# Table of Contents and Summaries

5

5

#### Ikonomichesko razvitie

Economic Development

Sravnitelen analiz na razvitieto na elektronnoto pravitelstvo v stranite ot Evropeyskia sayuz

Katia Kirilova

## Comparative Analysis of e-Government Development in the European Union's Member States

#### Katia Kirilova

The article examines the problems and challenges that e-governments in the European Union's member states face during the 2012-2020 period. In this regard, the possible sources of data for benchmarking are presented. The main methodological issues in the formation of indicators and indices for measurement and evaluation are presented. An analysis of the general e-government development index (EGDI), which is being developed by the UN, has been proposed. The analyses are divided into several parts: for countries worldwide, for EU countries and Bulgaria in particular. The respective average values and forecasts for the future period are presented. The main trends are shown, based on the analyzed data with an emphasis on the possibilities for expanding electronic services and digitalization.

Key words: public administration, e-government, information technologies.

JEL: H83, L86.

#### Upravlenie na resursi i razhodi

Management of Resources and Costs

Riskove za uspeshnata realizatsia na proekti, svarzani s izpolzvane na prirodni resursi

Marina Belcheva

## Risks for the Successful Implementation of Projects Related to the Use of Natural Resources

19

19

#### Marina Belcheva

The article examines the specifics of projects related to the use of natural resources for economic purposes. Up-to-date statistical information on their application in modern economy is presented, which reveals the trends in this regard. By reviewing the applicable regulatory framework, at constitutional and legal level, the article outlines the basic requirements for activities related to the use of natural resources, the relevant regulatory regimes, the procedures for granting rights of use, exploitation and extraction, the competent authorities, deadlines for implementation of granted rights, etc. The features of the different types of uses, which arise from the specifics of each natural resource, the different aspects of their management and the risks that accompany their life cycle are studied. Practical examples of the impact of some major risks on the use of natural resources for economic purposes are presented. The general framework for the management of projects related to the use of natural resources is examined, including:

identification of project objectives and possible sources of funding; planning of the activities and the budget of the project; assessment and planning of the necessary resources for its implementation; specifics related to the completion of such projects. The main focus of the article is the risks for the implementation of such projects, whose specific features stem from the depletion of natural resources, the strong legal regulation in the sector and the strict environmental requirements of the applicable legislation. The main risks in the management of projects related to the use of natural resources have been identified: regulatory, political, financial, operational, etc., and the effect on their implementation has been studied.

**Key words:** natural resources, extraction, project management, concession, risk.

JEL: K23, K32, Q28, Q32.

## Sotsialno razvitie

## Social Development

## Integriran podhod za planirane na mestno razvitie

Tatyana Daskalova 39

## An Integrated Approach to Local Development Planning

#### Tatyana Daskalova39

The article examines the normative and methodological framework of regional and spatial planning in Bulgaria after the 1990s. The problems and challenges facing complex planning in Bulgarian municipalities are outlined. Alternatives for integrated planning are proposed in order to achieve sustainable local development.

Key words: integrated approach, spatial plan, municipal development planning.

JEL: H7, R5.

## Evropeyski sayuz

## European Union

Margarita Atanasova

Prodalzhavashto obuchenie za litsa s visshe obrazovanie – predizvikatelstva i vazmozhnosti pred visshite uchilishta

49

49

Continuing Training for Persons with Higher Education – Challenges and Opportunities for Universities

## Margarita Atanasova

The offered continuing education in higher schools in Bulgaria covers various activities, among which the non-formal training courses stand out, aimed mainly at persons with higher education. The ongoing changes in the socioeconomic environment are accompanied by the dynamics of the users of non-formal education and the formation of certain challenges for continuing education and training in higher education. The main goal of the article is to study the state and dynamics of participation in nonformal education of the population with higher education in Bulgaria, on the basis of which conclusions are formulated for future policies and approaches to improve the continuing education offered in higher education. The object of research are people with higher education in Bulgaria, and the subject of research is the participation in non-formal training. The main source of information is statistics from the last three editions (2007, 2011 and 2016) of the Adult Education Survey (Eurostat), which covers EU countries and provides opportunities for comparative analysis within the community. The 2007-2016 period coincides with the first decade of Bulgaria's membership in the EU, including the beginning of the formation of the integrated European labor market in the conditions of free movement of people and workers.

**Key words:** continuing training, non-formal training, education and training.

JEL: M1, M5.

## Strukturni promeni v zemedelskite kooperatsii sled integratsiyata na Bulgaria v Evropeyskia sayuz

Angel Sarov

59

## Structural Changes in Agricultural Cooperatives Following Bulgaria's European Union Integration

#### Angel Sarov

59

The article aims to analyze the structural changes in agricultural cooperatives in Bulgaria, in terms of the Common Agricultural Policy (CAP) of the European Union (EU) and, on this basis, outline the main trends in their development. The analysis is based on official statistical information from the Ministry of Agriculture and Food and Forestry (MAF) "Agrostatistics", primary data "Agricultural and Accounting Information System" (FADN) National Strategic Institute (NSI). The trend of changing the following indicators is investigated: number of agricultural cooperatives in Bulgaria, changes in the utilized agricultural area (UAA,); changes in arable land, average size of UAA, labor force, dynamics of the production structure (crop and livestock) for the 2007-2016 period.

The results show that, as a consequence of the implementation of the CAP for the 2007-2016 period, structural changes in agricultural cooperatives are reported. They are expressed in the lasting tendency to decrease both their number and the land they manage. The analysis shows that the incentives under the various CAP support schemes have positive effects on the diversification of crop production. In general, the areas with cereals and oilseeds have decreased over the years. In 2016, there was an increase in the production of fresh fruits and vegetables as a result of the implementation of CAP measures resulting from coupled payments. Despite the CAP subsidies to support the livestock sector, including the support of farms included in selection control schemes, at the end of the period the number of cooperatives developing cattle breeding was almost halved. Despite the negative results in general, at the level of the production unit the result is in the consolidation of production.

Key words: agricultural cooperatives, structural changes, production structure, CAP, Bulgaria.

JEL: D2, Q1, Q13, Q15, Q18.

#### Ikonomika i pravo

**Economics and Law** 

## Mezhdunarodnopravnata zashtita na sotsialnite prava i printsipat na dostoyno sashtestvuvane

Paunita Petrova

Paunita Petrova

69

## International Legal Protection of Social Rights and the Principle of Dignified Existence

#### 69

The entire established system of international legal protection of social rights is fulfilled by the idea of decent human existence. Its norms, defending at first glance the heterogeneous categories of social rights – labor, social, health and educational – are united by the unified principle of dignified life. Decent human existence justifies the unity and indivisibility of all social rights. It is the moral source of their protection under international law.

Key words: international law, international legal protection, decent life.

JEL: K33, K39.

#### **Obrazovanie**

## Education

## Digitalna transformatsia na protsesite v prodalzhavashtoto

obuchenie v Instituta za sleddiplomna kvalifikatsia pri UNSS

Veselka Pavlova

76

Digital Transformation of the Processes in Lifelong Learning in the Institute for Postgraduate Studies at the UNWE

## Veselka Pavlova

76

The main questions in the article concern the digital transformation in lifelong learning, what we have to know and be able to do in order to carry it out, as well as the main pedagogical and socio-psychologic aspects. The premises of successful digitalization of the studying process in the Institute for Postgraduate Studies (IPS) at the UNWE are also included in the paper. The most important once include the use of the distance learning method and participation in many international projects and mobilities in the same area. The emphasis is put on the creative thinking and acting of lecturers and administrators in contemporary and effective studying in the IPS.

**Key words:** lifelong learning, postgraduate studies, digital transformation, distance learning, electronic learning.

JEL: A28, A29.

Digitalnite tehnologii v distantsionnoto obuchenie i perspektivite pri identifitsiraneto i validiraneto na znaniata i umeniata							
Balin Balinov						8	85
Digital Technology in Remote Training and the Perspectives in Identifying and Validating Knowledge and Skills							
Balin Balinov85							
In	the	new	digital	environment	and	due	to

In the new digital environment and due to the need for competitive professional specialists, it has become increasingly necessary to create a modern educational model that is consistent with the digital development period. The need to combine training and work requires students to be evaluated in a virtual environment which involves the development of online testing and evaluation systems, as well as authorship verification, authentication of test subjects and support of the exam process with real student results. The EU-funded Horizon 2020 (TeSLA) project has a similar purpose: to develop and implement an online testing and evaluation system by identifying subjects with a group of combined parameters in terms of avoiding time limits for the authentication and verification of authorship.

Key words: digital training, economics education, TeSLA system.

JEL: A28.

## Ikonomicheski teorii

## **Economic Theories**

Usrednen metod na verizhnite zamestvania

Veselin Mitev

90

90

Averaged Chain Substitution Method

#### Veselin Mitev

The article presents the essence and methodology of the universal and precise method of determinant factor analysis developed for the needs of financial and economic analysis. The averaged chain substitution method is a modification of the chain substitution method, which is the fundamental and most commonly used method of determinant factor analysis. The averaged method of chain substitutions eliminates the only significant disadvantage of the chain substitution method, namely the ambiguity (non-accuracy) of the results obtained thereby regarding the quantitative measurement of the individual influence which the participating factor variables exert on the variation of the

result indicator while changing the order of the substitution of factor variables in the construction of the factor chains. The methodology of the developed average chain substitution method is presented. Mathematical expressions are derived for the quantitative determination of the individual factor influences over the variation of the result indicator with those dependences between result indicator and participating factor variables that are most commonly used in financial and economic analysis. The methodology of the offered method can also be applied to more complex mathematical dependencies that define the relationship between result indicator and participating factor variables. Similarly, it is applicable in the study of a wide range of economic and non-economic indicators.

**Key words:** financial and economic analysis, chain substitution method.

JEL: C38; C58.

## Konvergentnost na tehnologiite na Chetvartata industrialna revolyutsia i sistemnite sledstvia za ikonomikite i obshtestvata

(Chast I), (Chast II)

Hristo Prodanov 101

Convergence of the Technologies of the Fourth Industrial Revolution and the Systematic Consequences for the Economies and Societies

(Part I), (Part II)

#### Hristo Prodanov 101

The article applies a systematic and political approach in exploring the convergent nature of the technologies of the Fourth Industrial Revolution and the related exponential, synergistic and emergent changes that occur at all levels of the surrounding world. This approach is driven by the understanding that nothing today can be separated into separate logics, fields, theories, because everything around us is becoming more interconnected, and this is the driving mechanism of the synergistic and emergent changes in technologies and, through them, in economy and societies. The enormous volume of this type of research is the reason it has been divided into two parts in order to broadly cover the object of the research, which is related to the convergent nature of modern technologies, as well as its subject, related to the disclosure of the scale of the ongoing changes. In order to achieve these goals, the first part focuses on the various technological revolutions and the growth of interconnection, because interconnectivity itself is inseparable from technological development. It also analyzes the convergent nature of several types of technologies - digital, nano-, bio- and cogni-, which interact with each other and this leads to emergent and exponential characteristics of change. This second part discusses the change in scientific knowledge and its increasingly convergent nature; the convergence between technologies and humans, their increasing interconnectivity and interdependence; the emergence of digital ecosystems and new forms of value generation; and finally the consequences for politicoeconomic systems and the need for systematic changes in them, through which to respond to the challenges dictated by technological convergence, by its emergent and synergistic characteristics, and through them, to the exponential changes at all levels of societies.

Key words: convergence, industrial revolution, digital technology, system.

JEL: A12, B55, D47, H12, O31, P17.

Mezhdunarodno sravnenie na izmeneniyata v potreblenieto na naselenieto v evropeyskite strani

133

International Comparison of Changes in Population Consumption in European Countries

Georgi Kiranchev

Georgi Kiranchev 133

The article presents some of the results of a study of differences and changes in per capita consumption for the 2000-2014 period for a group of European countries. The given study is part of a research project under contract Nº NID NI – 15/2017 to NID of UNWE, on the topic of "Analyzing the "consumer – investment products" ratio in the final production in Bulgarian economy – a tool for assessing the reproductive potential of the national economy".

The study of changes in per capita consumption in dynamics and comparability between countries covers the following group of 25 countries:

Austria, Belgium, Bulgaria, Great Britain, Germany, Greece, Denmark, Estonia, Ireland, Spain, Italy, Latvia, Lithuania, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Hungary, Finland, France and the Czech Republic. The dynamics of per capita consumption for the 2000, 2005, 2010 and 2014 periods have been studied. Data for later years are missing.

The research is based on the consumption per person in 56 product groups according to a single nomenclature and a single measure, in this case – the US dollar (at the average annual exchange rate to the national currency and at current prices). Unlike the study of consumption structures only, of structural differences and changes over time, this part of the study takes into account both structural differences and changes, as well as volume differences and changes.

The article presents the results of the research, per the requirements in the N $_{\rm N}$  NID NI – 15/2017 to NID of UNWE contract, and its goal lies solely in the presentation of results.

Key words: consumption, international comparison, multidimensional comparison.

JEL: E21, F00, O57.