Financial Crises, Impact and Response: The View from the Emerging World

Edited by Peter Koveos

ATINER 2012

Financial Crises, Impact and Response: The View from the Emerging World

Edited by Peter Koveos

ATINER 2012

Financial Crises, Impact and Response:
The View from the Emerging World

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

ISBN: 978-960-9549-71-4

All rights reserved. No part of this publication may be reproduced, stored, retrieved system, or transmitted, in any form or by any means, without the written permission of the publisher, nor be otherwise circulated in any form of binding or cover.

Printed and bound in Athens, Greece by ATINER

8 Valaoritou Street, Kolonaki 10671 Athens, Greece www.atiner.gr

©Copyright 2012 by the Athens Institute for Education and Research. The individual essays remain the intellectual properties of the contributors.

Table of Contents

1.	Financial Crises, Impact and Response: The View from the Emerging World: An Introduction Peter Koveos	1
	Part A: Crises and Reforms	
2.	Great Depression versus Disorganization Gradual versus Shock Therapy	15
3.	Iulia Igescu The Character and Directions of Restructuring of Ownership in the Polish Economy	29
4.	Maciej Kozłowski Financial Crisis Management – An Econometric Approach of the Romanian Market	43
5.	Stelian Stancu and Oana Madalina Predescu The Impact of the World Financial Crisis on the Romanian Advertising Market	55
6.	Irina Toboşaru, Irina Nicolau and Mihaela Stănoiu The Impact of Financial Crisis on Investors' Risk Aversion: Case Study on Romanian Capital Market Christian Păun, Radu Mușetescu and Julian Brașoveanu	69
	Part B: Financial Markets and Institutions: Operations and Risk	
7.	The Divide Between Developed and Emerging Capital Markets: Can we discriminate?	89
8.	Guoma Alrgibi, Mohamed Ariff and Louis Murray Determinants of IPO underpricing –The Evidence from Poland Tomasz Jewartowski and Joanna Lizińska	103
9.	Use of Coskewness and Cokurtosis in Determining ADR Risk	115
10.	Robert Boldin, Mukesh Chaudhry and Louis Palacios Dividend Policy: Some Evidence from the Nairobi Stock Exchange	127
11.	Nelson Maina Waweru and John M. Parkinson Empirical Analysis of Financial Institutions' Loans Peter Koveos and Yimin Zhang	137
12.	The Turkish Banking System After the 2007 Global Crisis	151
13.	Nuray Ergül, Sezayi Dumanoğlu and Halil İbrahim Alpaslan Offshore Financial Centers: Recent Evolution and Likely Future Trends Roberto Santillán-Salgado	161
	Part C: Foreign Exchange, Investment and Trade Issues	
14.	Sudden Stops and the Real Exchange Rate in Hong Kong: A Two-Sector Neoclassical Framework Paulina Etxeberria Garaigorta and Amaia Iza	175

15.	Foreign Direct Investment in Spain: An Empirical Study Eva Romero Ramos, José María López Pina and Eva Popero Moriones	197
16.	and Eva Ropero Moriones Elasticities of Turkish Trade	213
10.	Ayla Oğuş Binatli and Niloufer Sohrabji	213
	Part D: Tax and Monetary Policies	
17.	Tax Policy in the Financial Crisis	229
18.	Yun Ding The Structure and Compliance Cost of the EU Member States' Tax Systems	239
19.	Edyta Małecka-Ziembińska Sectoral Effect of Monetary Policy in Malaysia: Relative Importance of Monetary Transmission Mechanism Channels Mohd Azlan Shah Zaidi	257
	Part E: Economic Policy and Social Welfare	
20.	Flexible System of Direct Democracy Ensures Effective Economic Policy in the Czech Republic Petr Chmelik	285
21.		297
22.	Efficiency of the European Welfare Regime	341
	Kosta Josifidis, Novica Supic and Pucar Beker	
23.	Impact on Welfare of Country Heterogeneity in a Currency Union Carla Soares	359
	Part F: Methodology and Modeling Issues	
24.	Neural Networks Principal Component Analysis (NNPCA) for Estimating the Generative Multifactor Model of Returns in a Statistical Approach to the Arbitrage Pricing Theory (APT): Evidence from the Mexican Stock Exchange Rogelio Ladrón de Guevara Cortés and Salvador Torra Porras	385
	PART G: Management and Entrepreneurship	
25.	The Creation of Jobs for the Professional Development of Individuals over 40 years old: Entrepreneurship Sonia Benito Hernandez and Jose Ramos Rodrigo	411
26.	Transmission Mechanisms of Macroeconomic Impact on CEE Corporations	431
27.	Cristina Maria Triandafil and Petre Brezeanu Diversity of Innovation Strategies of Non-cumulative Firms: The Case of the Czech Republic, Hungary and Poland Anna Wziątek-Kubiak, Ewa Balcerowicz and Marek Pęczkowski	443

28.	An Empirical Analysis on Industry Attractiveness in Emerging Markets and the formation of Business Groups Eduardo Jarque and Kiyoaki Shiotsugu	479
	PART H: Industry Studies	
29.	Project-oriented Marketing Cooperation between Industrial Partners in the B2B Market Tatiana Čorejová and Corinna Ludwig	493
30.		507
31.	1	519
32.	1	535

List of Contributors

Halil İbrahim Alpasla, Instructor, Marmara University, Turkey

Guoma Alrgibi, Head of Banking and Finance Department, University College Dublin, Ireland

Mohamed Ariff, Lecturer, Monash University, Australia

Ewa Balcerowicz, Researcher Researcher at CASE-center for Social and Economic Research, Poland

Pucar Beker, Assistant, University of Novi Sad, Serbia

Ayla Oğuş Binatli, Associate Professor, Izmir University of Economics, Turkey

Robert Boldin, Professor, Indiana University of Pennsylvania, USA

Iulian Brașoveanu, Assistant Professor, The Bucharest Academy of Economic Studies, Romania

Petre Brezeanu, Professor, Academy of Economic Estudies, Romania

Mukesh Chaudhry, Professor, Indiana University of Pennsylvania, USA

Benaissa Chidmi, Assistant Professor, Texas Tech University, USA

Petr Chmelik, Researcher, Masaryk University, Czech Republic

Tatiana Čorejová, Professor, University of Žilina, Slovak Republic

Rogelio Ladrón de Guevara Cortés, *Professor-Researcher, University of Veracruz, Mexico*

Yun Ding, Professor and Director, Tax Education and Research Institution, Capital University of Economics and Business, China

Sezayi Dumanoğlu, Associate Professor, Marmara University, Turkey

Nuray Ergül, Assistant Professor, Marmara University, Turkey

Paulina Etxeberria Garaigorta, PhD Student, The University of the Basque Country, Spain

Sonia Benito Hernandez, Visiting Professor, Universidad Europea de Madrid, Spain

Iulia Igescu, Senior Economist, HIS Global Insight, Germany

Amaia Iza, Tenured Professor, The University of the Basque Country, Spain

Eduardo Jarque, PhD Student, Kyushu University, Japan

Tomasz Jewartowski, Assistant Professor, Poznań University of Economics, Poland

Kosta Josifidis, Full Professor, University of Novi Sad, Serbia

Ioannis Kallianotis, Professor, University of Scranton, USA

Vaia Karapanou, PhD Researcher, Erasmus University Rotterdam, the Netherlands

Peter Koveos, Professor, Syracuse University, USA

Maciej Kozlowski, Assistant Professor, Institute of Economics and Academic Teacher and Researcher, University of Lodz, Poland

Joanna Lizińska, Teaching and Research Assistant, Poznań University of Economics, Poland

Corinna Ludwig, Senior Sale Manager, MERCK, KGaA, Darmstadt, Germany Jaime Malaga, Associate Professor, Texas Tech University, USA

Edyta Malecka-Ziembińska, Lecturer and Researcher, Poznań University of Economics, Poland

Henrique Monteiro, Lecturer and Researcher, ISCTE, Portugal

Eva Ropero Moriones, Professor, Universidad Europea de Madrid, Spain

Olga Murova, Assistant Professor, Texas Tech University, USA

Louis Murray, Lecturer, University College Dublin, Ireland

Radu Mușetescu, Assistant Professor, The Bucharest Academy of Economic Studies, Romania

Irina Nicolau, Assistant Candidate, The Bucharest Academy of Economic Studies, Romania

Louis Palacios, University of Pennsylvania, USA

John M. Parkinson, Professor, York University, Canada

Cristian Păun, Assistant Professor, Academy for Economic Studies, Romania Marek Pęczkowski, Lecturer, Faculty of Economic Sciences, Warsaw University, Poland

José María López Pina, Professor, Universidad Europea de Madrid, Spain Salvador Torra Porras, Professor-Researcher, University of Barcelona, Spain

Oana Madalina Predescu, PhD Candidate, Academy of Economic Studies, Romania

Eva Romero Ramos, Professor, Universidad Europea de Madrid, Spain Jose Ramos Rodrigo, Visiting Professor, Universidad Europea de Madrid, Spain

Roberto Santillán-Salgado, Full Professor, EGADE-Tec of Monterrey, Mexico Kiyoaki Shiotsugu, Professor, Kyushu University, Japan

Carla Soares, Economist, Bank of Portugal, Portugal

Niloufer Sohrabji, Assistant Professor, Simmons College, USA

Stelian Stancu, Professor, Academy of Economic Studies, Romania

Mihaela Stănoiu, Assistant Candidate, The Bucharest Academy of Economic Studies, Romania

Novica Supic, Assistant, University of Novi Sad, Serbia

Irina Toboșaru, Lecturer, "Dimitrie Cantemir" Christian University, Romania

Cristina Maria Triandafil, PhD Candidate, Academy of Economic Studies, Romania

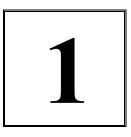
Louis Visscher, Associate Professor, Erasmus University Rotterdam, the Netherlands

Nelson Maina Waweru, Associate Professor, York University, Canada

Anna Wziątek-Kubiak, Professor, Head of Department, Academy of Business in Dabrowa Górnicza, Poland

Mohd Azlan Shah Zaidi, Senior Lecturer, University Kebangsaan Malaysia, Malaysia

Yimin Zhang, Professor, University of Shanghai for Science & Technology, China



Financial Crises, Impact and Response: The View from the Emerging World: An Introduction

Peter Koveos, Syracuse University, USA

The papers included in this Volume were presented at the ATINER Finance and Economics Conferences during the summer of 2009. The global economy has been in the midst of a grippling crisis for about a year now! The impact has been felt on most countries and industry sectors. It has been felt by public and private organization; by dometistic and international institutions; by for- and not-for-profit entities; by investors, employers, employees and consumers. Many have characterized the crisis as the biggest economic calamity since the Great Depression of the 1930s.

The severity and duration of the downturn have given rise to several questions. How did this happen? Was it preventable? Can it happen again? When does the global economy hit bottom? Are we poised for a double dip? What will be the long term impact on the nature and structure of the global economy? Can the U.S. maintain its economic supremacy, or has the damage been too much to bear? As is usually the case, attempts to answer these and other questions have produced variable and oftern contraditory answers.

Contributions to the Volume are presented in eight separate sections. These sections are: Crises and Reforms; Financial Markets and Institutions; Foreign Exchange, Investment and Trade; Tax and Monetary Policies; Economic Policy and Social Welfare; Methodology and Modeling; Management and Enrepreneuship; and Industry Issues. A short summary of each paper included in each section follows. These summaries should in no way be considered as substitutes for reading, enjoying and learning from the full paper.

The articles provide the reader with a unique view of the crisis and related issues primarily from the perspective of emerging economies in Europe, Africa and Asia. They thus provide a valuable complement to the plethora of studies based on the experiences of the developed world.

Crises and Reforms

Iulia Igescu's work is inspired by the differences between the evolution of output in central-eastern and that of eastern European countries during the transition period that began in 1989. In *Great Depression versus Disorganization: Gradual vs. Shock Therapy*, the author considers the economic performance of the central-eastern European countries (CEEC; the Czech Republic, Hungary, Poland, and Slovakia and that of the eastern European countries (EEC; Bulgaria and Romania). In the CEEC, the depth of recession (lowest output level per 1989 values) was between 15 and 25 percent. Output reached its pre-1989 levels in two to four years. Because losses were above the level of a normal recession, this output path has been termed Disorganization. In the EEC, the depth of recession was around 30 percent. It was more persistent, taking the EEC economies another seven to ten years to return to their pre-transition output levels. According to the author, their output dynamics is similar to a Great Depression

Maciej Kozlowski discuss *The Character and Directions of Restructuring of Ownership in the Polish Economy*. The characteristics of the Polish economy include both objective and subjective premises in the development of the private sector and a strong motivation of individuals to launch their own business activities. The objective premises underpinning this development include public dissatisfaction with the system, overly large size of Polish enterprises, lack of SMEs and lack of investment committed by public enterprises. The authors recommend an efficient process of ownership transformations as one of the comprehensive elements of system reforms. Ownership transformation will in turn allow introduction of various solutions in the field of finance, monetary, credit, research and development policy, as well as the one concerning environmental protection, structures, agriculture, food and many others. These reforms are also necessary in the context of the processes of integration and globalization.

Financial Crisis Management – An Econometric Approach of the Romanian Market describes the nature, genesis, global context and chronology of the recent crisis. Stelian Stancu and Oana Madalina Predescu focus on the source of the crisis, conditions in the United States and the impact on Romania. They also present the role of the Basel II Agreement in the promotion of risk management practices, especially within the banking system. They finally discuss the importance of the policy responses generated as a result of the financial crisis. They conclude that the greater the contribution of a financial institution to the risk management of the financial system is, the greater the capital demand, the Pigovian taxation, or the mandatory insurance prime should be.

The effects of the recent international financial crisis have been felt in many countries, including Romania. Irina Toboşaru, Irina Nicolau and Mihaela Stănoiu indicate that the country's advertizing market has also been affected. The crisis is forcing growth and profit forecasts to be revised downward.

According to *The Impact of The World Financial Crisis on the Romanian Advertising Market* identifies the major changes in the Romanian advertising market within the context of the crisis and proposes a series of marketing strategies that will enable companies in the sector become more competitive.

Among the several impacts of the financial crisis on the determinants of financial asset prices is that on investor risk aversion. Measuring risk aversion through a questionnaire to prospective investors, Christian Păun, Radu Muşetescu and Julian Braşoveanu confirm the relationship between the environment generated by the crisis and risk aversion. *The impact of financial crisis on investors' risk aversion. Case study on Romanian Capital Market,* also finds that risk aversion is also sensitive to the income and occupation variables. However, the analysis also contains some contradictory results regarding risk aversion and the risk type of assets included. The authors offer explanations for this contradiction. The study overall presents an interesting investigation of investment behaviour in an emerging market during a crisis.

Financial Markets and Institutions: Operations and Risk

Are all Capital Markets the same? The Divide Between Developed and Emerging Capital Markets: Can We Discriminate? Deals with that question in order to assist capital market observers and participants distinguish between a developed and an emerging market. The financial economics literature has a vast body of reports. Guoma Alrgibi, Mohamed Ariff and Louis Murray's article aims at identifying the variables associated with the developed and emerging states of a given capital market. Using discriminant analysis, the authors report on a number of characteristics and factors as being important for classifying a given market to be either developed or emerging. These findings are helpful to analysts and researchers by providing credibility to the use of the terms "developed" and "emerging."

Poland's stock market has been a growing emerging market. The study by Tomasz Jewartowski and Joanna Lizińska examines the determinants of the first-day initial public offering (IPO) returns for companies listed on Warsaw Stock Exchange (WSE) and provides a comparison of the results for Poland to those for North America and Western Europe. The empirical findings suggest that short-term underpricing for Poland is about the average as that for West European IPOs. *Determinants of IPO underpricing –the evidence from Poland* uncovers a positive and significant relation between underpricing level and relative size of IPO. Furthermore, the level of underpricing of Polish IPOs seems to depend more strongly on general market performance than it does in developed markets. The study also reveals that issuer's profitability has an explanatory power for underpricing of Polish IPOs and suggests that accounting data are more likely to explain underpricing in the Polish market.

The article by Robert Boldin, Mukesh Chaudhry and Louis Palacios focuses on the use of coskewness and cokurtosis in determining the risk of

American Depository Receipts (ADRs). ADRs are considered instruments for international diversification through domestically traded securities. The authors report that, although the literature has acknowledged the importance of higher moments (skewness and kurtosis), the use of these techniques has been neglected in practice. Using our data from 1995 through 2007, the results shown in *Use of Coskewness and Cokurtosis in Determining ADR Risk* Indicate that there is very limited support for inclusion of higher moments for the ADR's of emerging markets. However, using data for individual securities of emerging markets and the market index reflecting market returns of emerging markets themselves may yield stronger support for inclusion of higher movements in the analysis.

Nelson Maina Waweru and John M Parkinson's study, *Dividend Policy:* Some Evidence from the Nairobi Stock Exchange investigates the information content theory of dividends in the Kenyan Stock market. Using data from the Nairobi Stock Exchange (N.S.E) hand book for the period 1998-2004, the authors determine the factors that influence dividends payments. According to the empirical findings, dividend payments are mainly influenced by the current year's income followed by the company's retained earnings. The study also uncovers a significant relationship between share prices and dividends paid, indicating that dividends drive share prices in Kenya. Therefore managers may use dividends to convey information. The authors find no significant relationship between dividend payment and liquidity.

The article by Peter Koveos and Yimin Zhang examines China's financial sector and aspects of its operations and development during the country's post-Mao period. *Empirical Analysis of Financial Institutions' Loans* emphasizes the important position of financial institutions within China's financial sector and economy in general. *Indeed, during* 1992 to 2007 the accumulated raised capital from stock markets equalled a mere 11.4 per cent of the amount of loans from financial institutions in China during that period. The main business of China banks are deposits and loans and the interest rate differential is the main source of the banks' profits. The authors examine the behavior of loans before and after economic reform by empirical analysis to understand the China banks behavior.

Turkey's banking system has been the cornerstone of its financial sector. To protect and strengthen the system, according to the paper by Nuray Ergül, Sezayi Dumanoğlu and Halil İbrahim Alpaslan, the government issued Banking Law 5411 in November 2005. The Law aims at promoting confidence and stability in the financial markets through the efficient functioning of the credit system and the protection of the rights and interests of depositors. The new law affected both the internal and external financial structures of banking institutions. *The Turkish Banking System After the 2007 Global Crisis* focuses on 12 banks trading on the Istanbul Stock Exchange (ISE). Using ration analysis the financial position of these banks is analyzed during and after the crisis. The authors find that the results of the crisis on Turkish banks were not as severe as those on banks in other countries.

Offshore Financial Centers (OFCs) have received relatively little attention in academia. Yet, they are potentially important components of a firm's overall financial strategy. Their development has also been watched closely by policymakers around the world as countries compete for global capital. The origin of OFCs is closely related to the surge of the Eurocurrency markets during the 1950s and 1960s. According to Roberto Santillán-Salgado, after a first stage of rapid expansion many of those OFCs finally reached a consolidation phase and remained in place, even after most of the original drivers for their creation were no longer present. Offshore Financial Centers: Recent Evolution and Likely Future Trends explores the historical background of the OFCs phenomenon, analyzes its current situation and discusses its likely future trends, based on the OFCs' most recent environmental changes.

Foreign Exchange, Investment and Trade Issues

Sudden Stops and the Real Exchange Rate in Hong Kong: A Two-Sector Neoclassical Framework presents an analysis of the real effects of the Asian Financial crisis on the Hong Kong economy. The authors, Paulina Etxeberria Garaigorta and Amaia Iza, initially focus on the Sudden Stop phenomenon and on its effects, paying special attention to the real exchange rate and the relative price of tradable over non-tradable goods. They then make a growth accounting analysis that reveals that, as in other economies, the fall and recovery of the GDP in Hong Kong is mostly explained by Total Factor Productivity (TFP), while the real exchange rate can be mostly explained by the relative price of tradable over that of non-tradable goods. Finally, they consider a simple neoclassical framework, with two sectors, perfect mobility of production factors and perfect competition markets, to quantify at which extent such a simple description of the economy is able to mimic the dynamics for the prices, taking as exogenously given the TFP dynamics in both sectors.

Eva Romero Ramos, José María López Pina and Eva Ropero Moriones analyze the determinants of foreign direct investment, with emphasis on investment flows into Spain. In their study, *Foreign Direct Investment in Spain: An Empirical Study*, they state that entry into the EU and liberalization has certainly contributed to the current FDI levels. The regional distribution of these investment flows, however, has been uneven. The authors build an econometric model to explain regional differences in FDI by analyzing each region's characteristics and identifying those characteristics that are relevant to FDI. The study finds that local market demand conditions, more so than infrastructure or costs, are the main attraction for FDI. These results are of importance to policy makers interested in enhancing their region's FDI attractiveness.

Ayla Oğuş Binatlı and Niloufer Sohrabji gauge the effect of growth and exchange rate changes on the Turkish trade deficit by estimating income and price elasticities of the country's imports and exports based on the Johansen

cointegration method. *Elasticities of Turkish Trade* finds negative exchange rate elasticity for both imports and exports indicating that an appreciating lira will increase imports and exports. The latter result is due to cheaper imported inputs associated with an appreciating lira that help the export of consumer goods. However, since this sector is not a large enough component of total exports, the authors conclude that an appreciating lira hurts the overall trade position. The trade balance is further exacerbated by growth, as the income elasticity of imports is significantly higher than the foreign income elasticity of exports. This result is explained by the high income elasticity of intermediate imports. Given the importance of intermediate imports in total imports, the authors conclude that growth leads to widening trade deficits.

Tax and Monetary Policies

Although the 2008 global financial crisis brought relatively less disruption to the Chinese economy, the country's growth did start to slow down. The slowdown was accompanied cost increases and decline in efficiency. These factors had a negative impact on investment outlook by enterprises. According to Yun Ding, policy makers must avert further negative developments by adopting flexible and prudent macroeconomic policies. *Tax Policy in the Financial Crisis* recommends tax policy as an important lever in regulating the economy. Specifically, the author calls for launching more targeted tax policies, effective macroeconomic regulation, and promotion of stable and rapid economic growth.

The structure and compliance cost of the EU member states' tax systems is motivated by the important role tax systems play in determining the efficiency of the public sector and the economy in general. Not all taxes, of course, have the same impact on the economy. To compete globally, some countries adopt tax reductions, thus lowering their tax revenue. Others, however, change their tax systems to increase indirect and reduce direct taxes. Indirect taxes are considered to cause less distortions of the economy than direct taxes. Changes should also contribute to increases in the efficiency of tax systems by improving the way systems work. Fast and efficient administrations mean less hassle for businesses – and often higher revenue for governments. The study by Edyta Małecka-Ziembińska describes how changes in the EU member countries' tax systems lead to reductions in the administrative cost of taxation. It also presents the changes in the EU member states' tax systems introduced in recent years. Some EU member countries have adopted a flat rate personal income tax. The author examines the ways in which such modifications have affected the administrative cost of taxation.

Mohd Azlan Shah Zaidi investigates sectoral effect of monetary policy in Malaysia. Sectoral effect of monetary policy in Malaysia: Relative importance of monetary transmission mechanism channels evaluates the relative importance of transmission mechanism channels namely the credit channel, the

asset price channel and the exchange rate channel in transmitting the policy rate change to each sectoral output. The overall results suggest that to achieve specific sectoral output goal, the credit channel of the transmission mechanism of monetary policy can always be taken into account while other channels have to come into play in specific sectoral setup.

Economic Policy and Social Welfare

Petr Chmelik's paper deals with one of the most effectual barriers hindering the effect of democratic institutions and on the reflection of citizenry preferences on government policy: very low voter turnout. Based on empirical evidence presented in *Flexible System of Direct Democracy Ensures Effective Economic Policy in the Czech Republic*, the author shows that there are not significant differences between the voter turnout by local referenda and the voter turnout by municipal elections. The potential difference would then be attributed to lower legitimacy of local referenda than municipal elections. Moreover, a statistically significant dependence of the voter turnover rate on the municipality size was identified for both the local referenda and municipal elections. Thus the empirical evidence testifies against the general minimal voter turnout requirement. The paper outlines with respect to the empirical evidence an alternative way of gradual introduction of direct participation rights on the municipal level in the Czech Republic.

Ioannis Kallianotis surveys the global economic landscape and has a stern warning for all of us: We cannot live beyond our means indefinitely! The U.S., of course, is the poster child for this kind of a campaign, having grossly overspent and under saved. The Three Indigenous Socio-Economic Troubles of the Free-Market: Uncertainty, Unemployment, Untrustworthiness, analyzes the elements that caused the current and prospective problems to the U.S. freemarket and consequently, due to globalization, to the rest of the world's economies. A theoretical model is used to determine the factors affecting the objective variables of the economy by taking into consideration policy variables, aggregate demand, and exogenous ones. The dependent variables are determined by the equilibrium level of the variable in question and the unanticipated and anticipated exogenous variables. The empirical results show that the economy needs a stable financial market and a lower cost of production. The author explains the negative impact of uncertainty in the world financial and commodity markets, especially oil. The model in general offers very useful and interesting analysis of the current financial crisis and highlights the interdependencies observed in our global economy.

The European Union may be divided into four welfare regimes, each with its own efficiency attributes. Josifidis Kosta, Supic Novica and Beker Pucar Emilija analyze the efficiency of European welfare regimes by investigating the correlation between income inequality (and poverty rate) and the social protection expenditure in the 15 (pre-enlargement) countries of the European

Union from 1994 to 2004. Efficiency of the European Welfare Regimes finds that the Union countries allocating the most resources to social protection expenditure are not necessarily those with the lowest income inequality or where inequality has fallen the most. Conversely, the countries that used to allocate the fewest resources are not necessary those with the most income inequality (poverty rate) or where inequality (poverty) has increased the most. The authors suggest that this variation across countries be taken into account in interpreting and using welfare regime theory and typologies. They also point to the costs and benefits of welfare state reforms that may improve efficiency and suggest that many forms of intervention can be justified for efficiency reasons.

Impact on welfare of country heterogeneity in a currency union features a two-country Dynamic Stochastic General Equilibrium (DSGE) model for a currency union, with habit formation, product and labour differentiation and nominal rigidities, and monetary policy follows an ad-hoc rule. Carla Soares studies the effects of having heterogeneous countries sharing the same currency and monetary policy. The motivation comes from the obvious and persistent differences in performance among euro area countries. Given that the Eurosystem's monetary policy responds to the euro area wide inflation, countries' idiosyncrasies do not count for policy definition. The model is calibrated and the response to shocks is simulated. The main innovation is the incorporation of several sources of heterogeneity and the assessment of its impact on welfare. From the formal utility-based welfare analysis, the author finds that nominal rigidities are the most important source of heterogeneity. In a currency union where the central bank responds area wide and does not take into account national differences, it would be desirable to lower the overall level of rigidity in both countries at the same time, as there are significant welfare losses when country heterogeneity rises. A comparison of different policy rules leads to the conclusion that rules that weigh more inflation relatively to the output gap provide the best result in terms of welfare. The study also shows that if the central bank can take into account differences in nominal rigidities levels between countries, then it is preferable to react more strongly to the more rigid country.

Methodology and Modeling Issues

Neural Networks Principal Component Analysis (NNPCA) for estimating the generative multifactor model of returns in a statistical approach to the Arbitrage Pricing Theory (APT): Evidence from the Mexican Stock Exchange, by Rogelio Ladrón de Guevara Cortés and Salvador Torra Porras, uses a novel statistical technique to generate more reliable estimates of systematic risk factors than those generated by the APT. The technique, NonLinear Principal Component Analysis (NLPCA) accounts for the non-linearity of the uncorrelated factors. The authors explain the results attained and offer suggestions for future research.

Management and Entrepreneurship

Sonia Benito Hernandez and Jose Ramos Rodrigo's study examines the employment status of people over forty years and describes the role of entrepreneurs, older than forty, who built up his/her business. The challenges faced by this group has made many of them search for alternate mechanisms that would allow them to keep working. *The Creation of Jobs for the Professional Development of Individuals over 40 years old: Entrepreneurship* examines whether the start-up of micro enterprises can be considered a viable opportunity for this age group that is usually discriminated against because of age. The study was conducted as a result of the European Union's stated goal to increase the labor market activity rate of older people by 50 percent by 2010.

Cristina Maria Triandafil and Petre Brezeanu explore the link between idiosyncratic and fundamental dimensions of the corporate finance within CEE countries. *Transmission Mechanisms of Macroeconomic Impact on CEE Corporations presents* a Vector Error Correction Model (VECM) integrating both idiosyncratic and macro related indicators. Idiosyncratic variables were found to be affected by the internal as well as the external environment. Conclusions regarding the long term relationship between these variables differ by country from the perspective of the way the macro related variables enter the co-integration equations. The impact is different according to the peculiarities of the macroeconomic architecture.

Diversity of innovation strategies of non-cumulative firms: The case of the Czech Republic, Hungary and Poland portrays the differences in strategy of innovation across Czech, Hungarian and Polish manufacturing firms. Anna Wziątek-Kubiak, Ewa Balcerowicz and Marek Pęczkowski analyze and compare innovation strategies of firms of these three countries. The study reveals that external knowledge plays a crucial role in innovation activities in the New Member State firms. However the benefits of using external knowledge are determined by in-house innovation activities, and notably R&D intensity. Differences in innovations strategies were found to be greater within a given industry than across the three New Member States.

Eduardo Jarque and Kiyoaki Shiotsugu conduct an empirical analysis of the most attractive industries in emerging markets based on evidence generated from successful companies in those industries. An Empirical Analysis on Industry Attractiveness in Emerging Markets and the formation of Business Groups aims to develop a methodology to identify attractive industries in emerging markets. The authors find that, excluding the natural-resources sector, Banking and Telecommunications were the most attractive sectors. The study carries implications for public policy as well as management of firms in particular industries.

Industry Studies

The dynamic nature of the global economy has forced companies to deal with new and potentially conflicting challenges. For example, while the market demands more flexibility, speed and anticipation, customers expect more complex services. These challenges are difficult to meet by individual companies dependent on their own resources. What is the solution to dealing with these new challenges? According to Tatiana Corejová and Corinna Ludwig, the creation of cooperative strategies could compensate for deficits in the value chain by grouping company resources such as technical know-how, personnel and finances. Their paper, Project-oriented marketing cooperation between industrial partners in the B2B market, develops a concept for solutions whose objective is to improve the quality of marketing networks on the basis of existing marketing concepts and thus contribute to a higher return on investment for the companies involved. The analysis and evaluation of the solution methods is backed up and verified by experts. As a basis, the Four-Field-Matrix, which brings about the discussed problem areas, will be overlaid with appropriate marketing concepts offering solution possibilities

Due primarily to the lack of an appropriate legal framework, damages awarded for pain and suffering as a result of personal injury vary greatly between and within countries. *Quality Adjusted Life Years (QALY) as a Way to Better Assess Pain and Suffering Damages* suggests that QALYs offer such a framework, which is based on the impact of health impairment on the victim. This framework provides a synthesis between the deterrence theory and the insurance theory and enables calculation of ex ante pain and suffering damages for non-fatal accidents. Specifically, a QALY expresses the value of living one year under a certain health condition. By monetizing QALYs, Vaia Karapanou and Louis Visscher offer a non-arbitrary basis for assessing these damages.

Estimation of a Cost Function for the Portuguese Water and Wastewater Industry assesses the cost structure of the Portuguese water industry at the retail level, testing the existence of economies of scale and scope during a period in which public water infrastructure investments policies in the country aimed at seizing these cost economies. The author, Henrique Monteiro, indicates that this is the first study to jointly consider the water and wastewater activities in the Portuguese water industry while accounting for input prices. It deviates from previous studies in terms of the estimation approach used and the results achieved. For example, this study shows that economies of scale are found to increase with the size of the utility, except for wastewater collection. Also, diseconomies of scope are found for the combined activities of water supply and wastewater drainage and treatment, but the situation improves with the utility size and for utilities larger than three times the sample average economies of scope do exist. The study carries implications for public policy as well as for the direction of future research.

Cottonseed is a by-product of cotton fiber production that offers additional revenues for cotton farmers. The study by Olga Murova, Jaime Malaga and

Benaissa Chidmi, titled *US Cottonseed Price Analysis and Policy Implications*, analyzes factors affecting cottonseed prices. The results of the multiple linear regression show that the soybean price significantly and positively influence the cottonseed price. The simulation analysis forecasts an increase in revenues for different cottonseed price change scenarios for the next ten years. Several outcomes of the simulation analysis show that annual increase in cottonseed prices can bring the gross value of revenues from cottonseed production up to 47%, thus moving cottonseed from a by-product category to a co-product category. Several policy implications are discussed.

On behalf of everybody connected with ATINER, I wish to thank the contributors to this Volume! We all learned a great deal from their scholarly work!