Alessandro Bonatti

Home Address:
192 Edwards Street, Apt. 4
New Haven, CT 06511

Office:
Department of Economics
Yale University
New Haven, CT 06520-8268
Fax: (203) 432-2626

Telephone:
(203) 444-4231 (mobile)

E-mail: alessandro.bonatti@yale.edu

Web page: http://pantheon.yale.edu/~ab594/

Citizenship: Italian (J-1 Visa)

Fields of Concentration:
Microeconomic Theory
Industrial Organization
Political Economy

Desired Teaching:
Microeconomic Theory
Industrial Organization
Political Economy

Comprehensive Examinations Completed:
May 2005 (Oral): Microeconomic Theory *(with distinction)*, Political Economy *(with distinction)*
May 2004 (Written): Microeconomic Theory, Macroeconomic Theory

Dissertation Title: *Essays on Learning, Price Discrimination, and Competition*

Committee:
Professor Dirk Bergemann
Professor Benjamin Polak
Professor Johannes Hörner

Expected Completion Date: May 2009

Degrees:
Ph.D., Economics, Yale University, expected May 2009
M.Phil., Economics, Yale University, May 2006
M.A., Economics, Yale University, May 2005
Laurea in Economia, *summa cum laude*, Università di Napoli Federico II, January 2003

Fellowships, Honors and Awards:

Robert M. Leylan Fellowship in the Social Sciences, Yale University, 2008-2009
Carl A. Anderson Prize Fellowship, Cowles Foundation, Yale University, 2007-2008
John F. Enders Fellowship, Graduate School of Arts and Sciences, Yale University, 2007
Raymond Powell Teaching Award, Yale University, 2005-2006
Cowles Foundation Summer Prize, Yale University, 2005
Yale University Graduate Fellowship, 2003-2008
Angelo Costa Award for Undergraduate Thesis, Rivista di Politica Economica, 2003
Socrates-Erasmus Exchange Program Fellowship, Université de Bordeaux IV, France, 2001

Teaching Experience:

Instructor, Introductory Microeconomics, Yale University, Summer 2007
Teaching Assistant, Graduate Microeconomics, Yale University, Spring 2006 and Spring 2007
Teaching Assistant, Game Theory, Yale University, Fall 2005 and Fall 2007

Papers:

"Menu Pricing and Learning" (Job Market Paper), 2008
"Brand-Specific Tastes for Quality," 2008
"Collaborating" (with Johannes Hörner), 2008
"Bargaining over a New Welfare State" (with Kaj Thomsson), 2008
"Welfare Effects of Alternative Damage Payment Rules" (with Ben Polak), in progress

Conference Presentations:

European Economic Association Summer Meeting, Milan, Italy, August 2008
Nobel Laureates Meeting in the Economic Sciences. Part of the U.S. NSF-sponsored delegation, Lindau, Germany, August 2008
Society for Economic Dynamics Annual Meeting, Cambridge, MA, July 2008
CSEF-IGIER Symposium on Economics and Institutions, Capri, Italy, June 2008
North American Summer Meeting of the Econometric Society, Durham, NC, June 2007

Referee Activity:

Economic Journal, Rand Journal of Economics

Language Skills:

Italian (native), English (fluent), French (fluent)

References:

Professor Dirk Bergemann
Department of Economics
Yale University
P.O. Box 208281
New Haven, CT 06520-8281
Phone: (203) 432-3592
Fax: (203) 432-5779
Email: dirk.bergemann@yale.edu

Professor Benjamin Polak
Department of Economics
Yale University
P.O. Box 208268
New Haven, CT 06520-8268
Phone: (203) 432-9926
Fax: (203) 432-5779
Email: benjamin.polak@yale.edu

Professor Johannes Hörner
Department of Economics
Yale University
P.O. Box 208281
New Haven, CT 06520-8281
Phone: (203) 432-5352
Fax: (203) 432-6167
Email: johannes.horner@yale.edu

Dissertation Abstract

My dissertation focuses on learning, price discrimination and competition. I analyze the interaction of these phenomena to examine menu pricing in markets for experience goods, quality pricing in imperfectly competitive markets, and collaboration and free-riding incentives within research partnerships. For example, all three of these forces are involved in pricing of new products and services. Learning about the product occurs faster as more units are sold, hence sellers may use low introductory prices. Buyers have private information about their preferences, hence sellers may profitably adopt price discrimination techniques (such as menu pricing) to screen consumers. And often these markets are characterized by imperfect competition, so pricing is strategic.

The first chapter of my dissertation analyzes dynamic price discrimination in a setting with uncertain product quality and asymmetric information over buyers' valuations. I characterize the optimal menu of contracts offered by a monopolist as information about product quality is gradually revealed to market participants. I also derive predictions for the intertemporal patterns of prices, quantities, and product line variety for experience goods.

The second chapter extends the classic analysis of quality pricing by introducing strategic interaction. I consider an imperfectly competitive market with differentiated products in which consumers have idiosyncratic preferences for individual brands. I characterize the equilibrium nonlinear prices and derive implications for consumer substitution patterns across brands.

The third chapter (joint work with Johannes Hörner) combines the analyses of learning and strategic interaction in the context of collaborations. We study the performance of research partnerships, in which several agents can exert effort towards completion of a joint project. As time passes, agents gain information about the potential for the project's eventual success. However, agents cannot monitor each other's efforts, leading to a dynamic free-rider problem. We identify factors alleviating and aggravating this problem, providing insights into the design of successful collaborations.

I. Menu Pricing and Learning (Job Market Paper)

This paper addresses the question of designing intertemporal menus to sell experience goods. In each period, a menu is a set of price-quantity bundles. The quality of the product is initially unknown, and more information is generated through experimentation. The amount of information in the market is increasing in the total quantity sold in each period. The firm can therefore control the information flow to the market by the level of sales. The paper derives the optimal menu offer as a function of consumers' beliefs about product quality, and shows how the prices and quantities offered by the firm change over time, as a consequence of information diffusion. The model also has implications for the design of introductory offers, and for the dynamics of quantity discounts and product line variety.

The uncertainty about the quality of the product introduces a new and dynamic element into the standard trade-off between efficiency and rent extraction. Since learning occurs through consumption, each unit sold provides additional informational value. Noticeably, the effects of learning are not uniform across the product line. Positive signals about quality increase the differences between buyers' valuations for the product, tightening the incentive compatibility constraints, and therefore increasing the quantity distortions for small buyers. The results show that the firm pursues the two objectives of generating information and screening consumers simultaneously. However, the balance between the two goals is shifting over time. Initially, the firm charges lower prices, in order to increase sales above the myopic optimum, thus sacrificing short-term gains in order to invest in information. After the market has obtained sufficient information, the firm gradually shifts to a policy designed to extract revenue from high-valuation buyers. This policy may eventually exclude low-valuation buyers from the market.

This paper enriches the screening literature by extending nonlinear pricing techniques beyond the canonical, static environment to a model where information is revealed over time.

II. Brand-Specific Tastes for Quality

This paper analyzes a model of nonlinear pricing with competition. The novel element is that each consumer's willingness to pay for quality is private information and is allowed to differ across brands. In consequence, a buyer's type is a multidimensional vector, rather than a scalar, as in standard models of price competition.

In my model, buyers with high willingness to pay for quality also display strong preferences for particular brands. These buyers require higher discounts in order to switch away from their favorite product. I then characterize the symmetric equilibrium menu of contracts. This equilibrium menu shows that competition is fiercer for buyers with lower tastes for quality, and hence more elastic demands. This is in sharp contrast to earlier models in which competition is fiercer for higher-taste, more valuable buyers. In equilibrium, quality levels are distorted downwards for all buyer types, except for the highest one. Moreover, firms choose either to compete intensively for the entire market (providing strictly positive rents to all consumers) or to shut down the least profitable segment of the market.

Finally, this paper derives consumers' brand preferences directly from their tastes for firm-specific characteristics. As such, this model represents a theoretical contribution towards integrating endogenous product characteristics and price discrimination in a discrete choice environment.

III. Collaborating (with Johannes Hörner)

This paper studies the design and performance of partnerships. It focuses on collaborations where agents have the option of working towards completion of one or more common projects. All members in the partnership enjoy the benefits of success, and share uncertainty over the probability of being able to complete the projects. In particular, as agents work longer without observing a success, they become skeptical about the possibility of completing the task. Each agent's effort is not verifiable by others, thereby creating incentives for free riding. We show that, when players are symmetric and efforts are perfect substitutes, effort fades away as time elapses, but never stops. We then extend the model to allow for asymmetric players, deadlines, complementarity between efforts, and multiple tasks.

We find that sequential division of labor and deadlines help alleviate the free rider problem. Conversely, indivisibility of tasks, the number of partners, and asymmetries between agents are shown to increase the expected time to completion. The model may be applied to academic co-authorship, as well as to research and development joint ventures.

Bargaining over a New Welfare State (with Kaj Thomsson)

A project separate from my dissertation, this paper develops a theoretical model of legislative bargaining in the US Congress and applies it to the presidential period of Franklin Roosevelt. The goal of the paper is twofold: first, to provide a greater understanding of the objectives behind the New Deal. Secondly, by developing an estimable model of the US Congress, to narrow the gap between models of legislatures and their empirical or qualitative counterparts. In the model, the distribution of federal funds across different regions of the country is the outcome of a game in which the President acts as the agenda-setter and bargains with Congress over the final shape of the spending bill. For any set of preferences for the President, and any given distribution of seats in the Congress, the model can be solved for a unique predicted outcome. The actual distributions for several New Deal programs are then used to estimate the preference parameters of the Roosevelt administration. Theory and data are linked to estimate the model's parameters using a simple minimum distance approach. The results indicate that economic concerns for relief and recovery, though not necessarily for fundamental reform and development, largely drove the New Deal, and that political concerns mattered, but only marginally so.