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of Applied Economic Sciences

Quarterly Journal

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Journal of Applied Economic Sciences

Journal of Applied Economic Sciences is a young economics and interdisciplinary research journal, aimed to publish articles and papers that should contribute to the development of both the theory and practice in the field of Economic Sciences.

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Journal of Applied Economic Sciences be appeals for experienced and junior researchers, who are interested in one or more of the diverse areas covered by the journal. It is currently published quarterly with three general issues in Winter, Spring, Summer and a special one, in Fall.

The special issue contains papers selected from the *International Conference* organized by the *European Research Centre of Managerial Studies in Business Administration* (www.cesmaa.uv.ro) and *Faculty of Financial Management Accounting Craiova* in each October of every academic year. There will prevail the papers containing case studies as well as those papers which bring something new in the field. The selection will be made achieved by:

- Conference Session Chairs
- Editorial Board Members

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Journal of Applied Economic Sciences

ISSN 1843-6110

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A GROWTH RATE FOR A SUSTAINABLE ECONOMY

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Abstract

A sustainable growth rate – i.e. a growth rate which allows economy to expand without compromising the equilibrium of the natural system – is one of the most important and stimulating topics in growth literature. In this paper two findings will be presented. First of all, a brief discussion of both concepts – growth and development – is presented. A new sight for their relationship is suggested. The usual distinction between quantitative and qualitative variables is shown to be unsatisfactory. Growth and development must fit in a sustainability framework and therefore, progress should be based on steps of sustainable economic growth in order to have higher development levels. Secondly, a two-sector-closed-economy model is presented to demonstrate the existence of a positive sustainable growth rate for the GDP.

Keywords: economic growth, sustainable growth, development, sustainability

JEL Classification: O100, O400, O490, Q010, Q500, Q560

REASONING ON EVOLUTION OF CULTURE AND STRUCTURE

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Abstract

The purpose of this paper is to work toward developing evolutionary reasoning in the social sciences. Along with that, we argue to overcome the artificial divide of natural and social science for the sake of understanding behaviour. We make the case for an evolutionary and culturally sensitive view on long-surviving institutions and its base - individual behaviour. By taking into consideration the unsatisfying answers in the debate on structure and agency, we emphasize the importance of resonance for evolution and stability. We use case studies to make the point for an evolutionary understanding of institutions and to reflect on institutional path dependency.

Keywords: self-organization, path dependency, institutionalization

JEL Classification: A13, Z13, B25

A BEST EVIDENCE SYNTHESIS ON THE LINK BETWEEN BUDGETARY PARTICIPATION AND MANAGERIAL PERFORMANCE

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Abstract

Using the best evidence synthesis method (Slavin, 1995), we find out an accurate summary on the link between budgetary participation (BP) and managerial performance (MP). The use of selection criteria allowed to decrease the heterogeneity. Our results report the presence of the heterogeneity by cultural and industrial contingencies. American surveys reveal a significant positive link but suffer from heterogeneity of the sample. Under the sample homogeneity principle, Australian surveys reveal a non-significant negative link and only Taiwanese surveys reveal a positive and significant link. This last result has to encourage researchers to continue the study of publicly traded firms in the Taiwan Stock Exchange to study the causal link between the two variables with a Granger test and to study the evolution of this link over time in other countries.

Keywords: best evidence synthesis, budgetary participation, managerial performance, meta-analysis, subgroup analysis

JEL Classification: M49, C89

FORECASTS WITH SINGLE - EQUATION MARKOV - SWITCHING MODEL: AN APPLICATION TO THE GROSS DOMESTIC PRODUCT OF LATVIA

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Abstract

The paper compares one-period ahead forecasting performance of linear vector-autoregressive (VAR) models and single-equation Markov-switching (MS) models for two cases: when leading information is available and when it is not. The results show that single-equation MS models tend to perform slightly better than linear VAR models when no leading information is available. However, if reliable leading information is available, single-equation MS models tend to give somewhat less precise forecasts than linear VAR models.

Keywords: Markov-switching, VAR, forecasting, leading information

JEL Classification: C32, C53

THE UNEMPLOYMENT VOLATILITY PUZZLE: THE ROLE OF THE UNDERGROUND ECONOMY

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Abstract

Relying on the non-negligible role played by the underground economy in the labour market fluctuations, this paper extends the standard matching model à la Mortensen-Pissarides by introducing an underground sector along with an endogenous sector choice for both entrepreneurs and workers. These modifications improve the quantitative properties of the standard matching model, thus providing a possible explanation for the unemployment volatility puzzle.

Keywords: unemployment and vacancies volatility, productivity and job destruction shocks, underground economy, shadow economy, hidden economy, matching models

JEL Classification: E26, E32, J23, J24, J63, J64

THE FINANCING OF R&D INVESTMENTS: EFFECTS ON GROWTH AND FINANCIAL STRUCTURE*

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Abstract

The financing of innovation impacts on economic growth. What's, among bank-based or market-based system, the best organizational form? The paper supports the view that both forms have to be merged into a unique approach (law and finance view) embracing not only the overall quality of the financial services' supply (financial services view) but also the related legal aspects.

In particular, the paper agrees with the thesis that the financial structure of the economy emerges endogenously depending both on the firms' R&D investment choices and on their initial wealth level.

The paper presents also an empirical validation of the financial services and, more specifically, of the law and finance view, carried out over the period 1980-2008. A focus is dedicated to the Chinese case, which shows strong economic growth and increasingly efficient financial sector, in despite of the weakness of the legal system.

Keywords: R&D investment, finance and growth, financial system and institutions

JEL Classification: D82, E44, G20, K20, O32, P48

* The authors would like to thank two anonymous referees for helpful comments.

DYNAMICS OF UNEMPLOYMENT AND INFLATION IN WESTERN EUROPE: SOLUTION BY THE 1- D BOUNDARY ELEMENTS METHOD

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Abstract

Using an analog of the boundary elements method in engineering and science, we analyze and model unemployment rate in Austria, Italy, the Netherlands, Sweden, Switzerland, and the United States as a function of inflation and the change in labor force. Originally, the model linking unemployment to inflation and labor force was developed and successfully tested for Austria, Canada, France, Germany, Japan, and the United States. Autoregressive properties of neither of these variables are used to predict their evolution. In this sense, the model is a self-consistent and completely deterministic one without any stochastic component (external shocks) except that associated with measurement errors and changes in measurement units. Nevertheless, the model explains between ~65% and ~95% of the variability in unemployment and inflation. For Italy, the rate of unemployment is predicted at a time horizon of nine (!) years with pseudo out-of-sample root-mean-square forecasting error of 0.55% for the period between 1973 and 2006. One can expect that the unemployment will be growing since 2008 and will reach ~11.4% [$\pm 0.6\%$] near 2012. After 2012, unemployment in Italy will start to descend.

Key words: unemployment, inflation, labor force, boundary integral method, prediction, Western Europe

JEL classification: J64, J21, J11, E24, E31

ADVERSE EFFECTS OF CORPORATE LENIENCY PROGRAMS IN VIEW OF INDUSTRY ASYMMETRY

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Abstract

This paper studies the effects, leniency programs have on cartel stability and the subsequent abuse of market power. A game-theoretical model, which allows for asymmetry and retaliation, is employed to analyze this problem. We find that a leniency program does not always lead to a breach of trust; in certain industries leniency programs are unable to break collusion. Moreover, they may have the adverse effect in the sense that they strengthen cartel stability or lead to abuse of market power. A relatively large firm can use coercion to remove the option to a smaller firm to self-report. In industries characterized by a certain degree of asymmetry in market shares and high exit costs this is an even more likely scenario. In view of this limitation, policies aimed at the removal of the threat of retaliation need to be considered. This paper's emphasis is placed on leniency programs for cartels, but the line of reasoning may also be extended to corporate whistle-blowing programs.

Keywords: Antitrust Policy, Antitrust Law, Self-reporting, Leniency Programs

JEL Classification: K21, L41

INDO-CHINA TRADE: TRENDS, COMPOSITION AND FUTURE

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Abstract

India and China are among the oldest civilizations of the world with long history of interaction and relationship. They are the fastest growing economies among the major economies of the world. Both have made rapid progress after liberalisation. One of the major events in international trade and economics is the recent fast growth in the bilateral trade. India has emerged as one of the top ten trading partners of China whereas China has emerged one of the top three trading partners of India. Due to large size of economies and composition of economies and exports as well as high growth rates and political will from both sides, the bilateral trade will grow further and would have significant impact on global trade and economy.

Key words: India, China, Indo-China trade, trade composition, emerging economies

JEL Classification: F14, O53, O57, R11

WAS THE WORLDWIDE ASYMMETRY IN CURRENT ACCOUNTS CAUSED BY THE MACROECONOMIC POLICY OF THE GLOBAL ECONOMY'S LEADER?

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Abstract

Some authors sketch the causal chain that produced the current account surplus in China and the current account deficit of the US (as a part of global imbalances) as follows: declining interest rates in the US cause a redirection of capital flows into the periphery, rising capital inflows into China and other Asian countries trigger currency purchases by periphery central banks, and increasing stocks of foreign reserves on the asset side in the central bank balance sheet are matched by a proportional increase of reserve money on the liability side. To keep the exchange rate stable, foreign reserves are accumulated and reserve money expands. The Peoples Bank of China is trying to fight the inflation pressure with several measures, among them higher interest rates. This attracts even more foreign capital to China. Moreover, it cannot solve a problem that originates in the macroeconomic policy of the global economy's leader – a crucial point in this argument is the redirection thesis. The empirical evidence does not support this thesis in several respects – there is no evidence for a redirected capital flow away from the US toward China, and there is no evidence that interest rates controlled by the Federal Reserve are the cause of the capital flow to China.

Keywords: global imbalances, current account surplus, current account deficit

JEL Classification: F32

Journal
of Applied Research in Finance



Call for papers Journal of Applied Research in Finance

Published two times a year, the journal is the official publication of *The European Centre of Managerial and Business Studies*, academic organization devoted to the study and promotion of knowledge about financial economics. The journal has been established in year 2009 as a descendant to *Journal of Applied Economic Sciences* (JAES). Two issues are published per volume. All articles and communications are available online for free. Printed copies can be ordered at a cost. The editors maintain classic *double blind peer review* procedure aiming at high academic standards but at the same time emphasize dynamic referee process so that the journal tracks scientific progress in real time.

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15th October 2010

Expected Publication Date:

November (e-version) – December (hard-copy) 2010

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The 660-year-old Charles University in Prague is now undertaking a new publication venture by re-launching a journal *AUCO Czech Economic Review*.

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