QUANTITATIVE METHODS FOR COMPETITION ANALYSIS

13-17 February 2017

Venue: 2nd Floor, 5 Sturdee Avenue, Rosebank

This Short Learning Programme (SLP) is targeted at economists from competition authorities, economic regulators, research institutes and academia. It will cover key techniques to empirically characterise markets, with data-driven examples from some specific industries in the United States, Europe and South Africa.

The course will be led by Professor Jo Seldeslachts and Melissa Newham of KU Leuven in Belgium, one of the leading universities for the application of quantitative techniques in analysing markets and empirical industrial organization. Jo Seldeslachts has advised among the most important competition authorities across Europe (the European Commission, and the authorities in the UK and the Netherlands) and has published in the leading international journals in the field.

The main topics to be covered are as follows:

- Estimation of demand functions (homogenous and differentiated products)
- Identification of market power
- The relation between market structure and prices
- Detection of cartels
- Merger simulation

Approach

The course will combine lectures and hands-on workshop sessions using data sets in STATA. Key principles and tests taught during the lectures will be reinforced through the exercises using data from academic studies. Familiarity with STATA is a pre-requisite for the course. Participants will be expected to cover some key readings in preparation for the course.

Fees

The course cost is R10 000 per person. This rate includes all the course material, lunch and refreshments.

Contact details

For booking forms and information on the course, please contact **Farisai Chin'anga**; Tel: +27 11 559 7522; email: farisaic@uj.ac.za or **Prof Simon Roberts**; Tel: +27 11 559 7516; email: sroberts@uj.ac.za .

Programme

Day 1, 13 February 2017	
0800	**Registration and introductions**
0830-1000	**Lecture 1: Introduction** • Standard model and stylised facts • Relation between structure and profitability • Origins of empirical analysis of markets
Tea break	
1030-1200	**Lecture 2: Estimation of continuous demand functions** • Estimating the demand for a homogenous good • Simultaneity of demand and supply • Identification and instrumental variable estimation **Readings** • Davis and Garces (2010) Quantitative Techniques for Competition and Antitrust Analysis, Chapters 2 and 9.1.1 • Graddy (1995), "Testing for Imperfect Competition at the Fulton Fish Market", Rand Journal of Economics.
Lunch break	
1330-1630	**Exercise session 1**

Day 2, 14 February 2017	
0830-1000	**Lecture 3: Identification of Market Power** • Competition in quantities • Identification and estimation **Readings** • Davis and Garces (2010) Chapter 6 pages 300-315 • Berry and Pakes (2003), Lectures Notes, Chapter 2: Classic Empirical Models of Static Equilibrium • Genesove and Mullin (1998), "Testing Static Oligopoly Models: Conduct and Cost in the Sugar Industry, 1890-1914", Rand Journal of Economics.
Tea break	
1030-1200	**Lecture 4: Product Differentiation: Logit and Nested Logit** • Discrete choice model and product characteristics • Logit and nested logit **Readings** • Davis and Garces (2010) Chapter 9.2 • Berry, S. (1994), “Estimating Discrete-Choice Models of Product Differentiation”, Rand Journal of Economics • Berry and Pakes (2003), Lecture Notes, Chapter 4: Product Differentiation
Lunch break	
1330-1630	**Exercise session 2**

Day 3, 15 February 2017
Self-study

Day 4, 16 February 2017	
0830-1000	**Lecture 5: Product Differentiation: Logit and Nested Logit (cont.)** • Logit and nested logit continued
Tea break	
1030-1200	**Lecture 6: Market Structure and Prices** • Theoretical predictions • Direct assessment of market power: effect of competition on prices • Merger analysis **Readings** • Davis and Garces (2010) Chapter 5 • Ashenfelter et al. (2006), "Empirical Methods in Merger Analysis: Econometric Analysis of Pricing in FTC v. Staples", International Journal of the Economics of Business • Hackl, F., Kummer, M. E., Winter-Ebmer, R., and Zulehner, C. (2014). “Market structure and market performance in E-commerce”. European Economic Review
Lunch break	
1330-1630	**Exercise session 3**

Day 5, 17 February 2017	
0830-1000	**Lecture 7: Detection of cartels** • Inferring collusion from market data • Price levels, evolution of prices, price-cost margins • Firms’ behaviour: collusion vs. competition **Readings** • Davis and Garces (2010) Chapter 6 pages 318-338 • Harrington (2008) "Detecting Cartels," in Handbook in Antitrust Economics • Porter, R. H., and Zona, J. D. (1997). “Ohio school milk markets: an analysis of bidding”. National Bureau of Economic Research. • Porter, R. H. (1983). A study of cartel stability: the Joint Executive Committee, 1880-1886. The Bell Journal of Economics
Tea break	
1030-1200	**Lecture 8: Merger Simulation** • Merger regulation • Market definition • Competitive assessment • Merger simulations **Readings** • Davis and Garces (2010) Chapter 8 Merger Simulations • Motta, M. (2004) Competition Policy: Theory and Practice, Cambridge University Press, Chapter 1, 3, 5 • Ivaldi, M. and F. Verboven (2005): "Quantifying the Effects from Horizontal Mergers in European Competition Policy", International Journal of Industrial Organization • Björnerstedt and Verboven (2014), "Merger simulation with nested logit demand", The Stata journal
Lunch break	
1330-1630	**Exercise session 4**

Programme Lecturers

	Professor Jo Seldeslachts is a visiting Professor at the University of Johannesburg, Professor of Industrial Organisation at KU Leuven, and Senior Research Fellow at DIW, Berlin. He has held teaching and research appointments in many institutions including University of Amsterdam, Pompeu Fabra Barcelona and University of Illinois at Urbana Champaign. Jo has provided expert economic analysis and advice for a number of authorities including the competition authorities of the UK, the Netherlands and the European Commission. This has included ex-post analysis of antitrust decisions in European energy and telecom markets, as welll as a wide range of competition martters. Jo has published extensively including in the *Review of Economics and Statistics*, *Journal of Law and Economics*, *Journal of Industrial Economics*, and the *International Journal of Industrial Organisation.*
	Melissa Newham is a researcher and Master's thesis coach at KU Leuven where she is also completing her PhD. Her research interests relate to empirical industrial organisation and competition policy. Prior to this she was a trainee in the Chief Economist's Team at the EU's DG Comp and an Economist at E.CA Economics in Berlin. Melissa has an MSc in Economics from the University of Amsterdam, specialising in Industrial Organisation, Regulation and Competition Policy and BCom(hons) in Economics, Politics and Philosophy from the University of Cape Town. Melissa has extensive experience in tutoring in quantitative methods for competition analysis.