## COOPERATIVE MOVEMENT: THEORY AND PRACTICE

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# P. A. Sorokin on Cooperative Interaction. P. 3.

The paper analyses the views of a famous Russian sociologist P.A. Sorokin on the principles of co-operative interaction as well as his theory of solidarity as the main principle of cooperation. The author highlights an essential role of the scientist's theoretical heritage in the development of co-operative education.

**Key words:** social interaction, co-operative interaction, sociology, solidarity, mutual help, cooperation.

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# The Role of Consumer Cooperation in the Development of Agro-Industrial Complex in the Novosibirsk Region. P. 8.

Private subsidiary farms produced a considerable proportion of milk in the Novosibirsk region in the 1990s. They developed on the basis and with the support of agricultural organizations of the region. As a large number of agricultural organizations stopped operating, private farms lost their support, and the cattle stock in the farms of the Novosibirsk region decreased. Consumer cooperation can assist farmers in producing and processing agricultural products.

**Key words:** consumer cooperation, purchasing of agricultural products, total amount of business, measures of support, agricultural cooperation, private subsidiary farms, peasant farm enterprise.

### TOPICAL ECONOMIC ISSUES

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## Managing Labor Potential in a Networked Economy. P. 14.

The article explains how a worker's role changes with the change in the techno-economic paradigm (order). Not only science, but an innovative person as well becomes a major growth factor in the labor productivity. The authors develop their own classification of labor potential by economic activity and examine the changes in managing labor potential in a networked economy.

**Key words:** networked economy, labor potential, techno-economic paradigm, classification.

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# The Assessment of Regional Support Programs of Socially Oriented Non-Commercial Organizations. P. 19.

The paper considers strengthening the role of socially oriented non-commercial organizations in the development of civil society, and the forms of their support. The authors examine the application of methodical approaches to the assessment of the efficiency of programs aimed at developing socially oriented non-commercial organizations in the Novosibirsk region and the Altai Krai.

The discussion of the tools of target programs analysis is acute as the budgetary financing of programs is decreasing and the methods of efficiency assessment require improvement. The authors identify the main problems in the implementation of target regional programs and provide suggestions aimed at increasing the efficiency of the programs.

**Key words:** socially oriented non-commercial organizations, target program, efficiency, system of indicators.

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## Effectiveness of Regional Agreements on Minimum Wage in Russia. P. 31.

Therefore there was introduced a mechanism allowing regions to form their own standards in Russia. This article is devoted to assessing the effectiveness of regional agreements on minimum wage. We use data from the longitudinal survey RLMS-HSE for the years 2006–2014. Using representative sample we calculate the share of full-time workers with wages below the different minimum levels. Comparing with federal standards reveals an almost perfect compliance with federal minimum wage and a noncompliance with regional minimum wage. Regional agreements with fixed amount of minimum wage are more effective in wage restriction than regional agreements with minimum wage based on the basic needs.

**Key words:** wage, minimum wage, regional minimum wage, national minimum wage, regional agreements, Russia, RLMS.

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## A Priori Analysis of Theories of Motivation. P. 42.

The article provides a comparative analysis of contemporary motivation theories, identifying their strengths and weaknesses. On the basis of the conducted analysis, measures are developed which have the most significant impact on the motivation system in the organization. These issues are especially relevant in the training of specialists in educational institutions. This training is a basic requirement for the competitiveness of graduates on the labor market.

**Key words:** motivation, theory of motivation, incentive, coercion, reward, initiative, competitiveness

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## Investment in Anti-Crisis Management. P. 49.

The paper considers approaches of a company in crisis to the choice of investment and determines the types of investment which can promote economic recovery of a company. The author describes the main criteria used to assess if investment is economically sound. The level of complementarity is offered as an indicator when considering an investment project. It is also

noted that the sources of funding for investment projects depend on the stage of the crisis and the situation on the financial market.

Key words: investment, assessment criteria, economic efficiency, crisis, complementarity, cash flow, sources of funding.

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# Study of Human Capital Characteristics. P. 54.

The article describes the main approaches to the concept of human capital as a category of accumulation and a separate group of employees possessing a number of certain characteristics. The authors conducted a statistical analysis to identify characteristics of employees of human capital type, which demonstrated their high level of self-development, in particular, in pursuing new knowledge.

**Key words:** human capital, type of human capital, intrapreneur, group of characteristics, cluster, self-development.

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Organizing Reverse Material Flows As an Ecological Aspect of Logistics Management. P. 61.

The paper deals with the issue of organizing reverse material flows to decrease the negative anthropogenic impact of production and consumption on the environment.

**Key words:** retrologistics, ecological logistics, reverse material flow, ecological provision for logistics, recycling.

#### **EDUCATION ISSUES**

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Stimulation of Teachers Creative Activity as Investment in Human Capital: Experimental Data Analysis. P. 66.

Innovative development of the economy involves the development of qualitatively new characteristics of human capital. In this article, the authors present the results of an experimental study of the possibilities and limitations of stimulating creativity of teachers as an option of investing in the human capital of the Russian Federation. The paper examines personal characteristics of teachers that can promote creativity and limit it. The authors conclude that the essential qualities of teachers in creative education are «motivational orientation to creative activity» and «uncertainty tolerance». The research has shown that the capacity for creative activity is limited by personal factors, and it can not be the criterion of professional suitability, but it requires the full support and rewards system.

**Key words:** investment, human capital, innovative development, creative education, creative activity.

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## Developing Language Competence of Economics Students. P. 70.

The paper examines developing language competence of Economics students and describes the methods used for that purpose in teaching the English and the Russian languages. Studying the usage of anglicisms (English loan words) at English and Russian classes, classes of Translation for Specific Purposes can help Economics students develop language competence, enlarge vocabulary and background knowledge, facilitate cross-cultural communication in their professional field.

**Key words:** competence, language competence, sociocultural competence, speech competence, system of Economics terms, anglicisms, compensatory competence.

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# Developing Self-Management Skills of Students as a Factor of Personal and Professional Development. P. 75.

The paper analyzes the results of the research of self-management skills of the students of Siberian University of Consumer Cooperation in correlation with a similar study of students' self-management skills conducted a few years ago in another university. The author identifies trends and consistent patterns in the development of the self-management system (cycle) of students in the process of study. The conclusion is made that self-management skills are a major factor of personal and professional development.

**Key words:** self-management, self-study, self-development, self-regulation, self-management cycle, analysis of contradictions, forecasting, goal-setting, planning, quality assessment criteria, decision-making, self-control, correction, personal and professional development.

# TECHNOLOGY, QUALITY AND SAFETY OF CONSUMER GOODS

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Assessing the Level of Self-Sufficiency in Food Products in the Novosibirsk Region. P. 80.

In the light of global changes in the world economy, an urgent problem for the country is to ensure food security. An important role in this played by the regions. The article discusses the methodology and evaluation of self-sufficiency in food products of the Novosibirsk region.

**Key words:** the Novosibirsk region, food market, food security, food balance sheet, level of food security, resource potential.

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## Causes of Oxidative Stress of the Population and Measures for its Reduction. P. 89.

Having analyzed the morbidity rates of the population in the Sverdlovsk region, the author identified the reasons for the increase in morbidity rates, one of which is a decrease in antioxidant status, leading to a subsequent oxidative stress. The article discusses the potential use of medicinal plants with enhanced antioxidant activity as raw materials for manufacturing food products as one of the ways to influence the antioxidant status of a human body. The author analyses such indicators of medicinal plants growing in the Sverdlovsk region as antioxidant activity, amino acid composition. The analysis of the research results makes it possible to conclude that essential amino acids can reduce oxidative stress of a human body.

**Key words:** oxidative stress, essential amino acids, medicinal plant material, antioxidant activity.

#### MATHEMATICAL METHODS IN ECONOMICS

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# Main Postulates of Synergetics. P. 95.

The paper suggests using a systematic approach to studying and applying synergetics. Synergetics in a narrow sense is described as a theory of assessing the combined impact of different factors, and in a wider sense – as a science explaining self-organization of complex systems. The authors formulate the main postulates of synergetics and show the possibilities of their application in Economics research.

**Key words:** systems, synergetics, synergetic effect, self-organization, dynamic systems, postulates of synergetics

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# The Choice of the Optimum Organization of Distributed Information Systems with the Application of MS Excel Software. P. 99.

The paper considers the optimization of distributed database to minimize time expenditure for data transmission between different servers of a database. The authors discuss the possibility of using MS Excel Software to achieve the above mentioned objective. The opportunities of optimizing modeling technology on the basis of MS Excel are examined and assessed for the effective organization of the distributed information systems (DIS), the assessment being carried out to solve the problem of choosing the best placement for DIS files. After finding of the optimum solution, the stability and sensitivity of the model are analyzed. For evaluating the behavior of the system in various situations it is possible to conduct a parametrical analysis, and the change of any parameter with a certain interval can be saved in the form of the scenario.

**Key words:** distributed information system, computer network, optimization task, target function, database.

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# Approximating and Asymptotic Formulae in the Problem of Cavitation Flow around a Wedge. P. 104.

The paper deals with a classical problem of cavitation flow around a wedge according to the scheme by Riabouchinsky. The comparison of calculations on the basis of the exact solution of the problems and calculations on the basis of the approximating formulae offered by the authors demonstrate that the formulae are accurate to a high extent.

**Key words:** cavitation flow around a wedge, ideal fluid, drag (resistance) coefficient of a wedge, approximating and asymptotic formulae.