Institute for International Business

eXplore!

Big Data in Management Research
AOM – Research Workshop

Jakob Müllner

2025/07

universität innsbruck

Institute for International Business

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EIBA SUMMER SCHOOL

4th EIBA – Summer School on Research Methods in IB

"Artificial Intelligence, Machine Learning, and Big Data: Opportunities and Challenges for International Business Research"

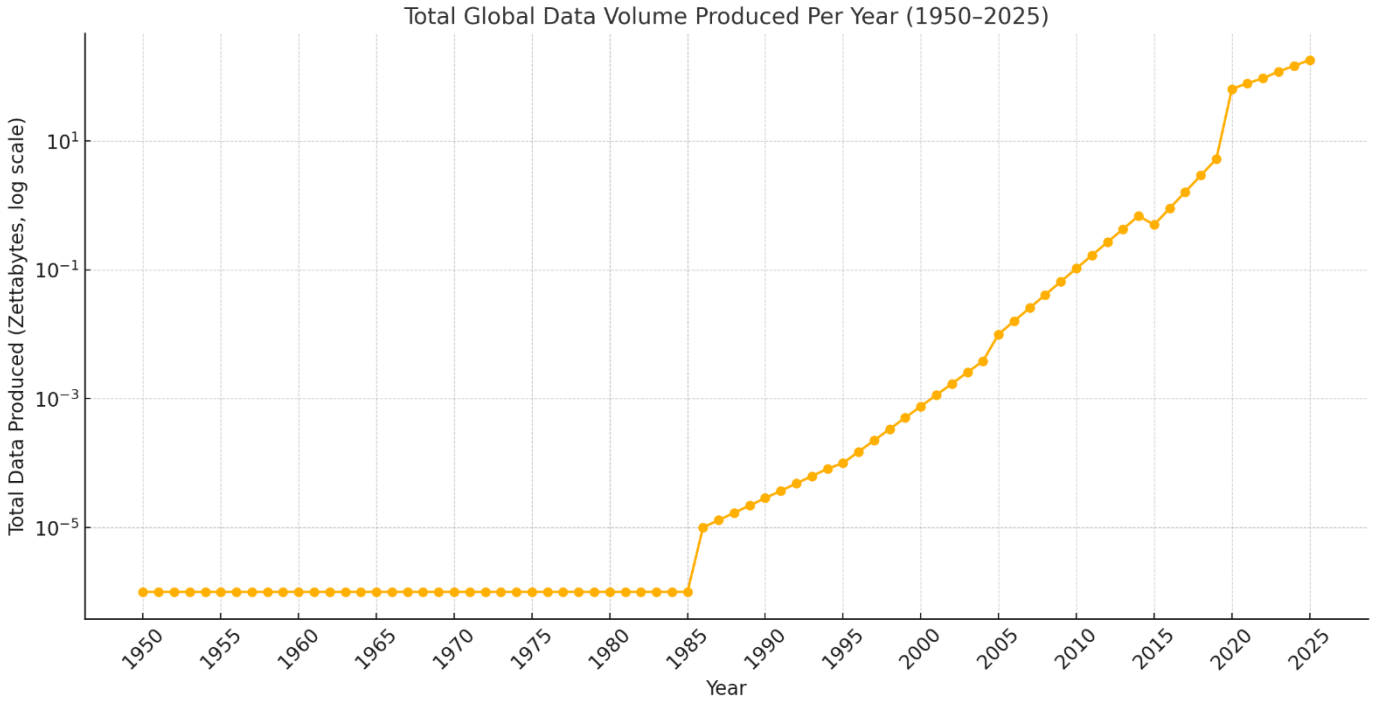
The European International Business Academy (EIBA) in collaboration with the Vienna University of Economics and Business is pleased to announce that the 5th EIBA Summer School will be held at the iconic campus of the Vienna University of Economics and Business, September 1-6 2025.

The 5th EIBA Summer School, titled "Artificial Intelligence, Machine Learning, and Big Data: Opportunities and Challenges for International Business Research", offers a unique opportunity for emerging scholars to engage with the rapidly evolving landscape of international business (IB). As digital multinational corporations (MNCs), platform-based companies, and AI-driven ecosystems redefine global markets, traditional IB frameworks are increasingly challenged. This program aims to explore how these transformations necessitate a rethinking of IB theories, a reorientation of research priorities, and a methodological evolution to capture the novel dynamics shaping international business today.

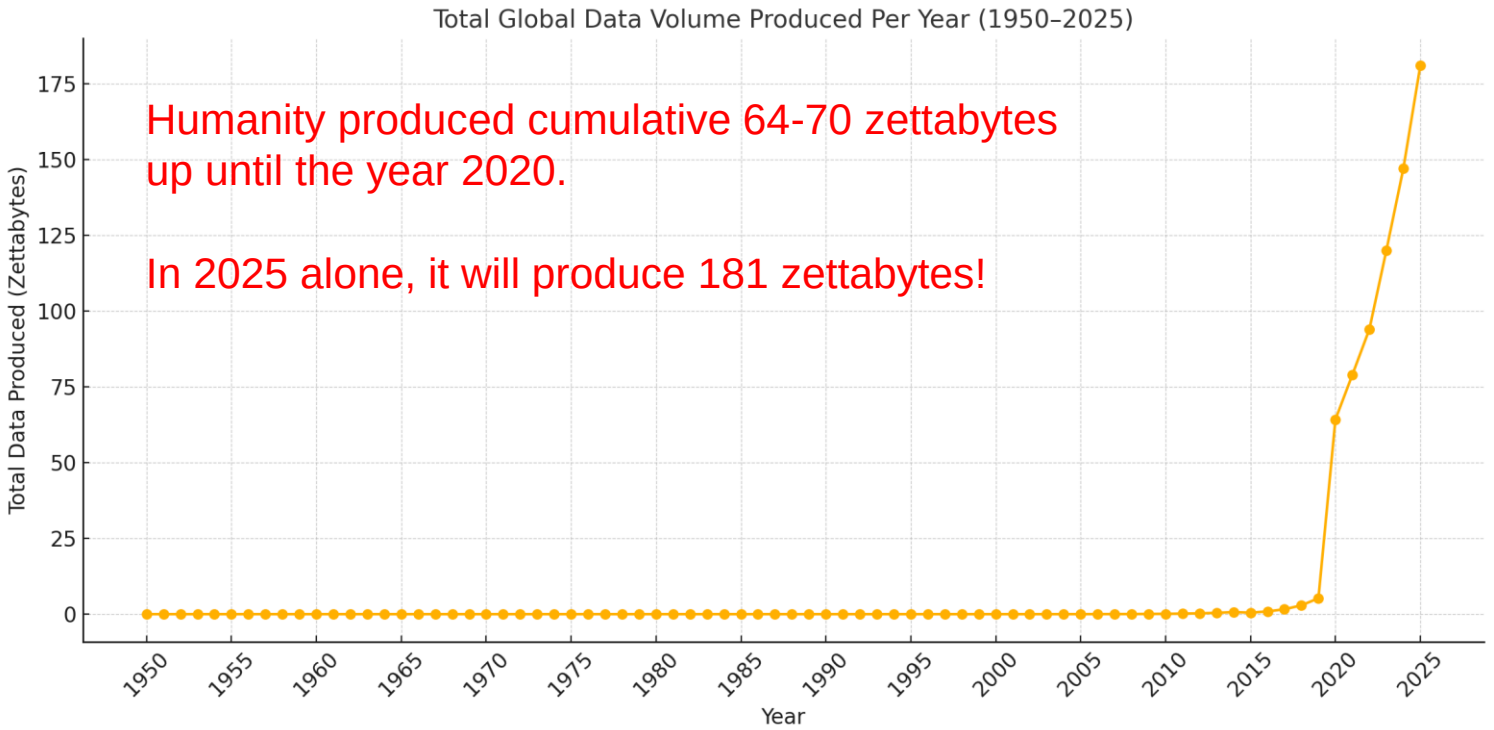
Participants will delve into the ways digitalization and data proliferation reshape IB scholarship. The summer school emphasizes four critical areas: (a) reevaluating foundational IB theories to better reflect the realities of digital MNCs and platform companies, (b) shifting research questions to address emerging issues such as algorithmic governance, digital supply chains, and data sovereignty, (c) leveraging new data sources, including big data and digital trace data, to improve existing measures or uncover previously unobservable phenomena, and (d) adopting cutting-edge empirical methods such as machine learning, network analysis, and natural language processing to analyze these trends effectively.

WU VIENNA | EIBA European International Business Academy

Big Data


Total Global Data Volume Produced Per Year (1950–2025)
Total Data Produced (Zettabytes, log scale)
10^{1}
10^{-1}
10^{-3}
10^{-5}
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
Year

Big Data


Total Global Data Volume Produced Per Year (1950–2025)
Humanity produced cumulative 64-70 zettabytes up until the year 2020.
In 2025 alone, it will produce 181 zettabytes!
Total Data Produced (Zettabytes)
0
25
50
75
100
125
150
175
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
Year

Three Examples Big Data Sources

Reach (almost) every person in the world

Our globaltrends software allows users to **download and process large amounts of GoogleTrends** data from more than 5 billion representative users worldwide

Strengths:

- Zero cost of data collection
- Real-time data availability
- Global coverage
- Granular subnational data
- Versatility (can be used for companies, products, persons, trends…)
- Zero response bias as Google is used in daily life

Read (almost) every digital information in the world

GDELT tracks **world's broadcast, print, and web news** in over 100 languages and identifies people, locations, organizations, themes, sources, emotions, counts, quotes, images and events driving our global society every second of every day.

Strengths:

- Multi-language data
- Real-time data availability
- Global coverage
- Includes context, emotions, events and relationships

Access the worlds largest media aggregation site

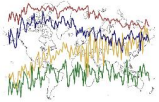
Qualitative data from official sources on **transactions** (e.g. FDI, Trade)**, individuals** (e.g. taxes, employment), **firms** (e.g. investment, employment). Fully matched, anonymized and remotely accessible.

Strengths:

- Qualitative depth
- Context
- Open API
- Moderated content

Google Trends

globaltrends



3.1

GOOGLE DATA IN STRATEGY

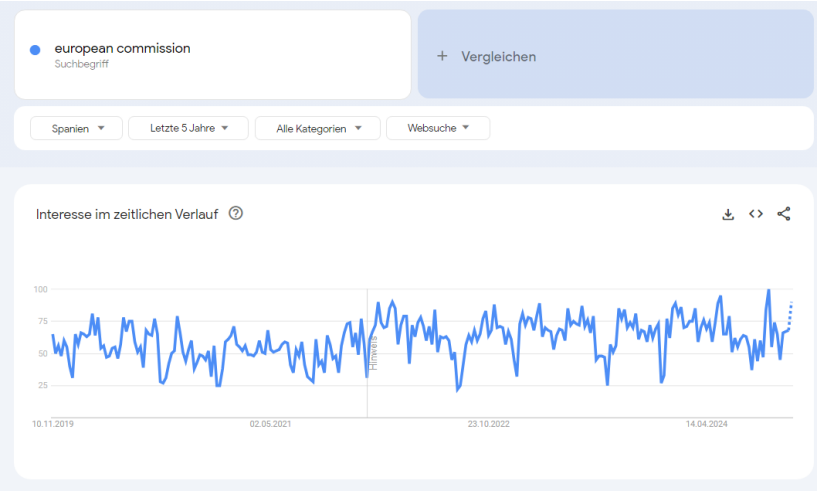
Rich & validated applications of Google Trends

- Public health & epidemiology (symptom tracking, pandemic research)
- Economics (macro-level forecasting)
- Political science (polling, issue salience, public opinion)
- Finance (stockholder recognition, stock price volatility, trading behavior)
- Social science (measuring cultural values like environmental awareness, religiosity, behavior like sexual behavior, or crime)
- Tourism (forecasting travel activity)
- Sports research (player/team performance/value)
- Meteorology & climate research (study extreme weather phenomena)
- Marketing (advertising efficiency, brand value measurement)

Few applications of Google Trends in Management

Google Trends

- Google Trends offers a portal to analyze search activities on Google
- The data is available globally or by country or region (e.g., provinces)
- Google provides two types of data:
  - Time series for search interest
  - Related search queries (rising, top)
- Google allows the usage of plain-language terms and automatically generated „topics“
  - Topics help to avoid issues related to the definition of search terms



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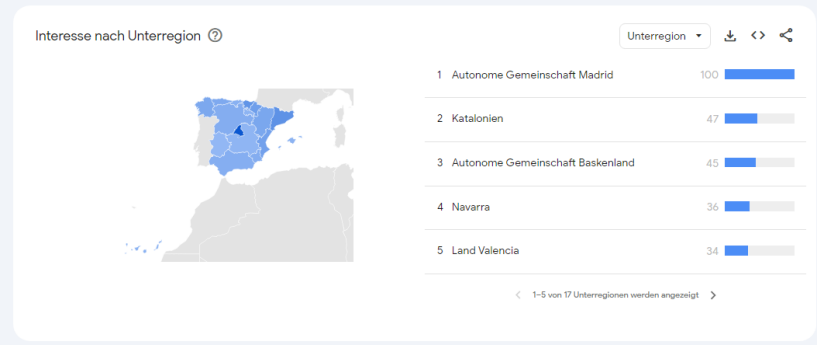

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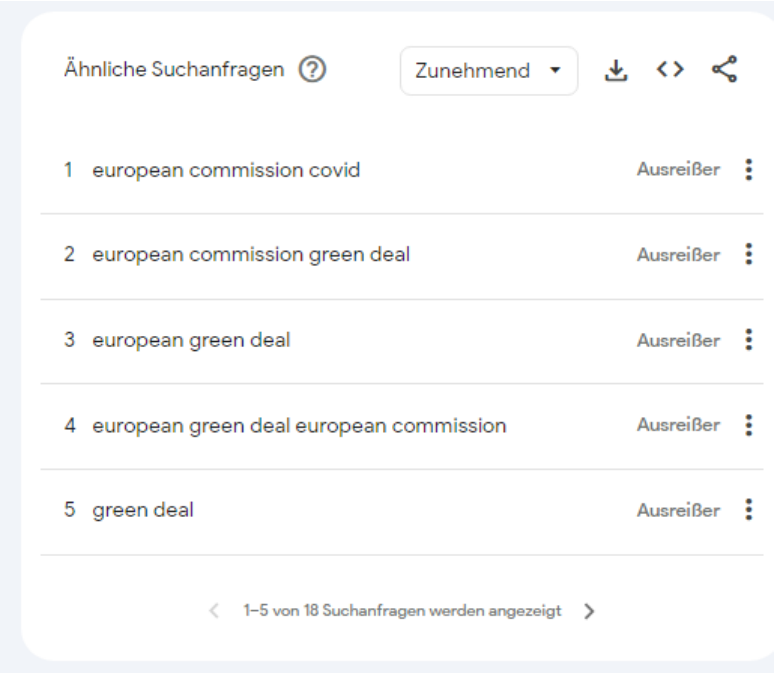


Foundations for the application of Google Trends in Management & Strategy Science

- Information gathering on Google as part of **individuals' decision-making processes**
  - Search engines are an essential channel by which to access information
  - Greater search volumes for a topic signifying greater public attention

- Google reflects every-day **information seeking behavior** of over 5 bn. internet users
  - No reporting bias
  - Time series data
  - Reliable geo-tagging
  - Global, national, and subnational data

Data on Google searches lends itself to study attitudes, awareness, and internationalization

We have used Google Trends in a number of projects

- Puhr, H. & Müllner, J. 2024. Vox Populi, Vox Dei: A Concept and Measure for Grassroots Socio-Political Risk Using Google Trends. *Journal of International Management.*
- Puhr, H. & Kupfer, A. 2023. Media in the Geopolitical Crossfire: Identification and Novel Data Sources for IB Research. *A I B Insights, 23(1): 1-6.*
- Puhr, H. & Müllner, J. 2022. Foreign to all but fluent in many: The effect of multinationality on shock resilience. *Journal of World Business, 57(6): 101370.*
- Puhr, H. & Müllner, J. 2021. Let me Google that for you: Capturing globalization using Google Trends, , *SSRN Working Paper https://ssrn.com/abstract=3969013 Vienna: University of Innsbruck, Vienna University of Economics and Business.*

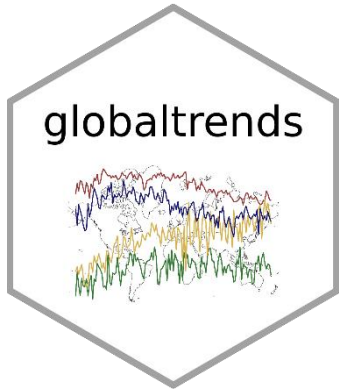
Our `globaltrends` R Package

The `globaltrends` R package provides standardized indices for

- country-level search scores,
- degree of internationalization (DOI) and
- volume of internationalization (VOI) for any construct of interest

- Code and extensive documentation available on GitHub (link)
- Conceptual discussion of using Google Trends to measure globalization on SSRN (link)

- We have successfully used `globaltrends` in various empirical applications



What can you use it for?

- Application I: Measuring Degree of Internationalization
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- Application III: Event-Study
- Application IV: Measuring Country Distances
- Application V: Media Analysis
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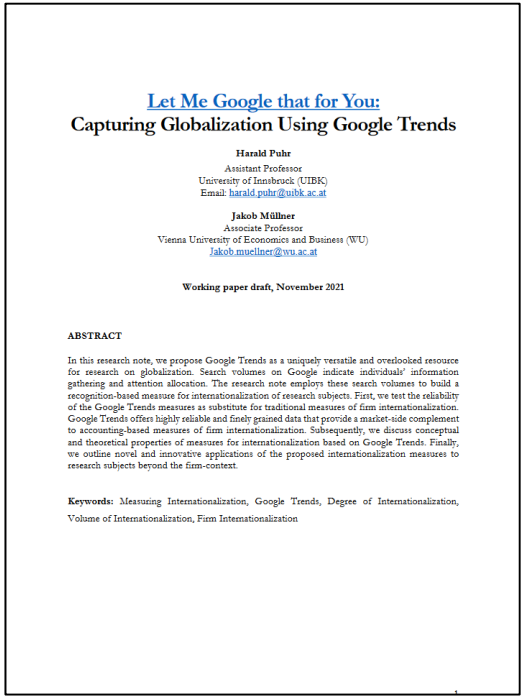

Let Me Google that for You:
Capturing Globalization Using Google Trends

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Working paper draft, November 2021

ABSTRACT

In this research note, we propose Google Trends as a uniquely versatile and overlooked resource for research on globalization. Search volumes on Google indicate individuals' information gathering and attention allocation. The research note employs these search volumes to build a recognition-based measure for internationalization of research subjects. First, we test the reliability of the Google Trends measures as substitute for traditional measures of firm internationalization. Google Trends offers highly reliable and finely grained data that provide a market-side complement to accounting-based measures of firm internationalization. Subsequently, we discuss conceptual and theoretical properties of measures for internationalization based on Google Trends. Finally, we outline novel and innovative applications of the proposed internationalization measures to research subjects beyond the firm-context.

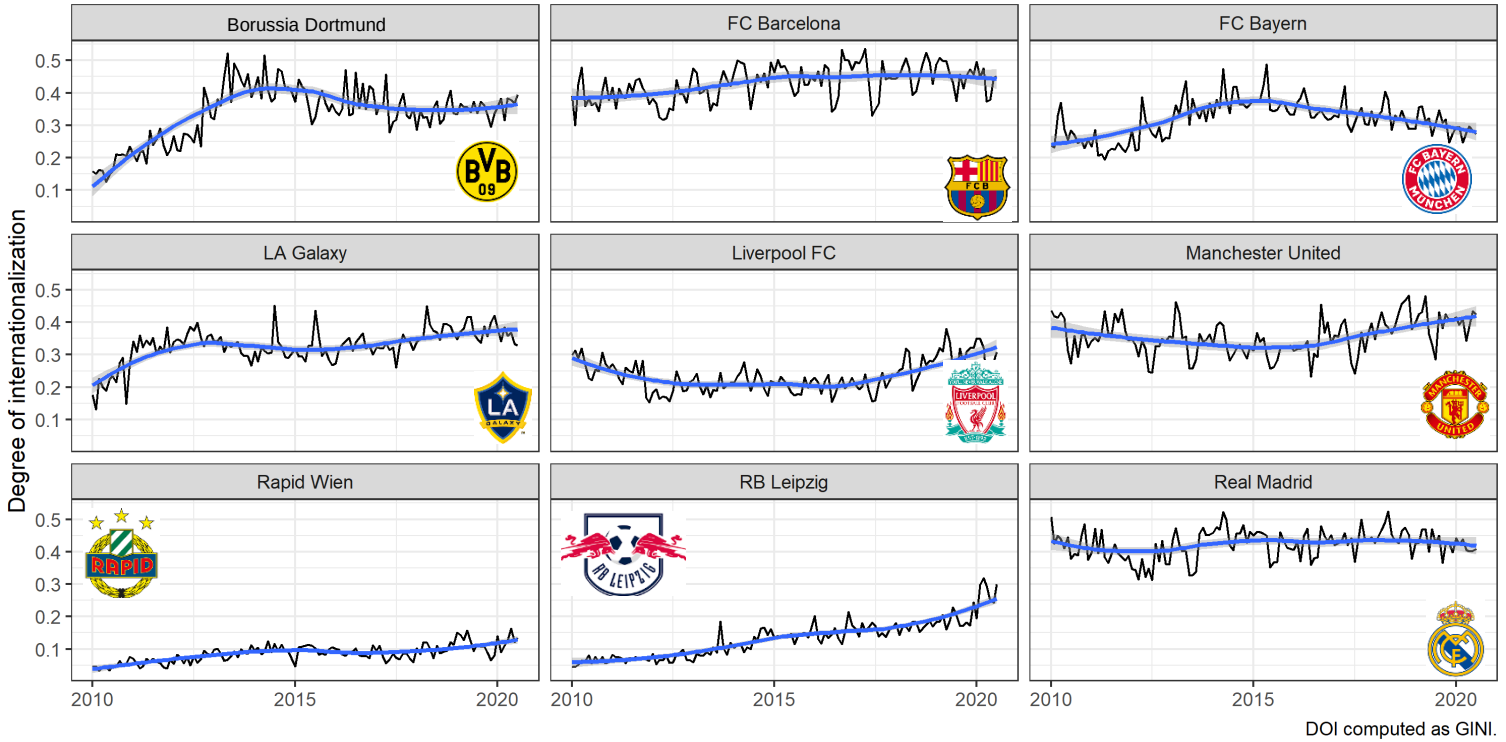
Keywords: Measuring Internationalization, Google Trends, Degree of Internationalization, Volume of Internationalization, Firm Internationalization

Puhr, H. & Müllner, J. 2021. Let me Google that for you: Capturing globalization using Google Trends, , *SSRN Working Paper.*

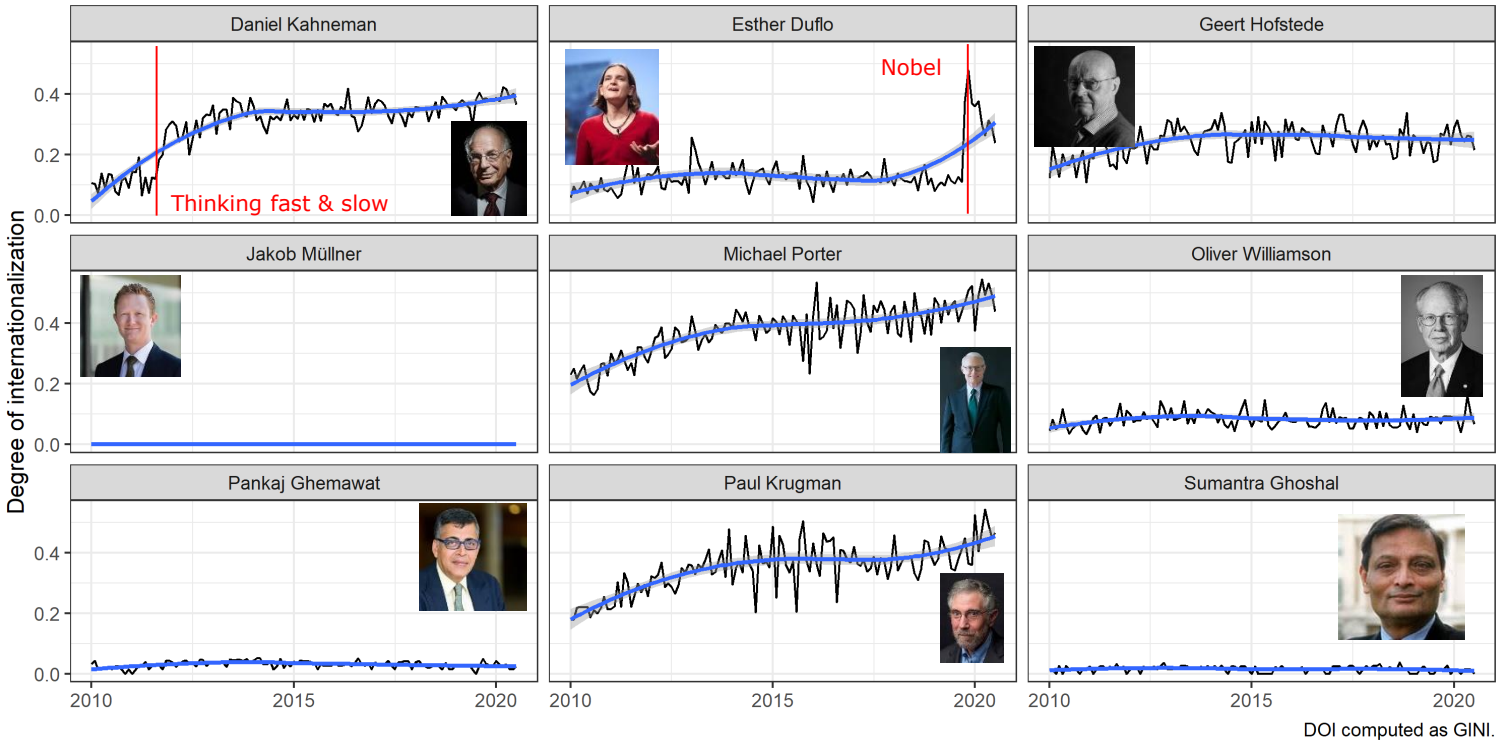
Degree of Internationalization of S&P 500 Companies

Non-profit Organizations (e.g., Universities)

Non-profit Organizations (e.g., Sports clubs)



Researchers & Authors



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Vox populi, vox dei: A concept and measure for grassroots socio-political risk using Google Trends

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ARTICLE INFO

Keywords:
Google Trends
Political risk
Social risk
Liability of foreignness
Psychic distance
Measurement

ABSTRACT

In this paper, we propose a concept of grassroots socio-political risk (SPR) and provide a measure for it that is based on individual-level Google Trends data that captures issue salience. Our concept provides a bottom-up complement to established measures that focus more on political and institutional players and the institutional constraints they face. Our grassroots SPR index attempts to capture public pressure to initiate institutional change in a country. In contrast to existing measures, our Google Trends-based measure captures issue salience directly among individuals rather than media or analyst reports. As such, it is uniquely representative of socio-political sentiment, timely, and widely available. Our concept and measure offer international business (IB) researchers novel opportunities. In addition to developing the index, we scrutinize its validity and provide an illustrative empirical application in the IB context by showing that differences between internal and external assessments of grassroots SPR are contingent on psychic distance.

1. Introduction

Despite increasing globalization, country-level socio-political risk (SPR) remains one of the most important and distinguishing issues in international business (IB) and international management (IM). In the US, the Economic Policy Uncertainty (EPU) index has seen steady increases since 1960 due to growing government regulation, frequent partisan rifts, and populist rhetoric (Baker et al., 2014; Baker et al., 2016). Crises, sanctions, trade wars, and, recently, military conflict have had similar effects on the global stage. According to the US National Intelligence Council's, 2021 report on Global Trends 2040, socio-political tensions will further increase in the coming years. Following this persistent relevance of SPR, academic interest in the impact of SPR on multinational enterprises (MNEs) has intensified in the past decades. Scholars have studied various facets of SPR such as corruption (Kaufmann and Ledyaeva, 2012; Sartor and Beamish, 2018), legal uncertainty (White III et al., 2015), socio-political violence (Oh and Oetzel, 2017), military conflict (Arikan et al., 2020; Li and Vashchilko, 2010), or property rights violations (Jiang et al., 2011).

However, much of the institutional literature and the literature in IB that measures SPR focuses on political actors as sources of risk due to weak constraints on their political power. These measures observe countries' long-term institutional structures and capture the risk of adverse institutional changes based on the constraints that prevent policymakers from top-down sovereign intervention against, foremost, foreign investors (e.g., expropriation). In today's global policy environment (White III et al., 2021), such top-down structural SPR is vitally important for companies, but it does not necessarily reflect a more fundamental, bottom-up source of institutional change

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1075-4253/© 2023 The Author(s). Published by Elsevier Inc. This is an open access article under the CC BY license

Puhr, H. & Müllner, J. 2024. Vox Populi, Vox Dei: A Concept and Measure for Grassroots Socio-Political Risk Using Google Trends. *Journal of International Management.*

Our empirical Approach to Measurement

- We build on methodologies by extant text-based (unidimensional) risk indices
  (Baker et al., 2013, 2016; Bontempi et al., 2021; Donadelli & Gerotto, 2019; Castelnuovo & Tran, 2017)

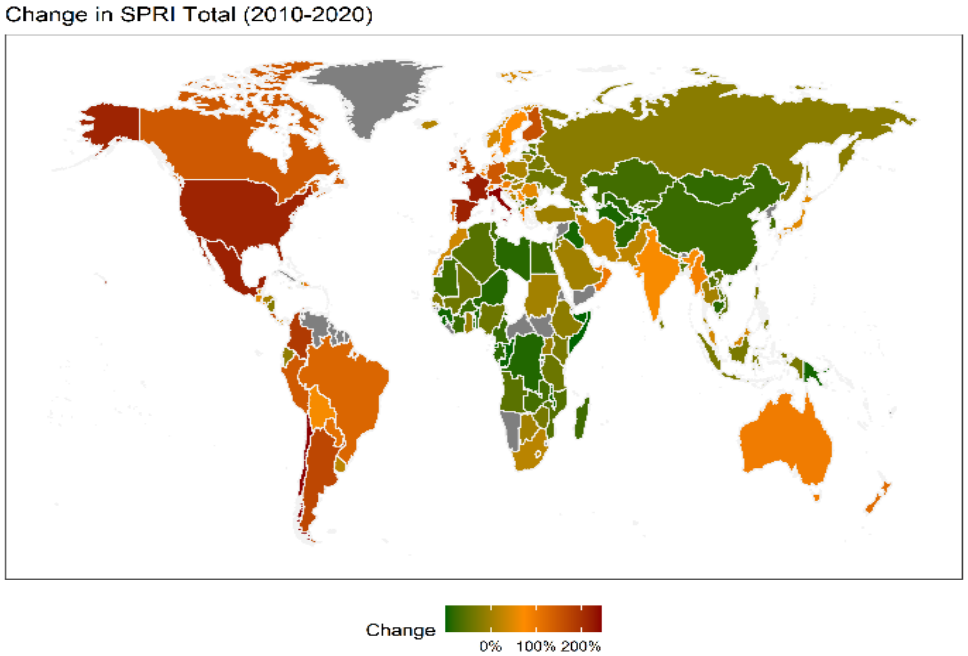
Approach

- Category and term identification and selection based on literature review
- Usage of language-independent “search topics” provided by Google
- Download and processing of search volumes using the `globaltrends` package for R
- Aggregation of terms to four categories, country risk, and weighted global risk

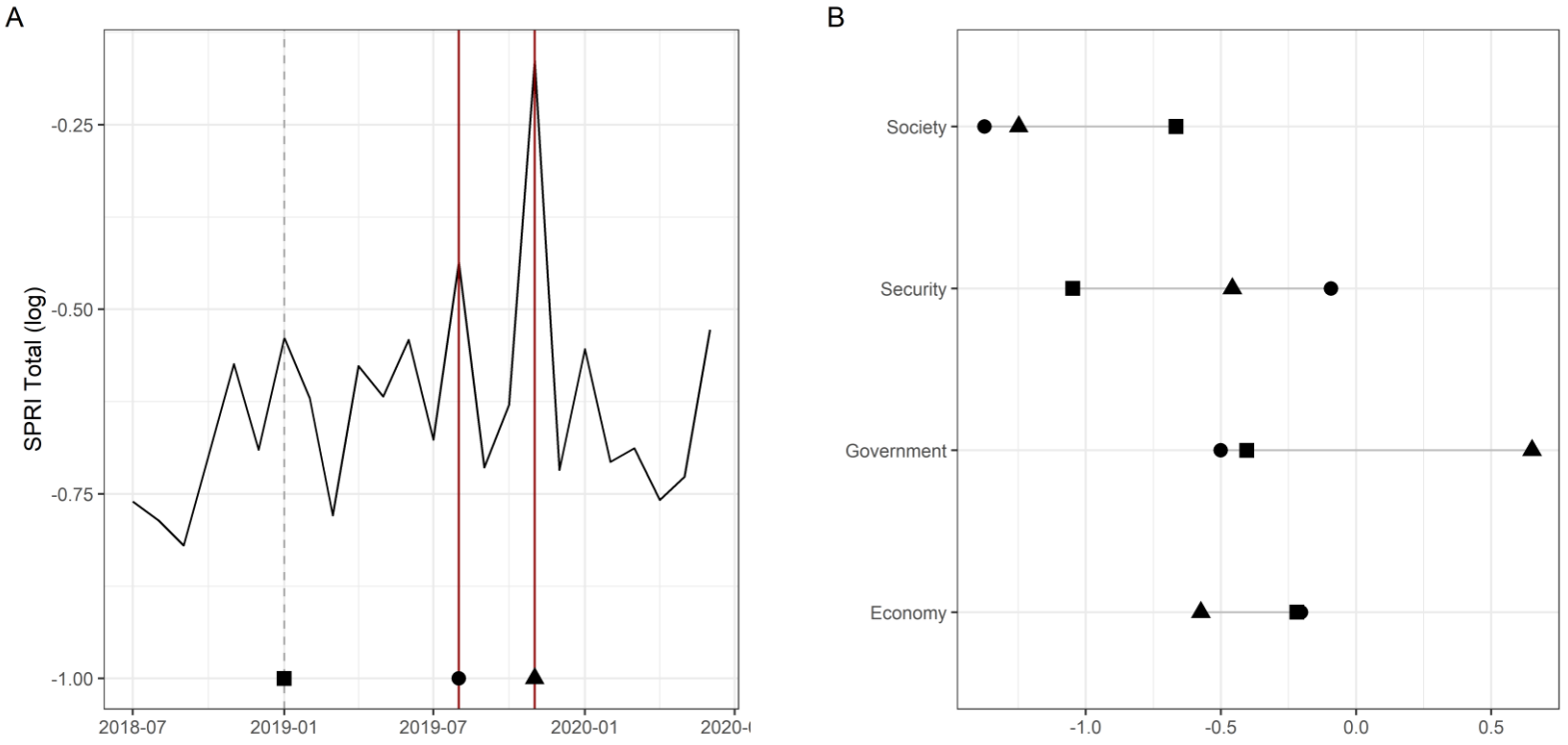
Data

- 4 categories of socio-political risk: Economy, Government, Security, and Social
- 110 keywords relating to these four categories
- Data for 149 countries that represent about 98% of global population and GDP
- Timeseries of monthly data from 2010 to 2020

Country-level socio-political Risk Index



Detailed socio-political Risk Analysis (e.g., Hong Kong)



■ baseline SPRI (2019-01); ● general strike and HKIA blockade (2019-08);
▲ citywide strike and district council elections (2019-11)

What can you use it for?

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Event Study: Methodology

Focus of interest:

- **Abnormal changes of interest** in a focal firm, person, or construct **within countries**

Conceptualization:

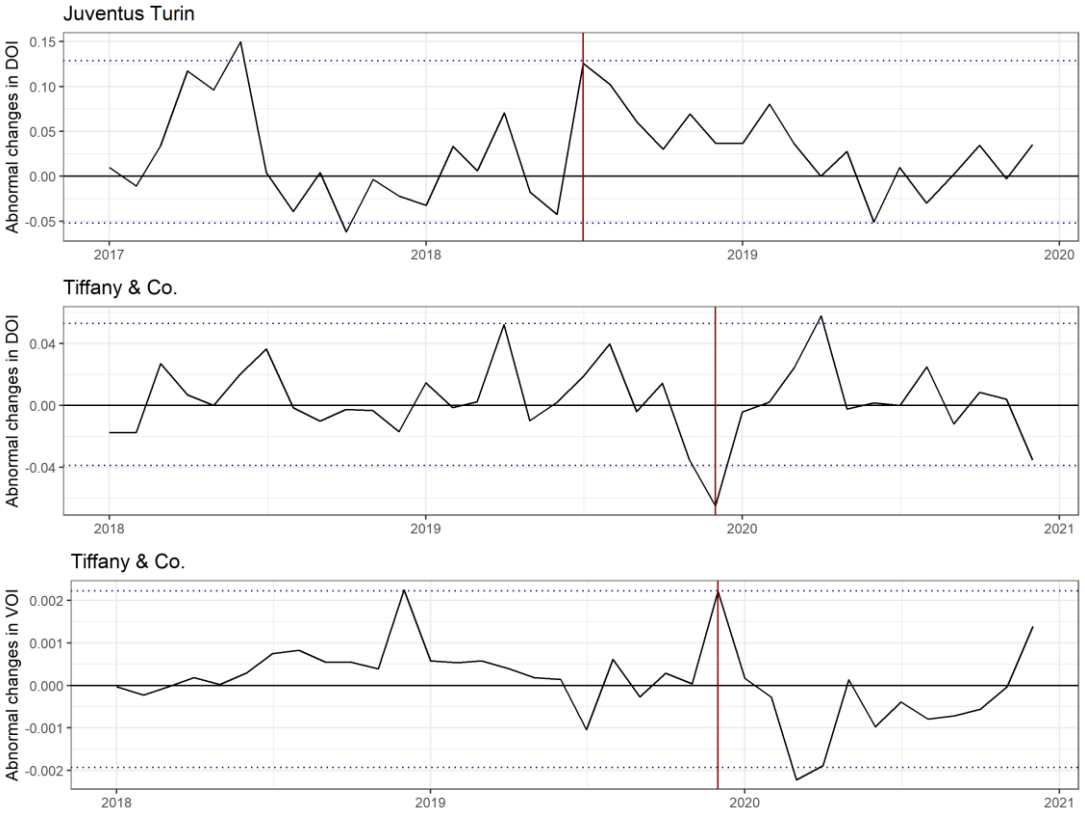
- Google Trends provides highly granular data (up to daily data)
- Events (e.g., M&A) trigger changes in search volumes on Google
- Deviation in information seeking from “normal” levels as indicator for effect of event

$$Abnorm.\ \Delta_t = Google_t - \overline{Google}_T$$

Event Study: Abnormal Changes in DOI

Cristiano Ronaldo Transfer

Announced acquisition by LVMH



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LVMH

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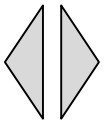
Information gathering and Distance

Cross-national distance
Impediment to information flows

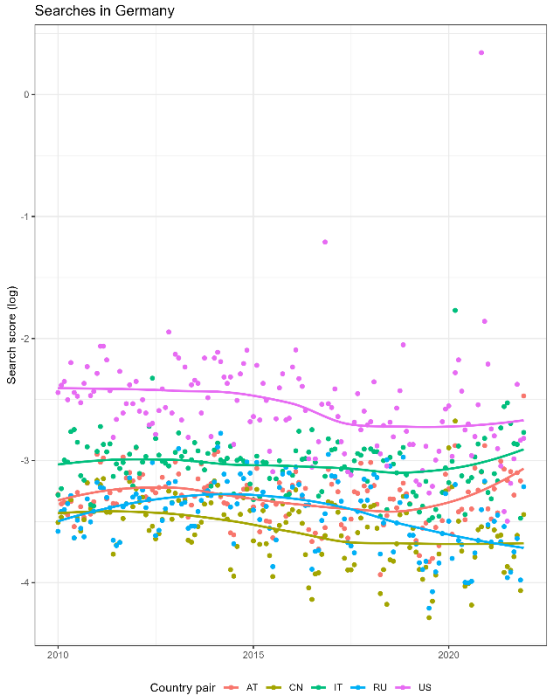


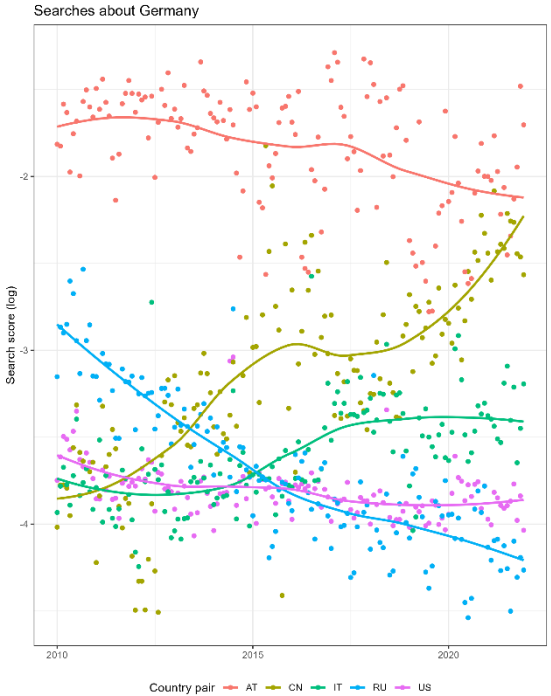
„Absence“ of distance
Free cross-national information flows

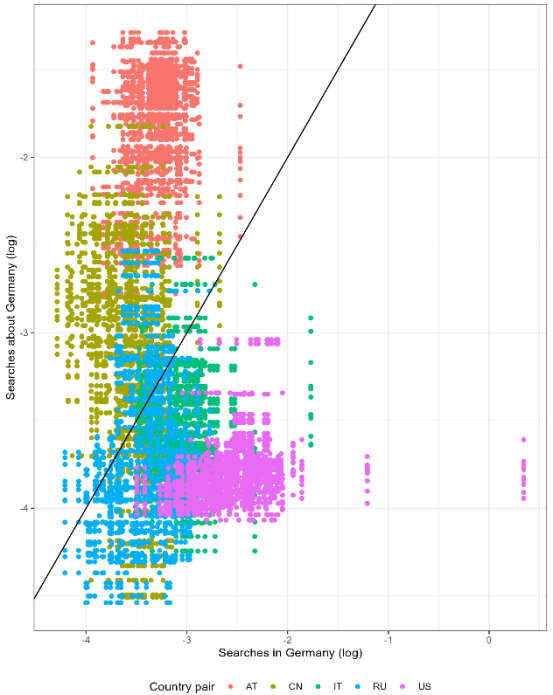
- The greater information gathering in country A about country B
  -> the greater the information flows from country B to country A
  -> the “more absent” the unidirectional distance between country A and country B
- Search volume on Google as **proxy for online information gathering** by individuals
  - Search engines are an essential channel by which to access information
  - Greater search volumes for a topic signifying greater public attention -> information flows

Data on Google searches lends itself to study attitudes, awareness, and internationalization

Unidirectional between-country Search Volume







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INSIGHTS

Puhr, H., & Kupfer, A. 2023. Media in the Geopolitical Crossfire: Identification and Novel Data Sources for IB Research. *AIB Insights*, 23(1). https://doi.org/10.46697/001c.66462.

Article

Media in the Geopolitical Crossfire: Identification and Novel Data Sources for IB Research

Harald Puhr[1], Alexander Kupfer[1]

[1] University of Innsbruck, Austria

Keywords: GDELT, Google Trends, geopolitics, media, issue salience

https://doi.org/10.46697/001c.66462

AIB Insights

Vol. 23, Issue 1, 2023

The media is a rich data source for IB scholars to study policy uncertainty, stakeholder attention, and issue salience. However, the media is exposed to geopolitical tension and political interference. The resulting bias distorts the insights scholars gain from media analysis and leads to potentially impaired conclusions. This study introduces GDELT and Google Trends as novel data sources to handle this challenge. Their usefulness is illustrated by an analysis of media coverage of Russia's invasion in Ukraine in 2022. The paper guides scholars in conducting media-based research in the face of abrupt geopolitical tension and political interference.

> *"The first casualty, when war comes, is truth"* – Hiram Johnson

INTRODUCTION

The media plays a fundamental role for information dissemination in society. For individuals, the media is an important channel to gather information about events and issues. For scholars in international business (IB) and related fields, the media is a rich data source to operationalize constructs like policy uncertainty, stakeholder attention, and issue salience. For politicians, however, the media is a means of communication and control – particularly in periods of substantial and abrupt geopolitical tension. If this is the case, political interference in the media biases reporting and consequently leads to impaired conclusions from media analysis.

The purpose of this article is to draw attention to this challenge and to propose GDELT and Google Trends as potential remedies. We develop the following two-step, data-driven approach: First, applying GDELT to identify structural breaks in the media that indicate interference and bias. Second, consideration of alternative data sources such as Google Trends that suffer less from direct political interference. We illustrate the proposed approach by an analysis of media coverage of Russia's invasion in Ukraine in 2022.

MEDIA-BASED RESEARCH

For researchers in IB and related fields, the media offers a gateway to understanding information-seeking in foreign societies. Among the most prominent media-based research is the economic policy uncertainty index compiled by Baker, Bloom, and Davis (2016). Similar approaches to measuring risk in IB have been applied by Bekaert, Harvey, Lundblad, and Siegel (2014) and Nguyen, Kim, and Papanastassiou (2018). Other studies in IB rely on the media to identify inter-state conflicts (Wang, Weiner, Li, & Jandhyala, 2021) or battle-related deaths (Witte, Burger, Ianchovichina, & Pennings, 2017). IB scholars have also applied media analysis to the firm level and used it for firm classification (Lazzarini, Mesquita, Monteiro, & Musacchio, 2020) or the identification of firm-related events and market entries (Dinner, Kushwaha, & Steenkamp, 2018; Wang & Li, 2019; Witte et al., 2017; Zhou & Wang, 2020), and to operationalize stakeholder relations (Henisz, Dorobantu, & Nartey, 2014).

These approaches build on the understanding of the media as a neutral information supplier to society. Consequently, under the assumption that information supply by the media corresponds to information demand in society, the more intense reporting on an issue, the greater the issue's salience – the importance that society assigns to it (Dennison, 2019).

MEDIA IN THE CROSSFIRE

Scholars, however, should be cautious when drawing conclusions from media analysis as the existence of bias in the media is well documented in the literature (Groseclose & Milyo, 2005; Herman & Chomsky, 2010). Bias can cause over- or underrepresentation in the media for certain issues, individuals, or organizations. Consequently, the link

a Contact author: harald.puhr@uibk.ac.at

[Puhr, H. & Kupfer, A. 2023](). Media in the Geopolitical Crossfire: Identification and Novel Data Sources for IB Research. *A I B Insights, 23(1): 1-6.*

Information Supply vs. Information Demand

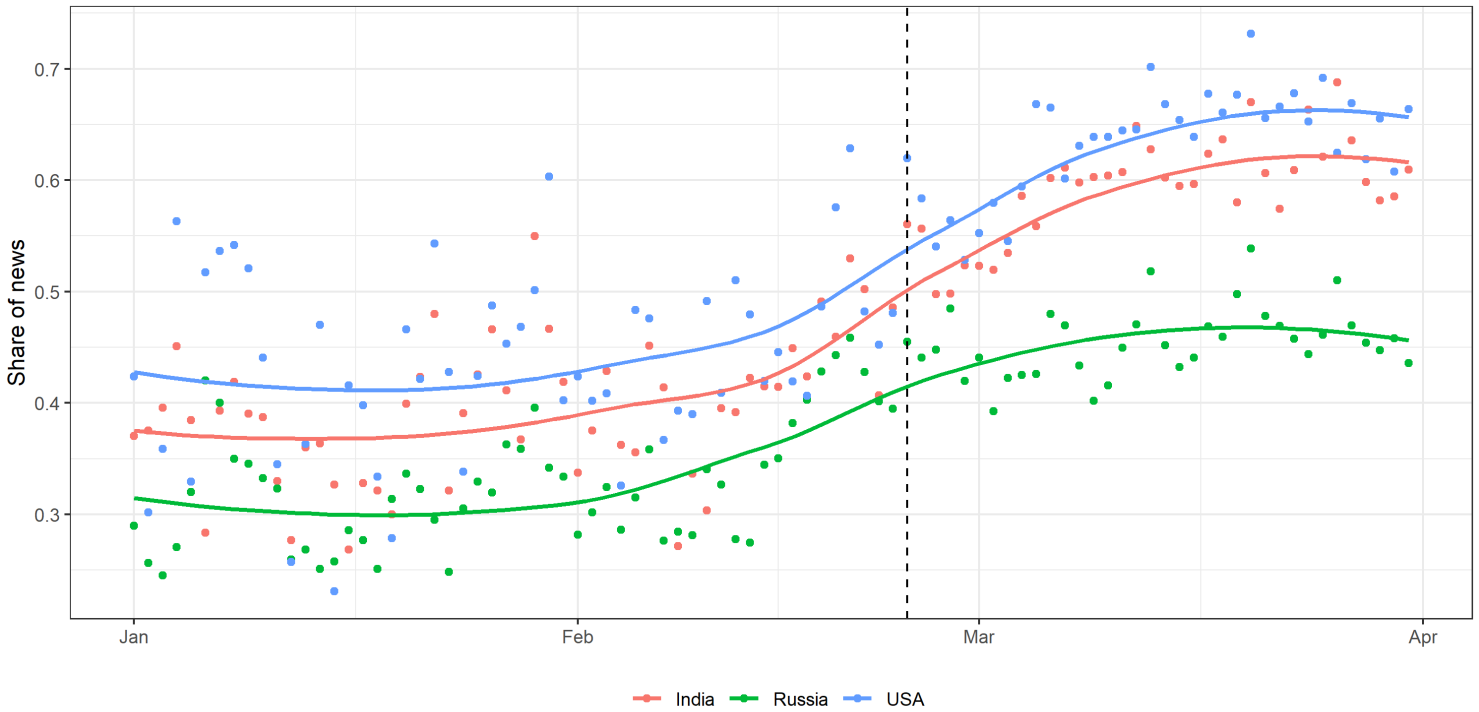
Focus of interest:

- **Search volume** about news in a given country
- Search volume signifies **individual information seeking**
- **Differences** between “official” media reporting and “individual” searches
- Differences indicate **reliability of institutions** and **cost of information seeking**

Conceptualization:

- In a perfect world **media supplies** the information that is **demanded by individuals**
  - Individual (online) information seeking would resemble information in media
- Comparison between information seeking and media shows **potential “filter”**
  - Particular relevance when government interferes with media -> Russian invasion in Ukraine
- Working paper available on SSRN (link)

Media Mentions of Ukraine (Jan-Apr 2022)



Media Mentions of Ukraine – by selected Individuals

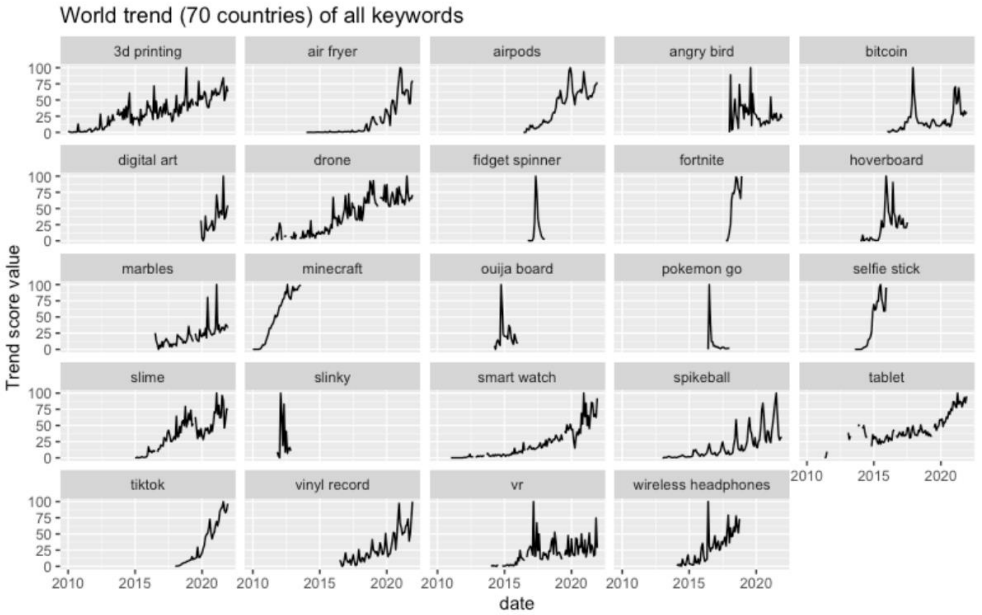
What can you use it for?

- Application I: Measuring Degree of Internationalization
- Application II: Measuring Socio-Political Risks
- Application III: Event-Study
- Application IV: Measuring Country Distances
- Application V: Media Analysis
- Application VI: Pattern Analysis

Pattern Analysis

- Google Trends Time Series can be used to study diffusion of phenomena across the globe (e.g. products, trends, ideologies, diseases)
- In a preliminary application, we downloaded Google Trends Data for 24 fast-growing consumer products
- Running Granger causalities tests between all countries and the world trend series, we identify causal „trendsetting countries“.

Figure A1 Trend scores of all selected keywords across the world scope



Pattern Analysis

We find that cultural proximity is more predictive of trend diffusion than geographical proximity

Figure 2 DOI for all keywords across aggregated country clusters

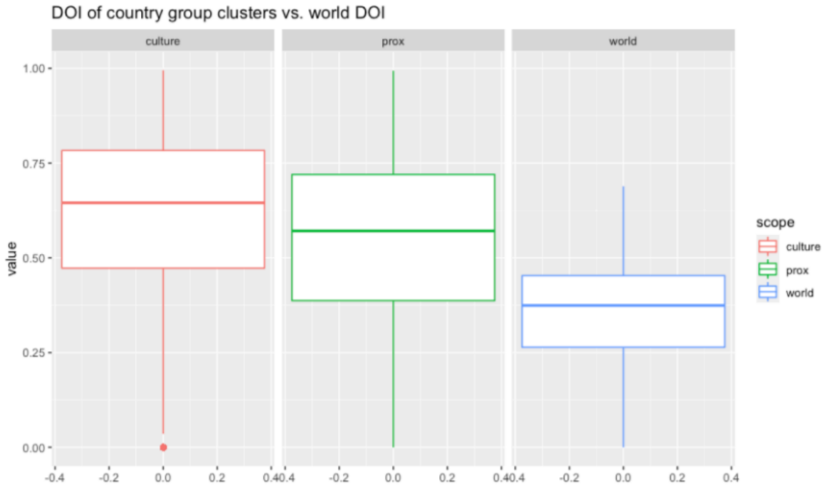
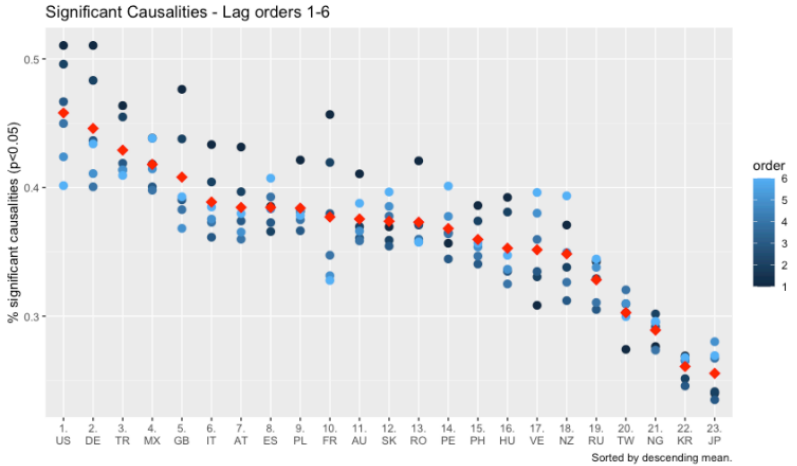


Figure 8 Percentage of significant causalities per lag and country - Lags 1-6



3.2

THE GDELT PROJECT

The GDELT Project

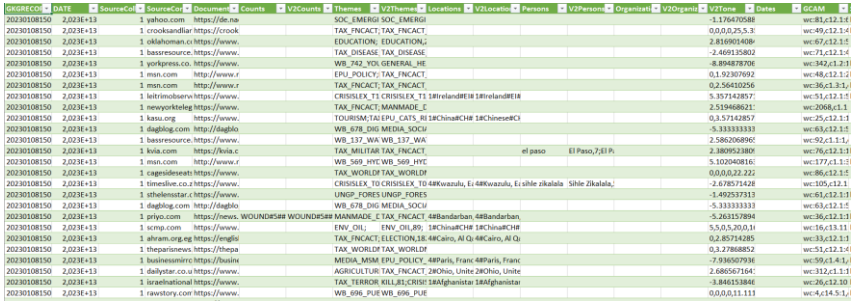
The Global Database of Events, Language and Tone monitors the **world's broadcast, print, and web news from nearly every country**. GDELT **identifies people, locations, organizations, themes, sources, and emotions** mentioned in these news items. The project offers a free open platform for data access to over 4 billion geo-located events, reported in over 100 languages and sourced from a diverse feed of sources.

Freely available at: https://www.gdeltproject.org/

- GDELT consists of several datasets
- The two central datasets of GDELT are:
  - https://blog.gdeltproject.org/gdelt-2-0-our-global-world-in-realtime/
  - Global Knowledge Graph
  - Event Database
- GDELT provides updates to its data every 15 minutes

Global Knowledge Graph

- News items are coded by:
  - Individuals mentioned
  - Organizations mentioned
  - Locations mentioned
  - Topics mentioned
  - Sentiment and polarization of reports
- The Global Knowledge Graph covers nearly 1.4 trillion news items
- The Global Knowledge Graph covers about 15 TB of data



GKGRECO	DATE	SourceCol	SourceCor	Document	Counts	V2Counts	Themes	V2Themes	Locations	V2Locatio	Persons	V2Person	Organizati	V2Organiz	V2Tone	Dates	GCAM
20230108150	2,023E+13	1	yahoo.com	https://de.na			SOC_EMERGI	SOC_EMERGI							-1.176470588		wc:81,c12.1:4
20230108150	2,023E+13	1	crooksandlar	https://crook			TAX_FNCACT;	TAX_FNCACT;							0,0,0,25,5.3		wc:49,c12.1:4
20230108150	2,023E+13	1	oklahoman.c	https://www.			EDUCATION;	EDUCATION,;							2.816901408		wc:67,c12.1:5
20230108150	2,023E+13	1	bassresource	https://www.			TAX_DISEASE	TAX_DISEASE							-2.469135802		wc:71,c12.1:4
20230108150	2,023E+13	1	yorkpress.co	https://www.			WB_742_YOI	GENERAL_HE							-8.894878706		wc:342,c12.1:3
20230108150	2,023E+13	1	msn.com	http://www.r			EPU_POLICY;	TAX_FNCACT;							0,1.923076923		wc:48,c12.1:2
20230108150	2,023E+13	1	msn.com	http://www.r			TAX_FNCACT;	TAX_FNCACT;							0,2.564102564		wc:36,c1.3:1,
20230108150	2,023E+13	1	leitrimobserv	https://www.			CRISISLEX_T1	CRISISLEX_T1	1#Ireland#EI#	1#Ireland#EI#					5.357142857		wc:51,c12.1:5
20230108150	2,023E+13	1	newyorkteleg	https://www.			TAX_FNCACT;	MANMADE_E							2.519468623		wc:2068,c1.1
20230108150	2,023E+13	1	kasu.org	https://www.			TOURISM;TAX	EPU_CATS_RI	1#China#CH#	1#Chinese#CI					0,3.57142857		wc:25,c12.1:1
20230108150	2,023E+13	1	dagblog.com	http://dagblo			WB_678_DIG	MEDIA_SOCIA							-5.333333333		wc:63,c12.1:5
20230108150	2,023E+13	1	bassresource	https://www.			WB_137_WA	WB_137_WA							2.586206896		wc:92,c1.1:1,
20230108150	2,023E+13	1	kvia.com	https://kvia.c			TAX_MILITAR	TAX_FNCACT			el paso	El Paso,7;El P			2.380952380		wc:76,c12.1:1
20230108150	2,023E+13	1	msn.com	http://www.r			WB_569_HYC	WB_569_HYC							5.102040816		wc:177,c1.1:3
20230108150	2,023E+13	1	cagesideseats	https://www.			TAX_WORLDF	TAX_WORLDF							0,0,0,0,22.222		wc:86,c12.1:5
20230108150	2,023E+13	1	timeslive.co.z	https://www.			CRISISLEX_T0	CRISISLEX_T0	4#Kwazulu, Ei	4#Kwazulu, Ei	sihle zikalala	Sihle Zikalala,;			-2.678571428		wc:105,c12.1:
20230108150	2,023E+13	1	sthelensstar.c	https://www.			UNGP_FORES	UNGP_FORES							-1.492537313		wc:61,c12.1:1
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20230108150	2,023E+13	1	scmp.com	https://www.			ENV_OIL;	ENV_OIL;89;	1#China#CH#	1#China#CH#					5,5,0,5,20,0,1		wc:16,c13.1:1
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20230108150	2,023E+13	1	businessmirro	https://busine			MEDIA_MSM;	EPU_POLICY_	4#Paris, Franc	4#Paris, Franc					-7.936507936		wc:59,c1.4:1,
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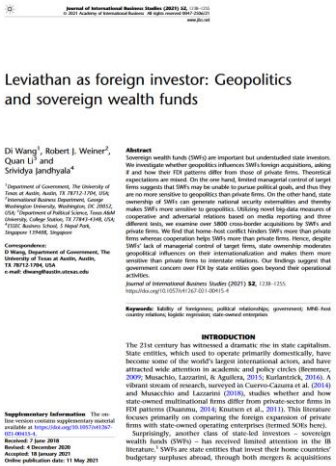
20230108150	2,023E+13	1	israelnational	https://www.			TAX_TERROR	KILL;KILL;CRISI	1#Afghanistar	1#Afghanistar					-3.846153846		wc:26,c12.10:
20230108150	2,023E+13	1	rawstory.com	https://www.			WB_696_PUE	WB_696_PUE							0,0,0,0,11.111		wc:4,c14.5:1,

GDELT Event Database

- Events are identified from news items
- Events are coded by:
  - Actors mentioned
  - Type, location, religion of actor
  - Type of event
  - Sentiment of reports about events
- The Event Database covers nearly 670 million events
- The Event Database covers about 270 GB of data

GLOBALEVENT	SQLDATE	MonthYear	Year	FractionDate	Actor1Code	Actor1Name	Actor1CountryC	Actor1KnownGr	Actor1EthnicCoc	Actor1Religion1(	Actor1Religion2(	Actor1Type1Coc	Actor1Type2Coc
1079185557	20230108	202301	2023	20.230.219									
1079185567	20230108	202301	2023	20.230.219									
1079185618	20230108	202301	2023	20.230.219	COP	POLICE OFFICER						COP	
1079185622	20230108	202301	2023	20.230.219	COP	POLICE OFFICER						COP	
1079185623	20230108	202301	2023	20.230.219	COP	POLICE						COP	
1079185642	20230108	202301	2023	20.230.219	CVL	VILLAGER						CVL	
1079185643	20230108	202301	2023	20.230.219	CVL	VILLAGER						CVL	
1079185646	20230108	202301	2023	20.230.219	CVL	VILLAGER						CVL	
1079185706	20230108	202301	2023	20.230.219	GOV	CHIEF MINISTER						GOV	
1079185710	20230108	202301	2023	20.230.219	GOV	CHIEF MINISTER						GOV	
1079185713	20230108	202301	2023	20.230.219	GOV	MAYOR						GOV	
1079185763	20230108	202301	2023	20.230.219	IRL	LIMERICK	IRL						
1079185771	20230108	202301	2023	20.230.219	JUD	LAWYER						JUD	
1079185789	20230108	202301	2023	20.230.219	LEG	SENATOR						LEG	
1079185796	20230108	202301	2023	20.230.219	MDV	MALE	MDV						
1079185809	20230108	202301	2023	20.230.219	MIL	ARMY						MIL	
1079185907	20230108	202301	2023	20.230.219	UAF	MILITANT						UAF	
1079185955	20230108	202301	2023	20.230.219	USAGOV	JOE BIDEN	USA					GOV	
1079185963	20230108	202301	2023	20.230.219	USAREL	NEW ORLEANS	USA						
1079184843	20230108	202301	2023	20.230.219									
1079184935	20230108	202301	2023	20.230.219	COP	POLICE						COP	
1079184942	20230108	202301	2023	20.230.219	COP	POLICE						COP	
1079184945	20230108	202301	2023	20.230.219	COP	POLICE						COP	
1079184953	20230108	202301	2023	20.230.219	CVL	COMMUNITY						CVL	

Measuring Geopolitical Relationships in GDELT



Leviathan as foreign investor: Geopolitics and sovereign wealth funds

Di Wang[1], Robert J. Weiner[2], Quan Li[3] and Srividya Jandhyala[4]

Abstract

Sovereign wealth funds (SWFs) are important but understudied state investors. We investigate whether geopolitics influences SWFs foreign acquisitions, asking if and how their FDI patterns differ from those of private firms. Theoretical expectations are mixed. On the one hand, limited managerial control of target firms suggests that SWFs may be unable to pursue political goals, and thus they are no more sensitive to geopolitics than private firms. On the other hand, state ownership of SWFs can generate national security externalities and thereby makes SWFs more sensitive to geopolitics. Utilizing novel big-data measures of cooperative and adversarial relations based on media reporting and three different tests, we examine over 5800 cross-border acquisitions by SWFs and private firms. We find that home–host conflict hinders SWFs more than private firms whereas cooperation helps SWFs more than private firms. Hence, despite SWFs' lack of managerial control of target firms, state ownership moderates geopolitical influences on their internationalization and makes them more sensitive than private firms to interstate relations. Our findings suggest that government concern over FDI by state entities goes beyond their operational activities.

Journal of International Business Studies (2021) **52**, 1238–1255

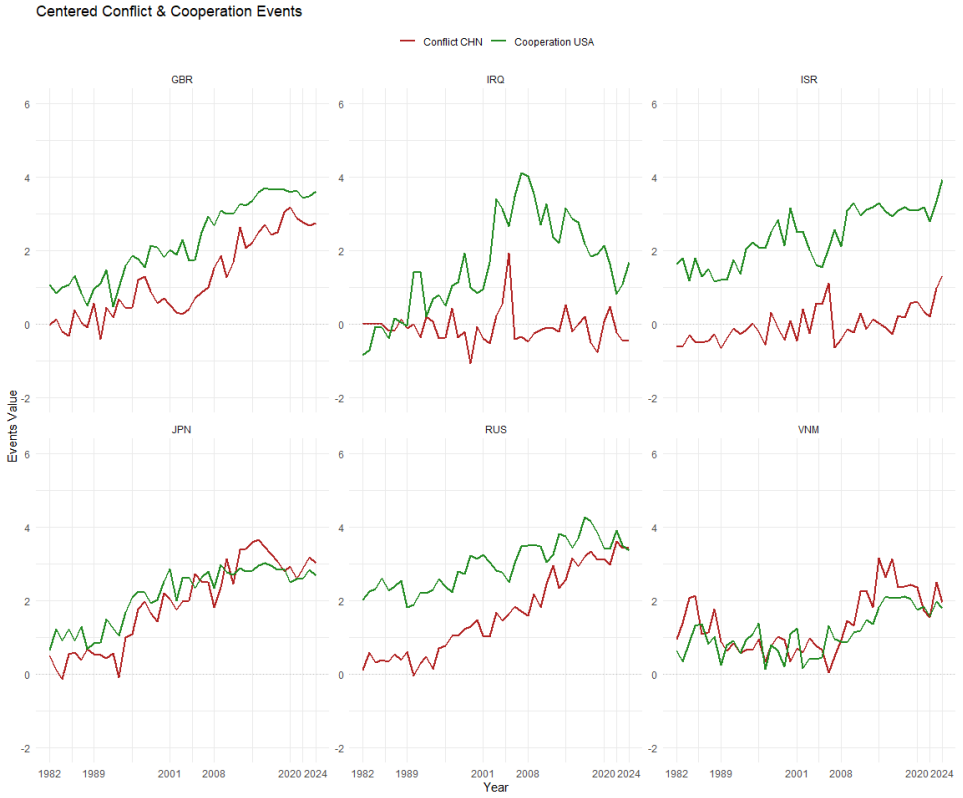
https://doi.org/10.1057/s41267-021-00415-4

Keywords: liability of foreignness; political relationships; government; MNE-host country relations; logistic regression; state-owned enterprises

INTRODUCTION

The 21st century has witnessed a dramatic rise in state capitalism. State entities, which used to operate primarily domestically, have become some of the world's largest international actors, and have attracted wide attention in academic and policy circles (Bremmer, 2009; Musacchio, Lazzarini, & Aguilera, 2015; Kurlantzick, 2016). A vibrant stream of research, surveyed in Cuervo-Cazurra et al. (2014) and Musacchio and Lazzarini (2018), studies whether and how state-owned multinational firms differ from private-sector firms in FDI patterns (Duanmu, 2014; Knutsen et al., 2011). This literature focuses primarily on comparing the foreign expansion of private firms with state-owned operating enterprises (termed SOEs here).

Surprisingly, another class of state-led investors – sovereign wealth funds (SWFs) – has received limited attention in the IB literature.[1] SWFs are state entities that invest their home countries' budgetary surpluses abroad, through both mergers & acquisitions



[Wang, D., Weiner, R. J., Li, Q., et al. (2021)](): Leviathan as foreign investor: Geopolitics and sovereign wealth funds. In: Journal of International Business Studies, 52, 1238–1255.

Application on an actor level

- Jamison, Tadmor & Henisz (2025)
- GDELT allows users to identify focal actors using the Conflict and Mediation Event Observations (CAMEO)
- Identify both the source and the target involved in the event
- The Goldstein Scale indicates the degree of conflict
- Location Matching with Prio-Grid allows geographical identification of events

Journal of International Business Studies
https://doi.org/10.1057/s41267-025-00778-y

Indigenous peoples' reactions to foreign direct investment: a social movement perspective

Anne Spencer Jamison[1] · Doron Tadmor[2] · Witold Jerzy Henisz[3]

Received: 15 August 2023 / Revised: 14 January 2025 / Accepted: 21 January 2025

Abstract
A growing body of literature highlights that large-scale investments in sensitive contexts can undermine both firm financial performance and peace-positive development. We investigate whether and under what conditions foreign direct investment (FDI) proximate to Indigenous land claims increases or decreases conflict. Drawing on social movement theory's identification of powerful frames and political opportunity structures as drivers of mobilization, we predict that FDI proximate to Indigenous land claims will promote conflict. We leverage novel data on the global location of Indigenous land claims and a global corpus of more than 4 billion news articles. We find that when locations with Indigenous land claims are treated with FDI, we observe an increase in media-reported armed conflict events. We further argue and find this effect to be driven by rebels acting on behalf of Indigenous people who target (multinational) corporations and the governments who offer them the formal license to operate. These negative effects are found across a wide range of industries. Our results underscore that for investments in sensitive socio-political contexts, such as Indigenous lands, firm performance and the livelihoods of community members are heavily influenced by conflict risk mitigation efforts.

Keywords Institutional context · Civil society · Political risk · Longitudinal (or time-series) · Theory of FDI and the MNE (ownership–location–internalization) · Indigenous

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Published online: 02 May 2025

Introduction

In recent decades, conflicts between Indigenous peoples and corporations operating on their traditional territory have frequently made the news. Multinational corporations, such as Danone, are exacerbating the ongoing water crisis in Mexico's Puebla Valley (Pearson, 2022), leading to protests by local Indigenous populations and water rights activists. Vedanta's aluminum mining project in India's Niyamgiri Hills jeopardized the cultural, spiritual, and economic survival of the Dongria Kondh tribe by threatening their sacred lands and disrupting their traditional way of life (Amnesty International, 2010), again leading to action by domestic and international activist groups, which induced the project's eventual halt and significant financial losses for Vedanta. These are often lose–lose situations, with Indigenous people losing life, land, and/or health (Kennedy et al., 2023; Scheidel et al., 2023; Temperet al., 2020), while corporations face financial and reputational costs (Birss & Sirén Gualinga, 2022).

The literature regarding non-Indigenous corporations operating in Indigenous lands has focused on such conflicts

Discussion

- New Big Data sources
  - Open up new opportunities for measuring Management-relevant concepts
  - Allow for more sophisticated methods

- Practitioners have embraced and integrated these new sources of data in their value chains
  - Finance
  - IT….

- Hypocrites calling: Do as I say, not as I do!
  - Academic research has not embraced the Big Data revolution
  - Reviewers, editors and journal resist change & new measures
  - Technological innovation and big data growth has outpaced publication cycles