Mahaut de Villeneuve Bargemon

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My website | My profile

Department of Economics, ThEMA
CY Cergy Paris Université & ESSEC Business School
Cergy, France

Research Fields. Environmental Economics • Information Economics • Industrial Organization

Education

- **Cergy Paris Université & ESSEC Business School** — *Sept. 2021 - Jan. 2026*
  Ph.D. Candidate in Economics — Cergy, France
  - Supervisor: Wilfried Sand-Zantman
  - Scheduled defense: January 13, 2026
- **ESSEC Business School** — *2021 - 2022*
  MRes in Economics — Cergy, France
- **Cergy Paris Université & ESSEC Business School** — *2020 - 2021*
  MSc in Economics — Cergy, France
  - Master's thesis title: *The Coexistence between Regional Markets for Emission Permits*
  - Supervision: Wilfried Sand-Zantman
  - Distinction: Highest honors
- **Sciences Po Saint-Germain** — *2016 - 2021*
  Bachelor & MA in Economics and Finance — Saint-Germain-en-Laye, France
  - Distinction: Valedictorian
  - Exchange program: University of Miami, USA (Aug. 2018 - July 2019)

Research Projects

[1] **Green, Greener or Neutral? Signaling Environmental Quality When Consumers Can't Tell** **(JMP)**

Abstract: *How can a firm signal the environmental quality of its product to consumers when its technology is unobservable? This paper analyzes a monopoly market where the firm can be either green, using a costly non-polluting technology that generates positive externalities; or neutral, relying on a standard technology. Consumers cannot directly observe the firm's environmental performance and derive a warm glow benefit from purchasing green products. Under incomplete information, we derive a separating equilibrium where the green firm uses either one instrument (price) or two instruments (price and effort to improve the greenness of its product) to signal its environmental quality to consumers. Signaling can result in an improvement in total welfare by increasing the public good benefit of green consumption. This highlights the role of effort as a potential dual-purpose instrument: mitigating informational asymmetries and improving social surplus. Additionally, we explore how regulations such as green effort subsidies influence this equilibrium.*

[2] **The Insurer-Investor Dilemma: When Insurers Fuel the Risks They Cover**

Abstract: *Insurers engage in two core activities: underwriting risks and investing in financial markets. This paper examines how these activities interact, particularly in the context of climate-related risks, where investment decisions can influence the probability of loss. We develop a model of two insurers who offer insurance policies to agents with different probabilities of loss, and invest the collected premiums, following either a risky or a safe strategy. Risky investments yield higher returns but increase the probability of loss for some agents. When insurers know the probability of loss, they always choose risky investments in equilibrium, purposely increasing the risk faced by some agents. When insurers do not know the probability of loss of agents, they must offer distorted insurance policies. The associated loss in profits increases as insurers choose risky investments. As a result, safe investments can emerge in equilibrium. This framework generalizes to settings in which a Principal's profitable action negatively alters the type of some Agents, thereby influencing the severity of adverse selection.*

[3] Tax the Emissions You Can't See: Designing CBAMs under Incomplete Information
Abstract: *The paper investigates the optimal design of a Carbon Border Adjustment Mechanism to mitigate carbon leakage created by the relocation of domestic firms to unregulated countries. Such regulation was proposed by the European Commission in July 2021. However, this system relies on firms self-reporting their emissions to determine the carbon tax to be paid on traded goods. Authorities are unlikely to be able to verify the veracity of such information, inducing firms to falsely report low emissions. With a theoretical model in which the regulator has incomplete information about firms' levels of pollution, we show that he must design a non-linear tax structure to distinguish between dirty and clean firms. In this setup, the "good type" (i.e. clean firm) is also the less cost-efficient, which constrains the regulator to reward dirty firms and impose a decrease in clean production compared to the optimal solution. This feature also uncovers an important friction between incentives: when firms can choose their technology of production, it is impossible for the regulator to reconcile both the incentive to become clean and a truth-revealing tax structure.*

PRESENTATIONS

- **2025:** AFSE Annual Congress 2025 (ENS Paris-Saclay), EEA Annual Congress (Bordeaux), ThEMA Theoretical and Applied Economics Seminar, ESSEC Theory Reading Group
- **2024:** European Economics Association Congress (Rotterdam, Erasmus University), ADRES Conference ENS Paris-Saclay, ThEMA Theoretical and Applied Economics Seminar, ESSEC Student Research Seminar
- **2023:** FSR 9th Climate Annual Conference, EAERE-ETH Winter School on Climate Policies, Innovation and International Competitiveness, ESSEC Student Research Seminar
- **2022:** ESSEC PhD Poster Session, CY Cergy Paris University PhD Seminar, ESSEC Student Research Seminar

TEACHING

- **Microeconomics 1** — *2024, 2025*
  Sciences Po Saint-Germain • Undergraduate (year 1)
- **Environmental Economics** — *2024*
  ESSEC • BBA 2nd Cycle
- **Economic Policy 2** — *2023, 2024, 2025, 2026*
  Sciences Po Saint-Germain • Undergraduate (year 2)
- **Grand Oral Training Sessions & Jury** — *2023, 2024*
  Sciences Po Saint-Germain • Masters
- **Microeconomics: Introduction** — *2021, 2022*
  CY Cergy Paris Université • Undergraduate (year 1)
- **Descriptive Statistics** — *2022*
  CY Cergy Paris Université • Undergraduate (year 1)

EXPERIENCE

- **Finance for Impact** — *March - July 2020*
  Junior Consultant (Intern) — Remote
  - Public policy analysis and evaluation: assisted the evaluation of multilateral programs for the IFC and the World Bank, with a focus on financial inclusion for MSMEs
  - Project design: response to calls for proposals
- **Tropical Audubon Society** — *Jan - July 2019*
  Audubon Ambassador Program Assistant Coordinator (Intern) — Miami, FL, USA
  - Program development and organization: coordination of the Audubon Ambassador Program for community engagement in South Florida's biodiveristy conservation

GRANTS AND AWARDS

- **Enseignant-Chercheur ATER contract** — *Sept. 2023 - July 2026*
  CY Cergy Paris Université
- **PhD Poster Session: Best Content Award** — *2022*
  ESSEC Business School • Presentation: Carbon Border Adjustment Mechanisms under Asymmetric Information
- **Labex MME-DII Ph.D. Scholarship** — *2021-2024*
- **Labex MME-DII Masters Excellence Scholarship** — *2020-2021*

SERVICE

- **PhD Student rep.** *2023 - present*
  CYU Doctoral School representative
- **PhD Poster Session Organizer** *2022*
  ESSEC Business School
- **Student rep.** *2018-2021*
  Sciences Po Saint-Germain
- **Co-founder of the Ibis Audubon Student Conservation Chapter** *2018-2019*
  University of Miami
- **Secretary General of the Student Sports Organization** *2017-2018*
  Sciences Po Saint-Germain

PERSONAL

- **Citizenship:** French
- **Programming Skills:** LaTex, Python, Stata
- **Languages:** French (native), English (fluent), Italian (proficient)
- **Interests:** Competitive boxing (2x USIBA National Champion, Florida National Champion), classical music and literature enthusiast.

REFERENCES

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