Finance and Sustainability

Book of Extended Abstracts from the Conference Held by Wroclaw University of Economics and Business, July 1, 2022

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Preface

The previous century was a period of rapid development and economic successes, reflected in the increase in gross domestic product, which – as it seemed not so long ago – could grow indefinitely. However, this rapid growth was paid for by the overexploitation of natural resources and environmental pollution.

In the last decade, we have witnessed a growing awareness and paradigm shift related to economic development. Thanks to this, developed countries have entered the path of transformation of their economies, building based on the principles of the New Green Deal. It requires substantial financial outlays and a change in the way we think about basic economic categories, such as costs or profits.

Scientists must participate in these transitions, paving the way and pointing out the best solutions. It also applies to finance, which creates development opportunities for economic ventures that promote sustainable development.

The financial system is already transitioning, driven by economic and finance strategies oriented towards long-term sustainable and climate-resilient development and the digital revolution. New finance concepts, such as green, sustainable, climate, and carbon finance, have emerged in a public debate. Finance was always an instrument of economic decisions. The aim of finance in the neoclassic market economy was to maximize profits and shareholders' value. The new approach to finance is purpose-oriented, mission-oriented, and value-oriented, opposite to the traditional role of finance. This approach supports sustainable development, green economy, low carbon economy, and adaptation and mitigation of climate change.

The conference Finance and Sustainability becomes a part of the public debate about climate and renewable energy issues and covers various topics related to recent financial problems, among which are: corporate finance, public finance, monetary and fiscal policy issues, and risk management. In the sustainability field, we wish to cover topics related to sustainable finance, the transition to a green economy, corporate sustainability and sustainable development.

The book includes extended abstracts of speeches presented at the conference „Finance and Sustainability" held by Wroclaw University of Economics and Business, July 1, 2022.

Agnieszka Bem

Environment, Social Responsibility, and Governance (ESG) Disclosure and Earnings Management in Telecommunication Companies: An International Perspective

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Keywords: ESG, CSR, earnings quality, telecommunication, sustainability.

Introduction

Management may manipulate earnings for various purposes, and eventually distort the reliability of financial information. The reasons for earnings' manipulation may differ, such as financial reasons that make managers mispresent the accounting information or inefficiency of the internal or external audit quality. On the contrary, companies with higher ESG are expected to prevent manipulation as they have stronger responsibility to the stakeholders, society, and environment. Prior literature has revealed that whether socially and environmentally responsible firms behave differently from other firms in their financial reporting and whether their financial information is more reliable, and if the quantity and quality of sustainability disclosures are associated with the earnings quality. This study contributes to the literature in various ways. To begin with, it is the earliest work that analyses the relationship between earnings management and ESG scores in the telecommunication sector, as per our knowledge. Furthermore, it takes a global point of view, including companies from different regions and countries.

Objectives

The authors aimed to search for the potential relationship between earnings management (EM) and Environment, Social Responsibility, and Governance (ESG) disclosure of the companies in the telecommunication industry on a global scale. We assumed a negative relationship between ESG scores and earnings management because companies with higher ESG scores tend to portray more accurate financial reports, enhancing reporting quality.

Research methods

We developed a research model based on the literature to measure the relationship between earnings management (EM) and Environment, Social, and Governance (ESG) disclosure in the telecommunication (T-Com) sector. We used data from companies in the T-Com sector around the globe for 5 years between 2016 and 2020. Because of lacking data and some other drawbacks, we used data from 92 companies from 41 countries. To control for regional, economic, and cultural differences among companies, we used macroeconomic indicators, development indices, and other variables that reflect these differences. We constructed two models: first for estimating discretionary accruals (DA) using the performance-adjusted Modified Jones Model developed by Kothari et al. (2005) and second for examining the bilateral relationship between ESG scores with discretionary accruals gathered from the first model.

Results/Conclusions

The results reveal that companies with higher Environmental Scores have higher dispersion from normal accruals; this may result from two reasons in our anticipation. They may record more accruals depending on environmental regulations or they may use environmental scores to make up their earnings. Though they slightly lack significance on DA, Social and Governance scores have a negative impact on DA. Hence companies with higher social responsiveness and strong governance lead to reliability in financial reports. Another point to mention is the relationship between DA and the governance scores of countries. The effect of "accountability" and "control of corruption" on a country would lead to less DA. On the other hand, governance effectiveness has a positive relation with DA. This study contributes to academics, practitioners, and policymakers in various ways. The results suggest that the policymakers and regulators should enhance the accountability and transparency of the country to prevent the companies from manipulating the financial statements. This study also helps practitioners and academics understand the impact of the ESG scores on the earnings quality of the T-Com sector worldwide.The main limitation of this study is the lack of ESG data provided by the companies. Furthermore, most companies that have announced the ESG scores were from developed countries or from larger economies, thus the developing economies have been represented less in the sample. Further studies may include a comparison of the T-Com companies based on whether they announced the ESG scores or not. The impact of ownership structure or board composition of T-Com companies on the relationship between ESG scores and earnings management can be tested.

Fiscal Policy Before and During the COVID-19 Pandemic and its Impact on the Creation of New Companies

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Keywords: fiscal policy, new business density, entrepreneurship, Coronavirus.

Introduction

Fiscal policy, does it affect new firm formation? Although this topic is not a new issue in the literature, it still raises many questions, implying the need for further research and explaining the relationship between fiscal policy and new business entry. There is widespread awareness that high fiscalism is a destimulant for starting a business. At the same time, in research works, we can find the opinion that fiscalism is only one of the factors influencing the decision to start a business. Literature also indicates differences in the study of the topics mentioned above. The works so far differ from each other in terms of the applied measures of fiscalism and the measures describing new enterprises. Fiscalism is much more studied in the case of individual countries than in groups of countries, and that is why this article covers a group of EU countries, which constitute an added value in the analysis of the relationship between fiscalism and entrepreneurship. The study covers the period from 2015 to 2020 inclusive, which allows for examining fiscalism's impact on entrepreneurship before and during the pandemic.

Objectives

Two primary research hypotheses were formulated. The first is that fiscal burdens negatively affect the creation of new firms. The second is that the COVID-19 pandemic has reduced interest in starting a business.

Research methods

Several complementary research methods were used. The collected data were sorted and categorised. The research was quantitative. Firstly, the new business density index was analysed. Statistical data regarding the new business density indexes from all the analysed countries were shown on the graph expressing the dynamics for each country in 2015–2020. Such data set made it possible to answer the research question about the dynamics of new firm formation in the analysed period, before and during the pandemic. The second step was to analyse the changes throughout the years in the starting a business index and the paying taxes index for each country. This set of data allowed for determining changes in the indexes. Next, the comparative method was used. The author compared the new business density index to the starting a business index in each country and the same comparison was made for the paying tax index. This allowed for identifying how changes between fiscal indicators impact new business density in EU countries.

Results/Conclusions

This research has shown that low fiscal burdens positively affect new firm formation. It was proved by the correlation analysis and the analysis where the author compared the two analysed indexes with the new business density index in the given years. It confirms the first hypothesis that fiscal burdens negatively affect the creation of new firms. The second hypothesis was that the pandemic negatively affected the creation of new companies. During the research, the author found that the coronavirus hadd not had a negative effect on new firm formation in the analysed countries. In some analysed countries, for example, Sweden and Belgium, the number of new firms registered during this time increased compared to the year 2019, while for the rest of the countries, this indicator remained relatively stable during the pandemic. It was mainly caused by the increase in the e-commerce sector and support measures implemented by governments.

Spatial Interactions in Local Debt. Evidence from Poland

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Keywords: local government, municipalities, Dynamic Spatial Durbin Model.

Introduction

Various causal mechanisms explain local fiscal policies' interactions with neighbouring local governments (e.g., fiscal competition, yardstick competition, expenditure spillovers). There is a vast empirical literature that documents spatial interactions with respect to taxes and expenditures. At the same time, there are only a few studies on debt. This research gap necessitates further theoretical and empirical studies. The fact that sustainable debt is vital for the sustainability of local public finance should not be ignored.

Objectives

The author aimed to verify whether there are positive spatial interactions with respect to debt among Polish municipalities. By doing so, she added to the emerging strand of the empirical literature on spatial interactions with respect to debt. She also offered an extension to a preliminary analysis for Poland by Kopańska and Kopyt (2018) that utilised cartograms, Moran I statistics and tools to identify hot (cold) spots.

Research methods

The Dynamic Spatial Durbin Model with FE was used to control spatial and time lags of the dependent variable, spatial lags of the independent variables, as well as unobserved individual and time effects. The panel consisted of 2,442 Polish municipalities (out of 2,479 units, due to missing data) from 2004 to 2020. The variable of interest was expressed as *per capita* municipal debt at the end of the year in constant 2020 prices. Three forms of spatial weight matrix were used: contiguity binary row-normalised weight matrix and inverse-distance row-normalised weight matrix (with cut-off: 20 km and 25 km, respectively). The set of demographic, socio-economic, fiscal and political control variables was introduced:

the population size, squared population size, share of young inhabitants, share of old inhabitants, unemployment, revenue capacity, previous vote share and average salary. Since some coefficients cannot be interpreted directly, he suthor determined respective long-run (short-run) direct, indirect, and total effects.

Results/Conclusions

Spatial interactions in Poland go beyond tax policies. Interactions in space with respect to debt among Polish municipalities are statistically significant, albeit smaller than those estimated for German or Spanish counterparts. An increase in debt in a given municipality by PLN 100 leads to an increase in the debt of neighbouring municipalities by PLN 8–10. The results are robust to the form of a spatial weight matrix. Spatial coefficients in the current study are comparable to those estimated for car tax in Poland. There is strong time persistence in debt levels. It is also found that in the short-run municipal debt increases with the share of young inhabitants and revenue capacity, whereas it decreases with the share of old inhabitants. Avenues for further research include additional robustness checks and spatial analyses in other spheres (e.g., local environmental policies).

Non-Financial Reporting in the Czech Energy Industry

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Keywords: Corporate Social Responsibility, non-financial reporting, environment, energy industry.

Introduction

Besides producing output and generating profit, the companies have other positive or negative effects in different areas. These include the impact of the company's activities on the environment and society. Gradual awareness of this impact led to the emergence of the concept of Corporate Social Responsibility. In connection with this concept, the need to inform about the responsible activities of a company has arisen. Companies should inform how they cope with individual impacts and try to prevent or minimise the negative impacts of their activities. The European Parliament adopted Directive 2014/95/EU on non-financial reporting, a part of the wider European Union initiative on Corporate Social Responsibility, in December 2014. As of the 1st of January, 2017, public interest companies with 500 or more employees are required to include a non-financial statement in the financial report. The aim is to link the company's economic performance with social justice and environmental quality.

Objectives

The aim of the paper is to evaluate the impact of obligatory presentation of non-financial information on the quantity of published information by companies involved in the energy industry. The main research question is the following: Is the quality of reporting affected by the directive 2014 on non-financial reporting? As among the first companies in the world to use non-financial reporting, large publicly traded companies were involved in industries with a clear negative impact on the environment in which they operate, and among the first areas that have been reported is the environmental area, the paper is focused on companies operating in the energy industry in the Czech Republic.

Research methods

The analysed sample consists of publicly traded companies on the Prague Stock Exchange. The research period is before and after the obligatory presentation of non-financial information. The evaluation is based on a textual analysis of researched companies' financial statements and annual reports. The CSR concept is based on the so-called three pillars: economic, social and environmental. These three pillars correspond to three characteristics, the so-called triple-bottom-line, or three "Care": Profit – profit (economic area), People – people (social area), Planet – Planet (environmental area).

Results/Conclusions

The most commonly reported are the environmental aspects of the business, whereas very rarely do companies report on social aspects. The researched sample did not show a statistically significant difference in published information content between the non--financial reporting before and after the effectiveness of an obligatory presentation. On the other hand, the quality and deepness of published information increased.

The Concept of Associated Persons as a Key and Potentially Problematic Aspect of Transfer Pricing

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Keywords: associated persons, attribues, Brazil, Czech Republic, Latvia, transfer pricing.

Introduction

Transfer pricing (TP) is based on many principles – the essential one is the Arm's Length Principle (ALP). In this respect, the term "associated persons" is of crucial importance: associated persons must be involved in transactions in order for the ALP to be applied. The paper aims to contribute to the existing comparative analysis of TP rules – specifically, to provide a critical analysis of the term "associated persons" as prescribed by domestic law in Brazil, the Czech Republic, and Latvia. The critical goals of the research conducted were to provide a comprehensive picture of the variety of definitions, to indicate relationships between international law rules and domestic law rules, and, last but not least, to highlight various concepts of the term "associated persons" and to identify problematic aspects connected with the interpretation of the definitions and the applications of the related rules.

Objectives

Considering the fact that there are many significant differences in the definitions of the term "associated persons", one can deduce that this "incoherency" (or absence of harmonisation in this area) can cause problems in the application of TP rules. This topic, however, has not been widely investigated. The aim of the paper is thus to extend existing analysis while providing a critical comparison of the definitions of associated persons as embodied in the law of the selected countries and to define and discuss potentially problematic aspects connected with the application of TP rules. The main goals are:

- to provide a comprehensive picture of the variety of definitions of the term "associated persons" in the selected countries;
- to indicate relationships between international law rules (represented by DTTs (namely, by Art. 9 of the DTTs which follow OECD standards)) and domestic law rules in selected countries;
- to highlight the various definitions of the term "associated persons" and to identify problematic aspects connected with the interpretation of the definitions and the application of the related rules (both on the international and domestic levels).

Research methods

As such, this study is exploratory and interpretative in its nature. The paper is based on qualitative secondary research covering predominantly legal regulations in the above-mentioned countries. The method applied for collecting information was the text's content analysis. The foundation for the subsequent analysis was the standards as provided by the OECD (2019), from which the essential criteria employed for the analysis were deduced.

Results/Conclusions

Based on the results of the comparative study, one can conclude significant differences among, and fragmentation in, the definitions of the term "associated persons" both in respect of the number of categories established and in respect of the absence of the autonomy of the definitions of the term "associated persons" as provided by public law (especially by income tax acts). At the same time, one can notice the same position regarding the application of double tax treaties in all the countries for which the study was realised.

Are Green Bonds Good Investment Opportunity for the Turbulent Times?

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Keywords: green bonds, volatility, crisis.

Introduction

A significant part of the academic literature on green bonds consists of studies searching for differences between conventional bonds and their green counterparts. Most commonly, the theoretical assumption is that there shall be no significant rational differences in the price and volatility of both bond types, given the same issuer, similar maturity, coupon, and currency. The statistical data shows an ever-growing demand for green bonds. However, there is limited academic evidence that they can be a remedy for the time of crisis. Therefore, this article aims to explore this issue.

Objectives

During times of high financial market volatility, investors tend to turn to alternative investments hoping for higher resilience. The interrelatedness between green bonds and other financial markets provides a basis for the exploration of the question of whether green bonds can be a reasonable alternative for investments during a financial turmoil.

Research methods

Using a multivariate GARCH framework on global green and conventional bond indices, we verify and test volatility patterns and assess how the volatility in the green bond market transmits to the broader conventional bond market during turbulent market conditions.

Results/Conclusions

The analysis shows that green and non-green bond markets are positively interconnected, showing some spillover effects between the markets. The risk relationship between bond markets is not constant, albeit we have identified certain resilience towards market shocks in the green bond indices. The results will provide insights to investors willing to diversify their portfolios for the turbulent market circumstances.

The Financialisation of the European Futures Market for Carbon Emission Allowances

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Keywords: carbon futures, financialisation, R2 decomposition.

Introduction

As well researched by the academic literature, the financialisation of traditional commodity markets has fundamentally changed their behaviour over the past two decades. The European Union Emissions Trading Scheme (EU ETS) created a new commodity market for carbon allowances in 2005. The bulk of carbon allowances trading occurs through derivatives, particularly forward and futures contracts. As freely traded on exchanges, this novel asset class naturally attracts the interest of financial investors seeking new risk-return profiles and diversification opportunities, which makes the EUA futures market prone to financialisation. Emission allowances pose one of the main tools of the European Union to tackle global climate change. Based on the carbon price, firms decide whether to invest in less carbon-intensive technologies and sell emission allowances or whether buying them and not reducing emissions is more economical – at least, that is the theoretical intention of a carbon trading scheme.

Objectives

We aim to measure the degree of financialisation present in the market for European carbon emission allowances, i.e., to what extent fundamental and financial variables drive prices of carbon futures. Understanding what drives price movements of E UA futures is of pivotal importance – assuredly also to financial investors – but first and foremost to policymakers trying to cost-efficiently lower greenhouse gas emissions of the economy.

Research methods

First we identified fundamental variables that should drive the prices of EUA futures. Afterward, we regressed returns and volatility of EUA futures on their fundamental drivers and variables serving as indicators for the influence of financial investors. Using *R*-squared decomposition, we investigated to what extent financial investors affected prices of EUA futures in relation to their fundamental drivers and how this relationship has changed over time. More specifically, we showed how the contribution of each group of drivers to the explanatory power of the regression model has evolved from trading phase II through the beginning of phase IV of the EU ETS, thereby indicating the degree of financialisation of the European carbon futures market.

Results/Conclusions

Our preliminary results indicate emerging financialisation as the importance of financial variables for explaining the variation in EUA futures returns and volatility increases over recent years. While we are still working on the paper regarding the robustness of our methodology and potential causes of time-variation, first results show signs of financialisation beginning around the midst of Phase III of the EU ETS.

Green Finance and B-Corps: Corporate Social Responsibility as a Driver for Financial Performance and Sustainable Development

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Keywords: green finance, sustainable finance, B-Corps, Corporate Social Responsibility, financial performance, sustainable development.

Introduction

The study aims to investigate green finance and B-Corps, which are innovative sustainable businesses that generate benefits for shareholders, society, and the environment. These companies represent an innovative research area that is still little discussed in the literature. In turn, green finance is crucial for business and economic growth because it incorporates several ethical, social, and environmental concerns.

Objectives

The paper focuses on Corporate Social Responsibility and demonstrates that it is a fundamental tool for companies to obtain higher financial performance and allow the sustainable development of the economy and the territory where it operates.

Research methods

By adopting a theoretical approach, the article first analyses the CSR concept, explaining why it has become fundamental with respect to the mentioned issue. Subsequently, through a literature review, the B-Corps is examined, and it is demonstrated how they positively contribute to green finance and sustainable development.

Results/Conclusions

The analysis results show that stakeholders and investors evaluate companies using the triple bottom line (TBL) approach, i.e., evaluating financial, social, and environmental performance. For this reason, companies must undertake social responsibility activities and communicate the results obtained to the stakeholders. B-Corps have a business model capable of combining financial objectives with social and environmental ones. Therefore, this paper considers the B-Corps business model from the standpoint of the new stage of the CSR adoption evolution. Moreover, this paper proves that green finance, as a tool aimed to collect the resources required to tackle climate and environmental issues and help companies manage financial risks, is essential to achieve sustainable development. It seeks to shed light on the conceptualisation of the B-Corp's positive contribution to green finance. Furthermore, the article highlights some key managerial implications within the theoretical framework outlined in the study. Companies must develop new business models to address the sustainable development challenges taking into consideration environmental, social, and governance (ESG) issues in their strategies.

Sustainable Fashion in the Circular Economy Paradigm: Reduce, Recycling and Reuse, the New Sustainable Corporate Strategy

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Keywords: fashion industry, sustainability, circular economy, product innovation, business models, corporate strategy.

Introduction

The fashion industry, one of the worst polluters in the world, is today facing a radical transformation. Fashion companies are today pressed by the need to invest in new technologies and reinvent the manufacturing processes to reduce the environmental impact of their activities and increase consumer safety. At the same time, fashion companies are increasingly focusing on sustainability by investing in product and process innovation to create fashion products that respect the environment and respond to purchase choices dictated by the driver of ethical and emotional aspects. These needs have led to the development of new business strategies geared towards sustainability. Circular fashion is the implementation of sustainability principles within the corporate strategy. The application of circular economy in the fashion industry opens the opportunity to reduce the impact on the natural environment and guide fashion companies in reaching the Sustainable Development Goals fixed in the United Nations Agenda, in particular the Goal no. 12 related to responsible consumption and production.

Objectives

The fashion industry is still far away from representing a circular system, where materials are designed and recycled to generate "additional value" rather than "additional wastes". Many pioneering companies are today exploring the potential related to applying "Circular models" in fashion. In line with these trends, companies in the fashion sector are increasingly interested in using fibres, yarns, and recycled fabrics in developing and producing new products. Unfortunately, it is a slow transition because of regulations, logistics, technical and economic resources and a lack of complete solutions and appropriate infrastructures. The aim of the paper is to analyse emerging trends in the fashion industry, focusing on the growing role of the circular economy in introducing a new business paradigm based on the so-called "3R" principle: reduce, reuse and recycle. The different combinations of the three Rs could be considered as a driver for enhancing differentiation in both the market and the business models, where sustainability is becoming a critical success factor able to drive the company's long-lasting competitiveness and improve brand image and the built of a solid market reputation. The paper aims to develop the notion of corporate sustainability in the fashion industry to highlight sustainable issues faced by companies operating in the market.

Research methods

Six interesting case studies are presented: three focus on fashion companies which are basing their business model on the circular economy's principle: Rifò (re-use of old clothing); Rapanui (old clothes transformation, use of organic cotton and on-time production); Cingomma (re-use and transformation of waste materials); three are related to companies using sustainable materials for producing fashion items: Orange Fiber (use of fruit waste), Ananas Anam (use of ananas fibre), Due di Latte (use of milk fibre).

Results/Conclusions

The transition of the fashion industry from a traditional highly environmental impact model to a circular economy model shifts the focus on reusing, adjusting, renovating and recycling the materials and final products. The careful selection of raw materials and the application of technological innovation in the production system allow companies to implement new sustainable approaches to production, enable them to self-regenerate and permit two reach two main results: on the one hand, to recycle the fashion products for reintegrating them into the environment, on the other, to have products that can be revalued without entering in the environment. In the fashion industry, circular economy models open interesting perspectives for entrepreneurs, which go far beyond sustainability. The application of the "three Rs principles", in particular, can create new market opportunities for start-ups, which enhances waste recovered to be transformed into new raw materials, particularly appreciated by consumers and able to create new niche markets, allowing the companies to rapidly increase brand awareness and reputation.

Biotechnology Sector in Hungary: A Small Fish in the Global Competition?

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Keywords: biotechnology, research and development, intellectual property protection, sustainable growth, competitiveness.

Introduction

The COVID-19 pandemic has spotlighted research and development in biotechnology, so it is reasonable to ask where Hungary is in the global race in this field. The study provides a brief summary of the areas of biotechnology R&D, which is followed by a comparison of the US and Europe, describing the economic significance and development trends of this subsector. The study then analyses the economic characteristics and sustainable growth potential of Hungarian-registered companies with R&D activities in biotechnology and the progress towards development and competitiveness goals set for 2030.

Objectives

Assuming that companies intend to protect their innovations with the tools of intellectual property protection to pursue exploitation, the study comprehensively explores the protection activities (patents, trademarks, design, and utility model protection).

Research methods

No comprehensive database is available of the business and scientific indicators of the subsector, so key performance indicators for the 1991-2020 period are analysed with several methods, relying on several databases (TEÁOR – standard classification of economic activities, the Opten database of companies and the eKutatás (eResearch) database of the Hungarian Intellectual Property Office).

Results/Conclusions

The research reveals that the Hungarian biotech R&D subsector has not changed significantly over the past 10 years: it is still fragmented, with a large number of microenterprises with very few employees and low revenues, established to conduct research as a complementary (ancillary) activity. However, in terms of intellectual property protection, the subsector is quite active as compared to other sectors in Hungary, as the country itself is only moderately innovative. Some biotech companies in the subsector stand out as they have been highly active in industrial property protection and can be considered successful in terms of the innovative output of their activities. These companies are primarily in red biotechnology. Unfortunately, their share in the Hungarian biotechnology R&D subsector is less than 6%.

The Impact of the COVID-19 Pandemic on Changes in the E-Commerce Market

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Keywords: e-commerce, COVID-19, consumer behaviour.

Introduction

The restrictions introduced in the initial period of the COVID-19 pandemic affected almost all areas of consumer life and the economy. Several industries experienced losses during this period (e.g., tourism and catering entities). E-commerce, however, is one of those industries that have benefited from the pandemic. According to Shopper's report *Trade vs coronavirus – how sales moved to the Internet* in the first quarter of 2020, depending on the category of products offered, from 5 to 23% of new stores started operating on the Internet. Consumers also made online purchases more and more frequently. This is confirmed, among others, by Deloitte research conducted in Denmark, Coresight Research in the USA, Polish Chamber of Economy in Poland.

Objectives

The objectives of the article were to define:

1) what e-commerce segments have developed during the COVID-19 pandemic,
2) whether and to what extent the COVID-19 pandemic influenced the start of online shopping by consumers in Poland,
3) whether and to what extent the COVID-19 pandemic influenced the more frequent choice of online purchases by consumers in Poland.

Research methods

The author used data from the survey carried out using the CATI method from July to August 2020 in Poland by a professional research agency – Interactive Research Center (co-authors of the survey: Anna Iwona Piotrowska, Joanna Szalacha-Jarmużek, Marlena

Ciechan-Kujawa). The sample consisted of 1000 adult respondents (18 years and over) and was representative in terms of age, gender, and place of residence. Logit models were estimated to investigate the impact of demographic and COVID-19 factors on consumers' propensity to use remote shopping. The logit model allows for determining what factors, and in what way, influence the studied phenomenon expressed as numbers in a dependent variable.

Results/Conclusions

The study results show that in the first stage of the COVID-19 pandemic, 40% of respondents were more likely to shop online. According to the study, consumers in all age groups declared more frequent online shopping during the COVID-19 pandemic than before. However, these changes were not observed to the same extent in each age group. The COVID-19 pandemic, as a motivation to use e-commerce more frequently had the most substantial impact on younger respondents. People over 50 were the largest group of people who bought online for the first time. It can therefore be concluded that the pandemic was an accelerator of changes, prompting consumers reluctant in terms of average store availability to use on-line shopping.

Acceptance of the Digital Euro (CBDC) By Users Based on the Example of France and Germany

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Keywords: digital euro, CBDC, technology acceptance, logit model.

Introduction

Attempts to offer the users of state money its new form with characteristics similar to cryptocurrencies led to the creation of the Central Bank Digital Currency (CBDC) concept. The justification for the digital issue of money by central banks is the rapidly progressing digitisation of payments. In October 2020, the European Central Bank (ECB) published a report on the fundamental features of the digital euro concept. The article aims to define the relationship between the characteristics of individual users of money as a product of the central bank from France and Germany and their acceptance of using the digital euro. In the study, the data from an empirical survey was used to assess the impact of selected determinants on the willingness of users from Germany and France to use the digital euro potentially issued by the ECB. The study was conducted on a group of adult internet users representative in terms of gender, age and place of residence, including 638 German and 646 French respondents (full responses). The hypotheses presented in the article assume that:

1) the demographic characteristics of German and French consumers have an impact on their readiness to use the digital euro;

2) the use of existing cashless payment methods by German and French consumers has an impact on their readiness to use the digital euro;
3) German and French consumers' trust in banks has an impact on their readiness to use the digital euro.

Research methods

The analysis used data from a survey conducted using the CAWI method. In the study, the logit model was used to assess the impact of selected determinants on the respondents' willingness to accept the digital euro issued by the European Central Bank.

Results/Conclusions

The results show that in both countries, the consumers most willing to accept the digital euro are men rather than women, consumers already taking advantage of the opportunities offered by mobile banking, and consumers who believe that the money entrusted to banks is unsafe.

Should We Assume the Discount Rate as a Risk Factor in a Discounted Cash Flow Valuation Using the Monte Carlo Simulation?

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Keywords: corporate finance, valuation, DCF, risk analysis, Monte Carlo.

Introduction

Financial models implemented in corporate finance are primarily based on the discounted cash flow valuation approach. Some authors indicate that a discount rate could be considered a risk factor. The author of this paper argues that a discount rate expresses an investor's current requirement and should be respectively perceived as a parameter.

Objectives

The paper shows the consequences of taking up an assumption in the Monte Carlo simulation, which would qualify a discount rate as a risk factor.

Research methods

A business valuation case study using the Monte Carlo simulation. Various sets of assumptions are formulated to show the consequences of qualifying the discount rate as a risk factor.

Results/Conclusions

The discount rate as a risk factor with an attributed probability distribution affects a risk variable in a non-linear way. The discount rate as an additional risk factor with an attributed probability distribution increases the volatility of a risk variable. The distribution of a risk variable becomes more flattened then.

Unconditional Basic Income – A Guarantee of Every Woman Emancipation?

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Keywords: UBI, emancipation.

Introduction

Unconditional basic income can be understood as a fundamental democratic right that guarantees every individual's emancipation. It should educate the citizens about the sense of belonging to a community and responsibility for it. The emancipation of individuals is also about gender equality. In western culture, women take up professional activities but less often work full-time, earn less, and work in less prestigious positions. Men in households often play the role of free-riders who do not perform household chores and take advantage of unpaid domestic work performed by women. Women's economic independence is an element of emancipation that can be guaranteed by an unconditional basic income. Not only can women get an income that can keep them safe, but they will also be able to engage more in public and political life as the link between living standards and employment will be weakened.

Objectives

The research aims to identify and classify conditions for implementing an unconditional basic income. The detailed objectives of the study are: to determine the impact of the benefit on women's willingness to work and new professional initiatives and the declarative way of spending funds from the unconditional basic income.

Research methods

A group of 1,000 respondents (Poles) was interviewed for the study. Among them, 52% were women and 48% were men. The sample includes a representative distribution by age and gender. The next step was to verify the dependence of the answers to the questions on the Likert scale, in relation to the gender of the respondents. Chi-square test and *U*-Mann-Whitney test were used.

Results/Conclusions

In this group, a statistically significant relationship was noticed between gender and the propensity to allocate the amount of unconditional basic income for education, new professional initiatives, accumulation of savings, or the possibility of taking care of the family. Gender differences were also apparent in the sense of independence and economic security that a UBI would provide.

Sustainable Financial Reporting amid the COVID-19 Crisis: Experience of the Digital Sector in Poland

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Keywords: earnings management, financial crisis, sustainable accounting, digital sector.

Introduction

Good quality of financial reports is a key to assess corporate future prospects. Sustainable accounting reporting plays a vital role in the process of proper decision making. Reported earnings are closely monitored by stakeholders. Considering the importance of profits, companies sometimes have incentives to influence their level. It is possible because of managers' discretion in the area of reporting process. The informativeness of financial reports is especially important during turbulent periods when there are higher risk and uncertainty levels. The existing evidence on the reporting quality during previous crises like the 2008 global financial crisis or the Asian crisis remains inconclusive. First, academics pointed out that companies may be willing to influence earnings to mitigate the negative consequences of macroeconomic crises. Firms may be inclined to boost their earnings when financial performance is poor. Other studies indicated, quite reversely, that companies reported even more severe losses during a crisis, when many other companies also suffered from negative market downturn to "make savings" so as to inflate earnings in the future. Both mentioned strategies result in a deterioration of earnings informativeness. On the other hand, firms may report more conservatively during a downturn to alleviate information asymmetry. If profit changes are expected by stakeholders during a market downturn, managers may have no incentive to manage earnings aggressively and they will report more sustainably.

Objectives

The purpose of this empirical research is to examine the informativeness of financial reports of IT companies listed on the Warsaw Stock Exchange while the overall economy suffered turbulence induced by the COVID-19 health crisis. The digital sector seems to have unique features as the pandemic evoked significant development in such business models. However, in the same time, the pandemic caused huge negative turmoil in many corporate management areas. Earnings management activities deteriorate the quality of profits. Conservative reporting is in line with the idea of sustainable growth and positively influences the company's ability to meet the needs of all stakeholders in the future.

Research methods

Earnings quality is proxied with cross-sectional models. We examine the evolution of both accrual and real earnings management. Earnings management is estimated with abnormal accruals, abnormal cash flow from operations, abnormal discretionary expenditures and abnormal production costs. Expected accruals are estimated with the Jones model. Three individual measures of real management are standardised and combined into aggregated measures to allow for some general conclusions. Parametric and non-parametric tests are employed to check statistical significance.

Results/Conclusions

This research suggests that Polish IT companies were less inclined to inflate earnings using discretionary accruals during the crisis period. However, they were more eager to implement the "big bath" accrual strategy to have the possibility to inflate future profits. It seems there was a more aggressive aggregated intervention in earnings by changing some real transactions in the pandemic period. Polish IT companies implemented earnings management strategies based more on the probability of being detected, rather than on the cost of such activities.

Investigation of Sustainability and Environmental Performance for Engineering Manufacturing Technologies through Life Cycle Assessment

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Keywords: Life Cycle Assessment, circular economy, plastic product, production stage, material recirculation.

Introduction

According to the European Environment Agency, the practical solutions aimed at a circular economy include eco-design, waste prevention programs, and optimal waste management processes in the whole lifecycle of products. Basically, circular economy (CE) promotes reuse of waste flows and energy streams in industrial systems with reducing raw material and energy inputs. The most economical technologies are more environmentally friendly and more energy efficient. These technologies can improve the economic efficiency, the environmental performance, and the environmental strategy of companies. Nowadays, the more sustainable and more economical technologies are best identified and planed using Life Cycle Assessment (LCA) method. In the context of the sustainable and more economical engineering manufacturing technologies, it is essential to evaluate the complete life cycle of different products. The design of a sustainable lifecycle model with a looping method in the production phase promotes sustainability by maintaining the value of products and minimizing resources and wastes. Over the last years, using of renewable energy and recycled scrap instead of virgin material in the production stage has constantly increased. Plastic technological scrap and process water recirculation can become a good environmental and economic strategy in the production lifecycle stage within the new framework defined by the circular economy. Focusing on economy and environmental performance through Life Cycle Assessment can add a new step to lifecycle analysis and may identify additional goals related to design of the environmental management.

Objectives

This research work assesses the environmental loads of plastic products throughout the products' whole life cycle focusing on the production stage. The life cycle assessment lasted from the raw material extraction to the end of the plastic production process. In the research methodology and in developing the lifecycle model the main questions were as follows: (1) how can we optimize the manufacturing process, (2) which material and waste flows are recirculated in the production stage, and (3) how high are the environmental loads in the examined lifecycle phase? The main aim of this research work was to determine the resources and the main environmental impact indicators.

Research methods

The examined lifecycle of plastic products has been developed from the raw material extraction to the end of the manufacturing process phase based on the Life Cycle Assessment method. The Life Cycle Assessment was employed in accordance with the recommendations provided by the ISO 14040 and 14044 standards. This analysis associated with the production stage of plastic products, from the extraction of raw materials for their manufacturing process until the technological loss and the used process water become plastic scrap and wastewater at the end of the manufacturing stage. This research work consists of the Life Cycle Inventory, the Life Cycle Impact Assessment, and the interpretation and decision-making phase. To find the scientific answers to the questions posed, eight different environmental impact categories and emissions were analysed with the help of GaBi 8.0 LCA software at the University of Miskolc. This research work analyses more scenarios regarding the environmental impacts in the examined production phase. In the first scenario, the manufacturing process is determined without technological loss and wastewater recirculation. In this case, plastic scrap is treated, and the water from the cooling process is managed as wastewater in a municipal wastewater treatment plant. The second and the third scenarios determine the manufacturing process with process water looping and plastic waste recirculation. The system boundary is valid from the cradle to the gate. Auxiliary processing systems such as transporting materials for use, obtaining electric power from a Hungarian production energy mix, using diesel oil for transport of the product, and plastic waste management process are included in this analysis. Considering the effect of the lifecycle of plastic products, the functional unit as the distribution of produced product output in one hour was defined.

Results/Conclusions

The results of this research can be used to develop plastic production processes with lower environmental impacts and lower releases of emissions. These results support the product-oriented environmental management of plastic products. The results of the life cycle analyses presented in this research are expected to contribute to a better understanding of the life cycle of plastic products in the European Union.

Value-Based Treasury and Working Capital Management

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Keywords: treasury management, working capital management, cost of capital.

Introduction

Value-based treasury and working capital management are of particular importance under the conditions of a full operating cycle implemented in an enterprise with the existing risks associated with the failure to implement a timely operating cycle. Enterprise value was created during the implementation of the inventory conversion cycle. Other activities of the enterprise may be aimed at protecting the value created during the inventory conversion cycle. During working capital management, some of the attention is focused on inventory management. Three subcycles can be distinguished in inventory management. The first is related to the accumulation of material stocks and raw materials for production. The second category includes work-in-progress. The third focuses on the finished goods inventory. To implement the inventory conversion cycle, it is necessary to secure adequate amounts and non-risky sources of capital. In this regard, success is guaranteed by appropriate treasury management procedures.

Objectives

This study focuses on a discussion of the treasury management model coupled with working capital management. Financial issues are discussed from the perspective of treasury management and net working capital management within the framework of management science.

Research methods

Based on the literature, a model description of treasure management aimed at the effective value-creating management of net working capital was developed. The model was then tested using empirical data from the financial statements of companies implementing working capital management.

Results/Conclusions

The application of the treasury management model is the best way to increase the efficiency of working capital management. This efficiency is measured in terms of the value creation of the enterprise achieved by managing treasure in such a way as to increase the wealth of owners.

Causes of Sickness Absenteeism in Europe – Analysis from an Intercountry and Gender Perspective

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Keywords: sickness absenteeism, gender inequalities, socioeconomic factors, Europe, regionality, Geographically Weighted Regression.

Introduction

This study aims to extract and explain the territorially varied relation between socio-economic factors and absence rate from work due to own illness or disability in European countries in the years 2006–2020. For this purpose, several causes of absenteeism were identified, separately for men and women.

Objectives

The study was aimed at identifying and explaining the territorially varied relation between socio-economic factors and absence rate from work due to own illness or. The second goal was to identify causes of sickness absenteeism of men and women separately. This approach was associated with significant differentiation in the value of the absence rate in terms of gender, which was confirmed in the literature on the subject. Moreover, the following research questions have been posed: Does the disease spectrum vary in the studied countries? Why and where are the sickness absence percentages higher for men than for women? Do social policy and sick-leave legislation systems influence sickness absence trends? Do work-related factors, such as job satisfaction, affect sickness absenteeism?

Research methods

To explain the absenteeism and emphasise gender and intercountry differences, geographically weighted regression was applied. Spatial data are more complex in their structure than in their time series. Analysed spatial units are often diverse in terms of their size and economic or social potential, as confirmed by this study, where the database consisted of both small and large countries that differed significantly in their levels of absence rate for men and women. The relationships modelled in such cases often vary over geographical space, which causes heteroscedasticity of the random component in OLS (Ordinary Least Squares) regressions. One of the ways to solve this problem is to use the GWR model, which considers spatial heterogeneity and dependency. That is why the GWR model was incorporated into the study.

Results/Conclusions

For men, five main variables influenced sickness absence: body mass index, the average satisfaction rating by job situation, employment in the manufacturing sector, social benefits by sickness/health care, and performing health-enhancing physical activity. For women, five main variables increased the absence rate: the risk of poverty or social exclusion, long-standing illness or health problems, employment in the manufacturing sector, social protection benefits, and deaths due to pneumonia. The research proved that the sickness absence observed in the analysed countries was highly gender and spatially diverged. Understanding the multifactorial factors playing an important role in the occurrence of regional and gender-divergent sickness absence may be a good predictor of subsequent morbidity and mortality as well as be very useful to better prevent this outcome.

Sustainable Development Promotion through the Regulations of the Polish Investment Zone

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Keywords: Polish Investment Zone, sustainable development, special economic zones.

Introduction

It has scientifically been recognized that the Polish Special Economic Zones (SEZs), although established as early as in 1994, did not expand in a sustainable way and actually failed to develop poorly industrialized areas of Poland. Some researchers (i.e. Ambroziak, Golik, Kątnik-Prokop) underline that subzones were often created near already developed urban and industrial centers; the biggest investment expenditures were incurred by companies in western and central Poland.

Objectives

The author analyzed recent legislative change in modus operandi of the SEZs introduced by new legal regulations in 2018 and a shift of the paradigm towards a more sustainable development of Poland. The paper presents the detailed criteria for companies interested into the tax exemptions, i.e., (1) sustainable economic development, and (2) sustainable social development, listed in the Regulation of the Council of Ministers dated 28th of August 2018 on state aid granted to certain entrepreneurs for the implementation of new investments. The criteria for sustainable economic development are as follows:

1) investment in projects supporting industries in line with the current development policy of Poland where the country may gain a competitive advantage (including investments within strategic sectors consistent with the Responsible Development Strategy);
2) professional activation through creating or commissioning the creation and running of an on-site nursery or kindergarten (or covering 80% of the costs related to the stay in a nursery; alternatively employing at least 10% of people a disability certificate);

3) establishing regional links (i.e. cooperation with suppliers and cooperators operating in the sub-region NUTS 3 of the new investment);
4) robotization and automation of processes carried out as part of the new investment;
5) belonging to the National Key Cluster selected in a competition organized by the minister responsible for economy;
6) conducting research and development activities, where 1% of the entrepreneur's costs in a given tax year are the costs of research and development activities, or purchase of research and development services classified as services in the field of scientific research and development works; alternatively, conducting R&D activities through employing persons who conduct development works as part of the new investment;
7) a new investment in renewable energy sources;
8) holding, as at the date of submitting the application for a decision to support, the status of a microentrepreneur, small entrepreneur or medium-sized entrepreneur.

The criteria for sustainable social development are as follows:

1) creation of specialized jobs in order to conduct business activities covered by the new investment and offering firm employment, covering the employment of at least 80% of employees with higher education, technical or vocational secondary education confirmed by a diploma, certificate or other document authorizing to practice, and on the basis of an employment contract;
2) running a business with a low negative impact on the environment confirmed by a certificate (e.g., EMAS, ETV or ISO 14001);
3) location of the investment in a medium-sized city losing its socio-economic functions (i.e., 139 towns in Poland listed in the Regulation of the Council of Ministers dated 28th of December 2021 amending the regulation on state aid granted to certain entrepreneurs for the implementation of new investments);
4) supporting the acquisition of education and professional qualifications and cooperation with industry schools (i.e. training courses, co-financing the costs of education, cooperation with technical schools, offering extracurricular educational activities, creating a sponsorship class or laboratory, conducting an implementation doctorate by an employee);
5) taking actions in the field of employees' care, in particular offering: participation in additional health care programs going beyond the benefits financed or co-financed from the employee benefits fund required by law; additional employee benefits in the field of various forms of recreation, cultural and educational activities, sports and recreation activities, insurance, health care programs.

Research methods

The desk research exposes the key notions of the legislative changes introduced in Poland by the Act on supporting new investments dated 10th of May 2018. By the mentioned

Act there was established Polish Investment Zone (PIZ) – a legal instrument allowing to benefit from public aid throughout a whole Poland.

Results/Conclusions

The legal changes of the Polish Investment Zone expose the reorientation of the Polish economic policy towards intensified promotion of sustainable development through a set of criteria to be met by the companies which benefit from public aid. The author describes a completely new approach to, e.g., conducting R&D activities, projects of a low negative impact on the environment or the ones located in towns of a high unemployment rate, among other factors.

Sustainable Development and Competitiveness of the Regions as Complementary Phenomena

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Keywords: sustainable development; competitiveness; regions; regional development.

Introduction

In the literature on the subject, the phenomena of regional competitiveness and sustainable development of regions are usually considered separately. The essence of sustainable development consists in treating the economic, social and environmental spheres on an equal level. Achieving sustainable development at the regional level in Poland is still a great challenge due to the observed disparities between regions. Actions aimed at achieving sustainable development of regions assume the necessity to strive for a balance between actions in each of the above-mentioned areas of regional functioning. On the other hand, the differences in productivity and innovation in regions (influencing regional inequalities) that largely determine the competitiveness of regions are observed. In the literature on the subject, among the main determinants of the region's development, besides entrepreneurship, the phenomenon of competitiveness is also mentioned. In practice, there are two most common approaches to building the potential of regions and regional development, which some authors consider mutually exclusive: the need to increase competitiveness, and the pursuit of sustainable development.

Objectives

The aims of the article are to present both issues (competitiveness of regions and its relations with the sustainable development of regions) – mentioned as alternative development paths leading to increased prosperity and development of the region – and to show that these two phenomena do not have to be mutually exclusive.

Research methods

To achieve the purpose of the presentation, the author used the method of analysis and criticism of the literature. Various views presented in domestic and foreign publications in the research area were analysed.

Results/Conclusions

The conducted analyses indicate the need to explore the subject, but the most important conclusions include: (1) sustainable development is a multidimensional process that ultimately leads to an improvement in the quality of life of the region's community, which also occurs as a result of competitiveness; (2) the SDGs are closely related to the multi-dimensional definition of competitiveness; (3) the competitiveness of regions takes various forms, and the constantly occurring economic, social and cultural changes mean that regions have to deal with the effects of disparities, which does not mean that the competitiveness of the region does not have a positive impact on the sustainability of regions in general. There is a need to expand the discussion on a new category which is "sustainable competitiveness". If we understand the competitiveness (of enterprises as well as of regions) as the ability to effectively compete with other "players" on the market, then sustainable competitiveness will focus not only on the present moment, but on the long-term perspective. In this perspective, development itself will not be competitive, while sustainable development will be. In the context of the economy, this will mean maintaining or increasing the ability to provide income in relation to the present and the future.

Delivering and Co-Producing Public Services (at the Local Level): Political and Fiscal Challenges

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Keywords: public services, state-owned enterprises, privatisation, in-sourcing, accountability.

Introduction

The period after The Second World War was related to the strong interventionist approaches undertaken, contributing to the extension of the boundaries of state ownership. These processes continued after World War II, the outcome being the expansion of the public sector. However, the deteriorating economic conditions of the 1970s and the emergence of the New Public Management ideology of the 1980s contributed to the expansion of the privatisation cycle that peaked during the 1990s. At that time, privatisations were carried out in developed industrialised countries, in transition post-socialist countries, as well as in countries of the so-called third world, with the latter two groups of countries' privatisations aiming, in addition to economic and managerial reasons, at promotion of democracy, equality, justice and social modernisation through privatisation.

Objectives

This contribution aimed at portraying the privatisation framework by focusing on contextual factors, indicating that privatisation processes were neither linear nor proportional, and the actual starting point of the privatisation processes being the operation of state-owned enterprises. Structural reasons dictated the existence of state ownership as well as their possibility to contribute to the implantation of the function of being "the employer of last resort". An essential input element for advocating privatisation was the demonstrated lower production efficiency of state-owned enterprises due to the lack of accountability.

Research methods

The methodological approach builds on the elaboration of potential advantages and weaknesses of privatisation. The potential advantages include increased efficiency, reduction of public sector indebtedness, reduction of the role of the state, mitigation of public sector problems in wage setting, diversification of ownership and expansion of shareholding, promotion of employee shareholding and reducing the potential for political influence among others, where potential conflicts among these goals need to be mentioned. In contrast, potential weaknesses of privatisation include deficient investment legislation, marginalisation of the poor in case of rising prices of privatised activities, imperfect competition and the emergence of real private monopolies, cessation of the possibility of implementing public subsidies, the emergence of the so-called deficit contracts, corruption, weakening of democracy and participation. The analysis of privatisation processes and their outcomes derives from the property rights and public choice approaches.

Results/Conclusions

The results indicate that privatisation goals might not be achievable, mainly related to the issues of service availability and regulatory capacity. It has led to the partial slowdown of privatisation processes after 2000 due to the sometimes-observed problematic experiences with moral hazard and opportunistic behaviour of agents, the emergence of off-balance sheet borrowing, and limited evidence of potential cost savings, in particular in smaller units of governance. Alternative production mechanisms were put forward, either following the preferences of bureaucrats or pointing towards the limitation of transaction costs, etc. These mechanisms included inter-municipal cooperation, but in-sourcing trends were observed, profoundly associated with the emerging era of the New Public Governance paradigm of the 2010s. Thus, we can conclude that street-level evidence points to the existence of outsourcing-insourcing cycles.

The EU Crowdfunding Regulation and Polish Crowdfunding Act – Towards More Sustainable ESG Investing?

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Keywords: crowdfunding, ESG investing, sustainable finance, the EU Crowdfunding Regulation.

Introduction

Available data show that sustainable projects have high success rates in crowdfunding. Legal regulation on sustainable crowdfunding stimulates ESG investing and, consequently, promotes sustainable development, yet the exact size of this impact remains unexplored 2021,). Currently, together with the entry into force of the Regulation (EU) 2020/1503 on European crowdfunding service providers for business ("Crowdfunding Regulation"), the EU-wide rules on crowdfunding service providers have been established. It opens the question of whether and to what extent these rules promote sustainable ESG investing.

Objectives

The purpose of the study is to find an answer to the question of whether Crowdfunding Regulation can contribute to the achievement of the EU goals within the sphere of sustainable ESG investing.

Research methods

The research methods used within the study are a formal-dogmatic method which involves an in-depth analysis of legal provisions of the EU legislation, as well as comparative methods in legal research, including the law in-context method and functional method.

Results/Conclusions

Primary observations reveal that much more can be done to foster ESG investing with sustainable crowdfunding within the sphere of EU law. Within the study, I discuss possible improvements within the sphere of European legislation on sustainable crowdfunding. The conclusions of the study are as follows.

1. Crowdfunding Regulation facilitates sustainable (and specifically ESG) investing as it generally facilitates crowdfunding.
2. Crowdfunding Regulation could be modified so as to introduce the European "sustainability label" for crowdfunding service providers that specialise in sustainable (ESG) investing. The European "sustainability label" could function in the form of a certificate of sustainability attached to crowdfunding service providers by competent national authorities after a detailed analysis of the rules of functioning adopted by these persons, which should specify criteria for qualification of crowdfunding projects as sustainable, transparency obligations with regard to sustainable crowdfunding projects, as well as provisions on independent reviews of operations of sustainable crowdfunding services providers (e.g., with regard to the selection of crowdfunding projects) conducted by independent external reviewers.
3. Crowdfunding Regulation could be modified so as to introduce the European "sustainability standard" for sustainable crowdfunding projects, which could be comparable to the newly introduced European green bonds standard. The European "sustainability standard" would be applied only to these crowdfunding projects that facilitate the financing of sustainable projects that are aligned with the EU Taxonomy and require that the proceeds from financed projects are allocated only to sustainable activities alligned with the EU Taxonomy.
4. The attainment and management of the European "sustainability label" and "sustainability standard" should be subject to far-reaching transparency and supervisory obligations imposed on project owners, including independent reviews of external reviewers, to secure their positive impact on sustainable ESG investing.

Carbon Border Adjustment Mechanism as a Fiscal Measure Complementing the EU ETS

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Keywords: Carbon Border Adjustment Mechanism, CBAM, EU climate policy, emissions trading.

Introduction

The contribution discusses the Carbon Border Adjustment Mechanism (CBAM), an instrument within the scope of the EU climate policy currently projected to be implemented to complement the EU emissions trading system and avoid the danger of carbon leakage. Whereas at present, the risk of carbon leakage is managed mainly through the allocation of free carbon allowances, that solution is deemed to be provisional only since the dynamic orientation of the EU ETS assumes phasing out of a gratuitous allocation of allowances and the inevitable duty to buy carbon allowances or decrease emissions in the future, in order to ensure a more significant ecological effect in terms of reducing greenhouse gas emissions and mitigation of climate changes. However, there arises the necessity to secure the competitiveness of the European industry against entities from outside the EU, not encumbered at all (or not encumbered to such an extent) by the costs of climate policies. CBAM is intended to be the solution, but there appears the question of how its projected construction may affect its effectiveness and how the optimal mechanism should actually look like, also in terms of economic efficiency. Several issues should be discussed, i.e. in particular, how phasing out of a free allocation of carbon allowances should be performed; how the gradual path of CBAM implementation should be shaped; which emissions (direct/indirect) should be covered by CBAM; which products should be included in CBAM; which actions may exempt a given country from the scope of application of CBAM; which exemptions from the scope of application of CBAM should be provided; what encumbrances imposed by CBAM should be in terms of monetary values.

Objectives

The purpose of the contribution is to examine, based on the intended construction of CBAM, whether it has the chance to achieve its projected objectives, consisting mainly in precluding the risk of carbon leakage.

Research methods

The contribution is based on the use of the dogmatic method, i.e., the analysis of texts of the proposal for a regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism and related legal texts (including also the EU ETS directive provisions of measures aimed at preventing carbon leakage), but also the sociologic method with the particular focus on economic analysis of law (within the scope of effects to be achieved by the application of CBAM).

Results/Conclusions

Contrary to free allocation of carbon allowances and compensations for indirect (i.e., related to higher energy prices) costs of emissions, currently applied as measures preventing carbon leakage, CBAM in any form considered by the European Commission will act as a factor contributing to increase of prices of commodities, which may not be the best idea in current factual circumstances and already high inflation rate.

While the effectiveness of CBAM, construed as the degree of achievement of the ecological goal, is undoubtedly significant, one should not overlook the problem of economic efficiency of CBAM, based on relations between input (costs) and output (effects) of CBAM; environmental and economic concerns should be balanced and taken into consideration when deciding whether to apply CBAM and, if that decision is affirmative, how that instrument should be shaped.

In terms of environmental effectiveness, it would be desirable to replace promptly and fully the present measures aimed at preventing carbon leakage with CBAM, which should cover any form of greenhouse gas emissions related, directly or indirectly, to the manufacturing of a given product; in such terms, CBAM should have relatively broad scope without any exceptions as to products of sectors covered by the EU ETS; CBAM would be the most effective when based on actual (not any default) emissions related to manufacturing of a given product and calculated based on then-current prices of carbon allowances on the EU market.

However, in terms of economic efficiency, the idea of CBAM raises concerns as being an additional price signal entailing an increase in the prices of commodities. At the same time, the EU grapples with highly unfavourable circumstances causing already increased inflation and difficulties in implementing climate policy requiring departing from fossil fuels. It is highly dubious whether it is the right moment to implement CBAM, and if CBAM is to be implemented now, the process should be slow and gradual, and the measures applied up to now should not be suddenly abandoned.

The Future of Cities as Smart Inclusive Communities

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Keywords: inclusive cities, smart cities, smart communities.

Introduction

Cities of tomorrow as smart communities use information and communication technologies to drive innovation and promote sustainable and inclusive urban growth, improving the quality of life, and developing the city of the future as inclusive and smart community driving sustainable urban development, strengthening a collaborative and participatory space of action. Cities select a pathway for promoting a smart city vision to smart inclusive community. Cities are rethinking the urban future, following a smart city view towards urban development to drive inclusive urban growth and improve the quality of life, shaping the city as an inclusive community and engine of sustainable growth. A smart city helps shape the city of the future, using the potential of information technology to serve both economic and social life, and transform the urban community in a significant way. Inclusive cities protect the value of a city, thus enhancing community development. Smart inclusive cities help support sustainable urban development, strengthening collaborative and open frameworks within urban communities. Currently, several European cities are selecting a smart city vision to develop the city as an open, innovation-led, socially inclusive community.

Objectives

Although many studies focus on the role of smart and sustainable transformation, few studies investigate how cities rethink their sustainable future in terms of smart and inclusive development. Smart city strategy, planning and policies contribute to shaping the city as socially inclusive urban community. Which urban future development do cities aim to achieve? How are cities interpreting the smart vision and approach to urban social growth by planning the smart and sustainable urban community? The research question refers to how cities are rethinking and planning the urban future by adopting a smart view to drive urban development and innovation to shape the city as a socially inclusive urban community. The study aims to elucidate how cities are rethinking their urban future, following a smart vision to drive the city as a smart and inclusive community and an engine of sustainable development, social growth and innovation. Cities are planning an urban inclusive future, selecting a smart city vision, to track a pathway for building an open, inclusive and socially innovative city.

Research methods

The study relies on considering case studies concerning smart city planning that refers to European cities and on a review of contributions that refer to understanding the concept of an inclusive city, smart city and smart community. The author employed a qualitative, descriptive and exploratory methodology to analyse how cities are rethinking their future development as inclusive, smart and sustainable communities. While cities are planning to transform urban environments into smart cities as an urban policy priority, they are rediscovering the smart city as an opportunity to drive the city to become a smart and inclusive community. European cities are rethinking the urban future, employing ICT to shape smart, sustainable and inclusive urban communities. The study follows a multiple case study methodology. The research methods involved case selection and data collection from policy documents. In particular, smart city strategy framework (Paris Smart and Sustainable Looking ahead to 2020 and beyond and Wien Smart City Strategy Framework) adopted by the municipalities of Paris and Wien are considered.

Results/Conclusions

The cities of tomorrow are planning their future as well as smart inclusive urban communities, and developing the potential of ICT to promote inclusive social urban growth, improving the quality of life, and following a smart city framework to improve the well-being of urban communities to identify a pathway to future urban development. Smart inclusive cities contribute to a high quality of life, and achieve urban sustainability, making cities as collaborative open spaces and the loci of innovation that are driving pathways of urban and social inclusion. Smart, open and inclusive cities support continuous urban development and innovation, making wealthy urban communities, and empowering citizens who are involved in policies and services co-production, and ensuring a better quality of life.

Local Budgetary Policy of Polish Municipalities and its Impact on New Businesses Formation in Medical, Creative and Agri-Food Sectors

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Keywords: local development, budget policy, municipalities, new business formation.

Introduction

The added value of the article is that the research conducted so far in the field of entrepreneurship mainly covers individual sectors or does not consider the sectoral assignment of newly created economic entities. The study presented in the article combines budgetary policies as a support for entrepreneurship in each of the three analysed sectors and, at the same time, indicates the factors determining the effectiveness of LGUs policies in relation to each of these sectors of the economy separately.

Objectives

The article examines the impact of the budget policy of local government units at the municipal level in Poland on new business formation in the medical, agri-food and creative sectors. The article will help to answer the question of what factors contribute to the faster development of new enterprises.

Research methods

The study was conducted employing an econometric panel model. In particular, the study was based on pooled estimation modelling based on 2244 communes. Thus, the study covered the population of local self-government units in Poland.

Results/Conclusions

The research showed that the budget policy of communes influences new business formation. Individual elements of the municipal budget policy have different impacts on each economic activity. From the perspective of the creative sector, local authorities should emphasise improving education level and spending investment expenditures to obtain a higher rate of new business formation. In turn, local policymakers can support the agri-food sector using a tool such as a planned development area. Supporting the development of the planned area at a local level will positively affect the rate of new business formation. As the representatives of the medical sector claim, local authorities should pay attention to the grants which are vital factor determinants for this type of sector.

The Scope of Application and Effectiveness of Entrepreneurship Support Instruments Used by Local Governments in Poland and Latvia

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Keywords: local entrepreneurship, municipal entrepreneurship, local development, local government support.

Introduction

The main area of local government (municipalities) activity is the implementation of public tasks, including creating appropriate living conditions and organising the proper functioning and development of the economy. Municipalities play a significant role in this, particularly when it comes to creating basic infrastructure. Local authorities are using a wide range of tools, procedures and financing sources to directly or indirectly influence the local socio-economic situation. Municipal entrepreneurship was discussed as early as 1956 through the "Tiebout Model". The model asserts that local governments compete with each other in order to convey more taxpayers into their jurisdiction by offering packages of local public goods at competitive tax-prices. This article focuses on the concept of entrepreneurship, interpreted as a socially conditioned process of creating opportunities for creating wealth and its creative use by transforming financial, material and social capital innovatively.

Objectives

H1: Municipal self-government's activities contribute differently to the development of local entrepreneurship in Poland and Latvia.
H2: Financial and non-financial instruments used in Poland and Latvia differ in their effectiveness in supporting entrepreneurship.

Research methods

The authors aimed to verify the interactions between supporting entrepreneurship at the local level and the dynamics of entrepreneurship observed in Polish and Latvian municipalities. We drew on the data of 36% of the total population of municipalities in Poland and the entire population of Latvian local government units (LGUs) at the local level. To assess the effectiveness of analogous solutions used in both countries and their consequences in the form of entrepreneurship dynamics, we used the *C*-Pearson contingency coefficient, the chi-square test of independence, the Sokal and Michner formula, and the tau-Kendall coefficient.

Results/Conclusions

The conclusions of our original research show that the activities of local governments in the form of financial and non-financial instruments for supporting entrepreneurship do not contribute to the development of local entrepreneurship in Poland and Latvia. They also indicate differences in the level of this relationship, which can be interpreted as their effectiveness. Such conclusions are consistent with the idea of broadly understood territorial capital which is influenced by a number of factors, both internal and external.

Transfer Pricing Safe Harbours for Financial Transactions – Challenges and Possibilities

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Keywords: financial transactions, European Union, safe harbours, transfer pricing.

Introduction

The OECD project against BEPS has brought and initiated many changes, among others, in the OECD Transfer Pricing Guidelines. To react and respond to changes in the current business environment, a new chapter for transfer pricing in financial transactions has been introduced (chapter X). This step can be considered beneficial. However, meeting all the requirements for setting a transfer price for financial transactions seems to be very demanding and expensive. Furthermore, the guidelines provided in the OECD Transfer Pricing Guidelines have generally not provided responses to all potential problems and circumstances – only fundamental ideas and principles. Then, applying a simplified procedure for setting a transfer price (even for financial transactions) can be viewed as desirable both for the tax-payers and tax authorities. The aim of the conference paper is linked to this idea – the aim is to present the results of a comparative study dealing with the rules for safe harbours for financial transactions as established in EU Member Countries and Great Britain (EU 28) and present a proposal of the concept of a safe harbour for financial transactions while focusing on intragroup loans.

Objectives

The aim of the paper is, based on the synthesis of existing safe harbour rules for loans, to provide a summary of existing concepts and present a taxonomy of the criteria as deduced for establishing a safe harbour for loans. The paper thus contributes to existing comparative analyses of transfer pricing rules and is a point of departure for further research into guidelines that may be applicable when setting a safe harbour.

Research methods

The comparative study carried out is based on qualitative research. The authors based their considerations and assessment on the OECD standards as a background for related comparison, expert literature and information provided by the IBFD database covering rules for safe harbours/preferential regimes for financial transactions in the EU 28. The selection of this group of countries is not random – the EU countries are, as a rule, OECD member countries and are (with except for Great Britain) obliged by the EU law. The latter stated then eliminates the existence of the concept being contrary to the EU law. The method for gathering the information and data was a content analysis of the text.

Results/Conclusions

Generally speaking, it can be concluded that the existence of safe harbours/preferential regimes for financial transactions is a minor concept adopted in the domestic law of the EU 28. If this concept is accepted, there is a significant variety in the rules established for this area. This conclusion also remains valid for the comparative analysis of the explicit rules for setting transfer prices for financial transactions. Considering the standards/rules established by the OECD and being inspired by the relevant rules in the EU 28 domestic law, the authors elaborated (created) a potential general concept of safe harbours for financial transactions in line with the aforementioned rules, what is not always the case ofthe EU 28 countries.

Two Years after the Outbreak of the Pandemic: A Look at the Recovery Policies and the Sustainable Development Goals

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Keywords: United Nations General Assembly, Sustainable Development Goals, Agenda 2030, Covid-19, recovery policies, SDGs, pandemic.

Introduction

The 17 Sustainable Development Goals (SDGs), adopted by the United Nations General Assembly in 2015, were set out in Resolution 70/1, "Transforming our world: the 2030 Agenda for Sustainable Development", adopted unanimously by the 193 member countries. The deadline for achieving these goals is ambitious and is set at 15 years. However, the achievement of this deadline is hampered by the advent of the Covid-19, the effects of which threaten to make it difficult to achieve the goals and commitments of the 2030 Agenda. Despite the slowdown in the process of achieving the SDGs, the effects of the pandemic can hopefully provide an incentive for a radical and urgent paradigm shift for the rapid implementation of international and European policies that have the 2030 Agenda as a key guideline to remedy the damaging effects of the pandemic crisis and to achieve an inclusive, resilient and sustainable restoration that involves all of society and leaves no one behind.

Objectives

Two years after the start of the pandemic, the authors investigated, without any claim to comprehensiveness, the implications of the pandemic emergency on the Sustainable Development Goals and the economic and social policies for the pursuit of the 2030 Agenda, knowing that the entire understanding of the effects of the current global crisis will require future in-depth analysis. Finally, the analysis focused on how economic, social policies of states reduce the impact of the negative repercussions, in the social, economic and environmental, generated by the recession due to Covid.

Research methods

The research methodology is based on the content analysis of documentation and published reports about the effects of Covid-19 on the "17 SDGs" two years after the outbreak of the pandemic and future recovery policies; more specifically, an attempt was made to conduct the analysis through a concise treatment of each SDG. Specifically, all of the SDGs were analysed. Sustainable Development Goals and information found from official documents published both at the global and national levels. The analysis at the international level was based on the various reports published by the United Nationsand for the European countries, data were sourced from reports published by institutional organisations. This documentation was analysed using content analysis techniques that allowed for a thorough reading of the text's corpus and highlight and extrapolate the data necessary for this analysis.

Results/Conclusions

The environmental, economic and social transition called for by Agenda 2030 is clearly in danger of finding the current pandemic framework an obstructive factor that is difficult to overcome. Suffice it to think, in this regard, of the physiological slowdown that Covid-19 – related emergency conditions – health, human and socio-economic – bring about on the path of integrating the SDGs into governments' policies. In particular, the future vision of sustainability-related state choices risks giving way to contingent needs, resulting in diverting the tension for sustainable development, the prodromes of which were already evident at the international level, to short-term emergency policies.

The socio-economic effects of the crisis, materialising in an extension of the global population in poverty and an increase in inequality, translate first and foremost into an obstacle to achieving the goal of ending all forms of poverty in the world, also reverberating negatively on the critical issues related to food security, collective health and well-being, employment, and wage inequality.

The effects of the pandemic on the 2030 Agenda goals can be interpreted in two ways: while, on the one hand, they undoubtedly seem to slow down the process aimed at achieving the SDGs, on the other, they may constitute, by highlighting the need for a radical and urgent change of paradigm, an essential stimulus, fueled not only by creased awareness about the value of sustainability but by an understanding that policies for the pursuit of the SDGs can be an antidote to the setbacks of the pandemic crisis and a long-term remedy term for its adverse effects. The projection of future recovery policies will therefore have to have a sustainable approach, such that they can generate modern capitalist systems based on economic strategies that take into account "value creation" and rethought intending to preserve our planet and the people who live on it.

A paradigmatic example of the latter trend is, in the European context, the Next Generation Eu, the concrete implementation of which, if able to hold true to genetic auspices, can only be a cornerstone of the Union's path in achieving the Agenda 2030 goals, coinciding with the path, however, paved with complexity, toward overcoming the Covid-19 crisis.

Strong ESG Risk Management as a Way to Improve Organisational Resilience in Times of Crisis: An Analysis of WIG-ESG Index Constituents

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Keywords: ESG risk ratings, organisational resilience, sustainable investing, ESG equity indices, WIG-ESG.

Introduction

During the last decade, sustainable investment practices have evolved substantially. Companies have been increasingly disclosing ESG-related information as EU and national regulations force them to do so, and stakeholders increasingly demand more information. Therefore, ESG reporting is moving seamlessly from voluntary to mandatory. In 2018, Polish-listed companies were required to disclose such information for the first time due to EU Directive 2014/95/EU and the amendment of the domestic Accounting Act. The first index of responsible companies available on the Warsaw Stock Exchange was Respect Index (which existed in the market for 10 years) which included companies that were most compliant with corporate governance, information governance and investor relations requirements. Due to the rapidly developing market of socially responsible investing, the Respect Index has been replaced by the WIG-ESG index since January 2020. By investing in companies that score high in ESG rankings, investors hope for the organisation's resilience to the crisis and higher returns. Due to the dynamic development of socially responsible investing in Poland and worldwide, new indices using ESG screening criteria are being designed, which are the underlying instrument for structured products.

Objectives

The aim of the study was to analyse the constituents of the newly created WIG-ESG index and to discuss its performance and organisational resilience in relation to ESG risk exposure and management. The WIG-ESG comprises all the largest companies with the highest liquidity listed on the WSE (WIG 20) and 40 medium-sized companies (mWIG 40).

Weighting of WIG-ESG constituents is based on free-float shares adjusted for ESG ratings provided by Sustainalytics and an assessment of compliance with WSE set of corporate governance principles.

Research methods

The article discusses how ESG indices are constructed on major European stock exchanges in relation to the Polish WIG-ESG index and its precursor Respect Index. The WIG-ESG index constituents were also a subject to analysis in terms of ESG performance, financial performance and enterprise resilience. Trends in indebtedness, profit generation and share price change in 2019 and 2020 were verified.

Results/Conclusions

Some companies put effort into managing ESG factors because of a desire to increase ratings, while others know that ESG considerations are likely to be at the heart of mainstream investing and make long-term decisions with them in mind. The research showed that the criteria for inclusion in the WIG-ESG index should be amended to recognise companies that care about strong ESG risk management and exclude those with negligible ESG efforts. As global practices indicate, ESG ratings are always considered as a criterion for inclusion in the index, and companies whose ratings deteriorate are excluded. The second important issue is eligibility for inclusion. Suppose all listed companies are eligible to be included in the index (ESG testing as a condition for inclusion). In that case, this will reduce the rotation of the index's constituents and enable researchers to examine the relationship between a company's ESG score after each update and its long-term performance.

Financing of the Preserving Ecosystems in Ukraine: Political and Managerial Aspects

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Introduction

Preservation of the NPF has been a priority of sustainable development and public policies. Ukraine has had a deep interest in preserving reserves, national nature parks and other categories of nature-protected funds and has had cooperated internationally for many years. The effectiveness of ecosystem conservation depends on the economic and financial instruments of public policy. Developed countries of the world annually invest significant financial resources into the ecosystem conservation, nature-protected fund (NPF), maintenance of biodiversity. This is especially difficult to do for countries with limited financial resources and budgets, such as Ukraine. The Government of Ukraine should focus more on the development of NPF for higher economic development.

Objectives

The main objectives of this work were to develop an efficient system of preserving ecosystems, in particular to implement international experience and improve Ukraine's sociocultural development level. The article analysis state budget financing of ecosystems conservation in Ukraine, interdependence of the financing of nature-protected fund and a success business with the assessment of other factors – financial, organization and political; a set of measures to stimulate the development of ecosystems conservation and innovative financing instruments (green loans, green bonds, sustainability linked loans, vouchers, obligations, public-private partnership) in accordance with the concept of sustainable development has been developed.

Research methods

General scientific methods were used: systematisation – to analyse the economic and legal principles of preserving ecosystems in Ukraine and European countries; cause and consequences – to study the financial crisis for the preserving ecosystems. The few special methods were applied – a method of cybernetic planning, as a tool of economic--ecological management of protected areas, allows to assess in advance the resource potential of protected objects, to analyze the market of services provided in the relevant region and to determine the most likely risks for private entrepreneurs who have aims to carry out ecologically oriented economic activity; benefits and costs analysis – to assess the economic efficiency on the implementation best foreign practices for optimization financing of ecosystems preservation in Ukraine; to choose the optimal mechanisms of state regulation scenario of development of NPF of the state – we have used the method of analysis of hierarchies. Factors such as the budget financing in nature-protected fund, the financing of innovative instruments in the dynamics were taken into account.

Results/Conclusions

Using financial incentives, payments for ecosystem services are a form of conservation finance that rewards people for maintaining these ecosystem services. In order to facilitate these transactions, the service provider must clearly define the service and secure an ecosystem which needs those particular resources. The European Union has an important positive experience of implementation of innovative financing mechanisms of ecosystem conservation for Ukraine's economy. Governments can raise funds through issuing sovereign debt for ecosystems conservation purposes. This could then be counted as part of domestic budgets and tax policy; however, it is assumed that municipal and sovereign bonds are issued for specific projects and assets rather than to bolster government coffers, thereby mitigating the risk of double counting. That is why state budget financing of ecosystems conservation in Ukraine must be strengthened by interdependence of the financing of nature-protected fund and a success business with the assessment of other factors – financial, organization and political. To stimulate the financial development of ecosystems conservation in Ukraine the authors recommend by such innovative instruments as green bonds, sustainability linked loans, green obligations, public-private partnership, vouching agreements, green loans, cybernetic planning and blockchain biodiversity technologies in accordance with the concept of sustainable development. An increase in private investment will also be beneficial for the conservation of ecosystem biodiversity.

An Analysis of Current and Capital Expenditures on R&D between Polish NUTS 2 Regions

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Keywords: current expenditures on R&D, capital expenditures on R&D, Polish NUTS 2 regions.

Introduction

Since Research and Development (R&D) activities are regarded as an important driver of knowledge transfer and firms' innovation activities, R&D expenditures of firms and universities are of particular importance. This is related to strong interactions between innovation activities of firms and competitiveness of regions and countries. In this regard, special attention is put on current and capital expenditures of R&D as essential for innovation processes.

Objectives

The purpose of this article was to examine how current and capital expenditures on R&D differ in firms and universities at NUTS-2 level in Poland.

Research methods

The research concerned the years 2004–2020 and was based on data from Statistics Poland, Local Bank Data. The author used the zero unitarization method and multivariate analysis. These methods allow for analysing how current and capital expenditures on R&D incurred by firms and universities differ in Poland at NUTS 2 level.

Results/Conclusions

The findings of the research indicate a relatively high differentiation among regions at NUTS 2 level in Poland in respect of current and capital expenditures on R&D in firms and universities. The highest differentiations can be observed between Lessser Poland Voivodship, Masovian Voivodship and Lubusz Voivodship, Opole Voivodship and Świętokrzyskie Voivodship. The results revealed that Lessser Poland Voivodship, Masovian Voivodship were distinguished by the highest level of current and capital expenditures on R& in firms and universities with respect to other Polish regions at NUTS 2 level. As a practical and policy implication, there is a need to strengthen R&D activity and cooperation in this area between firms and universities in order to increase firms' innovation activities and, consequently, competitiveness of firms and regions.

Reaching the Value of Early-Stage Ventures on the Business Angels Market

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Keywords: business angels, early-stage venture, valuation, entrepreneurs.

Introduction

Despite increasing recognition of business angels importance in the entrepreneurial finance ecosystem, the question of how valuation of early-stage ventures is approached by business angels has been largely unexplored. This is problematic, because usually such ventures operate when uncertainty is extremely high, often lack a track record and do not generate any revenue, thus making standard valuation methods inapplicable. Under such adverse circumstances business angels need to decide how much to invest and for how much the equity of the investee venture, which entails setting the value to the venture. That comes with further challenges as usually there are no comparable ventures against which the valuation can be referred.

Objectives

Although the valuation is critical both to angels and entrepreneurs as it determines returns from the investment, influences entrepreneurial motivation and shapes control structure in investee venture, until recently only a few studies could provide empirical evidence on this topic. While scholars so far have focused their efforts on inquiring how the characteristics of angels, entrepreneurs, and ventures matter in the valuation, this paper is positioned differently and aimed to recognise the mechanisms that drive business angels to reach the value of early-stage venture.

Research methods

Data were obtained from semi-structured interviews with business angels. The research sample is diverse in terms of different types of angel investors (independent investor/

member of an angel syndicate). A strength of the sample is that some of the interviewed angels were also the managers/founders of angel syndicates that took part in numerous processes of setting and negotiating the value of early-stage ventures, and therefore had extensive experience in the field. Data were analysed with inductive methodological approach.

Results/Conclusions

The findings provide empirical evidence of how business angels approach the valuation of early-stage ventures. It has been found that angels are likely to use non-compensatory approach towards the valuation, with recognised paucities in some dimensions of their prospective investee ventures not being redeemed by remarkable surpluses in the others. It has been also found that when arriving at the value, angels focus not only on ongoing founding, but also on likely dilution and prospective exit value.