## Summary

# Guaranteed and Probability-Based Approaches to Setting Rates for Taxes and Fines

#### A. Zakrevskiy, V. Tokarev

This paper studies the problem of long-term influence of tax and fine rates changes as a government economy control means (policies). The distribution of tax authority resources between investigation and imposing of penalty provided by algorithms designed for dynamic model in previous paper [4] considered as operational policy. Since the reaction of taxpayers and tax authorities can't be precisely predicted the probabilistic and guaranteeing approaches to planning are used. For both cases problems of long-term policy planning were brought to static deterministic task of minimizing which are different only by the way of critical distortion calculation. Analytical and numerical results were compared and their economical features were discussed.

Is proved that from tax authority standpoint the lowest possible tax rate is the most preferable. This conclusion is right under very general assumptions irrespective to the planning approach – guaranteed or probabilistic-guaranteed.

There is no well-defined answer for optimal fine rate. It can be equal to the top or bottom boundary of allowed set (rarely inside the set). The answer depends on intensity the rate of evasion diminishing and lowering efficiency of tax authority work if the tax rate is increasing.

# Efficiency of the Banking Sector in the Russian Federation with International Comparison

## S. Caner, V. Kontorovich

In this paper, we estimate the efficiency of financial intermediation of the Russian banks using a stochastic production frontier approach. Furthermore, we estimate the impact of various determinants on the efficiency score of banks. Banks play a crucial role in providing low cost capital to the rest of the economy. So, an efficient banking system is essential for sustained growth at low cost of capital.

We estimate the efficiency level of Russian banks and compare to international practice. Compared to many other countries, intermediation efficiency of the Russian banking industry remains very low at about 40% where as it is over 90% in the U.S. and the U.K. In the E.U. the average is about 75%. We estimate separate efficiency measures of the banks in obtaining funds in terms of deposits as well as the efficiency in credit intermediation. Accordingly, Russian banks are much less efficient in obtaining funds in terms of deposits than in financial intermediation. The distribution of banks according to deposit efficiency is skewed to the lower end. However, there has been a modest improvement since 2000 as inefficient banks drop out of the system. However, collecting deposits for inefficient banks is very costly. Banks with 50% or less efficiency score account for more than 80% of deposit interest costs.

The overall efficiency in intermediating credit is relatively better compared to raising funds at 41%. Efficient banks provide about 60% of total credits to the economy while the rest are provided by banks with efficiency scores of less than 50%. Low efficiency in banking results in misallocation of capital and other funds thus raising the cost of capital. However, since 2000 there has been a significant improvement in the intermediation efficiency of the banks.

The primary sources that contribute to low efficiency are equity asset ratio, non performing loans, interest rate volatility, inflation rate volatility and real effective exchange rate volatility. The results indicate the need for major restructuring in the Russian banking industry. Restructuring can be in the form of mergers and acquisitions. Establishment of the deposit insurance system provides and opportunity to revoke the licenses of some of the inefficient banks. This would improve better allocation of banks' resources.

# Next Economic Crisis in the USA: Practical Approach to Forecasting

#### S. Nikolaenko

This article is devoted to the method for analysis of cyclical dynamics of economic variables that is based on a concept of «unit of economic time». Applicability of this method for forecasting of business cycle turning points is investigated. In particular, when the method is used to estimate the possibility of the next economic crisis in the USA, the crisis is predicted to happen in the 3 quarter of 2009.

## **Innovation Activities of Russian Enterprises**

#### K. Kozlov, D. Sokolov, K. Yudaeva

The paper analyses data on innovative activities of Russian enterprises and estimates impact of several factors on number and quality of innovations. The authors use two independent data sources – enterprise survey, conducted by authors in collaboration with Institute on Economy in Transition, and data from annual surveys done by Goskomstat. Results of both surveys, barriers for innovations as perceived by enterprises, distribution by types of innovations were described in detail. The authors also conducted regression analysis for main factors, suggested by theoretical literature on innovations. Main barrier for innovative activity for the majority of Russian enterprises is lack of retained earnings and restricted access to external finance. Intensity of competition plays significant positive role, given the intensity is not too high.

## **Taxation Theory**

## V. Zanadvorov

Russian taxation system is cumbersome, complicated and inefficient. It is quite a challenge to the economic development of Russia. This taxation theory course allows students to look at taxation from the viewpoint of economic theory. The course is particularly essential for students specializing in public finance and public administration.

The previous issue was finished by the lecture 10 «Taxation and efficiency: social welfare functions as mathematical techniques at the context of tax system optimization». It was the begin of the part IV «Optimal Taxation». Now the three lectures of the last forth issue will present a lot of optimization models for different types of taxes and also some problems of tax system optimization including tax evasion and costs of tax system functioning. 11. Excess tax burden. 12. Some models of optimal taxation. 13. Costs of taxation system functioning, tax evasion.

It is important to remember that the course suppose the students with good knowledge of an intermediate microeconomics course.