# **Ferdinand Pieroth**

# Address: Department of Economics Yale University New Haven, CT 06520-8268

**Telephone:** US: +1 (203) 589-7124

GER: +49 151 1564 5637

E-mail: ferdinand.pieroth@yale.edu

Web page: www.ferdinandpieroth.com

Citizenship: German, F-1 Visa

# **Fields of Concentration:**

Microeconomic Theory Organizational Economics

#### **Comprehensive Examinations Completed:**

2021 (Oral): Microeconomic Theory, Macroeconomics (*with distinction*) 2020 (Written): Microeconomics, Macroeconomics

#### **Dissertation Title:** *Essays in Microeconomic Theory*

#### **Committee:**

Professor Marina Halac (Chair) Professor Elliot Lipnowski Professor Philipp Strack

#### **Education:**

Ph.D., Economics, Yale University, 2025 (expected)
M.Phil., Economics, Yale University, 2022
M.A., Economics, Yale University, 2022
M.Sc., Economic and Financial Research, Maastricht University, 2019, *summa cum laude*B.Sc., Economics and Business Economics, Maastricht University, 2017, *summa cum laude*

#### Fellowships, Honors and Awards:

University Dissertation Fellowship, Yale University, 2024 Carl Arvid Anderson Prize, Cowles Foundation, Yale University, 2022-2023 Cowles Foundation Fellowship, Yale University, 2019-2024 John Y. Campbell Fellowship, Yale University, 2020-2024 University Fellowship, Yale University, 2019-2025 Student Prize Best M.Sc. Thesis, Stichting Wetenschap Universiteit Maastricht, 2019 Student Prize Best B.Sc. Thesis, Stichting Wetenschap Universiteit Maastricht, 2017 Scholarship, Studienstiftung des Deutschen Volkes, 2017-2019 Scholarship, Kreissparkasse Miesbach-Tegernsee, 2013-2015

# **Teaching Experience:**

# Yale University

Fall 2023, Teaching Assistant to Prof. John Geanakoplos, Microeconomics (PhD)Fall 2022, Teaching Assistant to Prof. Johannes Hörner, Microeconomics (PhD)Fall 2021, Teaching Assistant to Prof. John Geanakoplos, Mathematical Economics (UG)

# Maastricht University

Teaching Assistant for Economics and Business (2017), Microeconomics: Choices, Markets, and Welfare (2017), Quantitative Methods II (2016), and Quantitative Methods I (2015)

# **Research Experience:**

Research Assistant to Marina Halac, Yale University, 2022-2024 Research Assistant to Michael Peters, Yale University, 2020-2021 Research Assistant to Christian Seel, Maastricht University, 2019

# **Publications:**

"Competing to Commit: Markets with Rational Inattention" with Carlo M. Cusumano and Francesco Fabbri (2024), *American Economic Review*, 114(1), pp. 285-306

"Your Failure is My Opportunity – Effects of Elimination in Contests" with Moritz Mendel and Christian Seel (2021), *Journal of Mathematical Economics*, 95, 102495

# Working Papers:

"Due Diligence in Common Value Auctions" with Carlo M. Cusumano (November 2024), *Job Market Paper* 

"Redistributive Bargaining under the Shadow of Protests" with Carlo M. Cusumano (November 2024)

"Misaligning Incentives in Teams" with Carlo M. Cusumano and Tan Gan (July 2024), submitted

# **Seminar and Conference Presentations:**

2023: SAET Conference, Paris; MLSE Seminar, Maastricht University; EEA-ESEM, Barcelona;

2022: Econometric Society Summer School, Singapore; GSBE-ETBC Seminar Maastricht University; Student Workshop, University of Chicago; European Winter Meeting of the Econometric Society, Berlin;

# **Referee Service:**

American Economic Review: Insights, Econometrica, Journal of Behavior & Organization

# Languages:

German (native), English

#### **References:**

Prof. Marina Halac Yale University Department of Economics New Haven, CT 06520 PO Box 208281 Phone: (203) 432 3693 marina.halac@yale.edu Prof. Elliot Lipnowski Yale University Department of Economics New Haven, CT 06520 PO Box 208281 Phone: (203) 432 5352 elliot.lipnowski@yale.edu Prof. Philipp Strack Yale University Department of Economics New Haven, CT 06520 PO Box 208281 Phone: (203) 432 3703 philipp.strack@yale.edu

# **Dissertation Abstract**

# Due Diligence in Common Value Auctions, with Carlo M. Cusumano [Job Market Paper]

Information acquisition is paramount in common value auctions: It can make the difference between submitting a winning or losing bid and between securing a great deal or overbidding. However, often buyers cannot access pivotal information about the good's value without the seller's approval. For example, in the context of mergers and acquisitions, the internal reports of a company for sale are not publicly available. Similarly, in the real estate market, potential buyers of a house cannot examine its structural integrity without the owner's permission. Should the seller grant access to such confidential information? If so, should she allow for this information acquisition before or after buyers submit their bids?

In many high-stakes environments, like the sale of a company or a house, the seller grants access to confidential information via *due diligence*, i.e., after a price has been agreed upon with the buyer. In turn, the buyer can use this information to decide whether to execute the transaction or renege from the purchase. While allowing for due diligence is common business practice, there is little theoretical foundation explaining the widespread adoption of this procedure. This paper fills some of this gap: We explain why and when due diligence is the seller's revenue-maximizing timing of information acquisition in the canonical context of common value auctions.

We introduce the possibility of information acquisition into an informal common value auction with multiple symmetric buyers and a single indivisible good for sale. Initially, all agents are symmetrically uninformed. The seller chooses whether and when to grant access to confidential information, in which case buyers can decide whether to process it at a cost and privately learn their common valuation. The buyers' valuation can be higher or lower than the seller's reservation value. Whenever trade occurs, the price paid by the auction winner equals his bid.

In a common value auction, information acquisition is a strategic substitute since it benefits a buyer only if no other buyer has accessed the same information. We show that, as a result, the seller never wants to allow for *research*, i.e., information acquisition before bidding, if she is concerned about her worst-case equilibrium revenue. Under research, buyers may become asymmetrically informed in equilibrium, leading to an expected revenue lower than in the no-information benchmark due to the resulting winner's curse. Allowing only the auction winner to perform due diligence after the price is set avoids these issues, since buyers are symmetrically uninformed when bidding. However, two novel effects with opposing implications on the seller's revenue arise in this case. On the one hand, buyers may bid more aggressively as the possibility of conducting due diligence carries an option value. On the other hand, if the auction winner conducts due diligence, the seller's expected revenue is lower than the winning offer: The winner closes the deal only if the valuation exceeds his bid. Our main result shows that the size of the *stakes*, i.e., the size of the potential gains and losses from trade, determines which of these two effects dominates. In particular, granting access to information via due diligence maximizes the seller's revenue guarantee whenever the stakes are sufficiently high.

# Redistributive Bargaining under the Shadow of Protests, with Carlo M. Cusumano

We consider an alternating-offers redistributive bargaining model where an affected third party can protest against proposals under review. Protests are costly and only stochastically successful. When successful, they secure the status quo. Stationary equilibria feature either inefficient protests or excessive accommodation to the third party. In both cases, the bargainers do not extract the full surplus. *Strategic delay* is necessary and sufficient to curb this issue: By delaying a harmful agreement with positive probability only after acquiescence, the bargainers create an endogenous punishment device that allows them to extract more surplus without triggering protests. The bargainers' misaligned interests are key for this result: If they internalized each other's payoff, strategic delay would not be credible.

# Misaligning Incentives in Teams, with Carlo M. Cusumano and Tan Gan

In a multi-agent setting, we study the optimal design of monitoring and compensation to uniquely implement work under contracting frictions. The principal has complete flexibility in designing the monitoring system but is constrained in the number of pay-relevant contingency clauses she can use. Our main result shows that misaligning workers' incentives is optimal as it decreases the extent to which they can free-ride on each other's effort provision. This allows the principal to extract the full surplus from a team whose size grows exponentially with the number of contingency clauses. Under the strongest contracting friction, i.e., the restriction to binary contracts, the optimal contract features two sub-teams competing for a bonus.

# **Competing to Commit: Markets with Rational Inattention,** with Carlo M. Cusumano and Francesco Fabbri (2024), *American Economic Review*, 114(1), pp. 285-306

Two homogeneous-good firms compete for a consumer's unitary demand. The consumer is rationally inattentive and pays entropy costs to process information about firms' offers. Compared to a collusion benchmark, competition produces two effects. As in standard models, competition puts downward pressure on prices. But, additionally, an *attention effect* arises: The consumer engages in trade more often. This alleviates the commitment problem that firms have when facing inattentive consumers and increases trade efficiency. For high enough attention costs, the attention effect dominates the effect on prices: Firms' profits are higher under competition than under collusion.