



EKONOMICKÁ UNIVERZITA V BRATISLAVE  
FAKULTA HOSPODÁRSKEJ INFORMATIKY



## **AIESA 2009**

**A**ppplied

**I**nformatics

**E**conometrics

**S**tatistics

**A**ccounting



## **ZBORNÍK / PROCEEDINGS**

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A MLADÝCH VEDECKÝCH PRACOVNÍKOV NA BUDOVANÍ  
SPOLOČNOSTI ZALOŽENEJ NA VEDOMOSTIACH“**

**„YOUNG SCIENCE AIESA 2009 – PARTICIPATION OF PHD.  
STUDENTS AND YOUNG SCIENTIFIC WORKERS ON BUILDING OF  
SOCIETY BASED ON KNOWLEDGE“**

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**1. sekcia**

**1<sup>st</sup> Section**

**Informačné technológie a informačné systémy –  
podpora informačnej spoločnosti**

**Informatics technologies and informatics systems –  
maintenance of informatics society**

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## **The Capabilities of CUBE Systems**

Process modeling is one of the leading approaches for information systems design and development. Environments called CUBE systems or Enterprise Architecture (EA) tools from different corporations are used to support this type of development. The paper is about the capabilities that these systems and tools provide and about the characterization of the leaders in this area of products, as ARIS Toolset, Corporate Modeler Suite, MEGA Modeling Suite, Metastorm ProVision and Troux 8 Suite.

*Ing. Martin Blahušiak, Katedra aplikovanej informatiky, FHI EU v Bratislave, Dolnozemska 1, 852 35 Bratislava*

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## **Information Technologies Based Economy as a Way from Crisis**

Global economic crisis showed serious failure of present system itself. Local governments are trying to solve it by higher governmental expenditure which should stimulate consumption. But if the solution should be long-lasting, it is necessary to detect real causes, not only try to solve consequences. As an important negative factor can be considered also economic growth based on abnormal (not sustainable) consumption and following high production of goods. In my article, I am describing new approach how to move economy from production to services. Information technologies can be long-time and sustainable tool how to increase economy, create more jobs and to protect our environment.

*Ing. Michal Feik, Katedra aplikovanej informatiky, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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## **Approaches to Analysis and Design of Integration Platforms**

The integration platform or at least integration part is currently already essential part of each new project in IT area. Even the integration is very common problem, there is very few or none comprehensive methodologies and approaches to creation of integration platforms. There are couple approaches which try to solve isolated areas in enterprise application integration (EAI), but they are not combined and don't resolve all basic problems. Two main approaches, which influence the EAI area in nowadays are service oriented approach and process oriented approach. These approaches are aimed to make the integration concept in companies more flexible, be able to target the actual needs and make the execution of overall IT strategy more cost effective. In terms of creation of integration platform, which is based on these approaches, it is important to use methodological aspects, which are able to combine these approaches and resolve all actual integration problems.

*Ing. Peter Horňák, Katedra aplikovanej informatiky, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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## **Automation of Testing Database Knowledge by Using Visual Basic Script and Automated MS Access Documentation Tool**

The article deals with the problem of mass testing of information technology knowledge. It describes the author's effort to automate the process of testing students' knowledge of the MS Access database system. As the number of students often reaches hundreds, the process of test evaluation is exhausting and time-consuming. The MS Access application however provides capability of self-documentation, which generates text document with all objects of the database described. This document can be then analyzed and thus shorten the process of evaluating by 80 or more percent. The article describes the whole story from the initial idea, through mistakes and problems to final solution.

*Ing. Daniel Kastl, Katedra aplikovanej informatiky, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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## **Electronic Class Solution**

This paper deals with design and implemetation of Windows based Software aimed at helping making the everyday life of a college Teacher easier. The teaching and testing process, with focus on classes, Is broken into simple tasks and implemented using Cbuilder 5.0. The software reduces the need for paper and pen oriented tasks, Speeds up the pre-and post-class tasks of a teacher.

*Ing. Miroslav Kršjak, PhD., Katedra aplikovanej informatiky, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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## **The Importance of the European Computer Driving Licence in the Insurance.**

European Computer Driving Licence (ECDL), known as International Computer Driving Licence (ICDL) outside Europe, is the global standard in end-user computer skills, offering Candidates an internationally recognised certification that is supported by governments, computer societies, international organisations and commercial corporations globally.

The aim of this paper is to focus on the importance of the insurance workers computer skills as a necessary assumption for the effective performance of their work duties.

*Ing. Zuzana Littvová, PhD., Katedra poisťovníctva, NHF EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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## **Using of UML in Modelling of Police Actions**

The author of the article talks about the origin and development of UML as a tool that supports object- oriented analysis and projects. He outlines possibilities for utilizing of computer languages for other purposes than originally proposed. The author is trying to point out the possibilities for using UML diagrams in a state sector, especially police squads. He also concentrates on USE CASE and SEQUENCE diagrams which can be easily utilized in police work by making police actions more effective by shortening the time of investigation.

He proposes the methods of graphic illustrating of particular actions which are to specify these actions particularly by filing the cases. The author outlines the example where these diagrams clearly define roles and places of all subjects who relate to particular police actions. USE CASE diagrams are made particularly for these purposes and are able substantially shorten the time so that police man working on the case has the clear idea about all the subjects relating to this case. Sequential diagrams are suitable for accurate time analysis of a criminal act and they also give the police men view of particular actions of the subjects relating to this act. The advantage of above mentioned diagrams in police work is that they are simple, clear, and easily manageable. They can also eliminate mistakes and unclear situations that can originate by incorrect paper work or filing. To use UML diagrams is not necessarily conditioned by using computer technology.

*Ing. Mgr. Peter Schmidt, Katedra aplikovanej informatiky, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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### **Information Systems in Learning Territory**

We are a part of growing informatics society. Computers are unthinkable part of our lives and we meet with them in each department. In last 2 decade has informatics find her place in learning area in Slovakia, as a tool for simplify learning process. Nowadays, we have a lot of learning systems and information system using in purpose of managing content focus on education.

There are several systems use for managing and sharing information about students and teachers, their time scheduling, their results as exams or theses,

In Economic University, we are using LMS Moodle as an e-learning, learning management system and from January 2009 also AIS as an informatics system. Both of them manage users, their result, information and some other contents.

Informatics society is living in a hurry period, so it is necessary to have all information very clear, ready to use for all participant from anywhere, up-to-date and valid.

*Ing. Hana Trochanová, Katedra aplikovanej informatiky, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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**2. sekcia**

**2<sup>nd</sup> Section**

**Vývojové trendy účtovníctva a audítorstva  
v podmienkach Európskej únie**

**Evolutional trends of accounting and auditing in  
European union countries**

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## **The Position and Importance of the Balance Sheet in the Context of the Historical Development**

The balance sheet is one of the components of the complete set of financial statements. It presents the final balances of assets, liabilities and equity as of the balance sheet date. It also informs users of accounting information about financial position as of the certain date. Accounting in its beginning was primarily focused on evidence of facts and business transactions. Closing of accounting books was not so important. Through the centuries users found out the need of completed information, so they need some mean of providing accounting information in certain form and structure. The paper is concerned in development of form and structure of balance sheet and its importance in the historical context.

*Ing. Miriama Blahušáková, Katedra účtovníctva a audítorstva, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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## **Grouping of Enterprises with Focus on Holding**

The paper deals with the way how to recognize both business aggregations based on Czech and international legislation and aggregations based on publicly published information in the trade register. It solves the way of evaluation and verification of the correctness of the information mainly with regard to International Auditor Directives. The Directives gives both theoretical and practical guides of evaluating and verification. The paper targets on nowadays development in this field of auditor's verification and financial management.

*Ing. David Ficbauer, FIZA, a.s., Brno*

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## **Internally Generated in Tangible Assets in Context IFRS**

The objective of this conference papers is to define internally generated intangible assets in context International Accounting Standard 38 Intangible Assets. This Standard internally generated intangible assets are divided into internally generated goodwill and internally generated intangible assets, that is different as internally generated goodwill. Internally generated goodwill is not recognised as an asset to IFRS, because it is not an identifiable resource controlled by the entity that can by measured reliably at cost. Internally generated intangible assets, that is not as internally generated goodwill are sometimes difficult to qualifies for recognition because of problems in identifying whether and when there are identifiable assets that will generate expected future economic benefits and also determining the cost of the assets reliably.

*Ing. Tímea Göghová, Katedra účtovníctva a audítorstva, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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## **The Red Flags of Financial Statement Fraud Schemes**

True and fair view of entities' financial position and performance is the main purpose of the Financial Statements provided mainly by others than owners. Currently we can observe many businesses going into bankruptcy because of different needs of peoples involved into business and approaches for committing frauds. The red flags were not detected before the impacts of fraudulent activities on market are evident. Actions or omissions designed to hide or distort the real financial performance or financial condition of a companying reality could be managed by owners, management and market to fulfil their different needs from the information reported in entity's statements. Fraud examination involves obtaining evidence and taking statements, writing reports, testifying to findings, and assisting in the detection and prevention of fraud. This article is focused on fraudulent schemes especially in financial statement schemes and red flags and its impact on the true and fair view to be provided by the financial statements.

*Ing. Stanislava Husárová, Katedra účtovníctva a audítorstva, FHI EU v Bratislave,  
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## **Revenue from Non-Exchange Transactions in the Context of International Public Sector Accounting Standards**

Revenue from non-exchange transactions belongs to the specific problems of public sector accounting. The article deals with basis provisions of IPSAS 23 – Revenue from non-exchange transactions (taxes and transfers). The objective of this Standard is to prescribe requirements for the financial reporting of revenue arising from non-exchange transactions, other than non-exchange transactions that give rise to an entity combination. The Standard deals with issues that need to be considered in recognizing and measuring revenue from non-exchange transactions including the identification of contributions from owners.

*Ing. Marianna Kicová, Katedra účtovníctva a audítorstva, FHI EU v Bratislave,  
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## **Operating Segments and their Relevance for Financial Analysis**

The disclosures required by IFRS 8 *Operating segments* help to explain the significance of different business activities within the company. Relevant information is provided by disclosing additional information in the financial statements about the different business activities of the company. The operating segments statement enables users to obtain a better understanding of the relationship between the business as a whole and its component parts.

*Ing. Zuzana Kubaščíková, Katedra účtovníctva a audítorstva, FHI EU v Bratislave,  
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## **The Questions of the Labour Price with Respect to the Tax Burden and the Fund Contribution**

Social system in Slovak republic is very difficult. Cash insured enlistment is member on several exchequers, between who oneself sources in final implication by daub onto social insurance company.

From view of labor price is specified minimal base of assess (minimum wage) and maximum base of assess (average wage in economy). For concrete calculation enlistment is base of assess assigned gross wage. This progress is from wage disadvantageous how for employer like this too for staff.

In presented paper we will take a look on present social system in Slovak Republic and on social reform from view of labor price.

*Ing. Iveta Kufelová, Katedra podnikovohospodárska, FPM EU v Bratislave, Dolnozemská cesta 1, 852 35 Bratislava*

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## **Accounting for Asset Retirement Obligation according to US GAAP – Financial Accounting standard 143**

Accounting for the asset retirement obligation is guided by US financial accounting standard (FAS) 143 and its interpretation (FIN) No. 47. This standard addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs.

This statement applies to legal obligations, which means an obligation that party is required to settle as result of an existing or enacted law, statute, ordinance, or written or oral contract or by legal construction of a contract under doctrine of promissory estoppel.

Asset retirement obligation is initially measured at fair value and upon initial recognition, the entity records an increase to the carrying amount of the related long-lived asset and an offsetting liability. Afterwards the entity allocates the asset retirement cost to expense using a systematic and rational method over its useful life.

*Ing. Juraj Kulik, Siemens s.r.o., Corporate Finance, Silvánová 12, 902 01 Pezinok*

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## **Accounting Valuation of Financial Assets in Croatia**

New FAS (Financial Accounting Standard) 157-4 from FASB of USA dated 02.04.2009 allowed companies to use more leeway in valuing their assets under "mark-to-market" accounting. This change still requires financial institutions to mark transactions to market prices but more so in a steady market and less when the market is inactive. Such changes could significantly boost bank statements of earnings and losses. Inspired by this change in valuation of financial assets in USA accounting, in this paper we analyze current situation in accounting valuation of financial assets in Croatia. In first part of paper we will look at Croatian accounting legislation, then in second part we will define financial assets by Croatian law and explore which accounting standards are stringed with financial assets and its impact on financial result. Finally in the last part we will look in future perspectives of development accounting valuation of financial assets in Croatia.

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**Luka Mladineo**, *University of Split, University Centre for Professional Studies, Livanjska III/5, 21000 Split, Croatia*

**Stipe Lača**, *Finesa capital d.d., Ulica slobode 46, 21 000 Split, Croatia*

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### **Deferred Tax Assets and Deferred Tax Liabilities within the International Financial Reporting Standards and Croatian Financial Reporting Standards**

In this article will be analyzed individual parts of the financial statements with respect to the Croatian Financial Reporting Standards (CFRS) and their compliance with International Financial Reporting Standards (IFRS). Special attention will be given to CFRS 14 – Value adjustments and its treatment of deferred tax assets and deferred tax liabilities. Compliance of CFRS with IFRS 12 – Income tax.

Furthermore will be shown accounting of all the different forms of deferred tax assets and deferred tax liabilities and also shown and explained detailed ways of registering the same.

At the end of this work will be presented our treatment of deferred tax assets and deferred tax liabilities in the financial statements, especially in the gross balance.

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**Petar Pepur**, *University of Split, University Centre for Professional Studies, Livanjska III/5, 21000 Split, Croatia*

**Luka Mladineo**, *University of Split, University Centre for Professional Studies, Livanjska III/5, 21000 Split, Croatia*

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### **Different Aspects of Approaches to the Valuation of Pension Liabilities and their Effects Presented in Financial Statements**

Each entity that has at least one employee should have an own pension fund scheme in order to sustain payment of pensions toward its employees in the future. There are a lot of options for the entity to choose the funding scheme. By the valuation of pension liabilities can be used two different approaches, the *actuarial* and *economic*. There are also two approaches for presenting information in financial statements which are based on the IFRS system. The IFRS system provide two competitive income conceptions for the entity to choose. The first one is based on accrual principle - *Revenue and Expense approach*, whilst the second one is based on comprehension of income as a change in the assets during the period - *Asset and Liability approach*. Consequently, the effects by using these ways of a different approaches will be also demonstrated in financial statements of entities.

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**Ing. Alena Kucková**, *Katedra účtovníctva a audítorstva, FHI EU v Bratislave, Dolnozemska cesta 1,852 35 Bratislava*

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### **Deffered Tax and its Impact on Hidden Reserves**

Deferred tax is result of the difference between the value of assets and liabilities in accounting and the value of assets and liabilities from tax view. Hidden reserves are result of the difference between the value of assets and liabilities in accounting and their real value. This topic is concerned with the connection between the deferred tax and the hidden reserves.

*Ing. Mgr. Martin Tužinský, Katedra účtovníctva a audítorstva, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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### **Audit of the Insurance Company - Taking Account of Financial Risks**

Insurance under current existing legislation are required to have a certified annual accounts to the auditor. The auditor provides reasonable assurance that the data subject to audit does not contain a significant inaccuracy. At the termination of that conclusion, it is necessary for insurance companies to pay serious attention to financial risks. Financial risks, more specifically, market risks, the largest part of the risk of overall risk portfolio poisťovne. Prítomná financial crisis only confirmed the fact.

*Ing. Ingrid Vacháľková, PhD., Katedra poisťovníctva, NHF EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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**3. sekcia**

**3<sup>rd</sup> Section**

**Aplikácia štatistických a aktuárskych vied  
v sociálno-ekonomickej oblasti**

**Application of statistical and actuarial sciences in  
social-economic area**

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## **VAR Model for Import of Goods and Services of the Slovak Republic**

Import of goods and services reflects the level of purchasable inhabitants and its increase indicates higher consumption of inhabitants (higher demand for foreign goods and services). In so small and open economy such as Slovak economy is, import presents important macroeconomic indicator which should be watched very carefully and the knowing of its further development is important in order to choose correct actions by the state for supporting and growing of domestic economy.

For these reasons we consider it important to analyse the determinants of the development of import of goods and services in order that the architects of economic policies are in possession of quantitative instruments while making their decisions. The aim of this paper is to create a macroeconomic model which is methodologically based upon the principles of vector autoregressive models and to use it in order to generate prognosis of the import of the Slovak Republic.

*Ing. Peter Ďurka, Katedra štatistiky, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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## **Multivariate Statistical Analysis of Environmental Sustainability in Poland – Outlays and Effects**

Economy, society and environment are the three dimensions of a sustainable development and the environment is one of the most important among them. The definitions of a sustainable development, provided by many authors and sources, are primarily focused on an environmental capital. The aim of the study is to estimate the diversity of environmental sustainable development in Polish voivodships (NUTS 2 regions). According to the hypothesis to be tested the investments effectiveness in an environmental protection depends in a significant degree depends on the quality of the environment in various voivodships. The cluster analysis has been applied with use of the environmental indicators. Also, the author plans to build a synthetic measure to describe the overall quality of the environment.

*Mgr. Katarzyna Frodyma, Cracow University of Economics, Cracow*

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## **The Development of the Price Indexes under the Condition of Financial Crisis in Slovakia**

The global financial and economy crisis is the main title of the news in European area. This crisis influences all parts of national economics. Price of the labour is devalued in the market and is also influenced by the trends in the global market. The target of this work is to show the development of the labour price under the condition in Slovakia during last ten years. Second target is to show, how crisis influenced the price of labour and in which areas the depression of the labour price was the highest. In this work will be also shown the comparison between price and productivity of the labour, before and after breakout of the global financial and business crisis.

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### **Application and Valuation of Mortality Catastrophe Bonds**

This article introduces one of various forms of catastrophe bonds (CAT bonds), so called „Mortality CAT bonds“, providing insurers and reinsurers with the possibility to transfer catastrophe mortality risk off their own portfolios to capital markets, in order to gain access to additional capital. The aim is the explanation of base principles of these innovative securities but above all the definition of valuation methods and calibration of quantitative models applied in financial industry.

*Ing. Zdena Ondrejkočová, Generali Slovensko Poist'ovna, a.s.*

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### **Life Insurance – Long Term Financial Investment**

The signification of a life insurance is described on the beginning of my report – it is an insurance product, which covers risks threatening lives and health of people. There is also written about its contribution both for a client (insurance protection, saving) and just saving part of reserve products for a state (effective allocation of money, supplement to the state retirement system). Merits of this report is reserve products (endowment insurance, pension insurance and unit-linked insurance) utilization for the investing. The size of policy depends on the monetary investment, investment horizon, investment strategy and above all management fee. The profitability of this saving way will exemplify in model situations.

*Ing. Ivana Šafarčíková, Hospodárska fakulta Technická univerzita v Liberci*

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### **Economic Cohesion of Households in Poland. Statistical Analysis**

Polish regions are diverse in terms of its level of socio-economic development. Households' surveys which are conducted in Poland also confirm the significant diversity in families' financial situation. Socio-economic inequalities affect the level of economic convergence in Poland. The aim of cohesion policy is to equalize the development opportunities, but a certain level of inequality is an immanent feature of every economic system. The Polish presence in the European Union creates a tremendous opportunity to reduce the gap which differ Poland from the most developed countries. The objective of this paper is to introduce the issues of economic cohesion and present basic assumptions of pursued doctoral dissertation.

*Mgr. Agnieszka Walega, Cracow University of Economics, Cracow*

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## **Characteristics of some Probability Distributions in the Exponential Family**

An exponential family is a class of probability distributions sharing a specific form. This specific form is defined by general density function of this family. We can rewrite density function of every distribution from this family on this general function. In this text we characterize the exponential family and derive the characteristics of some of these exponential distributions using this general form.

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*Ing. Petra Chmelová, Katedra matematiky, FHI EU v Bratislave, Dolnozemská cesta 1, 852 35 Bratislava*

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**4. sekcia**

**4<sup>th</sup> Section**

**Aplikácia modelov a metód operačného výskumu  
a ekonometrie v ekonomickom rozhodovaní**

**Application of operation research and econometric  
models and methods in economic decision making**

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## **Bank Financial Ratios**

Turbulence of economic environment has become a phenomenon for the last years influencing economic subjects all over the world. The extent of its impact depends on ability of company to react on it and manage it. Financial management of banks is directly connected with financial analysis, which is the base for taking appropriate decisions in the future. In presented contribution I focus on financial ratios as an important instrument of financial analysis of the banks based on assessment of liquidity, assets quality, capital adequacy and profitability as the most important aspects of bank's financial profile.

*Ing. Nora Dudáková, VÚB, a.s., Bratislava*

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## **Seignorage: Definition and Modeling**

The aim of this paper is to analyze seignorage. Seignorage has in economic literature more meanings more or less accepted. In first part I would like to point out to various definitions of seignorage (fiscal and monetary seignorage, opportunity cost seignorage and others). In second part a framework for measuring seignorage is presented and estimates of seignorage are analyzed.

*Ing. Rastislav Gábik, Katedra operačného výskumu a ekonometrie, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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## **Planning of the Supply Chain Process in Reverse Logistics**

Planning of the Supply Chain process is very difficult process which includes a number of factors. If the remanufacturing of already manufactured products is included into this process the variety of factors increases even more and it will influence overall planning of the production, with production related control and ordering of inventory as well as planning of the work operation. While planning the Supply chain process it is necessary all the subprocesses taking place in the company as a part of the complex manufacturing process are included. Next very important precondition is the planning of the supply chain process itself and with it related planning of the production which is necessary for the determination of the objectives of the optimalization. That is very important for the correct definition of the all subprocesses included into the process of supplying.

*Ing. Pavel Gežík, Katedra operačného výskumu a ekonometrie, FHI EU v Bratislave, Dolnozemska cesta 1, 852 35 Bratislava*

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## **Chosen Methods for Estimating the Parameters of Production Functions**

The aim of this paper is analysing and estimating the parameters of the most common used production functions in the environment of the Slovak republic. Especially we will use econometric approach and calibration. We will analyse witch approach will give us better results when we use the models for prognosing.

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*Ing. Tomáš Domonkos, Katedra operačného výskumu a ekonometrie, FHI EU v Bratislave,  
Dolnozemska cesta 1, 852 35 Bratislava*

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### **Simple Dynamic Models and its Application to Slovak Economy**

This article deals with simple dynamic models and its application to Slovak economy. The only macroeconomic model which can accurately present the reality and relations between economic variables, is a dynamic model. That is because the economy is in progress and many economic variables depend on various variables in preceding periods of time. External interventions into economy may not be reflected immediately, but may show in a few years. Even in this case we can apply the dynamic models. We can also focus on a stability of these models. It is important to know, whether model converges or diverges.

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### **Inflation in a Sight of Microeconomics**

The contribution deals with a price growth of products which is caused by changes in a demand and a supply. There is shown that if a supply or a demand change it will cause shift of a current equilibrium price to a new equilibrium. We consider a simple model which consists of a demand function, a supply function and a price adjustment equation. We also assume that supply and demand function depends on the price expectations of particular market subjects (consumers, producers). The paper shows how price can change and what are the main variables which caused its changes.

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### **Query Designer as the Result of Network Theory Application**

The goal of this article is to create an algorithm which could be used by query designer. Query designer in this article represents the program which will result in specific connection between databases. In order to get full picture of data using by finance community in decision process on various level of organization. It is an application of network theory to database systems. Users specify their requirements of data and query designer finds which tables within one database (or databases) have to be connected (and how) in order to retrieve demanded data using in reporting/decision process.

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## **Factors Influencing the Balance of Economies**

An aim contribution is analyzing factors affecting balance economies following valid macroeconomic and econometric knowledge. Economy consists of microeconomics a macroeconomics. Macroeconomics search operation economies en bloc. Macroeconomics abstraction from behaviour individual subjects and concentrated oneself on search relations, that is not obnoxious with microeconomics access.

Simultaneously allows to know relation of environments, where enforcing microeconomic processes. Going out from, that economic units nonexistent along yourself separate, but that together cooperate, fill up oneself, are break it up dependent. With interactions of economics units that are generating mosaic of economies en bloc rise new problems, there are not possible solve on microeconomics levels.

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## **Analysis of Competitiveness by Way of Specific Economic Coefficients in Slovakia**

Report shows specific possibility for evaluation of regional competitiveness of NUTS 3 by use of application of available statistical information for these regional units. These data were given by Statistical Office of the Slovak Republic. Standpoint, from which the report comes out, is set up on condition that application of specifically constructed economic coefficients enable us to evaluate already reached level of regional competitiveness. The economic coefficients are created from available regional information.

And moreover such acquired values can be used for inter-regional comparison and identification of regions which are more competitive and those backward. From executed comparison will be possible to make conclusion about realized structural economic policy.

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## **Modeling Preferences, Risk Attitudes and Decision Analysis**

The aim of this paper is to look at the role of risk attitudes in decision making under uncertainty. Every decision involves some kind of trade-off. The important question is how much risk is a decision maker willing to assume. The concept of a utility function that incorporated decision maker's attitude toward risk is presented. Some utility-assessment approaches are described. We explore the axiomatic foundations of utility theory and discuss the behavioral assumptions that form the basis of expected utility. People do not always behave according to expected utility theory and these axioms so we consider some implications of these behavioral paradoxes for the practice of decision analysis.

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