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**Research interests:** industrial organization, antitrust, consumer search

**Dissertation:** “Three essays on economics of search” (expected defense in May 2009)

Sponsors:

Professor Michael Riordan, (212)854-6984, [mhr21@columbia.edu](mailto:mhr21@columbia.edu)  
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**Education:**

2003-present Ph.D, Economics, Columbia University  
2001-2003 M.A. New Economic School, Moscow, Russia  
1997-2001 B. A. Moscow State University, Moscow, Russia

**Employment:**

From 09/2009 – Economist at Federal Reserve Bank of Boston, Consumer Payments  
Research Center

**Working papers**

*Estimating search with learning (job market paper)*

Abstract: In this paper we estimate a structural model of search for differentiated products, using a unique dataset of consumer online search for hotels. We propose and implement an identification strategy that allows us to separately estimate consumer's beliefs, search costs and preferences. Learning plays an essential role in this strategy: it creates variation of posterior beliefs across consumers that is orthogonal to the variation in search costs. We show that ignoring both the limited nature and endogeneity of choice sets due to search may lead to significant biases in estimates of consumer demand: from 70 percent to more than twice depending on information assumptions. Second, the median search cost is about 25 dollars per 15 hotels; there is also a significant heterogeneity of search costs among the population. We perform a statistical test between models of search from known (Stigler 1967) and from unknown (Rothschild 1974) distribution and find that our data favors the latter: consumers learn about the price-quality relationship while searching.

*Search from unknown distribution: an alternative characterization, joint with Ting Wu*

Abstract: In this paper, we revisit the problem of search from unknown distribution, introduced by Rothschild (1974). For consumers that have Dirichlet priors about unknown distribution of offers, we develop a novel characterization of optimal stopping rule, alternative to the one based on reservation value. An advantage of our representation is that it delivers closed form, easily computable formulas for ex-ante purchase probabilities, conditional on consumer's preferences and search cost. This result opens a possibility of introducing search frictions into estimation of demand by consumers who learn while searching. We illustrate application of our method on a dataset of prices and market shares of S&P 500 mutual funds, that was originally used by Hortacsu and Syverson (2004). By comparing the two models, we find that: a) search without learning over-estimates demand for best goods (lowest priced); b) search with learning produces consistently lower price elasticity, especially for the lowest priced goods.

*Vertical integration in sequential negotiations*

Abstract: We study vertical integration in the form of financial ownership as a way to improve the bargaining position of a firm in sequential negotiations. In our model an upstream monopolist bargains over a sequence of bilateral contracts with downstream firms. When there are negative externalities between the contracts, and negotiations are costly, the order of negotiations becomes an important strategic variable. We show that by integrating with one of the downstream firms the monopolist is able to commit to a favorable bargaining protocol vis-a-vis the non-integrated one, and ultimately increase his profits. Two effects make this happen: first, integration increases the monopolist's outside option in negotiations with the non-integrated firm; second, integration serves as a commitment device of no return to the non-integrated firm after a breakdown of negotiations. This makes that firm more willing to settle today, and at higher price. In the case when the principal is located downstream we find that his expected profits are unaffected by vertical integration, mainly due to the absence of contracting externalities upstream.

**Publications**

*A History of Russian VAT*, Forthcoming in a volume "Tax reforms in developing countries", edited by Joseph Stiglitz, published by Columbia University press

In this article we give an overview of developments of Russian value added tax, between 1992 and 2007. We give a detailed account of legislative changes that happened during this period, and evaluate them from the perspective of performance of this tax.

**Conferences**

2008 Earie 2008, Toulouse, France

2008 International Industrial Organization Conference, Washington, DC

**Honors**

2003-2009 Teaching/dissertation fellowship, Columbia University  
2008 NET institute summer research grant  
2008 Wueller summer research award and PER Summer research grant  
2007 Wueller summer research award and PER Summer research grant  
2006 Wueller award dissertation proposal and PER Summer research grant  
2005 Wueller award for best research proposal  
2002 Best student paper award, New Economic School

**Refereeing**

Journal of Industrial Economics

**Personal**

Languages: Russian (native), English (working), French (reading)