

GRADUATE – Disciplines Menu  
Doctorate and Masters in Economics

DISCIPLINE: Empirical Microeconomics	CODE: MDPTEC070
ACRONYM: MEE	
PROFESSOR: Luis Henrique Bertolino Braido	WORKLOAD: 40h  CREDIT HOUR: 4
MANDATORY: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	COURSE: <input type="checkbox"/> M <input type="checkbox"/> D <input checked="" type="checkbox"/> MD
PREREQUISITES: None	
CONCENTRATION AREA: Economic Theory	
STUDY PLAN	
<p><b>Course in Empirical Microeconomics</b></p> <p>This course addresses briefly the methodological discussion that supports the use of empirical tests in different areas of knowledge; presents a set of econometric methods available to perform such tests in economics; and describes a selection of articles that test different microeconomic theories.</p> <p><b>Part I: General Principles</b></p> <p><b>1. Philosophy of Science and Scientific Method</b></p> <p>1.1. Pre-Modernism: Classicism, Scholastic, Enlightenment, British Empiricism, Romanticism, German Idealism, Positivism</p> <p>1.2. Modernism: Popper, Friedman, Kuhn, McCloskey and Sims</p> <p>1.3. Post-Modernism:</p> <p><b>2. Some Econometric Techniques</b></p> <p>2.1. Handout 1: Cross Section</p> <p>2.1.1. Random Variable</p> <p>2.1.2. Linear Regression: Consistency and Efficiency</p> <p>2.1.3. Statistical Inference with Heteroscedasticity and Correlation of Residuals</p> <p>2.1.4. Complex Sampling</p> <p>2.2. Causality</p> <p>2.2.1. Selection Bias, Instrumental Variable, and Natural Experiment</p> <p>2.2.2. Sample Selection and Attrition</p> <p>2.3. Handout 2: Time Series</p> <p><b>3. Theories of Human Behavior and the Methodological Individualism</b></p> <p>3.1. Psychology: Mentalism and Behaviorism</p> <p>3.2. Sociology: Collectivism</p> <p>3.3. Economy: Utilitarian Rationalism</p>	

**Part II: The Competitive Tradition**

**4. Consumer Theory**

- 4.1. Preference and Individual Demand
- 4.2. Family and Allocation of Time
- 4.3. Empirical Tests to the Slutsky Matrix
- 4.4. Aggregation and Estimation of Aggregate Demand

**5. Theory of the Firm**

- 5.1. The Nature of the Firm
- 5.2. Cost Minimization
- 5.3. Empirical Tests and Estimation of the Conditional Factor Demand

**6. Overall Equilibrium**

- 6.1. General Results: Existence, 1st and 2nd Welfare Theorems
- 6.2. Classic Market Failures: Public Assets and Externalities
- 6.3. Applications to Finance: Complete Markets
  - 6.3.1. Division of Risk and Asset Pricing
  - 6.3.2. Empirical Tests to Full Insurance Forecast
  - 6.3.3. Estimation of CCAPM
  - 6.3.4. Estimation of Stochastic Discount Factor
- 6.4. Incomplete Markets, Financial Innovation and Default

**Part III: Strategic Interactions and Non-Competitive Markets**

**7. Game Theory**

**8. Asymmetric Information**

- 8.1. Moral Hazard
- 8.2. Adverse Selection

**9. Auctions and Industrial Organization**

**GOALS**

To develop skills for empirical research in economics.

**BIBLIOGRAPHY**

**Some Selected Readings**

**Methodology**

Rubin, Donald B. (1979). "Using Multivariate Matched Sampling and Regression Adjustment to Control Bias in Observational Studies," *Journal of the American Statistical Association* 74, 318-328.

Hansen, Lars P. and Heckman, James J. (1996). "The Empirical Foundations of Calibration," *Journal of Economic Perspectives* 10, 87-104.

Kydland, Finn E. and Prescott, Edward C. (1996). "The Computational Experiment: An Econometric Tool," *Journal of Economic Perspectives* 10, 69-85.

\*\*McGinn, Colin (2002). "Looking for a Black Swan," *The New York Review of Books*, 49 (18).

\*\*McCloskey, D.N. (1983). "The Rhetoric of Economics," *Journal of Economic Literature* 21, 481-517.

Russell, Bertrand (1959). "História do Pensamento Ocidental."

\*Sims, Christopher A. (1996). "Macroeconomics and Methodology," *Journal of Economic Perspectives* 10, 105-120.

### **Some Econometric Techniques**

#### **Sample Selection, Attrition, Complex Sampling and Selection**

Binder, D.A. (1983). "On the Variances of Asymptotically Normal Estimators from Complex Surveys." *International Statistical Review*, 51, 279-292.

Hansen, Lars P. (1982). "Large Sample Properties of Generalized Method of Moments Estimators." *Econometrica*, 50(4), 1029-54.

\*\*Heckman, James (1979). "Sample Selection Bias as a Specification Error," *Econometrica* 47, 153-162.

\*Heckman, James (2001). "Micro Data, Heterogeneity, and the Evaluation of Public Policy: Nobel Lecture," *JPE* 109 (4), 673-748.

\*Imbens, Guido M., Jeffrey M. Wooldridge (2008). "Recent Developments in the Econometrics of Program Evaluation," NBER Working Paper Series, <http://www.nber.org/papers/w14251>

Nascimento Silva, Pedro L., Pessoa, Djalma G.C. e Lila, Mauricio F. "Análise Estatística de Dados da PNAD: Incorporando a Estrutura do Plano Amostral." IBGE.

Wooldridge, Jeffrey M. (2002). "Econometric Analysis of Cross Section and Panel Data," MIT Press, Cap. 17-18.

Wooldridge, Jeffrey M. (2003). "Cluster-Sample Methods in Applied Econometrics," *American Economic Review* 93, 133-138.

\*Wooldridge, Jeffrey M. (2006). "Cluster-Sample Methods in Applied Econometrics: An Extended Analysis," Mimeo, Michigan State University.

### **Consumer Theory**

\*Becker, Gary (1965). "A Theory of Allocation of Time," *Economic Journal*, 75 (299), 493-517.

Braido, Luis H.B., Pedro Olinto, Helena S Perrone (2011). "Gender Bias in Intrahousehold Allocation: Evidence from an Unintentional Experiment," *Review of Economics and Statistics*, forthcoming.

Browning, Martin, François Bourguignon, Pierre-André Chiappori, and Valérie Lechene (1994). "Income and Outcomes: A Structural Model of Intrahousehold Allocation." *Journal of Political Economy*, 102 (6), 1067-1096.

\*\*Browning, Martin, and Pierre-André Chiappori (1998). "Efficient Intra-Household Allocation: A General Characterization and Empirical Tests." *Econometrica*, 66 (6), 1241-1278.

Pezzin, Liliana E. and Barbara S. Schone (1997). "The Allocation of Resources in Intragenerational Households: Adult Children and Their Elderly Parents." *American Economic Review Papers and Proceedings*, 87 (2), 460-464.

### **Theory of the Firm**

\*Coase, Ronald (1937). "The Nature of the Firm," *Economia*, 4 (16), 386-405.

\*\*Pencavel, John and Ben Craig (1994). "The Empirical Performance of Orthodox Models of the Firm: Conventional Firms and Worker Cooperatives," *JPE*, 102 (4), 718-744.

### **Overall Equilibrium**

Alvarez, Fernando, Jermann, Urban (2000). "Efficiency, Equilibrium, and Asset Pricing with Risk of Default," *Econometrica*, 68 (4), 775-797.

Bansal, Ravi and Yaron, Amir (2004). "Risk for the long run: A potential resolution of asset pricing puzzles," *Journal of Finance*, LIX (4), 1481-1509.

Braido, Luis H.B. (2013). "Ergodic Markov Equilibrium with Incomplete Markets and Short Sales", *Theoretical Economics*, 8 (1), 41-57.

Campbell, Cochrane (1999). "By force of habit: a consumption based explanation of aggregate Stock market Behavior", *Journal of Political Economy*.

Cochrane, John H. (2001). "Asset Pricing," Princeton University Press, chapter 21.

Constantinides, G.M. (1990). "Habit Formation: A Resolution of the Equity Premium Puzzle," *Journal of Political Economy* 98, 519-543.

Duffie, D., Geanakoplos, J.D., Mas-Colell, A., McLennan, A.M. (1994). "Stationary Markov Equilibria." *Econometrica*, 62 (4), 745-781.

Epstein, L., Zin, S. (1989). "Substitution, Risk Aversion, and the Temporal Behavior of Consumption and Asset Returns: A Theoretical Framework," *Econometrica*, 57, 937-968.

Epstein, L., Zin, S. (1991). "Substitution, Risk Aversion and the Temporal Behavior of Consumption and Asset Returns: An Empirical Analysis", *Journal of Political Economy*, 99, p.263-286.

Kehoe, Timothy J., Levine, David K. (1993). "Debt Constrained Asset Markets," *Review of Economic Studies*, 60, 865-88.

Masao, O., Zhang, Q. (2001). "Decreasing Relative Risk Aversion and Tests of Risk Sharing." *Econometrica*, 69 (2), 515-526.

\*Mehra, R., Prescott, E.C. (1985). "The Equity Premium: A Puzzle," *Journal of Monetary Economics* 15, 145-61.

Ravallion, M., Shubham, C. (1997). "Risk and Insurance in Village India: Comment." *Econometrica*, 65 (1), 171-184.

\*Townsend, R.M. (1994). "Risk and Insurance in Village India." *Econometrica*, 62 (3), 539-591.

Yogo, Motohiro (2006). "A Consumption-Based Explanation of Expected Stock Returns," *Journal of Finance*, LXI (2), 539-580.

### **Game Theory**

Braido, Luis H.B. and Ledo, Bruno A.C. (2013). "Dynamic Price Competition in Auto-Insurance Brokerage," working paper, FGV/EPGE.

Chiappori, P.A., Levitt, S., Groseclose, T. (2002). "Testing Mixed Strategy Equilibria When Players Are Heterogeneous: The Case of Penalty Kicks in Soccer." *American Economic Review*, 92 (4), 1138-1151.

### **Contract Theory**

#### **Theory:**

Holmstrom, Bengt and Paul Milgrom (1987). "Aggregation and Linearity in the Provision of Intertemporal Incentives," *Econometrica*, 55 (2), 303-328.

Rothschild, Michael and Joseph Stiglitz (1976). "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information." *Quarterly Journal of Economics*, 90 (4), 629-649.

Grossman, Sanford J., Oliver D. Hart (1983). "An Analysis of the Principal-Agent Problem." *Econometrica*, 51 (1), 7-45.

#### **Tenancy:**

Akerberg and Botticini (2002). "Endogenous Matching and the Empirical Determinants of Contract Form" *Journal of Political Economy*.

Bandiera (2001). "On the Structure of Tenancy Contracts: Theory and Evidence from 19th Century Rural Sicily," Centre for Economic Policy Research (CEPR), Discussion Paper 3032.

Shaban, Radwan A. (1987). "Testing between Competing Models of Sharecropping," *Journal of Political Economy* 95, 893-920.

Banerjee, P. Gertler, and M. Ghatak (2002). "Empowerment and Efficiency: Tenancy Reform in West Bengal," *Journal of Political Economy* 110, 239-280.

#### **Insurance:**

Cardon and Hendel (2001). "Asymmetric Information in Health Insurance: Evidence from the National Medical Expenditure Survey," *Rand Journal of Economics* 32, 408-427.

Chiappori and Salanié (2000). “Testing for Asymmetric Information in Insurance Markets,” *Journal of Political Economy* 108, 56-78.

Chiappori, Heckman, and Pinquet (2000). “Testing for Moral Hazard on Dynamic Insurance Data,” Mimeo, University of Chicago.

Chiappori and Salanié (2002). “Testing Contract Theory: a Survey of Some Recent Work,” *Advances in Economic Theory*, Forthcoming.

Hendel and Lizzeri (2000). “Optimal Dynamic Contracts: Evidence from Life Insurance,” NBER, working paper 7470, January 2000.

### **Industrial Organization**

\*Berry, Steven, James Levinsohn, and Ariel Pakes (1995). “Automobile Prices in Market Equilibrium,” *Econometrica* 63 (4), 841-890.

De los Santos, Babur, Ali Hortaçsu, Matthijs R. Wildenbeest (2010). *Testing Models of Consumer Search using Data on Web Browsing and Purchasing Behavior*, Mimeo, U. Chicago.

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Marquez, R. (1997). A note on Bertrand competition with asymmetric fixed costs. *Economic Letters* 57, 87–96.

Monteiro, P.K., Page Jr., F.H. (2009). Endogenous mechanisms and Nash equilibrium in competitive contracting games. *Journal of Mathematical Economics* 45, 9-10, 664-678.

Padilla, A. Jorge (1995). Revisiting dynamic duopoly with consumer switching costs. *Journal of Economic Theory*, 67 (2), 520-530.

\*Stahl, Dale (1989). Oligopolistic Pricing with Sequential Consumer Search, *American Economic Review* 79, 4, 700-712.