

# 6<sup>th</sup> IRI Economics Conference

PROGRAM  
ABSTRACTS

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Komárno, Slovakia

2019

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# 6<sup>th</sup> IRI Economics Conference

## Štúrovo, Slovakia, 14-15 January 2019

### Program

### 14 January 2019

Registration from 9.30 continuously

Session No. 1. 10.00-11.00

Finance

Chair: Richard SZABÓ

Zsuzsanna GŐSI: Analysis of accounting reports in the sports sector
Richard SZABÓ: Efficiency of Top 500 Companies
Buah AKU-SIKA: The Effect of Commodity Prices on Exchange rate; Empirical Evidence from Ghana

Session No. 2. 11.20-12.40

Information

Chair: László BERÉNYI

Ferenc BAKÓ, Marcell KUPI: Creative Networks
László BERÉNYI, Bernadett SZOLNOKI: Information society: becoming more mobile
Jay Stephen SIY: Outsourcing Multimedia marketing to better manage revenues and costs: An air travel industry perspective
Ágnes SIKLÓSI, Krisztina A. SISA, Attila VERESS: The SME Sector's Accounting in the Light of the Digitization Challenges

Session No. 3. 13.00-14.40

Education

Chair: Judit KÁRPÁTI-DARÓCZI

Ildikó LAKI: Volunteerism and Voluntary Work
Petra Kinga KÉZAI: Education startup in the market economy
Mariann BENKE: Compare motivation theories and testing self-determination Theory
Mariann BENKE, Beatrix LÁNYI, Roland SCHMUCK, András TAKÁCS: Quality orientation in the Higher Education
Judit KÁRPÁTI-DARÓCZI, Tibor János KARLOVITZ: Entrepreneurial Competencies among Albanian University Students

## 15 January 2019

Session No. 4. 10.00-11.40  
Researches

Chair: Tibor János KARLOVITZ

Tamas KOZAK, Andras KOVACS, Laszlo KARPATI: New Approach of Trading Area Definition
Éva KŐVÁRINÉ-IGNÁTH: IMF, World Bank and the Hungarian application for membership
Ákos ESSŐSY: Receptiveness to Flexible Employment at Hungarian SMEs
Jay Stephen SIY: Assessing Employee Performance drivers in the Hungarian supply network of Airline value chains
Sevinj OMARLI: Tactical marketing decisions of managers in times of crisis: Qatar Airways Company, case study

Session No. 5. 12.00-14.00  
Environment and Health

Chair: Gábor GYARMATI

Tamás KOZAK: New Challenges for Asian Retail
Michał PTAK: Taxes and climate change: a case study from Sweden
Éva PINTÉR, Tibor PINTÉR: Financial evaluation of energy efficiency in buildings: Social cost-benefit analysis
Tibor PINTÉR: The economic determinants of cancer: Statistical analysis
Gábor GYARMATI: Thinking of Health and Food Consumption of the Z Generation
Ákos SZERLETICS: Organic Farming in the Common Agricultural Policy

# Abstracts



## The Effect of Commodity Prices on Exchange rate; Empirical Evidence from Ghana

Buah AKU-SIKA

University of Miskolc

The main purpose of this study is to examine the effect of commodity prices on exchange rate using Ghana as a case study. Monthly data on exchange rate, cocoa, gold, interest rate and inflation from the periods 1999 to 2014 were employed. The study first adopted Custav Cassels's absolute version of the PPP model to establish a relationship between commodity prices and the exchange rate. The Johansen cointegration technique and the Vector Error Correction Model (VECM) were used to test if cointegration exists among the variables of interest and measure the long run relationship among the variables of interest respectively. The study further proceeded to test for the presence of volatility among to commodity prices using the GARCH methodology. The results indicated that the commodity prices are volatile and therefore have stochastic shocks. The study finally used the Impulse Response Function to examine the stochastic shocks of the commodity prices on the exchange rate. The study however found out that all the variables are positively related with the exchange rate except for inflation.

## Creative Networks

Ferenc BAKÓ, Marcell KUPI  
Széchenyi István University

The main purpose of our research is to support the structure and characteristics of the invisible knowledge-network of the creative professionals in Győr, based on empirical research. We would like to determine the main factors that shows the quality and can timely alter the properties of this hidden network.

The subjects studied were determined after special considerations based on selected criteria. The survey was done in a questionnaire form that we did with the so-called roster recall method. The essence of this method is that each candidate will get a complete list of all the possible members of the network, which list's data must be given after the nature of this relationship. The resulting database can be used to determine a connection network that has many features that provide valuable information such as clustering, gradient distribution, robustness, and so on.

Creative professionals are constantly on the lookout for trends and trends around the world. The question is therefore whether they share their knowledge and information with each other, to what extent and in what form.

In addition, we have studied what is the spatial flow of creative professionals, how they are influenced by so-called soft and hard factors, first of all personal relationships, the latter being the material factors. Finally, we have carried out a comparative analysis based on previous research on the extent to which European and other mainstream trends in the world are affected.

## Quality orientation in the Higher Education

Mariann BENKE, Beatrix LÁNYI, Roland SCHMUCK, András TAKÁCS

University of Pécs, Faculty of Business and Economics

The ESG 2015 quality management principles have a great influence on the quality policy of the higher education institutions in various countries in Europe. These guidelines provide necessary framework for the quality management of higher education in the European Union.

The analysis of the quality policies of Hungarian and foreign universities is crucial for the determination of level of the Hungarian higher education. We carried out a content analysis of 120 higher education institutions from four countries (Great-Britain, Germany, Austria, Hungary). Our research is based on QS World University Rankings 2018 (QS Top Universities 2018), however we completed our research only in European countries because we concentrated on the European ESG guidelines.

The content of the quality policies were compared with each other. The comparison is based on previously determined criteria and we integrated it into a uniform structure which was also created by us. The main aim of the research was finding best practices based on the international quality approach and analyse other quality management policies.

With content analysis we specified the best practices that are based on the quality management methodologies. We defined seven basic pillars that are essential for the high quality services in the higher education sector. The results of the research can be used to create up-to-date quality policies fulfilling the ESG guidelines.

## Compare motivation theories and testing self-determination Theory

Mariann BENKE

University of Pécs, Faculty of Business and Economics

The paper describes and analyzes motivation of student based on the Self-Determination Theory (SDT). SDT is used in the paper as a basic concept because it can be considered a universal motivation and learning theory. SDT is a process theory of motivation which can be interpreted as a cognitive learning theory.

Motivation theories can be classified in several ways in psychology and also in management sciences. The first chapter shows those psychological theories and their classification which are connected to motivation theories in business. Literature review is used as a method to show the mainstream's opinion of the topic.

The second chapter describes the Self-Determination Theory which is the main base of the empirical research shown in the last chapter. Self-Determination Theory is a theory in the field of psychological motivation and learning theories, but we use it also in the field of management exactly among process theories of motivation. People can usually be motivated by two factors in their work or other activities: external factors, and internal factors. The self-determination theory is a human-specific macro theory with its examination focused on the interaction of external and internal motivational factors. This model makes it possible to analyze the work, learning process, sports and other activities.

The empirical research examines the motivation of the students of a Central European University by a questionnaire (N=471) from Vallerand et al. (1992). The data is analyzed by SPSS software for correlation and correspondence analyze. Results and conclusions are shown at the end of the paper.

## Information society: becoming more mobile

László BERÉNYI, Bernadett SZOLNOKI

University of Miskolc

The possibilities and challenges of the information society have been interested among a wide range of researchers in the past decades. A key driving force of technological and social development in the 21st Century is the spread of smartphones. Becoming more mobile reshapes both working and everyday life. Obviously, business opportunities show a dynamic growth. However, the other side should be considered. Beyond the individual intentions for using the tools and the security awareness, the preparedness for dealing with the changes in personal relations are momentous questions.

The paper investigates the personal level of “mobilization”, including application area of desktop computers and smartphones. The topic also covers online shopping. The research tool is a survey that asks to mark specific items of a list. Data collection is managed by Evasys Survey Automation Suite. Data processing is supported by SPSS.

The target group of the research consists of Hungarian higher education students. The analysis is based on 253 responses; it aims to explore the utilization of computers and smartphones as well as checking the differences by various group-forming criteria. About online shopping frequency and purchase subject are processed.

Results allow business initiations to establish targeted solutions in product development or marketing actions. Moreover, there are educational possibilities: making the learning materials “more mobile” with new training methods may move forward the effectiveness of the education.

## Receptiveness to Flexible Employment at Hungarian SMEs

Ákos Essősy

Széchenyi István University, Doctoral School for Regional Economic Sciences

Nowadays, only companies that are adaptable and flexible in their structure and processes can survive. The basis for a motivated company aiming for peak performance is organisational innovation. Hungary is one of the less innovative countries in Europe. Only organisations that can integrate new solutions smoothly into their everyday operations will remain truly competitive. The Government of Hungary, in its Partnership Agreement with the European Union, set out the goals for improving and supporting the adaptability of enterprises, the promotion of flexible and family-friendly workplace practices and services, and the employment of women with young children. The aim of this study is to demonstrate, through a Hungarian example, the receptiveness of Hungarian small and medium-sized enterprises to flexible forms of employment. The effect of flexible employment on economic adaptability and competitiveness through workforce efficiency and retention is examined. Its aim is to raise the awareness of options to increase employment among Hungarian SME managers.

## Analysis of accounting reports in the sports sector

Zsuzsanna GŐSI

Eötvös Loránd University Faculty of Education and Psychology

*Introduction.* In Hungary, the change in the financing environment has affected each sporting organization in recent years. Sport is clearly moving upward from an economic point of view. The current research presents the change in the property, financial and income situation in the sports sector with the help of the accounting reports of sports federations.

*Material and methods.* The topic was explored using the document analysis method. During the research, accounting reports and public benefit reports submitted for the years between 2010 and 2017 were reviewed. The analysis was based on dynamic and distribution ratios. Then the property, financial and income situation was examined, with the help of indicators relevant to the non-governmental organizations as well.

*Results.* Those associations that are entitled to subsidies through the corporate tax system had a tenfold increase in their annual revenues starting from 2010. In the case of other associations, a smaller increase in revenue can be observed. The largest share of sports federation revenue comes from support. In terms of expenditures, the proportion of personnel-related expenditures is small; however, its value has increased considerably. As a result, the number of employees shows an increase. The assets of sports federations also show an increase in each case. Their property structure is very similar: high cash and passive accruals ratio, favorable liquidity situation.

*Conclusion.* The examined sports organizations, among them, the sports federations have achieved high revenue growth. The changes can be linked to two dates, the support through Corporate Tax System in 2011 and the Sports Development Concept in 2013. The reports of sports federations reflect the dynamic growth of the sport economic sector.

## Thinking of Health and Food Consumption of the Z Generation

Gábor GYARMATI, Tibor János KARLOVITZ

Óbuda University

Organic farming is a way of production of healthy food. This is a solve of the problem of industrial agriculture. Its method wants to reduce chemical using and artificial fertilizer using therefore in Western European countries the knowledge and popularity of this method increase. The members of the Z generation live in this market and as this is a basic need, they buy food from this market. When we want to analyse the healthy food consumption of the Z generation, we should look at thinking of health and meal by this generation. We analyse this question help with a survey and we find that the Z generation members do not bother about their health therefore they do not think too much about organic food and do not buy this kind of food regularly and consequently. What kind of reasons can stand behind this attitude? Lower level of health knowledge and mind and the age.

## Entrepreneurial Competencies among Albanian University Students

Judit KÁRPÁTI-DARÓCZI<sup>1</sup>, Tibor Janos KARLOVITZ<sup>2</sup>

<sup>1</sup>Óbuda University

<sup>2</sup>International Research Institute (Komárno)

Albania is a small European country, which is outside the European Union. It means that principally the teaching in Albanian school system is not obligatory by European key competencies. Before we examined the entrepreneurial competencies in non-European countries, both in Ghana (Africa) and in Asian countries the students had less entrepreneurial attitudes than European students did e.g. in Portugal or in Hungary. We thought that Albania is in a middle position. Our examination focused on Albanian economics students, but we had a control-group with sociology and teacher's training students.

Our main research question was: Do the Albanian economics students have 'European' entrepreneurial competencies? – Our hypothesis was that they had few entrepreneurial competencies.

We conducted a questionnaire survey in the framework of primary research. In the questionnaire there were 49 questions (partly statements), and the answers were in a seven-point Likert-type scale. We have received 578 answers, but we could process only 565 questionnaires. There were 289 economics students from Durres, 104 from Shkoder, 70 from Tirana, and the control-group consisted of 102 pieces in our sample.

In our research we used both univariate (descriptive methods: means, median, modus, frequencies) and multivariate (analysis of variance, One-Way ANOVA) statistics.

We found that Albanian students have enough high entrepreneurial competencies: even members of the control group had adequate attitudes. We found some differences between Shkoder and Durres, Shkoder and Tirana sub-samples. The Tirana MA and Durres BA students gave similar answers. We found that probably the cultural background is more important than what happened in the school. In the future, we will compare our results with other country-samples, first of all with Hungary.

## Education startup in the market economy

Petra Kinga KÉZAI

Széchenyi István University,  
Doctoral School of Regional- and Economic Sciences

The topic of the study is to find a relationship between startups and education in the market economy. The purpose of the analysis is to give an overview of the relationship between the startup business and education through a successful example. The research question is: whether there are startup companies, whose profile is education, have significant international potential?

In the 1970s, startup companies started their Silicon Valley venture into the world. Today a whole ecosystem has been built into the economic sector. In Hungary, since 2007, the startup movement has started and has gained more and more space. Startup is currently a very popular topic. As a result of the promotion in the media, the public is also attracted to the pursuit of new entrepreneurial ideas.

This paper attempt to define the startup concept: the development of the startup ecosystem, startup companies in the different sectors. It investigates: businesses with a profile of education in the market economy; where are they located in Hungary and who are their representatives.

Research method: This study contributes previous cause-related literature by shedding light on the development of the startup ecosystem. The complex study was carried out based on the Insider Database, focused on the Hungarian innovative companies with education profiles.

As a result, this study presents a successful programming school in the field of business: Logiscool. Logiscool offers experience-based programming for 6-18 year-old children in 11 countries around the world. Within 4 years they educated nearly 20 000 students in 54 schools. This paper intends to present Logiscool's life path from founding to development to the international market.

## New Challenges for Asian Retail

Tamás KOZAK

Budapest Business School

The first innovation in the history of retail well known to us was the emergence of department stores. The second, the mail order service was connected to the introduction of catalogues. The third is the spread of discount stores, and internet commerce is obviously the fourth disruptive innovation, where the scale and the speed of the change differentiated from the previous phases. Majority of Asian countries are ahead to illustrate how the traditional retail business models are being transformed by the disruptive technology. The main trends and business developments are explored in the research.

The retail sector – especially in the Asian markets – is traditionally characterised by a way of thinking in long term, and the manifestation of evolution was accompanied by expansive omni - channel models. The new forms and channels of trade strengthened the managements' attention to the future and the local (domestic) companies also took up developing more conceptual plans. Today many even among the managers of the sector feel that we are witnessing changes that do not only modify the presently known operating models but also fundamentally rewrite the business models. The biggest fears are formulated against online commerce, but – in the near past – the role of modern channels (discounts, hypermarkets) that upset the local ecosystem have been sharply criticised.

The research summarises the innovation patterns of retail trade because this will help the in the other parts of the world to pose the right questions.

## New Approach of Trading Area Definition

Tamas KOZAK<sup>1</sup>, Andras KOVACS<sup>1</sup>, Laszlo KARPATI<sup>2</sup>

<sup>1</sup>Budapest Business School

<sup>2</sup>California Consulting Ltd.

Definitions and interpretations of socio-economic spaces has dramatically changed in the last decades. Beyond the classic physical, geographical spaces (regions), nowadays new space-discussions got in the focus of scientific research. Cyber space (internet), personal space-sensing (mental spaces and maps) and their relations to geographical space expanded the term of socio-economic space. This „space revolution“ altered the methods and tools of retail and sales planning, too.

The method of sales planning to start up retailers mainly covers the question of how to make trade forecasts by using competitors' data. There are some well-known methods, of this are that of planning on the basis of trade in goods, volume or price projections. Authors modified the HUFF model to calculate the potential attraction area of a new business in the existing fabric of retailers' set in a defined space of potential consumers. Based on the modified HUFF model, a decision-making SHOP model was developed assisting the potential investors of a retail unit by calculation of cash-flow in the existing consumer-defined space parallel with other – existing – retail units. This SHOP model approach makes decision-making more reliable against the calculations where neighbour-effects are not taken - fully - into account

Both theoretical foundation and practical application of the two decision-making models are disclosed that gives an insight of an entrepreneur in the applicability of this spatial planning approach elaborated by the authors.

## IMF, World Bank and the Hungarian application for membership

Éva KÖVÁRINÉ-IGNÁTH

Institute for International Studies, Corvinus University of Budapest

Oil crisis, Soviet troops in Afghanistan, the emergence of the so-called New Cold War, economic recession, Reaganomics, weaknesses of the Soviet Empire, Solidarity movement in Poland, changes in the global capital markets – just to mention some phenomena from the end of the 1970's, early 1980's. Hungary, as a member of the Council for Mutual Economic Assistance (CMEA), and part of the Eastern bloc could feel the impact of both the political and economic changes that occurred during the aforementioned period. The developments in the international economic arena, the recession after the second oil crisis in 1979 and the decline of trust towards CMEA states in the financial markets (among other aspects) alongside with the economic situation of Hungary led to the decision to apply for membership in the International Monetary Fund (and in the International Bank for Reconstruction and Development) in November 1981, which resulted in full membership in both organisations in 1982.

The study aims to describe the difficult road Hungary travelled until the birth of the decision to submit the application to the aforementioned organisations, and also the first financial arrangements that helped to tackle with the economic difficulties in 1982. In relation to the economic situation of Hungary, the article is going to focus on trade relations and indebtedness, as well as the economic measures introduced after the first loans coming from IMF. As a framework for the accession, besides touching upon the change in the Soviet behaviour regarding handling the financial situation of the bloc, the global economic and international financial developments are also going to be introduced.

## Volunteerism and Voluntary Work

Ildikó LAKI

University of Szeged

Expansion and operation of volunteering is indispensable for the functioning of society. Volunteerism is a particularly important area both with regard to public and private/ecclesiastical initiatives. Although European societies, including the Hungarian society, have had opportunities for volunteering for a long time, voluntary work appears to be treated differently in the world of work and in social life. Volunteering can be regarded both as work and relaxation; the minimum common criteria that emerge from these approaches are that voluntary work is based on shared values and promotes integration.

The diverse forms of voluntary activity include mutual help and self-help, as well as charity work, philanthropic activity, and assistance to others. Formerly, voluntary activities were mainly carried out under the auspices of the church and civil society organisations (foundations and associations).

Volunteers are frequently involved in matters of public interest; they participate in lobbying and society actions and are engaged in activities of interest representation. At the same, they are also involved in community life and society actions aiming at strengthening of the role of civil society.

## Tactical marketing decisions of managers in times of crisis: Qatar Airways Company, case study

Sevinj OMARLI

Corvinus University of Budapest,  
Business Administration and Management Doctoral School, Marketing  
Department

The main purpose of the study is to determine which factors impact on tactical marketing decisions of managers and what marketing activities are applied in times of crisis. The interview with marketing information executive was analyzed using grounded theory methodology. Data analysis in the study followed Corbin and Strauss' (1990) coding processes. This research study is conducted with the primary aim of exploring tactical marketing decisions of managers in times of crisis; using Qatar Airways Company as a case study.

Results indicate those four major components; marketing strategy, marketing informational system (MIS), environmental factors, internal restrictions, and limitations play an important role in tactical marketing decision of managers in a crisis period. It is determined that in order to diminish the negative influences of the crisis, Qatar Airways Company made marketing budgets more efficient by making customer's faithful and attracting them by building a strong, distinct brand image.

## Financial evaluation of energy efficiency in buildings: Social cost-benefit analysis

Éva PINTÉR, Tibor PINTÉR

University of Pécs, FBE; Budapest Business School, FCHT

One of the main objectives of EU energy policy is to improve the energy efficiency of buildings, because nearly 40% of the final energy consumption is made up of buildings – houses, offices, shops and other buildings – and in addition, buildings have the second largest energy saving potential. It is very difficult to determine the overall economic impact when it comes to energy efficiency testing for public buildings, as there are a number of factors of uncertainty that arise from implementation to operation. Buildings should therefore be treated as capital investments where the best investment scenario is likely to be unclear. There is a need to model trade-off relationships between the factors influencing the investment. One of the tools for assessing cash flows in energy efficiency studies is Cost-Benefit Analysis (CBA), which is called the Social Cost-Benefit Analysis (SCBA) in the public sphere. In this study, besides the revenue and expenditure required for energy efficiency analysis, we explore the potential risk factors that lead to scenario analyses. In determining the theoretical framework for the above building energy efficiency analysis, it can be seen that the known calculations must be thoroughly and carefully developed according to the specific data. The cost and benefit factors should be individually defined for the duration of the entire operating and investment cycle. In addition to the discount factors corresponding to EU standards, only investment-specific factors can make the analysis complete – tax effects, inflation indexation or with the help of integrating residual value.

## The economic determinants of cancer: Statistical analysis

Tibor PINTÉR

Budapest Business School, FCHT

Cancer is a very dangerous civilization disease. Several research institutions and civil organizations made publications about the frequency ratios of the cancer in terms of individual countries. The data show, that economically developed countries are more concerned by this disease (especially in the incidence rate, not in the mortality rate). Higher life expectancy and more reliable statistical system can be the causes of the phenomenon, but there are other kinds of correlations. Development indicators such as ratio of urban population, ratio of research and development expenditures, ratio of internet users, rate of income equality (and not the inequality) show decisive positive correlation with the cancer incidence. By the help of a statistical analysis among the EU member countries and the OECD member countries, we will have the opportunity, to identify the economic determinants of the cancer. These countries have to comply with the same statistical standards, that is why the conclusions are to think further. Global data may even express a stronger positive relationship between the level of economic development and the proportion of the population with cancer. The results of the research confirm the view, that the societies and economies exposed to more dynamic changes are more vulnerable to this kind of disease. I examined the connections by the help of correlation matrix and linear regression model, validation values are also appropriate. By the help of doctors, healthcare professionals, sociologists we can make further conclusions, in the current state, the study can serve as a "mapping" work.

## Taxes and climate change: a case study from Sweden

Michał PTAK

Wroclaw University of Economics

In order to address climate change and reduce greenhouse gas emissions policymakers can use a set of instruments, including economic instruments such as environmental taxes and emission trading schemes. By providing "carbon prices" that is prices of carbon dioxide emissions taxes and trading schemes provide signals to energy users to reduce energy consumption and to reduce carbon dioxide emissions. It should be noted that economic instruments reduce emissions in a cost efficient manner and trigger innovations in "green" technologies.

In the European Union emission trading scheme for greenhouse gases is mostly regulated by EU law. Taxes on energy are only partially harmonised across the EU. The so called Energy Taxation Directive sets minimum levels of taxation applicable to motor fuels, heating fuels and electricity. The Directive also includes tax exemptions and tax reductions that member states may implement.

The aim of the article is to analyse Swedish energy taxation system from the perspective of climate policy objectives. Sweden is one of the forerunners in the use of taxes to reduce carbon dioxide emissions. In the early 1990s Sweden introduced carbon tax on fuels that is tax levied on carbon content of fuels. The aim of the tax was to reduce carbon dioxide emissions by enhancing energy users to shift to fuels with lower carbon content and to save energy. The current tax rate (about 120 euro per tonne of CO<sub>2</sub>) is higher than rates of carbon taxes in other EU member states and higher than most of the estimates of the social costs of CO<sub>2</sub> emissions. The level of the tax is regularly adjusted in order to maintain the incentive to reduce emissions. Swedish tax system also includes incentives to use alternative fuels including fuels produced from biomass materials. Furthermore, energy taxes in Sweden were implemented through environmental tax reforms.

## The SME Sector's Accounting in the Light of the Digitization Challenges

Ágnes SIKLÓSI, Krisztina A. SISA, Attila VERESS

Budapest Business School

The aim of our study is to present the current changes in the field of accounting for small and medium-sized enterprises (SMEs), primarily with regard to digitization challenges. In our research, we will review the changes, challenges and potential consequences of SME accounting.

In the theoretical part of our study, we deal with the dimensions of the revolution of "industry4.0" and the content issues of accounting work and bookkeeping, and the organization of accounting tasks.

Our research is to be supported by secondary and primary research methods. During our preliminary research we conducted an in-depth interview with the accountants and senior accounting specialists of the SME sector. In the framework of our empirical research, we sought to find out what was the opinion of the experts concerned about the future of accounting, especially about the challenges of digitalisation.

On the basis of our premise, the accountant's work will not completely cease, but it will only be transformed. Due to digitalisation, routine data capture work is reduced and, therefore, more time is available to make analyses that meet the information needs of decision makers, to examine contexts and thus make the bookkeeping service even more relocating to consulting work.

In our opinion, some of the processes can be replaced by automation, but this will not be complete, good professionals will always be required. Time will be spent on quality work, which is likely to involve the appreciation of controlling roles.

## Assessing Employee Performance drivers in the Hungarian supply network of Airline value chains

Jay Stephen SIV

Corvinus University of Budapest

The research examines the drivers of employee performance in the context of airline value chains in Hungary. The supply network providing products and business process services to airline companies serves as the focus of the study. Supply networks are essential components of industry value chains and are crucial to their continued existence. Suppliers provide products as well as core and noncore services that are reliant on three important inputs: technology, financial capital and human resources. Assessing the efficient utilization and quality of human resources are intrinsically linked with employee performance in the workplace. The variability in performance, however, is influenced by different societal, firm-specific and industry-specific factors that affect employee motivation and consequently, job satisfaction and performance.

The research identifies the determinants of workplace satisfaction and its resulting effect on employee performance in the industry supply network using surveys and regression analysis. Based on the review of extant literature, various factors that may influence employee satisfaction were included in the survey form. A representative sample of rank and file employees and supervisors from three supplier firms participated in filling up the questionnaires. Data from the survey is summarized and then further analysed using regression analysis.

The results show that rank and file employees consider welfare, ergonomics, compensation, and nonmonetary rewards as contributory factors to job satisfaction whereas supervisors only consider top management support and compensation as factors that contribute to their satisfaction in the workplace. Further analysis also shows that welfare and compensation are the most important factors in the respective groups that influence employee performance for airline value chain suppliers in Hungary.

## Outsourcing Multimedia marketing to better manage revenues and costs: An air travel industry perspective

Jay Stephen SIV

Corvinus University of Budapest

Cyclical, marginal, volatile – these words characterize the air travel business and at the same time, summarize the challenges faced by industry stakeholders. Demand for air travel is prone to seasonal variations and economic cycles. It is also sensitive to changes in oil prices as well as security and safety threats. Add to these the capital intensive and high fixed cost structure tied to aircraft acquisition resulting to minimal profits and low return on investments for airline firms.

In order to survive, many firms turn to outsourcing to better manage revenues and control costs. Outsourcing of multimedia marketing to third party providers increased together with the rapid growth of low cost airlines, capitalizing on their frequent need to reach out to clients and engage potential customers using the internet and social media sites, telemarketing, radio, print media, and television to advertise seat sales and last minute discount deals, for instance.

The paper examines the rationale of outsourcing in multimedia marketing and how third party-providers operate and position themselves in this business model. A mixed method dual approach is employed to better understand the situational dynamics. First, a business analysis of the case of three multimedia outsourcing firms based in Hungary is conducted. Second, a factor analysis of the determinants of income sustainability is performed. As profit-oriented entities, income sustainability is an important measure of operational viability and business continuity for outsourcing firms.

The results indicate that a combination of internal and external factors serve as important considerations in the decision to establish an outsourcing operation. These include firm size and resources, operating history, economic growth, inflation and borrowing costs. The dominant bargaining position of airline companies, on the other hand, negatively affects the income sustainability of outsourcing firms as measured by either return on assets (ROA), return on equity (ROE) or forecasted earnings before interest (EBIT), in accordance with extant literature.

## Efficiency of Top 500 Companies

Richard SZABÓ

Óbuda University, Galamb József International Research Center

More opportunities existed to measure the efficiency of economic entities. The Data Envelopment Analysis is the most popular for banks and companies. This multidimensional tool should be reduced by two dimension, and has been developed the mostly aggregated ratio, the R type efficiency Template (ReffT). The input should be calculated from the ratio of Equity divided by Total Assets. Two kind of output could be defined, gross and net. At the gross output will be used the earning before taxes divided by the revenue, and at the net output will be used the earning after taxes divided by the revenue. Finally will be described two ReffT, gross and net.

The second part should be analysed the ReffT theory to practice by evaluation of the World top 500 Companies. All 500 companies will be calculated the ReffT ration and ordered by ascending.

## Organic Farming in the Common Agricultural Policy

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The paper analyses the support of organic farming activities within the Common Agricultural Policy (CAP). The CAP is one of the most significant public policies of the European Union, aiming at significant economic, social and environmental goals in rural areas across Europe. One of these diverse goals is the advancement of organic farming on the agricultural territory of the European Union. Organic farming is an agricultural production system in which farmers elect to refrain from using pesticides, fertilizers, and other artificial materials aimed at enhancing production. Organic farming is a production approach that is rapidly gaining popularity all across Europe. A brief overview is given on the Community legal background on this subject, as well as the situation of organic farming within the common subsidy framework. The paper discusses in detail the current support instruments related to organic farming in Hungary. A summary is given on the requirements that farmers have to meet in order to be able to take part in the support measure. The level of participation and the expected results are also discussed. The paper reviews the scientific literature in this field, looking at particularly the impact assessment of CAP support instruments related to organic farming. Lastly, the future of the CAP is analysed with a view to possible support measures on organic farming in the period 2021-2027.