
GLOBAL ECONOMY AND GOVERNANCE

CHALLENGES IN A TURBULENT ERA

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TABLE OF CONTENTS

AGRICULTURAL LABOUR PRODUCTIVITY IN THE EUROPEAN UNION - DYNAMICS AND CONVERGENCE. <i>NINA DREJERSKA, JAROSŁAW GOŁĘBIEWSKI, MARIOLA CHRZANOWSKA</i>	9
ALTERNATIVE POLICIES MIXED FOR POLAND ANALYZED WITH THE USE OF GAME METHODS. <i>LECH KRUS, IRENA WORONIECKA-LECIEJEWICZ</i>	11
ANALYSIS OF THE PERCEPTION OF USING EMPLOYEE OUTSOURCING IN COAL COMPANIES IN POLAND BY EXTERNAL COMPANIES EMPLOYEES. <i>EWELINA WŁODARCZYK</i>	13
AN INFLUENCE OF CAPITAL MARKET'S DEVELOPMENT ON THE RELATION BETWEEN THE COMPANY'S GROWTH AND THE LEVEL OF DEBT. EVIDENCE FROM EUROPEAN CONSTRUCTION COMPANIES. <i>ANETA KALISIAK</i>	14
APPLICATION OF GEOMARKETING TOOLS IN THE COAL SALES NETWORK OPTIMIZATION. <i>AURELIA RYBAK</i>	15
APPLICATION OF MULTI-CRITERIA OPTIMIZATION TO SAFE BUDGET PLANNING. <i>KRZYSZTOF S. CICHOCKI, LECH KRUS</i>	16
ASSESSING THE ECONOMICAL EFFICIENCY OF INTERMODAL CHAINS IN GLOBAL TRADE. <i>BOGUSZ WIŚNICKI, DARIUSZ MILEWSKI</i>	18
ASSESSMENT OF THE POSSIBILITIES OF IMPLEMENTING CORPORATE RISK MANAGEMENT STANDARDS IN POLISH HIGHER EDUCATION INSTITUTIONS. <i>JACEK WINIARSKI</i>	20
ASYMMETRIC INFORMATION AND DEAL SELECTION: EVIDENCE FROM ITALIAN VENTURE CAPITAL MARKET. <i>GIUSEPPE RISALVATO</i>	21
AWARENESS OF POLISH STUDENTS CONCERNING GENDER EQUALITIES IN FAMILY LIFE AND LABOUR MARKET IN POLAND IN CORRELATION WITH FOSTERING OF INTANGIBLE CULTURAL HERITAGE. <i>TERESA KUPCZYK</i>	23
BACK TO BITS AND BITES: DO TRADE AND INVESTMENT AGREEMENTS PROMOTE FOREIGN DIRECT INVESTMENT WITHIN DEVELOPING COUNTRIES? <i>MARTA BENGUA, BLANCA SANCHEZ-ROBLES</i>	25
BASIC IDEAS AND BUSINESS MODELS OF WIKINOMICS IN PUBLIC ADMINISTRATION. <i>ALEKSANDER JAKIMOWICZ, DANIEL RZECZKOWSKI, KATARZYNA SMULSKA</i>	27
BUILDING A STATE INSTITUTION ON THE BASIS OF PROCESS ANALYSIS. THE CONCEPT OF THE CADASTRE INSTITUTION. <i>BOGDAN NOGALSKI, ADAM KLIMEK</i>	29
BUSINESS PROCESS MANAGEMENT CENTRE OF EXCELLENCE AS A SOURCE OF KNOWLEDGE AND COMPETENCIES. <i>AGNIESZKA BITKOWSKA</i>	31
CITIZENSOURCING - APPLYING THE CONCEPT OF OPEN INNOVATION TO THE PUBLIC SECTOR. <i>ALEKSANDRA RADZISZEWSKA</i>	33
COMPARATIVE ANALYSIS OF THE EFFECTIVENESS OF CORPORATE BANKRUPTCY PREDICTION MODELS BASED ON FINANCIAL RATIOS FOR 2008-2015: THE COLOMBIAN CASE. <i>JACKSON ARROYAVE</i>	35

COMPETITIVE POSITION OF COMPANIES IN THE POLISH CHEMICAL SECTOR – TMAI APPROACH. <i>BARBARA FURA</i>	36
CONSUMERS' INFLATION EXPECTATIONS IN EUROPEAN UNION - EXAMINING THE HETEROGENEITY AMONG MEMBER STATES, GROUPS OF CONSUMERS AND THEIR ECONOMIC DISTANCE SPATIAL DISTRIBUTION. <i>KAROLINA TURA-GAWRON, KAROL FLISIKOWSKI</i>	38
CORPORATE SOCIAL RESPONSIBILITY IN THE CONTEXT OF RISK PREVENTION AND GROWTH SUPPORT SOCIAL VALUE OF BUSINESS. <i>IVETA SEDLÁKOVÁ</i>	40
COVENANTS AS BARRIERS TO USE OF BANK LOANS BY BUSINESSES. <i>AGATA SIERPIŃSKA-SAWICZ</i>	41
CROSS-SECTIONAL ASSET PRICING MODELS FOR THE POLISH EQUITY MARKET. <i>ADAM ZAREMBA</i>	43
CULTURAL AND PERSONALITY TRAITS IN RISK- TAKING BEHAVIOUR- EVIDENCE FROM POLAND AND UNITED STATES OF AMERICA. <i>MONIKA CZERWONKA</i>	44
CURRENT TRENDS IN VENTURE CAPITAL INVESTMENTS IN EARLY STAGE LIFE-SCIENCE PROJECTS RELATED TO HEALTHCARE. <i>WALDEMAR KARPA, ANTONIO GRGINOVIĆ</i>	46
DETERMINANTS OF THE BANKING SECTORS TRANSFORMATION IN SOUTH EAST EUROPE BETWEEN 1996 AND 2015. <i>KATARZYNA KUBISZEWSKA</i>	48
DETERMINANTS OF THE FAMILY BUSINESS CAPITAL STRUCTURE - CENTRAL AND EASTERN EUROPEAN PERSPECTIVE. <i>JAKUB MARSZAŁEK</i>	50
DIVIDEND PAYERS OF LISTED COMPANIES - GLOBAL PERSPECTIVE - CASE OF FOOD PROCESSING COMPANIES. <i>JUSTYNA FRANC-DĄBROWSKA</i>	52
ECOLOGICAL AND SOCIAL DETERMINANTS OF THE EU SUSTAINABLE DEVELOPMENT. DEA APPROACH. <i>JANUSZ ROSIEK</i>	54
ECONOMIC GROWTH AND STABILITY ON THE AGENDA OF THE INTERNATIONAL MONETARY FUND. <i>RYSZARD WILCZYŃSKI</i>	56
ECONOMIC NEWS AND HOUSEHOLD'S DECISIONS. <i>ANNA MEDVED</i>	58
EMISSIONS OF ENERGY PRODUCTION AND SOCIO-ECONOMIC GROWTH. <i>JÓZEFA FAMIELEC, RENATA ŽABA – NIERODA</i>	59
EMPLOYABILITY IN THE KNOWLEDGE-BASED ECONOMY. <i>MARIA POSTOYEVA</i>	61
ENHANCING MARKETING DECISION MAKING FOR THE BIG DATA APPROACH IN RAPID TRANSIT RESEARCH. <i>WU CHIH-WEN</i>	62
ENVIRONMENTAL RISK MANAGEMENT OF POLISH FUEL COMPANIES IN FINANCIAL STATEMENTS. <i>ADAM LULEK</i>	64
EQUITY CROWDFUNDING IN POLAND. <i>ANGELIKA KĘDZierska-SZCZEPANIAK</i>	66
EU DEVELOPMENT ASSISTANCE INSTRUMENTS UNDER THE EU BUDGET - ASSISTANCE MECHANICS, UTILISATION AND EFFECTIVENESS. <i>MAGDALENA PROCZEK, EWA OSUCH-RAK, JOANNA SURAŁA</i>	67

EU LEGISLATION ON ANTI-MONEY LAUNDERING AND TERRORIST FINANCING IN THE LIGHT OF RIGHT TO PRIVACY AND ITS IMPLEMENTATION TO POLISH LAW. <i>MAGDALENA JACZEWSKA</i>	69
EVALUATION AND SELECTION CRITERIA FOR THE MOST ADVANTAGEOUS OFFER USED BY THE CONTRACTING AUTHORITIES IN POLAND AND SELECTED EU COUNTRIES. <i>BEATA GRZYL</i>	71
EXTENDING ACCOUNTABILITY IN (OUT)SOURCING RELATIONSHIPS. <i>JOANNA GUŚĆ, SŁAWOMIR JARKA</i>	73
FDI AND TRADE AS A CHANNELS OF SPILL-OVER EFFECTS OF TOTAL FACTOR PRODUCTIVITY. <i>JACEK PIETRUCHA, RAFAŁ ŻELAZNY</i>	75
FINANCIAL STRUCTURE OF FDI AND ECONOMIC GROWTH IN POLAND – VAR MODEL EXAMPLE. <i>ANETA KOSZTOWNIAK</i>	76
FINANCIAL SUSTAINABILITY OF NON-PROFIT SECTOR IN SLOVAKIA. <i>DENISA GAJDOVÁ</i>	78
FISCAL POLICY FOR HOUSEHOLDS AND PUBLIC BUDGET CONSTRAINT IN ITALY. <i>IRFAN AHMED</i>	79
FORECASTING HOUSEHOLD SAVING RATE WITH CONSUMER CONFIDENCE INDICATOR AND ITS COMPONENTS: PANEL DATA ANALYSIS OF 13 EUROPEAN COUNTRIES. <i>ANETA MARIA KŁOPOCKA, RUMIANA GÓRSKA</i>	80
FOREIGN DIRECT INVESTMENT INFLOW TO THE MONETARY UNIONS COUNTRIES IN AFRICA AND ITS DETERMINANTS. <i>KRYSTYNA MITRĘGA-NIESTRÓJ, BLANDYNA PUSZER, ŁUKASZ SZEWCZYK</i>	82
FOREIGN DIRECT INVESTMENT, INSTITUTIONS, AND INEQUALITY IN INDONESIA: AN EMPIRICAL STUDY. <i>PANDE NYOMAN LAKSMI KUSUMAWATI, JOOST HERMAN, R.L. HOLZHACKER</i>	84
FROM BASIC SCIENCE AND PATENTS TO THE TECHNOLOGICAL DEVELOPMENT OF THE ECONOMY? SHORT AND LONG RUN CAUSALITIES. <i>MARTA ORVISKA, JAN HUNADY, JOHN HUDSON, PETER PISAR</i>	86
FROM ORDINARY BUSINESS IDEAS TO WORLD-LEVEL INNOVATIONS. <i>KATARZYNA ŁOBACZ</i>	87
GOVERNANCE INDICATORS INFLUENCING ILLICIT FINANCIAL OUTFLOWS FROM DEVELOPING COUNTRIES. <i>ANSELM KOMLA ABOTSI</i>	89
GREGORIAN AND INDIAN CALENDAR: COMPARATIVE ANALYSIS OF MONTHLY ANOMALY IN INDIAN STOCK MARKET. <i>TAJINDER JASSAL, BABLI DHIMAN</i>	90
IMPACT OF CSR ON OPERATING FINANCIAL RESULTS - THE CASE OF COMPANIES FROM RESPECT INDEX. <i>KAROLINA DASZYŃSKA-ŻYGADŁO</i>	92
IMPACT OF ECB ANNOUNCEMENTS OF ASSET PURCHASE PROGRAMMES ON SOVEREIGN BOND MARKETS IN INDIVIDUAL EU MEMBER STATES. <i>MICHAŁ KONOPCZAK</i>	94
IMPACT OF FORMAL INSTITUTIONS ON REGIONAL ENTREPRENEURSHIP - GOVERNMENT FAILURE OR SUCCESS? EVIDENCE FROM POLAND. <i>SYLWIA MORAWSKA, MAŁGORZATA GODLEWSKA</i>	96

IMPACT OF PRODUCTION FACTORS ON THE EFFECTIVENESS OF DIFFERENT TYPES OF AGRICULTURAL PRODUCTION IN REGIONS OF THE EUROPEAN UNION. MARTA GUTH, KATARZYNA SMĘDZIK-AMBROŻY.....	97
IMPACTS OF CLIMATE CHANGE AND TRADE IN THE LEAST DEVELOPED COUNTRIES. JOAO HENRIQUE PEREIRA TAVARES.....	99
INFLATION EXPECTATIONS AFTER FINANCIAL CRISIS: ARE CONSUMERS MORE FORWARD-LOOKING? MAGDALENA SZYSZKO, ALEKSANDRA RUTKOWSKA.....	101
INFLATION IN NIGERIA, A HISTORICAL FACT OR CONSEQUENCES OF FISCAL DEFICIT?: AN EMPIRICAL EXAMINATION USING THRESHOLD VECM. JAMALADEEN ABUBAKAR KATHIRVELAN JOTHI SIVAGNANAM.....	103
INNOVATIVE MARKETING SERVICES IN BUSINESS PRACTICE. KATARZYNA BACHNIK, ROBERT NOWACKI.....	105
INTEGRATING EAST CENTRAL EUROPE INTO THE WELFARE REGIME TYPOLOGY. AGNES OROSZ.....	107
INVESTMENT DECISIONS IN TECHNOLOGICAL FIRMS. INNA ALEXEEVA ALEXEEV, BEGOÑA TORRE OLMO, SERGIO SANFILIPPO AZOFRA.....	109
ISO 26000 AMONG THE CORPORATE SOCIAL RESPONSIBILITY STANDARDS. MARCIN GERYK.....	111
KNOWLEDGE MANAGEMENT AND COMPETITIVENESS OF MANUFACTURING COMPANIES. MARCIN SONIEWICKI, MARCIN SZYMKOWIAK.....	112
LEVERAGE AND FIRM GROWTH: AN EMPIRICAL INVESTIGATION OF GAZELLES FROM EMERGING EUROPE. ANTON SORIN GABRIEL.....	114
LOCAL GOVERNMENT CHALLENGES' TO IMPLEMENT PUBLIC PRIVATE PARTNERSHIP IN INDONESIA. ERWIN SONDANG.....	115
LONG TERM CONSEQUENCES OF THE CO2 EMISSION CURBING POLICY IN POLAND. JAN GADOMSKI, LECH KRUSĆ.....	116
MANAGING INNOVATION PROCESSES IN INDUSTRIAL SECTOR. QUALITATIVE STUDY. DAWID SZUTOWSKI, ALEKSANDRA SZULCZEWSKA-REMI, JULIA SZULCZYŃSKA, PIOTR RATAJCZAK.....	118
MANAGING THE TRANSITION OF THE MODERN GLOBAL ECONOMY TO A NEW QUALITY OF ECONOMIC GROWTH WITH THE HELP OF OVERCOMING THE „UNDERDEVELOPMENT WHIRLPOOLS”: CONCEPTUAL SUBSTANTIATION AND PRACTICAL RECOMMENDATIONS. ELENA POPKOVA, ALEKSEI BOGOVIZ.....	120
MARKET AND POLICY DRIVERS OF THE FARM PRICE-COST SQUEEZE: EVIDENCES FROM THE EUROPEAN UNION. BAZYLI CZYŻEWSKI, ANNA MATUSZCZAK.....	122
MEAT CONSUMPTION AS A DETERMINANT OF ECONOMIC WELL-BEING – THE CASE OF DEVELOPED AND DEVELOPING ECONOMIES. JOANNA BEREŻNICKA.....	124
MITIGATING THE NEGATIVE INFLUENCE OF IT INDUSTRY ON THE NATURAL ENVIRONMENT. GRZEGORZ CHMIELARZ.....	126
MODELLING LOCAL DEVELOPMENT USING FUZZY ANALYTIC HIERARCHY PROCESS. ALEKSANDRA ŁUCZAK, AGNIESZKA KOZERA.....	127

MODEL OF EU FUNDRAISING PROCESS. <i>ELŻBIETA WEISS, AGNIESZKA BITKOWSKA, RAFAŁ TYSZKIEWICZ</i>	129
MOTIVES OF FOREIGN DIRECT INVESTMENT BY POLISH COMPANIES - GREENFIELD VS. ACQUISITION. <i>MAŁGORZATA JAWOREK, WŁODZIMIERZ KARASZEWSKI, MAŁGORZATA SZAŁUCKA</i>	131
NEGATIVE FACTORS AFFECTING THE EFFICIENCY OF RESTRUCTURATION OF PUBLIC HOSPITALS. <i>KAROLINA WIELICKA-GAŃCZARCYK</i>	133
ON FORM AND CONTENT OF SUPERVISOR ACTIVITIES THAT SUPPORTS E-LEARNING ACCEPTANCE ON INDIVIDUAL AND TEAM LEVEL, IN MANDATORY ENVIRONMENT. <i>JACEK WOŹNIAK</i>	135
ONLINE COMMUNICATION TOOLS ON BUILDING RELATIONSHIPS WITH YOUNG CONSUMERS. <i>MAGDALENA KOWALSKA</i>	137
POLICY IMPLICATIONS TO SUSTAIN THE STABILITY OF THE FINANCIAL SYSTEM. <i>AGNIESZKA ALIŃSKA</i>	138
PRICE AND COMPETITION EFFECT OF VAT: EVIDENCE FROM THE BULLION COIN MARKET IN GERMANY. <i>WOJCIECH STILLER</i>	139
PROSUMPTION AND PLATFORMS FOR PARTICIPATION IN PUBLIC ADMINISTRATION OF THE DIGITAL AGE. <i>ALEKSANDER JAKIMOWICZ, DANIEL RZECZKOWSKI</i>	140
QUALIFICATIONS AND COMPETENCIES OF POTENTIAL LABOUR MARKET PARTICIPANTS. <i>MAŁGORZATA GAWRYCKA, JUSTYNA KUJAWSKA, MICHAŁ TOMCZAK</i>	142
RELATIONS BETWEEN THE ATTITUDES AND BEHAVIORS OF POLISH CONSUMERS TOWARDS THE SOCIAL CORPORATE RESPONSIBILITY. <i>ELŻBIETA WEISS</i>	144
REPUTATION RISK INSURANCE AS A NEW CHALLENGE FOR INSURANCE COMPANIES IN THE DIGITAL ERA. <i>DANUTA SZWAJCA</i>	145
RESPONSIBLE RESEARCH AND INNOVATION CONCEPT IN ECONOMIC DEVELOPMENT: NEO-SCHUMPETERIAN PERSPECTIVE. <i>KAROL ŚLEDZIK</i>	147
REVERSE SPLITS IN INTERNATIONAL STOCK MARKETS: RECONCILING THE EVIDENCE ON LONG-TERM RETURNS. <i>ADAM ZAREMBA</i>	149
RISK FACTORS OF BUSINESS ACTIVITY IN THE ORGANIC FOOD SECTOR - THE EVIDENCE FROM POLAND. <i>HANNA GÓRSKA-WARSEWICZ, SYLWIA ŻAKOWSKA-BIEMANS, MONIKA ŚWIĄTKOWSKA, DAGMARA STANGIERSKA, EWA ŚWISTAK, AGNIESZKA BOBOLA, JULITA SZLACHCIUK, KAROL KRAJEWSKI, MAKSYMILIAN CZECZOTKO</i>	150
SELECTED MICRO AND MACROECONOMIC CONDITIONS OF WAGES, INCOME AND LABOR PRODUCTIVITY IN POLAND AND OTHER EUROPEAN UNION COUNTRIES. <i>DARIUSZ FATUŁA</i>	151
SIGNIFICANCE OF EDUCATION FOR THE ECONOMY OF SUSTAINABLE DEVELOPMENT - TOWARD SOCIAL RESPONSIBILITY. <i>BEATA SADOWSKA</i>	152
SOURCES AND CONSEQUENCES OF CONFLICTS IN RELATIONSHIPS OF MULTINATIONAL ENTERPRISES IN INTERNATIONAL MARKETS. <i>ALEKSANDRA HAUKE-LOPES, KRZYSZTOF FONFARA, MILENA RATAJCZAK-MROŻEK</i>	153

SOURCES OF FINANCING INVESTMENT AIMED AT IMPROVING ENERGY EFFICIENCY IN ORDER TO ACHIEVE A LOW CARBON ECONOMY IN POLAND. <i>ANNA MANOWSKA</i>	155
SPECIFIC CHARACTER OF MARKET AND SOCIAL ORGANIZATIONS, AND THE COURSE OF COOPETITION; PROPOSED DIRECTION OF RESEARCH. <i>MARTA MOCZULSKA</i>	156
SPECULATIVE TRADING AND ITS EFFECT ON FORWARD PREMIUM PUZZLE: EVIDENCE FROM BRITISH POUND MARKET. <i>KATARZYNA CZECH</i>	158
STATISTICAL PROPERTIES OF RATES OF RETURN ON SHARES LISTED ON THE GERMAN, FRENCH, AND POLISH MARKET – A COMPARATIVE STUDY. <i>WIESŁAW DĘBSKI, EWA FEDER-SEMPACH, SZYMON WÓJCIK</i>	160
SUPPORTING GEN-Y ENTREPRENEURSHIP IN THE CITY OF POZNAŃ. <i>JAN FAZLAGIĆ, ALEKSANDRA SZULCZEWSKA-REMI</i>	163
SUSTAINABLE DEVELOPMENT OF GLOBAL ENTREPRENEURSHIP: PRINCIPLES, PRIORITIES AND PERSPECTIVES. <i>IRINA MOROZOVA, TATIANA LITVINOVA</i>	165
SUSTAINABLE INTENSIFICATION OF AGRICULTURE AS THE COMPOSITION OF ECONOMIC PRODUCTIVITY AND ENVIRONMENTAL PRESSURE MEASURES. <i>ANDRZEJ CZYŻEWSKI, JAKUB STANISZEWSKI</i>	167
SYSTEMIC RISK INDICATORS AS MEASURES OF EARLY WARNING SYSTEM OF CENTRAL BANKS. <i>ALEKSANDRA NOCOŃ</i>	169
TECHNOLOGY FORESIGHT AS AN INSTRUMENT FOR IDENTIFYING DIRECTIONS OF ORGANISATION IMPROVEMENT. <i>MARCIN OLKIEWICZ</i>	171
TESTING E-COMMERCE SYSTEMS SUCCESS MODEL IN A POLAND SAMPLE. <i>FATİH ÇETİN, JOANNA PALISZKIEWICZ, MAGDALENA MAŁDRA-SAWICKA</i>	172
THE CONCEPT OF REAL ESTATE PORTFOLIO MATRIX (REPO-M) AND ITS APPLICATION FOR STRUCTURAL ANALYSIS OF THE POLISH COMMERCIAL REAL ESTATE MARKET. <i>BOLESŁAW KOŁODZIEJCZYK, PAWEŁ MIELCARZ, DMYTRO OSIICHUK</i>	174
THE DEVELOPMENT OF ORGANIC MILK PRODUCTION IN POLAND AND ITS DETERMINANTS. <i>MARIA ZUBA-CISZEWSKA, ALEKSANDRA KOWALSKA</i>	175
THE EFFECT OF HIGHER EDUCATION ON HUMAN DEVELOPMENT IN IRAN DURING 1976-2014 USING ARDL APPROACH. <i>SEYED MOHAMMAD JAVAD RAZMI, MARYAM BABAEE</i>	177
THE EFFECT OF POPULATION AGING ON IRAN'S ECONOMIC GROWTH. <i>SEYED MOHAMMAD JAVAD RAZMI, MARYAM BABAEE</i>	178
THE EVALUATION OF PROJECT MANAGEMENT PRACTICES IN THE CZECH SOCIAL ENTERPRISES. <i>KLARA KUBICKOVA, MAJRA HODŽIČ</i>	180
THE IMPACT OF COMMON AGRICULTURAL POLICY (CAP) ON THE SOCIO-ECONOMIC SUSTAINABILITY OF FARMS IN THE EUROPEAN UNION COUNTRIES. <i>SEBASTIAN STĘPIEŃ, MARTA GUTH, KATARZYNA SMĘDZIK-AMBROŻY</i>	182
THE IMPACT OF MANAGEMENT METHODS ON EMPLOYEE ENGAGEMENT. <i>OLGA RAWA-SIARKOWSKA, BARBARA A. SYPNIEWSKA</i>	184

THE IMPACT OF REMITTANCES ON THE RECEIVING COUNTRY: EMPIRICAL EVIDENCES FROM ROMANIA. <i>RUXANDRA IOANA CUREA-PITORAC</i>	186
THE IMPACT OF THE EU FUNDS ABSORPTION ON REGIONAL DEVELOPMENT OF POLAND (2005-2014). <i>IZABELLA KUDRYCKA</i>	188
THE IMPACT OF THE SELECTED FACTORS ON A NEW FIRMS FORMATION IN THE PRIVATE HEALTH CARE SECTOR. <i>TOMASZ SKICA, TERESA MROCZEK, MAŁGORZATA LEŚNIEWSKA-GONTARZ</i>	189
THE MAIN DIRECTIONS OF IMPROVING THE EFFICIENCY OF REGULATION OF THE TRANSNATIONAL BUSINESS IN MODERN CONDITIONS. <i>MUSLIMAT ALLAHVERDIYEVA</i>	191
THE METHODOLOGICAL PROPOSAL FOR EVALUATION OF DISCRETIONARY ACCRUALS IN THE PROCESS OF EARNINGS MANAGEMENT DETECTION. <i>MICHAŁ COMPOREK</i>	192
THE RELATIONS OF INVESTMENTS AND SUBSIDIES TO LABOUR PRODUCTIVITY IN AGRICULTURE IN POLAND BETWEEN 2010 AND 2015. <i>ALEKSANDRA PAWŁOWSKA, WŁODZIMIERZ REMBISZ</i>	194
THE ROLE OF INTERNAL FINANCING IN CAPITAL ACCUMULATION – CASE OF FOOD MANUFACTURING SECTOR. <i>MAGDALENA MAŁDRA-SAWICKA</i>	196
THE ROLE OF TRUST IN VIRTUAL ORGANIZATIONS AND IMPLICATIONS FOR E-CULTURE. <i>HELENA BULIŃSKA-STANGRECKA</i>	198
THE SITUATION OF WOMEN IN THE POLISH LABOUR MARKET IN THE LIGHT OF CHANGES IN THE PENSION SECURITY SYSTEM. <i>MAŁGORZATA GAWRYCKA</i>	199
THE UNIQUE MODEL OF DEVELOPMENT OF SMALL TOWNS IN POLAND. A CASE STUDY OF THE CITTASLOW NETWORK OF TOWNS. <i>ELŻBIETA STRZELECKA, BEATA GLINKOWSKA</i>	201
TRANSFORMATION OF BACK-OFFICES FUNCTION TO SUPPORT A CULTURE OF INNOVATION AND INTELLECTUAL CAPITAL DEPLOYMENT. <i>IRYNA OLEJNIKOVA</i>	203
TRUST IN M-COMMERCE IN THE EYES OF YOUNG URBAN DWELLERS OF TWO CENTRAL EUROPEAN COUNTRIES. <i>JACEK WOŹNIAK</i>	205
WHAT EXACTLY DETERMINES FOREIGN DIRECT INVESTMENT? <i>MINAKSHEE DAS</i>	207
WHAT IF NOT GROSS DOMESTIC PRODUCT? <i>ANNA BLUSZCZ</i>	208
WHAT IS THE ROLE OF INNOVATION IN PRODUCTIVITY GROWTH IN EUROPE IN TIMES OF CRISIS? <i>ELENA MAKREVSKA DISOSKA</i>	209
WHERE WILL THE ASSET IMPAIRMENT TESTS LEAD US? <i>JADWIGA PRAŻNIKÓW, TADEUSZ DUDYCZ</i>	210
WHO IS UNBANKED? EVIDENCE FROM POLAND. <i>TOMASZ SZOPIŃSKI</i>	212
WOMEN PERSONAL NETWORK AND FINANCIAL PROFITABILITY: CASE OF TUNISIAN SMALL FIRMS. <i>HAYET BEN SAID</i>	213
WORKFORCE PRODUCTIVITY FOLLOWING MERGERS AND ACQUISITIONS - EVIDENCE FOR POLAND. <i>MARCIN OCIESZAK</i>	219

AGRICULTURAL LABOUR PRODUCTIVITY IN THE EUROPEAN UNION - DYNAMICS AND CONVERGENCE

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Abstract

The aim of the study: Efficiency of production factors is one of the most important issues which determines competitiveness of the economy as well as its particular sectors. This relation refers also to the agricultural sector which contributes to 1.3% of GDP on average in the European Union in 2016 and depending on the country employs from 1.3 to even 29% of labour force 2014. Despite of a tendency of decreasing share of agricultural employment in total employment, this indicator is higher than the share of agriculture in GDP of all Member States apart from Slovakia. As a result, there exists a disparity of farmers' income comparing to average income in the economy (Wąs, Mażewska, 2012). This disproportion rises a question on agricultural labour productivity, its changes in time and their possible influence on convergence across the EU.

The main aims of the study are (1) to assess to what extent structural changes in agriculture (i.e. decrease in a number of farms, increase in their area, etc.) contribute to changes in agricultural labour productivity and then (2) to identify if there exists a convergence tendency in agricultural labour productivity across the European Union.

Methodology: Convergence processes have been widely studied in regional sciences but they were also investigated referring to the agricultural sectors, for example by Liu et al. (2008), Alexiadis (2010), Esposti (2011), Emvalomatis et al. (2013) as well as Sapa and Baer-Nawrocka (2014). That is why authors decided to take up this topic in a perspective of the last two decades (1996-2015) using the data of the World Bank and Eurostat. Agricultural labour productivity expressed by agriculture value added per worker (constant 2010 USD), proportion of value added generated by agriculture (% of GDP) and a share of agriculture in total employment are presented as time-series with a trend's function.

A panel data regression model is used for assessment of changes in agricultural labour productivity resulting from a variety of structural factors affecting agriculture and rural areas. This research can be possibly developed with application of a spatial panel data model. For the second objective we use the convergence coefficient. It can be applied to analyses of convergence processes in time and the convergence can be identified when its value decreases in the analysed time period (Bal-Domańska, 2009).

The main findings: Values of the convergence coefficient are stable and vary only from 0.36 to 0.38 during the analysed period.

Conclusion: Preliminary results of the study shows that convergence in agricultural labour productivity cannot be identified across the EU Member States.

Recommendations: A regional approach for research on convergence in agricultural labour productivity in the European Union can be applied as it can be also more reasonable for identification of spatial effects.

Limitations: Diversification of agricultural production within particular EU Member States suggest further research at the regional level.

ALTERNATIVE POLICIES MIXED FOR POLAND ANALYZED WITH THE USE OF GAME METHODS

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Abstract

The aim of the study: The study leads to an analysis of mutual interactions of the monetary and fiscal policies in the case of Poland. The historical policies carried on in different periods of time and their economic effects are compared with possible strategies obtained from analysis of the proposed monetary-fiscal game.

Methodology: In the paper methods of the noncooperative game theory are combined with the ideas of the New Neoclassical Synthesis (NNS) modeling. A noncooperative monetary-fiscal game (MFG) has been formulated for players - namely monetary and fiscal authorities. Strategies of the players are defined as instruments of their policies: the real interest rate and the budget deficit in relation to GDP. Payoffs include inflation and GDP growth respectively. The payoffs are calculated using a specially elaborated macroeconomic model based on the New Neoclassical Synthesis concept. The model, called NNS-MFG model, has been formulated and estimated using the statistical data for Poland. The model name indicates linking of the NNS and MFG methods. The macroeconomic NNS-MFG model describes influences of the instruments of the monetary and fiscal policies on the state of the economy. In comparison to the basic NNS model, this model describes not only a transmission of the monetary policy impulses but also influences of the fiscal policy. It takes into account the budget expenditure gap. In place of the Taylor rule policies mix alternative to the historical ones are introduced. The estimated model has been implemented in the form of a recursive algorithm in a computer-based system.

The main findings: The payoffs of players have been calculated dependently on strategies implemented. The best response strategies and the Nash equilibria have been analyzed. It has been made for different time periods in which changes of the policies to more restrictive or more expansive to the historical ones have been assumed. The best response strategies have been derived for the different targets assumed by the monetary and fiscal authorities. It has been shown that for the assumed inflation goal there were possibilities to obtain the GDP growth higher than the obtained in the past.

Conclusion: Different strategic situation are indicated: the first when the strategies leading the Nash equilibrium satisfy the Pareto optimality and the second, when the Nash equilibrium leads to ineffective decisions. It is shown when the excessive goals of the monetary and fiscal policies may lead to not effective, not Pareto optimal Nash equilibria.

Recommendations: A respective coordination of monetary and fiscal targets leading to the Pareto optimal Nash equilibria and effective policy mix is required.

Limitations: The study has been made for the case of Poland and the period 2000 - 2014.

ANALYSIS OF THE PERCEPTION OF USING EMPLOYEE OUTSOURCING IN COAL COMPANIES IN POLAND BY EXTERNAL COMPANIES EMPLOYEES

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Abstract

In recent years outsourcing of a variety of different activities has been more commonly observed in coal mining industry. It is connected with employing workers by external companies. These practices are not necessarily perceived as good ones by mines' employees because they may influence directly or indirectly their remuneration.

This article aims to present how external employees assess outsourcing underground workings. In order to achieve this aim there was a survey carried out among employees of one of external companies. Participants of the survey were randomly chosen among underground miners employed at one external company. The survey was anonymous which obviously might have influenced respondents' honesty in answering. In some of them the survey was carried out online and in the remaining ones it was filled in on paper.

The survey showed that external employees have negative approach to outsourcing underground workings. All respondents had employment contracts. More than a half of external employees were remunerated within time-and bonus based compensation system. Another 30 % of respondents that is 9 employees was remunerated on the basis of piecework.

Thus, if such workers want to earn more they must work faster and more efficiently. This, in turn increases the targets of employees of mining companies. The majority of mining company employees are remunerated within time-and bonus based system. Therefore since outsourced workers influence labour standards that are used to calculate bonus, they also influence the employees' remuneration.

Moreover, outsourced work, which is done in haste (piecework) does not promote safety. It was shown in the survey results, too. Moreover outsourced companies very often employ retired miners so the costs of employment that are incurred by the outsourced companies are much lower than those incurred by mining companies.

Analysing the survey results allowed better understanding of reasons of disapproval of outsourcing underground workings. This in turn may be used for better human resource management in coal companies including in particular planning incentive based pay systems.

AN INFLUENCE OF CAPITAL MARKET'S DEVELOPMENT ON THE RELATION BETWEEN THE COMPANY'S GROWTH AND THE LEVEL OF DEBT. EVIDENCE FROM EUROPEAN CONSTRUCTION COMPANIES

ANETA KALISIAK

SZKOŁA GŁÓWNA GOSPODARSTWA WIEJSKIEGO W WARSZAWIE

Abstract

The aim of the study was to investigate if the capital market's development determines the relation between the company's growth and the level of its debt. This paper presents research results regarding this relationship among construction companies listed on stock exchanges in 28 European Union's countries. The construction sector of industry is very important for every EU's country and for the European Union as a whole. It delivers the buildings and infrastructure for economy and society. According to the report The European Construction Sector: a global partner, this sector „generates about 9% of gross domestic product (GDP) in the European Union and provides 18 million direct jobs”. The main reason for undertaking this research was a desire to gain insight into the problem of creating a financing structure of enterprises, which are noted on different capital markets, according to their growth. The study was conducted in 2010-2015. Data for the article were acquired from the EMIS Intelligence database and from the websites of surveyed companies. In total, the object of examination was 211 businesses, which were divided up according to the degree of capital market's development on which they are noted. There were created two groups of companies: listed on emerging capital market and listed on the developed capital market. The division was based on the indicator calculated as a ratio of the capitalization of all companies in a given country to the GDP of this country. Data were analysed using the correlation method to test the relationship between the company's growth and the level of its debt within two groups of companies. The statistical method used in the study was also an analysis of variance between the two formed groups and between countries of each group.

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APPLICATION OF GEOMARKETING TOOLS IN THE COAL SALES NETWORK OPTIMIZATION

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Abstract

The aim of the study: Over the last twenty years, geomarketing is becoming stronger position among the tools used to conduct competitive struggle in a stormy and turbulent market. Enterprises in the XXI century are operating in unknown so far, unstable environment called the era of turbulence. Globalization, changes in exchange rates, fuel prices, commodity prices, the global economic crisis are the main causes of this phenomenon. The article presents the application of geoinformation software in the field of geomarketing analyzes. During the analysis data on authorized resellers of the Polish Mining Group were used. The purpose of the conducted analysis was to present possible tools for optimization or verification of the coal company distribution network, as well as the establishment of new sales points. These tools allow to conduct extensive analysis of customer behavior, competitors, distribution networks and product. Spatial analysis tools will also enable the coal company to verify its existing distribution network in terms of selected criteria.

Methodology: The presented tools belong to GIS operations used to process data stored in Spatial Information System resources. These are so-called geoprocessing tools. The author used the Quantum GIS program in the conducted research. The sales volume of a product depends to a large extent on the used distribution network. The paper presents Polish Mining Group authorized sellers network analysis for the chosen voivodship.

The main findings: The article contains several examples of analysis created by the author. Their result is the ability to select the optimal distribution points using selected criteria. Among the used tools noteworthy are geocoding, cartodiagrams, spatial intersection and sum. The analysis can be carried out for the network of authorized resellers either for the whole country, voivodship or city. The presented tools provide the opportunity to specify the target group, the areas of potential target groups concentration or areas in which they are located.

Conclusion and recommendations: The used methods allow to place points of sale in areas with a high probability of finding new customers and to choose the best location of sales points. The use of analogous analyzes would give the mining company the ability to analyze distribution networks and a way to effectively optimize the sales network. This in turn improves the company's sales and allows to achieve higher operating income.

APPLICATION OF MULTI-CRITERIA OPTIMIZATION TO SAFE BUDGET PLANNING

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Abstract

The aim of the study: Development of a tool which helps formulate, evaluate and select safe long-term budget policies for investment and debt, minimizing the infrastructure gap between a given country and developed countries. The policies maximize cumulated investment and simultaneously minimize debt service costs and assure financial stability - budget liquidity and other fiscal rules introduced by regulator. They are below a limit, above which budget liquidity will be destroyed and investment and/or debt excessive. The investment are financed with own resources, debt, and EU funds. The proposed method can also facilitate development of efficient regulations for policy rules.

Methodology: Mathematical modeling and multi-criteria optimization are utilized. A new method supporting local government decisions regarding long-term budget planning is developed. The method utilizes a mathematical model reflecting interrelations between budget financial flows and stock over time and the iterative decision supporting procedure implementing multi-criteria optimization and yields Pareto optimal outcomes. Budget liquidity and fiscal rules, included as constraints in the LG budget optimization model, are satisfied over long-term. The method bases on Herbert Simon „satisficing behavior concept” and in a special, iterative way uses the reference point approach of multi-criteria optimization. The method links long-term financial planning and budgeting for results and outcomes. Finance, decision making, computer science and economics disciplines are brought together.

The main findings: Implementation of the multi-criteria optimization techniques in decision making procedures which ensures financial stability and budget safety. Safe investments and debt policies for various level of risk are computed for select Polish local governments. The final solution is selected by a decision maker (dm) depending on his aversion to risk. A dm analyzes consequences of her decisions regarding investment, fixed assets formation, debt until its maturity and budget balance. The existing in Poland fiscal rules do not prevent local governments, as intended, from issuing excessive debt.

Conclusion: The fiscal process can be stabilized, using the developed method, by establishing how much investment and debt a government can afford over a several years period maintaining budget's liquidity. The method can be implemented by local government finance officers and treasurers to ensure the financial stability over a long term eg. 10 years to decrease public debt.

Recommendations: The method should be used by local governments (LG) to safely manage investment and debt, and the regulator - to look at the consequences of various fiscal rules" impact on functioning of LG.

Limitations: The fiscal rules implemented in the model come from the Polish law, however, country specific rules can be incorporated in the model. The method can be used in many countries with various goals and constraints and is best suited for countries which joined the EU after 2004 with large infrastructure gap.

ASSESSING THE ECONOMICAL EFFICIENCY OF INTERMODAL CHAINS IN GLOBAL TRADE

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Abstract

The aim of the study: The aim of the paper is to assess impact of the integration of intermodal chains on logistics costs and thus on global trade. The special emphasize is laid on the problem of the diversity of standards of containers and transport technology in different parts of the world.

Methodology: The paper proposes the heuristic approach incorporating several research tools and methods: critical literature review, direct market research, dedicated model of logistics costs, case study research, sensitivity analysis and analysis of critical success factors, transferability analysis.

The main findings: The results of research presented in the paper confirm that integration of intermodal chains thanks to standardization of loading units in a global scale could be profitable. The results of logistics cost analysis prove measurable benefits for logistics operators and as well as their customers.

Conclusion: The important factor of integration of intermodal chains is a unification and increasing the dimensions of loading units, what in turn will allow reduce logistics costs and accelerate global trade.

Recommendations: Authors postulate extension the scope of economic analysis of intermodal global chains by taking into account other factors of their costs. Further research should identify the relations between logistics costs and volume of global trade.

Limitations: The calculations here have been made with an aim to use the most credible data sources. Nowadays it is difficult to determine adjustment costs for efficient transport of larger containers (e.g. 53' units) in the global chains. Significant technological limitations occur both on the maritime and in the land section infrastructure (e.g. continental Europe).

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ASSESSMENT OF THE POSSIBILITIES OF IMPLEMENTING CORPORATE RISK MANAGEMENT STANDARDS IN POLISH HIGHER EDUCATION INSTITUTIONS

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Abstract

The trend of legislative changes in the field of higher education has been tending towards universities for years to function in a similar way to business law practitioners. Universities, polytechnics and other public HEIs are expected to be organizations that find themselves in a competitive environment and are able to finance a significant part of their scientific and didactic activities. In this situation, it is necessary to implement the process of effective risk management at universities. How to model such a process? What is its optimal course? Can you successfully apply the risk management standards used in corporations? The main purpose of the article is to evaluate the use of popular risk management standards in risk management corporations in specific entities, such as public universities in Poland. The research hypothesis is as follows: International standards of corporate risk management are only to a very limited extent applicable in public universities. The article is of an analytical-comparative nature.

ASYMMETRIC INFORMATION AND DEAL SELECTION: EVIDENCE FROM ITALIAN VENTURE CAPITAL MARKET

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Abstract

The aim of this study is to show how information asymmetry affects VCs deal selection process in the Italian environment. The presence of asymmetric information is a fundamental assumption of signaling theory. In this paper the authors want to analyze the selection process of the new company by VCs. In the absence of information about the companies, investors evaluate the quality of new firms with difficulties. The target company, in fact, to receive fund from VCs must have certain characteristics in terms of resources: financial, human, networks ties and intellectual capital.. VCs invest time and energy in assessing signals of value that may indicate the potential and the quality of the firm. VCs can only assess the value of observable characteristics, relying on a background affected by information asymmetries, as the entrepreneur and the management team, that own more information about the new venture than any external investor. This is a central issue for the relationship between venture capitalists and entrepreneurs especially during the screening of the deal flow. The role of VC in Italy is deepen observing some statistical data on the total asset invested, in different industries where about 90 percent of companies funded by VCs are SMEs. In order to realize such analysis, the authors use information collected in a dataset built on information contained in the Bureau van Dijk and Bloomberg databases, completed with data collected through a survey sent to VC funds.

The period under observation is between 2012 and 2017. The dataset is composed by 50 observations, and represents a significant sample of the Italian market. The results show that there is a positive relationship between management education, international experiences of the team management and the likelihood of receiving external investment by VCs. As will be shown, also the industry-specific experience of the team management and the number of patents have a key role. This reasoning allows to highlight the importance of the matching between the business idea and the investment decision between VCs and new enterprises with high potential. Another goal of this study is to show a positive relationship between the presence of alliance network and the likelihood of receiving investment by VCs. The main limitations of quantitative research in VC are the difficulty of getting information about the deal selection.

This study, can contribute to future research, both in terms of new-developing theory and in methodological insights. This study is one of the first that describes the information asymmetry in VCs deal selection process in the Italian environment. The authors argue the

relationship between VCs and entrepreneurs, especially during the screening of the target firm. Furthermore, there is the possibility that the new venture firms with a better business and a skilled team not funded, unless they can communicate their competence and quality to the potential investor. The gap can be reduced only if the better informed part, firms, can send a signal of quality to the less informed part, VCs.

AWARENESS OF POLISH STUDENTS CONCERNING GENDER EQUALITIES IN FAMILY LIFE AND LABOUR MARKET IN POLAND IN CORRELATION WITH FOSTERING OF INTANGIBLE CULTURAL HERITAGE

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Abstract

The main objective of the study was to identify awareness of Polish students concerning gender equality in family life and labour market in Poland. It involved especially an attempt to determine what symptoms of gender inequality and stereotypes were perceived by Polish students in Poland and whether they had ever felt discriminated against or suffered any signs of gender-related inequality at home or at university. The study included a literature review and empirical, qualitative and quantitative research based on a questionnaire. It was held in 2016/2017 and the sample included 308 Polish students of various universities in Poland. The research was held so as to enable data analysis concerning students' gender and their fostering of intangible cultural heritage. Statistical analysis was performed with the IBM SPSS v. 22 statistical software. Gender differences were estimated based on chi-square test results and correlations between variables were verified with Pearson's coefficient. Descriptive statistics were developed, too. The study confirmed that students in Poland were not fully aware of the existing symptoms of gender inequality in family life and labour market. Female students have significantly higher awareness of these inequalities and stereotypes than male respondents. A large group of the latter fail to perceive the problem at all or underestimate it. More than 20% of the respondent students had suffered symptoms of discrimination and gender inequality - these concerned female respondents significantly more frequently. No statistically significant correlations were identified between gender equality awareness and the degree of fostering their intangible cultural heritage. The obtained research results raise worries because the young and educated people should be perceived as a chance to improve the situation in future. The situation diagnosed in the present study may threaten implementation of the European Union's Programme „Strategic engagement for gender equality 2016-2019” or the Fifth Objective („Gender equality”) for the Sustainable Development planned to be implemented by 2030. Therefore, it seems necessary to take additional action to increase students' awareness, especially among male students concerning the existing gender inequalities, e.g. by introducing these issues in teaching curricula.

Research questions:

1. What is the awareness of students concerning gender equality in Poland? Are there any gender-based and cultural heritage-based differences in awareness of students relating to gender equality?
2. What are the symptoms of gender inequality observed by students in Poland?
3. What stereotypes relating to the role of women and men in family/labor market domain are observed by students in Poland?
4. Have students in Poland ever encountered discrimination/symptoms of inequality against their gender in home/school domain?
5. Is there a statistically significant correlation between students' awareness concerning gender equality and their fostering of intangible cultural heritage?

Hypotheses:

1. A large percentage of students, especially males, are unaware of the existing gender inequality in family life and labour market.
2. Students encounter gender equality problems in home/school domain. There are gender-based and cultural heritage-based differences in that respect.
3. There is a statistically significant correlation between students' awareness of gender inequality and their fostering of cultural heritage.

BACK TO BITS AND BITES: DO TRADE AND INVESTMENT AGREEMENTS PROMOTE FOREIGN DIRECT INVESTMENT WITHIN DEVELOPING COUNTRIES?

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Abstract

Do trade and investment agreements promote FDI within developing countries? Foreign Direct Investment (FDI) is key for the growth and technological progress of potential host countries, especially for developing countries (DC).

In order to attract FDI, however, potential recipient countries need a sound institutional framework. Consolidated institutions increase the credibility of domestic governments regarding an adequate governance and reduce the perceived risk by potential investors. However, it is frequent for DC to lack some or all of the necessary institutions. In these cases, Multilateral or Bilateral Treaties on Trade (RTAs) and/or Investment (BITs) among source and host countries may help overcome the lack of other institutions. On empirical grounds, however, there is still some controversy in the literature about the real impact of these kind of treaties on incoming FDI.

The aim of this paper is to analyze:

- a) Do RTAs and BITs help attract FDI, even in the case of flows among DC, and for the case of Latin America?
- b) If the answer to a) is positive, is the impact of these agreements homogeneous among countries, or is it different according to their degree of development?

We exploit a rich panel data of intraregional bilateral FDI stocks and flows among 11 Latin American countries (which form the bulk of the countries in the area involved in FDI flows) over the period 1995-2012. We work in a gravity model framework, include control variables and perform a Poisson Pseudo Maximum Likelihood estimation (PPML) to circumvent common econometric problems in these analyses. We also test for endogeneity by using GMM.

Our results suggest that RTAs and BITs impact positively and significantly on FDI flows for the countries of our sample in 1995-2012. The impact of BITs seems larger than that of RTAs.

Moreover, this impact seems to be higher for countries with better institutional quality. These results are robust to the inclusion of different control variables and econometric techniques, and to the use of stock or flows of FDI.

According to the results obtained in our sample, RTAs and BITs enhance the credibility of governments of potential host countries, increasing the attraction of FDI. Governments should seek and promote the swift negotiation and signature of these agreements as an effective means of attracting more FDI.

RTAs and BITs can offset the lack of developed institutions in DC, helping improve governance and credibility and attract FDI. This should be clear not only for policy makers but also for the rest of political and economic agents, since their support is key for their governments when they are negotiating these agreements. Assistance from multilateral institutions, (the International Centre for Settlements of Investment disputes, IMF, World Bank, WTO, EU etc.) is also key.

More disaggregated information about BITs and a larger sample could be useful in future versions.

BASIC IDEAS AND BUSINESS MODELS OF WIKINOMICS IN PUBLIC ADMINISTRATION

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Abstract

The aim of the study: The aim of the study is to determine the degree of matching of the public administration sector to the market sector in Poland. The analysis of the match between the two sectors has been carried out in accordance with the wikinomics guidelines, with emphasis on prosumption. At the heart of the wikinomics there are four principles of cooperation: openness, peering, sharing and acting globally. This school is based on seven non-standard empirical business strategies: peer pioneers, ideagoras, prosumers, new Alexandrians, platforms for participation, global plant floor and wiki workplace. These strategies are the result of the rapid spread of ICT in the world economy, which are now considered to be peak technologies.

Methodology: The research used a database of prosumption principles in public administration, which was constructed on the basis of a direct survey conducted in 2016. Respondents were clients of municipal public administration offices in the selected voivodship. The basic research method was the correspondence analysis, and the results were graphically presented in two-dimensional and three-dimensional charts.

The main findings: In the course of research, it turned out that there are substantial difficulties in implementing the prosumption principles in the public administration sphere. They are due to the lack of sufficient transparency of the public sector. This results in the absence of synchronization between the public sector and the market sector. The source of problems are both technological and sociological factors.

Conclusion: In the Polish economy there is significant asymmetry between the private and public administration sector in terms of the absorption of the idea of the wikinomics. The biggest delay in the absorption of new ideas is in the public administration sector, which can hinder and delay the development of the private sector.

Recommendations: It is urgent to include in procedures for the private and public administration sector management of new recommendations provided by the wikinomic business models. This will require greater transparency of the public sector in Poland.

Limitations: Web sites of municipal public administration do not meet the criteria required by the principles of prosumption, which can limit the country's economic potential both locally and nationally or internationally. This makes it impossible to introduce the ten

proposed presumption principles in the public administration at both local and higher levels.

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BUILDING A STATE INSTITUTION ON THE BASIS OF PROCESS ANALYSIS. THE CONCEPT OF THE CADASTRE INSTITUTION

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Abstract

The aim of the study: The purpose of the study is to demonstrate that the building of state institutions* should be preceded by an analysis of the socio-economic processes in which the institution can participate. The research covers the administration sector functioning in the area of geodesy and cartography (geodetic and cartographic services), with particular emphasis on improving the level of protection of land ownership, improving the efficiency of investment processes and improving the efficiency of public administration.

*At this stage of the work, the institution is understood as an organization.

Methodology: The research tools used in the conducted study are instruments of process analysis (mapping, reengineering, lean management), benchmarking, time series analysis and forecasting, law analysis, statistical analysis, analysis of organization resources, interviews and analysis of literature. The knowledge and experience acquired during many years of work on improving the functioning of geodetic and cartographic administration was also utilized.

As part of the work, an analysis of the transfer of ownership and an analysis of the investment process were conducted.

The main findings: As a result of the research, it has been found that it is not possible for the existing institutions to achieve the desired state of knowledge of land ownership and the extent of these rights (ownership boundaries). As a result of the findings, work was undertaken on the concept of institutional changes that would enable construction and maintenance a legal order of land** in Poland. The work on the concept was guided by the following criteria: improvement of the system of protection of property rights (it is recognized that the protection of property rights plays a key role in institutional conditions of economic growth), improvement of investment efficiency (generating economic growth) and improvement of administration efficiency. It was also assumed that the level of ownership and fairness of ownership relations, available information on property rights and their extent, has a significant impact on the efficiency of space-making processes.

**Legal order of land is defined as "An orderly process of state-owned land boundaries".

Conclusion: We intend to show that a process approach can be used in administration to refer first to the processes in which administration participates (as opposed to the process

approach applied to processes within the organization). In particular, this approach makes it possible to assess the legitimacy of public administration participation in socioeconomic processes, thus enabling the subsidiarity principle to be implemented.

Recommendations: If the government accepts the concept preparation of changes, preparation of detailed organizational solutions, draft legislation and implementation of changes, due to the very wide range of impact of the proposed institutions, should be entrusted to an appropriately equipped Government Plenipotentiary.

Limitations: The proposed institutional changes are difficult to perform mainly due to political factors.

BUSINESS PROCESS MANAGEMENT CENTRE OF EXCELLENCE AS A SOURCE OF KNOWLEDGE AND COMPETENCIES

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Abstract

The aim of the study: The aim of this article is to present the functioning of Business Process Management Centre of Excellence in a knowledge and competencies perspective.

Methodology: Using Business Process Management standards and information tools allows the transformation of informal knowledge into formal knowledge. Empirical research has been carried out on a companies operating on the territory of Poland in 2017.

The main findings: The results revealed that enterprises with implementation of process approach tend to maximize knowledge diffusion and develop organizational competencies via organizing Business Process Management Centre of Excellence in the world and in Poland.

Conclusion: An increasing number of companies adopting a Business Process Management Centre of Excellence, which is a center for process improvement and provides many good practice solutions. These solutions are the basis for improvements of process-oriented enterprises.

Recommendations: It can be valuable for decision makers for creating Business Process Management Centre of Excellence and for academics to prepare the future research. The results of the study may be generalized in other companies in other sectors, which implemented of business process management.

Limitations: A limitation from the use of the organizations, which were implemented process approach.

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CITIZENSOURCING - APPLYING THE CONCEPT OF OPEN INNOVATION TO THE PUBLIC SECTOR

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Abstract

The aim of the study: Citizen-sourcing is highly innovative tool used in public sector, especially in city management. The primary aim of the paper is to answer the question of whether citizensourcing increases adoption of innovation in contemporary public sector management.

Methodology: This research attempts to reduce the gap in the literature on the citizen-sourcing applications roles in the context of open innovation initiative in public sector. This research examines the potential enabling roles of social media and other citizen-sourcing applications in motivating and having citizens' engagement easier in open data environments. Specifically, the use of different tools and applications in supporting citizen-sourcing initiatives has been analyzed. This study, focusing on the case study, analyzes the strengths, weaknesses, opportunities, and threats of citizensourcing.

The main findings: The findings suggest the important role of social engagement, and other citizen-sourcing applications in designing crowd-powered mechanisms. Such mechanisms have the potential to influence the ways people share their experience and ideas. The findings confirm the usability of citizensourcing in innovation adoption in public sector.

Conclusion: Citizensourcing is able to increase civic engagement and allow citizens to have more influence on innovation creation and application. Citizen participation increases visibly the innovation potential of public sector.

Recommendations: This paper suggests that contemporary public sector management should consider more realistic, practical, and tangible approaches to achieving ideals for open innovation.

Limitations: However, this research has inherent limitations because it is only focused on a case studies concerning use of citizen-sourcing applications, that support ideas sharing and their implementation in public sector. Further research should examine which specific actions should be taken to increase citizen engagement in applying the concept of open innovation in public sector.

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COMPARATIVE ANALYSIS OF THE EFFECTIVENESS OF CORPORATE BANKRUPTCY PREDICTION MODELS BASED ON FINANCIAL RATIOS FOR 2008-2015: THE COLOMBIAN CASE

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Abstract

The use of Logit and discriminant analysis in prediction of corporate bankruptcy has been utilised in several researches since the last century. During the recent years there have been dozens of studies comparing the several models existing as the previously mentioned concurrently with Probit, artificial neural networks, support vector machine, among others. This paper presents the comparative analysis of the effectiveness of few models of predicting corporate bankruptcy currently used in the European and North American markets based on financial ratios for three firms located in the country Colombia for the years 2008-2015. The main objective is to corroborate the validity of few models in the prediction of firm failure in Latin American companies, specifically in the context of two bankrupt and one healthy Colombian firms. The analysis has been accomplished using the bankruptcy forecasting models widely proposed in the literature and used systematically around developed countries, as the multiple discriminant analysis represented in Z-Altman model, Korol with the two-function model and Prusak with the P2 model. In addition the financial ratios of the companies have been analysed using the Logit model and decision tree developed by Korol. The objective was achieved because out of five models, four (Altman, 2-function, Prusak, Logit) captured the bad financial situation of one firm which experimented illiquidity with huge debt, and finally was took over by the government. The healthy contrasting firm was found as non-bankrupt by three models (Decision, 2-function, Logit) for the whole period analysed, which gave 100% of accuracy, as the firm has had a sound financial situation. This paper demonstrates that the two-function and Logit models from Korol forecast bankruptcy very well for the studied Colombian companies. It is recommended for further research the application of this models in the study of bankrupt firms of other Latin American countries and for different sectors.

COMPETITIVE POSITION OF COMPANIES IN THE POLISH CHEMICAL SECTOR – TMAI APPROACH

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Abstract

The aim of the study: The chemical sector is one of the key sectors of the European economy. Currently, its fastest growth is, besides the Asian markets, expected in Central and Eastern European countries, including Poland, which is one of the largest producers of mineral fertilizers in Europe. However, there are many challenges facing the Polish chemical industry, such as high raw material prices, tightening of environmental standards, and growing competition from the rapidly growing Asian markets. In view of the above, the aim of the study is to determine the competitive position of companies in Poland's chemical sector in 2012 and 2016 as well as determine the relative changes in their competitiveness.

Methodology: A determinant of company's competitive position, in this paper, is its financial situation that determines a company's growth in a dynamic environment (Gostkowska-Drzewicka, 2015). The situation of 25 companies, within the chemical manufacturing sector (325, NAICS) listed on the Warsaw Stock Exchange (WSE), was evaluated. The study involved conducting an empirical analysis in terms of liquidity, debt, turnover, profitability and market efficiency. Using their respective indicators (X1-X11), one aggregated indicator - Taxonomic Measure Attractiveness of Investment (TMAI) (Tarczyński 2014) was created. The empirical analysis was done for two-time points, 2012 and 2016. Companies' rankings were presented in two variants, with weights of variables and without weights.

The main findings: The research confirmed the high level of conformance of rankings received in both variants of the applied method. Consistently high positions in the ranking were displayed by most of the manufacturers of Pesticide, Fertilizer, and Other Agricultural Chemical. In 2012, Soap, Cleaning Compound, and Toilet Preparation Manufacturing companies were classified low, although in 2016 they improved immensely. The reverse situation happened in the case of manufacturers of Pharmaceutical and Medicals, which in 2016 additionally strengthened their low position achieved in 2012.

Conclusion: Based on TMAI, the companies with the best and worst competitive positions in the sector as well as companies with the biggest changes in their ranked positions in 2016, compared to 2012 were identified. Ranking compliance in both variants of the method was confirmed by levels of Spearman's correlation.

Recommendations: The results obtained can help to assess the market value of companies in the chemical sector and develop a strategy for the development of the chemical sector in Poland.

Limitations: Despite the many advantages, TMAI does not take into account the impact of hard-to-quantify, off-balance items that undoubtedly affect the company's competitive position.

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CONSUMERS' INFLATION EXPECTATIONS IN EUROPEAN UNION - EXAMINING THE HETEROGENEITY AMONG MEMBER STATES, GROUPS OF CONSUMERS AND THEIR ECONOMIC DISTANCE SPATIAL DISTRIBUTION

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Abstract

The aim of the study: The main aim of the study is to (1) analyze the standard dependencies, and (2) economic distance weighted spatial dependencies among inflation expectations of different groups of consumers and chosen macroeconomic variables (HICP rate, GDP growth rate and unemployment rate) in 26 European Union Member States (EU member states without Denmark and Luxemburg). The time span covers 2001-2016. The consumers have been separately divided due to their income, employment and age into eleven groups. The two main research questions are as follow: (1) do the consumers' inflation expectations in European Union are economic distance weighted spatially (EDWS) dependent, and (2) are the consumers' inflation expectations EDWS heterogeneous in selected group of consumers.

Methodology: The consumers' inflation expectations were collected from the EC Business and Consumer Survey and quantified with the adjusted Carlson-Parkin method. As the macroeconomic variables selected should Granger cause the consumers inflation expectations and their impact is usually lagged, we performed the Panel Data Granger Causality Test. We analyse the dependencies among consumers' (different groups of consumers) inflation expectations and HICP rate, GDP growth rate and unemployment rate with panel data regression (PDR) models (standard OLS). We examined the spatial autocorrelation among expectations of different groups of consumers, based on economic distance weights HICP rate, GDP growth rate, unemployment rate, with the Global Spatial Correlation Coefficient (Anselin 1988). At the end we performed spatial panel data regression (SPDR) analysis (based on economic distance weights: HICP,GDP, unemployment) of inflation expectations of selected groups of consumers. The results were compared with those from standard PDR models.

The main findings: The standard PDR analysis of inflation expectations among different groups of consumers indicates the heterogeneity among these groups. It shows the main impact of previous HICP rate (lagged by one month) on expectations. There is an economic distance weighted (HICP rate and unemployment rate) spatial autocorrelation among expectations in EU member states. This correlation is also heterogeneous among groups of consumers. The SPDR analysis of inflation expectations among different groups of

consumers indicates the heterogeneity among these groups and the existence of their spatial component.

Conclusion: We may state that the consumers' inflation expectations in EU are economic distance weighted (HICP and unemployment rate) spatially dependent. The consumers' inflation expectations are EDWS heterogeneous among selected group of consumers.

Recommendations: The conducted research indicates that SPDR model fits better to analyse consumers inflation expectations than standard PDR model, and that there is a spatial component based on economic distance weights in distributing consumers' inflation expectations in EU member states.

Limitations: Because of lack of data, the study did not take into account Denmark and Luxemburg. The data of inflation expectations of selected group of consumers in Poland was not available.

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CORPORATE SOCIAL RESPONSIBILITY IN THE CONTEXT OF RISK PREVENTION AND GROWTH SUPPORT SOCIAL VALUE OF BUSINESS

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Abstract

In the business environment, many factors influence the success of a business. In addition to the effective use of opportunities in a competitive environment, it is also risk prevention. The issue of CSR is becoming more and more important among successful businesses as well as those who want to succeed in competition. Positive signals are received by interest groups such as investors, employees, business partners and the community in which businesses operate.

Applying the CSR principles helps businesses get new ones and maintain existing qualified employees. On the contrary, underestimating and neglecting CSR may be one of the sources of risk that threatens the existence of a business itself.

The aim of the study is to point out the possible elimination of risks in business by applying the basic principles of CSR. The article compares most successful businesses in Slovakia with Via Bona Slovakia for the years 2010 to 2016. Risks in business are analyzed. Consequently, based on the best experiences of successful businesses, risk prevention is designed to apply CSR.

The main findings are an increase in the awareness of CSR and its application by entrepreneurs in Slovakia. Positive business examples have a positive impact on individual interest groups.

The recommendations include designing new ways to increase the competitiveness of enterprises by increasing the social value of businesses.

COVENANTS AS BARRIERS TO USE OF BANK LOANS BY BUSINESSES

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Abstract

The aim of the study: The article addresses the issue of conditions that the borrower is obliged to fulfill during the crediting process. These terms, the so-called covenants are built into credit agreements and are aimed at limiting banks' risk when financing business entities. However, at the same time, covenants constitute conditions limiting the scope of use of bank loans. The contracts included financial and non-financial covenants. Covenants are very diverse.

Methodology: The principle hypothesis of the study assumes that the covenants differ according to the type of credit and the characteristic of the industry and the financial situation of the enterprise. In order to examine the hypothesis, an analysis of 25 credit agreements in three corporations and their subsidiaries was undertaken. These entities belong to fuel, mining and metallurgical sectors. At the same time, we observe the extent to which these covenants were kept during four quarters of 2016 and two quarters of 2017.

The main findings: The results showed that in some cases covenants have not been respected, but this did not lead to financial penalties. Studies have also shown that abiding by non-financial covenants has been more difficult than abiding by financial covenants. In covenants, several contracts stipulated that a company cannot freely dispose fixed assets, restructure them or use leased assets which hinders the use of those asset to repay debt. One major obstacle was the fact that the company could not undertake any additional business beyond the existing one. This hindered the diversification of companies' activities, which would improve their competitive position on the market.

Recommendations: The author intends to conduct further research on covenants to highlight their flexible use and to increase the availability of bank loans to business entities. The scope of using bank loans in Poland is much lower compared to developed countries and amounts to only few per cent in relation to GDP.

Limitations: Due to the confidentiality of the data contained in loan agreements, the names of groups and their companies were kept confidential at the request of their management. Confidentiality of company names was a prerequisite for access to data contained in contracts.

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CROSS-SECTIONAL ASSET PRICING MODELS FOR THE POLISH EQUITY MARKET

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Abstract

The aim of the study: The major aim of this paper is to find the most appropriate asset pricing model for the Polish market. Hence, we evaluate and compare the performance of four popular multifactor models from finance literature: Capital Asset Pricing Model (Sharpe 1964), the three-factor model by Fama and French (1993), the four-factor model by Carhart (1997), and the five-factor model by Fama and French (2015). The Polish stock market continues to attract investors from all over the world. As an emerging markets, it is likely to provide higher risk premia than developed markets. Furthermore, while it is open to international investors, despite the increasing integration of developed and emerging markets, it will probably offer diversification opportunities for investors from developed markets, even in the current post-liberalization period. Despite this growth in size and importance, Polish investors still lack a clear solution to the simple problem: which of the popular asset pricing models is best suited for the Polish equity market?

Methodology: To answer this question, we investigate the returns on over 1.000 stocks from the Polish equity universe for years 2000-2017. To compare the performance of the four asset pricing models, we conduct a battery of tests, including both classical ones as well as state-of-the-art methods. We conduct Fama-MacBeth (1973) regressions, form and examine portfolios from one-way sorts and two-way sorts with the use of GRS (Gibbons, Ross, and Shanken 1989) and GMM methods, apply the simulation-based tests of monotonic relation by Pattern and Timmermann (2010), and also implement factor redundancy checks in the style of Huo, Xue, and Zhang (2015) and Medhat (2017).

The main findings: The principal findings of this study could be summarized as follows. The four-factor model by Carhart (1997) is the clearly best performing model of the four examined. All of its underlying variables, when jointly considered, are reliable predictors of future returns in the cross-section. Moreover, the model explains the cross-sectional variation in stock returns very well, well the other models basically fail to deal with the momentum effect in the equity market. Furthermore, the value and momentum factors are the only factors that pass the factor redundancy test. Importantly, the Carhart's model is the only one, which includes them both. All of the other factors are well explained by other portfolios, verifying their redundancy for asset pricing Poland. Summing up, practitioners and researchers in Poland should consider using the Carhart's model for asset pricing studies and in their ventures.

CULTURAL AND PERSONALITY TRAITS IN RISK- TAKING BEHAVIOUR- EVIDENCE FROM POLAND AND UNITED STATES OF AMERICA

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Abstract

The aim of the study: The aim of the study is to analyse susceptibility to risk-taking behaviour relative to cultural and personality traits.

Methodology: Undergraduate (Chemistry) students from two different cultural regions (Poland and United States of America) were studied. Personality traits were measured with TIPI- a 10-item measure of the Big Five personality dimensions (Gosling et al. 2003), risk-taking behaviour related to five different domains of risky behaviours (Ethical, Financial, Health/Safety, Recreational, and Social) by DOSPERT scale (Blais and Weber, 2006).

Hypotheses:

H1: Culture matters; there will be differences in risk-taking behaviour between Polish and American students. Poles coming from more collectivistic culture will be more willing to take risk than Americans (Hofstede et.al 2010).

H2: Risk propensity is rooted in personality. Risk propensity will be related directly to the factors of extraversion and openness, and related inversely to neuroticism, agreeableness and conscientiousness (Nicholson, et al. 2005).

H3: Men will have report more frequent risk taking than women. Men are more confident than women and trade more excessively (Barber and Odean 1998) since then should be more prone to risk-taking behaviour.

The main findings: Polish students reported significantly greater risk taking than American students in two domains - health/ safety and social and in the overall risk-taking scale. Correlations revealed that high scores in extraversion and low score in conscientiousness predict overall risk-taking behavior. Men reported significantly greater risk taking than women but only in the domain of financial risk.

Conclusion: The statistical analysis performed in study verified the hypotheses that culture and personality traits play a substantial role in risk taking behavior.

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CURRENT TRENDS IN VENTURE CAPITAL INVESTMENTS IN EARLY STAGE LIFE-SCIENCE PROJECTS RELATED TO HEALTHCARE

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Abstract

Scholars and policy makers agree that early-stage venture capital is the most important element of innovation pipeline in the healthcare industry. Transforming knowledge into innovative medical device or identifying active molecule of a future drug is a risky endeavor, since the entire innovation process in healthcare displays high levels of uncertainty. Therefore, securing the financing at the very beginning of innovation pathway in healthcare is challenging and requires an in-depth understanding of investment strategies implemented by venture capitalists. In turn, this requires to take a broader look at global trends in early-stage venture capital funding of healthcare oriented life-science projects.

The aim of the study: Referred to the above, this paper aims at providing the outlook for early-stage venture capital investment in Europe. There is a double rationale for it: first, most literature investigating this topic focuses on the U.S.; second, there are voices claiming the decline of financing for early-stage innovation efforts in life sciences.

Methodology: Using CB Insights data on early-stage venture investments in healthcare-related life-science projects, we analyze their trends and check whether these investment decisions are related to a specific, healthcare-related life-science industry and whether venture-capitalists are sensitive to the development stage of companies they are investing in.

The main findings: While healthcare-oriented life-science companies originated in the U.S. remain the global leaders in attracting venture-capital for their early-stage projects, Europe is catching up, dominated by firms in the U.K. Since 2009, there were 152 deals in Europe with the overall value of 1.8 bn US dollars. Almost half of them are early-stage investments, with a median value of 2.9 m US dollars per deal. While there has been an upward trend in VC financing since 2009, we may have witnessed a sharp increase in the investment activities since the beginning of 2017. Moreover, there is evidence that investors are mostly attracted by biotechnology sector.

Conclusion and recommendations: Europe is lagging behind the U.S. in attracting venture capitalists to healthcare-related life-science projects. A different funding scheme for innovation in Europe (based on public funds) is certainly partly responsible for the situation. Therefore, we claim a series of changes in policy orientation tailored to fuel the healthcare innovation pipeline in Europe. These include, among others: supporting small companies with necessary financing for early-stages products (and thus substitute the missing venture-

capital streams), lowering regulatory uncertainties by creating fast HTA mechanism and providing financial support for expensive clinical trials.

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DETERMINANTS OF THE BANKING SECTORS TRANSFORMATION IN SOUTH EAST EUROPE BETWEEN 1996 AND 2015

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Abstract

The aim of the study: Although in Europe there are still countries which need to adjust their economies and business sectors to the principles of market economy. The rebuilt of the economic system has proceeded in the transformation process. Special importance shall be applied to the banking sector, which constitutes mainly the financial sphere of the countries undergoing the transformation. The aim of this article is to check how the transformation process of the banking sector has been developed in the region of south-east Europe which, in many cases, had to build independence and statehood from scratch has occurred, and how this process is connected with macroeconomic stability.

Methodology: The methods used include a literature review of the theory on the transformation process with special focus on the East South Europe, as well as a panel data analysis (OLS, FE, RE) in order to assess the factors influencing the transformation process, including macroeconomic stability, economic growth as well as general transformation and quality of institutions. The time period of the research covers 19 years, from 1996 to 2015 while the region of interest is the Balkan Peninsula, namely Albania, Bosnia and Hercegovina, Bulgaria, Croatia, Macedonia, Romania, and Serbia. The data is based on databases from the World Bank, European Bank for Reconstruction and Development and central banks of the studied countries. The economic stability, as well as the transformation process engagement, were assessed with the sizes of polygons which vertices were pointed by various ratios and indices.

The main findings: The banking sector's transformation process was measured using the Banking Reform Triangle (Fries, Taci, 2002) and confirmed once a huge change measured with triangles' sizes and secondly, a strong progress, mainly achieved by the underdeveloped economies, for example, Serbia. Economic stability was examined using the Macroeconomic Stability Pentagon (Kolodko, 1993), and the strongest improvement was recorded in Serbia, whose MSP increased by over six units. Only in Albania, the situation was worse in 2015 than in 1995. The process of economic transformation was assessed using the size of the hexagon which vertexes are the EBRD Transformation Indices. The tool manifested a strong dispersion in 1995 combined with a noticeable progress within the studied period. The sizes of the hexagons in 2015 for all countries characterized with a greater similarity.

Conclusion: The study carries out three models of panel data using various estimators (OLS, RE, FE). In all performed models, the macroeconomic situation (both its stability and growth) are not recognized as significant factors influencing the banking transformation. Taking into account the Akaike information criterion, a model with fixed effects definitely gives better results.

Recommendations: The study improves the research area of banking sectors' transformation and its determinants.

DETERMINANTS OF THE FAMILY BUSINESS CAPITAL STRUCTURE - CENTRAL AND EASTERN EUROPEAN PERSPECTIVE

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Abstract

The aim of the study: The article describes the characteristics of listed companies capital structure, with particular emphasis on family businesses. The aim of the article is to find statistically significant differences in financing policy between family owned companies and others. The nature of family enterprise is associated with a greater degree of ownership concentration and may affect the financing decisions. In addition, management in these types of businesses may also be targeted to the problem of maintaining the ownership control and decisions may be different from non-family businesses.

Methodology: More than 2,000 listed companies in selected Central and Eastern European countries were analyzed in period of 2006-2016, including more than 600 family businesses. Data was obtained from Amadeus database. The analysis was mainly focused on the problem of capital structure. To take into account the economic context of the researched entities, their profitability and liquidity were also analyzed. Beside the descriptive statistics the significance difference test and panel regression model were used. The research was conducted in a general, sectoral and national context.

The main findings: The results show that family businesses compared to other companies apply conservative financing policies. They are less indebted and generally achieve higher profitability. This relationship is particularly evident in services (mainly transport) and construction activities. Such relation is significantly more important if family company is directly managed by the family member.

Conclusion: The research and analysis indicate that in the countries of Central and Eastern Europe companies controlled by families protect their capital by lower exposure to financial risk. This results in a steady growth of the company and stable income of its owners. While this not always happens in the general population of the companies, it is clearly visible when direct family management is taken into account. This means that family nature of the company's financing is not so much the degree of the capital ownership control but the actually exercised board.

Recommendations: The results obtained are used in the analysis of companies in terms of the risk of insolvency. They are also a voice in the discussion on the specifics of family

entrepreneurship. They point out that not only the nature of property determines the proper classification of enterprises as family.

Limitations: It must be stressed, however, that the results obtained are not entirely clear. This may be caused both by the sectoral conditions of financing strategy and the differences in the family business development stage in particular country. In addition, discussions can raise the definition of family business. Apart from the family-controlled shareholding, the influence and control of the company is also affected by the degree and nature of shareholding concentration, which is not reflected in the article.

DIVIDEND PAYERS OF LISTED COMPANIES - GLOBAL PERSPECTIVE - CASE OF FOOD PROCESSING COMPANIES

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Abstract

The dividend puzzle is being presented by different explanation concerning the need to distribute the firm's cash flow. This issue is crucial because dividend payment is important for the value creation of listed companies as well as for investors recommendation (Carleton, Chen, Steiner 1998). Bearing in mind the financialization of the economic process and the consequences of financial crises in companies value assessment, the dividend payments are a signal for the future profitability of a company (Miller and Rock 1985, Kumar 1988). This is particularly important in the situation when speculative bubbles appeared and crashes which have global consequences for an economy which creates uncertainty in payout policy (Chay and Suh 2009). The purpose of this article is to examine the dividend payment factors among listed companies - cross-country analyses. Three research hypotheses were verified: H_1: Top capitalization companies implement a policy of a fixed dividend payout (Denis and Osobov 2008); H_2: Stock exchange companies in developing countries reduce dividends (or pay out it irregularly) (Chemmanur and Tian 2014); H_3: There are statistically significant differences in the determinants of dividends distributed in advanced and developing economies (Aivazian, Booth and Cleary 2003). Four heterogeneous groups of companies were identified for the study (see Chen, Lung, Wang 2009): 25% with the lowest capitalization and 25% of the highest capitalization, broken down by developed and developing countries. Authors examine the characteristics of dividend payers and nonpayers are common across countries, by using international data for food processing sector. The database has 3640 companies from 110 countries in 2016. They were divided into groups of developed and developing countries (Joliet and Muller 2015) and then separated those with the lowest and highest capitalization. Four separate econometric models will be developed for distinguished groups of companies (advanced economies 25% min - Model_1, advanced economies 25% max - Model_2 and developing economies 25% min - Model_3, developing economies 25% max - Model_4). In addition, after identifying determinants of dividend payout, tests will be carried out on proving the significance of model differences (McLemore, Woodward and Zwirlein 2015).

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ECOLOGICAL AND SOCIAL DETERMINANTS OF THE EU SUSTAINABLE DEVELOPMENT. DEA APPROACH

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Abstract

The aim of the study: latest discussions on the definition of socio-economic development in terms of sustainable development suggest that there is a strong need to develop new approaches to measure the economic performance of the firms, regions and national economies in the EU. The new considered and created concepts should take into account simultaneously economic, social and environmental goals. One of these concepts is eco-efficiency, first introduced by Schaltegger and Sturm (1989) and defined as a relationship between inputs describing ecological and social impacts and outputs determining the level of socio-economic development. The EU recognizes eco-efficiency as a principle option to reach the competitiveness according to the EU development strategy goals (EC, 2005). Strengthening eco-efficiency has also been identified by the OECD as one of the major elements in its work on sustainability (OECD, 1998).

The aim of the paper was to show the advantages of non-parametric approach and extended Data Envelopment Analysis (DEA) models to the situations of multiple inputs and multiple outputs. Different model specifications allow to capture different characteristics of socio-economic development and to show different possibilities for economic policy to increase its efficiency.

Methodology: extended DEA models were used for environment to measure the eco-efficiency and for social indicators, to take into account the social performance and their impact on sustaining development of the EU countries. In the frameworks of conducted analysis the 28 countries of the EU were investigated in reference year.

The main findings: the analysis showed a relatively high level of effectiveness' differentiation of the the countries concerned in terms of their impact on the level of economic sustainability, taking into consideration both ecological and social determinants. It also allowed us to show the potential areas of increased activity in the area of environmental and social policy, as well as to link the scale of its impact with other determinants of sustainable socio-economic development.

Conclusion: The aim of the paper was to show the advantages of non-parametric approach (mainly extended DEA models) in the situations of multiple inputs and multiple outputs. Various model specifications allow to capture different characteristics of economic development and to show different possibilities for economic policy to increase the

efficiency. The results show the strengths and weaknesses of the analysed countries in the scope of the different indicators.

Recommendations: in the proposed approach, as opposed to the standard applications of DEA for the ex-post performance assessment, DEA can be used for ex-ante assessment of different policy scenarios. In order to analyze the impact of different strategies and goals of economic policy, DEA models with restricted weights can be used. Therefore as a next step for further research the restrictions for the weights can be introduced and the impact of their change for the measuring of sustainable development investigated.

Limitations: restrictions of the DEA method, mainly connected with: limited number of inputs and outputs, basing only on statical approach, problems connected with heterogeneity of the analysed objects (countries), which determine selection a specific variant of model for conducted research.

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ECONOMIC GROWTH AND STABILITY ON THE AGENDA OF THE INTERNATIONAL MONETARY FUND

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Abstract

Background: In the Articles of Agreement of the IMF the objective of achieving high growth and high levels of income and employment is among other objectives which aim towards stable and balanced economy, including towards balanced fiscal accounts and international balance of payments of members. Near term relationships between stability and growth are complex and the evidence from studies on growth effects of fiscal consolidations remains mixed. The issue of the stability and growth nexus is particularly sharpened when the economy is feeling effects of the recession and remains unbalanced.

The aim: To analyze and assess how the issue of the stability and growth nexus has been dealt with over time by the IMF. The study also aims to recommend to the Fund on its position on stability and growth as well as to indicate avenues for further research.

Methodology: The IMF's position on the stability and growth nexus is explored from both theoretical level and point of view of the practical, policy relevance. Reference to the EU position is made when needed. As regards the theory, the neo-liberal line referring to the Ricardian equivalence, and to concepts of crowding in and of market confidence related to balancing fiscal accounts on the one hand and the Keynesian perspective focused on countercyclical fiscal stimulus packages on the other, are taken into consideration. As regards policies, the IMF's and EU's adjustment programs for Greece during the aftermaths of the recent recession are compared and assessed.

Main findings: The IMF has been broadly sticking to the neo-liberal line, allowing for some selected shifts in the paradigm. At policy level, the Fund's position reactively evolved towards the view implying cautious fiscal consolidation and allowing to increasingly respect growth considerations and the related issues of inclusiveness and equity. In the case of the recent adjustment programs for Greece, the EU appears to prefer more austerity while the Fund's position is more growth- and distribution friendly.

Conclusions, recommendations and limitations: As compared to the EU, global and diversified membership and dispersed voting shares in the IMF imply more attention to growth issues, including in adjustment programs. It is, nevertheless, recommended to financial institutions to cooperate on programs and exploit synergies rather than compete. The ultimate growth effects of fiscal consolidation depend on different factors, like scope, structure and timing of consolidation, levels of fiscal multipliers, debt levels, political

feasibility of adjustment, external business cycle, which are recommended for further research. The anecdotal evidence from one country appears to be limited, so more cases should be tested.

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ECONOMIC NEWS AND HOUSEHOLD'S DECISIONS

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Abstract

The paper is devoted to the role of information context in dynamics of consumption/savings decisions. The basis for the study was a selection of news from major Russian TV channels for 2006-2016. The news available to ordinary viewers of the three main Russian television channels was analyzed. News was defined as negative or positive special program tools of sentiment analysis. Increased uncertainty (the spread of positive and negative news) leads to choice of consumption to the detriment of savings, which, thereafter, reduces the investment base of the economy. The authors analyze the connection of the tonality of news and its changes with the business cycle. The authors found an information cycle that, with some lag, correlates with the cycle in consumption/savings decisions in the Russian Federation. The deviations from the traditional model of rational expectations are investigated, the hypotheses of the „rational inattention“ is testing. Based on the study, recommendations are offered for the public policy adjusting.

EMISSIVITY OF ENERGY PRODUCTION AND SOCIO-ECONOMIC GROWTH

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Abstract

The drivers of the rise of energy use and the boost of energy demand are: needs of an economy and its citizens. The energy production sector can and should meet the needs. It faces the growth of energy demand as well as the side effects of its production in the form of pollution emissions, especially greenhouse gases. The basic research hypothesis of the study assumes that the emission of contamination by the power engineering is an objective result of the distribution of energy, but the rate of this emission should be lower than the increase in the emissivity of GDP, employment and productivity. Meanwhile, climate policy and following energy policy in the EU reduce and enforce the targets only in terms of greenhouse gas emissions. They are brought to: reduction of greenhouse gas emissions, achievement of a defined share of renewable energy in the national primary energy balance, achievement of a defined share of renewable energy in gross energy consumption.

The purpose of the paper is the endeavor to analyze the CO₂ emission in the power engineering sector and to assess the emission relative to the change in the emissivity of GDP, the number of employees, their working hours and productivity. The evaluation criterion assumes that the reduction of CO₂ emission should be faster than: GDP growth rate, rate of change in productivity of working hours, rate of number of employees and rate of change of working hours per one employee.

GDP will be used in the paper/elaboration as the most common/popular measure of economic activity.

The assessment of the emission reduction will be done by examining the emissivity calculated as the ratio of total emissions per unit of GDP, per unit of energy consumption and per unit of electricity consumption. In that context, GDP emissivity, energy use emissivity, electric energy production emissivity are dealt with/highlighted.

The subject of the research presented in this elaboration includes data on the emission and emissivity of the energy sector in Poland and macroeconomic data for the economy of Poland in 1990 - 2016 with the perspective up to 2020.

Sources of data for empirical analysis are power station's reports, containing information on emissions and related parameters, including information about: emissions CO₂, SO₂, NO_x, CO and dust generated by combustion of fuels used in electricity and heat production,

generation of electricity and heat in production units, consumption of fuel in electricity and heat production and their basic quality parameters.

The gathered information allows us to compare data of the volume of emission of the substances concerned in correlation to GDP, the volumes of electricity and heat production by the individual production units and on that basis allow us to define the emission indicators for the electricity generated in a year.

The final assessment of the study tends toward the determination of the compatibility /contradiction of CO₂ emission changes with macroeconomic changes expressing the socio-economic growth of Poland.

EMPLOYABILITY IN THE KNOWLEDGE-BASED ECONOMY

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Abstract

The aim of the study: In the knowledge-based economy, where information, technology and learning play vital part in economic performance fast changes became inevitable part of everyday life. As a result of this, new skills and abilities are required to stay competitive in modern economy. Employability increases the ability to secure a job now and in the future and hence it became a focus of attention of workers, employers, education providers and governments alike. Thus the main aim of the study is to identify and to summarise the key employability skills that would be required in the next 10 years in the modern knowledge-based economy.

Methodology: Employment related data from various government sources has been collected and critically analysed and compared with the information available on the skills required at workplace in the key sectors of knowledge-based economy.

The main findings: This study discusses the determinants and consequences of recent trends. It also looks into the future and tries to understand what the working future will look like and what employability skills will be required in about ten year's time. Some key employability skills have been identified, that would enable to sustain employment in the knowledge-based economy. Several gaps in the employability skills have been identified and recommendations made to deal with these.

Conclusion: In the knowledge-based economy key employability skills are required and will be required in the future. In order to sustain high employment in such economies government, employees and education providers should work in close collaboration.

Recommendations: Education providers should adopt a more proactive approach in identifying the current and future trends and focus more on the employability of the labour force. Governments and employees should work in closer collaboration to ensure that the current and future demand in key employability skills is met.

Limitations: There are some country and cultural specifics that have not been looked into in this study.

ENHANCING MARKETING DECISION MAKING FOR THE BIG DATA APPROACH IN RAPID TRANSIT RESEARCH

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Abstract

Increasing big data research to meet the needs of a growing academic research is one of the key challenges of the 21st century. Faced with significant big data research growth, empirical studies need new approaches to public rapid transit that increase yields and efficiency for reducing the traffic congestion. While centuries of transportation research improves our understanding of rapid transit systems, many factors that affect travelers' intention remain poorly understood. Decision makers often base marketing and management decisions on personal experience and intuition because they lack quantitative scientific evidence about how those decisions impact traffic capacity and yield. In order to meet the growing demand for transportation and business research, optimizing marketing and management decisions is becoming critically important. A promising approach in the pursuit of providing data-driven evidence to help them make optimal management decisions involves the use of large, historical datasets from travelers' big transaction database. The research capitalizes on this rich, existing data source, taking a „big data“ approach to rapid transit research. The research uses transaction database of Kaohsiung Rapid Transit Corp as a case study and amasses a historical dataset of more than 300,000,000 records of transaction database. The study mines this dataset to quantify how various factors impact traffic capacity, in order to help decision maker better-informed and data-driven management decisions. The research proposes data mining analysis method to analyze the travelers' big transaction database of Kaohsiung Rapid Transit Corp. This research introduces an application of data mining technologies on this company. The main purpose of this research is to identify customer characteristics and to recommend the marketing strategies in different customer demands of segment. Further, the research creates the value of customer and company. First, the research employs knowledge discovery from transaction database to examine the demand of traveler. By using the decision tree, association rules and cluster analysis to analyze the current consumer preference and demand. Second, association rules model can find the value of customers. The research employs K-means analysis to cluster customers into groups. The model can segment the market based on customer different behavior. Third, the research will apply decision tree to identify customer characteristics. Association Rules and Sequence Cluster Analysis is employed with filters and the travelers' characteristics in order to provide marketing and management strategy alternatives for decision support of Kaohsiung Rapid Transit Corp. Finally, the research mines the dataset using a variety of machine learning algorithms to develop predictive

models of traffic capacity and yields. The research results demonstrate the value in taking a big data approach to transportation research. They show how datasets from travelers' big transaction database can be immensely valuable for deriving quantitative evidence about how to maximize traffic capacity, yield and profits. Further, other research contribution demonstrates that analysis of travelers' transaction datasets using novel analytic approaches is an important complementary approach to experimental research, and will play a key role in generating the data-driven decision support tools.

ENVIRONMENTAL RISK MANAGEMENT OF POLISH FUEL COMPANIES IN FINANCIAL STATEMENTS

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Abstract

The word „risk” has been with us for centuries. Over time it has evolved and today we can talk about different kinds of risks, including environmental risks. Listed companies, in particular fuel, through its operations affect the surrounding nature. Therefore, they should inform customers, shareholders, investors of their doings. The best way to do this is appropriate presentation of information on risk management in the enterprise. Unfortunately, the current situation is not ideal.

The aim of the study is to present the current situation of environmental risk management information in financial statements of fuel companies. The data presented in reports that relate to the aspect is incomplete, poorly illustrated and unreadable. In the article it is stated, that the companies should take into account the risk management representative of its stages. Customers should be able to identify the description, evaluation, financing and administration of environmental risk. All these information should be presented in a coherent, readable and easy to find way. As a result, shareholders or investors will be able to make better-informed decisions concerning the investment company.

During the writing of the article there were methods of induction, deduction, descriptive analysis used. The research process consisted in identifying a research problem, which is insufficiently described the aspect of environmental risk in the financial statements. The next step in the research was to address the phenomenon by analyzing the environmental information contained in the reports of the fuel companies, which are summarized in the table. The present status of the environmental risk presentation and the stages of its management by selected stock companies in the reports were presented. On this basis, conclusions were drawn. An attempt was made to evaluate and demonstrate how environmental risk management information should be presented in the reports. The key to developing one's own ideas was the analysis of financial statements and the stages of risk management presented in environmental realities.

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EQUITY CROWDFUNDING IN POLAND

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Abstract

Crowdfunding is becoming more and more popular with every year. The financial crisis was crucial for its development. United States was the first region where crowdfunding has developed on a large scale. Its importance also increased in Europe, Asia and Australia.

Crowdfunding was concerned primarily with broadly understood social and charitable projects at the beginning. However, with the development and dissemination of this form of financing, its role is also increasing in other areas.

One of the crowdfunding forms is Equity Crowdfunding. It can be an alternative to other forms of financing for businesses. It is one of the most dynamically developing forms of private financing of business projects at an early stage of development. Investors are mainly interested in small companies with innovative ideas.

The level of interest in crowdfunding in Poland is lower than in Western Europe countries or USA. There dominate social and charity transactions. However, there are also small successes in the field of Equity Crowdfunding.

The aim of the article is to analyze the situation of the crowdfunding market in Poland with particular regard to Equity Crowdfunding. Opportunities and barriers for Equity Crowdfunding development in Poland will be presented. There will be also analyzed what can be changed to make Equity Crowdfunding more popular.

The data will come from crowdfunding platforms directly, European Commission, Eurostat and the Polish Agency for Enterprise Development.

EU DEVELOPMENT ASSISTANCE INSTRUMENTS UNDER THE EU BUDGET - ASSISTANCE MECHANICS, UTILISATION AND EFFECTIVENESS

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Abstract

Due to the progressing globalization process numerous threats, contradictions and imbalances that exist between countries acquire a wider dimension in the contemporary economics than in the past. They arise not only from historical legacies, various development paths and differences in economic and political systems, but above all are the aftermath of contradictory economic and political interests.

Peaceful resolution of such complex global issues as: migration, poverty, instable economic growth, terrorism, security or management of scarce natural resources is only possible thanks to the new developments. The fact that countries cannot cope on their own with dividing them issues creates an actual need to increase the role of international organizations, including the EU, as coordinators of actions. Consequently, the EU has become a de facto place of resolving conflicts of interests among its members and an entity playing a major role in mitigating results of global issues, intensifying its actions on sustainable development.

The purpose of the study is to examine the contemporary EU budgetary instruments operating under the Multiannual Financial Framework for the years 2014-2020, by means of which development assistance is provided. The principles and results of the functioning of these instruments, as well as the beneficiaries alongside with subsidized priorities will be presented. Also, an attempt to assess the effectiveness of EU development assistance based on the analysis of the effective utilization of funds under these instruments will be made. Another research finding will constitute a forecast of the EU development assistance system evolution. The authors will present the EU budgetary development assistance instruments in a broad sense of sustainable development policy and the EU and global governance order which will constitute an original approach in the development assistance study.

The analysis will be conducted using quantitative research methods, as well as comparative and descriptive analysis of the professional source literature. The data will be harvested from annual EU reports in order to carry out an analysis of research results and ex post evaluation.

The main research findings show that the EU is a major player in the field of development cooperation, and thus it participates proactively in undertakings aimed at tackling global challenges, which makes it the biggest worldwide donor of development assistance. What is

important, every year the EU maximizes its impact and increases assistance volumes from the EU budget for funding development operations and strives for increasing the effective utilization of funds provided under the financial instruments. Another conclusion states that the UK's decision to leave the EU might prove a serious obstacle for the further development of the EU development assistance. The consequences of the Brexit for the effectiveness of the EU development assistance and sustainable development policy will be elaborated.

EU LEGISLATION ON ANTI-MONEY LAUNDERING AND TERRORIST FINANCING IN THE LIGHT OF RIGHT TO PRIVACY AND ITS IMPLEMENTATION TO POLISH LAW

MAGDALENA JACZEWSKA

BAKER & MCKENZIE

Abstract

Since the September 2001 attacks the role that the financial sector can play in the fight against terrorism has been recognized and the "follow the money" rule has been developed. This event has been the impetus for intensifying control over financial flows and fighting the anonymity of bank transaction parties. Globalization, the increase in international transactions, and the development of financial technologies (FinTech) have not made it that easy. The last few years have been abundant in EU regulations and the terrorist attacks in London, Paris and Brussels have highlighted the need to develop effective ways of fighting this phenomenon by the international community. The purpose of my presentation would be to look at the aspects of the penetration of public and private law in the context of the need to combat money laundering (AML) and terrorist financing (CFT), but also to show deep changes and comprehensive presentation of recent legislation at EU and national level.

The first part of the presentation will focus on the evolution of EU regulation on AML and CFT. The evolution of the fundamentals for this issue will be outlined on the base of four AML directives. The *de lege lata* analysis and new solutions adopted in the AML4 Directive will be assessed. The AML definition will be broadly analyzed, particularly in the context of ranking AML as a cross-border crime (Eurocrime) under Art. 83 (1) of the Treaty on the Functioning of the European Union. It will be equally important to look at the Council of Europe Conventions on Counteracting Terrorism as tools aiming to establishing common legal standards on the European continent.

The next stage of deliberations will focus on the evaluation of the way of implementing EU legislation to the Polish legal system, the *de lege lata* analysis and, above all, the current analysis of the law implementing the provisions of the AML4 directive to Polish legal system, which is currently at the legislative stage. A comparison of the way in which AML4 is implemented by Poland and other Member States will allow the *de lege ferenda* conclusions to be developed.

Most importantly the presentation will include reflections on the impact of anti-terrorism financing legislation on the right to privacy. An attempt will be made to determine the direction in which changes should take place in order not to overburden the private sector with further responsibilities, but to gain confidence and to help it perform their duties in an effective manner. Attention will also be paid to the interactions between AML and CFT

regulations and the protection of personal data. The anti-terrorist financing provisions will be correlated with the provisions of the General Data Protection Regulation and of the Directive 2016/680 of 27 April 2016. The conflict with other fundamental rights mentioned in judgement in joined cases C-4020/05 and C 415/05 (Kadi) will be also raised. The research is based on theoretical and legal analysis and legal benchmarking.

EVALUATION AND SELECTION CRITERIA FOR THE MOST ADVANTAGEOUS OFFER USED BY THE CONTRACTING AUTHORITIES IN POLAND AND SELECTED EU COUNTRIES

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Abstract

The aim of the study: The aim of the research, was to determine to what extent Polish contracting authorities use the possibility of choosing optimal selection criteria in the process of disbursement of public funds. Moreover, the results include selected tender procedures in which evaluation and selection criteria for the most advantageous offer were used in chosen UE countries (Czech Republic, France, the Netherlands, Spain and Sweden).

Methodology: On the basis of reports published by the Public Procurement Office and the analysis of 500 notices of proceedings for construction works conducted in Poland in the first-third quarter of 2017, the authors carried out a classification of evaluation and selection criteria used in practice for the most advantageous offer selection. The authors also analyzed 500 construction works notices published in the Supplement to the EU Official Journal for the procurements conducted in five selected EU countries.

The main findings: One of the EU's key priorities under the Europe 2020 Strategy is sustainable development. Changes in EU legislation (e.g. Directive 2014/24/EU, 2014/25/EU) aim at maintaining proper relationships between environment, society and economy. One of the methods adopted for sustainable development is to implement the rules regulating the above relationships, including those relating to public procurement and the application of new criteria for choosing the most advantageous offer, taking into account the above strategy. The current EU public procurement rules allow contracting entities to apply a number of different criteria for evaluation and selection of the most advantageous offer for construction works, services and supplies. Among the possible applications, the following criteria relating to the object of the contract are especially noteworthy: functionality, environmental and social aspects, innovation or product life cycle cost (Grzyl, Miszewska-Urbanska, Apollo, 2017). Carefully chosen criteria are elements that significantly increase the chances of the contracting authorities to gain in construction works, supplies or services of the highest quality, while respecting energy and the environment (Grzyl, Apollo, Miszewska-Urbanska, Kristowski, 2017).

Conclusion: The results of the research indicate that Polish and Czech contracting authorities do not use the possibility of applying new criteria limiting them to only 3.

Recommendations: It is necessary to thoroughly change the approach of Polish contracting authorities to define evaluation and selection criteria, taking into account the possibility of using many diverse criteria of varied nature.

Limitations: A significant limitation in the application by Polish contracting authorities a bigger number of evaluation and selection criteria is the difficulty in their unequivocal definition.

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EXTENDING ACCOUNTABILITY IN (OUT)SOURCING RELATIONSHIPS

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Abstract

The aim of the study: Classical Transaction Cost Economics perspective, organizational structures are economically justified if coordination costs by prices are higher than the cost of coordination by this structure (Coase, 1993). In that company would outsource (leave to the market mechanisms) only those activities which would generate higher coordination and control costs as compared to these costs internalized in an organizational structure. This is called economic motive for outsourcing and the decision is made based on the costs estimation of the available options. The costs estimation issues in this relationship has been subject to many theoretical and empirical studies and find it difficult the deliver objective/valid outcomes. Moreover all of the see the organization as inherently unitary rather than continuously reproduced as such, then the organization and its environment become disconnected (Llewellyn, 1994) and estimate only the fraction of the costs (Barthélemy, 2001).

In this research, we replicate the study of Tai (1990) conducted at Matsushita organization to illustrate the development of outsourcing relationships to establish a „cooperative sourcing society“. Such a plan involves the extensive rethinking of the boundaries between the organization, the environment and society.

Methodology: In the current study the outsourcing relationships are identified in quantitative study and their costs as well as control and coordination efforts analysed more in depth in qualitative study conducted on several strategically chosen cases.

The research design combines quantitative and qualitative data collection among SMEs (micro enterprises) in Poland. Qualitative part of the study, conducting in-depth interviews with selected companies is a work-in-progress.

The main findings: Expected results show positive effect of extended the accountability in accommodating the SME goals and less relevant aspect of the level transaction costs in outsourcing relationship.

Conclusion: This article sees accounting as a resource, drawn on by agents, not only to „make a difference“ within organizations but to „create a difference“ between the organization and society. Therefore „to organize“ involves a negotiated understanding of organizational realities and an interpretation of these in relation to external realities. (Morgan, 1986, p. 240).

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FDI AND TRADE AS A CHANNELS OF SPILL-OVER EFFECTS OF TOTAL FACTOR PRODUCTIVITY

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Abstract

The aim of the study: As a consequence of globalisation growth and productivity have become more sensitive to developments beyond national frontiers. This paper explores foreign direct investment (FDI) and trade (import and export) as channels of international total factor productivity (TFP) spill-overs. FDI and trade are potentially an important source of productivity growth. However, empirical literature is inconclusive as to the nature and extent of trade spill-overs. Our main goal is to examine of transmission of TFP spill-over effects through trade channel in 41 countries (the members of EU and OECD) during the period of 1996-2015.

Methodology: We use two different estimation strategies to study relationships between TFP spill-over effects and total factor productivity growth (1) Dynamic spatial autoregression (SAR) methods, (2) We create index of TFP spill-over effects and use panel data regression models.

The main findings/Conclusion/Recommendations: (1) the FDI and trade channels are important for productivity transfer (2) international TFP spillover effects are statistically significant (3) the degree of theirs significance depends on the quality of the institution.

Limitations: due to lack of bilateral FDI data the study related to FDI channel covers the period of 2001-2012.

FINANCIAL STRUCTURE OF FDI AND ECONOMIC GROWTH IN POLAND – VAR MODEL EXAMPLE

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Abstract

The aim of the study: The aim of the paper is to analyze and assess the impact of Foreign Direct Investment (FDI) structure (equity, reinvestment of earnings and debt instruments) on changes in economic growth in Poland in the years 1994-2016, with particular attention to the effect of FDI and to verify whether there are any cause-and-effect relationships between GDP and FDI.

Methodology: The paper uses VAR model (Vector autoregression), the response-impulse functions and variance decomposition. Empirical analysis was carried out with the use of the OECD and NBP (National Bank of Poland) databases and index analysis.

The main findings: Research hypothesis: Changes the GDP in the large degree depends on changes of the reinvestment of earnings, at growing for their meaning in the time.

Conclusion: The analysis of the impulse responses of the component of FDI and GDP indicates that, the powerful impact on GDP have reinvestment of earning, towards the weaker impact from the page of the equities and debt instruments. The driving positive effect of the reinvestment of earnings for changes the GDP longer than of other FDI components.

The analysis of the impulse responses of the GDP on component of FDI indicates, that in first years they are heightening the positive effect for reinvestments of earnings and equities, by the slowdown influence on debt instruments.

The variance decomposition calculations for the variable GDP show that GDP was explained to the largest degree by reinvestment of earnings, the lower degree by equities and the lowest by debt instruments.

Recommendations: Results of the verification of the one are important immediately of leading the theoretical as well as empirical FDI influence on the GDP for the host country perspective.

These results of the verification VAR model (the response-impulse functions and variance decomposition) show that for the GDP growth in Poland are important mainly reinvestments of earnings. It means that the investment policy of Poland towards FDI should support the

height of the reinvestment of these earnings, of which the beneficial effect on the GDP grows in the time.

These results allow for the improvement (reinforcement) of forecasts of the income and reinvestments of earnings carried out for the purposes of estimating balances of payments by the central banks.

Limitations: The period 1994-2016 by annual dates.

FINANCIAL SUSTAINABILITY OF NON-PROFIT SECTOR IN SLOVAKIA

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Abstract

Socio-economic and political changes after November 1989 have strongly influenced the Slovak society, which had an impact on almost all areas of economic, political, social and public life. A very intensive development of so-called „third sector” belonged to one of them. The new legislation framework was creating. Non-profit organizations have become state's partner in the area of providing social services not secured by the state and have strong economic and social power, which influences the development of the whole society. Nowadays the financial sustainability is one of the fundamental problems in a non-profit sector. This problem becomes more important due to the foreign capital withdrawal, done by donors of the non-profit organisations mainly during its establishment in 90ties. The national support from public sources is limited and is not sufficient for functioning of non-profit organisations. In non-profit organisations, we stress the necessity of diversity of financial resources' structure, which ensures their independency, financial stability and sustainability from the short-term as well as long-term perspectives. The aim of this article is the setting up key criteria of Non-profit organisations financial sustainability, investigation of these criteria dependency and the level of financial sources acquisition on selected sample of Slovak Non-profit organisations. We assume that thanks to these criteria NPO could better formulate their financial strategy, diversify and stable their financial sources and transformation of this strategy to the long-term strategy plan maintain and develop its entrepreneurial mission.

FISCAL POLICY FOR HOUSEHOLDS AND PUBLIC BUDGET CONSTRAINT IN ITALY

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Abstract

The current study investigates the impacts of structural tax-cut policy of Italian government on GDP, output, commodity prices, value added by commodities and disposable incomes of institutional sectors. Using SAM as a database and employing neo-classical CGE model, the study simulates two policy scenarios.

In first scenario, the amount of 6 Billion is transferred from Government to HH1 and it is compensated by cutting the government expenditures by same amount. The findings confirm that the proposed tax-cuts have a negative effect on GDP albeit very low as -0.04 percent. This finding is in favor of the opponents of the tax-cut policy who maintain that the tax-cut policy has no or negative effect on the output of the economy. On the other hand, the value added by commodities show mixed results wherein some commodities evidenced increase in value added while some have undergone a decline. The disposable income of low income households has been increased significantly while the incomes of other institutional sectors have declined.

In second scenario, the same transfers are made from government to HH1 whereas these are compensated by the transfers from HH5 to government. The results show a positive impact on GDP with 0.03 percent point increase from the benchmark GDP. Moreover, the commodity output, value added by commodities and commodity prices have also undergone significant impact. The disposable income of low income households is significantly increased as in scenario one and the incomes of other institutional sectors, except highest income households, have also observed positive increase as oppose to incomes in scenario one. This suggests that the tax cut policy can positively move up the economy if the amount of money transferred to low income households is balanced with the increase of same amount in terms of taxes on high income class.

There are some limitations to the study which might have affected the findings of the study. One of the limitations is that the study includes 1st income class households to receive transfers from the government. This class excludes several other households who are eligible to receive the government transfers and but are included in the second income class. Inclusion of these households may have resulted in different findings of the study. Another limitation is that the study employs a static CGE model thereby lacking the presentation of results in the long run. Since the results of tax-cuts are expected to evidence in the long run therefore, calibrating the model for large periods might give the different scenario of the economy.

FORECASTING HOUSEHOLD SAVING RATE WITH CONSUMER CONFIDENCE INDICATOR AND ITS COMPONENTS: PANEL DATA ANALYSIS OF 13 EUROPEAN COUNTRIES

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Abstract

The aim of the study: The aim of this study is to investigate the effects of consumer confidence on a household saving rate, which are unsatisfactorily considered in previous research. Apart from the aggregate confidence indicator, its components are also used to provide more precise information. The questions of interest are (1) whether Consumer Confidence Indicator and its components forecast future household propensity to save by themselves and (2) whether they contain information about future household saving rate aside from the information contained in economic fundamentals. The explanatory variables that we treat as „economic fundamentals” are variables usually perceived as potential determinants of household saving.

Methodology: The sequence of linear regression models applied in this study is inspired by that of Carroll, Fuhrer, & Wilcox (1994). Panel data of 13 European countries (Belgium, Czech Republic, Denmark, Germany, Spain, France, Italy, Netherlands, Austria, Poland, Portugal, Finland and Sweden) are used. To the best of our knowledge this is the first analysis of consumer confidence forecasting ability for household saving settled in the broad European perspective.

The main findings: The results of analysis confirm that changes of Consumer Confidence Indicator and some of its components are statistically significant predictors of changes in household saving rate on their own and in case when controls for economic situation are contained. The enhancement in Akaike Information Criterion (AIC) is obtained when the baseline model with just fundamentals is augmented by including lagged changes in (1) the overall Consumer Confidence Index or (2) the component index referring to the household expectations about general economic situation or (3) the component index referring to the household expectations about unemployment.

Conclusion: This paper provides a unique appraisal of the predictive ability of not only composite but also component consumer confidence indicators for household saving rate. Panel study of 13 European countries confirms that Consumer Confidence Indicator and some of its components have a predictive power for the forecasts of the household saving rate in both cases - as distinct predictors and as additional variables to the baseline model.

The highest influence for the future household saving rate is exerted by question concerning unemployment expectations.

Recommendations: Our findings support the recommendation for combining the strengths of objective indicators (such as economic fundamentals) and the subjective ones (such as consumer confidence) to improve household financial behavior forecasts.

Limitations: This study applies aggregated data. We leave an exploration of the household level data to later work, or other authors.

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FOREIGN DIRECT INVESTMENT INFLOW TO THE MONETARY UNIONS COUNTRIES IN AFRICA AND ITS DETERMINANTS

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Abstract

The aim of the study: In recent years the effect of foreign direct investment impact on economic growth of WAEMU and CEMAC countries can be observed. To attract investors those countries have done a lot to liberalize their economies. It is important that those groups of countries are specific and because of that various factors play an important role in the level of FDI inflows. It is said that these countries have not benefited enough from this type of capital yet. There is also a significant difference in the level of capital inflows to those countries in recent years. The aim of this study is to show the impact that different factors have of FDI inflows in selected WAEMU and CEMAC countries and to what extent.

Methodology: The main method used to determine the impact of numerous factors on FDI is statistical analysis, primarily using Pearson correlation coefficient and regression analysis. Among the explanatory variables Authors put nominal GDP, nominal GDP per capita, ease of doing business place, TI Corruption Perception Index place, Global Innovation Business Index place and the share of natural resources in GDP. The response variable is FDI level and FDI level per capita.

The main findings: As a result of the study it has been shown that different factors suggested as a explanatory variables have different level of impact on the level of FDI. The strongest positive influence on the level of FDI has the level of GDP and vice versa. There is also a positive impact of the rest of the factors on the level of FDI in the countries covered by the study. Conclusion: Countries that are part of WAEMU and CEMAC are not very attractive place to locate capital through FDI. It is the result of numerous factors, both of economical and non-economical nature. It is worth noticing that the level of FDI in those countries has risen in recent years, although very slowly. It may be the result of actions taken by policymakers to liquidate limits of proper absorption of foreign capital.

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FOREIGN DIRECT INVESTMENT, INSTITUTIONS, AND INEQUALITY IN INDONESIA: AN EMPIRICAL STUDY

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Abstract

Foreign Direct Investment (FDI) is a main driver for economic growth in a developing country like Indonesia since it has a limited source of domestic financing. However, the impact of FDI on the host country is still debatable in the current literature. The modernization theory suggests that FDI can contribute to the host countries development through employment creation, technological transfer, and economic linkages while; the dependency theory proposes that FDI distorts host countries economy through local entrepreneurship destruction, domestic firms crowding out, and unemployment increases. Unfortunately, most of existing studies focus on the contribution of FDI to economic growth, rather than another development indicator such as inequality. Evidences show that high economic growth is often not accompanied by lesser inequality. Therefore, firstly this paper aims to examine the effect of FDI on inequality in Indonesia. Inequality includes not only income aspect but also education and health aspects. The observation is focused on the FDI-inequality nexus at district level since Indonesia has implemented decentralization since 1999, in which district government has more authority to manage FDI flows in their regions. Secondly, this paper considers the role of district government institutions in driving FDI to reduce inequality. Institutions capture the quality of district government in supporting business sector, such as land access, infrastructure, business licenses, security, conflict resolution and other institutional aspects. In order to address those objectives, this paper employs a cross-section estimation method for 105 Indonesian districts in 2011 and 2013. For the estimation, institutions are treated as a moderating variable, which is measured by factor analysis method. By using the data of 2011, this paper finds that FDI has no significant impact on income, education, and health inequality in the short run. Furthermore, this paper finds unexpected results that the quality of institutions leads higher inequality. The results might be caused by the analysis which is only focused in the short run and the existence of endogeneity problem. Therefore, this paper estimates the effect of FDI and institutions in 2011 on inequality in 2013. After considering long run analysis and endogeneity problem, this paper finds that FDI significantly leads to lower inequality in education and health, but not in income. Moreover, institutions significantly reduce income inequality, but institutions do not have a significant effect as a moderating variable. The findings of this paper suggest that local government should consider the role of FDI in reducing inequality, especially in

health and education. Improving the quality of district government institutions are required to solve the problem of inequality in their regions. However, the data of institutions only reflects business perceptions of the quality of district government. It may cause an ambiguous effect of institutions on inequality. Therefore, for further study, exploring the quality of institutions from the perspective of another stakeholder like society should be considered.

FROM BASIC SCIENCE AND PATENTS TO THE TECHNOLOGICAL DEVELOPMENT OF THE ECONOMY? SHORT AND LONG RUN CAUSALITIES

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Abstract

The paper examines the potential effects of scientific publications on patenting and share of high technology exports. We proxy the technological level of the economy by the high technology exports share in total exports. The link between these two has previously been noted in the literature by, e.g., Montobbio and Rampa (2005). The main aim of the paper is to test the potential causalities between scientific publications, the number of patents and the share of high technology exports controlling for endogeneity.

We test the short-run and the long-run causalities among high technology exports, number of scientific publications and number of patents in three separate models. Our sample consists of panel data for 61 countries and 20 years. The panel Granger causality and Vector Error Correction Model have been used in order to capture short-run causalities. Furthermore, panel cointegrated regressions, namely Fully Modified OLS and Dynamic OLS have been applied to test long-run causalities.

Our results strongly suggest that there is a positive long-run effect of scientific publications on both patenting and the share of high technology exports. This suggests that the outcomes of science in the form of scientific publications strongly support technological development. We are not able to find any significant short run causality, except the statistically significant Granger causality between scientific articles and the high technology exports share.

Furthermore, several policy implications follow from our results. Firstly, there is strong evidence that R&D intensity at universities and other research organisations is a fundamental factor supporting the technological development of the economy in the long-run. Hence, support of basic science even in the less applied form seems to be a good way to enhance the development of new technologies and increase the share of exports with higher added value in the long-run.

It is important to note that despite our considerable efforts to achieve the most relevant results, our analysis has certain limitations. First, the variables used in the analysis are only proxies for the intensity of science and technological development of the economy. Secondly, we assumed that the effect of R&D intensity is largely localised in the same country.

FROM ORDINARY BUSINESS IDEAS TO WORLD-LEVEL INNOVATIONS

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Abstract

The aim of the study is to analyse the process of development of start-ups, which were funded based on knowledge sourced from academia. The study includes ventures founded by scientific workers employed at different universities, as well as those started by students and graduates of the same organisations.

The analysis is based on process approach, which considers three different objectives defining framework for this process. Evolutionary economics, based on Schumpeter's view, with firm theories that follow, is utilized as a basis for development of theoretical model of business venturing. Empirical studies are employed in order to test and upgrade the model created. The methodological approach is based on grounded theory and uses case study strategy. The study is based on 82 case studies conducted in Poland and compared against 40 cases located in well developed European countries, i.e. UK, Germany.

As a result five stages of the start-ups development process are distinguished, each related to higher level of innovativeness of products commercialized on the market:

Stage 1: development of the basic business offer - associated with the emergence and the commencement of the implementation of one's own vision of the venture;

Stage 2: the improvement of the offer - occurs when entrepreneurs refine their offer, expanding it, creating a portfolio of products (mainly service offers);

Stage 3: partnership building - occurs as a result of changes in the philosophy of thinking about business; the offer takes the form of an increasingly comprehensive approach to the issue of needs which the company caters for;

Stage 4: standardisation - based on the expanded partnership in which knowledge of the company and its partners serves to create unique products;

Stage 5: the intensive development of innovation - the transition to this stage requires the involvement of the company in its own targeted R&D activities; the offer is prepared for the needs of broad markets, at least on a national scale but mainly on an international scale (sometimes over a slightly longer time horizon; successive entering new markets);

For each stage distinguished the critical junctures as well as product features are described in details. The special attention is paid to knowledge which need to be engaged within the process in order to make it happen. The model developed attempts to answer the

question how firms develop their product offers from ordinary business ideas to world-level innovations. The results provided help to understand how break-through innovations happen within small organisations which starts with no resources except of academic knowledge and some networking opportunities. They also help to understand how new ventures can be supported by economic policies to become more innovative and produce world-level innovations in shortest possible time.

The results are discussed and compared against other published concepts of ventures development with main gaps in known models stated and filled in.

GOVERNANCE INDICATORS INFLUENCING ILLICIT FINANCIAL OUTFLOWS FROM DEVELOPING COUNTRIES

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Abstract

Economic growth has traditionally been attributed to the accumulation of human and physical capital and increased productivity arising from technological innovation. The quest to attract physical capital (FDI inflow) led to the design and implementation of policies, and building institutions by governments of developing countries to create a congenial investment environment to attract foreign investors. The multinational corporations operating in these developing countries take advantage of these policies to milk these countries of capital through both legal and fraudulent activities. There is the need for a comprehensive scrutiny of the quality of governance indicators that enhance the activities of these multinational companies in order to fight this menace of illicit financial outflow. This study, therefore, seeks to explore the influence of cross-country governance indicators on illicit financial flow from developing countries. The study is based on secondary data (panel) drawn from Global Financial Integrity, the World Development Indicators and the Worldwide Governance Indicators. The total number of developing countries included in the analysis is 139 with 1562 observations. Using the multilevel estimation approach, the study finds that regulatory quality has a negative and significant influence on illicit financial flow whilst government effectiveness, corruption, and FDI net inflows have a significant positive effect. This calls for developing countries to design and implement sound policies, build effective and accountable institutions, control corruption and enhance regulatory quality in order to control this menace.

GREGORIAN AND INDIAN CALENDAR: COMPARATIVE ANALYSIS OF MONTHLY ANOMALY IN INDIAN STOCK MARKET

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Abstract

Purpose of this Study is to contribute in the area of Stock market Calendar Anomalies by re-examining the phenomena in nine different sectors to understand the occurrence behavior in better way. GARCH model is used to analyze the data for the period January 2004 to December 2014. Analysis leads to three conclusions first is that the Indian stock Market is not efficient and second is that anomalies varies across the sector and Calendar to calendar and third conclusion is that the Gregorian Calendar is not sufficient to capture all calendar anomalies. Use of Local calendar might provide new insights to the researcher. Variation between sectors could be because of different behavior of Investor in Various months of year for different type of stock. Therefore it can be concluded that the stock market is not homogeneous and integrated. Anomalies are still there in Indian stock market however these anomalies are not homogeneous for whole stock market.

Methodology: Study is to contribute in the area of Stock market Calendar Anomalies by re-examining the phenomena in nine different sectors using Local and Gregorian Calendar. The main findings: Analysis leads to three conclusions first is that the Indian stock Market is not efficient and second is anomalies varies across the sector and Calendar to calendar and third conclusion is that the Gregorian Calendar is not sufficient to capture all calendar anomalies.

Conclusion: Indian stock market is not homogeneous and integrated. Anomalies are still there in Indian stock market however these anomalies are not homogeneous for whole stock market. Recommendations : Use of Local calendar might provide new insights to the researcher because all the local festivals were decided according to local calendars.

Limitations: This study is limited to India only. Including more countries can bring more clarity to the phenomena.

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IMPACT OF CSR ON OPERATING FINANCIAL RESULTS - THE CASE OF COMPANIES FROM RESPECT INDEX

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Abstract

The aim of this study is to verify the impact of CSR activities on financial operating performance of companies. In the field of assessment of impact of CSR on economic performance vast majority of researches aim at showing immediate or long term impact of performance related to sustainability on companies' financial results proving whether there exist a significant relationship between these two. Immediate effect is analyzed by event studies showing reaction of investors on the information disclosure about company being included (excluded) in (from) sustainability index (Consolandi et al., 2009; Cheung and Roca, 2013; Daszyńska-Żygadło et al. 2014, Adamska and Dąbrowski 2016). The long term effect (usually calculated as a yearly effect over a certain period of time) is analyzed on the basis of financial performance (accounting or market measures) regressed over sustainability (or CSR) performance (scoring/rating result) (among the newest published research results being: Wang and Berens, 2015; Saeidi et al., 2015; Słowski et al., 2016). Depending on the period of the analysis, proxies selected for financial performance and sustainability performance as well as a sample of companies and methodology of research assessed impact is either positive, negative or inconclusive and insignificant (Margolis et al., 2007). Therefore it still leaves a room for further studies. It is important to notice that empirical studies are mainly conducted on big samples from developed stock exchanges and developed markets while there is lack of evidence or limited number of studies (Daszyńska-Żygadło et al. 2014, Adamska and Dąbrowski 2016) that analyzed only short term effects from less developed markets, especially central European countries. This paper aims to extend existing literature by verifying longer term effects of CSR activities of companies that are included in sustainability index. Therefore, the research question is not about perception of investors, but about fundamentals, can we recognize improvement or worsening of operating financial results of companies included in RESPECT. Methodology applied is based on event studies that employ accounting-based performance measure, in details described by Barber and Lyon (1996), widely used in research analyzing operating performance after mergers and acquisitions (for example in the paper of: Healy et al. 1992; Ghosh, 2001; Linn and Switzer 2001; Perepeczo 2009). The sample is composed out of 22 companies that in the period of 2009 - 2014 were included in the sustainability index RESPECT on Warsaw Stock Exchange. Analysis was conducted 3 years before and 3 years after the inclusion in order to verify the hypothesis of significant changes in operating performance after inclusion in the index. Results show that there was a significant positive change in operating performance based on

ROA relative to industry-median firms. It indicates that operating performance of companies from various industries improve following inclusion in sustainability index, which could lead to the conclusion that CSR activities may improve operating performance of a company. Limitations of the study are connected with the small size of a sample and choice of proxies both for CSR activities and for operating performance extending of the sample would be recommended.

IMPACT OF ECB ANNOUNCEMENTS OF ASSET PURCHASE PROGRAMMES ON SOVEREIGN BOND MARKETS IN INDIVIDUAL EU MEMBER STATES

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Abstract

The aim of the study: The objective of the study is to evaluate the instantaneous impact of selected major announcements regarding the ECB's SMP, OMT and EAPP/PSPP programmes on the yields on sovereign bonds issued by individual EU Member States, using a standard event-study framework.

Methodology: To evaluate the instantaneous (same-day) impact of announcements regarding the ECB's SMP, OMT and EAPP/PSPP on the yields on Treasury bonds issued by individual EU Member States, a standard event-study framework is applied. The specification of the model is autoregressive with the lag order (P) selected individually for each equation to ensure the serial independence of errors. Since the analysis aims at estimating the impact separately for individual countries and at the same time a significant contemporaneous correlation across their yields can be suspected, the seemingly unrelated regression method is employed to jointly estimate equations for all countries. To better understand the influence exerted by the release of each individual announcement on each of the examined programmes, an additional system of equations has been estimated.

The main findings: The overall average immediate impact of the ECB's communications on SMP, OMT and EAPP/PSPP was relatively small and confined to the most troubled peripheral countries of the euro area - much in line with the original objectives. Therefore they can be deemed successful, in that they resulted in a decline of those economies' bond yields. This is in line with the previous studies. At the disaggregated level, the launching of the SMP exerted the most pronounced overall influence on bond yields of almost all examined countries, with the subsequent announcements of other programmes having an impact almost only on the peripheral countries. This is also in line with the previous studies. More interestingly, the analysis revealed significant heterogeneity among individual EU Member States. In particular, the ECB's decision to launch the SMP led to a significant increase of yields on bonds issued by the safest countries.

Conclusion: The main findings may point to the different perception by market participants of the expected impact of the SMP on „healthy” and „troubled” countries, and - more generally - also of the investors' fears for the integrity of the euro area. Such indirect „penalisation” of the well-performing EU Member States may adversely affect the balance of costs and benefits of adopting the euro for the countries outside the Eurozone.

Recommendations: The results of the study may be of particular importance to financial market participants, central banks and policy makers, especially in EU Member States from outside the euro area.

Limitations: The preliminary results ought to be investigated further, including with the use of alternative methodology to confirm their robustness.

IMPACT OF FORMAL INSTITUTIONS ON REGIONAL ENTREPRENEURSHIP - GOVERNMENT FAILURE OR SUCCESS? EVIDENCE FROM POLAND

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Abstract

The aim of the study: The greatest catastrophes of human history, aside from the natural disaster, were according to scholar's institutional failures of governments. Despite that, institutional support, especially efficiency of legal framework in settling disputes, nowadays has a crucial influence on regional entrepreneurship activity and the growth level as well as country development. Institutions shape economic activity and behaviour of entrepreneurs. Moreover, it is proved by scholars that limitation of judicial independence has negative impact on growth of gross domestic product. In addition, also the choice of the judges of the highest courts has a key impact on the economy. Aim of this study is to investigate the impact of efficiency of legal framework in settling disputes on regional entrepreneurship in the Central and East European countries (on the example of Poland).

Methodology: A conceptual model that relates to the efficiency of legal framework in settling disputes has been developed. The authors use this conceptual model to develop propositions about the impact of justice in Poland on development of regional entrepreneurship.

The main findings: The application of the proposed model to the Polish case shows its usefulness in settling disputes according to the effectiveness, costs as % of year gross income per 1 citizen, number of proceeding or length of court proceedings.

Conclusion: The impact of judiciary on development of regional entrepreneurship is significant. Although till now due to low efficiency of settling disputes judiciary system in Poland is unable to achieve Pareto efficiency and resolve the market failures according to entrepreneur's activity.

Recommendations: The main contribution of this study lies in offering a tool for supporting the efficiency of legal framework in settling disputes.

Limitations: The analysis is limited to data for a single country, and further investigation would help access the generalisation of the findings.

IMPACT OF PRODUCTION FACTORS ON THE EFFECTIVENESS OF DIFFERENT TYPES OF AGRICULTURAL PRODUCTION IN REGIONS OF THE EUROPEAN UNION

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Abstract

The aim of the study: Identifying the impact of land, capital and labor factors on the efficiency of different agricultural production types in the EU.

Methodology: The Ward Cluster Analysis was used to distinguish groups of EU regions, significantly differing in factor endowments, DEA model with variable scale effects to determine the relative differences in technical efficiency of different types of agricultural production in EU regions, differing in factor endowments and ANOVA analysis (NIR, Scheffe and HSD tests) to assess the significance of differences in the efficiency of identical agricultural production types between EU these regions. Time scope of research: 2015, spatial: EU regions, subjective: representative farms from these regions.

The main findings: The efficiency of all types of agricultural production in 2015 was the highest in the agricultural holdings of the EU regions with the highest all three traditional production factor endowments. Second highest efficiency of the different types of agricultural production had farms concentrated in EU regions characterized by the lowest factor endowments (cluster B). It included most of the EU-12 regions. The lowest efficiency of all types of agricultural production was observed in the cluster of regions from the EU-15, with higher capital and labor endowments than farms from cluster B. It was therefore found that the agriculture of the EU-12 regions was characterized in 2015 by higher efficiency of transforming inputs into effects than households in the EU-15 regions.

Conclusion: Factor endowments play a significant role in transformation production factors into effects - this is consistent with the production function. In agriculture the result depends of labor and capital factors as well as the natural factors. The article shows that there is a diversity of factor endowments in agriculture between EU region groups, which translates into differences in the technical efficiency of agricultural holdings of various types of production.

Recommendations: It would be useful to conduct comparative studies on the effect of factor endowments on productivity of EU farms of different types over time to show whether the proven dependency is characterized by durability.

Limitations: Due to the use of EUFADN data, which relate to the best farms, the results relate to the sample of farms with specific economic characteristics. The analysis is static, since the latest EUFADN data (one-year) is used, but once the economic results have been fixed, a dynamic analysis is also planned.

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IMPACTS OF CLIMATE CHANGE AND TRADE IN THE LEAST DEVELOPED COUNTRIES

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Abstract

Hunger affects 1 billion people; however, there is no food crisis in the world. In 2008, the year of the most starvation in LDC, we also had the greatest harvest ever, able to feed double the population and still stock food. The food challenge in 2008 occurred mainly due to the 145% increase in grain prices; in some cases 300%. It was caused by successive years of tremendous economic growth and lack of investments in agriculture. Besides that, it is well-known that agriculture subsidies in developed countries knock down prices and make agriculture impracticable in developing countries.

„Hunger is causing the death of 6 million children per year, 1 every second,“ according to FAO. However, it is not a priority, because hunger is a localized issue, causes death, but does not affect the world economy. On top of that, climate change has been a tremendous threat to agriculture in LDC and will continue to harm them seriously. Cop15 showed little commitment to avoid the so-called „perfect storm“, a fatal combination of climate change and trade issues in the food security of LDC. The pressure on food prices began building in 2007, in what Josette Sheeran, the World Food Program’s executive director, described as a „perfect storm“.

The key factors include rising prices for fuel, fertilizer, seed and transportation; increasing demand for food, driven partly by the growing prosperity of population giants like China and India; and growing demand for corn and certain crops that could be converted into ethanol for use as fuel. While food-exporting nations stood to benefit from higher food prices, most developing countries were expected to be hurt because 55 percent are net food importers, according to the Food and Agriculture Organization.

Nearly all the countries in Africa are currently net importers of cereals, the FAO said. Many countries that were net exporters or self-sufficient in many food crops experienced a decline in local production and a rise in imports which became cheaper because of the tariff reduction. Some of the imports are from developed countries, which heavily subsidize their food products. The local farmers’ produce was subjected to unfair competition, and in many cases could not survive. The effects on farm incomes, on human welfare, on national food production and food security were severe. Because of this new situation, the paradigm of „food security“ has suddenly shifted back to the traditional concept of greater self-sufficiency, instead of prioritizing the option of relying on cheaper imports.

It is now recognized that in the immediate period, there is a need for emergency food supplies to affected countries, but that a long-term solution must include increased local food production in developing countries. This raises the question of what constitute the barriers to local production and how to remove these barriers.

A. Scientific relevance/innovation To study the impacts and consequences of trade and climate change in the food security of LDC since they are deeply connected to creating a „perfect storm“.

B . Societal relevance To make proposals/recommendations for IOs.

INFLATION EXPECTATIONS AFTER FINANCIAL CRISIS: ARE CONSUMERS MORE FORWARD-LOOKING?

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Abstract

The aim of the study: The aim of the study is to assess pre and post-crisis forward-lookingness (FL) of consumers inflation expectations in the EU Member States (MS). We consider 18 MS classified into subgroups: euro area and non-euro area MS. We assume that average level of FL in the sample and in subgroups does not increase in post-crisis times.

Methodology: We quantify the EC Business and Consumers Surveys results with adjusted, subjectified Carlson and Parkin method (Bachelor and Orr 1988). Then we estimate average errors of expectations, test their rationality with unbiasedness and macroeconomic efficiency tests and finally we estimate hybrid specification of expectations as proposed by Łyziak and Mackiewicz-Łyziak (2014).

The main findings: The forward-looking component of consumers inflation expectations is on an average about 10% in our sample. After 2008 - what we consider to be post crisis period - it has not changed remarkably, at the same time expectations accuracy has deteriorated and the use of available information has worsen as well. However we cannot find a clear difference in the expectations formation change among euro area and non-euro area MS.

Conclusion: Great Recession alerted expectations formation of consumers. We confirm the results obtained by the other studies (Andreou, Eminidou and Zachariadis, 2016; Dovern and Kenny, 2017). As the evolution of central banking is still on, the expectations are shaped not directly by the crisis but still by policy reaction on the crisis.

Recommendations: Communication explicitly addressed to consumers (simple) should become a commonly shared practice: central banks should speak on the main street as the title of Binder's article suggests (Binder, 2017).

Limitations: As expectations are not directly observed, in this study, as in any study covering them, we used their proxy. The group of the non-euro area MS is very diversified: as a consequence, the conclusion on the euro area and non-euro area MS differences was not clear.

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INFLATION IN NIGERIA, A HISTORICAL FACT OR CONSEQUENCES OF FISCAL DEFICIT?: AN EMPIRICAL EXAMINATION USING THRESHOLD VECM

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Abstract

The study empirically examines the consequences of the relationship between fiscal and monetary policies in Nigeria. To do this, an Inter-temporal Budget Constraint (IBC) of the federal government was estimated using annual time series data for budget deficit, growth rate of monetary aggregates (M1 and M2), change in federal government stock of debt and directs CBN financing of budget deficit. The series were collected from the Central Bank of Nigeria's statistical bulletin, 2015. To examine the evidence, the study assessed the univariate and multivariate stochastic properties of the series using Perron (1997); LP (1997) and Gregory and Hansen (1996); Hateemi J. (2008) respectively. The following evidences were found for the univariate stochastic properties and the results reveal the presence of unit root at levels for all the series except CBN financing of budget deficit. This finding is consistent across the two tests. For the multivariate counterpart, the evidence reveals that seigniorage and debt are the two components used in long run budget deficit financing in Nigeria. In terms of the short run dynamics of the relationship, Threshold VECM was estimated and the result reveals that both debt and seigniorage components, except growth rate of broad money supply, affect budget deficit in the short run. Therefore the study made the following conclusions: firstly, seigniorage and borrowings are the two important components used in budget deficit financing both in the short and long run in Nigeria. Secondly, the evidence found by the study is in favor of fiscal policy dominance which has an implication of affecting interest rates and/or prices. Therefore, inflation in Nigeria is both historical fact and consequences of budget deficit.

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INNOVATIVE MARKETING SERVICES IN BUSINESS PRACTICE

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Abstract

The aim of the study: The paper reports theory of marketing service innovation and examines research data on how enterprises use marketing services, how they define their innovativeness and perceive them as value generators.

Methodology: The paper discusses two broad categories of marketing services: advertising services and market-research services, taking into consideration their innovativeness and business use. The aim of the theory and data analysis is to verify the following assumptions: H1. Regardless of their size or sector, enterprises are very keen on spending money on innovative marketing services. H2. There are great differences in how enterprises evaluate and value innovative marketing services (depending on their location, scope of operations and financial standing). H3. Enterprises experience particular benefits when they use innovative marketing services. The analysis covers small, medium, and large companies in Poland. Research was carried out on the stratified-quota nationwide sample of 505 companies which operated in Poland and used business services. The researchers conducted direct interviews with managers in charge of the entities in the sample, using their proprietary questionnaire based on categorized questions.

The main findings: (1) The level of service innovativeness depends on a company context (its size, scope of operations, and business locations). (2) Enterprises evaluate marketing services which they can access as generally innovative and potentially beneficial.

Conclusions: The findings contribute to advancing an understanding of how enterprises perceive innovative marketing services and how this perception relates to their assessments of overall service quality and intentions to use the services. The research shows that assessments of innovation of advertising services and research services are generally similar - differences in the perception are small, and so are relationships between the assessments and the features of companies. Innovative marketing services are usually regarded as designed and delivered in new, non-traditional ways; fewer companies see innovativeness in new types of customer interactions and in more open-minded organizational cultures that accept experimentation.

Recommendations: The research results should draw the attention to the complexity of innovation in the field of marketing services. Managers present different levels of knowledge on innovation. In general, they assess innovation of marketing services positively. They can see symptoms of innovation but they are not always convinced of the full usability of

innovative solutions from the point of view of management processes and raising their companies' competitiveness. It is also interesting that managers' opinions on innovation of marketing services and their impact on the business success are not generally influenced by variables which characterize the organizations themselves.

Limitations: The limitation of the study relates to the subjectivity of the term "innovation" in marketing and the fact that the understanding of innovation varies across enterprises. Practitioners could benefit from a classification of marketing innovation types as well as an analysis of barriers and stimulators which shape the innovation of marketing services.

INTEGRATING EAST CENTRAL EUROPE INTO THE WELFARE REGIME TYPOLOGY

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Abstract

The overall aim of the paper is to provide a comprehensive analysis of social policy developments of East Central European (ECE) countries in order to assess whether there is an ECE (post-communist) welfare state model. The relevant literature is inconclusive on whether East Central European countries indeed merit their own welfare state model, as certain scholars have claimed (Cerami, 2005; Deacon, 1992). Following the core research aim outlined above, the study seeks to address and answer the following research questions. Does East Central Europe constitute a distinct welfare state regime? If it does so, what are the distinct features of the welfare state model in East Central Europe? Have the countries of the ECE model become more similar over time?

The structure of the article is as follows. The first section comprises the conceptual framework of the analysis in order to introduce the main elements of welfare state regimes, focusing mainly on the theoretical contradictions of post-communist social policy developments. There follows the collection of the historical-institutional features of East Central European welfare states. The empirical part of the paper builds upon Saint-Arnaud and Bernard's (2003) and Fenger's (2007) validations of Esping-Andersen's welfare regime typology. Their methodology of hierarchical cluster analysis is used but replacing their data with data that are available for other countries than the traditional OECD countries. To do so it is possible to show that East Central European welfare states differ significantly from the types those are distinguished by Esping-Andersen (1990). The article then re-clusters the given countries by using the most recent available data in order to shed light on the changes in cluster membership by time. The main findings are summarized in the conclusion part. The empirical analysis shows a distinct, specific type Central European welfare state regime. They are mainly characterised by lower levels government spending and social outcome situation. Their further development still remains an open question.

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INVESTMENT DECISIONS IN TECHNOLOGICAL FIRMS

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Abstract

This paper analyzes the influence of the firm-, country- and sector-level factors on the investment decisions of tech firms. Despite of the relevance of the technological sector because of its enormous contribution to the global economy, and despite of the particular nature of the sector, few studies focused on investment decisions in this industry. Moreover, the previous literature barely considers the effect of macroeconomic and industry variables on investment. To this extent this work tries to reduce this gap. Our study shows a different behaviour of the technological sector regarding investment decisions compared to other industries stressing the importance of macroeconomic and industry variables. This information may help governments to design appropriate strategies to foster development of the technological sector of their countries providing stronger support both from governmental and private sectors.

Based on Modigliani and Miller (1958) theorem, an extended literature revision was carried out stressing various relations between different factors and capital investment. This enabled us to carry out the analysis of 940 listed companies from 16 OECD countries from 2003 till 2013. The sample is divided in 2 subsectors: „Manufacture”, or hardware (447), and „Services”, or software and IT consulting (493). Our model includes various firm-level and macroeconomic and industry variables. Estimation is done using GMM methodology which allows controlling both unobservable heterogeneity and the problems of endogeneity in explanatory variables through the use of instruments.

The results of our analysis show that specific macroeconomic and industry variables of each country should be taken into account to understand investment decisions in the technological industry. Regarding firm-level variables, we found that, as in other sectors, cash flow generates direct impact on investment. The reason is that, besides the cost difference between internal and external financing and agency conflicts, the presence of asymmetric information and intangibles in technological sector is larger which hampers access to external financing. Contrary to what happens in other industries, investment opportunities are negatively related to investment decisions due to high presence of intangibles.

Regarding macroeconomic and industry variables, tech firms invest more when the export activity of the sector is higher and more patents are registered. Nevertheless, we detected less investment in tech firms when a country experiments economic growth and when the R&D expenses from the private sector are higher. This apparent contradiction has

to do with that these factors enhance growth of R&D activities in the firms what makes them postpone capital investments. Besides that, other significant differences were detected by running additional analysis according to the subsector classification, investment opportunities, leverage level and size of the firms.

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ISO 26000 AMONG THE CORPORATE SOCIAL RESPONSIBILITY STANDARDS

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Abstract

The aim of the study: The aim of the article was to show the basic differences between ISO 26000 and other standards SA8000, GRI, AA1000, ISO 14001, ISO 9000.

Methodology: The paper presents the various CSR standards. The article is based on written sources, regulations and literature of subject.

The main findings: Awareness of corporate social responsibility through its recently intensified promotion has reached such a level that it is no longer a problem whether to implement the concept of corporate social responsibility, but how to do it.. Because of the high profile of ISO within the business community, the decision by ISO to develop an SR standard represents a significant opportunity to „mainstream“ (or diffuse) the concept of social responsibility (and hence to institutionalize it) to a wide section of businesses and other organizations that have not heretofore been reached through the specialized SR rule instruments of other entities. The fact that experts from Account Ability (developers of AA 1000), Global Reporting Initiative (GRI), the UN Global Compact (UNGC), Social Accountability International (SA 8000), the Organisation for Economic Cooperation and Development (OECD, responsible for the OECD Multinational Enterprise Guidelines), the International Labour Organization (ILO, responsible for the ILO Tripartite Declaration) and other international SR rule proponents participated in the ISO 26000 working group can be seen as recognition by these other SR rule developers of the bridging (and hence „mainstreaming“) potential of ISO 26000

Conclusion: However ISO 26000 is the new rule, the problem itself is not. The Article shows similarities and differences between standards.

Limitations: The article compares the selected categories in the standards.

KNOWLEDGE MANAGEMENT AND COMPETITIVENESS OF MANUFACTURING COMPANIES

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Abstract

This article continues previous research on the issue of knowledge and manufacturing companies (among others: Soniewicki, 2016). Its goal is a complex analysis of relations, in manufacturing companies, between four elements of knowledge management - knowledge acquisition, knowledge transfer inside the companies, use of ICT tools supporting knowledge management processes, knowledge implementation - and checking the relations between them and companies' competitiveness level. Manufacturing is very important, also for rich, developed countries. It has an important influence on the entire global economy through job creation, infrastructure construction and GDP increase. Currently, the importance of knowledge and processes of its proper management among manufacturing companies are often overlooked. This is because knowledge management is often associated with service industry and in the case of manufacturing is not an obvious issue (Grönroos, 2005; Soniewicki, 2016).

The study is based on a survey using a dedicated questionnaire in which more than 1200 enterprises took part. 334 were of the main interest - manufacturing companies: high, medium-high technology and others. Comprehensive analysis of survey results required use of different advanced statistical methods. Exploratory factor analysis and classical correspondence analysis were used. The use of structural equation modelling (SEM) which aim is to search for relationships between unobserved constructs (latent variables) from observable variables is also considered.

The use of multivariate statistical methods based on data gained from Polish manufacturing enterprises showed that it is possible to find the main factors which have an impact in the area of four crucial elements of knowledge management. For instance, conducted analysis showed that knowledge acquisition is determined by four crucial factors: R&D and cooperation, market knowledge, external experts' knowledge and external publications. Relations between elements of knowledge management and the level of companies' competitiveness were also found and visualised in a two-dimensional space using correspondence analysis.

The results of the analyses suggest that manufacturing should concentrate especially on acquiring knowledge from entities in their value chain but also from various kinds of publications. The other elements of knowledge management which may increase

competitiveness of manufacturing companies are frequent managers' meetings with employees, use of advanced IT and detailed assessment of all setbacks.

The sampling frame has been taken from Kompas Poland database which does not contain all manufacturing companies operating in Poland. The analyzed sample contains 334 firms, it is recommended to have at least 100, 250, 500 to use statistical multivariate methods depending on the authors.

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LEVERAGE AND FIRM GROWTH: AN EMPIRICAL INVESTIGATION OF GAZELLES FROM EMERGING EUROPE

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Abstract

The aim of the study: The aim of the paper is to assess the impact of leverage on gazelles' performance while controlling for firm characteristics, macroeconomic environment, and characteristics of domestic banking sectors.

Methodology: We estimated our model specification using four different methodologies: pooled OLS, fixed effects panel model, estimations with panel-corrected standard errors, and FD - GMM approach.

The main findings: Using a sample of 1,105 gazelles from Central, Eastern, and South-Eastern European (CESEE) countries for the period 2006-2014, we found that leverage affects negatively firm growth. We also found that younger and larger gazelles grow faster. Contrary to our expectations, gazelles grow faster in countries with lower level of economic and financial development. The results prove to be robust regarding the use of different estimation approaches and alternatives variables for firm growth.

Conclusion: The role of funding issues in explaining gazelles' performance using firm-level data has been insufficiently researched until now. Our paper is motivated by this gap in the extant literature dedicated to high growth firms and also by the need to provide better guidance for appropriate policy interventions in emerging economies.

Our results show that in all countries gazelles' own debt overhang/leverage is a big drag on firm growth. Our findings proved to be robust regarding the use of alternatives measures for firm growth and of different estimation methodologies.

Recommendations: Our results suggest that improving access to various sources and types of financing represents a key issue for supporting gazelles' growth.

Limitations: There are several limitations of our study that should be recognized. First, we employ total growth, computed as the sum of organic and acquired growth, because of the lack of data on mergers and acquisitions. However, this approach is widely used in the extant literature on firm growth. Secondly, we did not include in our empirical analysis entrepreneur characteristics or innovation activity at firm level due to the lack of data available. Thirdly, the inferences resulted from these empirical analyses are limited by the data on which the results are based.

LOCAL GOVERNMENT CHALLENGES' TO IMPLEMENT PUBLIC PRIVATE PARTNERSHIP IN INDONESIA

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Abstract

This paper aims to analyze the challenges' those faced by local government in Indonesia, which includes the provinces, districts and cities, in implementing the Public Private Partnership (PPP) scheme. Under PPP scheme, private entities have opportunity to participate in providing infrastructures in Indonesia. This PPP scheme, both of economic and social infrastructures and/or big and small projects, can be implemented by ministries, agencies, and local government.

The analysis is focused on the discussion of implementation of PPP in the local government under the Act Number 23 of 2014 concerning Regional Government, Government Regulation Number 27 of 2014 concerning State / Regional Government Asset Management, and Presidential Regulation Number 38 of 2015 concerning Cooperation between Government and Business Entities in term of Infrastructure Provision.

Based on the analysis carried out, it was found several challenges that must be faced by the local government that will implement the PPP projects, such as: Budget Challenges, Regulation Challenges, and government contracting agency challenge. These challenges must be solved by the government (central and local government) to create a good business/investment climate. Therefore, some of the developed recommendations are expected to be solution to the local government in addressing these challenges.

LONG TERM CONSEQUENCES OF THE CO₂ EMISSION CURBING POLICY IN POLAND

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Abstract

The aim of the study: The aim of the study is an analysis of the impact of CO₂ limiting policy on macroeconomic structure and growth. Structure in question includes macroeconomic proportions and the sectoral structure of production. Expected outcomes of this policy include changes of the used technologies for the cleaner, less emitting ones, and hence slowing down the negative impact of the climate change.

Methodology: Long term optimization macroeconomic dynamic model is proposed. This approach is an alternative to CGE modelling. The model concerns the small open economy; i.e. the economy being the price-taker of the system of the world prices, and its performance having negligible impact on the world prices.

The model contains four production sectors, consumption sector as well as the foreign trade. Each production sector chooses between finite number of different available technologies representing respectively the traditional and new cleaner, however more expensive ones.

The bicriteria optimization problem is formulated. Contradictory goals are considered jointly in the problem: the consumption, which is maximized and CO₂ emissions to be minimized over the considered time-period. Decision variables include: production, investment and foreign trade in sectors within available technologies and alternative trajectories of emission allowances. All the above variables are time dependent. The reference point approach for bicriteria optimization is used to calculate a representation of the Pareto set of solutions. Constraints of the model include necessary identity relations common for the economic systems and reflect inertia of the economic system, as well as resistance to changes.

Analysis considers different scenarios regarding evolution of the technical progress expressed in the improvement of the technology parameters, as well as the development of the world prices of energy, raw materials, consumption and investment goods.

The main findings: Imminent effect of the policy of CO₂ reduction is a decrease of consumption. Cost of the CO₂ emission reduction in terms of the decreased consumption has been assessed. It has been obtained for different scenarios concerning assumed development of the technical changes and trajectories of the world prices. The scale of the consumption

loss is strongly determined by the rate of the technical progress. The desired technology conversion depends on the sufficiently high prices of the emission allowances.

Conclusion: Without technical progress economy would enter stagnation or even recession due to deterioration of conditions caused by climate changes. Only solution seems to be an effort aimed at innovations improving existing and introducing new technologies.

Recommendations: It seems that countervailing the negative consequences of the climate changes should rely on the technical and scientific research supported to significant extent by the state.

Limitations: This study refers to a mid-sized country exemplified on the case of Poland.

MANAGING INNOVATION PROCESSES IN INDUSTRIAL SECTOR. QUALITATIVE STUDY

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Abstract

The aim of the study: The aim of this paper was to describe in details the characteristics of the consecutive stages of innovation process in Central and Eastern European companies.

Methodology: The objectives were achieved through empirical study relied on the semi-structured interviews that were carried out in the fourth quarter of 2016 in twelve Central and Eastern European companies performing innovation activities.

The main findings: In the course of the work innovation managing process was observed in all investigated companies with almost 60% of them managing actively patents, and only 25% using formalized procedure to select innovative ideas. However, most companies did not applied effective tools to manage testing to production stage transmission during innovation process.

Conclusion: The research allowed to gather enough data to answer the research questions, however future research validating the results in quantitative study will be suggested.

Recommendations: The research gives opportunities for practical application in innovative companies managing innovation processes. The originality of the publication is not only a result of a comprehensive approach to innovation process but also the survey on the interdependencies between the stages of the process.

Limitations: Also, some limitations in the research process was notice, such as time pressure of respondents and recording quality.

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MANAGING THE TRANSITION OF THE MODERN GLOBAL ECONOMY TO A NEW QUALITY OF ECONOMIC GROWTH WITH THE HELP OF OVERCOMING THE „UNDERDEVELOPMENT WHIRLPOOLS”: CONCEPTUAL SUBSTANTIATION AND PRACTICAL RECOMMENDATIONS

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Abstract

The aim of the study: Though the modern global economy is an integrated system, it is peculiar for strong disproportions in development of its countries, which is a reason for its unstable development. The purpose of this article is to substantiate and develop practical recommendations for managing the transition of the modern global economy to a new quality of economic growth for the purpose of provision of its sustainable development. Methodology: For that, the proprietary methodology of calculation of „underdevelopment whirlpools” is used. The main findings: As a result of using this methodology, the author determines „underdevelopment whirlpools” in the modern global economy and offers perspective means of their overcoming. Conclusion: The authors made a conclusion that „underdevelopment whirlpools” deepen with time in the modern global economy. Their overcoming requires application of a completely new model of managing the development of economic systems. Recommendations: It is recommended to use a specially developed and presented mode of innovational development of the countries that are in „underdevelopment whirlpools”. Limitations: A certain limitation of this research is that it was performed on the basis of enlarged participants of the modern global economic system - regions of the world. For obtaining more precise results, further scientific studies should be performed on the basis of countries from one region.

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MARKET AND POLICY DRIVERS OF THE FARM PRICE-COST SQUEEZE: EVIDENCES FROM THE EUROPEAN UNION

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Abstract

The aim of the study: When farm commodity prices fall and costs of production rise, farmers can get caught in a „farm price-cost squeeze.” Willard Cochrane as the first examined this phenomenon while introducing the notion that farmers are on a „market treadmill” which, in spite of their constant efforts to improve productivity, wears away any profits that might result (Levins, Cochrane 1996). Although there is a consensus that agricultural markets are subjected to the price-cost squeeze in a long term, it lacks empirical studies of the effects of different types of subsidies on the price-cost squeeze (Moss 1992) The mainstream dispute is going around the question to which extent a monopsony power or flexible prices of food are responsible for the farm price-cost squeeze (Chen, Lent 1992). We take an attempt to fill this gap through modelling of the influence of potential market and the EU CAP variables affecting price-cost squeeze according to the Constant Elasticity of Substitution (CES) production function. We tested two hypothesis 1/ agricultural prices are flexible in the meaning that they react to the changes in a factor productivity as treadmill theory assumed 2/ CAP direct payments stimulate price-cost squeeze, while payments for public goods and investment subsidies have the opposite effect.

Methodology: We characterize the production technology by the CES function (Dudu, Kristkova 2017). We solved the minimization problem for factors costs which yielded factor demand equations expressed in growth rates. We replaced endogenous factors productivity with exogenous prices. We calculated the price gap and the TFP change using input-output approach with the reference to the FADN farm input-output matrix (27 EU countries, 2004-2012, 6 SO size classes of farms). We employed the seminal within-between specification of the model (Bell, Jones 2015).

The main findings: Our findings confirm both hypothesis stated at the beginning however the results differ in the farms of different size. We confirmed that the decoupled subsidies enhance the price-cost squeeze while the strength of the marginal effects increases along with the economic size of farm. The payments for public goods mitigate the cost-price squeeze but only in the middle size farms.

Conclusion: The results give an interesting contribution to the economic theory proving that public goods provision may be to some extent a remedy for market imperfections such as flexible prices or monopsony power.

Recommendations: The EU policy makers should reconsider a proportion of the CAP pillars where decoupled payments play a predominant role. If these payments evoke negative side effects on price-cost squeeze, perhaps the CAP measures should be shifted to investment and environmental goals.

Limitations: The length of time series comes for the main limitation. We are limited with the accession date of EU-13 countries as well as with the CAP programming periods.

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MEAT CONSUMPTION AS A DETERMINANT OF ECONOMIC WELL-BEING – THE CASE OF DEVELOPED AND DEVELOPING ECONOMIES

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Abstract

The aim of the study was to verify the criterion of meat consumption as a marker of economic well-being, in economies at different phases of development. Meat consumption per-capita is a widely used variable which is used to indicate the economic bases for the exclusion of meat and meat products from the diet. The study was performed simultaneously in Austria (a developed country) and Poland (a developing country) from January to March, 2015. The research material was collected from 1716 households. Descriptive statistics, econometric and descriptive models (the deductive approach) were used to process the research material. Respondents were classified according to the wealth criterion, measured by the average income per household member in a given country. This was characterized by variable differentiation.

The main findings: 1. The consumption of meat amongst Polish respondents amounted to 72.5kg/person, whereas amongst Austrian respondents it was equal to 76.2 kg/person. 2. Around 1% of Polish respondents resigned from the purchase and consumption of meat and meat products for financial reasons, however this reason was not stated amongst Austrian respondents. 3. A logarithmic function was used to explain the amount of meat and meat products consumed in relation to the amount of income per household member. In Poland, the actual data coefficient amounted to $R^2 = 0.68$. Analogical calculations conducted for Austrian respondents resulted in the estimation of a second degree, concave polynomial function of $R^2 = 0.73$. The function reached a maximum equal to 112 kg meat/person at an income per household member 157% of the average Austrian salary in 2015. In the case of the developing economy, it was discovered that the meat consumption function takes the shape of an indifference curve. In the developed economy, once the income per household member exceeds 157% of the average national income, consumers exclude meat and other meat products from their diet for health reasons and reservations concerning the quality and origin of the meat. The aforementioned group of respondents also referred to the development of new culinary trends, such as veganism and vegetarianism, which is indicative of a substitution effect. The difference in the level of income elasticity of demand for meat and meat products indicates that the consumption of meat in Poland is determined

by income amount, at a greater degree than in a developed economy. Low income in Polish families is the reason for the exclusion of meat consumption.

Recommendations: The meat consumption index as a determinant of social well-being should be used with the consideration of cultural and religious rules and norms, consumer preferences and geographical region. The absence of these additional factors in the assessment may lead to incorrect conclusions. The Japanese economy is an example, where meat consumption was 31/ kg (data from 2013). The identified limitations of the study include: non-representativeness of the research sample, age-structure of respondents, non-representativeness of the research conducted in Austria with regard to regional conditions, geographical location of the main research area, the specificities of the region and culinary traditions.

MITIGATING THE NEGATIVE INFLUENCE OF IT INDUSTRY ON THE NATURAL ENVIRONMENT

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Abstract

The main goal of the paper is to present the steps that might be taken by organizations making use of IT infrastructure to reduce its negative impact on the natural environment. The study is based on the literature review concerning the solutions that have been applied successfully in some organizations as a result of implementing the principles of sustainable development in the IT area. The paper analyses the influence of applying the solutions aimed at improved energy and resource efficiency which can be achieved through virtualization of work, use of cloud computing advantages and improved efficiency of data centres. An important part of the paper constitutes the analysis of the possibility of IT waste recycling, which can result in retrieval of scarce elements and rare metals, the resources of which are decreasing rapidly, mainly due to their extensive use in the IT industry. The paper confirms the fact that commonly recognised as "clean", the IT industry contributes greatly to natural environment degradation, and indicates the ways of reducing the extent of the problem and reveals the potential that rests in treated mainly as a burden electronic waste. The analyses included in the paper are based on the literature review and statistical data, however, thanks to this they present the problem in a wider, global dimension, yet providing the solutions that can be applied in the local perspective.

MODELLING LOCAL DEVELOPMENT USING FUZZY ANALYTIC HIERARCHY PROCESS

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Abstract

The aim of the study: Construction of development model and assessment of development priorities for local administrative unit.

Methodology: There is no standard model used to assess the process of development of local territorial units (LAU). The complex nature of the phenomena and the processes concerning the local development requires using various criteria. In this case employing the classical statistical methods imposes some restrictions which often lead to the excessive simplification of the analyzed phenomena and the relationships among the development factors. In such studies the multicriteria quantitative methods focusing on the option of dividing the analyzed problem into parts such as: the main goal, the sub-goals and the attributes (tasks) are very helpful. To solve this problem, the fuzzy analytic hierarchy process (FAHP) (Chang 1996) based on expert opinions was used. The essence of this process is to build a hierarchy structure for the problem considered. The hierarchy consists of the main goal, the sub-goals detailing it and the tasks enabling their achievement. At each hierarchy level, the importance of strategic factors is pairwise compared by experts. Expert opinions are the basis for the assessment of each strategic factor.

The research was based data from a survey with the councillors of the urban and rural municipality of Stęszew in the Wielkopolska Voivodeship in Poland in 2017.

The main findings: The direct use of the FAHP implies making certain assumptions as to the elements of the hierarchy that impact the local administrative unit. This study assumes that the main strategic goal should be the sustainable socio-economic development for LAU while the sub-goals ought to involve: the improvement of the environment and protection its resources, the improvement of the quality of social capital, the improvement and modernization of infrastructure and the economic development. A set of tasks (directions) is to be specified for each sub-goal. As showed by the analyses, the FAHP can be useful for quantifying the importance of goals and strategic tasks. The application of the FAHP extends the variety of the analytical tools used for building development strategies and enables making more detailed plans. At the same time, it allows the assessed strategic factors to be arranged in a hierarchy of importance which should lead to a more realistic distribution of the planned activities over time, thus accelerating the development of LAU.

Conclusion: Based on expert opinions and FAHP the model of LAU was constructed. The fuzzy analytic hierarchy (FAHP) processes enabled the assessment of strategic factors with the use of quantified qualitative preferences of local experts. In these approaches, quantitative methods are combined with qualitative expert assessments. The use of FAHP allowed to assess the importance of development priorities (strategic sub-goals, tasks and sub-tasks) for LAU based on expert opinions. In Stęszew municipality, the most important tasks and sub-tasks are related to the improvement of the quality of social capital, the improvement and modernization of technical infrastructure and also the improvement of the environment and protection its resources. Furthermore, based on task importance assessments by local experts, the importance hierarchy of tasks was established to identify the most important ones (priority tasks and sub-tasks), important tasks, medium-important tasks and those that do not urgently need to be implemented.

Recommendations: The proposed approach to construction of model and the assessment of strategic factors for local administrative units is a universal tool. Therefore, it may become useful for tracing the development paths, drawing up the development plans or programs for local administrative units. Also, it could be used for regional development planning.

Limitations: FAHP method has its limits coming from their assumptions and simplifications. It may affect the precision of clarification on the situations in the LAU.

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MODEL OF EU FUNDRAISING PROCESS

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Abstract

The aim of the study: The main aim of the article is to present the assumptions behind the process model of EU fundraising.

Methodology: There are selected four basic assumptions of creating the model: focus on the company seen from the process approach perspective; this pertains to the potential of EU funds supporting the development of innovative companies and the competitiveness of the Polish economy; EU fundraising procedure which uses the methodology of the process approach, applications of the model verified and exemplified with the case study of furniture companies.

The main findings: The article presents the methodology of the company activities towards the EU fundraising. Both the theoretical and practical aspects of the above-mentioned processes have been presented in the article.

Conclusion: Implementation of the project requires: planning, monitoring and controlling the activities of people and resources, organizing and coordinating related task, cooperation of specialists from various fields.

Recommendations: Relative to the above assumptions, we shall offer conclusions referring not only to the methodological correctness of the model, but also to its practical usefulness. The results and data presented in the article are generally representative for various sectors of the economy.

Limitations: The authors focus their attention on the topics connected with the EU fundraising process on the example of the furniture industry in Poland.

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MOTIVES OF FOREIGN DIRECT INVESTMENT BY POLISH COMPANIES - GREENFIELD VS. ACQUISITION

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Abstract

The aim of the study: Unlike in the 20th century, when FDI made by companies from developing countries were not substantial, or were negligible as in the case of Poland, today we observe a dramatic increase in their investment activity abroad. The growing scale of capital investment on the part of Polish enterprises outside their country justifies the need for more intensified research of the most developed form of internationalisation, which is FDI. This study identifies the relationship between FDI motives and establishment modes (greenfield-investment vs acquisition).

Methodology: The first part of the article presents the scale of Polish FDI, including FDI outward stocks and the number of Polish companies operating abroad. This section uses a number of periodically published papers by organisations such as: the UNCTAD and GUS. The second part presents selected results of these authors' own research conducted as part of Research Project No. N N112 322338 entitled „Investment Activity of Polish Enterprises Abroad - Factors and Effects”, financed by the Ministry of Science and Higher Education. 64 companies (out of 622), which implemented a total of 279 FDI, participated in this research. The majority of these investors (57%) decided to invest their capital abroad in the form of greenfield-investments, nearly 21% only made acquisitions, and 22% undertook both greenfield-investment and acquisitions.

The main findings: Market-seeking motives were the most important factors in the Polish direct investors' decision making process on investing abroad, regardless of the establishment modes. Within this group of motives, Polish investors have most frequently indicated „new market” as the most important factor. Conclusion: The study points to the fact that market-seeking motives explain most of the FDI undertaken by Polish firms. No clear support was found for the relationship between FDI motives and the establishment modes.

Recommendations: The study did not investigate the effects of the industry sector on foreign decision, which also is a promising avenue for the future study.

Limitations: The study is limited by sample size. The present analysis cannot properly account for factors such as sector of activity and firm size, which seem to be relevant from the point of view of specific FDI motives.

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NEGATIVE FACTORS AFFECTING THE EFFICIENCY OF RESTRUCTURATION OF PUBLIC HOSPITALS

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Abstract

Aim of the study was to diagnose causes of unsatisfactory (failure factors) of restructuring operations undertaken in public hospitals located in the Silesian Voivodeship. A level of achievement of an individual objective set for restructuring operation was a measure of their effectiveness. Methodology: The present research study was conducted in three stages and preceded by pilotage. At the first stage, the process of restructuration as perceived from public hospitals was analysed, at the second stage - from the point of view of their establishing entities. Two survey questionnaires (with 50 and 44 questions, respectively) were used to accomplish these stages. The research studies were conducted in the Silesian Voivodeship among management staff of 17 public hospitals and among 14 establishing entity representatives. The third step was aimed to assess and sort all the identified failure factors. The group expert assessment method was applied for its implementation by 20 people. Their selection was conducted in two stages and was target-oriented. The object relative relevance method was applied to organise the factors.

The main findings: The most common objective of restructuration of public hospitals was to improve the quality of provided services and then to reduce debts. The average degree of achievement of the first objective amounted to 75.2%, while of the second one - 67.7%. Among establishing entity representatives the most common objective was to reduce hospital debts and then to make an increase in the efficiency of medical staff. The average achievement level of individual objectives was 63.3% and 56.0%, respectively. The research studies let to identify 30 factors which have a significant negative influence on restructuration; among them 'adoption of improper assumptions on the restructuring plan in relation to financial forecasting' was considered the most important one. Conclusion: The literature on this topic includes a number of papers referring to the key success factors, however, no clear standing on the naming of factors with reverse effects was developed. In reference to restructuring actions, they are often referred to as risk sources, barriers, failure factors or causes for errors by risk researchers and analysts. The research studies and their results let to state that there are no top-down guidelines to plan the restructuring of public hospitals, so that each and every hospital approaches the process in a different manner. Public hospitals in the Silesian Voivodeship undertake restructuring operations in response to their need for recovery related to their excessively high level of indebtedness. The most commonly adopted objectives referred to an increase in their position towards competitors

and financial issues. Their undertaken operations focused on organisational, management and employment areas. Restructuration was not successful in all cases, however it cannot be said that it was none.

Recommendations: In order to conduct restructuring operations, public hospitals and their establishing entities should apply project management methodologies under which they will plan and implement their restructuring operations.

Limitations: The research studies were conducted in public hospitals located in the Silesian Voivodeship and operated as independent public health-care units.

ON FORM AND CONTENT OF SUPERVISOR ACTIVITIES THAT SUPPORTS E-LEARNING ACCEPTANCE ON INDIVIDUAL AND TEAM LEVEL, IN MANDATORY ENVIRONMENT

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Abstract

E-learning usage - understood as the adaptation of a new (specific, i.e. learning-related) technology- is usually analysed in environments where it is voluntary (Wu & Lederer, 2009). A different set of rules and problems in the full adaptation of the technology should be expected in conditions where the use of these tools is mandatory (Hwang, Al-Arabi & Shin, 2016). Specifically, in the case of organizations in which e-learning courses are obligatory and passing the final test of the course is monitored by supervisors, the typical approach to research into adapting technologies by humans - leading from beliefs, through attitudes, intention to apply, and finally applying the technology to a full extent and in a permanent manner (Jeyaraj & Sabherwal, 2008) - is insufficient. The „good e-learner” concept has been introduced for environments in which using the given form of e-learning is, in different ways, compulsory. It describes individuals who use these methods with satisfaction and effectively for learning (Woźniak, 2014), and is a measure of full adaptation to making use of e-learning.

The text utilizes this concept to analyse conditions that increase team and individual adaptation to a specific type of e-learning course - short technical knowledge courses that employees participate in every day. 10 teams in a financial company in Poland were observed to show the effects of different managerial activities on level of adaptation in teams. An e-questionnaire collected data from 104 employees, and MLQ and Fiedler's Least Preferred Coworker Scale from 10 teams leaders. The mean percentage of respondents willing to use these courses frequently if they were voluntary was taken as a measure of adaptation. The results showed that (i) a transformative management style, (ii) supporting skills and knowledge development, (iii) more frequent direct communication with team members, and (iv) people-oriented managerial style favour higher mean e-learning adaptation on team and on individual levels. However, the content of interaction (supporting skills and knowledge development) with the supervisor is a stronger predictor for accepting e-learning, than the form of these interactions (managerial style). The text fills some gaps in scientific knowledge concerning the effect of contextual factors (team leader activities as a form of facilitating social influence - Sørøbø & Eikebrokk, 2008; Karaali, Gumussoy, & Calisir, 2011; Rezvani, Khosravi, & Dong, 2017) which favour the adaptation of specific kinds of new technologies. It also broadens the research into team versus individual adaptation patterns. As a practical recommendation, it supports the effectiveness of

democratic and transformative leadership styles of interaction with team members as a tool for increasing acceptance of e-learning and organizational norms in general. The text is a case study type of research, based on data from one company, which additionally has a well-established e-learning tradition and specific, relatively directive organizational culture. Hence more studies are needed to conclude that leadership style is less important.

ONLINE COMMUNICATION TOOLS ON BUILDING RELATIONSHIPS WITH YOUNG CONSUMERS

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Abstract

The development of the online environment, particularly the access to information resources and new information and communication tools, undeniably and dynamically affect marketing. The development of new technologies and the associated access to information and a wide range offer from all over the world means that companies, wanting to retain their customers, are making every effort to build stable relationships. In order to do so it is necessary to use tools tailored to the expectations and lifestyles of their present and potential customers. Therefore, as companies are heavily dependent on the particular market segment, this research is limited to the segment of young people aged 15-24 years. The literature analysis and own observations allowed the Author to conclude that this group of people is strongly influenced by the new technologies.

The main aim of this article is to assess possibilities of using Internet communication tools in the process of creating relationships with a young consumer and to formulate and verify the model of the influence exerted on building relationships with the young consumer segment using Internet communication tools. The core of analyses is to emphasize the key elements underlying lasting relationships with a customer. In article relationships with customers are divided into two distinct groups, namely:

- the relationships formed at the behavioral level,
- and those formed at the affective (emotional) level.

An in-depth analysis of the subject literature allowed the Author to formulate an original concept of factors affecting the relationships in the virtual world at the behavioral and affective/emotional levels. The empirical research are the basis for the second part of the article that include the formulation and verification of the model of the impact of online communication tools on building relationships in the segment of young consumers.

POLICY IMPLICATIONS TO SUSTAIN THE STABILITY OF THE FINANCIAL SYSTEM

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Abstract

The changes taking place in today's global economy and the high frequency of periods of instability in the financial system necessitate flexible adjustment of monetary and fiscal policy instruments to the macroeconomic environment. This study aims to analyse the impact of the financial sector stability on public finance. This allows to verify the hypothesis about the impact of the private part on the public part of the financial sector. In order to test the research hypothesis, the quantitative analysis which is composed of two steps: correlation and regression analysis, is carried out. The analysis includes 28 European Union countries (EU28) and the 2000-2015 period. The analysis is based on annual panel data. Hence, the models reflect short-run relationships between given variables. The following variables are used in the econometric analysis: general government balance, Assets of financial institutions excluding central bank as % of GDP, Domestic credit provided by financial sector as % of GDP, Bank nonperforming loans as % of total gross loans, Return on equity (ROE) for deposit takers, Capital adequacy ratio (CAR) for deposit takers (regulatory capital to risk-weighted assets). The explained variable is general government balance (% of GDP). The results of the analyse yield some policy implications which are highlighted by the Authors.

PRICE AND COMPETITION EFFECT OF VAT: EVIDENCE FROM THE BULLION COIN MARKET IN GERMANY

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Abstract

This paper estimates the VAT pass-through for investment gold and silver on the German market. At least since 2000, transactions concerning investment gold are VAT exempt in the Member States of the EU. Nevertheless, based on the price development of a gold coin that does not always meet the conditions of the tax exemption, I find that the tax amount is fully passed on into the final price.

Contradictory, the VAT hike in Germany on silver bullion coins led to a statistically significant, however, slight price increase. Noteworthy, the price rise was partly anticipated within a short time before the VAT amendment and adjusted after that event. The results may be explained by the fact that not all silver bullion coins have been affected by the VAT hike, which increased the competitive pressure. Based on the data from annual reports of the Royal Canadian Mint as well as of the Austrian Mint on sales, this paper reveals the distortive impact of the inconsistent VAT treatment on the competition.

PROSUMPTION AND PLATFORMS FOR PARTICIPATION IN PUBLIC ADMINISTRATION OF THE DIGITAL AGE

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Abstract

The aim of the study: Changes in the contemporary world economy tend to move the business models of wikinomics from the private sector to the public sector, and especially to the public administration. The aim of the research was to determine whether the Polish public sector is adequately synchronized with the market sector in terms of pros and cons of prosumption and platforms for participation.

Methodology: Empirical data on prosumption in the public administration in Poland were collected on the basis of a direct survey conducted among clients of public administration offices. The contingency tables of frequencies allowed us to construct a 27 × 27 Burt table. This table became the input point for the application of multiple correspondence analysis. Relationships among categorical variables are graphically represented in two and three dimensions. Moreover, this article evaluates the websites of the commune public administration offices of the selected voivodeship in Poland in terms of their ability to fulfill the functions of the wikinomic platforms for participation.

The main findings: In terms of the principles of prosumption and the platforms for participation, the Polish public administration sector is much less developed than the market sector. The reason for this is the low transparency of the entire public sector.

Conclusion: The disparity between the public administration sector and the private sector is a serious barrier to growth and economic development. It also contributes to difficulties in foreign trade and lowers the country's position in the world economy.

Recommendations: In the public administration sector, it is necessary to implement ten principles of prosumption which are discussed in this paper. This will require simultaneous transformation of the existing municipal offices web pages into a wikinomic platforms for participation. These should be the platforms for grassroots action based on public disclosure and neighborhood knowledge.

Limitations: Harmonization of the public administration sector with the market sector encounters a number of barriers that can be divided into technological and mental ones. The first ones concern the technical requirements of the platforms for participation. Therefore, they can easily be overcome with the right inputs, while the latter ones are not. Breaking the mental barrier is only possible through the transformation of clients into prosumers, which

requires simultaneous bottom-up actions of citizens and the implementation of the principle of openness in the public administration itself.

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QUALIFICATIONS AND COMPETENCIES OF POTENTIAL LABOUR MARKET PARTICIPANTS

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Abstract

The aim of the study: The article discusses the issues related to the methods and quality of education of students in the context of the competence expectations of the labour market. The aim of this article is to examine the views of employers and employees on the desirable qualifications and skills of the potential labour market participants.

Methodology: The applied research method is a combination of qualitative and quantitative methods in the form of interviews conducted among recruiters (representing potential employers) and a survey of university graduates (potential employees). The main findings: The conducted study shows that both the Polish graduates and the Polish employers identify the deficits of hard skills (technical competencies). The differences of opinions between the representatives of the two groups were, on the other hand, related to their assessment of soft skills (communication and interpersonal). The deficits of which were pointed to by the surveyed recruiters, who described them at the same time as fundamental to obtaining the employment. Meanwhile, the graduates assessed their communication and interpersonal skills as highest. According to the recruiters, the future employees lack also practical experience. In the opinion of the graduates, the share of theoretical and practical trainings in the curriculum is sufficient.

Conclusion: From the point of view of employees regarding the labour market, there is a gap between the expectations and possibilities of getting a job, surveyed graduates assessed their IT competencies as low. The same gap exists for employers. The employers pay attention to the lack of work or internship experience and a shortage of competencies, especially related to communication and personality traits, including foreign language skills.

Recommendations: It should be noted, that employers perceive a great potential for the development of graduate competencies, which, together with acquiring practical experience, will probably lead to the narrowing of the competence gap.

Limitations: The employers believe that the graduates are not prepared to using the possessed theoretical knowledge in practice.

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RELATIONS BETWEEN THE ATTITUDES AND BEHAVIORS OF POLISH CONSUMERS TOWARDS THE SOCIAL CORPORATE RESPONSIBILITY

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Abstract

The aim of this article is to examine the relations between the attitude and behavior of Polish consumer on the market towards CSR. The sampling methods were used in the selection of consumers. There were conducted a survey on 415 Polish consumers. There was used a survey questionnaire, in which consumers were asked to describe their attitudes, expectations and reactions to a corporate social responsibility activities conducted by the entrepreneurs. The research has indicated a specific actions that are appreciated by Polish consumers and the activities that they are indifferent to or they have the critical attitude to them. It has been noted that consumers require from the entrepreneurs the responsibility for their behavior and want them to bear the consequences for unethical actions. The results of the conducted research may be the basis for designing a CSR strategy in an enterprise.

REPUTATION RISK INSURANCE AS A NEW CHALLENGE FOR INSURANCE COMPANIES IN THE DIGITAL ERA

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Abstract

Over the past several decades, the growing importance of reputation as a source of long-term competitive advantage and building of market value has been observed. Reputation is an opinion of a company formulated by various stakeholder groups, based on their perception and evaluation of its activities. The results of many studies have shown that good reputation is a source of tangible benefits, while reputation deterioration has a number of negative effects: stock prices decrease, falling sales, goodwill decrease etc. Negative consequences may manifest themselves over a longer period of time, which may include: decrease in customer loyalty, loss of investors and cost of capital increase, higher costs of acquiring business partners, resigning from work by valuable employees.

Business practices show that positive reputation must be built many years, yet it can be deteriorated or lost in a few minutes. In the view of this, the challenge for modern managers is to manage the reputation risk. The sources of this risk are embedded in the inside as well as in the variable, turbulent environment. In the current information age, reputation risk is being multiplied by technological advances in the field of IT. A particular danger is the growing use of the Internet and social media, which allow instant and mass dissemination of uncontrollable, sometimes untrue, information. It is therefore important to protect reputation from crises that may worsen or destroy it. One of the methods of protection is reputation insurance. Some insurance companies have taken up this challenge and a new product in a form of reputation insurance has been offered for a few years.

The objective of this article is to present the specificity of reputation risk as an insurance subject, to identify the dilemmas for insurance companies and to evaluate the current offers of the selected insurers.

Based on the analyzes and considerations conducted, it has been found that the underlying dilemmas stem from the fact that reputation risk is a very complex category that is difficult to define and measure. Reputation risk is defined as a "risk of risk", in which many negative effects of a particular crisis are concentrated. The main challenges that insurance companies face are:

- identifying potential events that trigger a reputation crisis,
- measurement of reputation damage,

- identifying all the negative consequences of crisis,
- valuation of financial losses.

The main problem is how to determine, identify and, above all, evaluate possible losses due to the deterioration of reputation that could be the basis for setting the insurance rate and the amount of compensation. An additional difficulty arises from the fact that the same event (e.g. defect of product, falsification of data, employee complaint) can cause very different consequences and losses depending on: the company's market position, its history and current reputation, industry reputation, territory of activity, cultural differences etc. In the face of the growing importance of reputation and increasing reputation risk, a dynamic development of the new segment of reputation risk insurance in the near future can be expected.

RESPONSIBLE RESEARCH AND INNOVATION CONCEPT IN ECONOMIC DEVELOPMENT: NEO-SCHUMPETERIAN PERSPECTIVE

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Abstract

Responsible Research and Innovation (RRI) concept is as a key pillar in the strategy of the European Union and US. It was developed to create sustainable, inclusive growth and prosperity and address the societal challenges of Europe and the world. In scientific literature the term „Responsible Research and Innovation (RRI)” has been increasingly used for over a decade. In today’s innovation based economy Neo-Schumpeterian Economics (N-SE) is the theory that can have the widest application.

The aim of the study: This paper introduces the issue of Responsible Research and Innovation in Neo-Schumpeterian theory of economic development and addresses the following key question: What is the role of RRI in economic development in Neo-Schumpeterian point of view?

Methodology: Authors of the study analysed this issue by looking through several lenses, obtained by structured and nonstructured literature searches. Methodology used in this study is prefactual thought experiment in critical analysis of the state of knowledge process. This methodology allows to generate potential linkages and relationships by exploiting a potential future from a certain present. In research there were used such databases as: Web of Science (www.apps.webofknowledge.com), Scopus (www.scopus.com), EBSCO (www.ebsco.com), Google Scholar (scholar.google.com). Mapping scientific literature obtain systematic search based on articles published in peer reviewed journals, related to the concept of RRI and N-SE theory.

The main findings: In the result of the study occurred that there is a need for a comprehensive theoretical approach in the field of N-SE. There were identified some gaps in the area of knowledge creation. If N-SE deals with dynamic processes causing qualitative transformation of economies driven by the introduction of novelties in their various and multifaceted forms and co-evolutionary processes the dimension to evaluate those processes can be RRI concept. Such novelties in N-SE like broad understanding institutional, organisational and social dimensions seems to be perfectly matching to RRI concept still having innovation as a central normative principle.

Conclusion: Changes in concept of innovation during recent decades are crucial, the notion of innovation in research, science literature, statistics and policy is becoming increasingly broad. After systematic mapping of scientific literature necessity of alternative

paradigms for economic development contained social aspects of innovation responsibility occurred. New paradigm of N-SE implementing RRI concept contains social value added of research which becomes innovation in economy. Furthermore on the leading edge in innovation driven economic development there should be public stakeholders as a financing and benefiting from innovation.

Recommendations: Broad understanding of innovation materialized in RRI towards N-SE implyfy its importance for innovation policy. This broad perception of innovation in RRI will, in fact require changes in political and administrative systems to apply. Economic development policy implementing RRI and NS-E assumptions will have reflection in partnership, strategies and legislation.

Limitations: The authors are aware that the level of development of RRI conception and N-SE theory is at an early stage. There is not enough research results from the empirical verification of the assumptions of RRI and N-SE. However considerations in this area appear to be fully justified.

REVERSE SPLITS IN INTERNATIONAL STOCK MARKETS: RECONCILING THE EVIDENCE ON LONG-TERM RETURNS

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Abstract

The aim of the study: A reverse stock split is an operation by which stocks of a company are effectively merged to form a smaller number of proportionally higher priced shares. Theoretically, reverse splits should have no impact whatsoever on a stock's price. Yet, the theoretical argumentation and empirical evidence provides support for both positive and negative subsequent long-term returns. The major goal of this paper is to resolve the puzzle of the contradictory evidence of the post-split performance. We hypothesize that investors underreact to the information content of reverse splits, leading to subsequent underperformance; we conjecture that any potential overperformance is due to influence micro-caps and penny stocks, displaying positive abnormal returns.

Methodology: We aimed to provide comprehensive and international evidence on the long-run performance following reverse splits. The earlier studies were nearly exclusively limited to the United States. Our study was based on a sample of over 5,000 reverse splits into 24 developed equity markets from three major global regions – North America, Europe, and Pacific – within the years 1990-2016. We used the calendar-time portfolio approach, i.e., we formed portfolios of stocks conducting reverse splits and evaluated their performance with asset pricing models. This more realistic method, superior to the ACAR approach, allowed us to gain investor practical perspective on the phenomenon of reverse splits. Importantly, the calendar-time portfolio approach was not broadly used in earlier studies, and the key reasons for this are that the calendar-time portfolio approach requires relatively large samples that were nearly impossible to amass in single-country studies.

The main findings: The principal findings of the study could be summarized as follows. We documented significant long-term underperformance relative to factor models accounting for market risk and cross-sectional return patterns related to value, size, momentum, profitability, and investment effects. The negative abnormal returns lasted 18 months after the reverse splits and were significant in all of the global regions: North America, Europe, and Pacific. In the broadest global sample, the four-factor model alpha amounted to almost -1% per month. Finally, in line with our expectations, any apparent positive abnormal returns are driven solely by the anomalous performance of very small companies, which are over-represented among the firms consolidating their shares.

RISK FACTORS OF BUSINESS ACTIVITY IN THE ORGANIC FOOD SECTOR - THE EVIDENCE FROM POLAND

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Abstract

The aim of the study: Due to rapid changes in economic environment of organic food sector in Poland, the number of uncertainties is increasing and affecting the enterprise management. The main aim of the study was to analyse the risk factors determining further development of the organic food sector in Poland.

Methodology: The potential risk factors were identified based on the analysis of literature and corporate reports of selected companies. Data collection process involved evaluation of the key risk factors identified via semi-structured interviews with representatives of 26 operators in the organic food sector.

The main findings: The analysis of corporate reports revealed the most important risk factors for organic food sector in Poland, including internal (liquidity risk, credit risk etc.), sector specific (inadequate quality of raw materials, risk of stability and continuity of supply) and macroeconomic factors (general economic situation, tax policy, law regulations etc.). The main risk factor reported by the respondents were reflecting the immature character of the Polish organic food sector. The supply of organic products is inadequate and several quality related problems were reported. However, the operators stressed also that consumers were unaware of the competitive advantages of organic products versus other products categories with the claims related to healthiness and positive environmental impact. Therefore, these demand related factors can hinder further development of the organic food sector.

Conclusion: Companies operating in the organic food sector face various supply and demand related risk factors. Continuity of supply and quality of organic raw materials as well as the poor awareness and knowledge among consumers on benefits from organic food production pose many challenges for the Polish organic sector.

Recommendations: More research should be undertaken to formulate and implement efficient business and marketing strategies by organic food operators to increase demand, reduce risk factors, introduce new organic products and to manage turbulent environment.

Limitations: The research approach is qualitative and the data can be generalized but give valuable insights into the development of the organic food sector in Poland.

SELECTED MICRO AND MACROECONOMIC CONDITIONS OF WAGES, INCOME AND LABOR PRODUCTIVITY IN POLAND AND OTHER EUROPEAN UNION COUNTRIES

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Abstract

The aim of the article is to identify and compare key factors affecting level of labour productivity, wages, income in the economies of the EU countries. Among different determinants the following were considered: compensation of employees, participation of self-employments and their mixed income in GDP, annual hour worked per employer , labour participation rate, especially before retirement (age 55-64), part time employment rate, price level, and the contribution of investments.

Data of Eurostat as well as OECD and the World Bank was used for calculations. The indicators of correlation and a grouping method were also applied. Four countries with a similar level and impact of specific factors were distinguished.

The most critical conclusion coming out of the research is the strong correlation of the relative price level, remunerations and the average worked hours with the labour productivity. Their influence differs slightly in case of the work efficiency figured per an employed and the work efficiency figured per a worked hour. Other variables such as the proportion of professionally active people and above all those at the age of pre-retirement age 55-64 years old, the high proportion of part-time workers or the level of capital expenditure have a lesser, but relative strong correlation with the labour productivity of both the employee and the worked hour.

Conclusions coming out from the analysis may support the state policy in terms of forming minimum wages, indirect taxation influencing the overall price level and the level of investment in economy. Conclusions were formed as recommendations for countries being at the lowest level of work efficiency, remunerations and income. Restrictions to apply the advice are political conditions, an employment structure in a given country and labour market elasticity.

SIGNIFICANCE OF EDUCATION FOR THE ECONOMY OF SUSTAINABLE DEVELOPMENT - TOWARD SOCIAL RESPONSIBILITY

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Abstract

In Poland, children and teenagers are obligatorily subject to the process of mainstream education until a particular age, currently until lower secondary schools, which are being closed. Some children and teenagers continue their education in upper secondary schools and some study at universities. The mission of education is to achieve diverse knowledge of life and the surrounding world. One of the elements of primary and further education is promoting knowledge of the natural environment, natural resources, plants, animals and the role of ecosystems in the life of every human being and economic entity.

The objective of the study is to determine the role and significance of education and to indicate effects of education on sustainable development in the context of creating individual social responsibility for the natural environment.

A fundamental hypothesis is as follows: „Long-term educational programmes executed as part of the education system and activities of enterprises, organizations, foundations or associations considerably contribute to the development of a high level of natural and ecological awareness of the young generation”. The following methods and exploration techniques were used in the research process: desk research, critical analysis of national and foreign literature on the subject, structured interview (standardized). The research is being currently conducted among students of Finance and Accounting of the University of Szczecin and will be finished on 10 October 2017. The research findings will enable formulating conclusions and recommendations.

SOURCES AND CONSEQUENCES OF CONFLICTS IN RELATIONSHIPS OF MULTINATIONAL ENTERPRISES IN INTERNATIONAL MARKETS

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Abstract

The aim of the study: Originating from social tensions on existing or realized differences, conflicts are an unavoidable feature of any business relationship and can manifest themselves in different intensities.

The multitude of relationships that multinational enterprises (MNEs) establish with diverse entities highly increases the probability of internal and external conflict situations. Although the impact of conflicts is important in international business and in MNE foreign relationships, this aspect has not been thoroughly analyzed in the literature.

A MNE being active in many international markets may be seen as globally dispersed internal network of a parent company (headquarters) and subsidiaries. Therefore taking into account the complex character of network of MNE's relationships in international markets, the sources as well as effects of conflict are diversified. In the article conflicts are divided through their type (functional or relational) and sources (internal or external) so as to allow more profound investigation into the problem. The aim of the article is to analyze MNE's conflict sources and their effects for internal and external relationships of these companies in international markets. Our intention is to identify the mechanism of conflict creation (why) and conflict effects (how) on MNE performance in both the positive and negative way.

Methodology: We present the effects of the case study analysis realized among business units of MNEs that operate in Polish market. The analysis was conducted using the case study method. Data were collected during interviews which were held in the first half of 2016. Collected information was analyzed by means of the constant comparative method. After internal and comparative analysis, the results were compared with the existing research.

The main findings: The conducted analysis allowed to divide the conflicts taking into account their source (internal/external) and their type (functional/relational). The results show that among 7 analyzed business units of MNEs, in 3 of them main conflicts had internal sources, in 4 external. In terms of their type, they are mainly relational conflicts. We also identified the mechanism of conflict creation (why) and the conflicts effects (how) on MNE performance. The analysis reveals that the effects of conflicts are diversified - from

positive strengthening relationships to the negative relationship ending, which in turn impacts the MNE's performance.

Conclusion: The main contribution is to present the complex analysis of the mechanism of conflict creation, including conflict sources and effects for the business unit of MNE in international market.

Recommendations: We suggest actions that managers may undertake in order to diminish the negative impact of conflicts in foreign business relationships. As examples of such actions are proposed: the formalization of cooperation, better complying to rules and agreements, investments in mutual competence development or mutual learning.

Limitations: The study is limited only to business units that operate in Poland and their perspective, more broad further research is needed.

SOURCES OF FINANCING INVESTMENT AIMED AT IMPROVING ENERGY EFFICIENCY IN ORDER TO ACHIEVE A LOW CARBON ECONOMY IN POLAND

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Abstract

The article discusses the regulations on low carbon economy. The basic legal defects of European Union directives and regulations in force in Poland are presented. This article analyzes the sources of financing for energy efficiency projects and identifies projects that can be financed by a given program.

SPECIFIC CHARACTER OF MARKET AND SOCIAL ORGANIZATIONS, AND THE COURSE OF COOPETITION; PROPOSED DIRECTION OF RESEARCH

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Abstract

Regardless of the differences between market and social entities, they may either coexist with other organizations, or actively and intentionally affect them - cooperate or compete. In the first case, the interactions are positive - based on help, common pursuit of objectives. In the second case - they are negative: bothering, aggression, rivalry, confrontation. Although both actions are classically considered "opposing", as was demonstrated by Branderburger and Nalebuff [1996], the interactions between contemporary organizations are complex. Actions intermingle and, at the same time, cooperation and competition are present - in the form of coopetition. Companies undertake to interact in the vertical (supplier - manufacturer - distributor - end recipient) and in the horizontal hierarchy (also between entities in the same trade, namely competitors). These relationships also apply to complementary organizations, namely units the activities of which increase the value of the company's offer. From the point of view of market entities these include, among others, social entities. It seems that the natural relationship for organizations in both analyzed sectors is mutual interaction. However, the professionalization of non-profit organizations on the one hand and the focus on corporate social responsibility, on the other hand, result in changes also in this respect. Entities of a new nature are established and thus questions appear about the directions and consequences of hybridization, including ones related to the configuration of emerging networks of relations and the course of coopetition. Due to the expansion of the companies' boundaries, the examination of this issue from the point of view of the organization is also becoming an interesting matter. Coopetition is also present at the level of organizational units (departments) and the individual level - employees.

The article is of a conceptual nature. The aim of the study was to formulate research problems and suggested the directions of research exploration regarding the course of competition, taking into account the meso and micro level.

A review of the literature was conducted. Characteristics of entities representing different sectors of the economy were characterized and the nature of their functioning was determined. Taking into account the phenomenon of hybridization of contemporary organizations, the directions of research exploration concerning the course of coopetition are proposed.

Taking into account the differences between market and social organizations, it was assumed that they will be dominated by other activities (cooperation, rivalry) and will be characterized by a different course of coopetition. It seems that coopetition in market organizations that socialize their activities will change its course from the prevalence of rivalry to larger focus on cooperation. In social organizations - a rebours - the process will proceed from the prevalence of cooperation towards increased rivalry.

These assumptions need to be verified empirically. Additionally, when comparing the course of coopetition in organizations representing different sectors, it is worth taking into account the formation of entities combining various rationalities. It seems that convergence between sectors will affect the course of coopetition processes in formed hybrids.

SPECULATIVE TRADING AND ITS EFFECT ON FORWARD PREMIUM PUZZLE: EVIDENCE FROM BRITISH POUND MARKET

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Abstract

One of the main puzzling features in theory of international finance is forward premium anomaly. There are a few streams in the literature on international economics which explain this phenomenon. One, among other, is that uncovered interest parity doesn't hold due to high activities of carry traders in the foreign exchange market (Baillie & Chang, 2011). Literature doesn't provide however the sufficient evidence to support that thesis. Many researchers try to understand and tackle the problem of forward premium anomaly but there is still no consensus on how to explain it (Fama, 1984; Froot & Frankel, 1989; McCallum, 1994; Zhou & Kutan, 2005; Clarida et al., 2009; Li et al., 2012; Shimizu, 2017; among others).

The aim of the paper is to demonstrate that one of the main reason of forward premium anomaly is high existence of speculative capital in the foreign exchange market. It is shown that direction and scale of speculative transactions may have a crucial impact on relationship between foreign exchange returns and interest rate differentials. The activity of speculators in futures and option foreign exchange market is measured based on the report of open positions held by non-commercial traders which is published by U.S. Commodity Futures Trading Commission's. U.S. The research is conducted on the basis of Markov Switching and General Autoregressive Conditional Heteroscedasticity models. The study is carried out using end-of-month foreign exchange and interest rates data over the period from January 2000 to December 2016.

The paper is focused mainly on British pound. It is shown that forward premium anomaly exists on the British currency market. The paper shows that, in the UK „Brexit“ referendum aftermath, British pound turned out to be an attractive funding currency of carry trade. It might have been one of the main reasons of extremely deep depreciation of British currency in the second half of 2016. Moreover, the paper demonstrates that the profitability of British pound carry trade was even higher than profitability of Japanese yen carry trade. The effectiveness of chosen carry trade strategies is measured by average annual excess return, Sharpe ratio and Sortino ratio. During the period from 23.06.2017 to 01.01.2017 carry trade strategy built with short position in British pound and long position in three chosen high-yielding currencies (Russian ruble, Brazilian real and South African rand) has reached above 70% average annual excess return with 1,09 Sharpe ration. Moreover, high activity of

speculators in British currency market has influenced the result of uncovered interest parity test in that market, in the period after „Brexite“ referendum. Research results suggest that speculative trading has a crucial impact on the existence of forward premium anomaly in the foreign exchange market.

STATISTICAL PROPERTIES OF RATES OF RETURN ON SHARES LISTED ON THE GERMAN, FRENCH, AND POLISH MARKET – A COMPARATIVE STUDY

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Abstract

The financial market and its instruments are subject to numerous studies all over the world. Special attention is duly earned by the multifaceted research and analyses of the behavior of rates of return on shares, their statistical properties, the beta parameter and its stability considering the aspect of division of the whole market into the bull and the bear one, and for different frequencies of measurement of the rate of return.

The present article is concerned with examination of the statistical properties of monthly rates of return of the biggest companies in terms of capitalization and turnover, which were listed on the stock exchange in Frankfurt, Paris, and Warsaw between 2005 and 2015. The basic descriptive statistics of the rates of return as well as normality and stationarity of their time series undergo analysis. Moreover, hypotheses about equality of the expected value of the rate of return and its variance are subject to verification. The study described above is also conducted taking into account the division of the whole market into the bull and the bear segments according to two definitions. The obtained results serve to conduct a comparative analysis of the three stock markets enumerated above. The results constitute an introduction to further and more advanced research on the beta parameter and its properties.

The obtained results indicate that there are quite significant differences in statistical properties of the rates of return on shares of companies on both types of markets as well as between the distinguished bull and bear market segments. Whereas their common characteristic is low asymmetry and kurtosis in the case of a relatively large number of companies, especially when the division into the bull and bear market is adopted, which could suggest convergence between the empirical distributions of the rates of return under examination and normal distribution. It has also been confirmed by the tests adopted to verify the hypothesis concerning normality of empirical distributions of the rates of return of companies under analysis; yet for the whole sample, there is definitely more cases where the rates of return have no normal distribution. An undoubtedly positive - from the point of view of statistics - property of nearly all time series under examination is their stationarity. Verification of the hypothesis concerning equality of the expected rate of return on shares of a company being tested with zero or the expected rate of return on the index portfolio that the company belongs to has demonstrated that for the vast majority of companies (for the whole sample) the equality is present; whereas for the bull and bear segments, the outcome

is highly equivocal, especially with the division made according to the adopted definitions. Whereas verification of the hypothesis concerning equality of investment risk of the rate of return on shares of a company being tested with the risk posed by the stock index portfolio the company belongs to revealed that the risks are predominantly different. The study also demonstrated that the market has rightly been divided into the bull and bear segments since the results obtained for these segments are occasionally significantly different from the results for the whole sample.

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SUPPORTING GEN-Y ENTREPRENEURSHIP IN THE CITY OF POZNAŃ

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Abstract

The aim of the study: The aim of the research was to analyse the current policies directed at the Gen Y'er in the city and to provide policy recommendations. The challenge is how to improve skills and competences of city administration in the city of Poznan in order to attract and retain talented young people (Gen-Y, the Millenials) endowed with creativity and passion, who are necessary to develop creative industries and social capital in the city.

Methodology: The research relied on existing strategy of Poznan urban policy studies using dedicated diagnostic tool, especially business support programs in the context of their adjustment to the needs of Generation Y entrepreneurship. The focus group and questionnaire surveys were also applied on a group of 162 students.

The main findings: The studies allowed to indicate number of barriers that need to be overcome for Gen Y in Poznań. It appears that most of the strategies and activities to be undertaken do not take into account needs of Millennials. Research has also shown the necessity to improve the city authorities' communication with stakeholders in the field of actions supporting young enterprises form innovative and creative sectors. However, the majority of respondents declared their satisfaction with living in the city.

Conclusion: The paper attempts to fulfil the research gap concerning the role of the city in the Triple Helix concept of University-Industry-Government relations in the Knowledge Society. To explore opportunities for creative workspace it is crucial to form a symbiosis between the city council and local elites like universities, as well as the creative sector in terms of the city image.

Recommendations: Stimulating Millennials' creativity by understanding their needs and creating conditions for making Generation Y more involved in city polices might be crucial for the city development.

Limitations: More than 200 questionnaires were omitted in the research due to their incomplection.

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SUSTAINABLE DEVELOPMENT OF GLOBAL ENTREPRENEURSHIP: PRINCIPLES, PRIORITIES AND PERSPECTIVES

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Abstract

The aim of the study: Development of the modern global entrepreneurship is one of the most perspective and promising means of overcoming the consequences of the global economic crisis, as well as prevention of future crises of economic systems, as it ensures full level of optimization of production and distribution processes. The purpose of the article is to determine perspectives and substantiate principles and priorities of sustainable development of the global entrepreneurship.

Methodology: For determining the level of sustainability of development of the modern global entrepreneurship, the authors use the methods of statistical analysis of time rows (method of horizontal and trend analysis).

The main findings: The authors perform a complex analysis of dynamics of development of global companies and performed evaluation of their sustainability. Also, the necessity for changing the model of managing the development of modern global entrepreneurship for increasing its sustainability is substantiated.

Conclusion: As a result, it is concluded that modern global entrepreneurship is developing in the unstable way, and practical recommendations are offered for solving this problem.

Recommendations: A perspective model of sustainable development of the modern global entrepreneurship is developed and presented.

Limitations: A certain limitation of the results of the performed research is the framework character of the offered recommendations. Adaptation of the described perspective model of sustainable development of modern global entrepreneurship to peculiarities of specific economic systems for successful practical application is a perspective direction of further scientific research.

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SUSTAINABLE INTENSIFICATION OF AGRICULTURE AS THE COMPOSITION OF ECONOMIC PRODUCTIVITY AND ENVIRONMENTAL PRESSURE MEASURES

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Abstract

The aim of the study: To measure to what extent development of agricultural sector in EU countries, in years 2005-2013, was in line with the concept of sustainable intensification.

Methodology: Sustainable intensification (SI) concept calls for a path of development based on the simultaneous improve in the productivity and environmental management of agricultural land [Buckwell et al. 2014]. The greatest methodical challenge is to find a composite measure, which would bond issues of productivity and environmental pressure. As so far many studies were concentrated on accounting for agriculture productivity in economic sense, including negative outcomes or environmental inputs [Turčková et al. 2015; Lin & Fei 2015]. This approach, however meets with criticism [Hoang and Coelli 2011; Byerlee & Murgai 2001]. In our approach economic and environmental productivity is calculated separately, using DEA method and Malmquist TFP Index. In the next step both performance indicators are composed, using euclidean and angular distance, in one sustainable intensification indicator.

The main findings: On average, agricultural sector in UE developed in line with SI concept. In EU-12 countries dynamic in economic performance was higher, while in EU-15 environmental performance increased faster. However, the progress of economic productivity among the EU-12 countries was too slow to talk about convergence with EU-15 in this regard. EU-15 countries were catching up with EU-12 in terms of environmental productivity.

Conclusion: Among EU countries exists trend of making agricultural production more ecoefficient, which is stronger than intensification tendency. However, in number of EU-12 countries, there is still strong need for improvement in economic efficiency, in order to increase international competitiveness of their agriculture sectors.

Recommendations: For EU agricultural policy, it might be beneficial to make the measures even more flexible, while agriculture in the member states should develop in different directions to stay in line with SI concept.

Limitations: Proposed measure doesn't take into account base level of agriculture development and limit sustainability to economic and environmental sphere, excluding social issues. Further developments in these directions are planned in the future.

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SYSTEMIC RISK INDICATORS AS MEASURES OF EARLY WARNING SYSTEM OF CENTRAL BANKS

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Abstract

The aim of the study: The main aim of the study is identification and assessment of systemic risk indicators from the point of view of their use in early warning system (EWS) of modern central banks against banking sector instability of the global economy. The study allowed to verify the research hypothesis, which states that systemic risk indicators have informative and predictive character, so they can be incorporated into the early warning system.

Methodology: The achievement of above objective, required the use of following research methodology: studies and critical evaluation of the literature, both domestic and foreign in the field of financial instability and systemic risk. It was also used the secondary analysis of empirical data of the largest banking sectors in the global economy and leading commercial banks, which are classified by the value of their total assets. Particular attention was also focused on financial analysis - ratio analysis and statistical analysis, aimed at verifying systemic risk indicators from the point of view of their informative and prognostic abilities. Additionally, it was also used cause and effect analysis, case studies, observation method, document analysis method as well as synthesis method.

The main findings: Conducted research confirmed that systemic risk indicators have informative and predictive character, so they can be incorporated into the early warning system. They allow early identification of banking sector instability. According to the research, they warned in advance about increasing systemic risk, affecting conditions of bank' functioning and destabilizing whole banking sector. In the study, it is considered that they can form a group of important parameters of the early warning system of central banks.

Conclusion: Conducted research, focused on the analysis and assessment of selected indicators of the early warning system, indicates that they enable individual banks and banking sector monitoring the exposure to systemic risk. Empirical research have confirmed that early identification of disorders and abnormalities in the functioning of banks and banking sector was possible by systematically controlling of informative and prognostic parameters of the EWS. So far, central banks - only in a limited extent - used single indicators to inform about disturbances in a banking sector. However, they did not create the early warning system. The research indicates that even though informative and prognostic abilities of analyzed indicators are different, the EWS should be created.

Recommendations: The concept of creating the early warning system does not mean negation of existing econometric models for the identification of risk areas of banking activity, developed by central banks and supervision authorities. The EWS has been considered as an alternative method, based on simple and unambiguous analytical indicators, providing a clear signal about deteriorating conditions of banks and banking sector. Systemic risk indicators should be an important part of the EWS, what was confirmed in the research and presented in the study.

Limitations: Systemic risk indicators are only a part of measures which create the EWS of modern central banks. Other measures will be a subject of further in-depth research.

TECHNOLOGY FORESIGHT AS AN INSTRUMENT FOR IDENTIFYING DIRECTIONS OF ORGANISATION IMPROVEMENT

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Abstract

The aim of the study is to show that technology foresight can be an instrument for creating the future in the organisation. In this paper technology foresight was presented at an organisational level, indicating that each case should be analysed individually while maintaining the methodology and the foresight process. The study also tried to demonstrate that the use of technology foresight determines the shaping of quality of the organisation. The presented results show that technology foresight can potentially become the major driver of an organisation's development.

TESTING E-COMMERCE SYSTEMS SUCCESS MODEL IN A POLAND SAMPLE

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Abstract

The main purpose of this paper is to test the usefulness of e-commerce systems success model for the Polish culture. This model was used and confirmed in different cultures (Floropoulos et al., 2010; Lwoga, 2013; Rouibah, Almutairi, & Lowry, 2015), so it clearly needs a research for testing it in the Polish culture. Following the findings of DeLone and Mclean's (2003) updated information systems success model and Wang's (2008) e-commerce systems success model, the six-factor model is used to measuring the success of e-commerce systems in Poland.

The sub-dimensions of this model are information quality, system quality, service quality, perceived value, user satisfaction and intention to reuse (DeLone & Mclean, 2003; Wang, 2008). These factors of success establish a casual interrelated model which supports belief-attitude-behavior interactions (Wang, 2008). According to this psychological viewpoint, the beliefs about the system (perceptions of quality of the information, system, and service), the senses about the worth of the system (perceived value) and emotional responses of using the system (satisfaction) influence the user's behavioral intentions (intention to use).

A total of 330 students from WULS participated in the research with a convenience sampling method. Structural Equation Modelling (SEM) was used to test the research model with using a mediation analysis (Hayes, 2009). All this finding supports the view that Polish students perpetually use e-commerce systems because they satisfy their system quality and perceive them valuable for themselves. But it should be also noted that all the findings are based on a single cross sectional study with a self-report survey from a single source. Future studies should take into consideration of these limitations for testing the generalizability of the results.

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THE CONCEPT OF REAL ESTATE PORTFOLIO MATRIX (REPO-M) AND ITS APPLICATION FOR STRUCTURAL ANALYSIS OF THE POLISH COMMERCIAL REAL ESTATE MARKET

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Abstract

The aim of the study: The paper presents an innovative model for property portfolio assessment based on the concept of a growth-share matrix, a business tool originally created by Boston Consulting Group. The proposed real estate portfolio matrix (REPO-M) uses two primary qualities of the property: its potential to accrue value over the holding period, and its ability to generate stable positive cash flows. Methodology: The idea behind the model is to utilize these two dimensions in the assessment of the qualities of individual properties and identify their subsets in order to meet preferences of different groups of real estate investors.

The main findings: The concept was developed to provide the companies with strategic advice on how to optimize the sales strategy of their non-core property assets. This method can be successfully applied to both commercial and residential properties. The concept is subsequently utilized for the purposes of post-hoc structural analysis of Polish commercial real estate market. Transaction analysis accentuates the prevalence of the core assets both in terms of transaction volume and value. Value-added assets constitute a much smaller market segment, but may nevertheless present a good opportunity for portfolio diversification. Speculative assets appear to be scarce, which is characteristic of the current phase of real estate market conjuncture.

THE DEVELOPMENT OF ORGANIC MILK PRODUCTION IN POLAND AND ITS DETERMINANTS

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Abstract

The aim of the study: The aim of the article is to present, analyze and discuss recent growth in the organic milk production in Poland, to recognize its main determinants and to identify emerging/progressive trends in this sector.

Methodology: The basis for the discussion has been the authors' own research consisting of the analysis of the data publicized on the IJHAR-S webpage (Agricultural and Food Quality Inspection, Poland), the data gathered by the CSO (Central Statistical Office of Poland), Eurostat, FAO (Food and Agriculture Organization of the United Nations), FiBL&IFOAM (Research Institute of Organic Agriculture FiBL&International Federation of Organic Agriculture Movements), and some initial surveys conducted among a couple of dairy cooperatives in the Lublin Province.

The main findings: Global demand for organic milk is continuously growing. Organic dairy and organic fruit and vegetables are the two largest categories in both the U.S. and the European organic market. Organic milk supply is not keeping pace with demand in these regions what gives an opportunity to Polish organic farmers to be more successful in the milk production. Although there is a systematic growth of milk production in Poland, organic farms are rarely interested in selling their milk in organic quality. Polish dairies that deal with organic milk processing are facing a lack of continuity of supplies since their suppliers are territorially dispersed and have small production scale.

Conclusion: There is a dense network of dairies, with rich raw material base, of which almost 61% are dairy cooperatives. Dairies, especially those with a lower level of milk processing, may specialize in the production of organic products. In dairy cooperatives farmers are both suppliers and their owners. Tradition, experience and trust are the main values that give the dairy cooperative a competitive advantage. The way to increase organic milk production is to educate and upskill the farmers, and to develop advisory network for them. It's a chance to improve the effectiveness of dairy producers and increase their income.

Recommendations: The research results could serve as the basis for the creation of appropriate national policies and strategies and could contribute to building an economic management system of organic producers and retailers which lead to achieve satisfactory financial performance.

Limitations: The development of organic milk market is influenced by a wide variety of factors, and their intensity of impact varies from country to country. Thus the main findings apply only to Poland.

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THE EFFECT OF HIGHER EDUCATION ON HUMAN DEVELOPMENT IN IRAN DURING 1976-2014 USING ARDL APPROACH

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Abstract

Nowadays most developing countries believe that development of quantitative and qualitative education is the essential base of economic development. This paper examines the effect of higher education on human development index (HDI) in Iran during 1976-2014 using ARDL approach.

As proxy of higher education four variables are selected: number of undergraduate, master and PHD students and also education expenditures. In addition the human development index (HDI) is selected as proxy of human development.

The basic background for selection of essential dimensions of human development index and its constituent indicators is the initial capacity of people to contribute and take role in the society. These capacities and capabilities are: ability to have long life with good health, ability to acquiring knowledge, and ability to access resources and facilities for the enjoyment of having a good life. As a result, human development index as a composite index, has three sub-index:

- 1) Life expectancy: represents long life and health.
- 2) Educational progress: represents knowledge level.
- 3) GDP (measured by purchasing power parity in dollars): indicates the existence of decent life.

Human development index shows how far a country is from ideal situation. It also is an index that measures the degree of empowerment

The results show that during the period of 1976 - 2014 the number of undergraduate, master and PHD students also education expenditures have positive significant effect on HDI in Iran.

THE EFFECT OF POPULATION AGING ON IRAN'S ECONOMIC GROWTH

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Abstract

Today, countries are trying to make a connection between higher education and national development programs and promote science and technology; hence, national development policies are basically connected to education. In fact, university is one of the most valuable resources that community has at its disposal for development and progress. In most developed and developing countries problems solving strategies and meeting the needs of national goals have been realized by academics. Today, most third world countries believe that rapid qualitative and quantitative expansion of educational opportunities is the basis of national development. This study aimed to evaluate the effect of higher education on human development and the relationship is discussed in two theoretical and experimental sections. In the theoretical discussion two ways have been determined based on which higher education affects human development; first, supplying efficient manpower with increasing efficiency and productivity followed by increased wages and welfare, second, in terms of expanding the frontiers of knowledge and technology and advancing technology and creating new technologies and new sciences in order to increase equality and social welfare and public and personal health and in experimental section by using Auto-regressive Distributed Lag (ARDL) model and the data from 1976 to 2014.

It was concluded that the number of undergraduate, postgraduate, and PhD students as well as the costs of higher education have a significant effect on the HDI.

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THE EVALUATION OF PROJECT MANAGEMENT PRACTICES IN THE CZECH SOCIAL ENTERPRISES

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Abstract

The aim of the study: Social entrepreneurship is becoming a phenomenon that is gaining interest in academic as well as professional public, being considered a solution of social problems. The purpose of this paper is to determine the relationship between the presence of project management practices in Czech social enterprises and the annual turnover, number of employees and support from the EU funds, analyze the use of project management tools in these enterprises and contribute to the understanding of how social enterprises use the project management practices to run their activities.

Methodology: An electronic survey was conducted among Czech social enterprises listed in „The directory of social enterprises” operated by P3 - People, Planet, Profit, o.p.s, a non-profit organization dedicated to popularizing social entrepreneurship and innovation. Questionnaire was sent to 203 organizations claiming to be social enterprises. In total, 57 responses were received, which is equivalent to a response rate of 28.08%. Descriptive statistic and Chi-Square Test were used for the analysis.

The main findings: The statistical tests based on the results of the survey show that the annual turnover, number of employees or the obtained support from EU funds have no demonstrable influence on the presence of project management practices in the Czech social enterprises.

Conclusion: The research has provided an empirical analysis of project management practices in social enterprises for the first time. It has suggested that social enterprises use project management tools to enhance their performance, but the statistical tests show that proposed variables have no influence on the presence of project management practices in these enterprises.

Recommendations: The implications for further research lie in more extensive research of practices used to measure and evaluate the impact of projects and activities realized by these enterprises.

Limitations: Social entrepreneurship is not yet well developed in the Czech Republic. Except „The directory of social enterprises” containing about 200 subjects, the Czech Republic lacks register of social enterprises. The limitation thus lies in a small number of respondents connected with the fact that there are still few subjects on the market.

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THE IMPACT OF COMMON AGRICULTURAL POLICY (CAP) ON THE SOCIO-ECONOMIC SUSTAINABILITY OF FARMS IN THE EUROPEAN UNION COUNTRIES

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Abstract

The aim of the study: The aim of the paper is to determine the influence of the Common Agricultural Policy's subsidies on the level of economic and social sustainability of farms in the European Union countries.

Methodology: To determine the influence of CAP subsidies on the economic sustainability of farms authors applied the ratio of representative FADN farm income to non-agricultural household income. In turn, in order to determine the social sustainability the level of income differentiation between farms of various economic classes has been established. To verify the above relations panel regression was used. The dependent variable was family farm income per labour unit (per person working full-time in the family; so called FWU), and the explanatory variables consisted of different types of subsidies. Spatial scope covers all EU countries and the time range covers years of 2004-2015.

The main findings: Thanks to the support the average income of farm households is approaching the average income of non-agricultural sectors, but distribution of this support is uneven among the farms. This leads to an increase in income disparities for small, medium and large farms.

Conclusion: Based on the preliminary study for Poland it should be noted that the research carried out confirmed the adopted hypothesis: Common Agricultural Policy subsidies improve the general level of economic sustainability of the agricultural sector, but they are not an instrument serving the income sustainability (as a social element of sustainability) of the farms themselves.

Recommendations: From the point of view of the sustainable development paradigm support for agriculture should be continued to prevent deprivation of agricultural income in relation to non-agricultural income, however the structure of CAP support should be changed towards a more equitable distribution of money, as it now leads to differentiation of income of small and large farms.

Limitations: The considerations didn't take into account the environmental sustainability which was a subject of a separate study. Moreover, conclusions concern countries and due to considerable regional diversity may not be applicable for more detailed analysis.

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THE IMPACT OF MANAGEMENT METHODS ON EMPLOYEE ENGAGEMENT

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Abstract

The objective of the study is to identify the correlations between management methods (i.e., people-oriented and non-people-oriented ones), direct (active and passive) participation and work engagement.

In the first quarter of 2017, a questionnaire-based quantitative study was carried out on a group of 1037 people selected by way of purposive sampling based on the criterion of employment in a company in Poland, regardless of size. Correlation analysis was conducted to test the relationships among the level of people-oriented management, non-people-oriented management, direct (active and passive) participation as well as work engagement and its three dimensions: vigour, dedication, and absorption. Regression analysis was conducted to establish which form of direct participation - active or passive - was correlated with the level of work engagement to a larger extent. Based on the highest probability method, path analysis was carried out with the use of fit indices CFI, GFI, and RMSEA.

Significantly positive correlations were found between people-oriented management and passive, active and direct participation whereas statistically significant negative correlations were discovered between non-people-oriented management and passive, active and direct participation. People-oriented management was positively correlated with all the dimensions of work engagement and non-people-oriented management - negatively correlated with the dimensions of work engagement. Models were built based on hierarchical regression. Statistically significant positive correlations between engagement and people-oriented management and statistically significant negative correlations between engagement and non-people-oriented management were obtained in all the three models. Compared to active participation, the passive form does not exert enough significant influence to be included in the model. People-oriented management was negatively correlated with non-people-oriented management. People-oriented management was positively correlated with active participation and the latter was in turn positively correlated with all the three dimensions of engagement.

People-oriented management and active participation (co-decision-making) were found to be the most significant for work engagement. Passive participation (cooperation) is of no importance. Not only does non-people-oriented management entail a low level of engagement but direct participation is also lower. As far as the dimensions of engagement are concerned (i.e., vigour, dedication, and absorption) - if one of them is more intense then

the others are intense as well. People-oriented management translates into active participation and the latter into engagement in all the three dimensions.

The study is important for practitioners as it widens managerial knowledge on the manners of approaching the human capital. The results broaden the understanding of the influence that management methods have on work engagement and indicate the need for enhancement of human resource management practices.

The limitation is the size of the research sample which prevents one from generalizing the conclusions and extending the study with other variables.

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THE IMPACT OF REMITTANCES ON THE RECEIVING COUNTRY: EMPIRICAL EVIDENCES FROM ROMANIA

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Abstract

As many studies are focused on migration from Central and Eastern European countries, and on the influence of remittances upon the origin country of migrants, the objective of this paper is to study the impact of remittances upon the economy of Romania, as a receiving country. In order to achieve our purpose, we have performed a quantitative analysis by using econometric models to highlight the correlation between the studied variables.

The empirical research began with the testing of the hypothesis according to which the remittances are more stable over business cycle than private capital flows. For this analysis we extracted the cyclical component of data series for Gross Domestic Product (GDP), Remittances (Remitt) and Foreign Direct Investment (FDI) using Christiano-Fitzgerald filter and perform a correlation test.

After that, we sought the answer to the question: Which type of external funding has the biggest impact on economic activity in Romania? We considered foreign direct investments and remittances as the main sources of external funding. In the first phase we analyzed the evolution of the indicators over the economic activity using descriptive statistics and variables dynamics. To study the effects of migration remittances upon the Romanian economy, we used the macroeconomic indicators that are most influenced by the remittances, according to the economic literature and for which the data series were available.

To validate our models we use Augmented Dickey Fuller unit-root test to check for stationarity, Skewness and kurtosis test for normality, Breusch-Pagan/Cook-Weisberg test to check for heteroscedasticity and applied the regressions for data series with and without time delay, to determine the moment when the independent variables have the biggest impact on the dependent one.

Correlating the cycles of GDP, remittances and to foreign direct investment we obtained a weak connection between GDP and Remittances cycles and a strong one between GDP and FDI cycles, therefore validating our hypothesis. The results highlight the fact that even though the percent of foreign direct investment in GDP is higher than the percent of remittances in GDP, the remittances have a bigger influence on the GDP than FDI.

Our results, for Romania, are in accordance with the recent studies in the field and conclude that the volume of remittances stimulates economic growth of the receiving country and the main channel of influence is through consumption.

The paper has also its limitations: due to the fact that in 1996 the methodology of collecting data was changed, we cannot use previous years in the analysis of and also a comparison with other countries like Romania it would have given us more reliable results.

For an in-depth study of this problem we have identified two future research directions: an analysis regarding the type of consumption that is most influenced by the remittances in Romania and a broader study of migration in which we include other countries from the European Union.

THE IMPACT OF THE EU FUNDS ABSORPTION ON REGIONAL DEVELOPMENT OF POLAND (2005-2014)

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Abstract

This paper reviews the absorption of EU Funds by the regions of Poland and its influence on the regional development. The main purpose of EU Funds distribution is achieving the convergence of the regional development process between the regions of Poland and the other European regions, as well.

One of the crucial targets of the regional policy of The European Union is diminishing of disparities between the regions of Europe. The greatest differences are observed between the old and new members of the EU, but are also large inside of each member country. Poland is an example of such country, where the gap between the per capita GDP of the richest region and the poorest is large - over double.

The absorption of EU funds by regions of Poland should to be the main source of the reduction of disparities between regions, and it is thus very important to find if the absorption indeed has influence on the convergence of regional development.

The regional development is presented from different point of view. One is connected with the GDP growth path in particular regions of Poland. Another deals with the gap of per capita GDP between regions and characteristic features of regional development. According to the theory that GDP is not sufficient indicator to represent the regional development, some chosen variables are also examined from the convergence point of view.

The new method of convergence analysis proposed by author is presented in this paper. The method is based on the information theory and entropy. The distribution by regions of chosen variables representing the different socio- economic phenomena are compared with the distribution of basic variables, treated as pattern, and proposed similarity measures are estimated. Analysis of changes in the similarity measures during the time is the basis of concluding whether the convergence of regional development has been observed. The proposed method gives us more useful results, as it takes into account many aspects of socio-economic sphere.

The empirical analysis for Poland contains period 2005-2014, and the conclusions based on the results are the last part of the paper. The results of empirical analysis indicate that some very crucial changes in regional policy and EU Funds management should be taken.

THE IMPACT OF THE SELECTED FACTORS ON A NEW FIRMS FORMATION IN THE PRIVATE HEALTH CARE SECTOR

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Abstract

Justification of the undertaken topic: Socio-economic changes in the society became driving factor of a rising demand on healthcare services. Objective deficit of public healthcare entities, have led to dynamic development in private healthcare sector, especially in the area of new private medical businesses. Environment of private medical businesses consist of factors having influence on new firms formation, in a both way positive and negative. Hence, raise the questions not only about overcoming negative factors perceived as threats, but also about the factors perceived as opportunities for formation new private medical businesses.

The aim of the study: The main purpose of research study is to identify strategic factors, which have direct influence on entrepreneurship in private healthcare sector. The complexity of the phenomenon imposes implementation of an unconventional approach in this field of exploration.

Methodology: Our approach is based on Intelligent Data Analysis (IDA) - a methodology that includes a set of techniques that can be applied for extracting useful knowledge from large amounts of data. In order to indicate, to what extent the environment have influence on strategic choices conditioning the success of businesses, were applied explanation techniques - decision rules -to express mentioned relationships.

The main findings: Conducted research, allows to identify and describe the variable that plays the crucial role in explaining reasons of a new firms formation in a health care sector. Study links the explanatory variables with the type of a municipality, and provide the answer on a question which factors are responsible for entrepreneurship in private health care sector due to the municipality type. Moreover, results proves that slightly different factors are responsible for successful entrepreneurship support in municipalities with different number of already existing private health care entities. The analyses show what factors could be a driving factors responsible for entrepreneurship in private health care sector.

Conclusion: Summarizing, research study showed what variables turned out to be important for the given category of municipality and for the level of entrepreneurship in that municipality.

THE MAIN DIRECTIONS OF IMPROVING THE EFFICIENCY OF REGULATION OF THE TRANSNATIONAL BUSINESS IN MODERN CONDITIONS

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Abstract

The main purpose of the study of the scientific article is a formulation of complex methods of effective regulation of transnational business in the modern economy of Azerbaijan. To the main directions to achieve the purposes is assigned: general regulation of transnational business at the country level; regulation of transnational business at the industry level (foreign trade); regulation at the transnational corporations level (SOCAR - State Oil Company of the Azerbaijan Republic). Developed a complex methods and methods of the studying for effectiveness of the transnational business regulations" in Republic as following parameters: transnational business performance indicators at the national level; transnational business performance indicators at the industry level (foreign trade); grouped performance indicators at the transnational corporations" level (SOCAR).

These primarily include the following:

- Calculation of the indicators effectiveness of the transnational business regulations" in the country, which were carried out on the basis of indices of competitiveness;
- Calculated indicators of effectiveness of the transnational business regulations" at the industry level, which were carried out on the basis of parameters of efficiency of export, import, export and import operations;
- Defined indexes of the transnationalization and revealed the extent of their impact to the effectiveness of regulation of transnational corporations.

THE METHODOLOGICAL PROPOSAL FOR EVALUATION OF DISCRETIONARY ACCRUALS IN THE PROCESS OF EARNINGS MANAGEMENT DETECTION

MICHAŁ COMPOREK

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Abstract

The aim of the study: In the economic literature it is generally emphasized that the analysis of accruals is an important tool for examining the scope of earnings management phenomenon. This paper investigates the power and specification of the different accruals-based models to select an appropriate model to measure earnings management in industrial companies listed on the Warsaw Stock Exchange.

Methodology: The study focused not only on examining the empirical validity of the Jones Model and The Modified Jones Model which are the most prevalent models of discretionary accruals in earnings management studies. It submits also new alternative model used to detection of issued phenomenon, taking into account: change in costs of revenues and change in trade payables as the proxies for the current components of accruals and the intangible assets as a proxy for the noncurrent components of accruals. Additionally, this study proposes working capital management approach in applying the discretionary accruals models. Empirical studies have been carried out among 103 Polish industrial companies listed on the Warsaw Stock Exchange in the period 2000-2016. The sample selection is based on the criteria as following: shares of each company must be traded on the stock market for at least 10 years, the fiscal year of an enterprise should be end up to 31 December and all of required data must be available.

The main findings: The application of existing accrual-based models in the Polish industrial listed companies shows that these predictive models have insufficient explanatory power (the average adjusted R-square amounts: 41% for the Jones Model and 39% for the Modified Jones Model). Proposed new model designed to estimate a discretionary accruals allows to improve explanatory power of studied models to 69%. Empirical tests show that there are significant diversification in terms of predictive suitability of accrual-based models depending on implemented strategies of net working capital management.

Conclusion: The conclusions drawn in this paper are part of practical research concerning the use of informational and decision-making features of accruals analysis on the emerging capital market, acting simultaneously a prerequisite for further research in this field.

Recommendations: This study contribute to the prior literature by proposing new model used to evaluate of credibility of the entity's performance presentation in the financial statements. Applied research procedure focuses on working capital management approach

in detecting of discretionary accruals instead of popular in economic literature cross-sectional approach.

Limitations: Presented research results may not fulfill the conditions of generalization and should be extended on the basis of a wider spectrum of industrial companies, as well as in relation to longer period of research.

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THE RELATIONS OF INVESTMENTS AND SUBSIDIES TO LABOUR PRODUCTIVITY IN AGRICULTURE IN POLAND BETWEEN 2010 AND 2015

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Abstract

Following the microeconomic producer theory as a framework, this paper studies the empirical relationship between investments and subsidies from CAP to the labour productivity on farms, thus also on whole agriculture sector. It refers to the labour productivity as the basis of producers' income and the investments affecting the capital endowment as a major source of productivity improvement. The aim of the article is to present analytical and empirical evidence of the positive relations between the growth of the investments as well as the subsidies on investment and the labour productivity. The multifactor ANOVA models with interactions are used as an applied research tool to assess the differences in the labour productivity by, for example, investments and subsidies on investments. The results obtained suggest indirectly that the agricultural producers behave rationally as far as investment and labour productivity relationship is concerned. Our findings may support decision-makers in evaluation of the instruments implemented by the EU and contribute to better understanding of policy effects.

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THE ROLE OF INTERNAL FINANCING IN CAPITAL ACCUMULATION – CASE OF FOOD MANUFACTURING SECTOR

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Abstract

Companies that maintain surplus funds from internal financing accumulate these funds and pay off their debt within the required deadlines. When a company has limited access to internal financing, cash level is declining and debt levels are rising. Hence, changes in the level and structure of internal sources of funding may contribute to changes in the maintenance of the most liquid financial assets. It is therefore important to assess whether a company uses the internal financing for pay debts or just accumulate these cash resources to support future investment opportunities.

According to Myers and Majful, the overly high level of financial assets results in shareholders' higher expectation of dividends payout or share buybacks (1984). Research by Shyam-Sunder and Myers (1999) shows that the level of cash is an important determinant that can contribute to an increase in investment. High cash preferences will limit spending on high-value investments. The evidence of this relation is not consistent (Almeida, Campelli and Weisbach 2004) as the level of short-term investment can be positively correlated with the value of future investments and the level of savings may also depend on external support (Mađra-Sawicka 2016). Companies accumulate cash and pay back their debt when they have a surplus of internal funds. When they have a lack of internal funds, they use cash followed by debt issuance and finally equity to fund new investments (Chen, Mahajan 2010).

Uncertainty in the food processing market may result in managers' inadequate forecasting of future cash flows and contributes to inefficient allocation of resources and undervalued liquid assets. Firms generally hold more cash than their normal working capital requirement (Maheshwari and Rao 2017).

The main objective of the study is to assess the relationship between the level of internal financing and the tendency to accumulate in food processing companies. The research hypothesis is based on the following research hypothesis: Higher profitability and availability of internal finance for food processing companies maintain a high level of liquid financial assets that are invested in the medium term. The study period covers the years 2010-2015. The research focuses on financial results from the F01 and F02 reports of the Central Statistical Office on non-financial corporations' research from food producers and beverage producer. The results will be presented in the groups divided according to the estimated value of internal financing in the relation to total assets. The impact of internal

sources of funding on managers' decisions to increase or decrease savings will be assessed by using descriptive statistics, panel models with fixed effects and delayed explained variables. The evaluation of the relationship between the selected variables will be made on the basis of descriptive statistics, correlation coefficients and variance estimation for the variables tested in the sample.

THE ROLE OF TRUST IN VIRTUAL ORGANIZATIONS AND IMPLICATIONS FOR E-CULTURE

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Abstract

Trust is an essential prerequisite for the functioning of an organization. This creates conditions for cooperation and sharing of knowledge. Trust is an important link especially in a virtual organization. Its specificity related to spatial distribution, temporality and use of IT technology contributes to a bigger demand for trust. The purpose of the article is to analyze the impact of virtuality on trust in IT organizations operating in Poland. The article has been drawn up to verify whether organizational trust depends on the degree of virtualization and whether the level of trust has impact on sharing of knowledge, sense of togetherness and cooperation. The analyses were carried out based on the data obtained by quantitative method (a survey filled in by a sample of 61 IT organizations) using statistical analyses. Statistical analysis of data showed that the level of trust depends on virtuality. Furthermore, the trust proved to affects knowledge sharing, sense of togetherness and inter-organization cooperation. A thesis of the article is a statement pointing to the necessity of building a climate of trust in virtual organizations by developing the e-culture. E-culture constitutes a foundation allowing to develop trust and in consequence - effective cooperation and sharing of knowledge. The role of e-culture pertains to adjustment of social systems of the organization to challenges posed by virtuality, in particular support of organizational trust. Limitation of this study refers to data collection in one branch, which may limit generalization.

THE SITUATION OF WOMEN IN THE POLISH LABOUR MARKET IN THE LIGHT OF CHANGES IN THE PENSION SECURITY SYSTEM

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Abstract

The aim of the study: Due to the growing group of individuals eligible for retirement benefits and decreasing number of individuals employed in the national economies in most EU countries, the state pension schemes based on the principle of redistribution are experiencing problems with self-financing. This issue becomes all the more important that the extension of the average retirement age and the time of the so-called healthy life convince many men and women approaching the retirement age to remain economically active. The aim of this study is to examine the opinion of a group of women on their economic activity and decisions related to retirement.

Methodology: We conduct an analysis based on the pilot survey. The study was conducted in 2016 on a sample of 45 women selected with non-probabilistic sampling techniques. The method used is similar to the method of "random selection" or "convenience sampling", which means that the particular individuals are included in the sample by chance but not randomly, which results from the fact that they were in the right place and time for the taking part in the research.

The main findings: According to 90% of the surveyed women, going into retirement should be one's individual decision. Economically inactive women want to spend their time on realizing their own dreams or caring for their grandchildren. The research shows that a frequent reason to exercise one's pension rights was being made redundant. In the case of Poland this factor is important, as the beginning of the transition period was followed by structural changes in the economy, which exposed many women to redundancies. Perhaps the poorly developed system of lifelong learning in the early 1990s was not conducive to rapid further training and acquiring new skills required of labour market participants. Unfortunately, according to 1/3 of the women, the reason for their decision to retire was inadequate working atmosphere. These women felt that they should provide work for the young.

Conclusion: However, most retired women declare that the decision on retirement was autonomous, they also claim an inadequate atmosphere at work and a feeling that they have to retire to provide work for others, including the young. Moreover, going into retirement is often associated with the loss of income and contacts with others. The observed adverse demographic changes stimulate the discussion on the retirement age and the functioning of

the pension system in Poland. It is important to examine the reasons for the low economic activity of older people — especially women — and identify the future consequences of the changes in the functioning of the labour market.

Recommendations: The conducted pilot research constitutes a good introduction to further in-depth analyses which may aim at getting to know women's opinions on their economic inactivity, based on a larger sample.

Limitations: small survey sample.

THE UNIQUE MODEL OF DEVELOPMENT OF SMALL TOWNS IN POLAND. A CASE STUDY OF THE CITTASLOW NETWORK OF TOWNS

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Abstract

The smart development of EU countries is currently based on large and medium-sized cities and their profile development potential, while the development of small towns seems to be only a background for this process. Urban regeneration is a guarantee of the smart development of the country, as de facto small towns play the role of a supply base of human capital for other urban centres, are centres of providing public and private services, knowledge gathering, creating innovation and infrastructure at local level, and they also have an impact on the welfare and maintenance of their own residents and the surrounding rural population.

An important problem for small towns in Poland is to raise funds for the revitalization of city centres, taking into account their historical heritage, but also taking into account the socio-economic aspects of development. In a typical situation, small towns do not pass to the second round of application for development measures at regional level, if they act individually.

In their article, the authors presented a unique on a Polish scale example of using by the network of cooperating cities an effect of scale to compete with other urban centres for development funds. For the first time in Poland, 14 cities of Cittaslow of Warmian-Masurian region, thanks to belonging to the network of Cittaslow cities, and the establishment of the Association of Polish Cities Cittaslow, have received significant national and EU funds. Their Supralocal Program for Revitalization of the Cittaslow Network Cities for the years 2014-2020 is a strategic document that has its basis in diagnosing existing problems in the physical, economic and social space (delimitation areas, delimitation indicators: unemployment rate and the share of the population benefiting from the social aid in the revitalized area in relation to the whole territory of the city). The basis of this program is the hybrid model of urban development, resulting from the imposition of different criteria and requirements in the adopted financial model (use of own resources, ESF, ERDF), social regeneration model (product and outcome indicators) and a dynamically developing on a national scale model of Polish cities Cittaslow (network model oriented towards good quality of life). A standardized 14-city diagnosis revealed a number of social dysfunctions such as poverty, unemployment, disability, homelessness, severe illness. These aspects have

been taken into account in the integrated urban investment projects (ZPIs) adopted by each city, covering various activities such as: renovation of historic buildings, development of public space, improvement of technical infrastructure of the revitalized part of the city, creating an employment stimulation centre, setting up a social cooperative, educational activities, building tourist infrastructure, creating cultural centres, etc. One of the most important elements of the activities undertaken within the ZPI is the creation of jobs. This model also includes references to resilience as an integral part of the local government's urban regeneration efforts.

TRANSFORMATION OF BACK-OFFICES FUNCTION TO SUPPORT A CULTURE OF INNOVATION AND INTELLECTUAL CAPITAL DEPLOYMENT

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EMPLOYMENT SERVICE HOUSE

Abstract

The most important attribute of intellectual capital is the company's ability to innovate, which makes it possible to gain sustainable competitive advantage. In addition to critical parts of the intellectual capital management system, such as the human capital management system and the knowledge management system, another important aspect is to be considered - the formation of the company's ability to adapt. So, if a key competence-the ability to innovate-is a function of the front office, then the creation of adaptive capacity, which is a certain combination of human capital and a knowledge management system, manifests itself in a back-office meaning. The main back-office function is to support generation of innovations and their implementation through key competencies that ensure the rapid alterations of all processes and structures that are supposed to change.

The main purpose of the research is to create company expertise, organizational structure, processes, and a team that will be able to maintain steady changes and remain successful. It is obvious that the key component of such a company will be a well-formed team with the necessary skills, knowledge, and competencies, a team whose propensity for transformation is one of its basic characteristics, a team for which resistance to change is unacceptable. The goal of this research is to show how implementing culture of transformation in the back-office helps to promote innovations and improve the company's performance. Additionally, monetary assessment of back-office performance is done to demonstrate what exactly the business will receive in terms of market share, financial results, and company value.

The project of transformation of back-office functions has been started in several IT companies, which meet maximum criteria of being innovative, working in a rapidly changing environment, and for which it is crucial to transform backing functions to support change and makeovers on permanent basis.

The first stage of the research is evaluation and measurement of the existing organizational structure, processes, management system, performance appraisal. The first stage also includes measuring how the companies react to the emerging opportunities and challenges, how quickly they are able to respond to uncertainty, create and launch new products, adjust the products to the clients' needs, etc. The next stage is identification of the bottlenecks that prevent flexibility and competitiveness, and the role of supporting functions in these processes. The methodology of the analysis is based on the results of interviewing a

company's employees, measuring the performance, processing results, and comparing against the data of other companies. The contribution of the project is a set of proposed changes for the organizational structure, processes and key competencies, and suggestions to alter the methods for assessing the success of the performance. The model is evaluated and if either implemented in the company or subjected to iterative improvements. Simultaneously, the old and new models of back office staff performance are being assessed.

Such an approach will allow to assess the potential for changes and create an optimal model of companies' supporting functions that will support execution of breakthrough tasks by the front office.

TRUST IN M-COMMERCE IN THE EYES OF YOUNG URBAN DWELLERS OF TWO CENTRAL EUROPEAN COUNTRIES

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Abstract

Trust research is an important component of mobile marketing research (Varnali & Toker, 2010), as trust is one of the key factors for mobile- and e-commerce purchases (McKnight & Chervany, 2002; Wu & Wang, 2005; Peštek, Resić, & Nožica, 2011; Kim & Koo, 2016). However, most research concerning drivers of m-commerce intention are based on an adapted TAM, which has become inappropriate (Zhng, Zhung & Liu, 2012) as mobile technology is no longer a new technology. This is especially true for some types of mobile customers, such as early adopters of new technologies. Trust research bases on an analysis of various kinds of trust and the factors which build or limit it in different buying situations (McKnight & Chervany, 2002; Wu & Wang, 2005; Li et al., 2012; Fang et al., 2014). Specifically, a differentiation is made between hard (e.g. encryption) and soft (e.g. personal data submission) issues in trust building (Head & Hassanein, 2002), showing that soft issues are neglected by first time m-clients, at least on US m-markets (Hillman & Neustaedter, 2017). The main goal of the research is to verify hypotheses concerning the relative unimportance of soft type trust issues in m-commerce, in the case of early adopters of new technologies from two similar environments, in which e- and m-commerce are not the obvious choice of shopping method (Woźniak, 2015; Knežević, Stefańska & Stojkovic, 2017). A questionnaire was used on 2 similar samples (groups of 100 persons each) of young urban professionals from big cities of Poland and Ukraine, to research the importance of soft and hard issues connected with trust. Gender and situational differences in m-purchase intentions were also taken into account. Although it is obvious that trust in the case of m-purchases is partially determined by cultural factors, most data on m-purchases comes from research carried out in a small group of cultures where internet-based markets are relatively mature, i.e. the US and East Asia (Hew, 2017). In addition, Hofstede's typology based on few permanent cultural features have been used to analyse cultural factors (Cyr, 2008, Chen et al. 2015). These features of the research make it difficult to apply its results to the management practice of the rising markets of countries whose development follows different trajectories (Akman, & Rehan, 2016), and in which m-commerce will be a significant tool of development. The study should enrich the scientific debate on not only the role of different types of trust in m-commerce, but on gender difference as an aspect of trust building in m-commerce, as divergent results have been obtained here (Chong, 2013; Lu & Rastrick, 2014; Akman & Rehan, 2016). It will also enlarge the scope of contextual factors that moderate m-

purchase intentions, as in addition to value and type of item purchased, it includes the situational context of the purchaser, a moderator trait that has not yet been studied. The main limitation of the study is the sample, as this was created using the snowball method, which is sufficient only for exploratory studies.

WHAT EXACTLY DETERMINES FOREIGN DIRECT INVESTMENT?

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Abstract

Foreign direct investment (FDI) is an important aspect of globalization and a dominant component of economic development strategies of both originator and host countries. As Figure 1 shows, FDI inflows have been rising rapidly since 1990. This is a manifestation of the increasing receptive attitude towards FDI and the consequent changes to institutions and incentives in order to facilitate these flows. It reflects a fundamental change in the paradigm for financing investment and growth. For growth to occur investment is essential. The countries, whose domestic savings were insufficient, traditionally relied on foreign aid or foreign debt. But rapid accumulation of external borrowing can result in unsustainable debt dynamics with consequent negative effect on growth performance. Hence the shift to FDI flows as a part of the development and growth strategies.

WHAT IF NOT GROSS DOMESTIC PRODUCT?

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Abstract

The article concerns the issue of methods of measuring the level of sustainable development in order to monitor progress of EU member states in this area. The attributes of Gross Domestic Product are presented as a universal and most popular measure of economic development. On the basis of a data analysis for member states there are shown significant faults of GDP per capita index, which does not include social differences in relation to the achieved income level. There are presented data on Gini coefficient index, which points at disparities in incomes of the studied countries. It is proved that EU member states are characterized by one of the lowest levels of disparities in societies incomes in comparison to other countries around the world. As a result of analyses, alternative concepts of indicators are presented, which could be used to assess progress in realizing the sustainable development strategy, such as: Human Development Index, Ecological Footprint, Happy Planet Index and Environmental Performance Index.

WHAT IS THE ROLE OF INNOVATION IN PRODUCTIVITY GROWTH IN EUROPE IN TIMES OF CRISIS?

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Abstract

The varieties of the national innovation systems among European countries are mirrored into large differences, discrepancies and sometimes unexpected results in the innovation process and its influence over the labor productivity growth. The goal of this paper is to find the differences between the drivers of the innovation systems and its influence over the growth of productivity between two different institutional settings in the period of the financial and economic crisis in Europe. The first group is selected countries from the CEE region and the second one is consisted of Germany, Norway, Spain and Portugal. In order to measure the role of innovation over productivity growth we use the CDM model of simultaneous equations. The model directly links R&D engagement and intensity to innovation outcomes measured either as process or product innovation, and then estimates the effectiveness of the innovative effort leading to productivity gains. Company-level dataset is used from the Community Innovation Survey (CIS10). There is one common result for the two country settings that in general the probability for a typical firm to engage in innovation increases with firm's size. The other factors influencing the decision process are rather quite different. Firm's productivity increases significantly with innovation output but only in the firms operating in Western Europe. The results for the firms in Central and Eastern Europe indicate that these countries' national innovation systems are vulnerable and when operating in periods of crises higher level of innovation output has led to less labor productivity. Therefore, systemic faults in the national innovation systems result into their unsustainability especially visible in period of crises as was the period 2008-2010. For the Western European countries the financial and economic crisis didn't have negative effects over their innovation systems as the innovation activity has resulted with higher level of labor productivity. For the CEE group of countries, on the other hand, the effects of the crisis had influenced negatively over the innovation process and the labor productivity as a whole.

WHERE WILL THE ASSET IMPAIRMENT TESTS LEAD US?

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Abstract

How is suggested by Coase (Coase 1990), whenever an economic theory is trying to find the most effective way to organize the business operations, technical tools of their implementation depends from the accounting. From highlighted by Nobes (Nobes 1998) two classes of the accounting models, Anglo-American is being realized in countries with the strong capital market and orientation on external shareholders. On the other hand Continental (European) model is being focused on the creditors' and other stakeholders' information requirements, especially for tax authorities. Realisation of this concept may be recognized mainly in countries with weak capital market. The aim of the Anglo - American model is to inform equity investors and allow the discretion in financial reports preparation as far as resulting statement provides the „true and fair value” (TFV). In the opposite, Continental model is being concentrate on the creditors and required high codified reporting settled in the stiff frames of the provided standards (Joos & Lang 1994). Anglo - American model is neutral, whereas Continental is prudent and focused to not allow assets for overvaluation by setting book value higher than market value.

Nowadays there is visible movement towards introducing IFRS, which represents Anglo - American mentality (Panetsos, 2016). Expression of that was an adoption by Parliament and the Council of the European Union (EU) a Regulation (No. 1606/2002) requiring all listed companies in the EU to use the International Financial Reporting Standards (IFRS).

The aim of the study: The main aim of the paper is the analysis of current state of research about influence of the asset impairment allowed by IFRS on the quality, comparability and perception of information presented in the financial statement.

Methodology: Systematic literature review has been performed, covering in the final data sample 46 papers published in journals containing the impact factor.

The main findings: In result of outgoing research presented in the prestigious journals we noticed lack of unambiguous research results, which may indicate increase of the quality of information showed in the financial statement after asset impairment tests adoption. On the contrary, there are a number of reports suggesting that management use impairment announcements when widely understood profitability of business getting worse. A lot of authors report, that presenting reliable information in the financial statement is not a factor determining preparing of impairment tests and they are rather associated with the managers' incentives to present financial condition of the company expected by stakeholders'. For that purpose managers also commonly delay the preparation of asset impairment tests. A

number of reports indicate extensively using asset impairment for earning management. Authors inform about exploitation of the write - offs for earning management and indicate on recording impairment following the managers' unethical behaviour. Moreover reports about the market reaction for the asset impairment announcements are negative. Writers notice that the stock price after write - off disclosure decreased and investors react very suspiciously on those disclosures. Negative view is being escalate by reports suggesting, that prediction of the impairment is high limited and even impossible.

Conclusion: Therefore we conclude that the state of the art indicate that implementation of asset impairment by IFRS didn't increase quality and reliability of information presented in the financial statement. Advanced accounting standard harmonization and popularization of IFRS didn't contribute to achieve goals assigned to adoption by the Council of the European Union Regulation No. 1606/2002.

Recommendations: Research directions should focus on the IFRS standard impact on the information quality presented in the financial statements according to the mentioned accounting models. There is a need to provide further research conducting comparison of effectiveness of those approaches (Anglo - American and Continental) in order to meet the financial market stakeholder expectation and in result improve the quality of signals provided to them. Based on that further directions of our research will focus on the prediction power of the information included in the financial statements according to long term investment decisions.

Limitations: Methodology used in the reviewed publications centers on the regression analysis, which represent generally the one research approach, consequently high limiting the capabilities for further improvement of provided methods.

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WHO IS UNBANKED? EVIDENCE FROM POLAND

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Abstract

The aim of the article is identification of factors influencing the problem of financial exclusion. Empirical material used for the purpose of this article was obtained within the research project "Social Diagnosis", realized in 2015 by the Council of Social Monitoring, acting at the College of Finance and Management in Warsaw. There was a slight negative correlation between the age of respondents and the use of banking services. Surprisingly, there was a negative correlation between the income and the tendency to use banking services. Factors such as the level of education, the use of the Internet and trust in commercial banks have positively influenced the tendency to use banking services. The analyzed variables such as income, age, trust in commercial banks, level of education, internet usage explained the use of banking services in 17.4%.

WOMEN PERSONAL NETWORK AND FINANCIAL PROFITABILITY: CASE OF TUNISIAN SMALL FIRMS

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Abstract

Many studies deal with the role of the female personal network in the success of the business. However, only a few examine the relationship between women's network and the profitability of the firm. The current article aims to identify what mark the network of women entrepreneurs and whether the network affects the success of the firm. For that, based on 41 very small firms, we examine the effects of the network on the financial profitability of the firm. The estimation of an equation using the least ordinary square suggests that the characteristics of the female network such as the informal and homophilic character do not affect the success of the firm. While the size of the network and the involvement of women in the network affect the profitability of the firm. In the light of this study, we advance that even if the female network differs from that of the male, the variables which are related to the network and which affect the profitability of the firm do not depend on the gender.

The aim of the study: The aim of this work is to highlight the characteristics of the women entrepreneurs network that ensure the success of their business.

Methodology: We have mobilized the theoretical framework of network analysis, its characteristics and its effects on the success of women's business. The theoretical study is used to determine some attributes of the women entrepreneurs network. As for the empirical study, it also allows us to verify the effect of these attributes on the profitability of the firm. To do this, we first present our sample, which is made up of 41 very small firms (women are more present in smaller firms) and the variables studied. Then, we try to verify some hypothesis derived from the theoretical study and presented in the descriptive analyses. Finally, we attempt to generalize the results from the descriptive analysis by moving to econometric study and discussion of results.

The main findings: We found that in virtually all cases, the financial profitability and the success of the firm depend on the financial variable such as the debt ratio. they depend also on the size of the network, the involvement of women in the network and on the network capacity to meet their needs (tangible, intangible and relational resources).

Conclusion: This study, therefore, indicates that the particularities of women network such as the informal and homophilic character as outlined in the literature review do not affect the success of the firm. While characters like the size of the personal network and the

involvement of entrepreneurs in this network to meet their need and which do not depend on gender affect the success of the firm. In the light of this study, we can advance that even if the feminine network differs from that of male, this difference does not affect the profitability and the success of the company.

Recommendations: In the light of this study, we can advance that even if the feminine network differs from that of male, this difference does not affect the profitability and the success of the company. This result enables legislators and educators to put in place the necessary mechanisms to better support entrepreneurs and promote women's entrepreneurship.

Limitations: Although our hypotheses were supported statistically, the sample size (41 observations) is limited and it does not allow us to locate our findings over a large confidence interval. Our results are encouraging and should be validated in a large cohort of women. Besides, future work should include a comparative study of both sexes to better understand the particularities of the network of each of them to measure the effect of these particularities on the success of the firm and on the promotion of entrepreneurship in Tunisia.

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WORKFORCE PRODUCTIVITY FOLLOWING MERGERS AND ACQUISITIONS - EVIDENCE FOR POLAND

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Abstract

The aim of the study is to investigate the changes in workforce productivity following mergers in Poland. Previous studies for the Polish market indicated that consolidation transactions turned out to be inefficient in financial terms resulting in no significant changes in cash flow return on assets and a significant deterioration in cash flow return on equity compared to the industry benchmark. These negative merger effects can be attributed to a lack of proper workforce management. Using a unique database consisting of 130 M&A transactions in Poland, I examine two research questions. First, I study whether there is a significant change in the sales/wages or EBITDA/wages ratios three years before and after the transaction. I verify the results using industry benchmark. Second, I investigate whether the targets and acquires actually underperform the industry average prior to the transaction as suggested by the Polish literature for other financial ratios. These two hypotheses have not yet been investigated either for Poland or any other Eastern European country. Moreover, conclusions for other foreign markets are inconsistent, thus leaving the problem as a free research field.

Methodology: Parametric and non-parametric tests were used in order to compare the employee productivity ratios in the respective periods of 3 years prior and after the transaction. The same tests were used in order to compare company performance versus industry average performance.

The main finding is that there are no significant changes in analyzed ratios before and after the transactions. The results are robust when applying the industry average as a benchmark. Moreover, the companies, both targets and acquirers, underperforming the industry average before the transaction.

Conclusions: M&A transactions do not impact workforce efficiency. The findings are consistent with previous studies for the Polish market showing that there is no significant change in financial performance after the merger. The results are also consistent with the notion that before the transaction targets and acquirers in Poland underperformed the industry average in contrast to the developed countries. Poor workforce efficiency management might be the reason why mergers in Poland are unsuccessful in financial terms.

Recommendations: This study suggests that when undertaking an M&A transaction it is crucial to focus on workforce efficiency. Whereas in developed countries most research findings imply that the efficiency increases after the merger, in Poland it does not.

Limitations: First, the study does not take into account the number of employees but just the amount of remuneration that these employees have earned. Based merely on sales/wages or EBITDA/wages ratios it is difficult to draw general conclusions about overall workforce efficiency. Second, the control companies benchmark might be used in order to reinforce the results. Researchers have argued that the industry and control company benchmark can lead to different conclusions. Third, the sample has its limitations too, because it covers a mere about 25% of M&A transactions in Poland. The remaining 75% were not taken into account due to the inaccessibility of the relevant data.