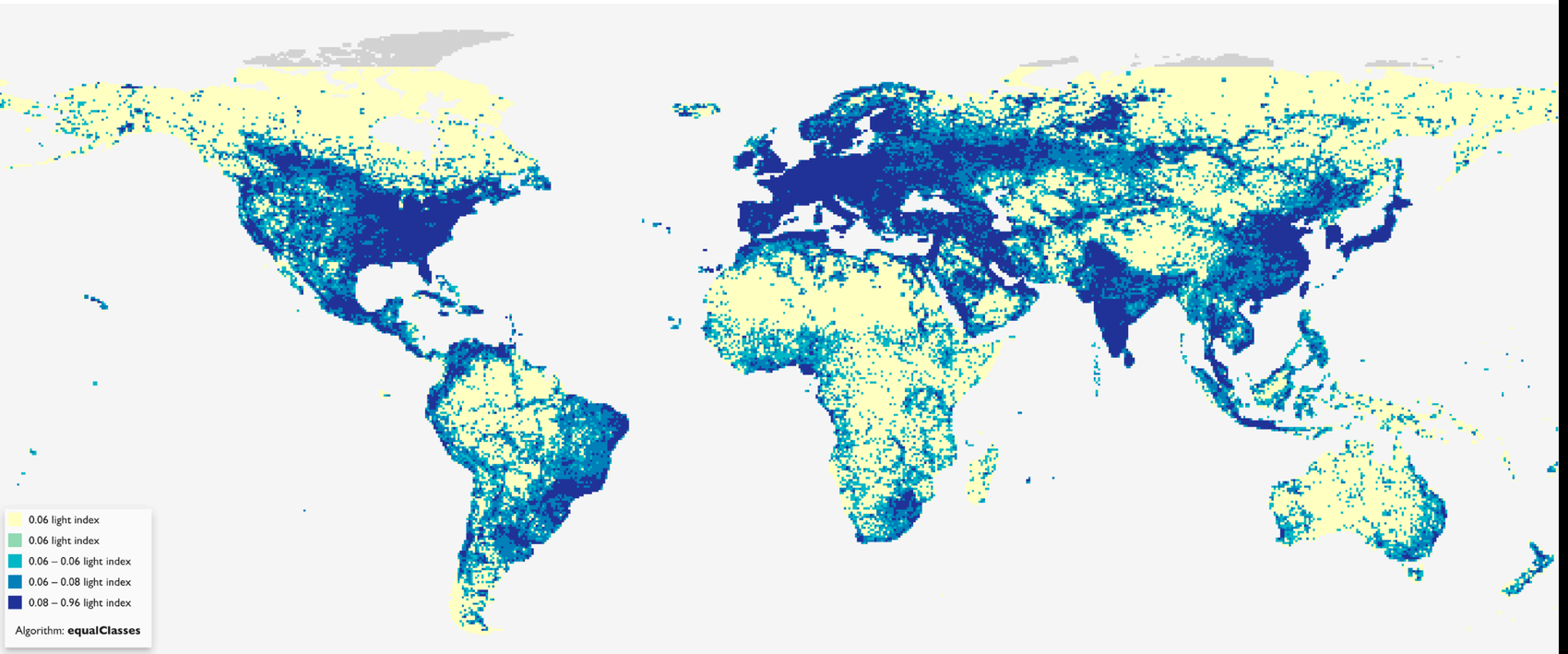
MAP DOWNLOAD ABOUT CODEBOOK EXTENSIONS API

Nightlights calibrated, mean

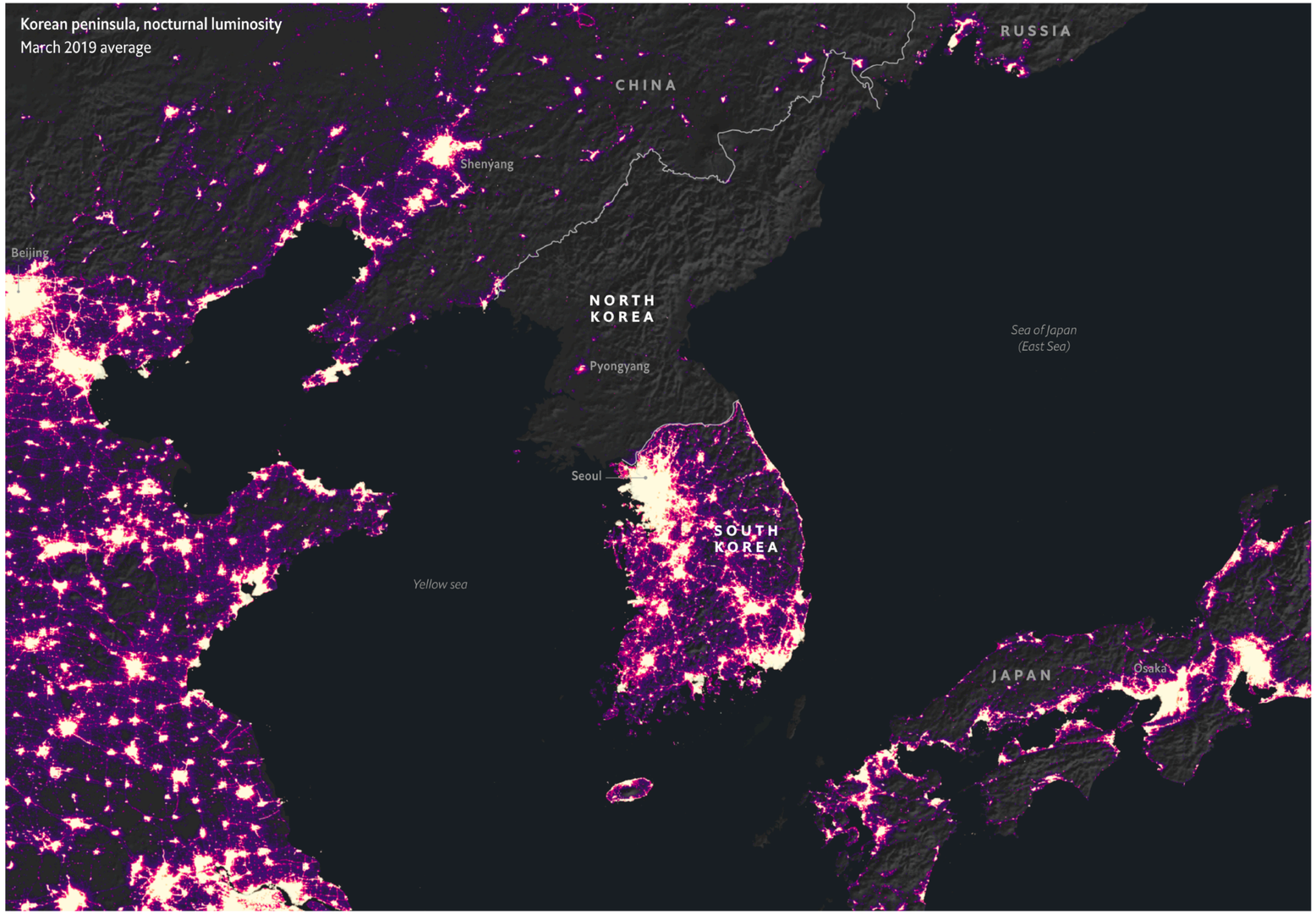
Select Year: 2012

Select Variable: Nightlights calibrated, mean

nlights_calib_mean measures the average measured nighttime light emission from the DMSP-OLS Nighttime Lights Time Series Version 4 (Average Visible, Stable Lights, & Cloud Free Coverages). These data are calibrated for use in time-series analyses using calibration values from Elvidge et.al. (2014), and standardized to be between 0 and 1.



Variable Source: **DMSP OLS Nighttime Lights**



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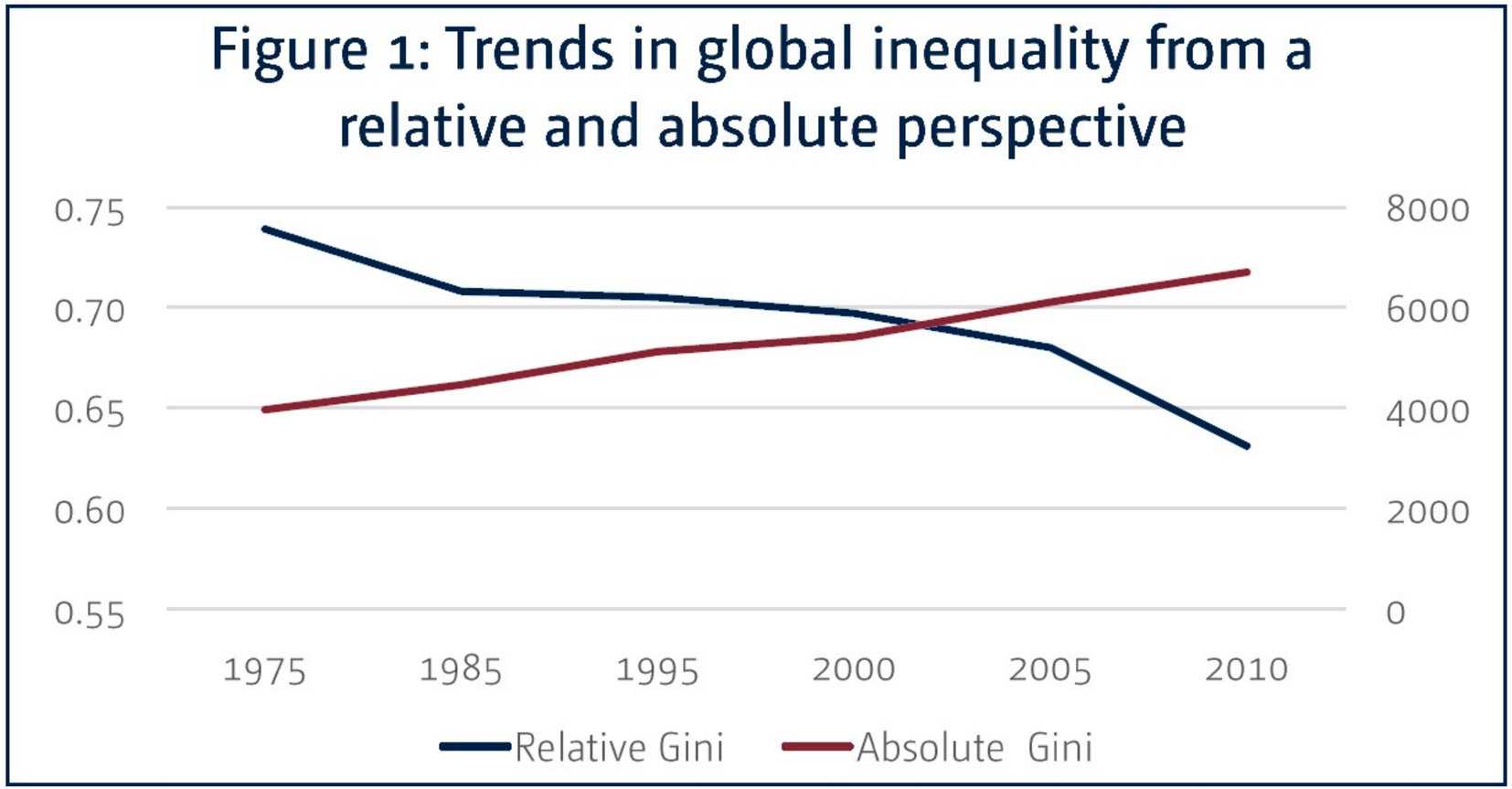
Graphic detail May 4th 2019 edition ›

When the lights go out

Satellite data shed new light on North Korea's opaque economy

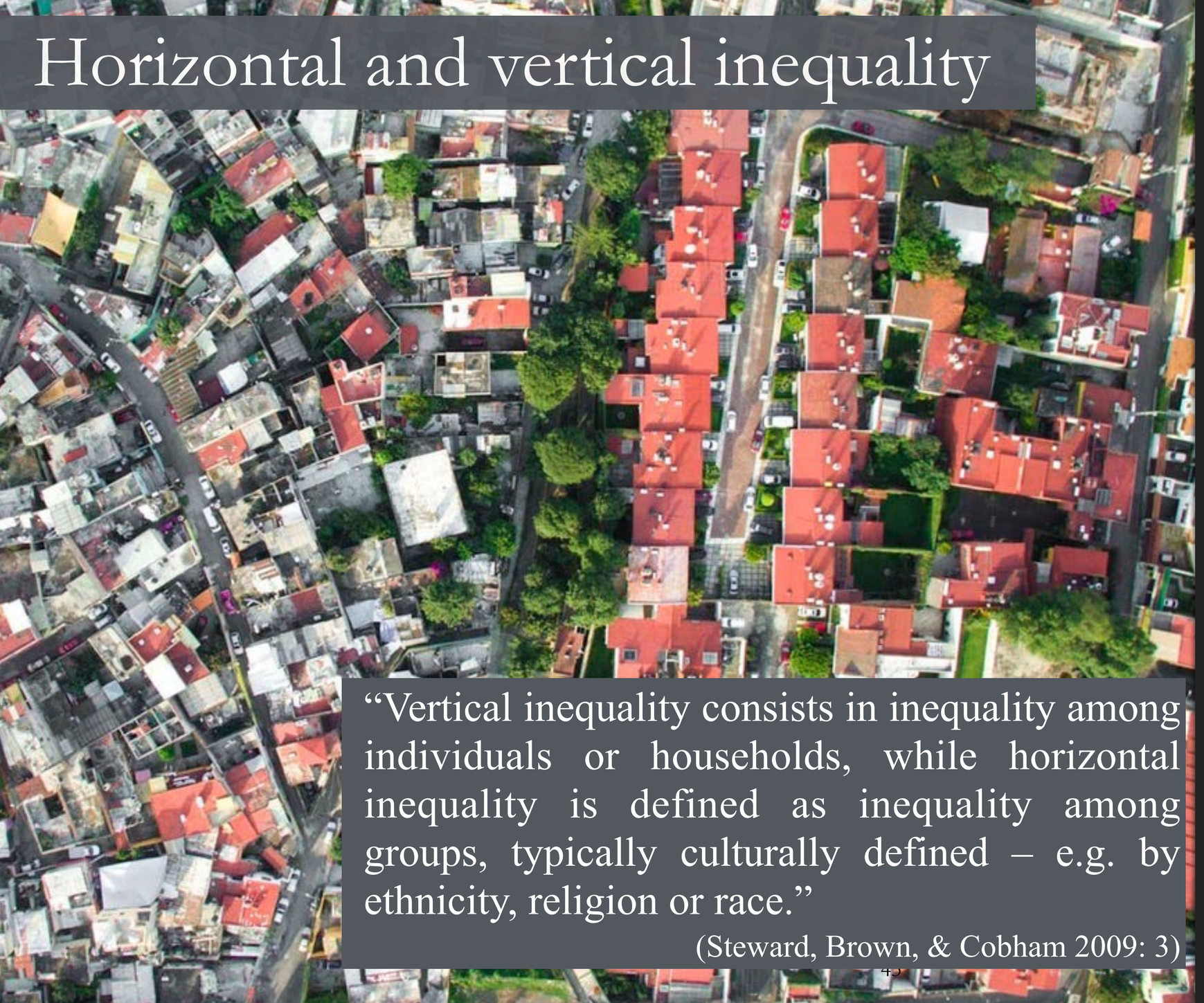
The country's nocturnal luminosity fell by 40% from 2013-15

Source: The Economist (https://www.economist.com/graphic-detail/2019/05/04/satellite-data-shed-new-light-on-north-koreas-opaque-economy)



Source : Oxford News (https://www.ox.ac.uk/news/2016-08-25-global-income-inequality-down-relative-terms-absolute-sums)

Horizontal and vertical inequality



"Vertical inequality consists in inequality among individuals or households, while horizontal inequality is defined as inequality among groups, typically culturally defined – e.g. by ethnicity, religion or race."

(Steward, Brown, & Cobham 2009: 3)

$43 million Ikoyi money: EFCC summons ex-NIA chief Oke, wife

November 1, 2017 Idris Ibrahim

N13Billion Ikoyi money

Related News

EFCC assault on spy chief's home highlights deepening crisis of a

The anti-graft agency, EFCC, on Wednesday announced that it was inviting the former head of the National Intelligence Agency, NIA, Ayodele Oke, for questioning.

Mr. Oke was sacked as NIA chief by President Muhammadu Buhari on Monday, about six months after he was first suspended. He was sacked alongside Babachir Lawal, former Secretary to the Government of the Federation, who was involved in a fraud case.

Economic capacity over time

Zimbabwean dollar

1980: 1 ZD = 1.00 USD
2000: 1 ZD = 0.01 USD
2002: 1 ZD = 0.001 USD
2005: 1 ZD = 0.0001 USD
2006: 1 ZD = 0.00001 USD

Turkish lira

1980: 1 T₺ = 0.0125 USD
1995: 1 T₺ = 0.0002 USD (10,000 T₺ = 23cents)
2000: 1 T₺ = 0.0000016 USD (<2 cents)

Australian $ vs. US $

Source: https://www.macrotrends.net/2551/australian-us-dollar-exchange-rate-historical-chart

Bauhaus et al.'s (2011) weaknesses

They use **cross-sectional** models, so we cannot assess changes over time.

They did not include all instances of "**no conflict**" but a random selection.

The **substantive change** in risk of conflict is unclear.

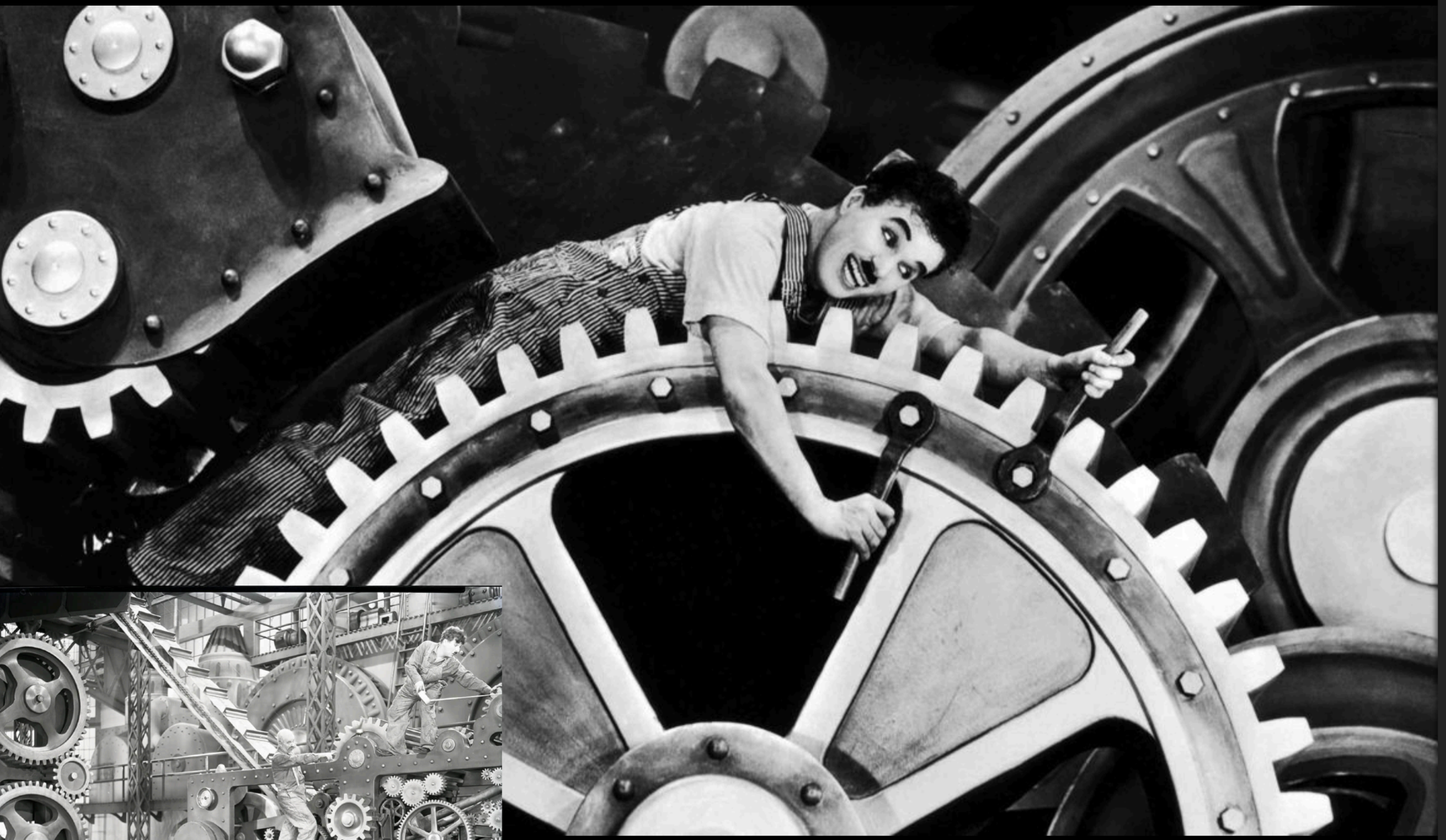
Similarities between these readings

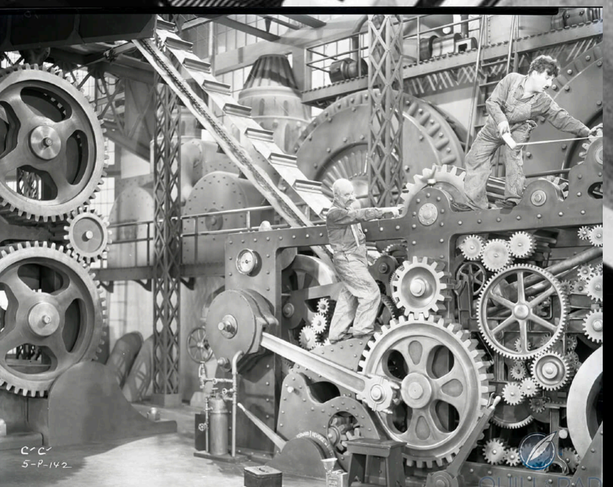
They use **rationalist** approaches considering costs and benefits of violence.

They focus more on models and **less on theory.**

Their **measurement** choices are less than ideal.

Any others?





II. Human security

Source: https://www.unfpa.org/sdg

'More than one million' died of snake bites in India

8 July 2020

Indian cobras are among the species which kill most people each year

An estimated 1.2 million people have died from snake bites in India in the past 20 years, a new study has found.

Top

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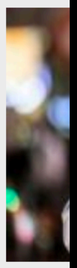


The H
leave

Human security **threats**

Type of security	Examples of main threats
Economic	persistent poverty, unemployment
Political	government repression, human rights abuses
Food	hunger, famine
Health	infectious diseases, unsafe food, malnutrition, lack of health care
Environmental	environmental degradation, resource depletion, natural disasters, pollution
Personal	physical violence, crime, terrorism, domestic violence, child labor
Community	inter-ethnic, religious, or there identity-based tensions

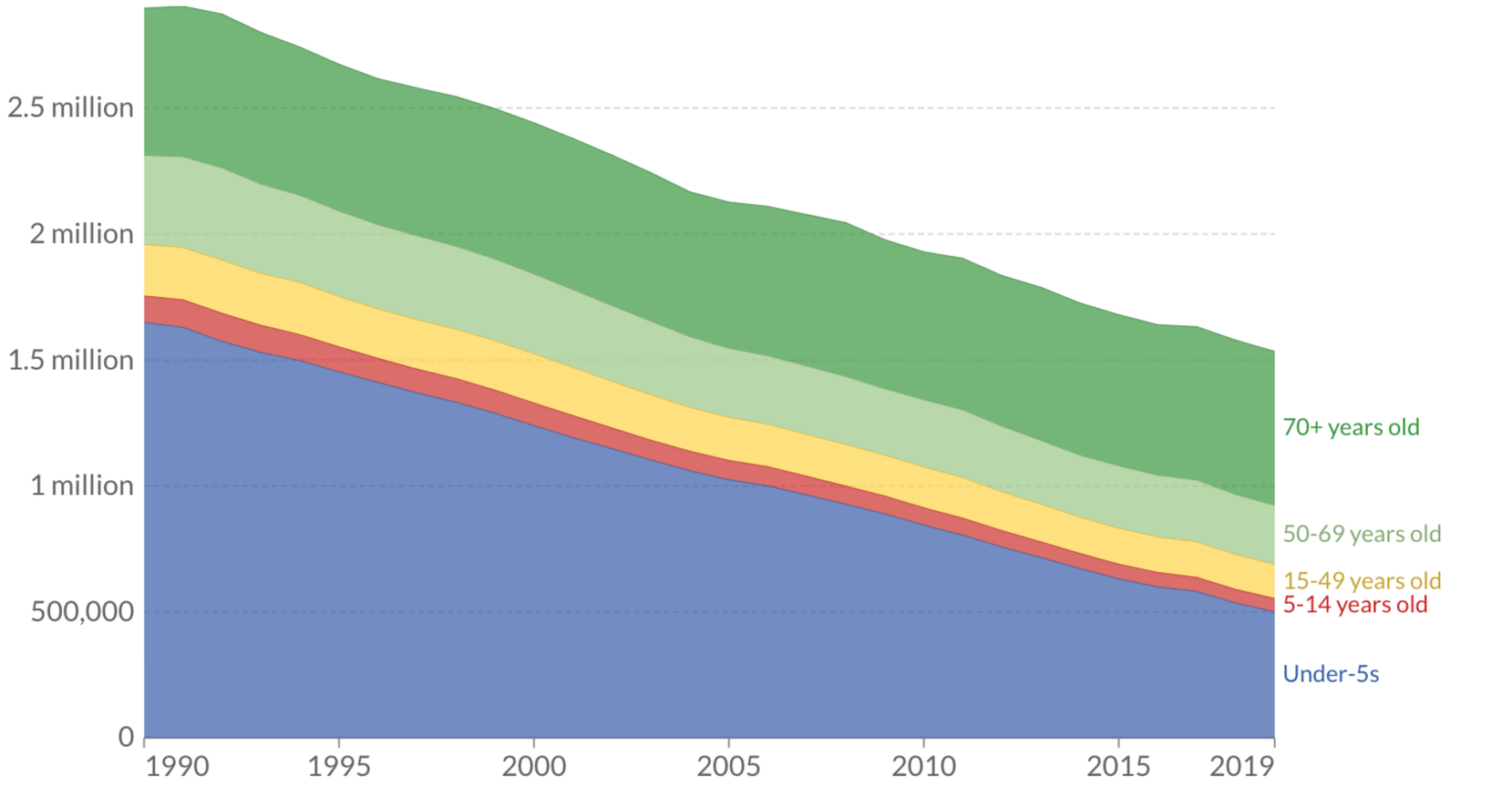
Source: United Nations Trust Fund for Human Security. nd. "Human Security in Theory and Practice." New York: United Nations

Deaths from diarrheal diseases, by age, World, 1990 to 2019

Annual deaths from diarrheal diseases, differentiated by age categories.

Our World in Data

⇄ Change country ☐ Relative



Source: IHME, Global Burden of Disease (GBD)

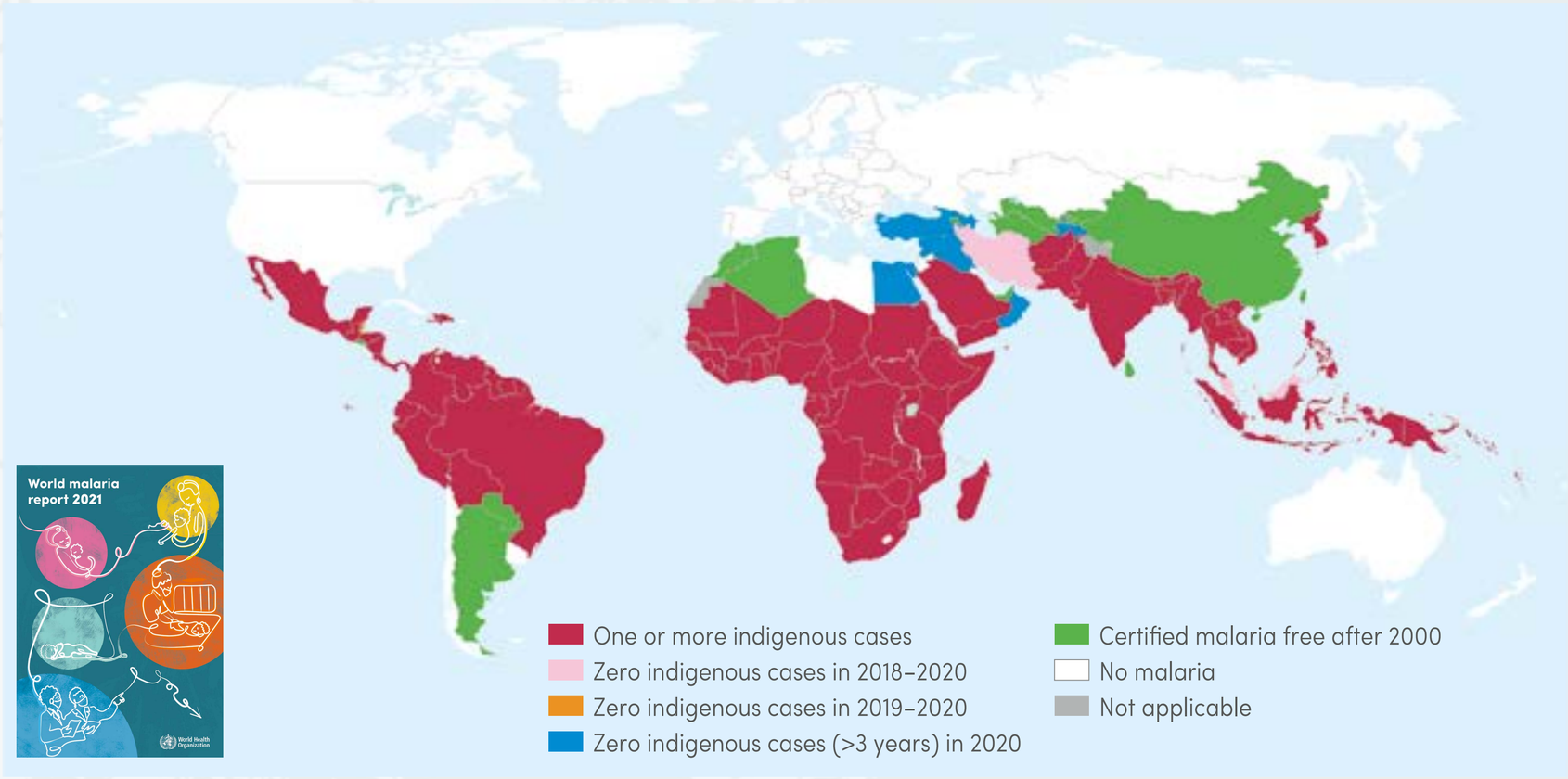
CC BY

CHART | TABLE | SOURCES | DOWNLOAD

Source: Our World in Data (https://ourworldindata.org/diarrheal-diseases)

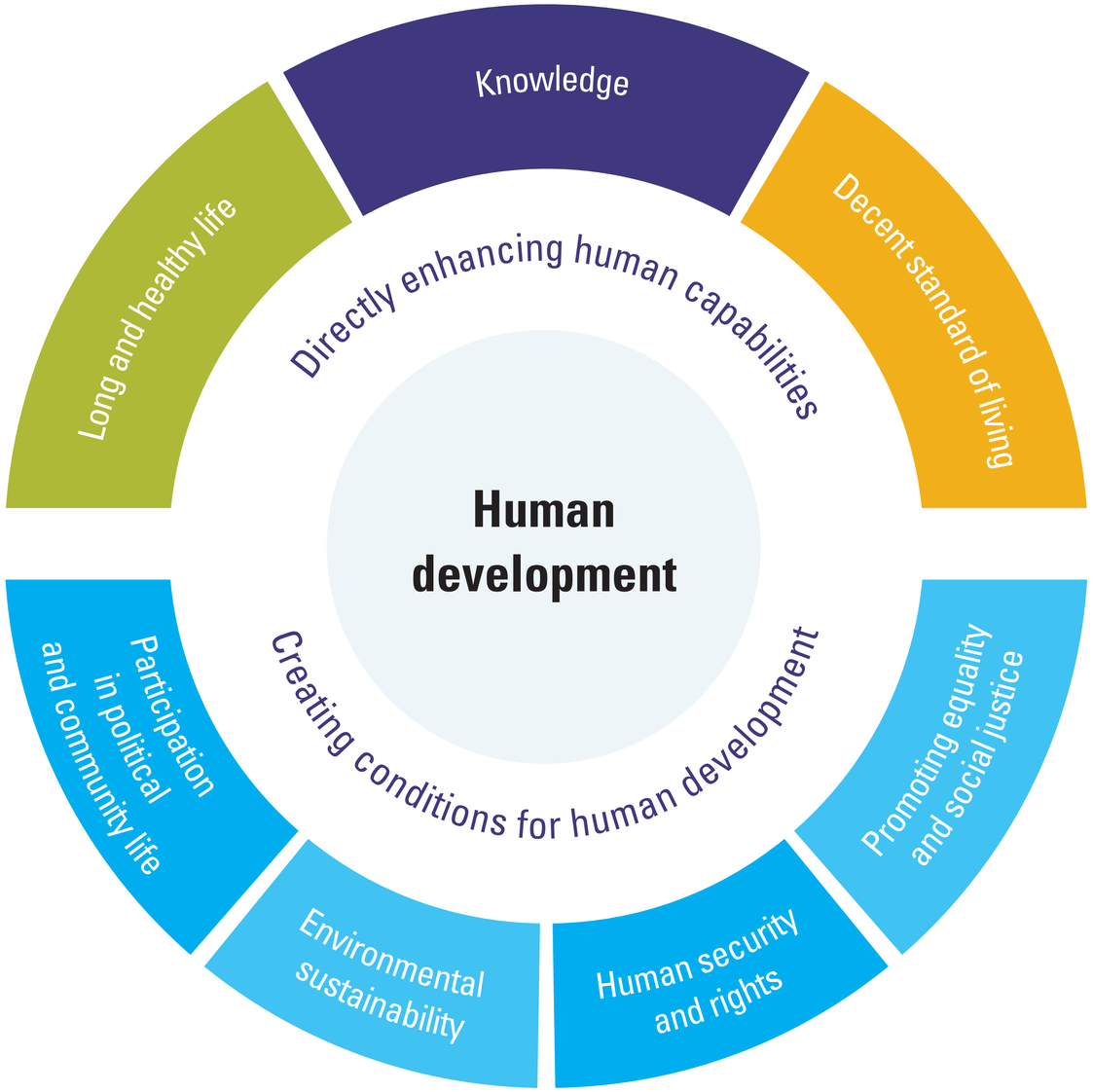
FIG. 3.1.

Countries with indigenous cases in 2000 and their status by 2020 Countries with zero indigenous cases for at least 3 consecutive years are considered to have eliminated malaria. In 2020, the Islamic Republic of Iran and Malaysia reported zero indigenous cases for the third consecutive year, and Belize and Cabo Verde reported zero indigenous cases for the second time. China and El Salvador were certified malaria free in 2021, following 4 years of zero malaria cases. *Source: WHO database.*



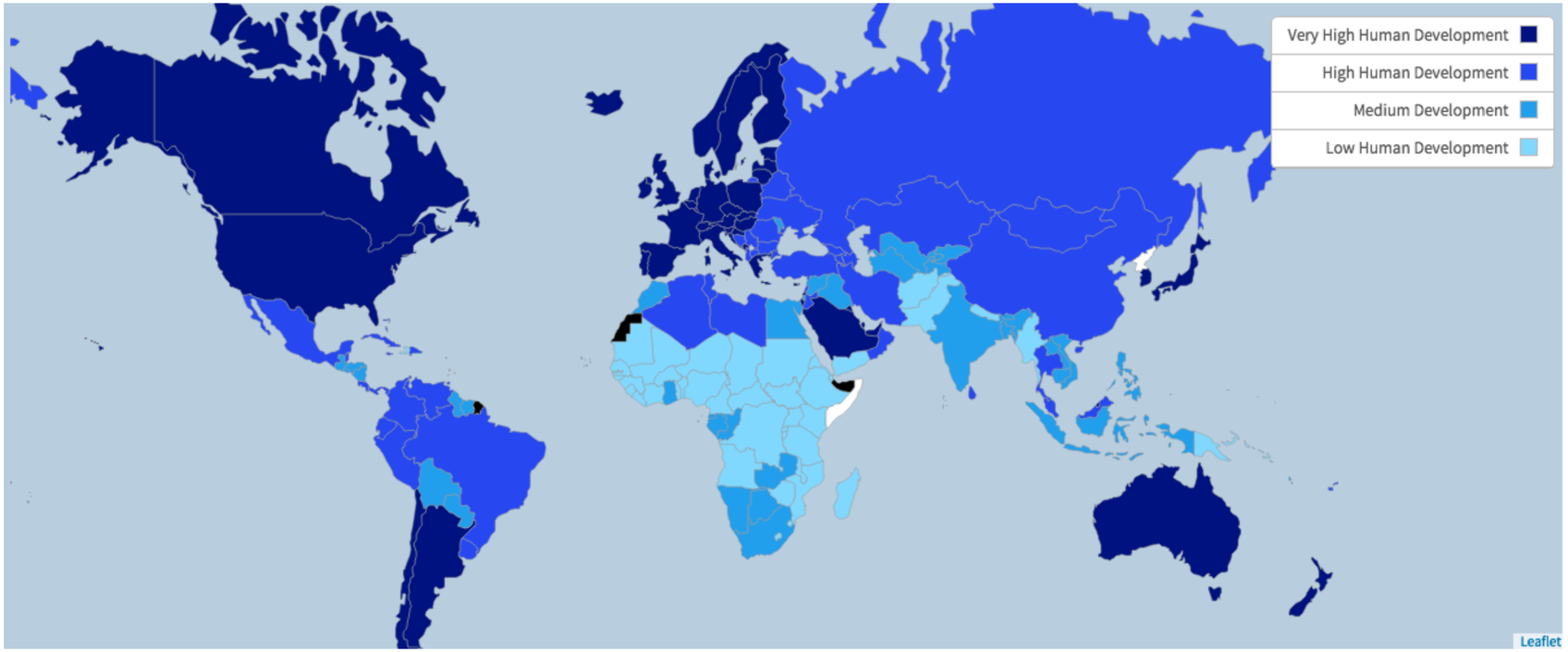
WHO: World Health Organization.

Dimensions of human development



Source: UNDP 2016: vii

Human Development Index, 2015



Source: United Nations Development Programme. 2016. http://hdr.undp.org/en/countries

HDI elements

Long and healthy life

Life expectancy at birth

Knowledge

Expected years of schooling

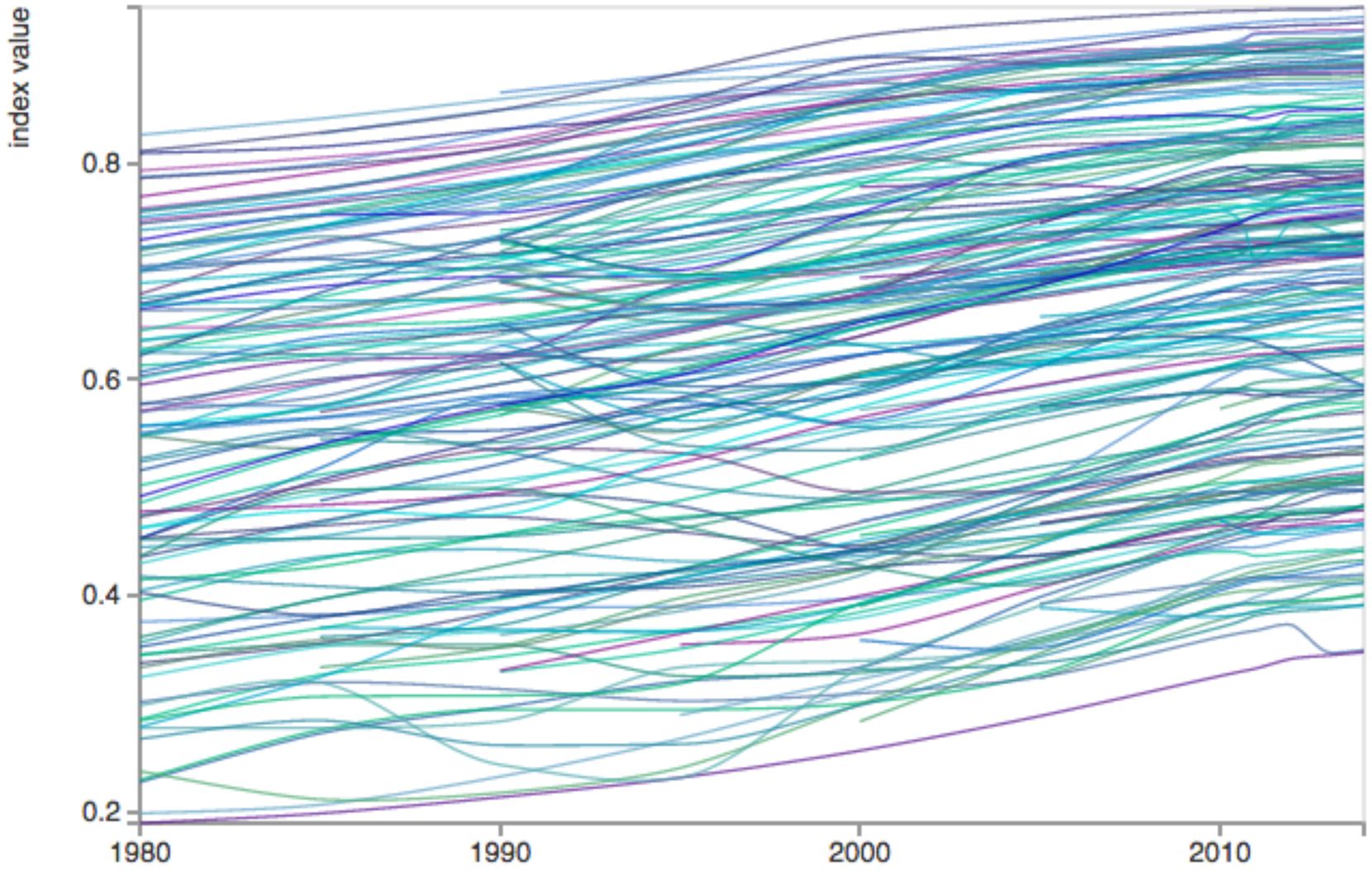
Mean years of schooling

Decent standard of living

Gross national income per capita, PPP

There's GDP again!

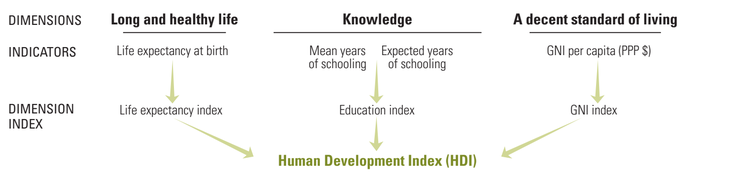
Human development index, 1980-2015



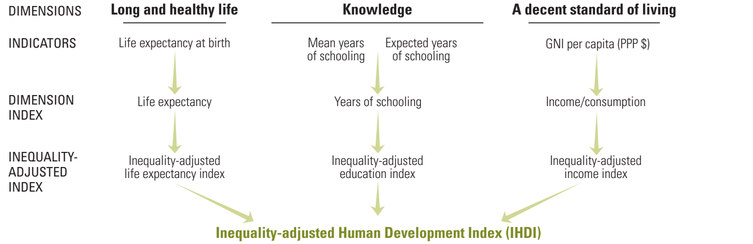
Technical notes

Calculating the human development indices—graphical presentation

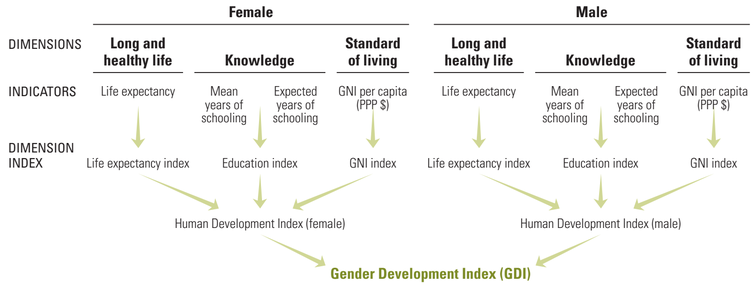
Human Development Index (HDI)



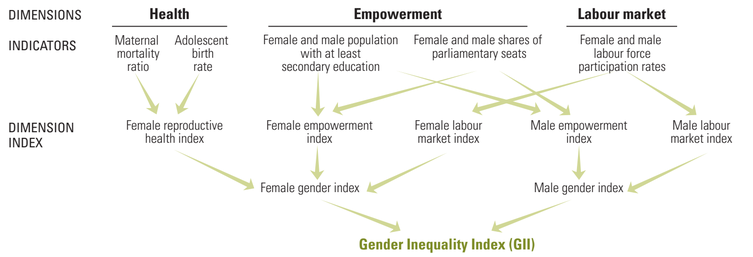
Inequality-adjusted Human Development Index (IHDI)



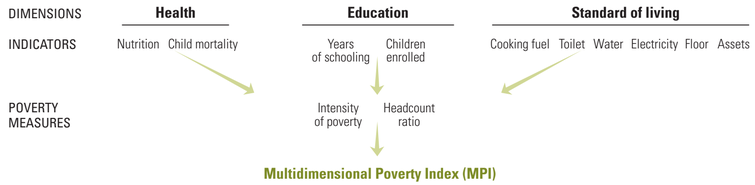
Gender Development Index (GDI)



Gender Inequality Index (GII)



Multidimensional Poverty Index (MPI)



A push towards subnational studies

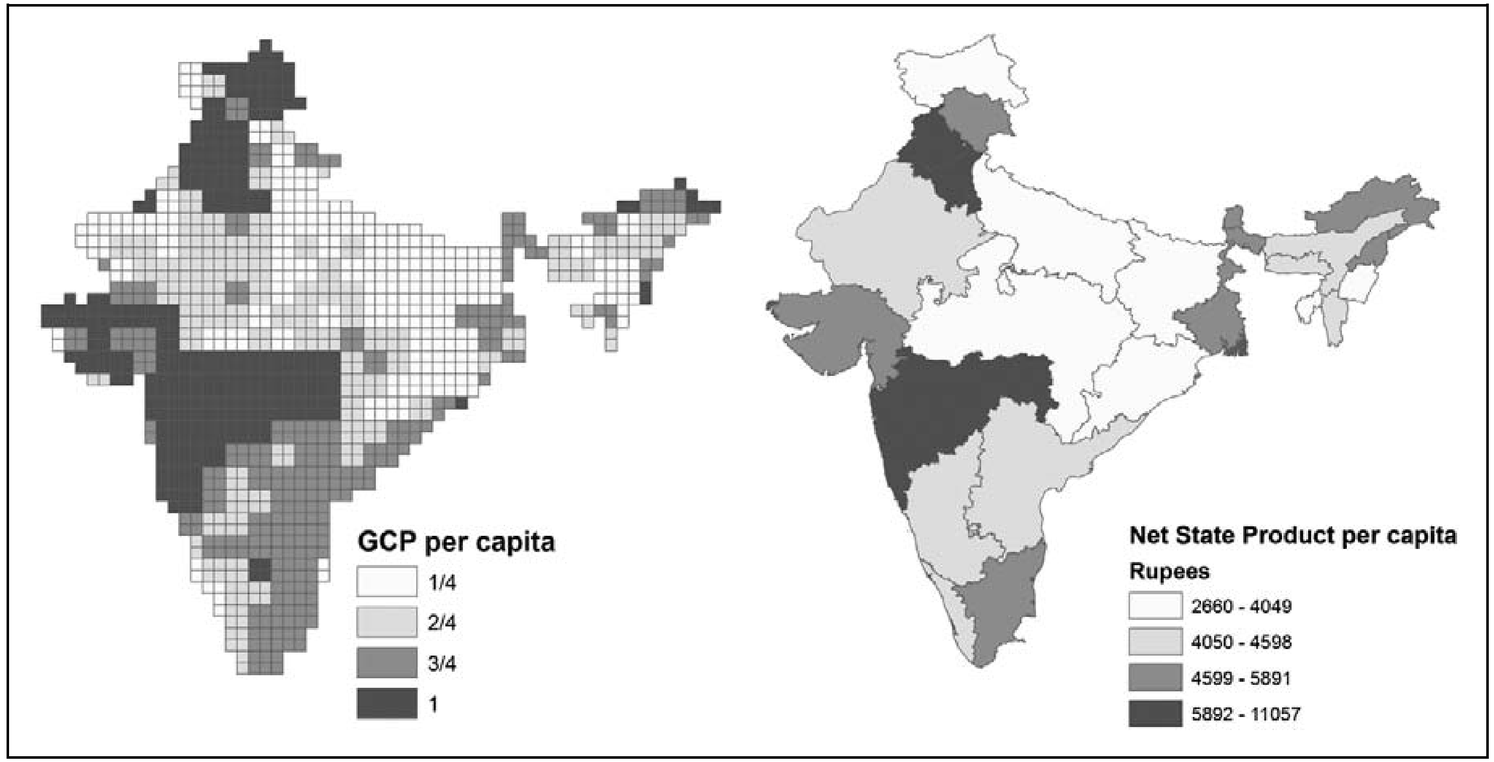


Figure 2. Maps displaying GCP per capita 1990 in India (left) and net state product per capita in 1990 (right) by the quartiles of the respective distributions

SCIENTIFIC DATA

OPEN

Data Descriptor: The Subnational Human Development Database

Jeroen Smits[1] & Iñaki Permanyer[2]

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In this paper we describe the Subnational Human Development Database. This database contains for the period 1990–2017 for 1625 regions within 161 countries the national and subnational values of the Subnational Human Development Index (SHDI), for the three dimension indices on the basis of which the SHDI is constructed – education, health and standard of living --, and for the four indicators needed to create the dimension indices -- expected years of schooling, mean years of schooling, life expectancy and gross national income per capita. The subnational values of the four indicators were computed using data from statistical offices and from the Area Database of the Global Data Lab, which contains indicators aggregated from household surveys and census datasets. Values for missing years were estimated by interpolation and extrapolation from real data. By normalizing the population-weighted averages of the indicators to their national levels in the UNDP-HDI database, values of the SHDI and its dimension indices were obtained that at national level equal their official versions of the UNDP.

Design Type(s)	longitudinal study design • data integration objective
Measurement Type(s)	Socioeconomic Factors
Technology Type(s)	digital curation
Factor Type(s)	geographic location • temporal_interval
Sample Characteristic(s)	Afghanistan • anthropogenic environment • Angola • Albania • Argentina • Armenia • Australia • Austria • Azerbaijan • Burundi • Belgium • Benin • Burkina Faso • Bangladesh • Bulgaria • Bosnia and Herzegovina • Belarus • Belize • Bolivia • Brazil • Barbados • Bhutan • Botswana • Central African Republic • Canada • Switzerland • Chile • China • Cote d'Ivoire • Cameroon • Democratic Republic of the Congo • Republic of Congo • Colombia • Comoros • Cape Verde • Costa Rica • Cuba • Czech Republic • Germany • Djibouti • Kingdom of Denmark • Dominican Republic • Algeria • Ecuador • Egypt • Eritrea • Kingdom of Spain • Estonia • Ethiopia • Finland • Fiji • French Republic • Gabon • United Kingdom • Georgia • Ghana • Guinea • Gambia • Guinea-Bissau • Equatorial Guinea • Greece • Guatemala • Guyana • Honduras • Croatia • Haiti • Hungary • Indonesia • India • Republic of Ireland • Iran • Iraq • Italy • Jamaica • Jordan • Japan • Kazakhstan • Kenya • Kyrgyzstan • Cambodia • South Korea • Kuwait • Laos • Lebanon • Liberia • Libya • Lesotho • Lithuania • Latvia • Morocco • Moldova • Madagascar • Maldives Archipelago • Mexico • Macedonia • Mali • Malta • Myanmar • Montenegro • Mongolia • Mozambique • Mauritania • Mauritius • Malawi • Malaysia • Namibia • Niger • Nigeria • Nicaragua • The Netherlands • Kingdom of Norway • Nepal • New Zealand • Pakistan • Panama • Peru • The Philippines • Poland •

[1]Global Data Lab, Institute for management Research, Radboud University, Nijmegen, Netherlands. [2]Centre d'Estudis Demogràfics, Universitat Autònoma de Barcelona, Bellaterra, Spain. Correspondence and requests for materials should be addressed to J.S. (email: j.smits@fm.ru.nl)

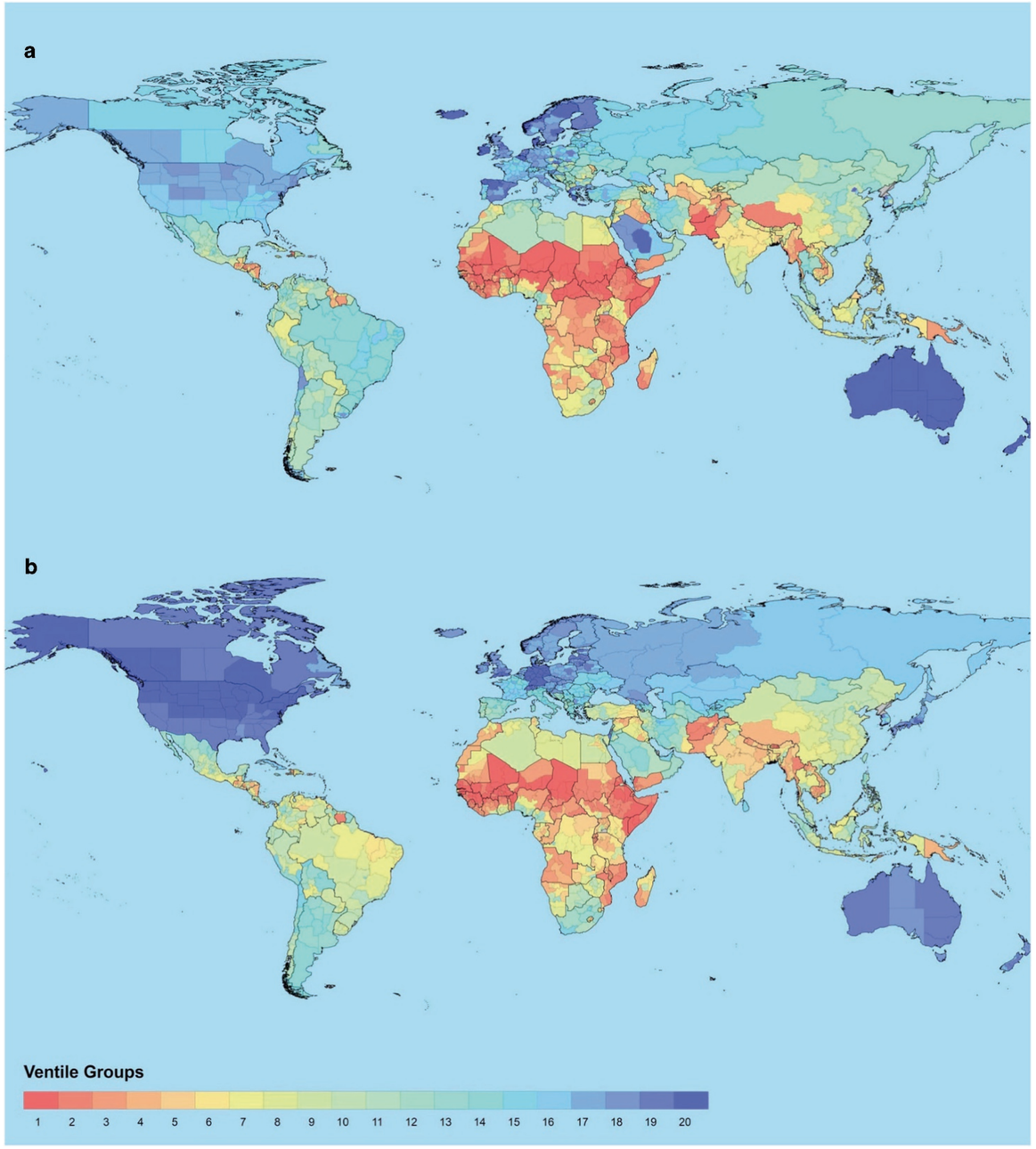

Figure 1. **World maps with the distribution of the education dimension indicators.** (**a**) Distribution of EYS values. (**b**) Distribution of MYS values.


Lake
Kivu
RWANDA
Burundi
Muyinga
Cibitoke
Ngozi
Bubanza
BUJUMBURA
Gitega
Heha
DEM. REP.
OF
THE
CONGO
TANZANIA
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Lake
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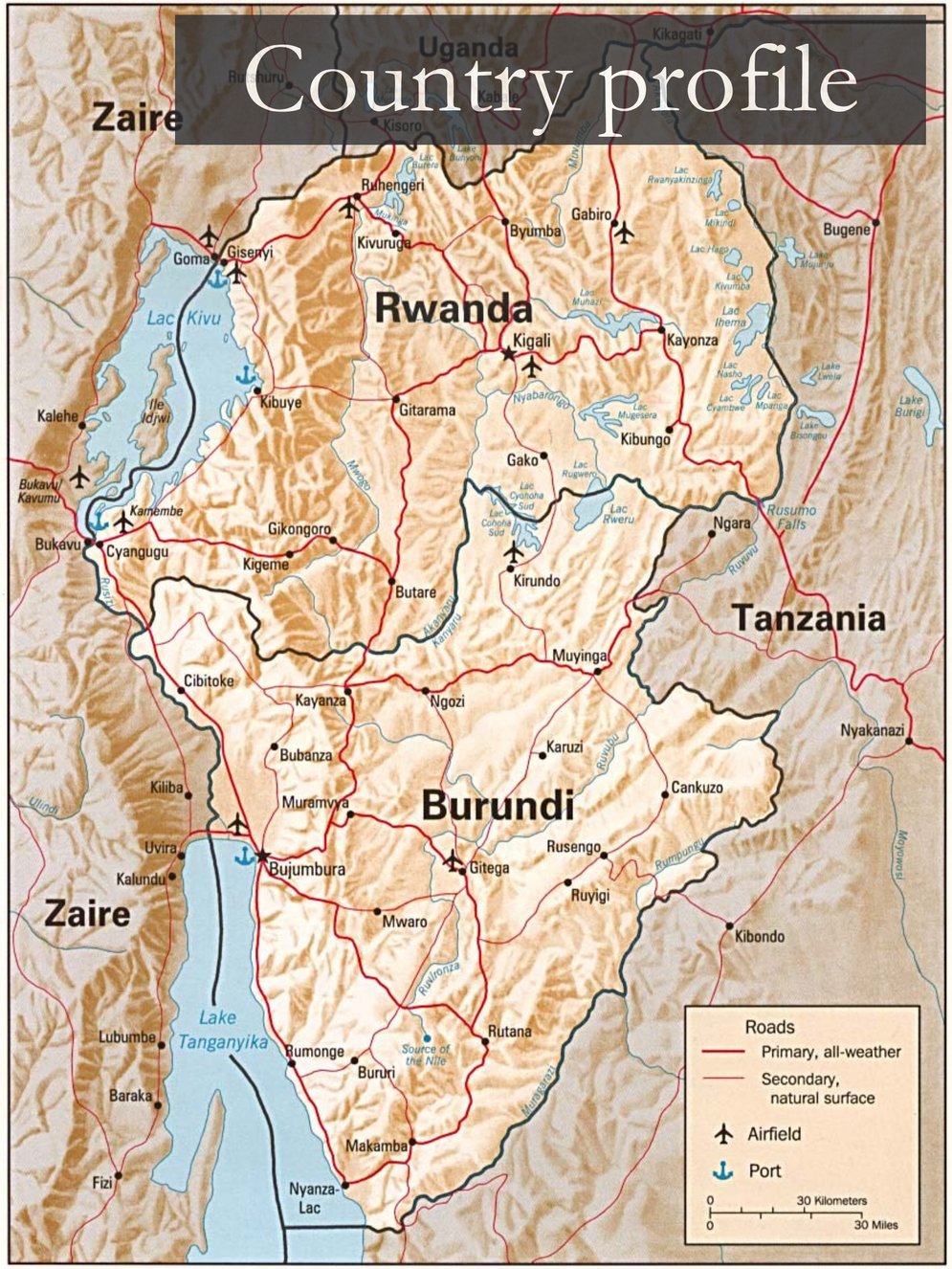
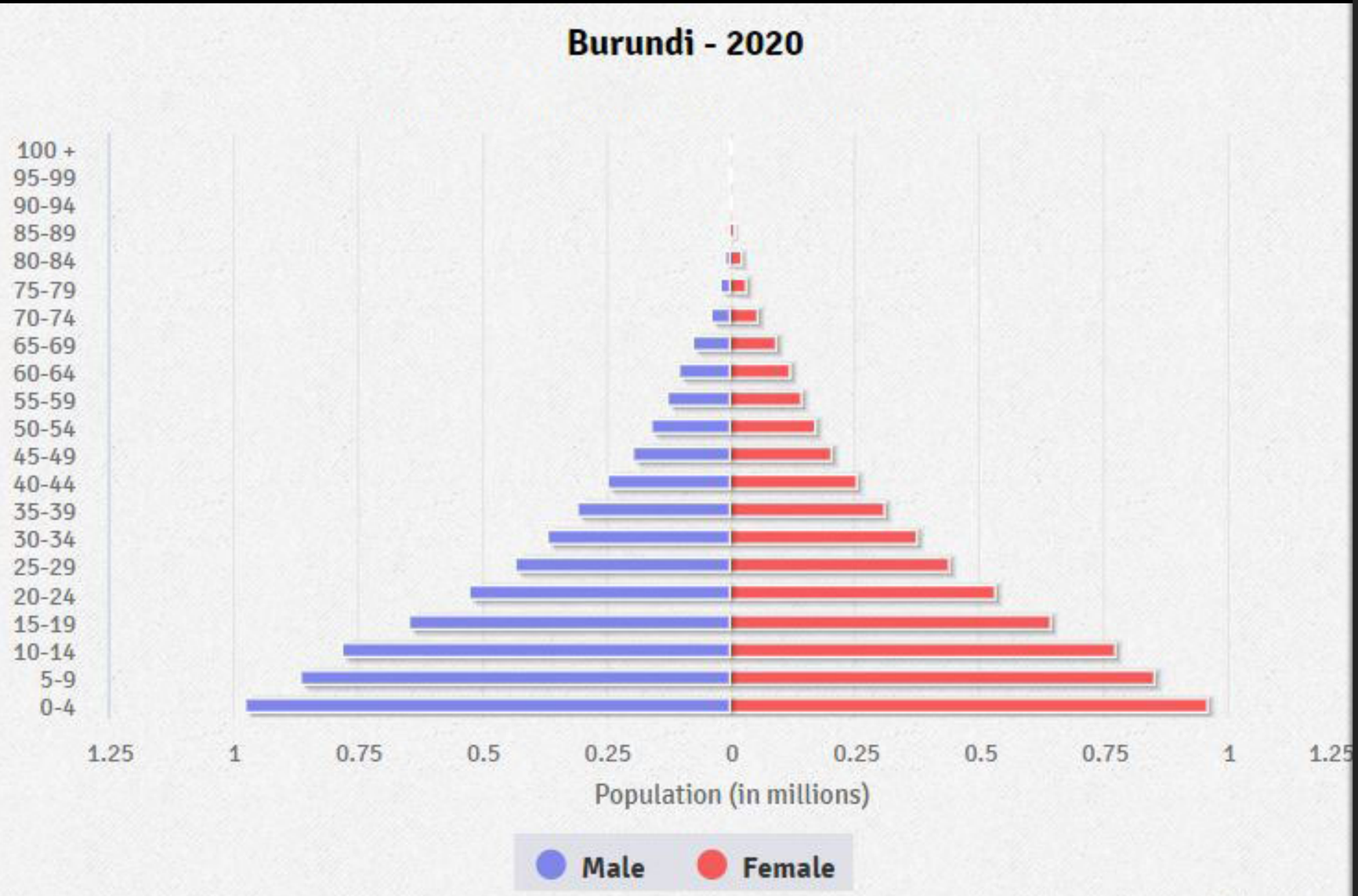
Country profile

Rwanda and Burundi



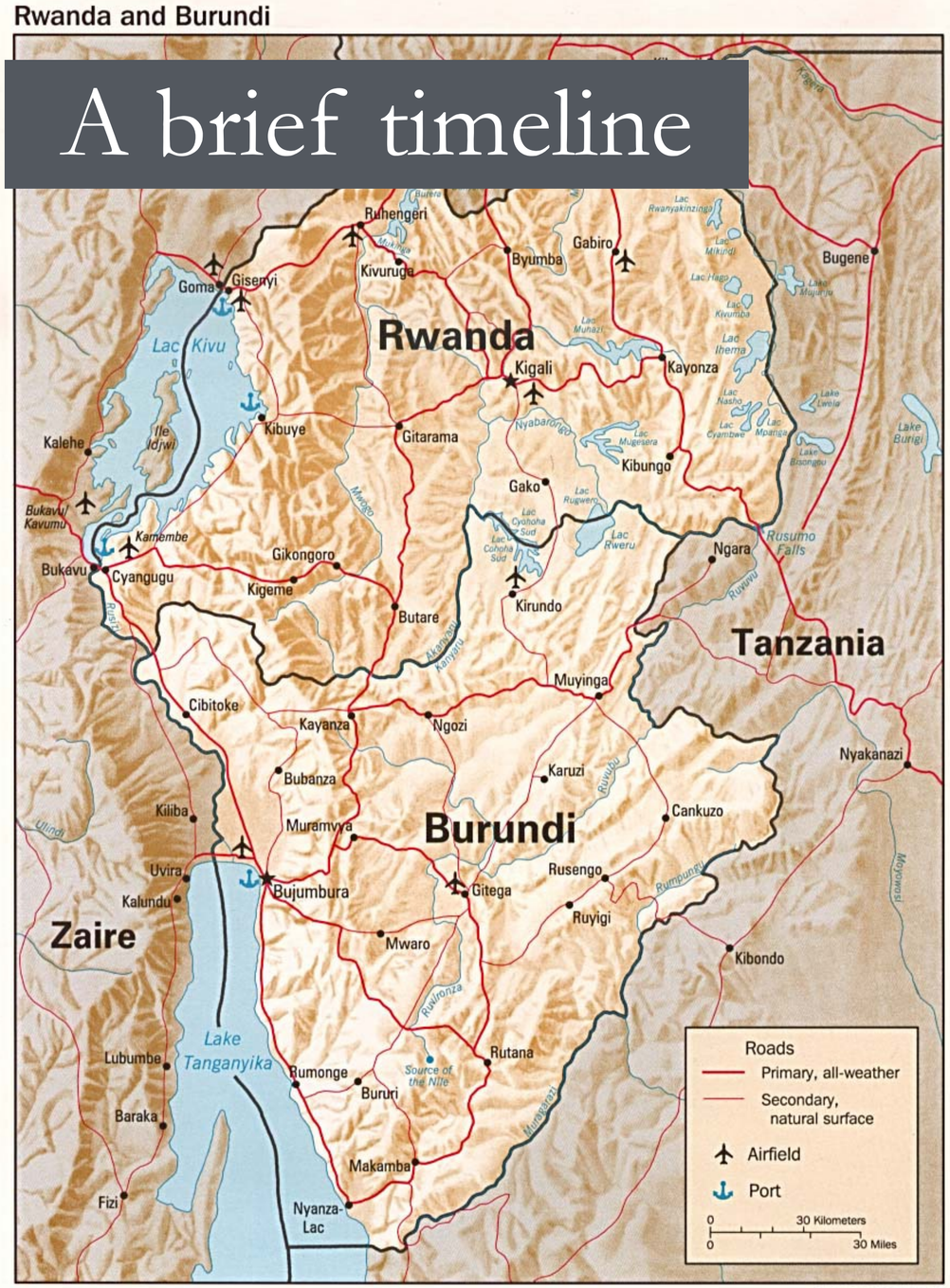
Source: University of Texas at Austin https://legacy.lib.utexas.edu/maps/burundi.html

Burundi’s population pyramid



Source: CIA Factbook

A brief timeline



Source: University of Texas at Austin https://legacy.lib.utexas.edu/maps/burundi.html

Today's puzzle

Grievances are everywhere but conflict is rare.

Evidence suggests that grievances lead to **action** due to opportunistic actors who have the resources or realistic chance at success.

Greed is ubiquitous as well.

Greed is also enabled by opportunistic actors in areas with weak institutions, parallel sources of power, or high stakes.