# Economic Theory, Policy and Applications

Abstract Book
From the 6th Annual International
Symposium on Economic Theory,
Policy and Applications,
25 – 28 July 2011,
Athens, Greece.
Edited by Gregory T. Papanikos



First Published in Athens, Greece by the Athens Institute for Education and Research.

ISBN: 978-960-9549-20-2

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### **TABLE OF CONTENTS**

(In Alphabetical Order by Author)

**Preface** 

**Conference Program** 

1. A Classification of Infinite Dimensional Walrasian Economies and the Economic Crisis

Elvio Accinelli & Martin Puchet

2. Distributive Politics and Public Infrastructure Accumulation: The Case of Spain

Betty Agnani & Henry Aray

3. The Comparative Analysis of the Exchange Rate and of the Purchasing Power Parity

Kamer Ainur Aivaz

4. A Model to Estimate How the Recession Could Affect the Convergence Process in EU

Lucian-Liviu Albu

5. Hedging and the Firm under Uncertainty both in Price and in Production

Alberto A. Alvarez-Lopez, Immaculada Rodriguez-Puerta & Monica Buendia

6. High-School Dropouts and Transitory Labor Market Shocks: The Case of the Spanish Housing Boom

Ainhoa Aparicio Fenoll

- 7. The Determinants of R&D Outsourcing and its Effect on Firm's Productivity: Firm Level Evidence from Korean Manufacturing Chulwoo Baek
- 8. Consumption, Saving, Investment, and Unemployment: SVAR Tests of the Effects of Changes in the Consumption-Saving Pattern Roberto Bande, Manuel Fernandez-Grela & Dolores Riveiro
- 9. Did Turkey Face With the Macroeconomic Sustainability in the 2010s? *Robullah Bayat*
- 10. Rehabilitating Heckscher-Ohlin

Bernard Beaudreau

11. Gender Wage Differences between Polarized Groups in Colombia 2000-2009: Are there Significant Differences?

Luisa Fernanda Bernat

- 12. Real Wages in the Manufacturing Industry in FYR Macedonia: The Role of Macroeconomic Factors, With Reference to Recession Times Nikica Mojsoska Blazevski & Marjan Petreski
- **13.** Education, Wage Inequality and Growth Kirill Borissov & Stephane Lambrecht
- 14. Developments in Mobile Commerce: Economic Opportunities, Risk Analysis and Risk Management

Patrick Brockett, Linda L. Golden, Danae Manika & Anji Song

15. Duopoly Competition in Product Size with Homogeneous Consumers' Tastes

Monica Buendia, Immaculada Rodriguez-Puerta & Alberto A. Alvarez Lopez

- 16. A New Credibility Estimation of Distribution Functions and its Applications to Experience Rating in Nonlife Insurance Xiaoqiang Cai, Limin Wen & Xianyi Wu
- 17. Effectiveness of Exchange Rate Channel on Macro Economic Variables: VAR Evidence for Turkey and Argentina
  Birgul Cambazoglu & Simay Karaalp

18. Parameters that Improve the Adjust of the R-Squared in the Portuguese Stock Market

Sonia Patricia Basto Carvalho & Angel Barajas Alonso

- 19. Country Size and Business Cycle Correlation in the Euro Area Leonida Correia & Sofia Gouveia
- **20.** Effects on the Spanish Economy of Transportation Investment Carolina Cosculluela & Rafael Flores de Frutos
- 21. Effects of Welfare Reform in the U.S. on Human Capital Accumulation among Adult Women
  Dhaval Dave, Nancy E. Reichman & Hope Corman
- **22.** Ownership, Economic Entrenchment and Allocation of Capital Sameeksha Desai & Johan Eklund
- 23. Money Demand and the Role of Monetary Indicators in Forecasting Euro Area Inflation

Christian Dreger & Jürgen Wolters

- **24.** Child Labour in the Presence of Agricultural Dualism: Possible Cures *Jayanta Kumar Dwibedi & Sarbajit Chaudhuri*
- 25. Cheap Money and Risk Taking: Opacity versus Underlying Risk Bernhard Eckwert
- **26.** Corruption and Economic Growth in Arab Countries *Hany Elshamy*
- 27. Teacher Gender and Student Achievement in Mathematics Evidence from Catalonia (Spain)

  Josep-Oriol Escardibul & Toni Mora
- 28. Patterns of Export Diversification in East Asian Economies Using Different Levels of Export Data
  Farazi Binti Ferdous
- 29. Quality of Life and Human Isolation:

The Case of Rural Area of Puglia

Mariantoinietta Fiore, Francesco Conto, Piermichele La Sala & Paolo Papapietro

30. The Cross-Cultural Impact of Prior Knowledge and Information Receptivity: It is Not How Much You Know but How Much You Think You Know!

Linda Golden, Danae Manika, Patrick Brockett & Anji Song

- 31. The Role of Structural Economic Models in Strategic Decisions *Adriana Grigorescu*
- 32. Seasonal Unit Root: An Application to Turkish Manufacturing Industry Series

Sinem Pinar Gurel & Murat Tiryakio□lu

33. Methodology for Evaluation of Balanced Territory Development: Latvian Case Study

Inese Haite

- **34.** CO<sub>2</sub> Emissions, Population, Technology and Development Anastasia Hernandez-Aleman & Carmelo J. Leon
- 35. A Model to Identify the Optimal Directions for Increasing the Romanian SMEs' Competitiveness

  Marioara Iordan, Cezar Mereuta & Mihaela-Nona Chilian
- **36.** Restructuring Romanian Industry: A Multi-Scale Analysis Raluca Iorgulescu & Lucian Liviu Albu
- 37. Tax-Expenditure, Expenditure-Tax or Fiscal Synchronization:
  A Panel Data Analysis of Spain's Regions
  Manuel Jaen-Garcia & Encarnacion Garcia-Ruiz

38. The Two Giants, Globalization and Urbanization: At the Roots of a More Equal World Income Distribution?

Achilleas Kallergis & Robert Buckley

- **39. Income Taxation and Labour Supply at the Extensive Margin** *Gabor Katay, Peter Benczur & Oliver Racz*
- **40. Public versus Private Monopoly in the Higher Education Market** *Bralind Kiri*
- **41.** Do Newspaper Articles on Card Fraud Affect Debit Card Usage? *Anneke Kosse*
- 42. How do Manufacturing Firms React to Real Exchange Rate Shocks? Evidence from Hungary

Mihaly Andras Kovacs

43. With Strings Attached: Grandparent-Provided Childcare, Fertility, and Female Labor Force Participation

Zoe Kuehn & Eva Garcia-Moran

- **44.** Education, Health and Cross-Country Productivity Differences *Alok Kumar & Brianne Kobber*
- 45. Why Do AMI Black Patients in an Emergency Strike Pay Less? A Nested Quantile Regression Model Approach Yong Sung Lee
- 46. Almost Periodically Correlated Time Series: A New Way for Business Cycles Analysis

Łukasz Lenart & Mateusz Pipień

47. Housing versus Financial Wealth Effects on Consumption:
A Breaking Down Method of the Dynamic Response of Consumption to an Interest Rate Shock

Manuel Leon Navarro & Rafael Flores de Frutos

- 48. The Economic Consequences of Chinese Power Industry Reform A Research Based on Co-Integration and Structural Changes Xin Liu & Feng Wang
- 49. The Optimum Number of Lawyers:
  Why the US Has Too Many and Their Cost
  Stephen P. Magee
- **50. Financial Decisions of Portuguese Micro-Enterprises**Fernando Jorge Lobo Marques, Antonio Borges Fernandes & Zelia Maria da Silva Serrasqueiro
- 51. Edgeworth Dependence and Government Spending Multipliers: A Theoretical Analysis

Luigi Marattin & Arsen Palestini

- **52. Price and Wage Setting in Portugal: Learning by Asking** *Fernando Martins*
- 53. Exclusive Broadcasting Rights of Soccer Games and Competition Policy in Brazil

Cesar Mattos

- **54.** European Inflation and the New Keynesian Phillips Curve Sandeep Mazumder
- 55. Leading Macroeconomic Indicators for Credit Risk: A Case Study on the Romanian Banking Sector

Bogdan-Gabriel Moinescu

- 56. Bidding Behaviour in Tenders of Public Work Lourdes Moreno-Mondejar
- 57. Does the Recent Extended Tax Cut Help the Sluggish American Economy?

Bob Namvar

58. Human Capital Composition and the Economic Growth of the Regions. The Case of Romania

Olimpia Neagu

- **59.** The Dynamics of Stock Market Volatility in CEE Emerging Markets Ciprian Necula & Alina-Nicoleta Radu
- 60. Improve the Competitiveness of Companies to Promote Regional Development and Strengthen Local Economies

  Juan Carlos Neri Guzman
- 61. Business Regulation and Private Investment in Developing Countries:
  A Simultaneous Equations Model Approach
  Clarisse Nguedam Ntouko
- **62. Does Foreign Aid Promote Exports In Recipient Countries?** *Felicitas Nowak-Lehmann D. & Boris Branisa*
- 63. The Role of Money in Economies with Monetary Policy Regimes that Ignore Monetary Aggregates

  Victor Olivo
- **64.** The Behavioural Effects of Tax Changes on Labour Supply *Marcos Pareto*
- 65. Workforce Migration and its Effects on Education Outsourcing:
  The Case of Romania
  Diana-Mihaela Pociovalisteanu, Victor Bogdan Oprean & Adina Popovici
- 66. Russia's Accession to the WTO: Gravity Model Approach
  Olga Podkorytova & Sergey Kolesnikov
- 67. Methods of Quantifying Risks in Banking Activity
  Alina-Nicoleta Radu, Carmen Obreja & Ana-Cornelia Olteanu
- 68. Macroeconomic Stability and FDI Flows in the Time of Crisis: Case Study of Certain Old and New Member States
  Nenad Rancic, Meta Ahtik & Ozren Pilipovic
- 69. Did Recent Labour Market Reforms Increase the Matching Efficiency of the Short-Term and the Long-Term Unemployed in Germany?

  Thomas Rothe & Sabine Klinger
- **70. House Purchase versus Rental in Spain** *Margarita Rubio, Eva Ortega & Carlos Thomas*
- 71. The Gender-Specific Effect of Working Hours on Family Happiness in South Korea

  Robert Rudolf & Seo-Young Cho
- 72. An Analysis of Human Capital on the Brazilian States Income Level: MRW versus Mincer

Marcio Antonio Salvato, Luciano Nakabashi & Ricardo Correa Cangussu

73. Right on Target: Exploring the Determinants of Inflation Targeting Adoption.

Hanna Samaryna, Ph.D. Student, University of Groningen, the Netherlands & Jakob de Haan, Professor, University of Groningen, the Netherlands, De Nederlandsche Bank, Amsterdam, the Netherlands & CESifo, Munich, Germany.

- 74. Green Tax and its Effects on Economic, Social and Environmental Indices in Khorasan-Razavi Province, Iran
  - Naser Shahnoushi, Maryam Moghimi Feyzabadi, Shahnaz Danesh, Mahmoud Daneshvar & Bitollah Akbar Moghadam
- **75. How Normal is Part-time Work in the Netherlands?** *Theo Sparreboom & Valia Bourmpoula*
- **76.** Optimal Tax and Expenditure Policy in the Presence of Migration *Jesper Stage*
- 77. Estimating Value At Risk Using GARCH And EGARCH Models Stelian Stancu, Oana Madalina Predescu & Nora Chirita

78. Effects of the Field of Higher Education on the Prevalence of Over-Education in European Countries

Alexander Tarvid

79. A Research on the Difference, Equilibrium and Evolution of the Wage in Inter-province: An Analysis Based on the Equilibrium Theory Zheng Wang & Junbo Xue

80. How Wide are the Provisional Borders in China?

Xiangdong Wei, C. Simon Fan & hSu Xu

81. Leveraged Buy Out: Does the Arrival of New Targets Increase the Agents' Incentives?

Ouidad Yousfi

82. Does the Current Wealth Allocation Hinder or Promote Further Economy Development in China?

Chun Yuan

**83.** The Sovereign European Debt Crisis *George Zestos* 

84. Introduction to Chinese Housing Market Fang Zhang

### **Preface**

This abstract book includes all the abstracts of the papers presented at the 6th Annual International Symposium on Economic Theory, Policy and Applications, 25 - 28 July 2011, organized by the Athens Institute for Education and Research. In total there were 84 papers and 90 presenters, coming from 30 different countries (Brazil, Canada, China, Columbia, Croatia, Egypt, France, the Former Yugoslav Republic of Macedonia, Germany, Hungary, India, Iran, Ireland, Italy, Japan, Latvia, Mexico, the Netherlands, Poland, Portugal, Romania, Russia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States of America, and Venezuela). The conference included a special plenary session on The Euro and Europe's Recent Economic Crisis; the conference was then organized into 20 sessions that included areas such as Labour Economics, Growth, World Trade, e.t.c. As it is the publication policy of the Institute, the papers presented in this conference will be considered for publication in one of the books of ATINER.

The Institute was established in 1995 as an independent academic organization with the mission to become a forum where academics and researchers from all over the world could meet in Athens and exchange ideas on their research and consider the future developments of their fields of study. Our mission is to make ATHENS a place where academics and researchers from all over the world meet to discuss the developments of their discipline and present their work. To serve this purpose, conferences are organized along the lines of well established and well defined scientific disciplines. In addition, interdisciplinary conferences are also organized because they serve the mission statement of the Institute. Since 1995, ATINER has organized more than 100 international conferences and has published over 100 books. Academically, the Institute is organized into four research divisions and nineteen research units. Each research unit organizes at least one annual conference and undertakes various small and large research projects.

I would like to thank all the participants, the members of the organizing and academic committee and most importantly the administration staff of ATINER for putting this conference together.

Gregory T. Papanikos President Abstract Book from the 6th Annual International Symposium on Economic Theory, Policy and Applications, 25 - 28 July 2011, Athens, Greece.

### FINAL CONFERENCE PROGRAM

### **Athens Institute for Education and Research**

**Social Sciences Research Division Economics Research Unit** 

6th Annual International Symposium on Economic Theory, Policy and Applications 25-28 July 2011, Athens, Greece



Conference Venue: St George Lycabettus Boutique Hotel, 2 Kleomenous Street, Kolonaki, Athens

### Organization and Scientific Committee

- Dr. Gregory T. Papanikos, President, ATINER.
- Dr. Nicholas Pappas, Vice-President of Academics, ATINER & Professor, Sam Houston University, USA.
- Dr. John Roufagalas, Head, <u>Economics Research Unit</u>, ATINER & Professor of Economics, Troy University, USA.
- Dr. Chris Sakellariou, Vice President of Finance, ATINER & Associate Professor of Economics, Nanyang Technological University, Singapore.
- Dr. Peter Koveos, Head, <u>Accounting & Finance Research Unit</u>, ATINER & Professor, Syracuse University, USA.
- Dr. Angelos Tsaklanganos, Professor, University of Nicosia, Cyprus & Emeritus Professor, Aristotle University of Thessaloniki, Greece.
- Dr. Kosta Josifidis, Professor, University of Novi Sad, Serbia.
- Dr. Horatiu Dragomirescu, Professor, Bucharest University of Economics-ASE, Romania.
- Dr. Stefano Spalletti, Senior Researcher & Aggregate Professor of History of Economic Thought, University of Macerata, Italy.
- Dr. Dimitris Tsoukalas, Associate Professor, Purdue University, Calumet, USA.
- Dr. Effrosyni Diamantoudi, Assistant Professor, Concordia University, Canada.
- Dr. Patrick Onsando, Lecturer, Moi University, Kenya.
- Dr. Margarita Kefalaki, Researcher, ATINER.
- Ms. Lila Skountridaki, Researcher, ATINER & Ph.D. Student, University of Strathclyde, U.K.
- Ms. Gina M. Bondi, Researcher, ATINER.
- Mr. Apostolos Kotsaspyrou, Researcher, ATINER.

### Administration

Fani Balaska, Chantel Blanchette, Stavroula Kiritsi, Eirini Lentzou, Konstantinos Manolidis, Katerina Maraki & Sylia Sakka

### Monday 25 July 2011

08:30-09:30 Registrations

09:30-10:00 Welcome and Opening Remarks by

- Dr. Nicholas Pappas, Vice-President of Academics, ATINER & Professor, Sam Houston University, USA.
- Dr. John Roufagalas, Head, <u>Economics Research Unit</u>, ATINER & Professor of Economics, Troy University, USA.

10:00-10:45 Opening Public Speech by **Gregory T. Papanikos**, General Secretary of the Greek Economic and Social Council (OKE), President, Athens Institute for Education & Research (ATINER) & Visiting Professor University of Strathclyde, U.K. *Greece's Quasi Economic Bankruptcy: Reflecting on 15 Years Experience (Macro and Micro Facets) as the Secretary General of the Greek Economic and Social Council (OKE)* 

### 10:45-11:00 Coffee Break

### 11:00-12:30 Special Plenary Session on Euro and Europe's Recent Economic Crisis

Chair: Gregory T. Papanikos, General Secretary of the Greek Economic and Social Council (OKE), President, Athens Institute for Education and Research (ATINER) & Visiting Professor University of Strathclyde, U.K.

#### **Speakers:**

- Christian Dreger, Head of Macroanalysis and Forecasting, DIW Berlin, Germany & Jürgen Wolters, Professor, Free University of Berlin, Germany. Money Demand and the Role of Monetary Indicators in Forecasting Euro Area Inflation.
- Lucian-Liviu Albu, Director, Institute for Economic Forecasting, Romania. A Model to Estimate How the Recession Could Affect the Convergence Process in EU.
- George Zestos, Jean Monnet Chair of European Integration & Professor, Christopher Newport University, USA. The Sovereign European Debt Crisis.
- Leonida Correia Assistant Professor, University of Trás-os-Montes and Alto Douro, Portugal & Sofia Gouveia, Assistant Professor, University of Trás-os-Montes and Alto Douro, Portugal. Country Size and Business Cycle Correlation in the Euro Area.
- Roberto Bande, Lecturer, University of Santiago, Spain, Manuel Fernandez-Grela, Lecturer, University of Santiago, Spain & Dolores Riveiro, Lecturer, University of Santiago, Spain. Consumption, Saving, Investment, and Unemployment: SVAR Tests of the Effects of Changes in the Consumption-Saving Pattern.

#### 12:30-13:30 Lunch Break

	Parallel Sessions (Each session includes 10 minutes coffee break)					
13:30- 15:00	Session I (Room A): Public Economics: Micro and Macro Aspects Chair: Christian Dreger, Head of Macroanalysis and Forecasting, DIW Berlin, Germany.	Session II (Room B): World Trade Chair: George Zestos, Professor, Christopher Newport University, USA.	Session III (Room C): Wages, Employment and Unemployment Chair: John Roufagalas., Head, Economics Research Unit, ATINER, Greece & Professor, Troy University, USA.			
Bentle Bureau Nancy Rober School & Ho Unive Econo Welfar Capita Women Luigi M Unive Palest Rome Depen Multip Lourdes Profes Mancl Tender Jesper S Unive	Marattin, Assistant Professor, risty of Bologna, Italy & Arsen ini, Professor, University of La Sapienza, Italy. Edgeworth dence and Government Spending pliers: a Theoretical Analysis. So Moreno-Mondejar, Assistant sor, University of Castilla-La na, Spain. Bidding Behaviour in the Sof Public Work. Stage, Professor, Mid Sweden risty, Sweden. Optimal Tax and diture Policy in the Presence of	Bernard Beaudreau, Professor, University of Laval, Canada. Rehabilitating Heckscher-Ohlin. Olga Podkorytova, Associate Professor, Saint-Petersburg State University, Russia & Sergey Kolesnikov, Ph.D. Student, European University at Saint- Petersburg, Russia. Russia's Accession to the WTO: Gravity Model Approach. Felicitas Nowak-Lehmann D., Researcher, University of Göttingen, Germany & Boris Branisa, Researcher, University of Mannheim, Germany. Does Foreign Aid Promote Exports in Recipient Countries? Farazi Binti Ferdous, Ph.D. Student, Waseda University, Japan. Patterns of Export Diversification in East Asian Economies Using Different Levels of Export Data	Luisa Fernanda Bernat, Professor, University of Icesi, Colombia. Gender Wage Differences between Polarized Groups in Colombia 2006-2010: Are there Significant Differences? Thomas Rothe, Senior Researcher, Institute for Employment Research (IAB), Germany & Sabine Klinger, Senior Researcher, Institute for Employment Research (IAB), Germany. Did Recent Labour Market Reforms Increase the Matching Efficiency of the Short-Term and the Long- Term Unemployed in Germany? Theo Sparreboom, Senior Labour Economist, International Labor Organisation, Switzerland & Valia Bourmpoula, Economist, International Labor Organisation, Switzerland. How Normal is Part-Time Work in the Netherlands?			

### 15:00-16:30

### Session IV (Room A): Essays on Microeconomic Theory

**Chair:** Dhaval Dave, Associate Professor, Bentley University & National Bureau of Economic Research, USA

Elvio Accinelli, Professor, Facultad de Economía, UASLP, Mexico & Martin Puchet, Professor, Facultad de Economía, División Posgrados, UNAM, Mexico. A Classification of Infinite Dimensional Walrasian Economies and the Economic Crisis.

Alberto A. Alvarez-Lopez, Tenured Professor, Universidad Nacional de Educación a Distancia, Spain, Immaculada Rodriguez-Puerta, Assistant Professor, Universidad Pablo de Olavide de Sevilla, Spain & Monica Buendia, Assistant Professor, Universidad Nacional de Educación a Distancia, Spain. Hedging and the Firm under Uncertainty both in Price and in Production

Monica Buendia, Assistant Professor, Nacional de Educación a Distancia (UNED), Spain, Immaculada Rodriguez-Puerta, Assistant Professor, Universidad Pablo de Olavide de Sevilla, Spain & Alberto A. Alvarez Lopez, Tenured Professor, Universidad Nacional de Educación a Distancia (UNED), Spain. Duopoly Competition in Product Size with Homogeneous Consumers' Tastes.

### Session V (Room B): Environment, Energy and the Economy & School, Learning and the Labour Market

Chairs: Bernard Beaudreau, Professor, University of Laval, Canada & Hany Elshamy, Lecturer, The British University in Egypt (BUE), Egypt.

Anastasia Hernandez-Aleman, Professor, University of Las Palmas of Gran, Spain & Carmelo J. Leon, Professor, University of Las Palmas of Gran, Spain. CO2 Emissions, Population, Technology and Development.

Naser Shahnoushi, Associate Professor, Ferdowsi University of Mashhad, Iran, Maryam Moghimi Feyzabadi, Graduate Student, Ferdowsi University of Mashhad, Iran, Shahnaz Danesh, Associate Professor, Ferdowsi University of Mashhad, Iran, Mahmoud Daneshvar, Associate Professor, Ferdowsi University of Mashhad, Iran & Bitollah Akbar Moghadam, Assistant Professor, Islamic Azad University of Qazvin, Iran. Green Tax and Its Effects on Economic, Social and Environmental Indices in Khorasan-Razavi Province, Iran.

Ainhoa Aparicio Fenoll, Assistant Professor, Colegio Carlo Alberto, Italy. *High-School* Dropouts and Transitory Labor Market Shocks: The Case of the Spanish Housing Boom.

Josep-Oriol Escardibul, Assistant Professor, University of Barcelona, Spain & Toni Mora, Assistant Professor, Universitat Internacional de Catalunya, Spain. Teacher Gender and Student Achievement in Mathematics Evidence from Catalonia (Spain).

### 16:30-18:30

### Session VI (Room A): Applied Industrial Analysis Chair: Luigi Marattin Assistant Professor,

University of Bologna, Italy

Chulwoo Baek, Lecturer, Sunmoon University, South Korea. The Determinants of R&D Outsourcing and its Effect on Firm's Productivity: Firm Level Evidence from Korean Manufacturing.

Carolina Cosculluela, Tenured Professor, Universidad Rey Juan Carlos, Spain & Rafael Flores de Frutos, Professor, Universidad Complutense de Madrid, Spain. Effects on the Spanish Economy of Transportation Investment.

Raluca Iorgulescu, Assistant Professor, Institute of Economic Forecasting, Romania & Lucian Liviu Albu, Director, Institute for Economic Forecasting, Romania. Restructuring Romanian Industry: A Multi-Scale Analysis.

### Session VII (Room B): Growth

**Chair:** Roger Tabry, Economics Instructor, Dawson College, Canada.

Kirill Borissov, Professor,
European University in St.
Petersburg, Russia &
Stephane Lambrecht, PRES
Universite Lille Nord de
France, France. Education,
Wage Inequality and Growth.

Hany Elshamy, Lecturer, The British University in Egypt (BUE), Egypt. Corruption and Economic Growth in Arab Countries.

Marcio Antonio Salvato, Professor, IBMEC-MG, Brazil, Luciano Nakabashi, Professor. Federal University of Parana, Brazil & Ricardo Correa Cangussu, Pontifícia Universidade Católica de Minas Gerais, Brazil. An Analysis of Human Capital on the Brazilian States Income Level: MRW versus Mincer.

### Session VIII (Room C): Labour Economics

Chair: Robert Rudolf, Ph.D. Student, University of Gottingen, Germany.

Nikica Mojsoska Blazevski,
Associate Professor,
University American
College, FYROM & Marjan
Petreski, Lecturer,
University of American
College, FYROM. Real
Wages in the Manufacturing
Industry in FYR Macedonia:
The Role of Macroeconomic
Factors, With Reference to
Recession Times.

Zoe Kuehn, Professor, Universidad Complutense de Madrid and FEDEA, Spain & Eva Garcia-Moran, Ph.D. Student, Universidad Carlos III de Madrid, Spain. With Strings Attached: Grandparent-Provided Childcare, Fertility, and Female Labor Force Participation.

Marcos P. Pareto, Ph.D. Candidate, Trinity College Dublin, Ireland. *The Behavioural Effects of Tax Changes on Labour Supply.* 

Robert Rudolf, Ph.D.
Student, University of
Gottingen, Germany &
Seo-Young Cho, Ph.D.
Student, Korea University,
Seoul, South Korea. The
Gender-Specific Effect of
Working Hours on Family
Happiness in South Korea.

Gabor Katay, Senior Advisor, Magyar Nemzeti Bank, Hungary, Peter Benczur, Head of Research, Magyar Nemzeti Bank, Hungary & Oliver Racz, Junior Analyst, Magyar Nemzeti Bank, Hungary. Income Taxation and Labour Supply at the Extensive Margin.

18:30-	Session IX (Room A): Stock	Session X (Room B): Regions	Session XI (Room C):
20:30	Markets and Other Financial	and the Economy	<b>Economic Sectors</b>
	Issues I	Chair: Monica Buendia,	Chair: Chulwoo Baek,
	Chair: Cosculluela, Tenured	Assistant Professor, Nacional	Lecturer, Sunmoon
	Professor, Universidad Rey	de Educación a Distancia	University, South Korea.
	Juan Carlos, Spain.	(UNED), Spain.	
Bernhard Eckwert, Professor, Bielefeld University, Germany. Cheap Money and Risk Taking: Opacity versus Underlying Risk.  Ciprian Necula, Senior Lecturer, The Bucharest Academy of Economics Studies, Romania & Alina-Nicoleta Radu, Teaching Assistant, The Bucharest Academy of Economics Studies, Romania. The Dynamics of Stock Market Volatility in CEE Emerging Markets.		Mariantonietta Fiore, Assistant Researcher, University of Foggia, Italy, Francesco Conto, Professor, University of Foggia, Italy, Piermichele La Sala, Ph.D. Student, University of Basilicata, Italy & Paolo Papapietro, Ph.D. Student, University of Bari, Italy. Quality of Life and Human Isolation: The Case of Rural Area of Puglia.  Fernando Jorge Lobo Marques, Ph.D. Student, University of Beira Interior, Portugal, Antonio Borges Fernandes, Ph.D. Student, University of Beira Interior, Portugal & Zelia Maria da Silva Serrasqueiro, Ph.D. Student, University of Beira Interior, Portugal. Financial Decisions of Portuguese Micro-Enterprises.  Juan Carlos Neri Guzman, Professor, Polytechnic University of San Luis Potosi, Mexico. Improve the Competitiveness of Companies to Promote Regional Development and Strengthen Local Economies.	Bob Namvar, Professor, California Baptist University, USA. Does the Recent Extended Tax Cut Help the Sluggish American Economy? Margarita Rubio, Researcher, Bank of Spain, Spain, Eva Ortega Researcher, Bank of Spain, Spain & Carlos Thomas, Researcher, Bank of Spain, Spain & Carlos Thomas, Researcher, Bank of Spain, Spain. House Purchase versus Rental in Spain. Fang Zhang, Ph.D. Student, University of Bath, UK. Introduction to Chinese Housing Market. Sinem Pinar Gurel, Lecturer, Pamukkale University, Turkey & Murat Tiryakioglu, Researcher, Afyon Kocatepe University, Turkey. Seasonal Unit Root: An Application to Turkish Manufacturing Industry Series.

21:00-23:00 Greek Night Entertainment with Dinner and Live Greek Music.

### Tuesday 26 July 2011

Parallel Sessions (Each session includes 10 minutes coffee break)		
08:30- 10:00	Session XII (Room A): Foreign Direct Investment & E-Commerce, Internet and New Technologies	
	Chair: Jayanta Kumar Dwibedi, Assistant Professor, Brahmananda Keshab Chandra College, India.	

Patrick Brockett, Chaired Professor, University of Texas at Austin, USA, Linda Golden, Professor, University of Texas at Austin, USA, Danae Manika, PhD Candidate, University of Texas at Austin, USA & Anji Song, University of Texas at Austin, USA. Developments in Mobile Commerce: Economic Opportunities, Risk Analysis and Risk Management.

Nenad Rancic, Teaching and Research Assistant, University of Zagreb, Croatia, Meta Ahtik, Teaching and Research Assistant, University of Ljubljana, Slovenia & Ozren Pilipovic, Teaching and Research Assistant, University of Zagreb, Croatia. *Macroeconomic Stability and FDI Flows in the Time of Crisis: Case Study of Certain Old and New Member States*.

Anneke Kosse, Policy Advisor & Researcher, De Nederlandsche Bank, the Netherlands. Do Newspaper Articles on Card Fraud Affect Debit Card Usage?

### 10:00-12:00

Session XIII (Room A): The Economics of Exchange Rate Chair: Ozren Pilipovic, Teaching and Research Assistant, University of Zagreb, Croatia. Session XIV(Room B): The Economics of Cities, Regions & Infrastructure

Chair: Patrick Brockett, Chaired Professor, University of Texas at Austin, USA. Session XV (Room C):
Education
Chair: Anneke Kosse,
Policy Advisor &
Researcher, De
Nederlandsche Bank, the
Netherlands

Kamer Ainur Aivaz, Professor, Ovidius University of Constanta, Romania. *The* Comparative Analysis of the Exchange Rate and of the Purchasing Power Parity.

Birgul Cambazoglu, Head of Capital Market and Securities, Gedik University, Gedik School of Higher Education, Turkey & H. Simay Karaalp, Assistant Professor, Pamukkale University, Turkey. Effectiveness of Exchange Rate Channel on Macro Economic Variables: VAR Evidence for Turkey and Argentina.

Mihaly Andras Kovacs, Advisor, MNB (The Central Bank of Hungary), Hungary. How do Manufacturing Firms React to Real Exchange Rate Shocks? Evidence from Hungary.

Achilleas Kallergis, Professor, New School University, New York, USA & Robert Buckley, Professor, New School University, New York, USA. The Two Giants, Globalization and Urbanization: at the Roots of a More Equal World Income Distribution?

Xiangdong Wei, Professor, Lingnan University, China, Simon Fan, Professor, Lingnan University, China & Su Xu, Assistant Professor, Southwest University of Finance and Economics, China. How Wide are the Provisional Borders in China?

Manuel Jaen-Garcia, Professor,
University of Almeria, Spain
& Encarnacion Garcia-Ruiz,
Assistant Professor,
University of Almeria, Spain.
Tax-Expenditure, ExpenditureTax or Fiscal Synchronization:
a Panel Data Analysis of
Spain's Regions.

Olimpia Neagu, Lecturer,
"Vasile Goldis" Western
University of Arad, Romania.
Human Capital Composition
and the Economic Growth of the
Regions. The Case of Romania.

Betty Agnani, Assistant Professor, University of Granada, Spain & Henry Aray, University of Granada, Spain. Distributive Politics and Public Infrastructure Accumulation: The Case of Spain.

Inese Haite, Ph.D. Student, University of Daugavpils, Latvia. Methodology for Evaluation of Balanced Territory Development: Latvian Case Study. Bralind Kiri. Ph.D. Student,
University of Granada,
Spain. Public versus
Private Monopoly in the
Higher Education Market.

Alok Kumar, Associate Professor, University of Victoria, Canada & Brianne Kobber, University of Victoria, Canada. Education, Health and Cross-Country Productivity Differences.

Diana-Mihaela

Pociovalisteanu, Associate Professor, The West University of Timisoara and "Constantin Brancusi" University of Tg-Jiu, Romania, Victor Bogdan Oprean, Lecturer, The West University Timisoara, Romania, Adina Popovici, Associate Professor, The West University of Timisoara, Romania. Workforce Migration and its Effects on Education Outsourcing: The Case of Romania.

Alexander Tarvid, Ph.D.
Student, University of
Latvia, Latvia. Effects of
the Field of Higher
Education on the
Prevalence of OverEducation in European
Countries.

### 12:00-13:00 Lunch Break

#### 13.00-Session XVI (Room C): Stock Markets and Session XVII (Room B): Microeconomic 15:00 Other Financial Issues II & General (Industry) Studies **Economics** Chair: Achilleas Kallergis, Professor, New Chair: Chun Yuan, Lecturer, Management School University, New York, USA School of Lanzhou University, China. Stephen P. Magee, Professor, University of Texas at Marioara Iordan, Deputy Director, Institute of Austin, USA. The Optimum Number of Lawyers: Why Economic Forecasting, Romania, the US Has Too Many and Their Cost. Mereuta, Romanian Center for Economic Linda Golden, Professor, University of Texas at Modeling, Romania & Mihaela-Nona Chilian, Austin, USA, Danae Manika, PhD Candidate, Institute of Economic Forecasting, Romania. A University of Texas at Austin, USA & Patrick Model to Identify the Optimal Directions for Brockett, Chaired Professor, University of Texas at Increasing the Romanian SMEs' Competitiveness. Austin, USA. The Cross-cultural Impact of Prior Fernando Martins, Researcher, Bank of Portugal, Knowledge and Information Receptivity: It Is Not How Portugal. Price and Wage Setting in Portugal: Much You Know but How Much You Think You Know! Learning by Asking. Adriana Grigorescu, Professor, National School of César Mattos, Consultant, Chamber of Deputies, Political Studies and Public Administration, Brazil. Exclusive Broadcasting Rights of Soccer Romania. The Role of Structural Economic Models in Games and Competition Policy in Brazil. Sameeksha Desai, Assistant Professor, Indiana Strategic Decisions. Alina-Nicoleta Radu, Teaching Assistant, The University, USA & Johan Eklund, Assistant Bucharest Academy of Economics Studies, Romania, Professor, Jonkoping International Business Carmen Obreja, Senior Lecturer, The Bucharest School and Ratio Institute, Sweden. Ownership, Academy of Economics Studies, Romania & Ana-Economic Entrenchment and Allocation of Capital. Cornelia Olteanu, Teaching Assistant, The Bucharest Zheng Wang, Professor, East China Normal University, China & Junbo Xue, Associate Academy of Economics Studies, Romania. Methods of Quantifying Risks in Banking Activity. Professor, Chinese Academy of Sciences, Rohullah Bayat, Assistant Professor, Imam Khomeini China. A Research on the Difference, Equilibrium International University, Iran. Did Turkey Face With and Evolution of the Wage in Inter-province: An the Macroeconomic Sustainability in the 2010s? Analysis Based on the Equilibrium Theory. Sonia Patricia Basto Carvalho, Ph.D. Student, Xin Liu, Assistant Professor, Chongqing Universidade de Vigo, Spain & Angel Barajas University, China & Feng Wang, Assistant Alonso, Associate Professor, Universidade de Vigo, Professor, Chongqing University, China. The Spain. Parameters that Improve the Adjust of the R-Economic Consequences of Chinese Power Industry Squared in the Portuguese Stock Market. Reform - A Research Based on Co-Integration and Structural Changes.

### 15:00-17:00

### Session XVIII (Room A): Essays on Macroeconomic Theory & Policy

Chair: Kamer Ainur Aivaz, Professor, Ovidius University of Constanta, Romania. Session XIX (Room B): Quantitative (Mathematical & Statistical) Applications Chair: Fernando Martins, Researcher, Bank of Portugal, Portugal. Session XX (Room C): Agriculture and Development Issues Chair: Stephen P. Magee, Professor, University of Texas at Austin, USA.

Manuel Leon Navarro, Professor,
Centro Universitario Cardenal
Cisneros, Spain & Rafael Flores de
Frutos, Professor, Centro
Universitario Cardenal Cisneros,
Spain. Housing Versus Financial
Wealth Effects on Consumption: A
Breaking down Method of the Dynamic
Response of Consumption to an Interest
Rate Shock.

Bogdan Moinescu, Senior Lecturer, Academy of Economic Studies, Romania. Leading Macroeconomic Indicators for Credit Risk: A Case Study on the Romanian Banking Sector.

Victor Olivo, Professor, Andrés Bello Catholic University, Venezuela. *The* Role of Money in Economies with Monetary Policy Regimes that Ignore Monetary Aggregates.

Hanna Samaryna, Ph.D. Student, University of Groningen, the Netherlands & Jakob de Haan, Professor, University of Groningen, the Netherlands, De Nederlandsche Bank, Amsterdam, the Netherlands & CESifo, Munich, Germany. Right on Target: Exploring the Determinants of Inflation Targeting Adoption.

Łukasz Lenart, Economist, Economics Institute, National Bank of Poland & Cracow University of Economics, Poland & Mateusz Pipień, Economics Institute, National Bank of Poland & Cracow University of Economics, Poland. Almost Periodically Correlated Time Series: A New Way for Business Cycles Analysis.

Sandeep Mazumder, Assistant Professor, Wake Forest University, USA. European Inflation and the New Keynesian Phillips Curve. Xiaoqiang Cai, Professor, The Chinese University of Hong Kong, China, Limin Wen, Jiangxi Normal University, Jiangxi, China & Xianyi Wu, East China Normal University, Shanghai, China. A New Credibility Estimation of Distribution Functions and its Applications to Experience Rating in Nonlife Insurance.

Stelian Stancu, Professor. Academy of Economic Studies, Romania, Oana Madalina Predescu, Professor, Academy of Economic Studies, Romania & Nora Chirita, Professor, Academy of Economic Studies, Romania. Estimating Value at Risk Using GARCH and EGARCH Models.

Ouidad Yousfi, Lecturer, University of Montpellier II, France. Leveraged Buy Out: Does the Arrival of New Targets Increase the Agents' Incentives?

Yong Sung Lee, Research Scientist, NJ Department of Health and Senior Services, USA. Why Do AMI Black Patients in an Emergency Strike Pay Less? A Nested Quantile Regression Model Approach.

Jayanta Kumar Dwibedi,
Assistant Professor,
Brahmananda Keshab
Chandra College, India &
Sarbajit Chaudhuri
Professor, University of
Calcutta, India. Child Labour
in the Presence of Agricultural
Dualism: Possible Cures

Clarisse Nguedam Ntouko, Ph.D. Student, Université d'Auvergne, France. Business Regulation and Private Investment in Developing Countries: Α Simultaneous Equations Model Approach.

Chun Yuan, Lecturer,
Management School of
Lanzhou University, China.
Does the Current Wealth
Allocation Hinder or Promote
Further Economy
Development in China?

### Tuesday 26 July 2011

17:00-19:30 Urban Walk (Departure from Conference Hotel-Venue). This tour includes the broader area of Athens. Among other sites, you will visit: Zappion, Syntagma Square, the Temple of Olympian Zeus, Ancient Roman Agora, and on the Acropolis Hill: the Propylaea, the Temple of Athena Nike, the Erechtheion, and the Parthenon. The program of the tour may be adjusted, if there is a need beyond our control. This is a private event organized exclusively for the economics conference participants and their accompanying persons. It requires pre-booking.

#### 20:00-21:00 Dinner.

Wednesday 27 July 2011

07:15-20:30 (estimated) One Day Cruise (includes Lunch).

Thursday 28 July 2011

07:45-19:30 (estimated) Delphi Tour (includes Lunch).

### Elvio Accinelli

Professor, Facultad de Economía, UASLP, Mexico.

### **Martin Puchet**

Professor, Facultad de Economía, División Posgrados, UNAM, Mexico.

### A Classification of Infinite Dimensional Walrasian Economies and the Economic Crisis

We consider pure exchange economies whose consumption spaces are Banach Lattices. Utility functions are strictly concave, Gateaux differentiable, and not necessarily separable. Following the Negishi approach and by using the excess utility function we introduce the set of social equilibria. We show that there exists a bijective correspondence between this set and the set of Walrasian equilibria. By transforming the infinite dimensional problem of finding Walrasian equilibria into an equivalent finite dimensional problem of finding social equilibria, we allow ourselves to use techniques of smooth functional analysis. We show that a suitable large subset of economies are regular and its equilibrium set is a Banach manifold. Finally, we focus on the complement of this set, i.e. the set of singular economies, and we analyze its main characteristics, among them those of being the causes of the economic crises.

### **Betty Agnani**

Assistant Professor, University of Granada, Spain. **Henry Aray**University of Granada, Spain.

### Distributive Politics and Public Infrastructure Accumulation: The Case of Spain

We test the effects of different combinations of parties simultaneously holding office in the central and regional governments on the growth rate of regional public infrastructure. Using panel data for the regions of Spain over the 1988-2004 period, we find evidence to support Distributive Politics on the growth rate of public infrastructure under both right-wing and left-wing central governments holding a majority and a minority. Our results show that right-wing central governments reward regions governed by the right party, but do not punish regions governed by opposition parties. On the contrary, left-wing central governments do not reward regions governed by the left party, but punish regions governed by opposition parties and especially those governed by regional parties.

\*We would like to thank Máximo Camacho, Javier Gardeazabal and María José Gutierrez for their comments. Financial support from the Spanish Ministry of Education and Science (SEJ2007-62081/ECON), the Junta de Andalucia (SEJ-2547) and the Centro de Estudios Andaluces (PRY112/08) is gratefully acknowledged. During the writing of this article the authors were kindly hosted by the Department of Economics at the University of Leicester.

### Kamer Ainur Aivaz

Professor, Ovidius University of Constanta, Romania.

### The Comparative Analysis of the Exchange Rate and of the Purchasing Power Parity

Romania, as other emerging economies, has faced some series of challenges, in terms of monetary. One of these challenges has faced the rate of exchange, including measures that are required for the entry into the euro area without creating further tensions for Romania. The linkages between the foreign exchange market, the real market, the money market and the capital markets make the exchange rate movements have an influence on the general economic equilibrium.

In time, several theories for determining the rate of exchange appeared and were gradually developed. One of them is the theory of purchasing power parity. According to this theory, in a country where there is a relative depreciation of purchasing power, the national currency faces depreciation. Basically this theory explains the evolution of the exchange rate index based on changes in relative prices between two national economies.

Based on these observations, this paper aims to investigate the correlations between the exchange rate and the purchasing power parity groups of EU countries in 1990-2010 focusing on features of the Romanian economy.

### Lucian-Liviu Albu

Director, Institute for Economic Forecasting, Romania.

### A Model to Estimate How the Recession Could Affect the Convergence Process in EU

The actual global crisis seems to influence negatively the convergence process in EU. As a rule, just new adhered countries were more affected by the actual crisis. Today all forecasts are suffering by uncertainty. There are different opinions regarding how deep and how long the convergence process could be affected. Synthetically, the pessimistic authors are viewing the future economic dynamics as one of so-called L type or U type or W type. Coming from lessons done by standard economic growth theories (Ramsey model, Solow-Swan model, Mankiw, Romer, and Weil model, etc.) and empirical evidences, we are considering the convergence in the level of income per capita as a result of structural changes in economy. In a first part of our paper we investigate the differences among countries in EU in terms of the share in total economy of main sectors. Then, based on the spatial (empirical) distribution of such shares in EU we are proposing a model to estimate a typology of the convergence process in the European area. Taking into account the existing differences among sectors in matter of productivity, there are two versions of the model: one considering the share of sectors in total employment and the other one in GDP. Finally, we are using the model to evaluate the negative impact of actual crisis on the convergence process, how deep and how long it will be prolonged, how investment and consumption are affected.

### Alberto A. Alvarez-Lopez

Tenured Professor, Universidad Nacional de Educación a Distancia, Spain.

### Immaculada Rodriguez-Puerta

Assistant Professor, Universidad Pablo de Olavide de Sevilla, Spain. **Monica Buendia** 

Assistant Professor, Universidad Nacional de Educación a Distancia, Spain.

### Hedging and the Firm under Uncertainty both in Price and in Production

In the theory of the firm under uncertainty, hedging is a usual mechanism for the firm to face uncertainty. In the literature, models devoted to this usually consider a unique source of uncertainty – normally, the output price-, but less attention has been paid to the analysis with more sources. In this paper, we consider a model by Dalal and Alghalith, with two sources of uncertainty - not only in output price, but also in production - , and enhance it by considering a forward market for the output produced by the firm. For this new model with hedging, we study its main properties and compare them to those from the original model without hedging. We also carry out a comparative-static analysis of several effects, and for this end we make use of an analytic result scarcely used in the literature. For instance, we study the effect of a variation in the risk aversion, or in the initial wealth, and also consider a proportional wealth tax.

### Ainhoa Aparicio Fenoll

Assistant Professor, Colegio Carlo Alberto, Italy.

### High-School Dropouts and Transitory Labor Market Shocks: The Case of the Spanish Housing Boom

This paper addresses the implications of transitory changes in labor market conditions for low versus high educated workers on the decision to acquire education. To identify this effect, I use the improvement in the labor market prospects of low educated workers motivated by the increases in employment and wages in the construction sector during the recent housing boom. The estimation strategy is based on the fact that changes in the labor market driven by the construction sector affect only men. Increases in construction activity are found to increase men's propensity to drop out of high-school, relative to women. According to this finding, policies promoting education should strengthen when in the presence of transitory shocks in the labor market that make dropping out more attractive.

### Chulwoo Baek

Lecturer, Sunmoon University, Korea.

# The Determinants of R&D Outsourcing and its Effect on Firm's Productivity: Firm Level Evidence from Korean Manufacturing

This paper examines the determinants of R&D outsourcing and its effect on firm's total factor productivity. R&D outsourcing has become prevalent under the paradigm of open innovation. However, due to the data availability there have been few previous studies on what triggers R&D outsourcing and whether or not R&D outsourcing contributes to firm's productivity.

Heckman two-stage model is used to estimate the determinants of R&D outsourcing allowing for sample selection effects. The model is tested on data from a sample of over 3,500 Korean manufacturing firms during 2002-2007. In order to obtain rich data on R&D activity, we combine financial statement data with *R&D Activity Survey* conducted by government following OECD's Frascati manual.

Four types of R&D outsourcing are distinguished according to its target: government, public, private and foreign research organization. With reference to determinants, corporate governance, market competition, R&D affordability and industry specific characteristics are considered.

Empirical results suggest that R&D outsourcing is complementary to internal R&D and small firms which belong to low technology industry have higher probability to conduct R&D outsourcing. Moreover, it is found that R&D outsourcing strategy of Korean manufacturing firms fails to improve their productivity.

### Roberto Bande

Lecturer, University of Santiago, Spain.

Manuel Fernandez-Grela

Lecturer, University of Santiago, Spain.

Dolores Riveiro

Lecturer, University of Santiago, Spain.

### Consumption, Saving, Investment, and Unemployment: SVAR Tests of the Effects of Changes in the Consumption-Saving Pattern

Macroeconomic analysis has shown that changes in the business cycle generate large fluctuations in the components of aggregate demand, which, if not corrected on time by fiscal policy, may generate large slumps in the activity levels and increases in unemployment levels. However, the potential changes in the consumption and saving patterns by families induced by the recession, and the subsequent effects on the labour market is an issue not sufficiently studied. The most recent macroeconomic literature has shown that there is a strong relationship between investment and unemployment, and if the main determinant of investment is saving, it becomes clear that changes in the saving patterns may affect the labour market equilibrium.

In this paper we aim to shed light on the transmission mechanism at work between investment and unemployment by looking at the consumption-saving pattern as a determinant of investment behaviour. Our starting hypothesis is that permanent shifts in the consumption-saving pattern will have permanent effects on investment, with subsequent consequences for the unemployment rate. To test this hypothesis we build an SVAR model for the Spanish economy seeking information about the response of the four relevant macroeconomic variables (consumption, saving, investment and unemployment) to simulated shocks imposed on the system.

### Rohullah Bayat

Assistant Professor, Imam Khomeini International University, Iran.

### Did Turkey Face With the Macroeconomic Sustainability in the 2010s?

In the beginning of the new millennium Turkey was faced with its worst financial crisis. After crisis Turkey remained as a good follower of the IMF. Some people believe that Turkey after applying of the IMF programmes has successfully removed its macroeconomic vulnerability along with its high economic growth. However, the behaviour of some macroeconomic indicators in the 2010s cast doubts about the sustainability and stability of the macroeconomic activities in Turkey after crisis. For instance in May-June 2006 Turkey was hit by another financial turmoil and Turkey' essential macroeconomic indicators quickly fluctuated. Also, while in 2010s Turkey has experienced a suitable economic growth but the unemployment rate has been too high in this period. It seems Turkey in previous decade has followed a jobless economic growth mode and so Turkish economy is yet vulnerable.

In this paper some important volatility and sustainability tests; such as government's budget sustainability test, external debt sustainability test and so on have been applied to examine the behaviour of some essential macroeconomic indicators in Turkey during the 2010s. The most important results suggest that the external sector seriously deteriorated in this country after crisis. Also the volatility of leading factors in banking and monetary sectors for a period of time has increased in the last decade.

### Bernard Beaudreau

Professor, University of Laval, Canada.

### Rehabilitating Heckscher-Ohlin

The Heckscher-Ohlin theory of international trade is an enigma of sorts. Despite being falsified on numerous counts (Bowen, Leamer and Sveikauskas 1987, Trefler, 1995), it persists as one, if not the central, theory of international trade, found both in undergraduate and graduate textbooks, not to mention in research. Clearly, while it has failed to be confirmed by the data, the notion that factor proportions motivate trade, whether at the regional or national level, continues to hold sway. This paper is an attempt at recasting the debate over the question of factor proportions and its role in interregional and international trade. Its starting point is simple and straightforward, namely that the factor proportions theory of international trade, developed in large measure by Paul Samuelson, is one but not the only possible---formalization of what I shall call the Heckscher-Ohlin hypothesis (HOH). To this end, an alternative formalization, based on a different set of assumptions is presented, tested and confirmed by the data. It concludes by examining the policy implications.

### Luisa Fernanda Bernat

Professor, University of Icesi, Colombia.

# Gender Wage Differences between Polarized Groups in Colombia 2006-2010: Are there Significant Differences?

In this paper a first empirical link between gender wage differences and income polarization is made. Using the Del Rio, Gradín y Cantó (2006) revision of the distributional approach, individual wage gaps are calculated for women in Colombia. This methodology, as opposed to the traditional Oaxaca (1963)-Blinder (1964) decomposition, gives more insight into the nature of these gaps as it constructs a full distribution of them which allows to analyze, conditionally on socio economic variables, the incidence, intensity and inequality of the phenomena. On the other hand, Esteban & Gradin (1997) methodology is used to evidence high bipolarization of income in Colombia. Both approaches are then combined to establish if there is a relation between income polarization and gender wage gaps.

### Nikica Mojsoska Blazevski

Associate Professor and Dean, University American College, FYROM.

Marjan Petreski

Lecturer, University American College, FYROM.

## Real Wages in the Manufacturing Industry in FYR Macedonia: The Role of Macroeconomic Factors, With Reference to Recession Times

In this paper we analyze the determinants of real wages in FYR Macedonia's manufacturing sector. We emphasize the macroeconomic aspects involved, and use econometric panel data techniques to model the behaviour of real wages for the period 2005:1-2010:3, using monthly data. The main conclusion is that real manufacturing wages are persistent in recession times and highly influenced by the 'external' variables, like the real effective exchange rate and the tariff burden. This in turn suggests that the manufacturing sector in FYR Macedonia is highly dependent on the foreign trade, which comes with doubled intensity in recession times. Hence, for policymaking purposes, the paper suggests that the appreciated currency will negatively reflect onto real manufacturing wage. Furthermore, the paper does not find empirical support for the 'young industry' argument, i.e. for protecting industries in times of recession; quite the contrary, it suggests that the removal of import barriers is needed to achieve full price competitiveness.

### **Kirill Borissov**

Professor, European University in St. Petersburg, Russia.

Stephane Lambrecht

PRES Universite Lille Nord de France, France.

### Education, Wage Inequality and Growth

We model a successive-generation economy in which parents, motivated by family altruism, decide to finance or not their offspring's capital accumulation on the basis of their altruistic motive, their own income and the equilibrium ratio between skilled-labor and unskilled-labor wages. The question we ask is how the growth process in this economy shapes the wage inequality and the split of the population in two classes, skilled and unskilled workers.

This paper is based on the threefold assumption of (i) family altruism (ii) accumulative human capital and (iii) the existence of two distinct occupational choices (high-skill and low-skill jobs). Moreover, in the high-skill occupations, there is room for heterogeneity in human capital, and hence in income. In that sense it combines (i) the neoclassical approach which sees human capital as efficiency units of labor whose individual endowments vary across the skilled workers and (ii) the approach which emphasizes the role of indivisibilities in occupational choice.

The main results are the following. First, we prove that there exists a unique intertemporal equilibrium path starting from any initial distribution of human capital. Secondly, we establish necessary and sufficient conditions for the existence of stationary equilibrium paths compatible with inequality in income among families and show that there exist a multiplicity of steady states. At these steady states, one share of the population permanently supply unskilled labor while the remaining share maintain a unique and constant human capital across generations and supplies skilled labor. Then we show that any equilibrium path converges to a steady state equilibrium with inequality. Finally, we propose an endogenous version of the model by assuming that the productivity of unskilled labor benefits from the accumulation of human capital. In this version of the model, it is shown that the relationship between inequality and growth is ambiguous.

### **Patrick Brockett**

Chaired Professor, University of Texas at Austin, USA. Linda L. Golden

Professor, University of Texas at Austin, USA.

### Danae Manika

Ph.D. Candidate, University of Texas at Austin, USA.

Anji Song

Masters Student, University of Texas at Austin, USA.

### Developments in Mobile Commerce: Economic Opportunities, Risk Analysis and Risk Management

In 1999, Sonera of Finland was the first telecom operator to provide the technology needed to allow customers to conduct wireless commerce (Rasinghani 2001). This mode of commerce brought a new technological buzzword: mobile commerce (m-commerce) and has grown tremendously since. According to Experian Marketing Services annual 2010 Holiday Marketer Benchmark Trend Report, 22% of Consumers used their phones to check prices, 21% researched about products, and 13% with Web-enabled phones made purchases with their mobile phones. Compared with 2009, consumers were 38% more likely to find mobile ads from businesses (Schwartz 2010). Mobile retailing is, together with many other wireless business activities, giving rise to yet another revolution in the business world centered on conducting business on the move (Coursaris and Hassanein 2002). M-Commerce is a natural extension of e-Commerce, but with distinctions between because of the unique challenges and risks associated with this newer wireless business model. M-Commerce differs from e-Commerce in mode of communication, types of Internet access devices, development languages, and communication protocols, as well as the enabling technologies used to support each environment (Coursaris and Hassanein 2002).

We first introduce the latest development in m-commerce, followed by an overview of the technologies that support it, particularly wireless networks, protocols and devices. This will be followed by analysis of the various risks to merchants and customers associated with this business model. Finally, an overview of several risk management approaches that can be used to mitigate these risks is discussed.

#### References:

Coursaris, C. and Hassanein, K. 2002. "Understanding M-commerce - A consumer centric model," *Quarterly Journal of Electronic Commerce* 3(3): 247-271

Raisinghani, M.S. "WAP: Transactional Technology for M-Commerce," *Information Systems Management*, 18(3), 8–16, 2001

Schwartz, Meredith. "The Mall in Your Pocket." Gifts & Decorative Accessories 111.10 (2010): 54-58.Business Source Complete. EBSCO. Web. 18 Mar. 2011. <a href="http://www.giftsanddec.com/article/534845-The\_Mall\_in\_Your\_Pocket.php">http://www.giftsanddec.com/article/534845-The\_Mall\_in\_Your\_Pocket.php</a>

### Monica Buendia

Assistant Professor, Nacional de Educación a Distancia (UNED), Spain. **Immaculada Rodriguez-Puerta** 

Assistant Professor, Universidad Pablo de Olavide de Sevilla, Spain. **Alberto A. Alvarez Lopez** 

Tenured Professor, Universidad Nacional de Educación a Distancia (UNED), Spain.

### **Duopoly Competition in Product Size with Homogeneous Consumers' Tastes**

It is well known that competition in prices decreases firms' profits in oligopolies. That is due to equilibrium price equals marginal cost, as shown in classic Bertrand's model. However, in repeated non-cooperative games, prices above marginal cost can be supported under threat of future price wars. That is: there may exist tacit collusion.

In the model we propose in this paper, we study a duopoly where the two firms produce the same homogeneous product and, under tacit collusion in prices, they begin competition in a new perfectly observable feature: the product size. Consumers prefer more size than less size up to an upper bound. The willingness to pay for size is common knowledge and homogeneous for all the consumers. Demand is composed by n consumers. They consume exactly one unit each if they are offered a pair of price and size according to their preferences. Otherwise, they consume nothing. Consumers observe the two offers and they choose the one they prefer the most. If they are indifferent between them, the demand will distribute between both firms. We study the effect in the product size.

We prove that, when the marginal cost at the upper bound size is not below the collusion price, the unique equilibrium point is the one for which the two companies offer the collusion price and the upper bound in size. Therefore, when there is a new feature of a product with the ability to generate vertical differentiation, firms tend to compete in this feature as much as they can. This result explains the considerable increase in sizes in certain homogeneous goods that verify the assumptions of our model, such as drinks in fast food restaurants.

### Xiaoqiang Cai

Professor, The Chinese University of Hong Kong, China. **Limin Wen**Iiangxi Normal University, Iiangxi, China.

Jiangxi Normal University, Jiangxi, China. **Xianyi Wu** 

East China Normal University, Shanghai, China.

## A New Credibility Estimation of Distribution Functions and its Applications to Experience Rating in Nonlife Insurance

We first present a new credibility estimation of the distributions of risks under Bayes settings in non-parametric framework. In contrast to Ferguson (1973)'s Bayesian nonparametrics, we assume no priors such as Dirichlet processes. We then apply our theory to premium pricing in the context of nonlife insurance, a procedure commonly known as experience rating, which concerns how to utilize the insured's claims experience to calculate a proper premium under a given premium calculation principle (a risk measure in the context of insurance). Wellregarded approaches in this area include Buhlmann's credibility method and Bayes approach deduced by Ferguson's Bayesian nonparametric method. Buhlmann's method works, nevertheless, only under the net premium principle, whereas Ferguson's method requires to precisely specify the mathematical form of the priors. Our proposed method can estimate the distributions other than the means of risks. It possesses the merits of both Buhlmann's and Ferguson's methods whereas overcomes their drawbacks, and thus provides a unified approach to experience rating for arbitrary premium calculation principles which has totally nonparametric feature.

We will develop a linear Bayes method and establish its strong consistency, for the situation where the loss distribution is unspecified but limited information (the first two moments of the prior distributions) is available. We will further develop an empirical Bayes method and establish its asymptotical optimality, for the general situation where a portfolio of risks exist but their distributions are totally unspecified. The performance of our approach in comparison with traditional methods is also evaluated through theoretical analysis and numerical studies, which shows that our approach produces premium estimates that are tightly close to the optima.

### Birgul Cambazoglu

Head of Capital Market and Securities, Gedik University, Gedik School of Higher Education, Turkey.

### Simay Karaalp

Assistant Professor, Pamukkale University, Turkey.

# Effectiveness of Exchange Rate Channel on Macro Economic Variables: VAR Evidence for Turkey and Argentina

Monetary transmission mechanisms which are used as tools by monetary authorities in determining the relationship between monetary targets and the real economy is fundamentally classified as interest rate channel (money channel), other asset prices channel and credit channel. Exchange rate channel which is analyzed under the scope of other asset prices channel has gained importance through widespread use of flexible exchange rate system with the increase of globalization level and therefore its effectiveness of the output and inflation has been the subject of various theoretical and empirical studies. In the light of findings of international studies, exchange rate channel is more efficient in open economies that adopt flexible exchange rate regime rather than close economies.

This study aims to explore the effectiveness of monetary transmission mechanisms of exchange rate channel on export-import values and thereby on total out and price level with two different VAR models. The sample countries of study are Turkey and Argentina which has adopted flexible exchange rate regime since February 22, 2001 and February 11, 2002, respectively. The model covers the period of 2003-2010 and monthly data set consists of six macro-economic variables which are reserve money, real effective exchange rate, export, import (CIF), consumer price index and industrial production index.

The study proceeds as follows: Section I provides theoretical background of the exchange rate channel of monetary transmission mechanism. Section II summarizes recent empirical studies. Section III describes variables and discusses the empirical findings of the model. Section IV provides concluding remarks.

### Sonia Patricia Basto Carvalho

Ph.D. Student, Universidade de Vigo, Spain. **Angel Barajas Alonso** 

Associate Professor, Universidade de Vigo, Spain.

# Parameters that Improve the Adjust of the R-Squared in the Portuguese Stock Market

During many decades, tests have been developed to verify whether the beta is the best tool to explain the returns of securities on the stock market. Moreover, the value of the beta and its coefficient of determination (R-squared) vary with the different parameters used for estimating the beta.

In this paper, we investigate for the parameters that provide a higher explanation when we estimate the beta on the Portuguese stock market.

We use all nine economic groups listed on the Euronext Lisbon, and, for each of those groups, determine which company has the highest market capitalization and highest turnover at the same time, measured in millions of Euros and thousands of Euros, respectively.

The linear regression and correlation coefficient between each of the companies can be calculated by studying two national indexes (PSI20 PSI General) to determine if they get better results with respect to a given period, frequency data or index.

We conclude that the explanatory power of R-squared in the Portuguese stock market is very low, independent of the parameters used.

When analyzing the year 2008 using linear regression, it remains unclear whether it is preferable to use daily returns or weekly returns, since half of the surveyed companies report the highest yield using either method.

The explanatory power of R-squared is higher when using larger time periods and monthly returns, and the results become more accurate when doing the regressions with the PSI20 Index.

### Leonida Correia

Assistant Professor, University of Trás-os-Montes and Alto Douro, Portugal.

### Sofia Gouveia

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### Country Size and Business Cycle Correlation in the Euro Area

Recently, the differential of GDP growth in the European Monetary Union (EMU) renewed the interest about the heterogeneity of the member states business cycles. In fact, whether the deepening of economic and monetary integration in the euro area has resulted in an increased synchronization, this is, if the "endogeneity of Optimum Currency Areas (OCA) hypothesis" has been confirmed, still an open question. In addition, due to globalization it has been an intensification of international trade. This phenomenon tends to amplify the spillover effects among the world economies.

We analyze the correlation between aggregate euro area and 28 OECD countries business cycles, using quarterly data from 1980 to 2010. We mainly focus on the first 12 countries that adopted the euro, emphasizing the comparison between smaller and larger countries. Moreover, we also use a control group of 16 OECD's countries. The role of the control group is to assess whether there's evidence of the endogeneity of the OCA properties in the EMU and whether there's evidence of a "world business cycle".

Also, we investigate the role of within-EMU trade as a determinant on business cycle synchronization, accessing if the trade effect is influenced by the country size. The preliminary results suggest that the adoption of the euro has set in motion a process that is capable of inducing greater similarity and synchronicity in the business cycles experienced by member states adhering to the euro.

### Carolina Cosculluela

Tenured Professor, Universidad Rey Juan Carlos, Spain.

Rafael Flores de Frutos

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## Effects on the Spanish Economy of Transportation Investment

This paper compares the dynamic responses of employment and GDP Spanish growth to a permanent unitary shock in different types of transport capital stock, with those estimated in the literature. It is argued that ignoring the likely existence of feedback relationships leads to misestimate the positive effects of public capital stock on economic activity.

#### **Dhaval Dave**

Associate Professor, Bentley University & National Bureau of Economic Research, USA.

### Nancy E. Reichman

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### **Hope Corman**

Professor, Rider University & National Bureau of Economic Research, USA.

# Effects of Welfare Reform in the U.S. on Human Capital Accumulation among Adult Women

Objectives: Education beyond traditional ages for schooling is an important source of human capital acquisition among adult women. Welfare reform, which began in the early 1990s and culminated in the passage of the Personal Responsibility and Work Opportunity Reconciliation Act in 1996, has promoted work rather than educational acquisition for this group. The aim of this study is to undertake a comprehensive analysis of the effects of welfare reform on adult women's educational acquisition (both formal and informal). We also estimate the impact of welfare reform on high school dropout of teenage girls, both to improve on past research on this issue and to explore compositional changes that may be relevant for our primary analyses of the effects of welfare reform on the educational acquisition of adult women. The study further explores the mediating role of work as a pathway through which welfare reform may have impacted educational acquisition.

Data / Methods: The analysis utilizes individual records from the October Current Population Surveys spanning 1992-2001 and the National Household Education Surveys spanning 1991-2003. The theory of human capital investment guides the empirical analyses. Estimates are derived from a difference-in-difference-in-differences (DDD) framework, which exploits variation in the timing of welfare policies across states and conducts a conditional pre- and post-comparison with treatment and control groups. A number of alternative models are estimated as specification checks, which support the robustness of these results and also support the validity of the counterfactual assumption underlying the DDD estimates.

**Results:** Estimates indicate that welfare reform has significantly increased the probability of young women from disadvantaged families staying in high school, by about 10-14 percent. In contrast, welfare reform has significantly decreased the probability of high school and

college attendance among adult women, by 20-25 percent. We do not find evidence that this decrease in formal education among adult women was being substituted by an increase in vocation education or work-related training courses. Thus, among the least educated adult women, welfare reform led to an overall decline in human capital acquisition.

**Discussion:** The opposing effects for teens and adult mothers underscore the differential educational incentives for the two groups that are built into welfare reform. This study fills an important gap in the welfare reform literature and suggests that the gains from welfare reform in terms of increasing employment and reducing caseloads may have come at a cost—lower educational attainment among women at risk for relying on welfare. This finding may have negative implications for poor mothers' ability to attain self-sufficiency and experience upward mobility, given the evidence of substantial earnings gains from even one year of community college. Education has also been shown to impart significant non-monetary returns in the form of better health behaviors and health outcomes. The decline in education among adult women, at risk of being on welfare, therefore also has negative implications for their health in the longer term.

### Sameeksha Desai

Assistant Professor, Indiana University, USA. **Johan Eklund** 

Assistant Professor, Jonkoping International Business School and Ratio Institute, Sweden.

# Ownership, Economic Entrenchment and Allocation of Capital

In an efficient economy, capital should be quickly (re)allocated from declining firms and sectors to more profitable investment opportunities. This process is affected by the concentration of corporate control, which in turn is affected by market institutions. We employ a panel of 12,000 firms across 44 countries to estimate the functional efficiency of capital markets. We adapt a measure for efficiency of capital allocation using the accelerator principle. Our empirical results show weak property rights and highly concentrated ownership reduce the functional efficiency of capital markets. Findings support the economic entrenchment hypothesis but not the legal origins hypothesis.

### **Christian Dreger**

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## Money Demand and the Role of Monetary Indicators in Forecasting Euro Area Inflation

Achieving and maintaining the stability of the price level is a primary goal for central banks. Because of unconventional monetary measures during the crisis, inflation could shift from the current benign regime of price stability to a new and persistently higher inflation regime. Recently, the ECB has stressed the need to improve models for money demand. Better monetary indicators for inflation forecasts are also on the agenda (Monthly Bulletin, 11/10). This paper addresses both issues. The money demand function links the monetary development to its fundamental determinants, such as real income, financial wealth and the opportunity costs of holding money. By comparing the actual money stock with its long run equilibrium, measures of excess liquidity are derived and used to forecast inflation.

Recent evidence has cast serious doubts on the robustness of money demand. However, as the authors have demonstrated, the instability problem can be resolved by including inflation as part of the opportunity costs. Despite this, a minor break in 2002Q1 occurs due to better income expectations in the monetary union. Wealth variables have become also more important since then.

The first contribution is to examine whether money demand has remained stable over the period covering the financial crisis. As a main finding, the demand for real money balances is very robust, especially, if real house prices are chosen as a proxy of wealth. The second contribution is to explore the forecasting properties of M3 indicators with respect to inflation. Our results show that monetary indicators can outperform an autoregressive benchmark and standard alternatives such as the term structure of interest rates, especially at longer forecasting horizons.

### Jayanta Kumar Dwibedi

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# Child Labour in the Presence of Agricultural Dualism: Possible Cures

Available empirical evidences suggest that the concentration of child labour is highest in the rural sector of a developing economy and that child labour is used intensively directly or indirectly in the agricultural sector. Another important characteristic of a transitional developing society the coexistence of modern and traditional/backward mode of agricultural production. This paper attempts to analyze agricultural dualism and its implications from the perspective of child labour incidence. This is important because from the view point of the use of child labour, these two types of agricultural sectors differ and any change in their output composition will affect the magnitude of child labour use in the agricultural sector. It is a common belief that the backward agricultural sector should be subsidized as poorer section of the working population are employed in this sector who send their children out to work out of sheer poverty. If the economic conditions of these people can be improved through agricultural development the social menace of child labour could automatically be mitigated. This paper using a three-sector full employment general equilibrium model with agricultural dualism and child labour shows that any fiscal measures designed to benefit backward agriculture cannot cure the problem of child labour instead they are likely to aggravate the child labour problem in the economy even though they raise the non-child labour income of the poor households. Our analysis suggests that increase in income alone may not be effective in mitigating the prevalence of the evil in the system. We have then proposed a couple of alternative policies to deal with the child labour question. We have advocated in favour of polices that target the demand side of the problem. Our analysis has shown how an FDI led growth strategy that encourages mechanized farming or incentive policies designed to benefit advanced agriculture will be effective in reducing the child labour incidence.

### **Bernhard Eckwert**

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## Cheap Money and Risk Taking: Opacity versus Underlying Risk

A number of mechanisms are frequently invoked to explain higher risk taking in response to low interest rates. These mechanisms tend to rely on the observation that low interest rates boost asset values. As asset values rise, balance sheets of banks grow, their leverage declines, and their risk taking and lending capacity expands. While plausible, these theories do not specifically address a key aspect of the recent financial crisis, namely, that so much of the risk was concentrated in highly complex and, therefore, opaque financial instruments. Moreover, a salient feature of many of these instruments was that, despite their opacity, they were perceived to be fundamentally rather safe due to the way they were structured. This is particularly true for senior tranches of collateralized debt obligations (CDOs), which often held AAA credit ratings. The goal of this paper, then, is to provide an explanation for the extraordinary popularity of these kinds of highly opaque but (seemingly) safe financial instruments in the low interest rate environment leading up to the crisis.

We develop a simple Bayesian investment screening model in which we distinguish between underlying, or fundamental, risk on the one hand, and opacity risk on the other. Underlying risk corresponds to the variance of investors' prior beliefs about the payoff distribution of investments in a certain asset class. Opacity risk corresponds to the noisiness of the payoff-relevant signal about a particular investment project in that class. While both sources of risk contribute to the overall riskiness of an investment project in essentially the same way, we show that changes in interest rates affect risk taking in these two types of risk very differently. When interest rates are high, investors tend to invest in transparent projects with high underlying risk. When interest rates are low, investors favor opaque but (seemingly) fundamentally safe investments, such as senior tranches of CDOs.

The fact that changes in interest rates affect opacity and underlying risk taking in opposite ways makes the net effect of low interest rates on overall risk taking fundamentally ambiguous. We show that the net effect (as measured by the average riskiness of financed projects) depends on whether the collection of potential investments differs mostly in terms of opacity or mostly in terms of underlying risk. If potential investments differ in terms of opacity but are relatively similar in terms of underlying risk, low interest rates *increase* risk taking. This is consistent with the common narrative about the causes of the crisis. If,

on the other hand, potential investments differ in terms of underlying risk but are relatively similar in terms of opacity, low interest rates *decrease* risk taking. This second effect of low interest rates goes against the received wisdom.

### Hany Elshamy

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### Corruption and Economic Growth in Arab Countries

During the past decade, corruption and its impact on the economy have received a great deal of attention. The resurgence of this topic is a consequence of a couple of factors. First, there is an increase in the number of corruption indexes. Researchers can now empirically examine the effects of corruption on output and other factors. Second, and more importantly, corruption has become more prevalent in the global economy (Tanzi, 1998).

There are various definitions. Some confine it to bribery, but may include bribery of officials of private-sector bodies as well as government. Some cast it much wider than bribery, but may confine it to perversion of government (Forsyth et al, 2009). There are several indicators that used to measure the corruption, in this paper I will use the Corruption Perceptions Index (CPI) which based on composite of a number of 'expert and business surveys carried out by a variety of independent and reputable institutions

The aim of this paper is to study the relationship between the corruption and economic growth in Arab countries for the period 2000-2009. The main objective of this paper is to estimate a simple model that constitutes an extension of Lucas' model of endogenous economic growth. In Lucas' model, the determinants of output are: physical capital, labour, and human capital. I am also particularly concerned to measure this model in a panel of 17 countries by using panel data analysis (Random and Fixed effects models). This paper depends on the data from the International Financial Statistics (IFS) published by the IMF and the Transparency International for the period 2000-2009.

### Josep-Oriol Escardibul

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Assistant Professor, Universitat Internacional de Catalunya, Spain.

## Teacher Gender and Student Achievement in Mathematics Evidence from Catalonia (Spain)

Based on findings in favour that students' results can be correlated with the gender of their teachers, a number of countries have implemented policy initiatives to increase the number of male teachers in primary education to improve the results of male pupils, since it is assumed that they are related to the lower presence of male teachers. However, the literature reviewed is not conclusive and presents three contradictory results: students perform better if they have a samegender teacher; female teachers enhance the achievement of all students; no evidence between teacher gender and student's results is to be found.

The purpose of this paper is to check whether teacher gender is relevant in students' results (in an international blind test in mathematics). It is also analyzed whether teacher gender has a bearing on students' motivation since the probability to attend the test is examined.

The data for this analysis are drawn from a sample of students in Catalonia (Spain) who participated in a blind-test (known as the "Mathematical Kangaroo", a competition in which 45 countries participate). The survey was targeted at secondary school students.

The econometric model estimates the effect of several variables on the probability that students participate on the Kangaroo test as well as on the score obtained. We conduct our estimation using a two-stage procedure since participation on the test leads to the presence of sample selection. We control for student, teacher and classroom characteristics as well as student and school fixed effects.

Results show that female teachers improve student results (both male and female). Moreover, students with female teachers have a higher probability of participating in the "Kangaroo" test (in this case, the effect being more marked among boys). Thus, our results do not show that a same-gender teacher improves student outcomes, but rather that female teachers improve the results of all students.

### Farazi Binti Ferdous

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# Patterns of Export Diversification in East Asian Economies Using Different Levels of Export Data

Worldwide fragmentation trade is expanding much faster compared to conventional product-based trade. The degree and intensity of participation of East Asian economies in fragmentation trade is greater compared to countries in other parts of the world, which is a critical part of their export dynamism. Nevertheless, the region's growth depends unavoidably on its extra-regional trade in final goods, and this dependence has increased over the years. Therefore, extra-regional trade is likely to remain the engine of growth for the region in the foreseeable future. This study tries to find how concentrated or diversified is the export pattern in the East Asian countries using internationally comparable disaggregated trade data. Moreover, it tries to analyze the pattern of the concentration or diversification and the pattern of extensive margin of export growth for the selected countries of East Asia. Contemporary studies found that rapid export growth in East Asia has shifted the export structure away primary commodities towards heavy concentration manufacturing, machinery, and transport equipment. By focusing on the specific product categories in which network trade is heavily concentrated, such as manufacturing sector and by using 2 or 3 digit SITC classification, these studies thus have the problem of limited commodity coverage while analyzing the export diversification of East Asian economies. To overcome this limitation of commodity coverage, this study examines the pattern of export specialization and the evolution of export diversification in China, Indonesia, Japan, Malaysia, Philippines, Republic of Korea, Singapore and Thailand by using the concentration index at the SITC 3 digit level and HS 6 digit level over the years, covering all commodity data. Analyzing the export pattern by product and destination margin, it is found that the maximum product variety exists for the regional export; on the other hand export concentration has increased over the period of 1995-2009 for most of the countries.

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### Francesco Conto

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### Piermichele La Sala

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## Quality of Life and Human Isolation: The Case of Rural Area of Puglia Region

The serious socio-economic problems at both a distributional and qualitative level, the energy crisis, and the environmental emergencies have recently stimulated an international debate about the meaning of words such as 'wellbeing' and 'quality of life' on the one hand, and about the inconsistency of merely quantitative indicators of economic growth (e.g. GDP), as proxies for the quality of life, on the other. Furthermore, in the last two decades, both developing industrialised countries have not faced any significantly correlation between their GDP growth rate and their quality of life. In addition, there are also special rural models which are so the outlier. The present research has a twofold aim. Firstly, it explores the socio-economic problems arising in a typical peripheral rural area - the 'Area Vasta Monti Dauni' - in the south of Italy, in order to analyse the concept of 'wellbeing' through the analysis of the 'quality of life'. Secondly, lines will be drawn up to elaborate rural development model based on the knowledge economy. For these purposes, we will develop an 'Index of Human Isolation' (IHI), on the basis of the 'Human Poverty Index' (UNDP, 1997), in order to take into account the multiple dimensions of isolation, that is a constant characteristic of rural areas, particularly the inter-generational, the socio-structural and the geographical ones. This index will be employed to analyse the relationship between a set of variables representing the main economic, structural and social aspects of the area and the dynamics of the value added. The expected results are twofold: (a) creation of Value Added should be decreasing at high levels of IHI; (b) implementation of knowledge economy service may actively contribute to the reduction of isolation and of gaps between rural and urban areas and to the increase of the value-added of such an area.

### Linda Golden

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# The Cross-Cultural Impact of Prior Knowledge and Information Receptivity: It is Not How Much You Know but How Much You Think You Know!

The importance of prior knowledge as a component of human capital has long been recognized in the consumer behavior field and investigated across domains. However, most studies regarding prior knowledge have focused on product situations. By contrast, health-related knowledge may lead to life or death situations, as with the H1N1 (swine flu) pandemic recently, so it is critical to understand consumer use of prior knowledge in health care situations, also.

Scales were developed and tested to investigate the impact of subjective knowledge, objective knowledge, and knowledge confidence on health care information receptivity for four English-speaking countries: USA, England, Australia, and Canada. Internet survey results showed that type of knowledge is important for information receptivity (an early step in consumer's responding to information for positive health care changes): Subjective knowledge (what people believe they know) and not objective knowledge (test score knowledge) is associated with receptivity. These results were consistent for all countries studied. Self-rated knowledge confidence was not important for any country.

The phrase "Think global, act local" may be relevant to health care promotions across countries, as in the case of a pandemic. This research suggests that there may be an opportunity for some global message targeting, which would have useful economies of scale for health care messages. It may also be useful to emphasize to consumers that they already have some knowledge so as to appeal to self-perceived knowledge levels.

In conclusion, the importance of prior knowledge in information receptivity (and search as was investigated in other research) cannot be ignored in developing effective marketing strategy. Know your target market and know their prior knowledge levels: Perception, again, is key: It is not what the consumer knows but what they think they know.

### Adriana Grigorescu

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## The Role of Structural Economic Models in Strategic Decisions

Structural economic models (SEMs) aim at highlighting the various cause-effect relationships within an analysed system. Due to the benefit of statistical data, SEMs establish links between endogenous variables, while employing a series of restrictions that could differ from one approach to another. The outcomes of a structural model provide a possible / probable picture of the parameters studied with the system by taking into account the cause-effect relationships between factors that concur to an economic process. From this perspective, SEMs can be successfully used in strategic decisions. This paper aims at presenting various SEMs, the conclusions the SEMs lead to and the ways the strategic decisions are influenced. Against this background, we shall try to highlight a mechanism for interaction between the two management tools – the SEMs and the strategic decisions.

Various studies show a steady concern of the specialists for SEMs with applications in macroeconomics. Thus, the economic environment will be able to make use of instruments of the kind both at macro- and microeconomic levels. The development of SEMs targeting interactions between fundamental factors at the level of microeconomics lately has increased their practical features. One less exploited area is the one relating to the use of SEMs in public strategic decisions. The present paper aims at highlighting some possible mechanisms that have effects on strategic decisions by taking into account the "lessons learned" from the run-up of SEMs. We believe that the SEMs provide a systemic approach that is strictly necessary in the strategic decision-making especially when the targets encompass mechanisms that ensure an efficient functioning of the socio-economic environment and a proper involvement of the state in the economic and social processes.

### **Sinem Pinar Gurel**

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## Seasonal Unit Root: An Application to Turkish Manufacturing Industry Series

The aim of this study is to investigate the seasonal patterns of five Turkish manufacturing industry series which have the main characteristics of Turkish economy during the 1980:1-2010:4 periods. Many economic time series are often subject to systematic fluctuations within the year such as seasonal movements. All the studies concerning time series methods are useful only when the series have not seasonal patterns. For this reason it is important to investigate the seasonality of the unit roots when studying with economic time series datas. The analysis is conducted using the HEGY approach developed by Hylleberg, Engle, Granger and Yoo(1990). It is important to determine what kind of seasonality is present in the data. For this reason, we search for the seasonal unit root with five different models which are concerning, trends, constant and seasonal dummies. We provide evidence on the presence of seasonal unit roots in Turkish manufacturing industry series. The main finding is that there are both deterministic and nonstationary stochastic seasonality in the series.

### **Inese Haite**

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## Methodology for Evaluation of Balanced Territory Development: Latvian Case Study

Balanced development of territories is one of the regional economy research issues. Both the European Union and Latvia experiences significant turning-point in current understanding of territorial development issues since more and more often the integrated view on issues of balanced development among cities and regions is being used. For the balanced and sustainable development it is important to reduce differences of disadvantaged development indicators among different territories of Latvia, especially among region of the capital city and the rest territory of Latvia. One of methods how to reduce the differences mentioned above is to implement a model of polycentric development, supporting comparatively less developed territories. In the most significant planning documents of Latvia for the European Union structural funds and Cohesion funds a term "Balanced development of territories" is defined as horizontal priority, which must be taken into consideration while planning and implementing investment projects. The aim of mentioned horizontal priority is to provide balance of economic development level and pace in different territories of the country (including planning regions, particular local municipalities), efficiently using resources (nature, human resources, cultural etc.) available for the promotion of the development. Using the peculiarities of territory development and potential for growth, it is possible to reach maximum outcome of investments, ensuring qualitative living conditions for the inhabitants and preconditions for development in respect to their belonging to particular territory. One of the main supervising indicators of horizontal priorities for evaluation of balanced territory development is defined index of territory development. This index in Latvia for the evaluation of different territorial units is used since year 2000. It needs to be mentioned that there exist some more socio-economic supervision indicators - changes in demography, level of unemployment, level of inhabitant income, demographic load, level of employment, economically active units of statistics, GDP per inhabitant etc. Unified methodology of supervision indicators is a precondition for equivalent evaluation of territories in long-term period within the context of balanced development.

### Anastasia Hernandez-Aleman

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# CO<sub>2</sub> Emissions, Population, Technology and Development

CO<sub>2</sub> emissions are a major threat to quality of life since they are an important contributor to climate change. The control of CO<sub>2</sub> emissions requires major technological breakthroughs that lead to more efficient production methods. In addition, technological efficiency can be conditioned both by the level of development and the rate of population growth. In this paper we look at the interrelationships between CO<sub>2</sub> emissions, population growth and technology in the context of both developed and less developed countries. We utilize the IPAT model as in Dietz and Rosa (1997). However, technology is not modeled as a residual variable but as an additional variable reflecting the level of environmental efficiency in the production process. We utilize a panel data of developed and developing countries with different rates of population growth and technological efficiency, for the period from 1998 to 2006. The results proved that the level of development discriminates against a particular relationship between technology, population growth and CO<sub>2</sub> emissions. First, it is proved that technological efficiency has a larger impact on CO<sub>2</sub> emissions in developed countries than less developed countries. In addition, the population growth has a larger impact on CO2 emissions in developed countries. Finally, the Kuznets relationship does not hold for less developed countries, while emissions are reduced for a per capita income of 16.115 \$ for developed countries. The results have relevant implications for the design of technological and population policies in less developed countries that favor the mitigation and control of climate change.

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# A Model to Identify the Optimal Directions for Increasing the Romanian SMEs' Competitiveness

From the point of view of identifying certain optimal directions for increasing the Romanian SMEs' competitiveness, and with the view of GDP growth on a durable basis through new investments, the study aims to elaborate a model of development starting from the development stage of SMEs within the EU. The development of entrepreneurial structures enfolds along two main axes: intensive development, which pursues a more efficient use of the existing capital, and extensive development, namely establishment of new companies. The positioning of Romania considering the overall trends in the sociopolitical and institutional European context is thus envisaged, namely a mainly intensive development, a balanced extensive and intensive development or a mainly extensive development.

Considering the Romanian economic peculiarities, the model of SMEs' competitiveness increasing must envisage first, in the authors' opinion, an extensive development, in areas and sectors with clear opportunities for such companies, while an intensive development should envisage strengthening of competitiveness by employing a strategic target regarding turnover and market share.

Considering such an approach, the authors perform an opportunity analysis by economic sectors, 9 sections and 46 markets being selected. The model to identify the optimal directions for increasing the Romanian SMEs' competitiveness, with the ultimate view of a sustainable GDP growth through new investments, envisages two coordinates, market accessibility and economic performance, which allow for breaking down the SMEs by classes of extensive competitive development and for completing the analysis for the 46 selected markets.

### Raluca Iorgulescu

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## Restructuring Romanian Industry: A Multi-Scale Analysis

Multi-Scale Integrated Analysis of Societal and Ecological Metabolism (MuSIASEM) is a method developed in relation to the field of science for governance and it can be used to check the robustness and the relevance of models, datasets, and forecasting using integrated biophysical, economic, social and demographic analyses across different hierarchical levels and scales. The 1999-2006 analysis looks through MuSIASEM lenses at the restructuring of different Romanian industries in the move towards the European Union member status. The results are provided together with details regarding microeconomic changes in industries with high exosomatic metabolism. The evolution of the energy metabolism intensity (exosomatic metabolic rate) for different groups of industries and industries is presented and explained. Structural changes in each economic sector can be related to metabolic variations and the paper provides microeconomic details for specific industries to support this statement. The study creates the foundation for a future analysis comparing the development of Romania with that of other countries.

### Manuel Jaen-Garcia

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Encarnacion Garcia-Ruiz

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## Tax-Expenditure, Expenditure-Tax or Fiscal Synchronization: A Panel Data Analysis of Spain's Regions

The revenues-spending nexus has been an object of great empirical research over the last twenty years. These analyses have been made on the national, regional, and local levels using different tests of unit roots, cointegration, and causality both with time series and panel data.

Determining which hypothesis best characterizes an economy is more than an intellectual exercise because it can potentially contribute to the discovery of a solution to the problem of growing budget deficits.

In this paper an analysis is made of nexus revenue-expenditure for Spain's Autonomous Regions. The particular characteristics of finance for the public sector in Spain lead to the conclusion that a unidirectional causality relationship exists between public revenue to public expenditure.

### **Achilleas Kallergis**

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Robert Buckley

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# The Two Giants, Globalization and Urbanization: At the Roots of a More Equal World Income Distribution?

Economic growth theory has now firmly embraced the idea that cities, rather than countries, are the central unit of analysis for encouraging higher economic growth. While the role of cities as engines of growth is increasingly being recognized, less attention has been given to the fact that over the past 20 years, cities have almost certainly been the main channel by which the world income distribution has become more egalitarian. This result presents a new and potentially very hopeful perspective about the effects of globalization and urbanization on income distribution. Under this view, allowing cities to better exploit agglomeration economies will not only improve growth, it will result in growth that is inclusive.

But, just as cities are being recognized as places rich with opportunities we must also be cognizant of the fact that these opportunities have to be effectively managed in order to be realized. In the past, ineffective policies based on old sectoral perspectives – on rural versus urban development – or the myopic, cash-flow framework that has governed most studies and reports on sub-national government have negatively impacted the growth of the city. Huge amounts of idle and unbudgeted assets that cities control remained unexploited. Decisions with respect to these assets will not be seen by policy-makers unless wealth orientation governs the policy perspective.

Based on policies that promote an appropriate regulatory and managerial environment, this wealth can be used in an equitable manner to help address the severe shortages of urban infrastructure, increase access to finance and mobilize agents, particularly those in the private sector, to bear the risks involved with using the city's fixed capital stock more effectively. Creating open, more inclusive cities cannot be done though solely on a wealth maximization basis. Nor will many cities gain from branding exercises designed to make them more attractive to the more "creative" workers. Rather, cities that focus on their own highly idiosyncratic opportunities and constraints and manage to implement welfare-enhancing investments, such as, for example, developing new much more efficient city-wide bus rapid transit systems, are well placed to create a conducive environment for equitable growth.

### **Gabor Katay**

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# Income Taxation and Labour Supply at the Extensive Margin

This paper estimates the effect of income taxation on labour supply at the extensive margin, i.e. the labour force participation. Labour supply effect of income taxation has been extensively investigated in the empirical literature, but most of the papers focus on the intensive margin.<sup>1</sup> Although the papers studying the extensive margin<sup>2</sup> generally concentrate on a specific group within the population, which limits the comparability of the results, adjustment at the extensive margin seems to be overall more pronounced and more robust than at the intensive margin.

We carry on the estimations on the Hungarian Household Budget Survey (HKF). The structural equation to be estimated is specified by a probit model of the form  $Pr(a_i = 1) = \Phi(\gamma wi + Z_i a')$ , where  $a_i = 1$  if individual i is active (employed or actively seeking a job),  $w_i$  is the after-tax wage in log and  $Z_i$  is a set of individual characteristics that may in uence labour supply, such as non-labour income or the size of the family.3The wage data is only available for workers, the potential market wage of non-employed should be estimated using  $w_i = X_i \beta' + \mu_i$ , where  $X_i \neq Z_i$  includes characteristics that can influence employers' wage offer. Unlike previous studies, the paper also controls for the social benefit allowances that a worker could have received if he had not worked as a measure of potential non-labour income. In this case, the prediction is based on observed individual characteristics and the legislation in force at the time of the observation.

The selection bias in the wage equation is treated by using the Heckman correction method. This leads to a three step estimation procedure:

- 1. First, wage w in the structural equation is replaced by its expression in the wage equation. This gives the reduced form equation  $Pr(a_i = 1) = \Phi(X_i \beta' \gamma + Z_i a')$ , which is estimated by regular probit procedure;
- 2. The inverse Mills ratio is then added to the wage equation, which allows us to input the potential market wage of non-employed;
- 3. Using the inputed wages, the structural equation is estimated.

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1 see e.g. Blundell et al. (1998), Blomquist et al. (1998) or Meyer and Rosenbaum (2001) 2 see e.g. Triest (1990) or Eissa et al. (2008))

3 The estimation method we use is similar to the one proposed by Kimmel and Kniesner (1998)

### **Bralind Kiri**

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# Public versus Private Monopoly in the Higher Education Market

This paper shows a theoretical model of a public or private university which plays solely in the market and endeavors to maximize its surplus in an ideal economy with perfect capital markets. We want to see the differences in the equilibrium and optimal choices between two scenarios in the higher education market - a public and private monopoly. The comparison of outcomes will be useful to know which type of monopoly produces better results for a community. It can also offer to any government a good guide to promote or stimulate the most adequate one. Supporting our expectations, we find that social welfare produced by the public is higher than or equal to the private. In order for this to be maintained, the ability of students accepted, and the cost of qualities offered by both are positively related inside the boundary conditions.

### **Anneke Kosse**

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# Do Newspaper Articles on Card Fraud Affect Debit Card Usage?

This paper investigates the impact of newspaper articles on card fraud on debit card usage in the Netherlands. Since the late 1980s, debit cards have rapidly grown into widely used payment instruments at points-of-sale. The ongoing increase in its acceptance and usage, however, has made debit cards increasingly attractive for fraud. Total debit card skimming fraud increased materially over the past few years, from less than EUR 4 million in 2005 to EUR 36 million in 2009. Although the financial damages are relatively small compared to the size of the Dutch debit cards market, the total costs to society might be substantial. That is, debit card fraud incidents receive a fair amount of attention from the media. This might have considerable effects on the usage of debit cards as consumers may shift away to other means of payment. Since earlier studies have demonstrated that the debit card is often a fast and cheap way of paying, a substantial substitution away from debit cards could eventually harm the cost efficiency of the entire payment system.

Although the fear of a possible erosion of consumer confidence is generally shared, clear evidence of safety incidents affecting overall consumer confidence and payment behaviour is lacking. Therefore the aim of this paper is to examine the impact of newspaper articles on skimming fraud on debit card usage in the Netherlands, using daily transaction data and newspaper announcements from January 1st 2005 to December 31st 2008. Given the extensiveness of the dataset, multivariate time-series analyses as well as panel data analyses are conducted.

The findings show that public information pertaining to debit card fraud through newspapers is significantly affecting debit card usage: the daily number of debit card payments is shown to be smaller on days on which newspapers report about skimming fraud at payment terminals. Moreover, the results point at a substitution away from ATM's towards payment terminals: debit card usage increases after newspaper publications on skimming fraud at ATM's. All effects, however, are found to be small in comparison to other factors such as seasonal and calendar effects, rainfall and time trends. Moreover, the effects are shown to last temporarily, with consumers soon forgetting the publicity and reverting back to regular behaviour.

### **Mihaly Andras Kovacs**

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## How do Manufacturing Firms React to Real Exchange Rate Shocks? Evidence from Hungary

This paper analyses firm reaction to exchange rate fluctuations in Hungary. Using firm level data for manufacturing we estimate the response of firm level labour productivity after a marked trend shift in the real exchange rate around the millennium. The methodology is based on a difference in difference estimator, where we identify a preand post-shock period.

The trend shift or shock in the real exchange rate comes from several sources. First in 2001 a new monetary regime was introduced in Hungary. The crawling peg regime, which kept the traded sector real exchange rate at a more or less constant level, was changed to inflation targeting, which caused a trend shift in the nominal exchange rate. Second, both cost push shocks and demand pressures also reinforced real appreciation after the millennium: minimum wages were doubled in 2001-2002, substantial fiscal loosening occurred, and financial constraints started to loosen among households. Among all these factors, we are primarily interested in the effect of the first one, the change in the monetary regime. This affected manufacturing firms directly, by altering the path of the nominal exchange rate from previous periods, and can be considered as a more or less permanent competitiveness shock during the period under consideration. Therefore in our analyses we have to control for the effect of minimum wage hikes and other macro-shocks. We also disentangle adjustment channels of manufacturing productivity. First, we make a difference between entry and exit and change in continuing firm productivity. Second we decompose the change in continuing firm productivity to the effect of output, employment, capital deepening and TFP.

While our methodology is similar to that of Ekholm et. al. (2009), we have opposite results. We found that real appreciation decreased labour productivity growth among Hungarian manufacturing firms: value added growth decreased more than employment. It seems that the competitiveness shock did not lead to significant capital deepening and an increase in TFP. This result seems to be robust for different exchange rate exposure specifications and controlling variables. We explain the phenomenon by the lack of credibility of the new monetary policy regime after 2001, arguing that firms did not believe the exchange rate appreciation to be permanent. We raise several arguments to support this hypothesis. First, the dual existence of an

inflation target and an exchange rate band made it possible, that firms did not give full credibility of the Central bank anti-inflationary commitment. Second, data on corporate sector FX deposit movements indicate that firms substantially increased their FX deposit after the appreciation, which makes probable, that they expected depreciation for the future. Finally, contrary the effect of the real exchange rate, stylized fact indicate, that those firms increased productivity more, which were more exposed to the minimum wages shock. As sharp minimum wage hikes distort the wage distribution for several years, this should have been considered by firms as permanent.

### Zoe Kuehn

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### Eva Garcia-Moran

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# With Strings Attached: Grandparent-Provided Childcare, Fertility, and Female Labor Force Participation

Grandparents are regular providers of free child care. Similar to any other form of child care, availability of grandparent-provided child care seems to affect fertility and labor market decisions of women. We find that women residing close to their parents are more likely to have children and are also more likely to work. However, different from any other type of child care, for individuals to enjoy grandparent-provided child care on a regular basis, their residence choices must coincide with those of their parents. Thus while living close to one's parents provides access to free child care, it imposes spatial restrictions that potentially affect one's labor market outcomes. We provide some evidence that wages of women residing close to their parents are lower compared to those residing further away. In a general equilibrium model of residence choice, fertility choice, and female labor force participation we quantify costs and benefits of grandparent-provided child care. We use a calibrated version of our model to estimate the amount of publicly provided child care that is needed to induce the observed fertility and labor force participation results.

### Alok Kumar

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### Education, Health and Cross-Country Productivity Differences

It has long been stressed by the theoretical literature that educational attainment plays a fundamental role in economic growth (e.g. Lucas 1988, Romer 1990, Mankiw, Romer and Weil 1992, Aghion and Howitt 1998, Acemoglu and Zilibotti 1999). Despite theoretical predictions, the empirical evidence on the effect of education on growth has been mixed. Most of the empirical literature treats education as an input in the production function and uses cross-country regression to identify the effects of education on growth. Using cross-country regression, Barro (1991, 1997) and Mankiw et. al. (1992) find that educational capital has significant and positive effect on the per-capita income. But, there is a large number of empirical studies (e.g. Benhabib and Spiegel 1994, Knowles and Owen 1995, Islam 1995, Caselli et al. 1996, McDonald and Roberts 2002) which find that education capital has insignificant and in many specifications negative effect on percapita income.

In response to weak empirical evidence of the effect of education on growth found by previous studies, the recent literature has developed in two directions. One strand of literature argues that measures of education capital such as enrollment ratios and average years of schooling used in previous literature do not adequately measure educational capital (Hanusehk and Kimko 2000, Hanushek and WoBmann 2008). In particular, these measures capture quantity of education and not the quality of education.

These recent studies show that quality of education as measured by student performance in the cognitive skills such as math and science have significant and positive effect on growth (see Hanushek and WoBmann 2008 for a review of this literature). Similar to previous studies, they find that the quantity of schooling proxied by enrollment ratios and average years of schooling does not have significant effect on growth. One drawback of these studies is that the measure of cognitive skills of student is available for only few countries, mostly developed countries. For example, the analysis of Hanushek and Kimko (2000) is based on data for only for 31 countries. Given small sample of countries, it is difficult to generalize these results.

The other strand of literature argues that treating education capital as an input in the production function misspecifies its role in the growth process (Nelson and Phelps 1966, Benhabib and Spiegel 1994, Islam 1995). Education does not affect per-capita income directly. Rather it affects per-capita income indirectly through its effect on productivity. Education capital determines the ability of a nation to adopt, implement, and effectively utilize technologies. It affects the speed of technological catch-up and diffusion. The main aim of the paper is to investigate the effects of education capital on productivity of a country or its total factor productivity (TFP). In particular, it examines the effect of quantity of education on TFP.

Understanding the role of quantity of education in the growth process is of fundamental importance. Removing illiteracy by 2015 is one of the main goals of Millennium Development goals (MDGs). Part of the reason for setting this goal is the belief that it will improve growth potential of poor countries. Given this ambitious target which involves rapid expansion of schooling system and severe resource constraint faced by poor countries in terms of funding, well-trained teachers and other complementary inputs, most of the spread in education is likely to be of lower quality. In addition, if only quality of education matters for growth, poor countries may focus their resources in improving the quality of existing educational infrastructure rather than expanding them. Since, poorer and weaker sections of the society typically do not have access to schooling, narrow focus on increasing the quality of existing education infrastructure may aggravate inequalities within poor countries.

In this paper, we study the effects of education on total factor productivity (TFP) for the panel of large number countries. Our analysis involves two steps. First, we estimate TFP of 100 countries using a variant of augmented Solow model of Mankiw et. al. (1992). We use panel data approach of Islam (1995) for this estimation. Our data spans the period 1960-2005 and we include health capital proxied by life-expectancy as one of the regressors. In the second step, we examine the determinants of TFP, especially the role of quantity of education capital. We proxy quantity of education capital by average years of schooling and primary and secondary school enrollment ratios.

We find that both quantity and quality of education significantly and positively affect TFP. This result is in contrast to findings of literature, which suggests that either education does not matter for growth (e.g. Benhabib and Spiegel 1994, Caselli et al. 1996) or only the quality of education matters for growth and not the quantity of education (e.g. Hanushek and Kimko 2000, Hanushek and Wobmann 2008). We also find that TFP differences explain about 1/3rd of percapita real income differences across countries. This estimate is substantially lower than existing estimates (e.g. Klenow and Rogriguez-Clare 1997, Hall and Jone 1999) which suggest that TFP differences are

the dominant source of per-capita real income differences across countries.

### Yong Sung Lee

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# Why Do AMI Black Patients in an Emergency Strike Pay Less? A Nested Quantile Regression Model Approach

This study examines whether being black plays a role to explain the behavior of AMI patients' benefit where the latter is defined as the difference between what hospitals charge and what patients actually pay. To do this, we consider the population of AMI patients in an emergency strike. To examine the effects of racial differences and other covariates on benefit, we use a nested conditional quantile regression model (NCQRM) which is similar to that of Hao et al (2007). Our study with New Jersey hospital inpatient discharge data implies that being black plays an important role to explain the behavior of AMI black patients' benefit even after we consider, for example, other important covariates such as their income and insurance status. Since the models considered would have missing and unobservable covariates, however, we interpret the effect of being black on benefit as a marginal rather than causal relation as in Abrevaya (2001). Our preliminary results indicate that in general, there are positive effects of being black on benefit for AMI patients. Among other things, our empirical results imply: (a) AMI black patients have a limited access to AMI care where they tend to seek for their regular AMI care with less cost effective but more accessible alternative, including hospitals' emergency rooms (ERs) as in SteelFisher (2004), (b) they tend to visit hospitals' ERs after the progression of their AMI illness, which leads especially AMI female patients to stay longer at the hospitals, and (c) black AMI patients have been receiving less benefit in the recent year, which might imply some evidence that the access of the black population to AMI care has been improved.

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## Almost Periodically Correlated Time Series: A New Way for Business Cycles Analysis

The literature presents a lots of methods for business fluctuations analysis. The large majority of this methods are based on econometric analysis for macroeconomics times series. One of the problem during statistical analysis can be a small sample size of available time series. This problem is present for example for Polish economy.

To cope with this and some another problems we introduce in this work a new econometric way for business cycles analysis. The theoretical results concerning almost periodically correlated times series (APC for short) are used as a tools to characterize business fluctuations in macroeconomic times series. The whole analysis is non-parametric. Basic assumptions are taken. We assume that the seasonal pattern is integral part of macroeconomic time series and therefore the interaction between seasonal and business fluctuations cannot be ignored. Firstly, a non-parametric methods as difference and centered moving average filters are proposed to eliminate the influence of seasonal and trend effects in macroeconomic time series. Next steps are based on the basic assumption in our work that business fluctuations in macroeconomic time series are the realizations of non-stationary almost periodically correlated class of times series, that is wider then stationary class. By this assumption the business fluctuations in macroeconomic time series are characterized then by the significant (from statistical point of view) parameters of discrete spectra of APC time series. To identify and estimate the parameters of interests as the duration, phase and amplitude of business fluctuations we use statistical test based on subsampling procedure. Using these characteristics we can correctly extract business cycle from seasonally adjusted macroeconomic time series. We use one of the very well known filter: the Hodrick-Prescott (HP for short). The smoothness parameter of HP filter are carefully chosen.

Our methodology can give significant from statistical point of view results in business cycle analysis. We apply our methodology for Polish macroeconomics time series. This time series are relatively short with comparisons with this available for old European countries.

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# Housing versus Financial Wealth Effects on Consumption: A Breaking Down Method of the Dynamic Response of Consumption to an Interest Rate Shock

This paper can be classified together with those trying to estimate the importance of different types of wealth on private consumption.

Here, the dynamic effect of a permanent shock in interest rates on consumption is broken down into five components: (1) The cost of credit effect, (2) the housing wealth effect, (3) the price of housing effect, (4) the financial wealth effect and (5) the feedback effect from the Central Bank.

The decomposition will allow comparing the relative importance of these effects on the final response of consumption. In particular, it will allow estimating not only the magnitude of the short-run effects of the two different types of wealth, but also the magnitude of their medium and long-run effects. These magnitudes might change over time and therefore their relative importance on the total response.

In order to break down the response of consumption into its components, the theoretical framework used in Flores et al. (1998) [Σφάλμα! Το αρχείο προέλευσης της αναφοράς δεν βρέθηκε.] and Pereira and Flores (1999) [Σφάλμα! Το αρχείο προέλευσης της αναφοράς δεν βρέθηκε.] has been adapted.

This theoretical framework has a VAR representation, allows for non stationary variables, cointegration and any kind of dynamic relationship among the variables. Moreover, it allows identifying structural shocks without constraining neither the statistical properties of the variables or the dynamics of their relationships. The identifying assumptions are clearly stated and, with them, the possible weaknesses of the analysis. Finally, an important feature of the model is that the contribution of each component, to the consumption final response, can be computed algebraically.

Our results indicate that both types of wealth have not only significant but very important effects on consumption. Their relative importance change with the term considered, getting their maximum in the long run (i.e.: after five years). None type of wealth has significant contemporaneous effects, but both do present important lagged effects. The same happens with the Price of Housing, which moves as predicted

in the financial accelerator model. Finally, a significant feedback effect, coming from the Central Bank is detected.

#### Xin Liu

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The Economic Consequences of Chinese Power Industry Reform - A Research Based on Co-Integration and Structural Changes

This paper studies the structural reform of the Chinese power industry. In 2002, the China power corporation was splited into two electrical grids and five power generators. Using Chow Forecast Test and One-step Forecast Test, this paper attempts to find empirical evidence for a Cournot equilibrium, where the market changed from monopolistic to oligopolistic. Based on the monthly data of power consumption and GDP, we showed that the long-term relationship between the power consumption and gross domestic products is unstable and the structural change exists in 2002, when the relationship of power consumption and GDP shows different growth patterns before and after it.

#### Stephen P. Magee

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## The Optimum Number of Lawyers: Why the US Has Too Many and Their Cost

More advanced countries have fewer lawyers per capita than middle-income countries. This puzzle is explained by the following fact. Like Spam, lawyers across countries are normal goods (rising with income) up to GDPs of about \$18,000 per capita (Argentina and Chile); thereafter, they are inferior goods and the demand for them declines. The US is the one major exception to this rule. The high level of US wealth also cannot explain the puzzle of why the US has so many Stigler's capture theory of politics is the most likely lawvers. explanation: US lawyers have the highest % of lawyers in national congresses of all advanced countries. This raises the next question which is how many lawyers are too many? Economic growth across samples of both 27 and 33 countries over a 37 year period from 1970 through 2007 shows that 36% of US lawyers are above the international optimum and hence a drag on the US economy. The data also helps quantify both the positive economic effect of US lawyers and their negative effects on the US economy.

The data indicates that the rule of law and US lawyers account for \$3 trillion annually to the US economy but excessive litigation and wasteful redistributive activity subtract \$1 trillion annually from our \$14 trillion economy. The problem of lawyer capture and lobbying corruption generally is attributable to the constitutional flaw in the US and all democracies of an absence of property rights at the group level. Lobbies operate without constitutional prohibitions on their opportunistic redistributive activities, behaviour that is criminal at the individual level.

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### Financial Decisions of Portuguese Micro-Enterprises

This paper aims to analyze the sources of financing and the capital structure of a sample of 131 small companies in Portugal, located in the districts of Vila Real, Bragança, Guarda and Castelo Branco, from 2005 to 2009. The companies were selected at random, and the data collected is based on their reported accounting information. Because the companies had different capital structures, we grouped then into three sub-samples as a function of working capital, negative, near zero and positive.

The importance of funding sources was measured by the dependent variable sources of long and average term, whereas the capital structure was assessed by means of the dependent variables: permanent capital/total liquid assets and non-current debits/total liquid assets. The considered independent variables were: the growth of the company, aging of the asset and return on equity. The mean values of each variable from 2005 to 2009 were used and a multivariate linear regression was used for processing the data.

We verified that the long and average term growth of the companies is financed by sources of funds with the same maturity, concluding that these companies follow the theory of minimum financial balance. The negative relationship between the origins of medium and long-term return on equity, leads us to conclude that these firms follow the pecking order theory. The aging of non-current asset has a positive relationship with the ratio of capital structure, meaning that older firms tend to have a higher prevalence of permanent capital. Additionally, these data allow us to conclude that, although developed primarily for large enterprises, the theories of capital structure are also applicable to micro companies.

#### Luigi Marattin

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Professor, University of Rome La Sapienza, Italy.

## Edgeworth Dependence and Government Spending Multipliers: A Theoretical Analysis

In this paper we derive analytic implicit form conditions for the qualitative analysis of government spending multipliers (on consumption and income) in presence of non-separability between private and public components of aggregate demand. Using the simplest neo-classical flexible price model with accumulation, we show that Edgeworth dependence is not a suitable condition to automatically assess the signs of the consumption and income multipliers, for which a more complex analysis must be carried out. We propose a detailed investigation of the form and the characteristics of the involved utility functions, which are crucial to such evaluation. We also show that if Edgeworth complementarity is strong enough, a public spending stimulus can raise at the same time private consumption and real activity. In order to reconcile our general framework with existing literature, we discuss recent examples of nonseparable functional forms from the standpoint of our results, and argue that their consistency relies on specific assumptions about steadystate points.

#### **Fernando Martins**

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### Price and Wage Setting in Portugal: Learning by Asking

This paper presents an analysis of the findings of a survey on a sample of Portuguese firms. The main aim was to identify some relevant characteristics about the dynamics of prices and wages in Portugal. The most important conclusions are: i) changes to wages are more synchronized than changes to prices; ii) most wages are defined using inflation as a yardstick, even though there are no formal rules; iii) the wages of most workers are defined in terms of sector-related collective agreements; iv) a considerable proportion of workers receive wages above those been agreed under the collective agreement; v) firms make frequent use of other mechanisms to cut payroll costs as a way of overcoming the restrictions imposed by downward nominal wage rigidity.

#### Cesar Mattos

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## **Exclusive Broadcasting Rights of Soccer Games and Competition Policy in Brazil**

The Brazilian competition agency, CADE, settled, by October, 20, 2010, two consent decrees with the most important broadcaster of Brazil, Globo, and with the main soccer league of the country (the "Club of 13") about the sale of exclusive rights of broadcasting of the Brazilian Championship.

Exclusive dealing for a three-year term was hold efficient in the last 13 years, although eliminating "competion in the market" of soccer broadcasting. The positive effects of this practice on the revenues earned by the teams (around 40% of the clubs' actual income) and on the protection of broadcaster investments in "soccer", by avoiding free-riding behavior, were deemed as key in this sector. The characteristic of "two-sided market" also suggested that the exclusive dealing contributed to efficiency by allowing the (exclusive) broadcaster platform to internalize all mutual externalities of advertisers and the audience.

The settlement was based on four points: 1) Globo renounced unilaterally to its "preference clause" in the renewal of the broadcasting contract for the championships that will be held in the period 2012-2014. This clause was deemed as unreasonably costly to "competition for the market" in the five relevant midias: open TV, pay TV, pay per view, mobile and internet. Furthermore, "Clube of 13" committed not to reintroduce this preference clause in the forthcoming contracts; 2) "Club of 13" also committed to award the right of broadcasting the Brazilian soccer championship in a competitive bidding with clear and objective rules; 3) "Club of 13" also committed to offer the contracts for the five relevant midias separately to facilitate entry; 4) The winner of the open TV competitive bidding will be allowed to sub-license its broadcasting rights and the (sub)licensee will have the right to choose the game to broadcast at each round.

The paper aims to explain the main economic elements that explain the design of this settlement in view of the international experience and the particularities of the Brazilian case.

#### Sandeep Mazumder

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## **European Inflation and the New Keynesian Phillips Curve**

The majority of macroeconomists who have studied inflation dynamics in Europe argue that the New Keynesian Phillips Curve provides a good way to describe changes in the price level from the 1970s onwards. However the vast majority of these papers estimate the NKPC using the labor income share as the proxy for real marginal cost. This paper argues that the labor share cannot serve as a proxy for real marginal cost due to its countercyclicality and the lack of labor adjustment costs. Once we account for labor adjustment costs, we are able to derive a new marginal cost proxy that is indeed procyclical, however we find that the NKPC fails to produce coefficients consistent with its underlying structural parameters when a procyclical marginal cost proxy is used. This casts serious doubt whether the NKPC is empirically applicable to Europe or for that matter any other country.

#### Bogdan Moinescu

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### Leading Macroeconomic Indicators for Credit Risk: A Case Study on the Romanian Banking Sector

The paper is an attempt at studying the mechanism whereby the economic activity dynamics impacts the developments nonperforming loan ratio across the Romanian banking system. This is yet another in a series of macro-prudential analysis research works, its backbone being to develop a set comprising five systems of complementary equations for quantifying credit risk, each of them containing one explanatory function for default rates regarding both households and non-financial corporations. The two default rates relating to bank loans are modelled on the basis of some macroeconomic variables via a logistic function, starting from the methodological solution of the reputed conditional risk model referred to as Credit Portfolio View. The major macroeconomic determinants of the default rate for bank loans granted to households are the exchange rate, unemployment rate and credit cost, while in the case of exposures to non-financial corporations the key indicators are economic growth and average lending rates. All these variables were included in various configurations and lags within the five macroeconomic credit risk models described herein.

#### Lourdes Moreno-Mondejar

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### Bidding Behaviour in Tenders of Public Work

This paper studies the bidding behaviour in tenders for road construction, awarded by the DGC (*Dirección General de Carreteras*) of the Spanish Department of Public Works from January, 1989 to December, 2000. To this aim we analyse the relevant factors in the offers presented by the companies in these tenders and in their probability of winning them.

Our departure point is an asymmetric bidding model where that certain companies may have relative advantages to develop a certain project and specific characteristics of the construction firms determine estimations of cost. The asymmetry assumption is becoming widespread in the literature, although the reasons for such behaviour may be very diverse: companies size and location may imply advantages either based on free capacity or on shorter distances between the location of the company and the project. Other reasons are collusion, experience of the bidders, joint bidding, subcontracting and financial solvency.

To our knowledge, there are not precedents analyzing these diverse reasons for differences among bidders together and there only a few have covered public works sector in Spain, especially, the behaviour of competitors. This piece of work establishes a model where different variables are brought together to support the hypothesis that competitive advantages of companies increase probabilities of winning the tender. Results seem to confirm this hypothesis in line with previous literature.

The basic equation of the model relates the offered price by each bidder and tender with different variables meaning costs or the chance to win it. We carry out a regression analysis using ordinary least squares with double fixed effects of company and tender to explore the previous empirical relation. This regression represents a reduced-form function of offers on factors influencing both the company own costs and his rivals'.

In order to increase our knowledge about the firm behaviour in DGC road tenders, we analyze the determining factors of the probability of winning a given tender. We correct potential sample selection bias via Heckman's correction method.

The results obtained have allowed a better understanding of the bidding behavior in tenders of roads construction and they might be applied in many other types of tenders.

#### **Bob Namvar**

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## Does the Recent Extended Tax Cut Help the Sluggish American Economy?

The recent extension of Bush tax cut for all levels of income will slow down the recovery of the US economy. It will lead to more government borrowing to finance its budget deficit which will raise the interest rate and crowd out households and firms that otherwise would borrow to finance their spending. This will reduce aggregate spending and will have a contractionary impact on the American economy. Although there is no general consensus about a solution for recession, there are some economic policy recommendations which can help a contracted economy. Assuming that government deficit does not increase, any policy recommendation leading to increase aggregate spending works in all recessions. Using time series data for 1949-2010 (Q3), the empirical estimates indicate that the propensity to spend is a variable parameter and it depends on the functional distribution of income as suggested by the post-Keynesian theories. Moreover, our estimation confirms the hypothesis that the propensity to spend out of average and below average income (wage and salary) is greater than the propensity out of high income (wealthy). Any policies, such as changes in tax laws, tax cuts, and tax rebates associated with shifting income from average and below average income to high income, will reduce aggregate spending and will have a contractionary impact on the economy. Any policies leading to shifts of income from high income to average and below average income will increase the aggregate spending and have an expansionary impact on the economy. The expansionary fiscal policy in form of the recent extension of tax cut will be more effective if all of the tax cut be devoted only to the average and below average income groups and be financed by increasing tax for high income earners.

#### Olimpia Neagu

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## Human Capital Composition and the Economic Growth of the Regions. The Case of Romania

Human capital is a vital input to economic growth, as key determinant of GDP in classical growth models. Many studies highlighted the direct contribution of human capital stock to the economic growth. But there are less evidence to show if there human capital composition can explain the different economic growth of the regions. The paper has the aim to investigate how the human capital composition differentiates the economic growth of the regions, in the case of Romania.

We will use for the human capital composition of regions the following indicators: the educational attainement level (% of the population aged 25-64 with having completed tertiary education), students in tertiary education as percentage of population aged 20-24, students aged 17 as a percentage of corresponding aged population, researchers as a percentage of persons employed, all sectors, percentage of population aged 25-64 participating in education and training, human resources in science and technology by virtue of occupation, (% of active population), by NUTS II regions of Romania.

We will analyze these indicators in correlation with the real growth rate of regional gross value added (GVA)at basic prices at NUTS 2 level in Romania.

We expect to find a strong correlation between tertiar education, a higher level of lifelong learning and researchers, on the one hand and economic growth of the regions, on the other hand.

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### The Dynamics of Stock Market Volatility in CEE Emerging Markets

This paper examines the dynamics of stock market volatility using daily index returns for several CEE emerging markets: Romania, Hungary, Czech Republic, Poland, Slovenia, Bulgaria, Slovakia, and Croatia. A series of classical GARCH processes will be estimated for modeling the volatility. To assess the persistence in volatility, integrated GARCH models, such as IGARCH, FIGARCH, and HYGARCH, will also be employed. An ARFIMA model for the mean equation will be used to capture the long memory property that is probably valid in the analyzed countries. Another stylized fact to consider is the heavy-tail behavior of the distribution of financial returns. Several leptokurtic distributions, such as the t distribution and the Generalized Hyperbolic Distribution, will be fitted and it will be analyzed whether they are a better candidate than the Gaussian one to model the distribution of stock returns. The validity of each of the model is examined using a battery of non-linearity tests. The performance of the GARCH models in forecasting the volatility is assessed using the mean squared error and mean absolute error.

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# Improve the Competitiveness of Companies to Promote Regional Development and Strengthen Local Economies

Improve the competitiveness of companies to promote regional development and strengthen local economies is the premise of most important development in the globalization era.

International competition forces companies to offer quality goods and services with a strong and consistent differentiation, which can only be achieved through innovation practices, continuous improvement and a permanent identification with consumer preferences.

According to the theory of industrial clusters of the characteristics of companies is the collaborative work, through which it manages to be more competitive in less time and with lower costs. Collaborative work is done through strategic alliances with various actors involved as financial institutions, universities, research centers and technological development, government and business organizations. Also in an atmosphere of cooperation, the dissemination of information and innovative practices increase.

Thus, it seems necessary to promote cluster initiatives in developing countries like Mexico to strengthen their regions, industries and be able to compete more profitably in international trade.

This research aims to present the results of a model to measure the functionality of an industry identified as a potential with a focus on industrial clusters. The model components are measured quantitatively and allow us to identify the weaknesses of the group of companies involved in the industry sweet and chocolate, identified as potential growth area in a local economy of Mexico.

The relevance of this study is it possible to have analytical tools to assess the degree of integration of the companies seeking to operate with a focus on industrial clusters in local economies of developing countries that seek to increase their participation and benefits of international trade.

Note that this study reveals that 87% of companies in the candy and chocolate industries would be willing to participate in an industrial cluster policy. However only 45% of them would be willing to collaborate, cooperate and compete with other institutions that make up the production chain and institutions to support their industry.

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# Business Regulation and Private Investment in Developing Countries: A Simultaneous Equations Model Approach

This paper analyzes the impact of business regulations on private investment in developing countries with a particular emphasis on Sub-Saharan Africa, which is the poorest region in the world. We defined five indicators of business regulation and make use of the principal component analysis methodology to construct composite indexes measuring respectively the regulation of business creation (regulation of entry), the regulation of employment, the regulation of contract enforcement, the regulation of property registration. We also use the closing recovery rate of assets of bankrupt firms as an indicator of the quality of the regulation of business closure. This indicator is also used as a proxy of the private investment irreversibility. The empirical analysis is performed with panel data from 54 developing countries, including 18 Sub-Saharan African countries over the period 2003-2007. Our econometric model is a simultaneous equations model that allows to deal with the reverse causality between the regulation of business and the private investment. We also take into account the impact of the geography of business regulations within neighboring countries. We make use of the three-stage least squares estimator (3SLS) in our econometric analysis. The empirical results show that the complexity of the regulation of business creation and employment has a negative and significant impact on private investment. However, it comes out that the negative impact of the complexity of the regulation of contracts enforcement and property registration is not statistically significant. The closing recovery rate has a positive and significant effect on private investment. We also evidence that the private investment rate in sub-Saharan Africa would have been improved by about 3.6% over the period 2003-2007 if the average quality of business regulation in the region had equaled that of all other regions in our sample, all things being equal. In fact, the complexity of the regulation of property right and the regulation of business closure, among others business regulations constraints, where predominantly responsible for the low level of private investment in Sub-Saharan Africa during the period. These findings bring new empirical evidence on the determinants of private investment in the developing countries, in addition to traditional determinants such as growth anticipations, public investment and macroeconomic instability.

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## Does Foreign Aid Promote Exports in Recipient Countries?

In this paper we focus on bilateral trade relations between donors and recipient countries and, in particular, on bilateral aid's impact on recipient countries' exports. To this purpose, we utilize an augmented gravity model with the usual control variables, adding the bilateral exchange rate to control for changes in competitiveness between trading partners.

We add to the existing literature by considering the impact of different types of aid on the export performance of recipient countries. (1) bilateral aid of a single donor-recipient pair with a supposedly very high positive impact on bilateral trade relations, (2) bilateral aid of the rest of the donors to a single recipient with a possibly trade-diverting (negative) impact on an existing bilateral trade relation, and (3) multilateral aid to a single recipient with supposedly no impact on existing bilateral trade relations. In contrast to other studies that apply regular panel data techniques, we investigate different impacts of aid and its covariates exclusively in the long run.

Our empirical findings indicate that the net impact of aid on recipient countries' exports is positive and that the average return for recipients' exports is about 1.50 US\$ for every aid dollar spent. We argue that "bilateral aid" seems to promote good bilateral trade relations, mutual trust and familiarity and that those factors reinforce bilateral trade, including recipient country exports. We also find evidence that the export-promoting effect of aid differs strongly between recipient countries. The paper also studies aid's contribution to an expansion of exports in different regions of the world. It is found that aid is strongly export-enhancing in Asia and Latin America, but not in Africa.

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## The Role of Money in Economies with Monetary Policy Regimes that Ignore Monetary Aggregates

This paper discusses the important issue of price level determinacy from a theoretical and empirical perspective. The theoretical section relies basically on a dynamic aggregate demand aggregate supply (AD-AS) model. In the context of this model control of a monetary aggregate generates price level determinacy under assumptions that are not very restrictive. In contrast, interest rate pegging and an interest rule in terms of expected inflation produce price level indeterminacy. Only the Woodford-Wicksell interest rate rule is consistent with price level determinacy, but central banks in practice follow inflation targets not price level targets. We also discuss critically the conclusions with respect to price level determinacy of the canonical New Keynesian model as presented by Woodford (2007). In the empirical section, we try to assess the relative importance of money against interest rate in explaining the evolution of the price level in six countries: Australia, Canada, Chile, South Korea, New Zealand and the United States. We first pool quarterly data for these countries for different periods up to 2007, and then proceed to a country by country analysis. The selection of these countries was primarily motivated by the fact that their central banks have given little consideration to monetary aggregates in their monetary policy strategies during the period under study. We find in our simple models that monetary aggregates have, in most cases, positive and significant impacts on the price level, while interest rate frequently exhibit an influence consistent with a "price puzzle". Our general conclusion is that the Quantity Theory continues to be relevant and that monetary policy strategies should not ignore completely the behavior of monetary aggregates.

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## The Behavioural Effects of Tax Changes on Labour Supply

The purpose of this paper is to determine whether changes in income taxes could effectively explain the relatively large differences in labour supply between Europe and the United States. More specifically, I test the hypothesis that, while direct labour supply elasticity may be small, retirement and education decisions magnify the effects of income taxes, leading to a disproportionately large decrease in labour supply over time. However, a more general – and more important – contribution of this paper is to provide an analysis of the importance of behavioral mechanisms through which income taxes affect the elasticity of labour supply; that is, not only understanding how, but also why, the elasticity is determined through changes in behavioural patterns.

In addition to empirically validating the model with retirement and education decisions as the underlying behavioural changes (as originally suggested by Jacobs, 2009), I also enhance it by looking at the effects of the presence of a shadow market, given that it too has been shown to be somewhat sensitive to tax levels.

For the analysis, I use a 2SLS IV simultaneous equation model. Given the problems associated with simultaneity bias and endogeneity, I instrument the independent variable (income taxes) with unexpected tax shocks. Results show that a one percent marginal tax increase does not decrease labour supply, but rather increases it by approximately 1 hour per year. When including the shadow economy, the effects of taxes on labour supply increase slightly to 1.1 hours per annum for a once percent increase in marginal taxes. As such, income taxes by themselves do not explain the hypothesis that they are the primary cause of labour supply differences between the United States and Europe.

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### Workforce Migration and its Effects on Education Outsourcing: The Case of Romania

In the conditions of the international mobility of the labor forces, there is a complex set of incentives to provide an international applicability of a given type of education. But there is a specific cost of providing such education for the countries that face an education outsourcing.

The objective of this study is to provide an assessment of the importance of such cost for an emerging economy such as the Romanian one. We are adopting a modified version of the analytical framework proposed by Poutvaara (2005). This framework describes the link between public education and migration, and can be used to test the migration incentives from Romania to EU15 countries. Further, we estimate the loss of Romanian economy as a result of such a process using a dataset for a 7 year period prior and post-Romanian accession to EU in 2007.

Our results suggest that the case of Romanian emigration falls within the frame model's variant of an *asymmetric federation*. Since the primary and secondary education has no particular country specific orientation and the tertiary public education is organized according to Bologna provisions and requirements, the education provided by the Romanian public system can be considered as being internationally applicable with respect to EU15 countries.

The cost of emigration is estimated as a function of public education expenses, wage taxes and the taxes on final consumption per capita not recovered from or lost due to emigration. An interpretation of the figures is provided and further research directions are suggested. The outcome of the proposed analysis can serve to a better-structured design of the public policies for education considering the societal characteristics of Romania in the context of European Union integration.

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### Russia's Accession to the WTO: Gravity Model Approach

Russia's ascension to the World Trading Organization has been (and still is) a long and winding process. It has sparked heated debates within the nation, polarizing public opinion into two groups of supporters and opponents. However, there is a considerable lack of studies of the effect of the WTO ascension. Our research tries to remedy that by answering the most basic question: how much exactly will Russia's trade flow increase with the membership?

To obtain an estimate, we employ a popular gravity model, which has been extensively used to calculate the effect of various trade unions:

$$\ln EXP_{ij} = \beta_0 + \beta_1 \ln(GDP_i) + \beta_2 \ln(GDP_j) + \beta_3 \ln(POP_i) + \beta_4 \ln(POP_j) + \beta_5 \ln(DIST_{ij}) + \alpha WTO_{ij} + \gamma RTA_{ij} + \delta Z_{ij} + \varepsilon_{ij}$$

where the subscripts indicate trade flows from the exporting country (i) to the destination county (j). The dependent variable EXP denotes the value of real exports, GDP - the level of real GDP, POP - the country's population, DIST denotes the geographical distance between the capitals, WTO=1 if both countries are WTO members and there is no trade agreement, RTA is a set of dummies for regional trade agreements and Z contains other control variables such as dummy for common language, common border, membership in the former USSR and geographical positions. Model is estimated with OLS.

Rose in his resonant paper [1] studied the effect of the WTO this way, only to find it insignificant. In our work we use a different specification of the model with the "pure" WTO effect – increase of trade between countries that are members of WTO but have no other trade agreements with each other (similar to Wei, Submaranian [2]). We estimate the model for a system of 53 countries, which account for 94% of Russia's trade, and obtain a high degree of goodness-of-fit( $R^2 = 0.8$ ) and the expected signs of coefficients. Based on the model, we conclude that ascension will yield an average 30% increase of Russia's trade with WTO members.

<sup>[1]</sup> Rose, A.K., 2002a, "Do We Really Know that the WTO Increases Trade?" NBER Working Paper No. 9273

<sup>[2]</sup> Subramanian, A., and Shang-Jin Wei, 2003, "The WTO Promotes Trade, Strongly but Unevenly," IMF Working Paper 03/185

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### Methods of Quantifying Risks in Banking Activity

Operational risk is for a bank the risk generated by internal and external events, considered for the first time as a very important risk in 2001, by the Basel Committee. The representation of how the losses are distributed for banks is made by using a typical distribution of losses, that results from combining the impact of the loss-frequency, that may produce "expected losses" with a high rate and a low impact, "unexpected losses" with a medium frequency and impact or loss caused by tension "stress loss" with a low frequency and impact. The Basel Committee requires banks to build an array for the operational risk analysis in a model whose aim is to calculate the Operational Value-at-Risk using the estimated distributions for each business line/risk factor from the array. The existing methods for quantifying operational risk differ, depending on the complexity and risk sensitivity: The Basic Approach (BIA), Standard Approach (SA), and Advanced Measurement Approach (AMA). All the advanced measurement approaches take into account the experiences of banks' operational risks and their causes. To use advanced methods successfully, banks must control operational risks through analysis and evaluation. Advanced Measurement Approach (AMA) is the most sophisticated computer model that allows the bank to determine its operational risk factors facing. The advantage of using this approach is that banks can more easily identify operations that result from operating losses and demonstrate the progress made in operational risk management procedures. In this paper we use the approaches for operational risk for credit institutions in Romania. Therefore, we made a statistical survey on a sample of 17 banks and financial intermediaries in Romania. Most banks that responded indicated that they use both the implementation of internal control procedures and prevention, staff training and risk transfer through insurance.

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# Macroeconomic Stability and FDI Flows in the Time of Crisis: Case Study of Certain Old and New Member States

The purpose of this article is to examine the relationship between FDI and national economic policy in the time of crisis. By joining the EU and the eurozone some participating countires gave up certain parts of their political and economic soverenity, while others for variouis reasons didn't participate in the eurozone. We assume the existence of certain differences between those groups of countires, which are caused by the possibility to accomodate the effects of international financial crisis through authonomously run monetary and fiscal policy. The proposed panel econometric model goes as follows:

#### FDI=a+bInfl+cEurzo+dReg+eDebt+fTrade+gGDP+3

**FDI** is dependent variable which stands for foreign direct investments inflows to specific country or groups of countires;

**Infl** is the annual inflation rate in the host country at period t, to control for macroeconomic instability;

**Reg** is varibale which captures the benefits of membership of regional economic integration (REI) for host's country FDI attraction and it is the summ of the GDP of all countires in REI. The larger the REI more possitive effects on FDI attraction;

**Euro** is dummy variable which shows how the membership in eurozone influences fdi inflows. The value is 1 if the country is member of eurozone otherwise it is 0;

**Debt** is variable representing the level of public debt;

**Trade** is the variable representing the sum of the host country's exports and imports. It is a proxy of the openness of the host economy.

**GDP** represents GDP of the host country.

We expect to find positive correlation between low inflation, low public debt, positive trade ballance and membership in euroznone.

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# Did Recent Labour Market Reforms Increase the Matching Efficiency of the Short-Term and the Long-Term Unemployed in Germany?

As a reaction to high and persistent unemployment in Germany, the largest labour market reforms in post-war history were implemented in three waves between 2003 and 2005. We analyse the impact of the reforms and its coincidence with an economic expansion on the efficiency of matching out of unemployment. The decrease of unemployment by 30 percent and of long-term unemployment even by 40 percent during the latest economic upswing that emerged after the reforms is outstanding. We try to isolate reform effects and a pure business cycle effect in an empirical matching function. Such approaches based on the theory of matching have been used recently to investigate the impact of labour market reforms on the macroeconomic level (Fahr/Sunde 2009, Destefanis/Fonseca 2007, Dmitrijeva/Hazans 2007). As an augmentation to common stock-flow matching functions we distinguish between short-term and long-term unemployment. We apply three stage least squares estimation (3SLS) for our equation system.

Our estimation results show, that the labor market reforms in total, but especially the first two waves (deregulation of labour market segments, more pressure on the unemployed and re-organisation of the Federal Employment Agency) increased matching efficiency by about 10 to 15 percent. The third wave (combination of unemployment and social assistance) had a slight negative impact only on matches from short-term unemployment, probably because many hard-to-place people entered unemployment at the beginning of 2005 or because the positive effect out of the second wave tends to decline over time. The inclusion of a business cycle variable provides direct evidence for the pro-cyclicality of the matching efficiency. However, there is no evidence that the coincidence of economic expansion and reform effects contributes to explaining the sharp decline of unemployment. Finally, the long-term unemployed benefitted from the reforms above average.

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### House Purchase versus Rental in Spain

One of the most salient features of the Spanish housing market, compared to other European economies, is its relatively low rental share. This may be partly attributed to the existence of fiscal distortions in Spain favoring ownership. In this paper, we simulate the potential effects of two measures aimed at homogenizing the fiscal treatment of ownership and renting: eliminating the existing subsidy to housing purchases, and introducing a comparable subsidy to rental payments. We do so in the context of a DSGE model featuring a market for owner-occupied and rented housing, as well as collateral constraints in loan markets. We find that both measures raise the rental share by a similar amount. However, whereas eliminating the subsidy to housing purchases reduces real house prices and construction activity substantially, introducing a subsidy to rentals has small effects in the opposite direction.

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## The Gender-Specific Effect of Working Hours on Family Happiness in South Korea

This paper uses detailed longitudinal data from the Korean Labor and Income Panel Study (KLIPS) from 1998 to 2008 to analyze the relationship between working hours and family happiness in Korea.

The Korean labor market is characterized by long working hours, a significant gender gap in earnings, and relatively low female labor force participation rates, in particular after marriage. While the latter rates increased after the Asian Crisis of 1998, from 2002 the trend is stagnating. Moreover, average working hours reduced significantly after 1998, but only a slow reduction could be found after the introduction of the 5-day working week in 2004.

Running fixed-effects ordered logit models on married couples with children, we analyze hours, job, and life satisfaction separately for women and men. Our findings indicate that Korean women report highest life and hours satisfaction when staying at home or working part-time (1 to 30 hours per week). Having to work longer than 30 hours decreases their happiness significantly. However, women's job satisfaction is lowest when working only part-time. This might be explained by the fact that most part-time jobs in Korea are of low pay and low responsibility.

Korean men, in contrast, are worst off when staying at home. Our evidence suggests that working is strongly related to higher happiness for men. Both life and hours satisfaction peaks at 40 to 50 hours per week. For both sexes, cross-partner effects are strongly significant and equivalent to their partner's own preferences. Thus, men prefer their women to stay at home or work only part-time, while women are most happy when their husbands work 40 to 50 hours.

These findings are particularly interesting in comparison to similar studies on other OECD countries like Great Britain or Australia where similar studies were carried out (Booth and van Ours, 2008 & 2009). Since mean working hours in Korea today are still well above 50 hours per week, future cuts in working hours will not only raise overall happiness but also female labor force participation rates. The latter can further be raised by an increase in high-quality part-time jobs.

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### An Analysis of Human Capital on the Brazilian States Income Level: MRW versus Mincer

Human capital, productivity and physical capital are considered the main factors in the economies' GDP per capita determination. According to the neoclassical approach, human capital accumulation explains about a third of the variation in per capita income across countries. However, some macroeconomic studies fail to find a relationship between human capital and income level and/or economic growth, such as PRITCHETT (2001) and ROMER (1990). There are several reasons for these results, and three of them are the most relevant. The first one is the use of an incorrect functional form to measure the relationship among the variables. The second one is the inadequacy of the proxy used to measure human capital. Finally, in many empirical studies the appropriate method to estimate the theoretical model is not employed. The present study focuses on the first and third above mentioned problems. Because the object of analysis is only one country (Brazil), it is expected that human quality difference among the Brazilian States is lower than international comparison studies. Additionally, as emphasized by ISLAM (1995) and SACHS and WARNER (1997), when the human capital quality aspect is not considered, there is a decrease in the correlation between this variable and income level. Because we have found out a positive correlation between the above mentioned variables in the empirical analysis, the consideration of a human capital quality proxy would make the results even more evident. The marginal return of education also has been estimated and we have analyzed the relevance of human capital on GDP per capita determination through a variety of estimation methods, for the 1980-2002 period. The empirical results rejected the neoclassical specification with human capital in favor of the mincerian's specification. The estimated marginal return of education is 15% and the empirical findings support the human capital theory.

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## Right on Target: Exploring the Determinants of Inflation Targeting Adoption

Inflation targeting has recently become a very popular monetary policy strategy. Among academic researchers and central banks' policy-makers, there is a growing interest in understanding the suitability and feasibility of inflation targeting in advanced, as well as emerging and developing countries. This paper seeks to contribute to this widely discussed economic policy issue by analyzing the determinants of inflation targeting adoption.

While theoretical literature describes several relevant preconditions for adoption, empirical evidence on their actual significance remains incomplete. Based on the formulated hypotheses, this paper empirically examines the effects of macroeconomic, external, fiscal, financial, and institutional factors on the choice of inflation targeting. The study applies a panel probit model for the dataset of 60 countries in the period 1985-2008.

The findings suggest that countries with the history of low inflation and GDP growth, high output and exchange rate volatility, with a floating exchange rate regime, and strong fiscal discipline are more likely to adopt inflation targeting. In addition, the probability of adoption is higher for countries with market-based financial systems, and also with less developed and smaller financial markets. Moreover, institutional and macroeconomic determinants of inflation targeting adoption are more significant for emerging and developing than for advanced countries.

This paper contributes to the existing literature by expanding the analysis of inflation targeting preconditions to several groups of factors and different subsamples of countries. The policy implication is mainly for emerging and developing countries, which are recommended to prepare well for the adoption of inflation targeting through improving their macroeconomic and fiscal performance, institutions, and financial markets.

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### Green Tax and its Effects on Economic, Social and Environmental Indices in Khorasan-Razavi Province, Iran

One of the most important government challenges is the environmental crisis. Macro-economic policies can make variations in the environmental system function. These variations, especially viewpoint emission, can be very important. Financial policy and taxes are two of the major macro-economic policies. Green taxes are important as a major implement in achieving sustainable development. In this study, Indirect taxes (taxes on fossil fuels) have been considered, and have been tried using an input-output table of the Khorasan-Razavi province in 2001, specifically looking at the amount of pollutants and greenhouse gas emissions, to survey the welfare and environmental effects on the green tax for the consumer sectors of energy in Mashhad. For this purpose, using the computational general equilibrium model, welfare changes with and without environmental impact, changes in demand for fossil fuels and changes in pollutants for the eleven tax scenarios have been studied. For consideration of emissions, variations of pollutants (CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>X</sub>, CO, CH and SPM) are calculated with variations of fossil fuels. To this end, two environmental factors -health and heating- have been considered. The emissions depend on each sector's use of each type of fossil fuel, i.e. each sector has a sector specific emission factor for each type of fuel used. The results indicated that taxation on fuel reduced intermediate and consumer demand for fossil fuels. If the environmental effects are considered, in the all scenarios, the welfare changes were positive and welfare increases as the tax rate increases; in the other words, the increasing taxes on fossil fuels is desirable. The highest growth rate of welfare is the 15% tax rate (scenario IV). Under the 15% tax rate on fossil fuels, welfare has decreased 0.1%, if the environmental effects are not considered. Furthermore, CO2 ,SO2, NOX, CO, CH and SPM emissions have decreased 4.7%, 2.7%, 3.5%, 3.4%, 4.8% and 2.9% respectively, and by Abstract Book from the 6th Annual International Symposium on Economic Theory, Policy and Applications, 25 - 28 July 2011, Athens, Greece.

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### How Normal is Part-time Work in the Netherlands?

The high incidence of part-time work in the Netherlands suggests that part-time work has to an important extent been 'normalized' in the Dutch labour market, and possibly more so than in other countries. This paper empirically assesses part-time work in the Netherlands and examines how similar part-time work has become to full-time work. Consistent with the high part-time employment rates and structural/institutional factors driving these rates we find that part-time employment is widespread in the Netherlands, is not limited to low-skilled occupations, and male part-time work is not the exclusive domain of younger or older workers.

We introduce an index of dissimilarity (ID) to assess part-time work in terms of sectoral and occupational distributions, and find that segregation between part-time and full-time employment is limited, at lower levels as segregation by sex. If Dutch definitions of employment and part-time work are adopted instead of international definitions, the occupational IDs (part-time work) for both men and women are even lower. Segregation between part-time and full-time work for men and women in the Netherlands also appears low in comparison with Greece and the United Kingdom, if the high proportion of youth part-time workers in the Netherlands is taken into account.

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## Optimal Tax and Expenditure Policy in the Presence of Migration

This paper concerns optimal income taxation in the presence of emigration. The basic model is a two-period model where all agents are identical and live in the home country in the first period of life, but where some emigrate at the end of the first period. It is shown that with a binding credit restriction, the government will tax labor income in the first period at a higher rate than otherwise, whereas the labor income tax in the second period is unaffected by emigration. With heterogeneous agents, the labor income tax in period two will be affected by emigration.

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### Estimating Value at Risk Using GARCH and EGARCH Models

Value at Risk (*VaR*) is considered to be one of the most important measures of market risk and it has been widely used for financial management by institutions including banks, regulators and portfolio managers. There is a method based on GARCH-type models have also been consistently used in the estimation of Value at Risk. A crucial factor for the accuracy of the *VaR* estimates relies on the underlying measure of volatility. Another problem that arises in the estimated *VaR* is finding a suitable performance measure that has the capacity to evaluate the performance of the estimates correctly.

Value at Risk models (*VaR*) have become a very popular tool for measuring the market risk of a portfolio of financial assets. *VaR* represents the decline in the market value of an asset or a portfolio of financial assets that can be expected within a given time horizon with a given probability.

This paper examines three GARCH-type models in the Value at Risk estimation. These models are applied to an optimized internally diversified portfolio, comprised of three benchmark indexes from three different countries (Romania, UK and USA) in order to assess the overall performance of the daily VaR estimates at various probability levels (1%, 2.5% and 5%). Study results indicate that all symmetric models outperform the asymmetric ones, both for normal and Student's t distributions. We also find that GARCH(1,1) underestimates 1%.

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# Effects of the Field of Higher Education on the Prevalence of Over-Education in European Countries

During the last decade, the number of higher education institution (HEI) graduates in European countries was significantly increasing, leading to an intensification of competition in the labour market for the tertiary-educated. The growth rate of the number of graduates, however, differs dramatically across fields of study. Thus, from policy perspective, it becomes of increasing importance to understand how the labour market situation of HEI graduates depends on their field of study. Nevertheless, to our best knowledge, there have been no cross-country comparative studies on the impact of field of study on the likelihood of being over-educated in Europe.

This paper aims to fill this gap by analysing how the likelihood of over-education of tertiary-educated employees depends on their field of study and whether and how it depends on country and age cohort. We use the data from the European Social Survey (ESS), rounds 2-4 (conducted in 2004-2009) and apply the OECD standard definition of over-education, where an HEI graduate is considered overeducated if his occupation does not belong to the first three ISCO groups. An important advantage of ESS data is that they allow us to take into account partner's and parental effects. We use the education level and occupation of the respondent's partner to control for assortative matching. Education levels of both of the respondent's parents and their occupation when he/she was 14 years old are used to control for family background (or social class), which serves also as a proxy for the respondent's ability. To analyse the determinants of over-education, we use multilevel mixed-effects logistic regression.

Preliminary findings show that in all European regions, graduates in Education Sciences and Medicine have a lower likelihood of being over-educated compared to Economists, other things equal. Graduates in Science have a significantly lower likelihood of over-education only in the Southern Europe, while graduates in Engineering have a lower likelihood in Northern and Southern Europe, no significant difference from Economists in the Eastern Europe, and a higher likelihood than Economists in the Western Europe.

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### A Research on the Difference, Equilibrium and Evolution of the Wage in Inter-province: An Analysis Based on the Equilibrium Theory

The wage of the Official is one of the focus issues in the public and labor economics. As we all know, there are great gaps of the economy between the provinces in China. Therefore, the wage of the officials between the provinces is quite different from each other. Then an issue arises. The wage of the official should be equilibrium in what level. Based on the equity theory of Adams and the bureaucrats utility model of Niskanen, together with the modified human capital model of Mulligan and Sala-I-Martin, the author design a model of equilibrium wage and calculated the equilibrium wage of each province and its evolution. The results show that the difference between the real wage and equilibrium of the West of China is bigger than that of the East of China. The gap between the real wage and the equilibrium level are decreasing during the recent years after the adjustment of the officials' wage. We can see that the results provide a conference for the regulation of officials' wage.

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#### How Wide are the Provisional Borders in China?

The pioneering work of Engel and Rogers (1996) has fostered a large literature to examine the quantitative importance of national borders as a barrier to international trade flows relative to distance. Apparently, the enormous size of the "border effect" revealed in this literature is puzzling, and is in fact counterfactual for many economists. Indeed, based on their extensive survey of the literature, Obstfeld and Rogoff (2000) list the "border effect" puzzle as one of the main puzzles in international macroeconomics, which deserves further research. The current paper attempts to shed light on the "border effect" puzzle by examining intra-national/ provisional borders in China. As developing economies in general and transitional economies in particular are more likely to face problems such as weak market institutions, high information costs, local protectionism, etc, the study of intra-national border effects of these countries reveals not only the potential costs associated with barriers to trade but also the extent of market integration in these countries. Using high frequency price data for 33 specific products sold in 117 cities across 26 Provinces in China over a period of 6 years, our main results show that the provincial border effect within China is rather small, if exists. Our empirical evidences therefore indicate high level market integration within China.

#### **Ouidad Yousfi**

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## Leveraged Buy Out: Does the Arrival of New Targets Increase the Agents' Incentives?

This paper studies the financial capital structure in Leveraged Buy Out (LBO) acquisitions. It analyzes how the arrival of new targets improves the agents' incentives when there is asymmetric information.

The entrepreneur and the LBO investor exert unobservable efforts to enhance the productivity of their project. We show that there are no debt-equity contracts that induce the entrepreneur and the LBO investor to provide the first-best levels of efforts. The decision of the LBO fund to exit prematurely the entrepreneur's project increases the agents' incentives. We also find that the entrepreneur's incentives increase with the amount of debt and when the LBO investor promises her the whole compensation cost.

#### Chun Yuan

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## Does the Current Wealth Allocation Hinder or Promote Further Economy Development in China?

Without doubt, China has been the most rapidly growing economy in the world over the past 3 decades. However, nobody can deny the fact that the significant achievement was considerably due to the process of the world market gradually identifying and valuating the market value of already existing physical and human capitals accumulated during the Maoism and even earlier eras. In the process of China gradually unveiling itself in front of the world and introducing the market-economic system, some rise in income disparity was inevitable, but the rural-urban income disparity may have been exacerbated rather than mitigated by a number of intended national funds allocation policies which emphasized allocating the bulk of national funds to the urban residents while only leaving the negligible remainder to the rural residents. Additionally, various economic and even super-economic restrictions on rural-urban migration aiming to maintain the vested interests of urban residents, which are essentially equivalent to extracting migration tax in effect, have further limited opportunities of the poor rural population to struggle out of poverty successfully. The government's recent policies shift to encourage migration, fund education and health for poor households in rural areas, and rebalance the economy away from investment and exports toward domestic consumption and public services, should help reduce the rural-urban income disparities. However, questions arise here: will the policy adjustment damage the economic efficiency? Does transferring more national funds from the rich to the poor exert positive or negative influence on the economic growth? In this chapter we will try to answer this question by using the data from the China Statistical Year Books. We argue that the peasants' poverty problem is mainly due to the inappropriate funds allocation policies which emphasized allocating the bulk of the national funds to the urban residents, especially those residing in the metropolitans. These inappropriate funds allocation policies might have reduced rather than promote the economic growth in the past. It is the high time, we argue, for the central government of China to adjust its national funds allocation policies and advocate a both just and efficient economic development pattern.

#### **George Zestos**

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### The Sovereign European Debt Crisis

The study aims to investigate the present financial crisis in Europe and particularly of the group of 27 European countries that are members of the European Union (EU). More attention will be focused on the group of those EU countries that adopted the single European currency, the Euro, as the crisis poses a significant challenge to the very survival of this currency. The European crisis is considered to be an extension of the US Subprime Mortgage Crisis that was transmitted to Europe via trade liberalization, economic integration and contagion.

The paper inquires which countries were affected the most, and why. To answer these questions it is important to present and analyze the economic monetary and fiscal position of the European countries before and during the financial crisis in conjunction with their membership status to the EU and the Eurozone. For this reason, countries will be evaluated and classified according to their economic performance during the crisis. Pertinent economic statistics will be presented for two distinct groups of countries; those that suffered the most and are still threatened by the crisis and those that were not affected. Statistical analysis aims to provide evidence why most of the Southern EU countries and Ireland were negatively affected whereas Northern EU countries were not. In addition, the study will address the question of why the financial crisis of the EU has not been resolved yet, although Greece is on the brink of bankruptcy and other European countries such as Ireland, Portugal, and Spain are feared to follow. The answer to this question lies in the decision making process of the EU and the Eurozone as was laid out in the founding treaties.

Furthermore, the European financial regulatory system is studied and the role of various important financial institutions and instruments in the formation and intensification of the crisis is analyzed. Special attention is also given to the role of the Credit Rating Agencies (CRAs), and financial derivatives such as Credit Default Swaps (CDS) and Hedge Funds. The study examines all measures and programs undertaken by the EU and the EU members jointly with the IMF and the European Central Bank to protect individual EU countries from the crisis. Lastly, policies and programs will be recommended to lead the EU and the Eurozone out of the crisis and save the Euro.

#### Fang Zhang

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### **Introduction to Chinese Housing Market**

My research topic is about Chinese housing market and comparing it with other developed region's and country's housing market, such as Hong Kong and USA. As one of the major parts of my research, 'Introduction to Chinese Housing Market' is very essential literature background information for the further research. In this part, I summarised systematically the development history of Chinese housing market and theoretically analysed the factors determining Chinese house prices. This part is meaningful to figure out why the Chinese housing market can keep booming and what forces drive up Chinese house prices, even during the global depression period and under the governments' pressure. Based on these background of Chinese housing market, through panel data and panel VAR model, I aim to figure out: whether the factors affecting Chinese house prices are similar with other countries, such as Hong Kong or USA; how these factors affect house prices in China and how strongly and quickly they affect; and what are the different impacts of these factors on different regions in China.