

## Francisco Pareschi

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CONTACT INFORMATION	Department of Economics Northwestern University 2211 Campus Drive Evanston, IL 60208	fpireschi@u.northwestern.edu fpireschi.github.io  Citizenship: Uruguayan, Italian
FIELDS	Industrial Organization, Applied Econometrics, Computational Economics	
EDUCATION	<p>Ph.D. in Economics, Northwestern University (<i>in progress</i>)  Committee: Igal Hendel (chair), Mar Reguant, Vivek Bhattacharya, Gaston Illanes  GPA 3.94/4.00</p> <p>M.A. in Economics, Northwestern University, 2019</p> <p>M.sc. in Economics, Universidad Carlos III de Madrid, 2018  GPA 10.3/12.0, Ranked 1st in class</p> <p>B.A. in Economics, Universidad de la República Uruguay, 2014  GPA 9.0/10.0, Ranked 1st in class</p>	
RELEVANT COURSE WORK	Industrial Organization Mathematical Optimization Advanced Econometrics Economics of Information	
FELLOWSHIPS & AWARDS	<p>Robert Eisner Graduate Fellowship, Northwestern University 2021  <i>The department's highest honor bestowed on a graduate student entering fourth year.</i></p> <p>Dissertation University Fellowship, Northwestern University 2023–2024</p> <p>Graduate Fellowship, Northwestern University 2018–2022</p> <p>Graduate Fellowship, Universidad Carlos III de Madrid 2016–2018</p> <p>Fellowship for Masters Abroad, Agencia Nacional de Investigación e Innovación, Uruguay 2016 (Declined)</p> <p>Introduction to Research Scholarship. Agencia Nacional de Investigación e Innovación, Uruguay 2013</p>	
RESEARCH EXPERIENCE	Research Assistant, Mar Reguant, Northwestern University 2019–2020 Research Assistant, Centro de Investigaciones Económicas Uruguay 2012–2016	
TEACHING EXPERIENCE	<p>Teaching Assistant, Northwestern University</p> <p>Intermediate Industrial Organization, Igal Hendel 2020</p> <p>Graduate Microeconomics III, Wojciech Olszewski 2019</p> <p>Math camp (graduate), Wojciech Olszewski 2020</p> <p>Teaching Assistant, Universidad Carlos III de Madrid</p> <p>Econometrics (undergraduate, graduate), Industrial Organization (graduate) 2017</p> <p>Teaching Assistant, Universidad de la República Uruguay</p> <p>Algebra, Calculus, Statistics, Econometrics (undergraduate) 2015</p>	

PROGRAMMING	Julia, Python, Stata
LANGUAGES	English (fluent), Spanish (native), Italian (intermediate)
WORKING PAPERS	<b>“Reducing Consumer Inertia in Tobacco Markets” (JMP)</b> , with Gaston Lopez

We study the equilibrium effects of tobacco control policies. To curb tobacco consumption, regulators are currently proposing policies to reduce smokers’ addictiveness and other policies to lower customers’ brand loyalty, which we refer to as *consumer inertia*. Although such policies would directly impact consumers, there is concern that firms’ responses could undermine the effect on consumption. We develop an empirical dynamic oligopoly model to analyze these policies’ equilibrium effects and estimate it using variation from the cigarette industry. Companies are forward-looking, since they internalize that, under consumer inertia, future demand depends on current purchases. Leveraging tax fluctuations and a policy that forced 40% of products out of the market, we show that addiction and loyalty are both significant. We also document pricing patterns that suggest firms are indeed forward-looking. Lastly, we use a tractable equilibrium notion to simulate industry dynamics under alternative levels of inertia. Our results indicate that these policies could backfire because reducing inertia increases demand elasticity up to three times and expands the expected number of products by as much as 30%. However, these policies also reduce firms’ benefit from attracting consumers since it is harder to retain them in the future, which leads to less aggressive pricing. This compensating factor is equivalent to increasing marginal costs by a factor of up to 3.5. Once we account for this dynamic effect, we conclude that firms’ responses tend to reinforce the efficacy of the policies designed to reduce consumption.

**“How Governments Engage in Price Discrimination? Evidence from a Large Scale Nationalization”, with Gaston Lopez**

State-owned enterprises (SOEs) have the potential to correct market failures, but they are also subject to the influence of politics and interest groups. We examine this trade-off in the context of the nationalization of the leading gasoline company in Argentina. Descriptive analysis suggests that pricing patterns changed after the nationalization. First, the government exerted less market power, charging lower prices on average and benefiting consumers. Second, it engaged in less economic price discrimination, reducing the correlation between prices and consumers’ willingness to pay. Third, it engaged in political price discrimination, charging lower prices in provinces with political connections with the state-owned firm. Motivated by these findings, we develop and estimate a model of gasoline supply and demand under market power and recover the government’s objective function. We find that public provision lead to welfare gains but is also associated with redistributive motives. Compared to a benevolent planner that internalizes the welfare of all consumers and firms equally, the government set prices as if it only cares about favoring middle-income consumers and consumers in provinces that have political ties with the firm. Lastly, we use the model to assess the company’s response to policy alternatives, including pricing rules that align government actions with the public interest and are in place in government agencies worldwide. Our findings show that rules effectively reduce the influence of politics in pricing but are associated with higher costs: they mitigate half of the welfare gains generated by the nationalization and increase the taxpayers’ burden by 10%. These findings emphasize the importance of politics and interest groups in shaping governments’ decision-making process and the role of SOEs as instruments for redistribution.

**“Bounding Outcomes in Counterfactual Analysis”**, with Mar Reguant

In many economic settings, counterfactual analysis can be difficult for two reasons: (i) we do not know how to compute the equilibrium of the game, or (ii) even if we know how to compute one equilibrium, the game might feature multiple equilibria, which are challenging to characterize exhaustively. We propose a bounding framework to allow for counterfactual analysis even when these problems might arise. The method relies on determining valid (conservative) bounds to counterfactual outcomes that contain any outcome that could be sustained in equilibrium, i.e., any outcome that can be supported by a set of equilibrium constraints. To ensure that all potential solutions are considered, We propose to reframe equilibrium constraints as a relaxed mixed-integer linear program. We show that the framework can also be used to narrow down equilibria by imposing additional equilibrium constraints. We provide examples of static price competition with differentiated products, dynamic games, and multi-unit auctions, three areas where counterfactual analysis faces these challenges.

WORK IN PROGRESS    **“Industry Dynamics in Markets with Inertia”**

**“Misallocation of water: the role of storage”**, with Matthew O’Keefe

**“Insurance under information frictions in the electricity market”**, with Mar Reguant

REFEREING    International Journal of Industrial Organization

**References**

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