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*CURRICULUM VITAE*

**NELSON SÁ**

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**ADDRESS**

Department of Economics  
Duke University  
213 Social Sciences, Box 90097  
Durham, NC 27708-0097

**E-MAIL** [nelson.sa@duke.edu](mailto:nelson.sa@duke.edu)

**WEBPAGE** [www.duke.edu/~nbs3](http://www.duke.edu/~nbs3)

**HOME**

221 Anderson Street, Apt. A  
Durham, NC 27705  
Home: (919) 809 7531  
Cell: (919) 768 3579

**EDUCATION**

Ph.D. in Economics (expected May 2008), Duke University, Durham, NC, USA

M.A. in Economics, Duke University, Durham, NC, USA, May 2005

M.A. in Economics, University of Porto, Portugal, December 2001

B.A. in Economics, University of Porto, Portugal, September 1997 (with honors)

**AREAS OF SPECIALIZATION**

Primary: Economic Growth, International Economics

Secondary: Industrial Organization, Macroeconomics

**DISSERTATION**

Title: *The Effect of Sunk Costs on Market Structure, Specialization and Welfare*

Committee: Pietro Peretto (chair), Michelle Connolly, Huseyin Yildirim, Wesley Cohen

## **PROFESSIONAL AND ACADEMIC EXPERIENCE**

2007-2003 Department of Economics, Duke University, Durham, USA

- Research Assistant, Professor Michelle Connolly (Spring 2007, Fall 2007)
- Co-Instructor, *Intermediate Macroeconomics* (ECON 110, Fall 2006)
- Head Teaching Assistant, *Intermediate Macroeconomics* (ECON 110, Spring 2005 and Spring 2006)
- Teaching Assistant, *Intermediate Microeconomics* (ECON 105, Summer 2005)

2003-1997 Department of Economics, University of Porto, Portugal

- Instructor, *Introductory Economics* (joint appointment with the Department of Engineering, Spring 2003)
- Member of the Department Pedagogical Committee (Fall 2002 - Spring 2003)
- Lecturer, *Introductory Economics* (Undergraduate, Fall 1997 - Spring 2003)

## **WORKING PAPERS**

1. “*Sunk Costs, Market Structure and Welfare: A General Equilibrium Interpretation*”, Fall 2007 (Job Market Paper).
2. “*Upstream Specialization in a General Equilibrium Model*”, work in progress.
3. “*Endogenous Intellectual Property Rights*”, with Michelle Connolly and Diego Valderrama, work in progress.

## **ACADEMIC AND PROFESSIONAL HONORS and AWARDS**

Graduate School Summer Fellowship, Duke University, Summer 2007

Department of Economics Summer Fellowship, Duke University, Summer 2006

Faculty Award for Outstanding Graduate Teaching Assistant, Department of Economics, Duke University, Spring 2006

Tuition Scholarship, Department of Economics, Duke University, Fall 2004-Present

Ph.D. Scholarship, Portuguese National Science Foundation (FCT, Portugal), 2003-2007

Award “*Fundação Engenheiro António de Almeida*” for Top Undergraduate Economics Students (Porto, Portugal), 1997

## **SKILLS and OTHER INFORMATION**

Computer Skills: Matlab, Scientific Workplace, MS-Word, MS-Excel

Languages: English (fluent), Portuguese (native), French (intermediate), Spanish (basic)

Citizenship: Portugal (F-1 Visa)

## **REFERENCES**

Pietro Peretto, Associate Professor of Economics, Duke University  
213 Social Sciences, Box 90097  
Durham, NC 27708-0097  
phone: (919) 660-1807  
email: [peretto@econ.duke.edu](mailto:peretto@econ.duke.edu)  
web page: <http://econ.duke.edu/~peretto/>

Michelle Connolly, Associate Professor of the Practice of Economics, Duke University  
213 Social Sciences, Box 90097  
Durham, NC 27708-0097  
phone: (919) 660-1819  
email: [connolly@econ.duke.edu](mailto:connolly@econ.duke.edu)  
web page: <http://www.econ.duke.edu/~connolly/>

Huseyin Yildirim, Associate Professor of Economics, Duke University  
213 Social Sciences, Box 90097  
Durham, NC 27708-0097  
Phone: (919) 660-1805  
email: [yildirh@econ.duke.edu](mailto:yildirh@econ.duke.edu)

## **JOB MARKET PAPER ABSTRACT**

This paper addresses the fundamentals which determine the relationship between market structure and welfare. While policy making is often guided by the suggestion that high concentration likely affects welfare negatively, theory suggests two different possible effects of market concentration. Structuralist views posit that low firm numbers enhance the likelihood of collusion and reinforce market power, to the detriment of welfare. Conversely, efficiency views hypothesize that high concentration is the natural result of individual cost differentials, enabling firms with productivity advantages to gain market share. Although game theoretical models have established a simultaneous and endogenous relationship between concentration and profitability, empirical studies have failed to identify broad statistical regularities, in the sense that some concentrated industries seem dominated by negative market power effects, while others display prominent efficient features. This paper identifies a set of fundamental determinants, common to all industries, upon which varied combinations of market structure, market power and productivity are derived. This carries relevant policy implications, since new instruments are devised with the ability to uncover dissimilar welfare effects in the presence of identical concentration features.

A general equilibrium model is developed with both exogenous and endogenous fixed costs. Exogenous setup costs require sufficient market power to generate enough net profits to break even. Endogenous fixed costs, embodied in technical innovation and/or advertising, create that market power. In this model, they enable the firm to affect consumers' willingness to pay, while at the same time making each good less substitutable with respect to competitors. Welfare is affected in a dual manner, depending both on the number of available varieties and the range of social preferences they cover. Any structural cost change that discourages market entry is traded-off against larger production scales for the remaining varieties. The novelty here is that the opportunity cost associated with variety loss is now variable, being larger the higher the level of product heterogeneity that arises from the endogenous differentiation investments made by firms.

*Ceteris paribus*, mechanisms based on exogenous fixed costs are consistent with structuralist views, associating strong concentration to added market power and negative welfare effects. However, excessively low setup costs and deep market fragmentation hinder investments in differentiation, also producing undesirable welfare outcomes. Conversely, changes in endogenous sunk cost parameters induce a negative correlation between market concentration and market power. Higher endogenous cost parameters increase differentiation outlays and discourage market entry. These results confirm that structural indicators, such as concentration indices, are not a sufficient statistic for welfare evaluations. Identical market features may conceal different cost structures and social value, according to diverse combinations of exogenous and endogenous fixed costs. In view of that, the model offers an additional tool for market assessment, with the purpose of identifying which type of sunk cost dominates the industry.