

# SUMMARIES

*K. A. Bukin*

## **Models of Preferences Evolution**

In this review of research publications we describe the advances of the microeconomic theory in the field of the evolution of preferences. It is shown that the leading approach based on the evolutionary games is so-called “indirect evolutionary approach”. Although being prevailing for the last 30 years this method has been compelled by such economists as T. Bergstrom and J. Weibull. This review depicts their main achievements in the field of evolution of preferences. Along with the big names contributions we consider some specific evolutions of preferences, namely the dynamics of intertemporal preferences with age, the mechanism of the risk adversity formation and some other.

**Keywords:** preferences of economic agents; dynamic games; utility theory; evolutionary approach.

*Yu. V. Vymyatnina, E. V. Polyakova*

## **Evolution of Inflation Expectations Modelling Approaches**

The paper considers evolution of macroeconomists’ attitude towards inflation expectations as well as genesis of approaches to their modelling. We devote a separate section to modelling inflation expectations under hyperinflation, including theoretical and empirical papers in our analysis, as well as less-known approach to modelling inflation expectations by Maurice Allais. We consider modelling inflation expectations in the context of adaptive vs rational expectations debate and accounting for the new opportunities of extracting inflation expectations and their dynamics through experiments or via text analysis by means of machine learning. We intend this paper to serve as a starting point for a deeper study of various aspects of inflation expectations modelling.

**Keywords:** inflation; hyperinflation; inflation expectations; monetary policy; macroeconomic modelling; machine learning; experimental economics.

*M. V. Tkachenko*

## **The Principals and Perspectives of Basket Credit Notes Structuring: the Case of Russian Issuers**

Nowadays there are few researches which investigate the pricing methods for structured products which depend on several underlying assets and no researches devoted to this topic in the case of Russian market. The aim of this article is to estimate fair value of first-to-default structured notes based on Russian issuers *CDS* and to conclude is it possible to construct this type of notes under the conditions of Russian market. We construct 715 first-to-default notes and calculate its fair value. Besides, we estimate the return of notes compared to its risk using modified Sharp ratio. The article demonstrates the analysis of Russian *CDS* market and its perspectives as a source of underlying assets for first-to-default notes.

**Keywords:** structured product; fair value; default; copula.

*R. V. Garafutdinov, E. P. Gurova*

## **On One Approach to the Formation of Markowitz’s Investment Portfolio Using Fractal Analysis**

The article describes the approach to formation of investment portfolios based on the selection of assets by the criterion of fractal dimension of their price series as a measure of

their stability and predictability. The hypothesis of the research is that a portfolio formed of assets with lower dimension value has better characteristics (profitability, risk) than a portfolio of assets with higher dimension value. The following main results have been obtained. Portfolios of assets with the smallest dimension value have lower risk than portfolios of assets with the largest dimension value and portfolios diversified by economic sector. At the same time, the use of different methods of fractal characteristics evaluation leads to the inclusion of different assets into portfolios formed on the same principle.

**Keywords:** investment portfolio; time series fractal analysis; fractal dimension; Hurst index; time series with variable structure; Python; R.

*M. E. Dmitriev, A. Yu. Zimokha, L. D. Popovich*

### **Implementation Potential of Responsible Self-Care in Russia**

Self-care and self-medication in particular are practiced by many Russians. But such practices are often ill informed and, in those cases, tend to be more harmful than beneficial to patients. The article explores the possibilities of developing a new information ecosystem which enables responsible self-care skills among Russians taking into account the best international practices and WHO recommendations. Preliminary estimates suggest that responsible self-care could help to save about 100 billion rubles a year or 4% of Russia's health budget.

**Keywords:** self-care; efficiency of health care; prevention of diseases; value of a statistical life; behavioral targeting.

*A. I. Bizyaev*

### **Transport Infrastructure Deficit and Economic Development: Israeli Case**

The present paper studies the impact of transport infrastructure deficit on the economy with Israel as an example. 27 countries have been selected for international comparison using methods of factor analysis, cluster analysis and regression analysis. The results show that Israel has persistent and severe transport infrastructure deficit which hampers economic development of the country.

**Keywords:** transport economics; transport infrastructure deficit; Israeli economy.

*Yu. S. Pinkovetskaia*

### **External Financing of Entrepreneurship in Various Countries: Gender Perspective**

The purpose of the paper is to evaluate indicators describing the participation of men and women in external financing of new small and medium-sized businesses in different countries. As the initial information in our study, we used data obtained from the implementation of the Global Entrepreneurship Monitoring Project. The study evaluated indicators that characterize the participation of men and women in investments in new businesses, and the average values of the corresponding contributions. It is proved that the share of the number of men involved in external financing is higher compared to the same indicator for women. So, there is a gender gap. The results obtained are of theoretical and practical significance for governments and entrepreneurs.

**Keywords:** new entrepreneurship; investment in entrepreneurship; external financing; gender gap; participation of women and men in financing.