

ABSTRACTS IN ENGLISH

Barbara Pawłowska

AROUND THE FUTURE OF BANKING SECTOR IN POLAND A DECADE AFTER THE SUBPRIME CRISIS

[**keywords:** subprime crisis, banks, business cycle]

Abstract

The article analyzes significant causes and effects of the global financial crisis and presents the implications of the subprime crisis for banking sector for the future. From the global perspective, the main reasons were indicated by: insufficient supervision over the financial market, conflict of interests between chiefs and agents, risk related to too "innovative" financial instruments. The consequences of the crisis are enormous, the most important of them are: economic downturn, drastic fall in securities quotations, drop in confidence in financial markets and banking sector. The implications of these experiences are: the need to strengthen supervision over the financial market, reduce the scale of financial institutions, regain confidence in banks, the role of monetary and fiscal policies in amortizing risks and eliminating imbalances in financial market.

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Małgorzata Niestępska

TAXES INCLUDED IN THE PRICE OF ELECTRICITY AND THEIR ROLE IN THE STATE BUDGET

[**keywords:** taxes; energy taxes, fiscal policy, excise, VAT]

Abstract

Energy system is "a bloodstream" of economy that responds to changes in price levels in market as the body for pressure changes. Low energy prices, associated with a fall in demand may be a symptom of economic downturn while high prices can mobilize to limit investment in innovation energy intensity. High prices can be cause of the escape of energy-intensive consuming enterprises to countries with lower energy costs. High prices for households can lead to energy

poverty. Market of fuels and electricity is regulated by law in the field of excise duties and goods and services tax. The treatment of taxes as a tool of adjustment in order to improve the competitiveness of domestic market is included in the definitions of tax functions. Each tax shall have the following functions: fiscal, economic and social. All of these features are reflected in the tax policy applied to energy. In the article there were presented the basis for the verification of the thesis if the tax system may be one of the tools to protect energy consumers against the negative impact of high energy prices. Taxes may act as an incentive tool to implement selected technologies. The imposition of high taxes on carbon-intensive technologies may lead to their elimination from market, such as Freon or the policy of decarbonisation, which effectively displaces coal from the EU market. An important role in the creation of the directions of changes in technology should be played by redistribution of income from environmental taxes in low-carbon, efficient technologies. The second argument concerns the possibility of state intervention in energy market and the assessment whether the share of income from the taxes included in the price of energy in state budgets is so significant that can reduce the motivation of the government to reduce taxes and to create a policy promoting renewable energy.

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Roman Lusawa

ECONOMICS OF NONSENSE AND THE MARKET OF KNOWLEDGE (POLEMIC ARTICLE)

[**keywords:** market failure, false stimuli, "impactosis", "grantosis", "pointosis"]

Abstract

The study touches upon the problem of introducing a mechanism of competition in markets of its own non-competitive nature. The economic illusions perpetuated in the social consciousness encourage the creation of motivational systems based on artificially staged competition. However, they often lead to ineffective activities and in extreme cases senseless actions. The process of intensification of this phenomenon has been the subject of reflection of European economists at the turn of the first and second decade of this century. It seems that getting to know the results of their investigations would also be very useful in our reality.

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Mirosław Zalech, Lech Jaczynowski

APPLICATION OF CHRONOCARD FOR TESTING STUDENTS' BUDGET OF TIME

[**keywords:** chronocard, observation sheet, photography of work time, students' time budget]

Abstract

With the application of chronocard, which includes activities such as: university classes, professional work, self-study, sleep, personal hygiene, social life, home activities, eating meals, participation in sports, commuting and going around, watching TV and others, the daily structure of time of non-stationary students who study in the first year in the faculty of management was examined. The obtained data was compared with the data obtained by Central Statistical Office on a nationwide sample. It was found that the surveyed students sleep less and work more than those surveyed by the Central Statistical Office. At the same time, they noted their considerable absence from obligatory didactic classes and the fact that they devote a small amount of time on their own education in relation to official school schedules. The methodological problems encountered in carrying out this type of research were also described in detail.

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Elżbieta Uzunow

ASHES FROM A MUNICIPAL WASTE INCINERATION PLANT IN PRODUCTION OF MODERN BUILDING MATERIALS

[**keywords:** municipal waste management strategy, application of combustion by-products, construction materials consisting of combustion by-products, closed circuit management]

Abstract

Strategies for the development of the municipal waste management system in EU countries are based on Council Directive 1999/31/EC concerning waste storage [1] and Directive 2008/98/EC of the European Parliament and of the Council concerning waste [2]. In connection with the obligations of member states re-

garding the implementation of the provisions of the above directives, municipal waste incineration plants have also been established in Poland which significantly reduces the amount of municipal waste stored in landfills. The article presents both existing ecological and economic problems related to waste remaining after this process of municipal waste disposal and new opportunities for economic use of post-process waste for the production of modern construction products, which fully meets the requirements of the circular economy. On the basis of completed own work in this area, the results of an innovative method of managing ashes remaining after the incineration of municipal waste were discussed. In the final conclusion the author justifies that from an economic point of view and for reasons of environmental protection, the solution will meet the expectations of potential recipients.

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Ema Halavach

SUSTAINABILITY OF ORGANIZATIONAL STRUCTURES OF MANAGEMENT IN MODERN CONDITIONS

[**keywords:** sustainability, life cycle, bifurcation, organizational structures of management]

Abstract

The effective functioning of any socio-economic system is predetermined by its “architecture” - the organizational structure of management. This structure under the influence of factors of a constantly changing dynamic environment undergoes a transformation associated either with the creation of new elements of the structure and relations between them, or with their liquidation. As part of the changes that are taking place, the system, with its inherent organizational management structure, may lose its stability and ability to adapt to the changed operating conditions. The purpose of the study is to analyze the approaches to the definition of the concept of “sustainability” and “sustainability of organizational structures of management,” to identify factors affecting it and to search for algorithm for designing sustainable organizational structures.

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**Amitava Nag, Arup Kumar Chattopadhyay,
Koustav Chanda, Shayak Sadhu**

**SECURITY AND PRIVACY OF SENSITIVE DATA IN CLOUD
STORAGE THROUGH CRYPTOGRAPHIC APPROACH**

[**keywords:** security, privacy, cryptographic, cloud storage]

Abstract

Cloud storage is an important application of cloud computing that offers organizations to store data in the cloud. However, privacy and security problems of sensitive data on cloud are the major challenges for data owners. To ensure data privacy and security, most of existing schemes propose to outsource only encrypted data to the cloud storage of a Cloud Service Provider (CSP). In this paper, we propose a security model for cloud storage systems which ensures the data security in the cloud. In the proposed scheme, confidentiality of data in the cloud is handled by symmetric encryption and security during sharing of data is ensured by public key encryption. The analysis shows that proposed scheme provides acceptable level of security for the sensitive data in cloud storage.

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Jan Rusinek

**HYBRID PROGRAMMING. AN EXAMPLE OF APPLICATION
IN STATISTICS, ECONOMETRICS AND DIDACTICS**

[**keywords:** Algorithms, computerization of the didactic process, hybrid programming, pascal, TeX, statistics, econometrics, spreadsheet]

Abstract

The article touches upon the application of hybrid programming using modifications of some previously written programs in different languages for obtaining and processing many statistical and econometric data obtained from student questionnaires for lecturers' evaluation.

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Soumadip Ghosh, Arnab Hazra, Payel Biswas, Amitava Nag

STUDENTS' PERFORMANCE EVALUATION
USING ARTIFICIAL NEURAL NETWORK

[keywords: Data Mining, Classification, Multilayer Perceptron, Decision Tree, Support Vector Machine]

Abstract

The volume of data generated every year in educational institutions is enormous; due to this large volume of data there is a need to provide an efficient system support to aid in good decision making process. This research study is all about the evaluation of student performance using data mining technique over a given data space. The database that we are using in our study is related with the secondary education of two Portuguese schools. Two datasets are provided regarding the performance evaluation in two distinct subjects: Mathematics and Portuguese language. The classification goal is to evaluate the final grade of the students in any institute. In our work we are using Multilayer Perceptron (MLP), which is a feed-forward artificial neural network model that maps sets of input data onto a set of appropriate outputs. The other classification techniques that are used over this dataset are Decision Tree (DT) and Support Vector Machine (SVM). The performance of MLP is found to be superior compared to the other two techniques used here.

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Anup Kumar Barman, Shikhar Kumar Sarma

MONOLINGUAL INFORMATION RETRIEVAL
IN LOCAL LANGUAGE: *CASE STUDY IN ASSAMESE*

[keywords: Information Retrieval, Assamese Language, Natural Language Processing]

Abstract

Large amount of information always implies the need of a good retrieval system. The research on Information retrieval (IR) is become very important due to the tremendous growth of digitalized information. Information retrieval system provide the most relevant information from a large collection based on the user

query. For the necessity of finding relevant information the research on Information retrieval has been started from 1950. Several IR systems were implemented depending on the nature of information and users. Finding the most relevant information based on the fired query in their own language is the aim of monolingual information Retrieval. In multilingual country like India where 23 official languages exists digitalize local language contents are growing tremendously. To meet the need of each individual's relevant information the monolingual IR in own language is very essential. Here we analyze the basic requirement of developing the monolingual IR. The IR system discussed here is implemented for Assamese Language which is one of the scheduled language of India. The retrieval efficiency of a statistical IR system can be enhanced using linguistic information generated through various Natural Language Processing applications.

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Od Redakcji

DISCUSSION ABOUT THOMAS PIKETTY'S VIEWS ON THE PHENOMENA INCOME INEQUALITIES

[**keywords:** income inequality, distribution of wealth, economic growth, profits from capital, critical analysis of Piketty's thesis]

Abstract

In 2014 a French economist Thomas Piketty published a dissertation entitled *Capital in the Twenty First Century*. The problem of uneven distribution of capital and progressive income inequality in developed countries were described there. It became a world bestseller, evoking the enthusiasm of some economists and total criticism of others. Three years later (a Polish translation was published a year later), a collective work under the scientific supervision of Healthier Boushey, J. Bradford Delonga and Marshall Steinbaum, entitled "Piketty and what is next" contains an analytical and debatable study by 22 authors (Western economists), grouped in the following chapters: I Collection, II Different views on capital, III Different dimensions of inequality, IV Political economy of capital and capitalism. The last chapter V contains the discussion of Thomas Piketty with the authors of the abovementioned literature.

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Stanisław Dawidziuk

ABOUT LIDIA BIAŁOŃ – CORDIAL MEMORIES

[**keywords:** memories, Lidia Białoń, WSM in Warsaw]

Abstract

In April 2018, Prof. Lidia Białoń, the first dean of the Faculty of Management at Wyższa Szkoła Menedżerska in Warsaw, then the vice-rector of the university. The professor focused on macroeconomic issues of marketing research, quality of education, scientific and technical progress and innovation management. Not only rich scientific achievements, but also a cordial memory among colleagues and students remained after the professor. NON OMNIS MORIAR.

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Aleksandra Pawłowska

SCIENTIFIC CONFERENCE “INNOVATIONS IN FINANCE
AND INSURANCE. MATHEMATICAL, ECONOMETRICAL
AND COMPUTATIONAL METHODS.
METHODS 2018”

[**keywords:** finance, insurance, mathematical methods, econometric methods]

Abstract

On 14-16 November 2018 “Innovations in finance and insurance. Mathematical, econometrical and computational methods 2018” conference took place in Wisła. The conference was organised by the University of Economics in Katowice. The aim of the conference was to present the most recent achievements in the subject of financial and insurance markets and mathematical methods in economics, finance and insurance.