# JOÃO THEREZE

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## ACADEMIC POSITIONS

## Duke University, Fuqua School of Business

2023-present

Assistant Professor, Finance Area

## **EDUCATION**

Princeton University 2016-2023

PhD in Economics

Princeton University 2016-2018

M.A. in Economics

Fundação Getúlio Vargas (EPGE) 2014-2016

M.A. in Economics Rio de Janeiro - Brazil

Fundação Getúlio Vargas (EPGE) 2010-2013

B.A. in Economics Rio de Janeiro - Brazil

#### RESEARCH PAPERS

## "Adverse Selection and Endogenous Information"

We study adverse selection markets where consumers can choose to learn how much they value a product. Information is acquired after observing prices, so it is endogenous. This presents a trade-off: information increases the quality of consumers' choices but worsens selection. We characterize how this trade-off translates into distortions of consumers' demand and producers' cost. Then, we show that information decisions produce a negative externality, may decrease welfare, and may lead to new forms of market breakdown. Moreover, efficiency is typically non-monotone in information costs. Two implications are that (1) standard measures underestimate the welfare costs of adverse selection; and (2) information policies can help correct its inefficiencies. Finally, we propose an empirical test to detect endogenous information in the data, and develop a framework for counterfactual policy analysis.

## "Screening Costly Information" Resubmitted at Journal of Political Economy.

We study screening with endogenous information acquisition. A monopolist offers a menu of quality-differentiated products. After observing the offer, a consumer can costly learn about which product is right for them. We characterize the optimal menu and how it is distorted: typically, all types receive lower-than-efficient quality, and distortions are more intense than under standard screening, even when no information is acquired in equilibrium. The additional distortion is due to the threat from the buyer to obtain information that is not optimal for the seller. This threat interacts with the division of surplus: profits are U-shaped in the level of information costs and, when such costs are low, the consumer may be better off than when information is free. Among several applications, we show (i) transparency policies may harm consumers by lowering their strategic advantage, and (ii) an analyst who empirically measures distortions ignoring information acquisition could severely underestimate the level of inefficiency in the market.

"Asymptotic Learning with Ambiguous Information" with Pëllumb Reshidi and Mu Zhang. Revise and Resubmit at American Economic Journal: Microeconomics

We study asymptotic learning when the decision-maker is ambiguous about the precision of her information sources. She aims to estimate a state and evaluates outcomes according to the worst-case scenario. Under prior-by-prior updating, ambiguity regarding information sources induces ambiguity about the state. We show this induced ambiguity does not vanish even as the number of information sources grows indefinitely, and characterize the limit set of posteriors. The decision-maker's asymptotic estimate of the state is generically incorrect. We consider several applications. Among them we show that a small amount of ambiguity can exacerbate the effect of model misspecification on learning, and analyze a setting in which the decision-maker learns from observing others' actions.

"Insurance Contracts and Financial Markets" with Andrés Carvajal. Mathematical Social Sciences 121 (2023): 8-19.

This paper studies the interaction between insurance and financial markets. Individuals who differ only in risk have access to insurance contracts offered by a monopolist and can also save through a competitive market. We show that an equilibrium always exists in that economy and identify an externality imposed on the insurer's decision by the endogeneity of prices in the financial market. We argue that, because of that externality and in contrast to the case of pure contract theory, equilibrium always exhibits under-insurance even for the riskiest agents in the economy and may even exhibit pooling. Importantly, the externality does not disrupt the single crossing property of the economy.

#### WORK IN PROGRESS

"Speed, Accuracy and Caution: the Timing of Choices under Risk Aversion" with Pëllumb Reshidi

A large empirical literature on the timing of binary choices documents that quicker decisions are often more accurate than slower ones. This evidence suggests individuals decrease the standards with which they choose over time, at odds with the classic sequential model in which standards are time-independent. We show that incorporating risk aversion can account for time-dependent standards. We find sufficient conditions for standards to be decreasing for a family of utility functions, and use a novel approximation technique to draw conclusions that hold for all risk-averse decision-makers. Our technique sidetracks some of the difficulties in solving non-stationary optimal stopping problems and allows us to partially characterize the optimal boundaries.

"Endogenous Belief Updating" with Francesco Fabbri

### **TEACHING**

Duke FIN 645: Financial Management (Daytime MBA, Fall 1 2023)

FIN 524K: Foundations of Capital Markets (MMS: DKU, Fall 1 2023)

Princeton FIN 502: Masters Corporate Finance (TA, Spring 2022)

ECO 363: Undergraduate Corporate Finance (TA, Spring 2019, 2020 and 2021)

ECO468/FIN568: Undergraduate and Masters Behavioral Finance (TA, Spring 2019)

ECO 406: Undergraduate course on Radical Markets (TA, Fall 2018)

EPGE Graduate Course on Real Analysis (I and II) for Economists (TA, Spring 2015)

#### PROFESSIONAL ACTIVITIES

#### Presentations and Seminars

- 2023 Bocconi; Chicago Booth; CU Boulder; Duke Fuqua; HEC Paris; LSE Management; Michigan; Purdue; Toronto Rotman; 10th Annual ASU Economic Theory Conference; 93rd Annual Meeting of the SEA; 45th Meeting of the Brazilian Econometric Society
- 2022 Princeton University; Stony Brook International Conference on Game Theory
- 2021 University of California, Davis; Young Economist Symposium
- 2017 Young Economist Symposium (accepted), North American Summer Meeting of the Econometric Society (co-author presented)
- 2016 Public Economic Theory Conference; Society for the Advancement of Economic Theory Conference

### Refereeing

Econometrica, American Economic Review, Review of Economic Studies, American Economic Review: Insights, American Economic Journal: Microeconomics, Journal of Mathematical Economics

#### HONORS, SCHOLARSHIPS, FELLOWSHIPS, AND GRANTS

| Princeton Graduate School Teaching Award          | 2021      |
|---|-----------|
| Stephen Goldfeld Memorial Fellowship              | 2021      |
| Dietrich II Economic Theory Center Research Grant | 2020-2022 |
| Princeton Graduate Economics Fellowship           | 2016-2022 |
| FAPERJ Nota 10 Masters Fellowship                 | 2014-2016 |

## **LANGUAGES**

Portuguese (native), English (fluent), Spanish (elementary)

## PHD REFERENCES

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