

Dino Collalti

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EDUCATION

2019 - 2023	University of Bern , PhD in Economics with Graduate School in Climate Science <i>Insigni cum laude</i>
2016 - 2019	University of Bern , MSc in Applied Economic Analysis <i>Insigni cum laude</i>
2013 - 2016	University of Bern , BSc in Economics with Minor in Public Law <i>Magna cum laude</i>

TEACHING AND RESEARCH FIELDS

Primary:	Environmental Economics & Tourism Economics
Secondary:	Natural Hazards, Development, Applied Econometrics

RESEARCH

Publications

- **Flash Flood Detection via Copula-based IDF Curves: Evidence from Jamaica**, *Dino Collalti, Nekeisha Spencer & Eric Strobl*. *Natural Hazards and Earth System Sciences* (2024). 10.5194/nhess-2023-162
This study uses the copula method to model the dependence between the intensity and duration of rainfall events separately and flexibly from their respective marginal distribution of extreme rainfall events. It delivers a flexible approach to generating rainfall intensity-duration-frequency curves that can directly be used to assess flash flood risk.
- **Economic damages due to extreme precipitation during tropical storms: evidence from Jamaica**, *Dino Collalti & Eric Strobl*. *Natural Hazards* (2021): 1-28. 10.1007/s11069-021-05025-9
We investigate economic damage risk due to extreme rainfall during tropical storms in Jamaica. We show that variation in maximum rainfall during a storm significantly contributes to parish level damages even after controlling for local wind speed. For instance, the damage risk for a 20 year rainfall event in Jamaica is estimated to be at least 238 million USD, i.e. about 1.5% of Jamaica's yearly GDP.

Working Papers

- **The Economic Dynamics after a Flood: Evidence from Satellite Data**. R&R at *Environmental and Resource Economics*, *Dino Collalti*
This study investigates the effect of flash floods on local economic activity in Central America and the Caribbean. I measure these rarely analyzed floods by constructing a high-resolution, physically based index of flash flood occurrence from satellite data and connect these to changes in local night light emissions.
- **Flash Flood Hazard: an Economic Analysis of Firms in Central America and the Caribbean**, under review at *Journal of Development Economics*, *Dino Collalti*
This paper investigates the effect of nearby flash floods on establishment performance in Central America and the Caribbean. To this end, I physically define flash flood occurrences from satellite rainfall data across countries and connect them with geo-located establishment survey data.
- **Tourism Demand Spillover: The Case of Hurricane Strikes in The Caribbean**, *Dino Collalti, Monika Bandi & Eric Strobl*
Natural disasters such as hurricanes cause considerable damage to the built environment and negatively affect the economy. Consequently, the exports of goods and services from the area hit are likely to fall, stimulating the now excess demand to spill over to nearby locations. Any accounting of hurricanes' and other natural hazards' impact on the economy that does not consider spillovers is, therefore, likely misleading. We investigate the direct effect of hurricanes on tourism and its spillovers to other destinations in the Caribbean. The Caribbean is an ideal setting to study the effects of natural disasters on tourism, as the region is both disaster-prone and economically reliant on tourism. We connect monthly airplane and cruise ship arrivals with a hurricane destruction index from a physical

wind field model that considers the local economic exposure measured by the previous year's night light activity. Evidence from local projections suggests that airplane arrivals decrease by 3% upon hurricane impact per 1

- **Predicting Swiss Healthcare Costs Using Machine Learning**, *Dino Collalti & Jonas Meier*. Healthcare costs account for a substantial and steadily growing share of GDP. However, predicting the growth of healthcare costs amounts to be a difficult task due to complex time trends and dependencies on economic measures such as wages and spatial differences. Using physician data, this paper takes a machine learning approach towards predicting aggregate healthcare expenditures.

ACADEMIC SERVICES

- Referee for
Environmental and Resource Economics. Economics of Disasters and Climate Change.
- Commission and committee work
Representative of PhD student's at the faculty meetings, hiring committee for chair structural economics with a focus on labor economics at the University of Bern, member of the evaluation commission of the Bachelor in Economics and Master of Applied Economic Analysis.
- Other:
 - Student Advisory for the Department of Economics 2019 - 2023
 - Member of the student council both at the faculty and university level

TEACHING EXPERIENCE (ASSISTANT)

2024	Introduction to Tourism Economics II (Bachelor level) & Seminar: Empirical Tourism Economics, University of Bern
2023	Introduction to Tourism Economics I (Bachelor level), University of Bern
2023	Swiss Climate Science Summer School, Workshop Leader, University of Bern
2021/2022/2023	Environmental Econometrics (Master level), University of Bern
2021	Seminar: Economic Analysis of Extreme Climate Events (Master level), University of Bern

PRESENTATIONS

2023	Heidelberg Workshop on Labor Economics and Regional Economic Development (Heidelberg, Germany), WECON Economics Conference of the West Indies (Kingston, Jamaica)
2022	VI Econometric Models of Climate Change Conference at Toulouse School of Economics, Annual Conference of the European Association of Environmental and Resource Economists (Rimini, EAERE), Empirical Microeconomists Lunch Talk, Department of Economics, University of Bern.
2021	Interdisciplinary Ph.D. Workshop in Sustainable Development at Columbia University (IPWSD), Workshop on Compound Weather and Climate Events (Bern/Online, Oeschger Center for Climate Change Research).
2020	Annual Conference of the European Association of Environmental and Resource Economists (Berlin, EAERE), Brown Bag, Department of Economics, University of Bern (2).

WORKSHOPS AND SELECTED COURSEWORK

2023	ICRET Workshop on Multiple Crisis in Tourism (Innsbruck, Austria)
2022	20th Swiss Climate Summer School: Extreme weather and climate: from atmospheric processes to impacts on ecosystems and society (University of Bern, ETH Zurich).
2021	Spatial Methods for Economists using Python (University of Bern).
2020	EAERE European Winter School: Spatial Environmental and Resource Economics (ETH Zurich).

SKILL SET

Programming

R, Python, Matlab, Latex

Languages

German (native), English (fluent), French (B1)

PERSONAL ACTIVITIES

Sport Climbing Judge

National judge of the Swiss Alpine Federation for national and international competitions.