Pierre BARDIER

Paris School of Economics and École Normale Supérieure PSL

pierre.bardier@psemail.eu

Personal website

DOCTORAL STUDIES

Paris School of Economics – École Normale Supérieure PSL 2021 – Present
PhD in economics, under the supervision of Marc Fleurbaey

University of Tokyo June–July 2026
Visiting at the Institute of Social Sciences, at the invitation of Susumu Cato
Scheduled one month visit

University of Rochester 2023, 2024
Two visitings at the department of economics, at the invitation of William Thomson
A full-semester visit and a two-month visit

PRIOR EDUCATION

École Normale Supérieure PSL 2016 – 2021
Five year track [1]

Université Paris I Panthéon Sorbonne 2019 – 2020
MA in mathematics

Paris School of Economics 2017 – 2019
MA in economics

Lycée Montaigne de Bordeaux 2013 – 2016
Classes préparatoires BL [2]

RESEARCH INTERESTS

Collective decision making —economic design and welfare economics— and individual decision making.

WORKING PAPERS

Efficiency-conditional priority to the worst-off

We study how to rank multidimensional allocations, over which agents have heterogeneous preferences, according to a new efficiency-preserving transfer principle. The motivation is that in conjunction with

[1] ENS students take courses both at ENS and at partner institutions, and must obtain a research master's degree accredited by ENS.

[2] Intensive courses in humanities, social sciences and mathematics preparing entrance exams to top French schools.

efficiency and informational parsimony principles, transfer requirements previously proposed, which ignore the respective efficiency of the pre-and-post-transfer allocations, force society to give absolute priority to the worst-off. The social orderings that we characterize —on the basis of our new transfer axiom, *strong Pareto*, *continuity* and an assumption pertaining to the representation of individual preferences— combine an inequality-neutral ordering and an infinitely inequality-averse ordering, and may display any finite aversion to inequality, except neutrality.

The probability of satisfying axioms: a non-binary perspective on economic design

We provide a formal framework accounting for a widespread idea in the theory of economic design: analytically established incompatibilities between given axioms should be qualified by the likelihood of their violation. We define the degree to which rules satisfy an axiom, as well as several axioms, on the basis of a probability measure over the inputs of the rules. Armed with this notion of degree, we propose and characterize 1) a criterion to evaluate and compare rules given a set of axioms, allowing the importance of each combination of axioms to differ, and 2) a criterion to measure the compatibility between given axioms, building on a analogy with cooperative game theory.

Hoping for the best while preparing for the worst in the face of uncertainty: a new type of incomplete preferences (with Bach Dong-Xuan and Van-Quy Nguyen)

We propose and axiomatize a new model of incomplete preferences under uncertainty, which we call *hope-and-prepare preferences*. An act is considered more desirable than an other act when, and only when, both an optimistic evaluation, computed as the welfare level attained in a best-case scenario, and a pessimistic one, computed as the welfare level attained in a worst-case scenario, rank the former above the latter. Our comparison criterion involves multiple priors, as best and worst cases are determined among sets of probability distributions. We make the case that, compared to existing incomplete criteria under ambiguity, hope-and-prepare preferences address the trade-off between conviction and decisiveness in a new way, which is more favorable to decisiveness. We also characterize a completion of an incomplete hope-and-prepare preference relation admitting an (asymmetric) *α-maxmin expected utility representation*, in which α is unique.

(Any selection of) the egalitarian Walrasian rule is subject to obvious manipulations when preferences are linear (with Bach Dong-Xuan and Van-Quy Nguyen)

We study the incentives properties of one of the central solutions to the problem of allocating divisible commodities among equally entitled agents, namely the Egalitarian Walrasian rule (EW), when agents have linear preferences. The EW rule being manipulable on this domain, we ask whether it is, at least, *immune to obvious manipulations*. Unfortunately, the answer is negative. This manipulability result is generic since we show that any agent for whom all the commodities are desirable has an obvious manipulation.

WORK IN PROGRESS with a very short description

Accounting for ex-ante fairness in ex-post welfare assessment (with Marc Fleurbaey and Stéphane Zuber)

We study new criteria to aggregate individual preferences over lotteries, giving precedence to the so-called *ex-post approach* without ignoring *ex-ante fairness*.

TEACHING

Microeconomics: market failures Spring 2025, 2026
Lecture course, BSc in social sciences (second year), CPES [3], Université PSL

Tutorials in microeconomics Spring 2023, 2024
BSc in economics (final year), École Normale Supérieure PSL
Instructors: Fanny Henriet (2023), Sylvie Lambert (2024)

Introduction to microeconomics Fall 2022
Three lectures for Classe Talents Paris I–ENS (top civil service exam preparation)

Tutorials in organisational economics Spring 2022
BSc in Economics (final year, in English), Université Paris I Panthéon–Sorbonne
Instructor: Lise Rochaix

CONFERENCES AND SEMINARS

Theory and Organisation seminar, Paris School of Economics (June 2025); Economic Theory Seminar, Karlsruhe Institute of Technology (December 2024); 17th meeting of the Society for Social Choice and Welfare, Paris School of Economics (July 2024); Workshop on Collective Decisions and Economic Design, University of Alicante (June 2024); Seminar, Department of Economics, University of Caen (June 2024); Theory and Organisation seminar, Paris School of Economics (June 2024); Online Social Choice and Welfare seminar (May 2024); Theory seminar, Department of Economics, University of Rochester (December 2023); 9th International Workshop on Computational Social Choice (COMSOC), University of Beersheba (July 2023); Summer school on Computational Social Choice, University of Amsterdam (July 2023); Conference on Economic Design, University of Girona (June 2023); 16th meeting of the Society for Social Choice and Welfare, Autonomous Technological Institute of Mexico (July 2022)

FUNDING

Two years PhD funding 2024 – Present
From Université PSL as demi-ATER (teaching)

PSE international mobility grant 2023
Full-semester visit at the University of Rochester

Three years PhD scholarship 2021 – 2024
From École Normale Supérieure PSL
Contrats Doctoraux Spécifiques Normaliens

LANGUAGES

French (Native), English (Fluent), Spanish (Good)

[3] Cycle Pluridisciplinaire d'Études Supérieures.

COMPUTER SKILLS

Python, R, Wolfram Mathematica, LaTeX, Open Office

Last update: January 2026