

Summary

Studies of Cause-Effect Relationships in Macroeconomics: Nobel Prize in Economics in 2011

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In modern science time-series analysis is fully integrated into macroeconomic theory. This is the main contribution of the Nobel Prize 2011 Winners Thomas Sargent (New York University) and Christopher Sims (Princeton University). Their methods of formulating and estimating macroeconometric models provide researchers with the tools for analyzing macroeconomic policy and complex cause and effect relationships in macroeconomics. The structural macroeconometric approach that was developed by Sargent enables to investigate the consequences of systematic changes in a policy. Vector autoregressions (VARs) that were introduced by Sims allow to identify shocks in macroeconomic policy and to trace their dynamic impact on economic activity. Both Sargent and Sims followed the concept of active expectations formation. While they were the main proponents of rational expectations approach in macroeconomics, their contribution to the development of modern theory of bounded rationality is also significant.

Key words: Nobel prize; rational expectations; vector autoregressions; structural macroeconomics; cross-equation restrictions.

The Economic Cycle in Russia in the Years 1998–2008: the Emergence of Internal Mechanisms for Cyclic Development or Importation of the Global Turmoil?

Belyanova E.V., Nikolaenko S.A.

It is now being discussed worldwide, whether there will be another recession in the near future. Russia, however, is primarily concerned with two issues: to what extent its economy is dependent on the world's turmoil, and whether a new economic crisis is to be expected. The authors of this study believe that the crises in Russia will inevitably recur due to the fact that in our country an economic system has emerged, whose development is now happening in cycles. Hence – the need to track and predict not only the development of the global economy, but also our own. In the meanwhile, in our country there is neither statistics, nor methods, nor proven procedures, allowing to analyse the cyclic processes professionally, as is done in dozens of other countries in the world. The main task of this paper is to draw attention to this problem and propose steps to resolve it.

Key words: business cycles; turning points; economic crisis; recession; leading indicators.

The Indices of Core Inflation in Russia

Dementiev A.V., Bessonov I.O.

This paper systematically reviews the theoretical rationale for the various core inflation measures and the experience of their implementation. The widely used exclusion-based method, also adopted in Russia for the official «core» consumer price index since 2003, is applied to calculate retrospectively this index back to 1997. A number of alternative core inflation measures for Russia for the period of 1997–2010 are also provided, with the methodology of their construction explained in detail. Formal criteria characterizing the correspondence of different core inflation measures to the theoretical requirements are econometrically tested, showing that the official «core» consumer price index reflects the trend of price dynamics no worse than other measures constructed using exclusion-based and trimmed-mean methods.

Key words: core inflation; exclusion-based methods; consumer price index.

Formation and Optimization of the Portfolio of Government Orders on a Limited Budget Using Mathematical Programming

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The article concerns the problem of forming a portfolio of state orders for implementing works at any of the three levels – federal, regional, and municipal – under a limited budget. Situations in which some of the works to be included in the portfolio can generate profit in the course of their implementation are the subject of consideration in the article. An approach to the analysis of these situations, along with that to finding an optimal structure of the portfolio in these situations, is proposed. The underlying idea of the approach consists of a) finding the maximum number of equally important projects that can be included in the portfolio taking into account that the profit that can be generated by implementing some of these works can be invested in some other works from the portfolio, followed by b) partitioning the portfolio into a set of independent groups of works. Both finding the above-mentioned maximum number and the partitioning are found by solving some Boolean and linear programming problems, respectively. Here, within each group, all the projects included in the group are financed from both the initial budget and the profit generated by some of the projects from the group. When such a partitioning into groups of works is feasible both technologically and legally, the administration in charge can form a portfolio of state orders for implementing works in the form of the mentioned groups of works and auction each group of the projects as a separate lot, i.e., can arrange combinatorial auctions in placing orders included in the portfolio.

Key words: Boolean programming; combinatorial auctions; linear programming, partitioning of a portfolio of state orders.

Financial Integration: International Experience and Perspectives of Development of the CIS

Kondratov D.I.

The article considers the distinctive characteristics of the Commonwealth of Independent States as a regional economic union of states on the post-Soviet space. It emphasizes major conceptual approaches to determining strategy and basic tendencies of the CIS development, perfection of monetary mechanisms of member states interaction. The article examines the prospects of the CIS transformation into an efficiently functioning economic union of states.

Key words: CIS; balance of payments; economic growth; total reserves; monetary integration.

Evaluation of the Potential Impact of Azerbaijan's Accession to the WTO on the Country's Export Potential

Rahmanov R.R.

This paper estimates the gravity model to evaluate the potential impact of the entry of Azerbaijan to the World Trade Organization (WTO) on its export volume. The data employed in the estimation of the model has a panel structure which covers the period from 2006 to 2010 and includes 600 observations. To estimate the model, OLS and feasible GLS estimators are used. It is found that in the long run, the accession to the WTO will benefit Azerbaijan: its exports are expected to grow by 83 percent. However, it is mentioned that any export growth should be expected only if the government stimulates the production of those products in which Azerbaijan has competitive advantage over the other countries. The paper is concluded with some policy recommendations.

Key words: Azerbaijan; World Trade Organization; gravity model; panel data; exports.