



AEA Publication Dynamics & Supportive Literature Management

Final Project for GLBL 6060 Applied Python for Global Affairs

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Yale University

AEA Publication Analysis - Field Popularity



AEA Publication Analysis - Collaboration Networks

Collaboration Networks

Search author:

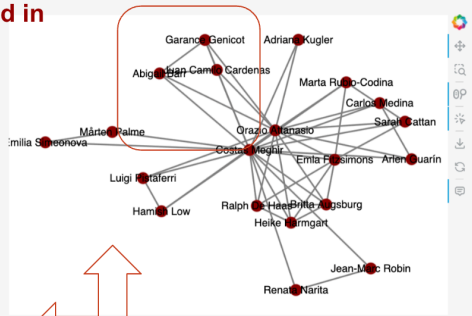
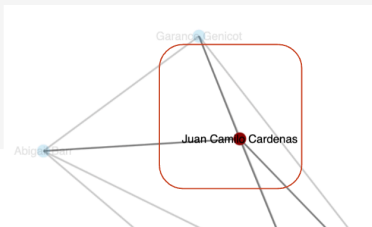
Costas

Costas Meghir

Costas Arkolakis

Costas Azariadis

1 Type and search for the author you are interested in



2 Zoom in to focus on a part of the network

AEA Publication Analysis - Geographic Trends

Year: 2013



Country ▲	Mentions ▲
United States	23
Oman	22
India	11
Mali	9
Brazil	8
Kenya	5
Canada	3
Malawi	3
Japan	3
China	3

First Prev 1 2 Next Last

Year: 2023



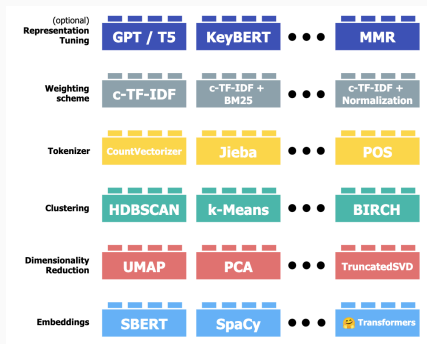
Country ▲	Mentions ▲
United States	27
Oman	11
China	8
Brazil	6
Mali	6
Chile	5
India	4
Mexico	4
Germany	4
Sweden	3

First Prev 1 2 3 Next Last

1 Use the slider to select year

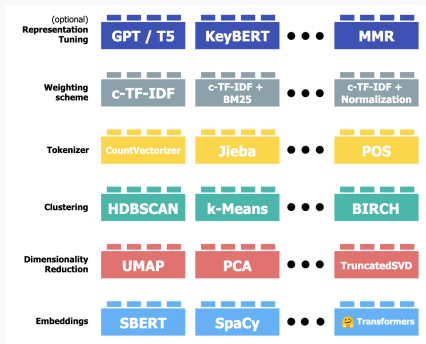
Show countries involved in more than 1 study

AEA Publication Analysis - Theme Discovery (BERTopic)



- **Preprocessing Abstract:**
 - Apply lemmatization to standardize words.
- **Embeddings:**
 - Convert documents into numerical representations.
 - Use *Sentence-Transformers* ('all-MiniLM-L6-v2').

AEA Publication Analysis - Theme Discovery (BERTopic)



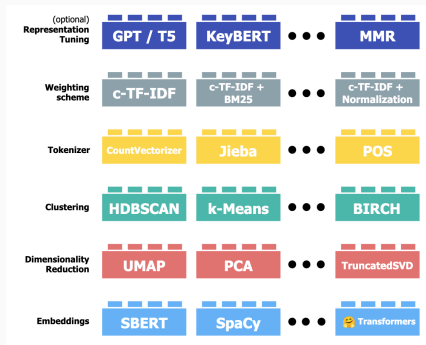
- **Dimensionality Reduction:**

- Reduce it to a workable dimensional space.
- Use *Uniform Manifold Approximation and Projection (UMAP)*.

- **Clustering:**

- Group embeddings to identify topics.
- Use *K-Means (Utilize silhouette scores to determine the optimal number of clusters)*.

AEA Publication Analysis - Theme Discovery (BERTopic)



- **Vectorizers:**

- Create Topic Representations.
- Use `CountVectorizer ngram_range=(1, 3)`.

- **Weighting Scheme:**

- Obtain an accurate topic representation from a Bag-of-Words matrix.
- Consider factors that differentiate docs in one cluster from those in another.
- Use `c-TF-IDF`.

AEA Publication Analysis - Theme Discovery (BERTopic)

Default Representation

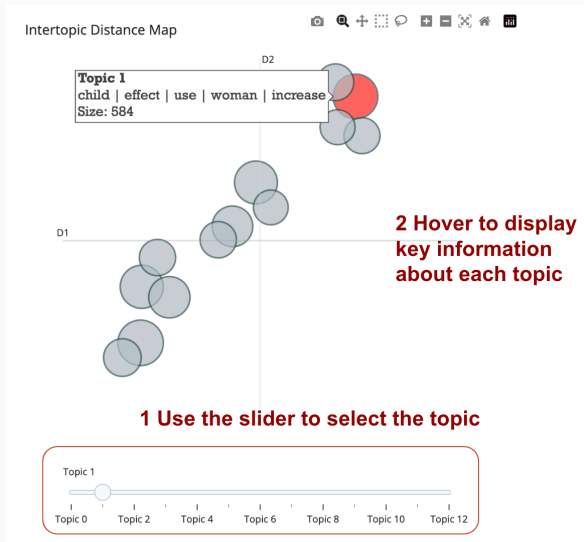
meat | organic | food | beef | emissions | eat | of | eating | is
the | explosion | atmosphere | eruption | kilometers | of |
immune | system | your | cells | my | and | is | the | how | of
moon | earth | lunar | tides | the | water | orbit | base | moons
eu | european | democratic | vote | parliament | member | union
plastic | plastics | tons | pollution | waste | microplastics | polymers

KeyBERT-Inspired

→ organic | meat | foods | crops | beef | produce | food | diet | cows | eating
→ explosion | explodes | eruptions | eruption | blast | volcanoes | volcanic
→ immune | immunology | antibodies | disease | cells | infection | cell | system
→ moon | moons | lunar | tides | tidal | gravity | orbit | satellites | earth | orbits
→ eu | democracy | european | democratic | parliament | governments | voting
→ plastics | plastic | pollution | microplastics | environmental | polymers | bpa

- Fine-tune Topics Representations:
 - Use *KeyBERTInspired*.

AEA Publication Analysis - Theme Discovery (BERTopic)



AEA Publication Analysis - Theme Discovery (BERTopic)

Theme Discovery

Document Embedding Visualization



Document Topics

- 0_trade_firm_country
- 1_child_effect_use
- 2_agent_game_equilibrium
- 3_tax_income_household
- 4_price_market_consumer
- 5_model_monetary_policy
- 6_wage_worker_job
- 7_student_school_college
- 8_choice_preference_risk
- 9_bank_credit_debt
- 10_political_party_candidate
- 11_health_insurance_care
- 12_cost_use_price

**1 Click to hide
themes you are
not interested in**

2 Rank the filtered papers by similarity score

README

Publication Analysis

Literature Search

Literature Review Support

Literature Search

Search literature by selecting criteria such as years, journals, JEL codes, authors, and keywords.

Real-Time Updates:

Updates display dynamically based on selected filters.

Articles Recommendation:

Enter text to measure similarity with the displayed articles.

Download Data:

Download filtered literature data in CSV format.

Year(s)

Journal(s)

JEL Code(s)

K32: Environmental, Health, and Safety Law

Author(s)

Search Keyword

Research interests

Normally, the temperature decreases with altitude, allowing air pollutants to rise and disperse. During inversion episodes, warmer air at higher altitude traps air pollutants at the ground. By merging vertical temperature profile data from NASA with pollution monitors and health care records, we show that inversions increase the PM10 levels by 25% and children's

Title	Issue	Journal	Abstract	Authors	Link	Similarity Score
Unwatched Pollution: The Effect of Intermittent Monitoring on Air Quality	Vol. 111, No. 7, July 2021	American Economic Review	Intermittent monitoring of environmental standards may induce strategic changes in polluting activities. This paper documents local strategic responses to a cyclical, once-every-six-day air quality monitoring schedule under the federal Clean Air Act. Using satellite data of monitored areas, I show that air quality is significantly worse on unmonitored days. This effect is explained by short-term suppression of pollution on monitored days, especially during high-pollution periods when the city's noncompliance risk is high. Cities' use of air quality warnings increases on monitored days, which suggests local government's role in coordinating emission reductions.	Eric Yingshen Zou	https://www.aeaweb.org/articles?id=10.1257/aer.2018.1348	0.953431
Going Beneath the Surface: Petroleum Pollution, Regulation, and Health	Vol. 13, No. 1, January 2021	American Economic Journal: Applied Economics	This paper quantifies the health impacts of petroleum leaks from underground storage tanks, the effectiveness of tank regulation, and the role of information as a policy tool in the same setting. Exposure to a leaking underground storage tank during gestation increases both the probability of low birthweight and preterm birth by 7-8 percent. Compliance with regulations requiring the adoption of preventative technologies mitigated the entire effect of leak exposure on low birthweight, and information increased avoidance and moving among highly educated mothers. Back-of-the-envelope calculations suggest the health benefits of preventative regulations exceed the upgrade cost to facilities.	Michèle Marcus	https://www.aeaweb.org/articles?id=10.1257/aer.2019.120	0.948969
Improving Regulatory Effectiveness through Better Targeting: Evidence from OSHA	Vol. 15, No. 4, October 2023	American Economic Journal: Applied Economics	We study how a regulator can best target inspections. Our case study is a US Occupational Safety and Health Administration (OSHA) program that randomly allocated some inspections. On average, each inspection led to 2.4 (0.9 percent) fewer serious injuries over the next 5 years. Using new machine learning methods, we find that OSHA could have avoided as much as twice as many injuries by targeting inspections to workplaces with the highest expected avoided injuries and nearly as many by targeting the highest expected level of injuries. Either approach would have generated up to \$500 million in social value over the decade we examine.	Matthew S. Johnson, David I. Levine, Michael W. Toftel	https://www.aeaweb.org/articles?id=10.1257/aer.2022.0569	0.946874
Mandatory Energy Efficiency Disclosure in Housing Markets	Vol. 14, No. 4, November 2022	American Economic Journal: Economic Policy	Mandatory disclosure policies are implemented broadly despite sparse evidence that they improve market outcomes. We study the effects of requiring home sellers to provide buyers with certified audits of residential energy efficiency. Using similar nearby homes as a comparison group, we find that this requirement increases price premiums for energy efficiency and encourages energy-saving investments. We additionally present evidence highlighting the market failure— incomplete information by both buyers and sellers—that prevents voluntary disclosure of energy efficiency in housing transactions. Our findings support that disclosure policies can improve market outcomes in settings with symmetrically incomplete information.	Erica Myers, Steven L. Puller, Jeremy West	https://www.aeaweb.org/articles?id=10.1257/aer.2020.0309	0.946616
Informed Enforcement: Lessons from Pollution Monitoring in China	Vol. 16, No. 1, January 2024	American Economic Journal: Applied Economics	Government regulations are often imperfectly enforced by public officials. In this study, we exploit the introduction of air pollution monitors in China to investigate whether real-time monitoring of policy outcomes affects the enforcement of existing regulations. Using assigned cities established by the central government and new georeferenced data on local enforcement activities, we show that monitoring (i) increases enforcement against local firms, (ii) improves the targeting of enforcement, and (iii) reduces aggregate pollution. These effects are driven by officials facing performance incentives and are stronger when there is limited scope for data manipulation, suggesting that real-time monitoring improves top-down accountability.	Sebastian Audert, Zhen Deng	https://www.aeaweb.org/articles?id=10.1257/aer.2021.088	0.945050
US Environmental Regulation and FDI: Evidence from a Panel of US-Based Multinational Firms	Vol. 2, No. 3, July 2010	American Economic Journal: Applied Economics	This paper measures the response of US-based multinationals to the Clean Air Act Amendments (CAAA). Using a panel of firm-level data over the period 1986-1999, I estimate the effect of regulation on a multinational's foreign production decisions. The CAAA induced substantial variation in the degree of regulation faced by firms, allowing for the estimation of econometric models that control for firm-specific characteristics and industrial trends. I find that the CAAA caused regulated multinational firms to increase their foreign assets by 5.3 percent and their foreign output by 9 percent. Heavily regulated firms did not disproportionately increase foreign investment in developing countries.	Rene Harms	https://www.aeaweb.org/articles?id=10.1257/aer.2.3.158	0.937249
DETER: A System that Processes Satellite Imagery and Issues Near-real-time Deforestation Alerts to Target Environmental Enforcement in the Amazon	Vol. 15, No. 2, April 2023	American Economic Journal: Economics	We study Brazil's recent use of satellite technology to overcome law enforcement shortcomings resulting from weak institutional environments. DETER is a system that processes satellite imagery and issues near-real-time deforestation alerts to target environmental enforcement in the Amazon. We propose a novel instrumental variable approach for estimating enforcement's impact on deforestation. Clouds limiting DETER's capacity to detect clearings serve as a source of exogenous variation for the presence of environmental authorities. Findings indicate that monitoring and enforcement effectively curb deforestation. Results host across several robustness checks.	Juliano Assunção, Camille Gaudou, Romero Rocha	https://www.aeaweb.org/articles?id=10.1257/aer.2020.0196	0.937147
The Hazards of Unleashing the Prescription Opioid Epidemic: Implications for Child Maltreatment	Vol. 14, No. 4, November 2022	American Economic Journal: Economic Policy	Child maltreatment has significant and long-lasting consequences. We examine how two interventions designed to curtail prescription opioid misuse, the reformation of OxyContin contracts and the implementation of multi-excess prescription drug monitoring programs (PDMPs), affected child maltreatment. Our results suggest counties with greater initial rates of prescription opioid usage experienced relatively larger increases in child physical abuse and neglect after OxyContin's reformation. We also find some evidence of increases in alleged physical abuse and neglect due to multi-excess PDMP implementation. Our results answer unintended consequences for children of reducing the supply of an addictive good without adequate support for dependent users.	Mary F. Evans, Matthew C. Harris, Lawrence M. Kessler	https://www.aeaweb.org/articles?id=10.1257/aer.2020.0001	0.906320
Climate Clubs: Overcoming Free-Riding in International Climate Policy	Vol. 105, No. 4, April 2015	American Economic Review	Notwithstanding great progress in scientific and economic understanding of climate change, it has proven difficult to forge international agreements because of free-riding, as seen in the defunct Kyoto Protocol. This study examines the club as a model for international climate policy. Based on economic theory and empirical modeling, I find that without sanctions against non-participants there are no stable coalitions other than those with minimal abatement. By contrast, a regime with small trade penalties on non-participants, a Climate Club, can induce a large stable coalition with high levels of abatement.	William Nordhaus	https://www.aeaweb.org/articles?id=10.1257/aer.13000001	0.905409

** NEW ** Enter some sentences about what interests you

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AEA Publication Analysis:

- *Field Popularity* ✓
- *Collaboration Networks* ✓
- *Theme Discovery* ✓
- *Geographical Trends* ✓

Literature Search ✓

Literature Review Support ✓