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Journal of Applied Economic Sciences

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Assessment of the Effectiveness of an Initial Public Offering by Russian Companies

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Abstract:

This article is dedicated to the analysis of the calculation of the efficiency of the IPO carrying out at stock exchanges in Russia and abroad and the impact on the companies' market value. The novelty of approaches consists in solving important theoretical and organizational-methodological problems of an economic analysis of the company's market value growth by attracting initial public offerings for stable growth, achieving better credit conditions, obtaining the status of a public company to enter foreign markets. Results of the study show that a successful IPO is characterized by a combination of achieved capitalization and the subsequent growth of shares of the issuer. In addition, the increase must be gradual. This behavior characterizes the profitable sale of the issuing company to the underwriter, and investors are able to make a profit for their participation in the offering. Earlier studies have considered only the cost of capital, but not the economic value added, which makes this work unique and innovative. The results can help build the correct development strategy and allow investors to increase the confidence in the success of the companies, and the company itself will be able to actively develop.

Keywords: performance assessment, bond-like paper, emission, IPO (Initial Public Offering), stock market.

JEL Classification: D22, D53, F21, G12, O16.

Introduction

IPO in Russia is popularized with the beginning of the rapid economic growth in the period from the 2000s to 2007. This is noticeable in scientific environment due to publications related to IPO in the Russian segment from 2004. The IPO (Initial public offering) term is a procedure for the initial public offering of shares to the public organized through financial market. In other words, a closed private enterprise for the first time decided to sell their shares to the public in the financial markets. This explanation is scientific and popular, which is typical in foreign literature. In the Russian practice the IPO is interpreted as a "fund-raising based on the first output of the company

on the open market and the offering of shares among investors" (Mirkin and Mirkin 2008). The essence of the IPO consists in that this is the form of attracting to finance companies, and not as offering. Part of the share capital in the form of shares issued on the stock exchange considering a blocking stake preserving among the owners, plays the role of the transfer of rights to a company to other people through the offer to purchase in this case, attracting investments.

Conclusion

Based on a comprehensive assessment of the IPO (initial public offering of shares) effectiveness leads us to the following conclusions:

Firstly, a successful IPO is characterized by a combination achieved by market capitalization and the subsequent growth of the issuer's shares. Thus, the increase must be gradual. This behavior characterizes the returnable sale of the issuing company to the underwriter, and investors are able to make a return for their participation in the offering. The analysis revealed that the company needs to stay at the peak of demand for shares on the stock market.

Secondly, the efficiency of IPO can be identified by examining the 4-year period. Weighted average cost of the company's capital at a successful IPO is lower than in the previous year. The obtained results indicate that the two companies (STS Media and MegaFon) of the telecommunications and media sector successfully conducted IPO. RusPetro Company of the oil and gas sector held a successful IPO just in the short time.

Third, IPO creates a special status; a public company needs to interact with investors, to publish reports regularly, to maintain corporate website, to disclose and properly apply relevant facts from the company's life.

IPO for the company is first and foremost, an additional source of funding. After the IPO, it is able to attract it at a lower price due to the distribution of risks among a greater number of shareholders. Moreover, the improvement in the balance sheet structure allows the company to attract significant additional debt financing, as well as to carry out additional issue in the longer term.

Thus, it should be noted that any public fund-raising is, above all, the sale of the company's future in the way as it is seen by the current owners. For its success their goals and strategies should be articulated and brought to the market participants' attention. Companies often direct all their efforts to achieving short-term results, which, as it seems to them, the market expects from them. But it is much more effective to focus on long-term goals and to help investors believe in the company's ability to achieve them. Building a proper development strategy and realization of IPO as the next step towards its implementation will be exactly the factor that will allow investors to believe in the company's success and will open up new horizons to the company.

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The Dynamics of the Wage-Price Setting Behaviour in Countries of Eurozone

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Abstract:

The literature review clearly indicates that there are significant differences concerning analytic approaches and inferences on the dynamics, patterns, and methods applied in examining the wage-price relationship. Regardless of the fact that there have been enormous efforts invested in trying to untangle the complexities surrounding the wage-price setting process, this paper provides new and statistically robust evidence on the wage-price setting process in Germany, Spain, France, Italy, Netherlands and Austria, covering the period of time 2000:Q1–2015:Q4. The data suggests that wage setters in all the countries, except in Austria, have under-adjusted for inflation in the post 2008 period, as probably the costs of such behaviour were low. Specifically, the cointegration tests provide strong evidence in favour of hypothesis that wages and prices in the respective countries are strongly cointegrated. Moreover, the results produced by VECM models provide statistically robust evidence in favour of a long-run relationship between wages and prices. However, the price elasticity coefficients suggest that there may be a valid case in favour of fully rational wage-price setting behaviour in these countries of Eurozone.

Keywords: inflation, rational expectation, causality, co-integration.

JEL Classification: C32, E31, J31.

Introduction

In principle, it is hard to reject the hypothesis that connection between wages, prices and economic activity is more akin to a tangled web than a straight line. Specifically, in the United States (US) wages and prices have tended to move together, even though the causal relationships are difficult to identify (Knotek and Zaman 2014). Nonetheless, this paper will attempt to examine the wage-price relationship in six countries of the Eurozone, i.e. Germany (DE), Spain (SP), France (FR), Italy (IT), Netherlands (NE) and Austria (AT), and try to untangle the issue by employing the Vector Error Correction Model (VECM). In addition to this, this paper will attempt to examine why following the events of global recession in the year 2008, the wage setters in the respective countries of Eurozone have responded with wage moderation and not with demands for higher wages.

The rest of the paper is organized as follows: section 2, presents a brief literature review on the determinants of wage-price relationship, and on the role of labour market institutions in determining the respective relationship; section 3, briefly describes the mathematical and econometric modelling issues; section 4, describes the variables and examines the stationary properties of data; section 5, provides the analysis of the rate of growth of wage, price and productivity series; section 6, presents results of specification tests; section 7, presents results of VECM analysis and of relevant diagnostic tests; finally, section 8, concludes by summing up the main findings.

Conclusion

The purpose of this paper has been to analyze the pattern and the dynamics of relationship between wages and prices in some of the countries of Eurozone during the period of time 2000:Q1-2015:Q4. The data clearly suggest that the average quarterly rates of growth of wages, prices, and productivity have decreased in the post 2008 period, with exception of wages in Austria and productivity in Spain. Undoubtedly, the empirical evidence from VECM models strongly suggests that there is strong long run equilibrium relationship between wages and prices in all the countries that have been considered. Moreover, the estimated price (wage) elasticity coefficients provide a valid case for rational wage-price setting behaviour. Additional issue that this paper has attempted to investigate and explain is, why in the post 2008 period the decrease in the rate of growth of wages has been higher than the decrease in the rate of growth of prices and productivity.

Certainly, it is reasonable to argue that wage-setters in Germany, Spain, France, Netherlands and Italy, though not in Austria, have for several reasons not reacted with demand for higher real wages in the post 2008 period. The first reasoning can rely on Akerlof *et al*. 2000 proposition that the rate of growth of price inflation has still been modest, hence the wage setters have under-adjusted for that modest increase in the rate of growth of prices as it has not been very salient, and additionally, the cost of engaging in such a behaviour has been low. Second reasoning can rely on Kromphardt and Logeay (2007) explanation that wage and price setters have unconditionally accepted the rigor of monetary policy authorities in the post-2008 period, and have not tried to pursue a policy which raises inflation rate significantly above the target inflation rate of the monetary policy authorities. Third reasoning can rely on Meager and Speckesser (2011) argument that by holding wage growth below productivity increases (or even reducing wages while productivity growth continues) can enhance the level of competitiveness and improve the economic/employment situation. Specifically, the increased level of wage moderation has certainly had a positive impact on the stability of the wage-price setting dynamics. Furthermore, the flexibility of the wage-price setting process may also be attributed to more flexible and efficient labour market, which is considered as a precondition for higher employment, as well as fairer, more competitive and more productive economy. Additionally, that labour market flexibility may also entail an economy that is better able to adapt to the changing economic environment, and thus it may be considered as a central element in producing better overall economic performance.

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Financial Mechanisms of Nanotechnology Development in Developing Countries

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Abstract:

Starting point of the research is the idea that nanotechnologies can become a new vector of development of economy of developing countries which will allow them to leave the path of overcoming development and conquer leading positions in the sphere of nanotechnologies. The article is devoted to determination and comparative analysis of various financial mechanisms of nanotechnology development in developing countries with the help of instrumentarium of the game theory as to criterion of effectiveness by the example of Russia's economy. The authors determine, analyze, and schematically present tax, investment, loan, amortization, and cluster mechanisms.

Keywords: nanotechnology development, developing countries, financial mechanisms, global economy.

JEL Classification: G31, F63.

Introduction

In the 21st century, the moving force of the global economy is new technologies. Therefore, provision of competitiveness of the country in the system of the global economy needs something more than large stocks of natural resources or cheap work force – it is necessary to develop technologies.

One of the most perspective directions of development of new technologies is nanotechnologies. Invented in the second half of the XX century, nanotechnologies entered the science and are viewed in developed countries as one of the top-priority directions of economy's development. Developing countries are also interested in nanotechnologies development, as it will allow them improving their positions in the global economy and reduce the gap in the level of economic development as compared to developed countries. (Popkova and Tinyakova 2013a)

In view of innovational nature of nanotechnologies, their development is not oriented at following one or several global leaders in this sphere, which is peculiar for many spheres of technologies development, but supposes own innovational research and development allowing even developing countries to take leading positions in the sphere of nanotechnology development in case of their success. (Popkova *et al.* 2013b)

One of the most serious problems of nanotechnology development in developing countries is absence or lack of financial resources. As a rule, developing countries possess far lesser investment attractiveness, which complicated the process of attraction of foreign investments, and weal development of institutional environment, which complicated the redistribution of internal financial resources. (Popkova and Tinyakova 2013b)

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Therefore, developing countries require development and creation of own financial mechanisms of nanotechnology development which are different than mechanism that successfully function in developed countries, in view of their peculiarities and existing possibilities, which predetermines high topicality of this research.

The purpose of this research is development of financial mechanisms of nanotechnology development in developing countries.

Conclusions

Thus, it can be concluded that the most effective and, therefore, the most perspective financial mechanisms of nanotechnology development in developing countries are cluster and tax mechanisms, as they ensure achievement of the most positive effect expressed in the growth of GDP by means of nanotechnology development, with high probability and low expenses, which allows maximizing the common general positive effect.

It should be noted that implementation of tax, loan, and amortization mechanisms supposes creation of preferential conditions for nanotechnology companies, which increases the possibility for companies that are not involved with nanotechnology research to pose as ones. This causes the problem of companies' belonging to the list of nanotechnology enterprises and requires formation of corresponding institutional basis and additional expenses from state.

Comparative analysis of effectiveness of various financial mechanisms of nanotechnology development in developing countries with the help of the game theory instrumentarium was conducted by the example of Russia, which somewhat limits the results of the research. However, this does not mean that results of this analysis are true only for the Russian economy. In view of common peculiarities of developing countries, the received results could be applied also to other developing countries.

At the same time, a perspective direction of further research in this sphere is determination of effectiveness of various financial mechanisms of nanotechnology development by the example of other developing countries for determining common regularities and individual peculiarities.

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Pricing Bounded Value Based Salam

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Abstract:

Salam is a contract in which advance payment is made for goods to be delivered at a future date. The main disadvantage of this contract is the variation of good's price at maturity. To resolve this issue, we use classically the Value-based Salam where the value of the good is defined as quantity time unit price. This solution permits the hedge the buyer and the seller against fluctuations in price's good but the quantity to be received at maturity can undergo unlimited changes.

In this work we propose a new approach to model Value-based Salam where the quantity to be received is Bounded and known.

Keywords: Islamic finance, derivatives, risks, hedging, Salam, value-based Salamke.

JEL Classification: G12, C5, C6, C87**.**

Introduction

Risk in finance is associated with financing, including financial transactions that include company loans in risk of default. Risk is a term often used to imply downside risk, meaning the uncertainty of a return and the potential for financial loss. It is not desirable as such. In Islamic finance the risk is more indesirable since it can be considered as "Gharar" meaning uncertainty which is banned by the Shariah[1].

To resolve this issue, we have to consider the main principle of Islamic in order to model new or existing financial contracts for hedging (Aboulaich and Dchieche 2015) and (Aboulaich and Dchieche 2016), or to use engineering in order to improve Islamic existing contracts (Dchieche and Aboulaich 2016).

In this work we propose to improve Salam contract especially the Value-based case to obtain a bounded Value-based Salam where the quantity to be received at maturity is bordered and the loss of the buyer and the seller is limited and known.

According to Figure 1 (Al-Suwailem 2011) an Islamic contract to be acceptable must respect the principles of Consistency. Substance means the outcome of the product, for example the outcome of tawarruq[2] is money for money, and this is not acceptable. For Mourabaha[3] the outcome is money for a good. This is an acceptable substance or outcome. Therefore, we move to the next step: is the form acceptable? We need to be sure that the buyer owns the good and is liable for it. Salam is a contract in which advance payment is made for goods to be delivered at a future date. The problem with Salam is that the price value of the good at maturity can be different from the expected price.

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[1] Islamic law

[2] Tawarruq is a financial instrument in which a buyer purchases a commodity from a seller on a deferred payment basis, and the buyer sells the same commodity to a third party on a spot payment basis meaning that payment is made on the spot.

[3] Sale on profit. Technically a contract of sale in which the seller declares his cost and profit
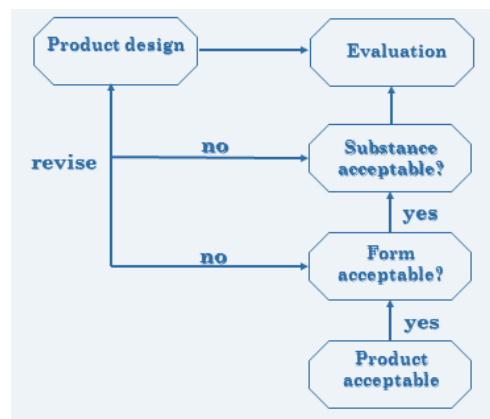
Figure 1 – Process of product evaluation

According to Khan and Ahmed (2001) there are two important counterparty risks in Salam. The counterparty risks can range from failure to supply on time or even at all, and failure to supply the same quality of good as contractually agreed.

According to Mrad (2010) the buyer and the seller of Salam contract suffers from fluctuation prices and the author suggest that the solution can be the value-based Salam.

According to Al-Suwailem (2011) Value based Salam can be a good solution to address price fluctuations because the value is defined as quantity times unit price, the buyer is able to hedge against price fluctuations of the future good and if the price raises the quantity to be delivered declines.

The quantity of good delivered using the value-based Salam has unlimited changes, the buyer and the seller have unlimited profits and unknown loss.

In this work we propose to use the idea behind the extended modified Salam (Dchieche and Aboulaich 2016) to Model a Bounded Value-based Salam. The remainder of this paper is as follows: the next section introduces the classical Salam contract; Section three includes the Value-based Salam; Section four presents the Bounded Value-based Salam; Section five explains an analysis and section six summarizes the finding and concludes.

In the following we will introduce the data used in the paper. S_0 is the price of one unit of good at t=0 and S_t is the price of one unit of good at maturity where t is the maturity. The price of a quantity of the good is denoted P and P_0 denotes the price of the quantity Q_0 of the good, where Q_0 is the quantity of the good at t=0. P_t is the price of the quantity Q_t of the good where Q_t denotes the quantity time's unit of the good and P_F is the future price of good calculated using the formula of actualization. P_r is the reduced price of good where r the rate of reduction and R is the rate of return of good.

Conclusion

Salam is a contract in which advance payment is made for goods to be delivered at a future date. The main problem of this contract is that the quantity of good to be delivered at maturity is fixed despite the changes of good's price at maturity. To resolve this, issue many authors (Al-Suwailem 2011) and (Mrad 2010) propose to use Value-based Salam which is a contract where the value of the good is defined as quantity time unit price. This approach permits to vary the quantity of good to be received according to the price of the good at maturity, but doesn't allow limiting the loss in case of important price's fluctuations.

In this work we propose a Bounded value based Salam where the buyer and the seller agreed on a common interval of execution of the contract based on percentage of tolerance's loss. Inside the interval we use the value-based Salam; outside this interval the quantity to be delivered is fixed. Value-based Salam protects the buyer and the seller against price's variation but can deprive them of better income in case of favourable variation. To avoid this problem, we are working on defining and modelling Hybrid Salam contract which will consist of two parts: value-based and quantity-based, this contract can hedge capital risk, return risk and liquidity risk.

Acknowledgment

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Companies' Financial Outcomes in Nigeria: Does Chief Executive Officer Nationality Matter?

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Abstract:

The purpose of the study is to expand the understanding of corporate governance mechanisms and company performance in Nigeria. In particular, it focuses on the upper echelon and resource dependence theories, which relate to the foreign CEO. The fixed and random effect estimators are employed to identify the variables that influence the performance of public listed companies on the Nigerian Stock Exchange. The empirical analysis shows that CEO nationality, percentage of non-executive directors, board size and board meetings statistically influence company performance. This indicates that these are the relevant corporate governance variables which benefit shareholders. More importantly, the study indicates CEO's nationality provides a better alignment of interests of shareholders and managers, which increases a company's competitive advantage.

Thus, the results serve as a guide to regulators to design and implement key corporate governance mechanisms in Nigeria to encourage diversification of boards. In addition, the study is one of the few studies that considers this aspect, especially in the Nigerian context and adds to the extant literature on the vital role of foreign CEOs in company performance in Nigeria.

Keywords: CEO nationality, corporate governance, performance, asset turnover, board meeting.

JEL Classification: G30, G34, G32.

Introduction

Given the spate of the collapse of corporate giants (*e.g.,* Adelphia, Enron, Parmalat, Global Crossing, HIH and WorldCom) in the developed markets such as in the United States (US), United Kingdom (UK) and Australia, and in the developing markets, like in Malaysia and India (Transmile and Megan Media), corporate governance has become a topical issue in the business world. Similarly, the collapse of 70% of Nigerian companies (African Petroleum PLC, Concord Group, HITV, Kaduna Textile Mills, Nigeria Airways, Mtel, Intercontinental Banks, Oceanic Bank) has raised the important question onthe characteristics of those responsible for managing a company's affairs (Ogbuozobe 2009, Oteh 2013, Ujunwa 2012, www.myfinancialintelligence.com). In other words, it begs the question of the role of corporate board members. As a result, the impact of corporate boards has been a subject of policy debate and a focus of considerable academic research in accounting and finance fields. (Adewuyi and Olowookere 2013, Ehikoya 2009, Ujunwa 2012)

The case for high standard of corporate governance rests on five main criteria: it improves the economic performance of companies through enhancement of shareholders' value; it leads to long term stability of the companies (Shleifer and Vishny 1997); it provides easy accessibility to finance and stock market valuation (Claessens and Yurtoglu 2013, Klapper and Love 2004, Kyereboah-Coleman and Biekpe 2006a, Kyereboah-Coleman and Biekpe 2006b); it instils investors' confidence in the market (Adewuyi and Olowookere 2013, Ehikioya 2009, Haniffa and Hudaib 2006, Kumar and Singh 2013); and it serves as a shock absorber to enhance the quality of earnings reported by managers (Marra *et al.* 2011). In contrast, poor corporate governance could lead to poor performanceregardless of the company's age and risks faced. (Claessens and Yurtoglu 2012)

Owing to the great importance of corporate governance as well as the claim by Ogbechie *et al.* (2009) that the importance of corporate governance remains unclear in Nigeria, the present study examines the impact of corporate governance on company performance. In particular, it examines the influence of Board size, Non-executive directors, Executive directors, Board independence, CEO duality, Foreign CEOs and Board meetings,

along with a few control variables, such as Company size, Company age, Leverage and Fixed assets ratio on company performance measures (Return on assets, Return on equity and Assets turnover). The examination of the factors influencing company performance is of great important to practitioners, academicians and those involved in designing and implementing corporate governance policies. In addition, the financial performance of companies is also crucial to shareholders and stakeholders. Notably, it is one of the key sources of finance and a yardstick for distribution of dividends. Therefore, with the inclusion of new variables that have not been explored by previous studies in the Nigerian context, the present study serves to augment examples found in the literature. More so, it contributes to the literature from the aspect of corporate governance mechanisms and their impact on the performance of the Nigerian public listed companies, given that corporate boards play a central role in the governance of public listed companies.

Also, the Nigerian case is likely to present a different picture owing to the influx of foreign CEOs in the Nigerian companies. Foreign CEOs' engagement can generate greater benefits to the companies' operations such as internationalization of various companies and opening of the country for investment. This is also likely to enhance the reputation of companies and enable them to diversify internationally. The rest of the paper is structured as follows: Section 2 discusses the corporate governance issues in Nigeria, while section 3 presents the theoretical background and review of literature. The research design and econometric method are explained in sections 4 and 5. In section 6, we discuss the results and section 7 presents the conclusion.

Conclusion

This study examines the impact of corporate governance mechanisms on company performance within the jurisdiction of the Nigerian Stock Exchange. With the employment of three performance measurements (ROA, ROE and AST), the results show that CEO nationality, percentage of non-independent directors, board size and number of board meetings of corporate boards statistically influence company performance. This suggests that apart from the initial excitement of establishing a company, corporate governance, which is main foundation that guides a company in the conduct of its day-to-day activities, remains the key to long-term survival of any company. In particular, a positive relationship is found between the CEO's nationality with all the three measurements of performance, while board meeting shows a statistically negative relationship with only one out of the three measurements of performance. As such, regulators should further focus their attention on the key corporate governance mechanisms in Nigeria and allow flexibility in determining the number of meetings to be held in a financial year.

This study also establishes the important role of foreign CEOs in company performance in Nigeria. The significant influence of the foreign CEOs on company performance in Nigeria indicates that these CEOs act in the best interest of shareholders and have a well-diversified business experience compared to the indigenous CEOs. Therefore, this development could be a drive towards attracting foreign direct investment in order to promote long-term growth of the country.

In addition, the study contributes to prior literature on corporate governance where it has been suggested that internationalizing the top level management of a company can improve the monitoring function as well as the transparency standards (Oxelheim and Randoy 2003). Further, the composition of a company's TMT is among the crucial corporate governance issues (Schmid and Dauth 2014). Hence, the finding that foreign CEOs have a significant impact on company performance provides a clue on how companies operating in Nigeria could make a good strategic choice towards improving company performance. All these can attract more foreign investors and increase the company's value.

Furthermore, the results of this study could be useful to the regulatory authorities and policy- makers to engage more in training and retraining of indigenous CEOs and encourage diversity on corporate boards so as to improve the performance of the company. More importantly, this has been the clamour of regulatory authorities around the globe, such as the SEC of Germany, the US and the UK, whereby the Corporate Governance Code recommends that board appointment should be made with regards to the benefit of diversity (Schmid and Dauth 2014). In line with the recommendation of the regulatory authorities from different countries and as suggested by the empirical results from this study, it is high time the SEC of Nigeria concentrated on the diversity of the board of companies to improve performance. Doing this could stimulate the achievement of Vision 2020 to become one of the developed countries in the world. An internationally-oriented board could enable Nigerian companies to compete at the international level because diverse business practices are expected to positively influence company performance that could be more beneficial to shareholders. For future studies, consideration should be given to the other measurements of company performance, e.g., market measurement, earnings management and financial decisions made by the company, and possibly, an extended sample period.

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Methodological Ways of Formation of Corporate Entities in Food Industry

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Abstract

Formation of corporate entities is an objective process, caused by globalization of economy and economic subjects' striving for creation of economically and socially effective structure, capable of providing balance of interests of groups which are interested in its functioning. In the food industry, formation of corporate entities takes place according to traditions in national economy and in view of production peculiarities, which is a basis for study of the sense and content of this process and for development of recommendations aimed at its improvement. The purpose of the research is to develop theoretical and methodological process of corporate perfection and practical recommendations, aimed at formation of effective corporate entities in the food industry. The authors offer developments which open theoretical and methodological aspects of the problem of formation of corporate entities in the food industry. The mechanism of formation of corporate entities in the food industry is developed, which is peculiar for its structure and order of elements which determine factors influencing formation of corporate entities; the authors determine the goal, tasks, and principles of formation of business structures in food industry which perform production, administrative, and social functions in the process of manufacture of food products in view of influence of conditions of internal and external environment, responsibility produced by its element, resource provision, interests of interested groups, and market requirements. The authors offer a scenario approach to management of food industry enterprises which differ as to the level of realization of processes of corporate perfection which is peculiar for combination and succession of application in managerial practice of the methods of formation of corporate entities, differentiated depending on the phase (stage) of corporate transformation. The procedure of formation of corporate entities in food industry is offered, which is peculiar for a set and succession of realization of stages which lead to transformation of processing enterprises and provision of their economically and socially effective functioning in the food market under the conditions of execution of liabilities before consumers, state, management, owners, public institutions, and employees.

Keywords: formation, corporate entities, food industry, model.

JEL Classification: E23.

Introduction

Actuality of the topic of the research is predetermined by totality of associated factors which cause the necessity for development and improvement of theoretical and methodological approaches and practical measures aimed at formation in the industrial sector of economy, which specializes on manufacture of food products, of effective and sustainable – in long-term – corporate entities.

Firstly, sectorial enterprises have unbalance of scales of production and taken managerial decisions, which negatively influences economic results. Despite wide use of technical and technological innovations, processing enterprises preserve orthodox approaches to current intra-company and strategic planning and, consequently, have to function under the conditions which do not allow fully realizing their potential and effectively organizing mass production (Serebryakova *et al.* 2014). It is possible to solve this problem through formation of corporate entities of a new type which are peculiar for systemic realization if managerial practice of instrumentarium of development and realization of scientifically reasoned managerial decisions which allow coordinating resource possibilities of enterprise with effective demand for the issued products and satisfying the consumers' needs for high-quality food products more fully, as compared to rivals.

Secondly, a comparatively low level of labor payment at most enterprises for manufacture of food products and other socio-economic factors depreciate the existing system of corporate values which is a basis for formation of effective production relations, which does not allow enterprises which process raw materials of agricultural origin having internal integrity and violates their sustainability. This circumstance is a basis for organization of functioning of sectorial enterprises according to requirements set to modern corporate entities which are socio-economic systems, the subjects of management of which have many-aspect responsibility before their employees, consumers, state, institutes of civil society, and other members of market relations (Serebryakova *et al.* 2014).

Thirdly, formation of corporate entities is a natural evolutionary process which corresponds to tendencies of globalization which are peculiar for modern world economy – these tendencies are expressed in establishment of integration connections between separate economic entities. Being a projection of the global phenomena, formation of corporate entities needs development of theoretical and methodological provision which is adequate to conditions of modern innovational environment.

Thus, actuality of the topic of the research is supported by endogenous (low speed of diffusion at enterprises of food industry of means and methods of effective management) and exogenous (insufficient elaboration of conceptual provisions of formation of corporate entities in food industry) factors which hinder formation of corporate entities and their effective functioning.

Corporate entities of food industry are industrial enterprises or their associations, created for the purpose of receipt of profit; they conduct production and economic activities, aimed at industrial processing of agricultural raw materials and production of food and bear responsibility for results of their functioning before consumers, state, owners, managers, employees, and other interested groups (Serebryakova 2014).

The main identifying features of existing corporate entities in production of food products are: mass character of production, which shows potential possibility for realization of advantages of large-scale production; matrix or divisional type of organizational construction, which characterizes structural integrity of entity and determines the character of its behavior in internal and external environment; long-term partnership connections with suppliers of raw materials which provide closeness of production cycle and sustainability of corporate entity; correspondence of business processes to requirements of the concept of general quality management, which positions enterprise's capability to function under the conditions of globalization of the world economy; presence of the system of corporate responsibility which determines conditions and character of execution of responsibilities of the entity before various interested groups (Semenenko 2014).

According to the authors' position, corporate entities of food industry include integrated economic entities of mainly holding type, as well as autonomous and independently functioning industrial enterprises which possess the above peculiarities (Sirotkina and Grishchenko 2013).

Formation of corporate entities in food industry, unlike other spheres of industrial sector of economy, is a relatively new process which requires development of corresponding methodological provision (Serebryakova *et al.* 2014). The most important category that determines the process of formation of corporate entities is corporate responsibility, which is treated by the authors as responsibility produced by owners, managers, and employees of corporate entity and other elements of its internal and external environment (Khorev, Salikov and Serebryakova 2015). Elements that show similar interest unite into interest groups – i.e., groups of participants of organizational and economic relations which are interested in effective functioning of corporate entity and achievement of its other (socio-economic) goals and which contribution into development of corporate entity is a basis of its successful functioning. Formation of corporate entities is an objective evolutional process, as it is in corporations and thanks to their dual (financial and social) nature that the most favorable conditions for maximization of profit and socialization of production and economic activities are created (Salikov *et al.* 2015). The mechanism of formation of corporate entities in food industry is understood as totality of interconnected elements, order of interaction of which determines content of processes which lead to emergence in the industrial sector of national economy, which specializes in manufacture of food products, of large creative business structures which perform production, administrative, and social functions as could see in Figure 1. (Grishchenko and Kulikova 2014)
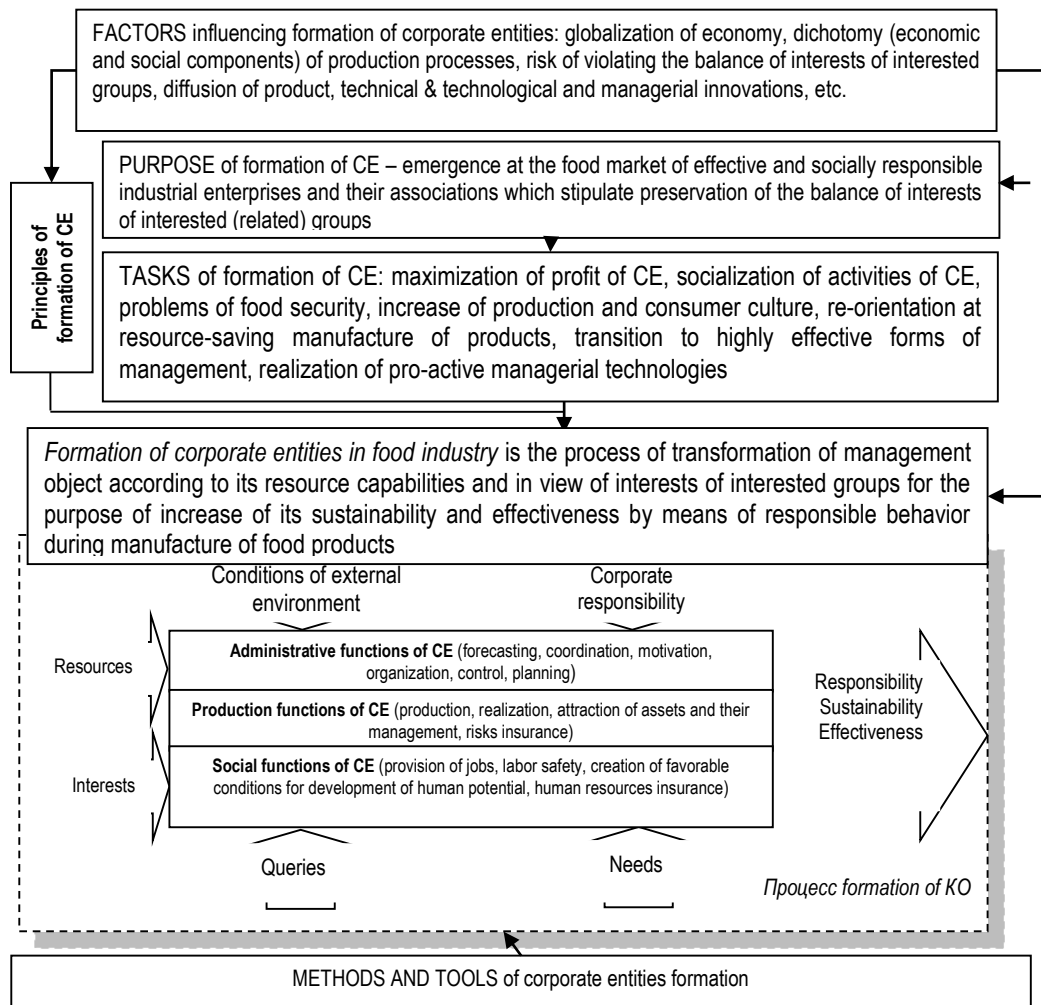
Figure 1 – Mechanism of corporate entities (CE) formation in food industry

The main principles of formation of corporate entities are:
- conscious (responsible) selection of goals and strategies of development of corporate entity;
- constant search for new forms and types of activities which stipulate maximization of income and increase of socialization of corporate entity;
- positioning of corporate entity as a responsible member of food market;
- coordination of interests of interested groups with development of corporate strategy.

The process of corporate entities formation is determined by its functional content. Administrative functions of formation of corporate entities include: development of the strategy of behavior of corporate entity in the market, coordination of goals and interests of interest groups which allows determining strategic landmarks of formation of corporate entity and developing indicators which show their achievement, motivation for maximization of profit and simultaneous socialization of corporate entity, and control over achievement of aims of corporate entity formation. (Zhuravlev *et al.* 2011)

Productive functions of formation of corporate entity consist in current and operative planning of the character and content of productive and economic activities, organization of intra-company interconnection of structural departments of corporate entity according to strategic landmarks which take into account interests of various interest groups. (Serebryakova 2014)

Social functions of formation of corporate entities in food industry include development of the strategy of corporate responsibility, motivation of human resources for socially and economically responsible behavior, realization of socially significant projects, creation of favorable (including safe) conditions for human resources, nature-oriented, and resource-saving activities, activization of activities aimed at development of human potential, and insurance.

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Estimating Determinants of Unemployment Duration in Korea: Evidence from the Korean Labor and Income Panel Study

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Abstract:

This paper examines the determinants of unemployment duration in Korea by using the Korean Labor and Income Panel Study (KLIPS) survey dataset. Empirical analyses find that unemployment duration increases when the subjects are female, older, have less than college education, have more family members, and have been unemployed for over 2 years. Specifically, the education effect is prominent during periods of economic crisis, (e.g. 1997-1998 and 2008-2009), implying that people with no college education have more difficulty finding employment during severe recessions rather than those with college degrees. In addition, we find that the duration of unemployment increases as the level of perception of life satisfaction is increases, which highlights the importance of personal psychological factors in explaining the average duration of Korean unemployment.

Keywords: Korean Labor and Income Panel Study (KLIPS), unemployment, survival model, education, recession, perception, life satisfaction

JEL Classifications: C23, C41, J64.

Introduction

Unemployment, defined as losing a job, is generally related to macroeconomic fundamentals. Weak demand from the labor market can lead to job losses. Unemployment duration as a result of this can be longer than average, as the labor market is sclerotic. From the supply side of the labor market, unemployment could be related to individual characteristics, such as, age, gender, education, marital status, etc. A lot of literature suggests empirical evidence that individual characteristics are significant factors to explain unemployment.[2]

Using a time-to-event (survival) function of the Kaplan-Meier (hereafter K-M), we attempt to find determinants of unemployment duration in Korea. Our analyses are distinguished from the existing literature in several aspects. First, we provide empirical evidence about the duration and demographic structure of the general unemployment duration in the Korean labor market as a first case study among leading emerging economies. Second, we use individual-level data from the first wave of the longitudinal surveys therefore our results refer to Korea as a whole. Also the analysis is carried out for wage workers and self-employed workers as well as males and females separately, in order to identify the differences in the labor market experiences by job type and gender. Consequently, our results of unemployment duration analysis will contribute to the deep understanding of the Korean unemployment duration factors from an individual and household perspective.

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[2] For example, please see Goldsmith *et al.* (1997), Kettunen (1997), Valletta (1998), Machin and Manning (1999), Clark (2006), Uysal and Pohlmeier (2011) and Choi (2013). Also, there exists an argument for extra factors, such as, discouragement and loss of motivation, depreciation of human capital, and stigma effects, for instance, see Heckman and Borjas (1980), Jones and Manning (1992), Machin and Manning (1999), Knights *et al.* (2002), and Stewart (2007).

Conclusions

This paper examines the effect of individual characteristics on unemployment duration (probability of leaving unemployment) in Korea. By using the conditional gap time Cox models of exits to employment with the KLIPS survey dataset, the hazard rates are estimated for wage workers and self-employed workers separately. Our results suggest that most of demographic and economic variables, such as, gender, age, education level, family size, and prior unemployment experience, are significantly estimated to explain unemployment duration. These results are consistent with a number of previous studies that recognize the importance of individual characteristics in determining the risks associated with unemployment, and unemployment duration. (Nickell 1980, Jones 1988, Gorter and Gorter 1993)

In addition to the above conventional findings, this paper highlights a couple of empirical results. First, the education effect is prominent during the sub-periods, 1997-1998 and 2008-2009. This result provides the meaningful implication that a college level education plays more important role in exiting from unemployment. This is particularly true during periods of severe recession rather than during normal economic states. Second, individuals who have high satisfaction with current family income, residential environment, and social contact with other people have a decreased probability of exit to employment. This result highlights an important facet of personal psychological factors explaining unforced unemployment behaviors, those conflicts with conventional demographic and economic factors. It is useful to separate the unemployment duration variable into two different types: unforced-unemployment and forced-unemployment. Such separation helps to estimate the importance of psychological factors for unemployed duration. Also, experimental study is useful to obtain more precise personal perception on life-satisfaction, since experimental methods can capture immediate reactions regarding satisfaction. Such experimental research methods on unemployed workers are expected to extend the existing labor economics research to the new field of behavioral labor economics.

Aknowledgement

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Formation of the Conception of Economic Opportunism in David Hume and Adam Smith`s Works

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Abstract:

The article analyzes the evolution of the issue of economic opportunism in the context of the history of economic mind – particularly, within the research of David Hume and Adam Smith. It is shown that in the process of search of English empirical philosophy of the 18th century for foundation of social order, the purely economic preconditions for social order are determined, their consequences are defined, and the basic notions of the conception of economic opportunism are formed. Historical fates of these ideas from the point of view of various courses of modern economic theory are described.

Keywords: British empirical philosophy, morality and economics, social order, economic opportunism.

JEL Classification: D21.

Introduction

The issue of opportunism is one of the key problems which determine the modern understanding of economic processes. At the same time, this issue, in spite of the large number of publications, devoted to this topic, and unambiguity of evaluations of effects of opportunistic behavior, containing in the works on the economic theory, is still open. In particular, the very conception of opportunistic behavior is one of the main "gateways" for supplementing economic models with moral (societal) principles, where the efficiency is related to virtue, and allocation – to distribution. This is reflected in various variants of interpretation of trust as a factor of economic development.

Besides, within the theory of contracts, the use of approaches which are peculiar for the paradigm "structure-behavior-result" leads to decrease of explanatory potential of opportunism conception as to dynamic aspects of economy. The thing is that the stated paradigm usually supposes the pre-determined set of both structural characteristics of economic benefit or exchange process and varieties of contract relations which determine the agent strategies of transaction costs' minimization. The models which are formed at this are advantageous operation-wise, but, as a matter of fact, static.

Not least of all, this situation may be preconditioned by the well-known obscurity of historical horizons of the economic opportunism conception. On the one hand, the opportunistic behavior is a "timeless" phenomenon, peculiar for any epoch, and on the other hand – the issue of economic opportunism was raised by the modern socio-economic mind (say, within O. Williamson's theory). Meanwhile, if we acknowledge that economic opportunism conception is a purely historical phenomenon, *i.e.*, a developing and constantly changing phenomenon, then the search for conceptual reasoning of this theory is obvious and necessary.

As a starting point, one can use the study of B. Mandeville with the motto: "vices of individuals are virtues of society" and the reaction to this study of D. Hume and A. Smith. Surely, the stated problematics was in one way or another analyzed in the works of other early economists (in other words, the matter under inquiry is brought not *in statu nascendi*, but *in statu formandi*). However, our choice is determined by the fact that before B. Mandeville the topic of ambivalence of interaction of ethics and economy was not considered to be the central one during the study of social processes; D. Hume was one of the first to consistently and elaborately analyze the genesis of contracts and contract mechanisms of interests and actions of individuals *per se*, as well as of institutional and evolutional aspects of agreements; finally, before A. Smith, the multi-dimensional nature of human actions in the context of the issue of interaction of moral, political, and economic institutions was not studied so thoroughly and in complex.

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Conclusion

Determination of individuals at cooperation in a strong form (realization of interests, despite the moral effects), limitation of human capabilities for rationale, and unintentional nature of consequences of individual decisions – all these theses, as was mentioned, unite the conceptions of social order of Hume and Smith. Antinomies and paradoxes, which are present in their systems, have ample grounds, one of which is the problem of individuality. Existence of individual was to be dissected and re-created by the thinkers of the Modern epoch. The foreground was taken by the question, which can be viewed as a fundamental in social ontology: why the long-term coordinated cooperation of individuals, and not the world of permanent conflict, is possible (total redistribution within economic problematics)?

Since Hume and Smith, one can see the formation of a tradition which generates typical answers to this question: systems of motivations and institutions, which, with different level of violence and determinacy, coordinate the activity of agents who define the performance of the agreements, also under conditions of implicit intentions of the parties.

Though Smith had the understanding of duality of social order – enforcement of social connections is inseparably related to the unlimited strive of individuals for gaining mutual interest (*i.e.*, not only robustness of economic exchanges and condition of the possibility of their organization should be revealed, but also the dynamic interaction of the mentioned factors) – today, the opportunistic behavior turned into exogenous principle, "friction", caused by the behavioral peculiarities of human; when this principle supplements the model construction, it increases the level of their correspondence to facts. At that, the role of opportunism in provision of socio-economic dynamics was partly omitted.

Besides, the methodological discussion on "realism of conditions" of economic theory should be mentioned in the following regard. The limitation of methodological individualism in our days is criticized both from the side of various institutional and behavioral conceptions and from the point of view of socio-ethical, egalitarian, and communitarian doctrines – in particular, within the theory of "good society" (vivid example – A. Etzioni's socioeconomics). However, the supporters of "social person" version should take into account that paradigm of *Homo oeconomicus* is not just a "rough copy". It was in the strive for preserving the autonomy of social origin in the life of society that Smith distinguished morality and economy into independent spheres of social existence, thus overcoming the ambiguity which characterizes the ethical concepts of Hume (utilitarian variant) and F. Hutcheson (non-utilitarian system). And on the contrary: the researchers which try to preserve the individual rationality – even at the expense of limitation of this rationality – should take into account that it was Hume's skepticism, as one of early conceptions of unideal rationality, that led the philosopher to substantiation of morality as a main regulating institution in large societies.

The abovementioned largely relates to the modern concept of economic opportunism. For example, the research of O. Williamson, who interprets (within the theory of contracts) the opportunistic behavior as one of the main factors that determine the choice of one or another form of economic transactions, is a great illustration of possible ways for interpreting (expanding) the conception of D. Hume (the corresponding formulations of Williamson are very close to the ideas of Hume's minor work "of the Original Contract") (Williamson 1996, Hume, 1966). As a strong form of egoism is the very self-love of moral theory of the author of "The Treatise on Human Nature", which emerges after the individuals realize the cooperative activity (before it, we deal with primary, "usual" self-love as a form of self-preservation), as it is this egoism (which affects individuals, according to both Williamson and Hume, in various degrees) which leads to emergence of whole classes of agreements and structures of interaction that allow saving intellectual efforts (reproducing routines and habits) under conditions of informational incompleteness.

However, the most important aspect consists in the fact that the basis for the choice of alternative forms of relations lies in the sphere of economic motives – minimization of transactions' expenses (which is declared explicitly), and implicitly – in the sphere of morality. In Williamson's conception, public morals are a normative source of the very possibility for emergence of opportunistic behavior and, correspondingly, realization of motivations which are forming within the frames of certain ways of organization of economic exchanges (informational asymmetry, like in Hume's works, may be viewed rather as a technical aspect of contracts' structuring). Therefore, Williamson's theory is a tangle of conceptual motives of analysis of socio-economic problematics.

The danger of such approaches consist, in our opinion, in the preserving possibility for unexacting mixture of morals and economy (syncretism of exogenous and endogenous elements of normative entities in economics), and, in a manner of speaking, emergence of certain party affiliation in economic research, which causes emergence of rather rigorist theories and methods of evaluation of institutional (including culturological and moral)

characteristics of some or other societies from the point of view of economic efficiency – with inevitable ranking and segregation of individuals, groups of individuals, and whole societies.

Finally, the defining aspect is, probably, the clarity of initial conceptual conditions. Return to the origins of problematics of interaction of morality and economy within the framework of genesis of economic opportunism conception might be very productive in this regard.

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Environmental Challenges, Externalities and Sustainable Policies in Transport Sector in Egypt

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Abstract:

The study analyzes the environmental effects, externalities and energy consumption in transport sector in Egypt. It focuses on external costs from transport sector and its economic impact on society expressed in monetary terms, and these external costs are mainly congestion, road accidents and air pollution caused by carbon dioxide emissions. The Human Capital approach is applied to estimate economic costs of road accidents in 2014 in terms of injuries, fatalities, damages in vehicles, suffer and loss and these economic costs are estimated to be 3.75 billion dollars. Moreover, the economic costs of air pollution mainly due to carbon dioxide emissions are estimated to be 2.8 billion dollars in 2014, and these estimated economic costs of both road accidents and air pollution are about 5% of GDP. In addition, environmental and safety transport policies are discussed. Also, internalization of externalities and policies adopted in transport sector in Egypt are illustrated and finally possible sustainable transport policies are recommended.

Keywords: externalities, environmental effects, sustainable, internalization.

JEL Classification: H23, Q51, Q53, R4.

Introduction

Transportation is vital to the functioning of growing economy and efficient movement of people and exchanging of goods and services. However, there are certain environmental challenges related to transport sector represented in the negative impacts on the society in the form of externalities. Profillidis *et al.* (2014) differentiated between environmental impact due to the development of transport sector on the environment and on the society, as it has negative impact on the environment through its adverse effect on air pollution locally and globally through the emissions of carbon dioxide emissions, sulphur dioxide and hydrocarbons that contribute to the existence of smog acid rain and destroying ozone layer and decreasing fossil fuel reserves. In addition, it affects negatively the society in the form of changes in the land use, accidents and congestion.

The transport sector is a major source of carbon dioxide emissions and energy consumption and globally responsible for about 90% of urban air pollution, 14% of the greenhouse gases emissions worldwide and the death of nearly 80000 people (Kaysi and Chaaban 2015). And according to World Energy Council (2011), the global transport sector will face major challenges related to congestion, urbanization, population and growth in fuel demand over the next four decades. Total fuel demand in all transport modes is expected to increase by 30-82% over 2010 levels between 2010-2050, in addition to that fuel demand for less developed countries that constitutes about 52% of transport market is projected to increase by 51% in freeway and this will cause carbon dioxide emissions to increase which means that the greatest challenge will be providing sustainable transport sector fueled by clean energy.

In Egypt, the transport sector is considered an essential sector in achieving both economic and social development and although various energy efficiency policy reforms had been implemented, energy consumption levels in transport sector are still high. Moreover, population growth and urbanization and limited capacity of public transport that caused switch from public transport to private cars in Egypt have a severe impact on transport system and infrastructure in the form of traffic Jamand pollution especially in major crowded cities as Greater Cairo. Also, this leads to increase the imports of gasoline and diesel. (ESCWA 2014) Sustainable development in Egypt requires efficient and safe transportation system depending on clean low carbon energy and this requires certain measures, instruments and sustainable transportation policies to internalize externalities and achieve sustainable development.

Therefore, from the mentioned above, it is essential to analyze environmental challenges related to transport sector in Egypt aiming at analyzing externalities and quantifying it in monetary units and suggesting certain sustainable transport policies. The rest of the paper is organized as follows. Section 2 provides a brief review of the main characteristics of transport sector in Egypt. Section 3 explains the externalities from transport sector in Egypt. Section 4 is a discussion of environmental and safety transport policies. Sections 5, 6 and 7 analyze internalization of externalities, policies adopted in transport sector and strategies for sustainable transport policies in Egypt respectively. Section 8 concludes the paper.

Conclusion

Although the transport sector is an important facilitator of economic growth, it imposes negative impact and environmental challenges on the society. The dependence of transport sector on fossil fuel resulted in emitting harmful emissions mainly carbon dioxide emissions that harm human beings and whole ecosystem.

The transport sector plays a vital role in achieving economic and social development in Egypt. Nevertheless, it is one of the major energy consuming sectors that emitted high level of emissions. The high growth of population and travel demand for both passengers and freight transport in addition to the existence of significant number of old vehicles and poor and inconvenient public transport systems resulted in transport sector severe problems that include traffic jams, noise emissions, inefficient fuel consumption and high rate of accidents imposing high economic costs on the society. (Korkor 2014)

Therefore, this study aims at discussing and quantifying the environmental effects and externalities resulted from transport sector in Egypt. In addition, environmental and safety transport policies are analyzed. Also, internalization of externalities and policies adopted in transport sector in Egypt as using alternative fuel and inspection and import regulations that resulted in considerable energy savings and pollutants emissions reduction are discussed. Finally, possible sustainable transport policies are recommended to reduce environmental effects resulted from transport sector since the implementation of sustainable transport policies will lead to better living standards for citizens and economic prosperity to the entire nation.

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Improvement of the Intellectual Asset Management in the Information Economy

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Abstract:

Intellectual property acquires a particular importance in terms of the information economy and the mobilization of a global movement of capital. Therefore, a study is dictated by the need to find innovative mechanisms for intellectual asset management – intellectual property in the new economy. Methods of logic, intellectual property valuation, determination of economic performance, effect, license price were used. The article defines the basic properties of innovations: scientific and technological innovation, industrial applicability and tradability. We have considered the project life cycle to create innovations and structuring of intellectual property. A conceptual scheme of informational systems usage in the investment design is proposed. A universal algorithm for informational technology investment management is developed, which allows considering several alternatives to solve tasks of intellectual property management of an enterprise in the information economy. The research is aimed at improving the informational technology investment management process as an intellectual property. The results allow conducting the intelligent management simulation to improve the efficiency of innovation projects creation in the information economy.

Keywords: information economy, innovation, innovative project, intellectual property, intellectual property management.

JEL Classification: O34, O3, O30.

Introduction

In today's information economy, within the market competitive struggle intellectual property is the main instrument of innovation. In foreign countries intellectual property consists up to 70% of the enterprise value, and intellectual assets are the basis for the creation of innovations. Major world leaders of high technologies sphere hold hundreds of patents, which gives them the opportunity to receive additional cash income from the use of intellectual property, to conduct an active policy of conquering markets, introduction of innovations and recruitment of the best staff. The greatest Russian companies own a much smaller number of patents, which is an inhibiting factor for the domestic economy development.

Conclusion

Innovative activity management is related to the creation, development and diffusion of innovations. The creators of innovations (innovators), in our opinion, should be guided by the main criteria such as the product life cycle and economic efficiency. This strategy aims to outperform the competitors, to create a novelty that will be recognized as unique in a certain area.

The problem of determining the economic effect and selecting the most preferred innovation implementation requires, on the one hand, the excess of final results from their use over the cost of development, manufacturing and implementation, and on the other hand – the comparison of the obtained results with the results from the use of other innovations similar by assignment.

The obtained results allow modeling innovative intellectual asset management mechanisms to improve the efficiency of creation of innovation projects in the information economy.

The universal algorithm developed for investment management in information technology has the following steps: preliminary design, the definition of criteria for IT project, calculation of the main indicators of IT project, identification of alternative projects and their assessment, probability of the behavior of IT products in the market, risk modeling; the detailed design allows simulating a number of alternatives to solve the problem of choosing the institutional mechanism for intellectual property management at an enterprise.

The practical use of the research results allows simulating the processes of intellectual property management; improving the efficiency of innovative projects and business processes in terms of information technologies.

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Impact of Oil Prices on Economic Growth in Latin American Oil Exporting Countries (1990-2014): A Panel Data Analysis

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Abstract*:*

This paper estimates the significance and sign of the impact of oil price changes on the GDP growth rate of a sample of net oil-exporting Latin American countries (Argentina, Colombia, Ecuador, Mexico and Venezuela), for the period 1990-2014. Most previous studies on the impact of oil price fluctuations on GDP growth were made for developed, net oil importing countries. By contrast, this study focuses on modeling the impact of oil price fluctuations on GDP growth rates of net oil exporting Latin American countries. Using annual data for the 1990-2014 period, pooled regression analysis and different panel data techniques, empirical results suggest that crude oil price fluctuations have a positive sign and a highly significant effect on the levels of economic activity for the sample countries. The importance of oil revenues for the public finances and for an important number of private companies, as well as the multiplier effects those activities have on economic activity validate the econometric results.

Keywords: impact of oil prices on GDP, relative importance of the oil industry, Latin American oil exporting countries.

JEL Classification: P28, Q43, O54.

Introduction

The impact of the price of the West Texas Intermediate marker crude oil price (WTI) on the growth rate of the GDP of exporting Latin American countries is an important current issue. Five net oil-exporting Latin American countries will be next examined: Argentina, Colombia, Ecuador, Mexico and Venezuela. A better understanding of the elasticity of their economic activity in response to oil prices fluctuations is a first objective towards a more complete mapping of the different channels through which oil prices impact different economic sectors. We propose an econometric methodological approach that provides relevant evidence for government economic policy designers and private-sector decision makers. The methodology consists of the estimation of a Pooled Regression, a Panel Data model with Fixed and Random Effects, and a Generalized Method of Moments Panel Estimation. The main empirical results suggest that oil price variations are positively related to the growth of the economy of the sample of net oil exporting Latin American countries and, for that reason, the relative importance of the oil industry in their economies makes their GDP growth are exposed to the ups and downs of the global oil market prices.

Latin American net oil exporting countries have been active participants in the global oil market for many years and have experienced both the benefits and the negative consequences of oil prices' significant secular volatility. For example, during the second half of the 1970s, Mexico carried out large-scale investments to explore for oil deposits and to build up the necessary infrastructure that would enable their exploitation.

However, the sustained decline in international prices that started during the summer of 1981 led to a moratorium on the country's international financial commitments (Garzón and Hafsi 1992). The economic boom generated by the large oil exports in Venezuela caused political dissent and also represented a turning point in the evolution of its economic model that made it highly dependent on oil exports and, logically, on the price of crude oil (Nariño-Rodríguez 2013). The important deposits discovered in the territorial waters of Brazil brought wealth and created the conditions for the diversification of the capital goods industry, but also disinterest in modernizing the rest of the economy (Nagao-Menezes 2012). In Colombia and Ecuador, the discovery of oilfields generated exceptional revenue for the government coffers but, since 2014, the decline of oil prices has slowed down their economic growth. The paper is organized as follows: section 2 deals with a review of representative studies on the subject matter of this work, and performs a brief digression on the determinants of oil prices; section 3 examines the impact of oil prices on economic growth; section 4 describes the data; section 5 puts forward the methodological approach; section 6 presents and discusses the empirical results; finally, the concluding section provides some general policy recommendations for oil companies and governments exposed to oil prices volatility.

Conclusions

The ups and downs of the international price of crude oil should have a noticeable influence on the level of economic activity. In those countries where the oil industry represents a productive activity of significant economic weight and, particularly for those that are net oil exporters. The revenue from crude and derivative products (in case there are any) exports, as well as the continuous investments in prospecting, drilling, and other expenses to build up an oil industry infrastructure, plus the operating expenses of wells and refineries, plus the purchases of various kinds of inputs and the salaries received by the labor force employed in the industry, all represent a powerful dynamic force for oil exporting economies.

In such cases, the measurement of the sensitivity of economic activity to the ups and downs of oil prices, as well as the importance of the oil industry as an integral component of the country's productive activity due to its productive enchainment with other industries and multiplier effects, are a matter of interest. A more precise understanding of the dynamics of these relations is a necessary condition for the development of short-term action plans and medium/long-term economic development strategies.

In this work we use Panel Data Analysis to measure the sensitivity of the GDP Growth of crude oil exporting Latin American countries to fluctuations in crude prices. This econometric technique substantially improves the measurement of the impact of oil market innovations on economic activity, as it creates the possibility to take into consideration the specific differences of each of the countries under study, using the Fixed and Random Effects Techniques, as well as a dynamic estimation using the Generalized Method of Moments (GMM).

Oil prices are subject to a number of economic and often-times non-economic (mostly, geopolitical) influences. Both the ups and downs of the economic cycle of major industrialized net oil importing countries, as well as unexpected geopolitical events influence their evolution. The importance of oil as the most popular source of energy in the planet and the highly significant financial stakes involved are a continuous source of uncertainty among oil market players. Oil exporting countries benefit when prices increase, but their income diminishes when there is a downturn.

The governments of oil exporting countries would like to have more influence over the global oil market equilibrium, and in some cases they have joined specific cross-national organizations to coordinate their policies, like the OPEC. However, after decades of an almost unilateral control by the OPEC, the global oil market has become more pulverized and no single participant, including the OPEC countries as a group, have an absolute control of global oil prices.

While many attempts have been made to predict the future evolution of oil prices, none have been successful and, except for very general anticipation trends, not much else is possible. It would seem that, as in other commodity markets, no individual player can influence the market, but beyond potential initiatives to do so, the arrival of news is one of the major determinants of oil prices.

Latin American Oil Exporting Countries have benefited from the windfall of their oil exports' earned resources, but sometimes have also been affected when international oil prices collapse. For that reason, it is important to develop empirical analyses that shed some light on the significance of oil price fluctuations over exporting countries' GDP. The benefits of using Panel Data Analysis are evident when the different models are compared, and all the models validate the statistical significance of oil price variations for the determination of economic growth rates in Latin American Oil Exporting Countries, a relationship that needs further study to determine the magnitude and timing of hedging needs or macroeconomic policy adjustments and other financial measures required to capitalize on windfalls and minimize the exposure of net oil exporting Latin American economies to secular falls of oil international prices.

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Stock Indices and Their Role in Prediction Czech and Slovak Business Cycle

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Abstract:

The paper demonstrates the importance of stock indices in predicting the development of the Czech and Slovak business cycles. At present, there are several international and national institutions which deal with the analysis of how the selected economic indicators influence the development and prediction of a business cycle, mainly through a construction of composite leading indicators, which are often used for short-term prediction of business cycles. All these institutions also examine the abilities of stock indices to predict the development of an economy, their findings, however, differ. International institutions, such as Eurostat and OECD, considers stock indices important, whereas at national levels the situation is different. We aim to analyse the real predictive abilities of stock indices in relation to the Czech and Slovak business cycles using our own methodology and to present conclusions of our analysis, i.e. whether it is really appropriate to use stock indices in predicting business cycles for these two countries.

Keywords: stock market; stock index; business cycles; composite leading indicator.

JEL Classification: E3, E32.

Introduction

In the past decades there has been an increase in the influence of stock market on the real economy and, subsequently, on a country's business cycle development. In the past, stock market development used to be parallel to the development of a business cycle. In the 1990s, however, we can observe a lead of stock market development against the development of business cycle. It means that the stock market, or its selected indicators, such as stock indices, has the ability to predict business cycle developments and hence, give us a view of a possible future economic development. However, this is not the case in every country.

The need to know the basic indicators, which can predict a country's business cycle development, arose mainly under the influence of the global financial crisis, which had started to spread from the USA in 2007. The crisis has confirmed that the instability in the financial sector can result not only in a financial crisis but in an economic one as well (Dietrich *et al.* 2011), which subsequently affects a country's economic (Siničáková and Pavličková 2011). Apart from predicting unfavourable economic events, it is also important to know the time when an economy is to experience economic growth, which often affects the development of the financial, sector as well (Botrić and Slijepčević 2008).

The aim of our paper is to analyse predictive power of selected stock indices in relation to the Czech and Slovak business cycles. Based on this analysis, we will try to find out whether there are stock market indices, which we can use for a short-term prediction of a business cycle development; and we will also focus on examining the quality of prediction of these indicators.

Conclusion

Nowadays, stock indices are used a great deal in predicting business cycles of world countries, including Slovakia and the Czech Republic. In these countries a stock index was included in the CLI in case of international organizations, namely OECD and Eurostat. Noteworthy is the fact that the domestic institutions, which engage in the construction of CLIs for the Czech Republic and Slovakia, i.e. Infostat and ČŠÚ, do not include in CLI any stock index, or even a financial market indicator. National institutions should take into consideration the specificities of the given country in a greater deal than Eurostat and OECD, therefore, it could seem that the results connected with the CLI composition should be more precise at the national level. Due to these discrepancies we have composed our own CLI for the Czech Republic and Slovakia and we have analysed the role of the selected stock indices in the prediction of Czech and Slovak business cycles using this composite leading indicator. The results of our analysis indicate that the selected stock indices in the case of the Czech Republic satisfy the conditions to be ranked among the leading indicators and that way they can predict the development of the country's business cycle. We consider the PX Index to be the best such indicator whose quality enables it to be ranked also among the leading indicators included in the Czech CLI, not only according to our calculations but also according to the calculations of OECD and Eurostat. In the case of Slovakia, we came to different conclusions. The monitored stock indices no longer showed the leading properties in all the cases, even the basic stock index for Slovakia, SAX, did not satisfy the conditions to be included in the group of leading indicators. This was the discrepancy between the results of our analysis and the analyses of OECD and Eurostat.

A prediction of a business cycle development, however, cannot be made only based on one area, i.e. for example the stock market development, but it is necessary to take into consideration the whole set of economic indicators, a combination of which can lead to the composition of a high-quality composite indicator which has a short-term predictive ability in terms of the country's business cycle.

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Development of the Municipal Market of Land Plot Auctions for Housing Construction in Russia

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Abstract:

The article deals with relevant issues of the modern development of the Russian land market in the segment of municipal auction sales of land for housing construction. The article shows that municipalities play an important role in the Russian market of auction sales of land plots for housing construction. It presents statistics showing the current situation, characteristics and development trends of the land market for housing construction and its segment of auction sales at the level of the Russian Federation and the municipality of Penza. Elements of procedural modeling of the territorial land market for housing construction are shown, including a classification analysis of the structure of the auction sales segment of the market. Methodological proposals are formulated on modeling and forecasting growth functions of the starting auction price according to the theory of auctions in the context of the municipalities of the Russian Federation and Penza. Classification and analysis is given of key factors affecting the likelihood of sales of land plots for individual housing construction at municipal auctions in Penza, including economic and mathematical modeling. Conclusions and recommendations on the research subject are formulated.

Keywords: land plots, municipal market of auction sales, land auctions, auction theory.

JEL Classification: D44, R52.

Introduction

At the present stage of development of the land market in Russia, land auctions are crucially important as a way of acquiring land for housing construction. Municipalities organize land auctions for housing construction to improve the housing conditions of individuals and to expand urban areas, as well as to additional revenue for state and municipal budgets.

In this regard, the study of the municipal market of auction sales of land for housing construction is of particular importance. With the proper functioning of the mechanism of land sales through auctions, budget revenues from land sales can significantly increase and the housing shortage problem that exists in Russia can be solved.

In this regard, the study of the municipal market of auction sales of land for housing construction is of particular importance. Without proper functioning of the mechanism of auction land sales, revenues from land sales of budgets of all levels can significantly shrink.

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[2] S units of domestic currency = 1 unit of foreign currency

Conclusion

Thus, the research contains an update on current situation of the research subject. It was found that the most problematic area of auction sales of land plots to individuals and legal entities is the sale of land plots that are part of residential areas zoned for housing construction, due to the high demand in Russia for affordable housing. The study covers the current situation, characteristics, and development trends of the land market for housing construction and its segment of auction sales at the level of the Russian Federation. The research findings was used by the authors to model the territorial market of land for housing construction, as well as to identify the classification criteria of the municipal market of auction sales and to propose a detailed classification of the auction sales market, leading to the conclusion about the diversity of the market. Methodological proposals were formulated on modeling and forecasting growth functions of the starting auction price according to the theory of auctions in the context of the municipalities of the Russian Federation and Penza. Measures were proposed to increase the number of bidders in auctions, which will lead to a greater growth of the starting auction price and higher municipal revenues.

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Market Structure and Banking Sector Performance

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Abstract:

The purpose of the paper is to analyse the relations between performance and structure in the banking market. The paper contains a theoretical definition and overview of approaches for competitive hypotheses testing. There have been used several methods to estimate the performance and concentration in the American banking market between 1966 and 2013. The results served as a basis for competitive hypotheses testing. The presence of the Structure-Conduct-Performance hypothesis and Efficient Structure hypothesis was verified by means of an estimate of regression models for panel data. Positive relations between the selected performance indicators and absolute concentration as well as between efficiency and market shares of the analysed banking sectors were estimated.

Keywords: performance, concentration, competitive hypothesis, panel data, US banking sector.

JEL Classification: G21, C12, D40.

Introduction

In the economic system of the country that works in accordance with the principles of market mechanism, there are carry out economic activities of individual entities. One of the conditions for the effective functioning of this system is well functioning financial system. Significant changes that have affected the financial system in recent years have included changes in deregulation, markets globalization and innovation. Especially the process of globalization affects the structure of the financial and banking market, their performance and stability. Therefore, it is very important to focus on analysing the banks performance. The performance of banks must be examined not only as an isolated phenomenon, but it is important to focus on performance evaluation in the context of market structure. Therefore, the aim of this paper was to analyse the relations between the market structure and banking sector performance. The analysis was performed on data for the US banking market within the period 1966-2013. The access only to this type of data is not a limitation of our analytical work, whereas the paper may constitute a form of methodological and analytical process, which in the case of data availability can be applied also in the banking sector of other countries and continents.

To fulfil the objectives, the contribution is divided into two main parts. The content of the first part is the theoretical definition of the relationship between market structure and banking sector performance. In the second part, there is empirically estimated performance and concentration in the American banking market, followed by testing of competing hypothesis between selected variables. One of the benefits of this paper compared to other studies can be considered the simultaneous use of multiple methods for efficiency and concentration measurement and expansion of the group of independent variables. To measure the efficiency there are used two methods: the ratio method and the nonparametric method (Data Envelopment Analysis, DEA). The concentration is measured by using traditional indicator (Herfindahl-Hirschman Index) and also by Hall-Tideman index.

Conclusion

The aim of the paper was to estimate the relationship between concentration and performance in the US banking industry. By testing the competing hypotheses there was found a positive relationship between performance (ROC) and concentration, confirming the validity of SCP hypothesis in the American banking market. The positive relationship was also confirmed between the performance and market shares of banking sectors, confirming the validity of ES hypothesis. The higher concentration on the deposit market was linked to higher performance. Decreasing competition enable banks to maintain a stable position on the market. In the case of dominant players, the stable positions on the market allow them to influence the level of interest rates, which ultimately could lead to an increase in interest income, to a decrease in interest expenses and consequently to an increase in net profit of banks. Higher profit and lower costs were reflected in better return on costs, indicating better performance of banking market. On the other hand, we could say that the growing competition in the market increased the migration of clients, reducing the duration of the relationship between the bank and the client. Bank customers go to the competition, which is able to offer higher interest rates on deposit products, respectively lower interest rates for their credit products. It forced other banks in a competitive environment to adapt to these conditions by reducing interest rates on the asset side, and rising interest rates on the liabilities side, which in turn led to lower profits and to a decline in performance.

In contrast to the above findings are the results in the case of cost efficiency, where the results have shown the existence of the significant relationship, but the sign of the estimated coefficient signalised the existence of a negative relationship. This is in line with "quiet life hypothesis" presented by Hicks (1935). According to Hick´s "quiet life hypothesis" firms with higher market power put less effort in pursuing cost efficiency: instead of taking advantage of their favourable position by cutting cost so as to gain higher profits, they prefer to enjoy a "quiet life". On the other hand, the competitive environment prevents managers to enjoy a "quiet life", forcing them to constantly look for opportunities to strengthen its market position, which reflects the growth of performance. The argument of a negative relationship between concentration and performance can be found in the work of Leibenstein (1966), who shown that the main factor for performance growth is the growth of competitive pressures leading to a decline in market concentration. Lower concentrations and thus higher competition lead managers to efforts to improve the performance of the company to prevent the crowding out from the market. The higher number of firms in the market allows for business owners to compare their performance with comparable market players. In the case that performance is not at the level required by the owners, it can lead to changes in management. It motivates managers to achieve increasingly better performance indicators in order to maintain a fixed position in the prosperous company. This finding is in line with work of Prutean-Podpier *et al.* (2007, 2008) suggesting a negative relationship between performance and concentration on the Czech banking market.

In recent years, several authors concluded that the relationship between concentration and performance may be modified by specific conditions. Therefore, when examining competition hypothesis, the other variables were added in regression models. The test results on the US banking market led to the conclusion that it is not possible to clearly identify the factors with a statistically significant positive or negative impact on banking sector performance. While in the case of *ROC* the variable capitalisation had a positive impact on performance, in the case of *CE* there was found a negative impact. A different impact was found out also in the case of macroeconomic variables. The exceptions are indicators of assets´ quality, size, profitability, and operational efficiency of the banking sector, which show the same direction of impact in both performance indicators.

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A Review of the State-of-the-Art Research on the Twin Deficit Hypothesis

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Abstract:

The aim of this paper is to find the most important patterns in published papers on the twin deficits. The research methodology includes text-mining analysis covering all the relevant Research Papers in Economics (RePEc) works. It turned out that Ricardian equivalence and the Mundell-Fleming approach dominate twin deficit research, especially in developed countries. The current account targeting hypothesis and bi-directional causality are confirmed mainly in developing countries. As regards the methodology, the most used are cointegration techniques and Granger causality testing. The percentage of papers proving Ricardian equivalence did not change during the analysed period, while the percentage of those confirming the Mundell-Fleming model decreased when using more recent data.

Keywords: twin deficit, text mining, Granger causality, Ricardian equivalence, current account targeting, Mundell-Fleming model.

JEL Classification: E62, F41, H62.

Introduction

The instability of the world economic system is frequently discussed. The US financial and economic crisis touched the rest of the world; in particular, the national economies were exposed to persistent current account or public deficits. The idea explaining the co-existence of the two kinds of deficits is known as the twin deficit (TD) hypothesis. The first mention of the interdependence between the budget and the current account deficit appeared in the 1980s, but in recent decades, a considerable number of papers have provided evidence of various forms of the current account vs. budget deficit relation. However, the evidence often brings ambiguous and even contradictory results. Hence, our objective is to find and analyse the most important patterns (from the point of view of results, variables, methodology, etc.) in the chosen papers on twin deficits. For that purpose, text-mining analysis with clustering is performed. Subsequently, the research is complemented by the analysis of the content of 50 highly qualified papers. They are classified according to countries, variables included, methodology, periods and results achieved.

Conclusion

Nowadays, a considerable number of papers are concerned with twin deficits. According to the RePEc database, 67 journal articles and 101 discussion papers (December 2013) contain the term "twin deficit/s" in their title. The papers differ according to the methods used, variables included, regions researched, results achieved and time period.

Firstly, our objective was to find the most frequently discussed economic categories associated with twin deficits, to identify the relations among them and to find some patterns prevailing in the papers. For that purpose, text-mining analysis and consequently clustering analysis were performed. The text-mining analysis reveals that Ricardian equivalence and the Mundell-Fleming approach dominate the twin deficit research. The analysis of the papers' content and classification confirms that this is true mainly in developed countries. The clustering of the frequency of terms used in the papers confirms that these two theories form two important clusters and are properly linked to the corresponding macroeconomic variables. The current account targeting hypothesis and bi-directional causality are evident primarily for developing countries.

Secondly, we aimed to classify the 50 most relevant papers into four possible categories according to the coun- tries analysed, methodology, variables included and period analysed, i.e. approaches explaining twin deficit theories by (i) Ricardian equivalence; (ii) the Mundell-Fleming model; (iii) the current account targeting hypothesis; and (iv) bi-directional causality.

As regards the applied methods, the most commonly used are cointegration techniques and Granger causality testing, although the Granger causality test does not offer uniform results. The majority of papers do not test the direct relation between two deficits, but also use some additional macroeconomic variables. The text-mining analysis (i.e. analysis of terms' frequency) and the analysis of the content of the papers reveal that the interest rate, exchange rate, government spending and debt represent the factors that are used relatively often. Finally, the percentage of scientific papers proving Ricardian equivalence did not change significantly during the analysed period. Nevertheless, the percentage of papers confirming the Mundell-Fleming model decreased when testing twin deficits with more recent data.

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Outsourcing: The Improvement of Accounting System

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Abstract:

The article is devoted to the issues of formulation and solving the problems of accountancy, expenditures, when we use outsourcing. The article marks the necessity to organize such accountancy, when pricing groupings are formed according to the events and changes that take place in business. The article underlines the necessity of accountancy for all expenditures that can be achieved by using the ABC - method (Activity Based Costing), when we calculate. Moreover, the article underlines the importance and necessity to define the fractions of assets to form the product cost of the certain forms or areas of activity. The article indicates the structural factors that influence the formation of full cost. These factors form tacit or transactional expenses. When we use outsourcing, we must manage by expenditures maintaining economic unity. The article splits off connections between the strategic components when we use outsourcing. At the end of the article, the authors present the conclusions due to the results of study.

Keywords: outsourcing, expenditures, pricing groupings, ABC-method, economic unity.

JEL Classification: M41.

Introduction

Further, in modern sources of information there is no scientific evidence of outsourcing companies. In the accounting information sources choice between "make" or "buy" is limited to the comparison of alternative costs by cost apportionment. As Horngren notes some strategic objectives remain forgotten (Hall 2004, 255-260).
The choice of the "right" service provider has a decisive influence on the effectiveness of outsourcing. "Confidence in well-done work outweighs any price saving, which the customer can receive by referring to another performer." (Morse, Davis, and Graves 2003, 43)

It is common knowledge, the foundation of any accounting system – chart of accounts. Chart of accounts by types of financial and economic activity includes the accounts used in management accounting. In accounting area information on expenses, changes in accounting procedures related to costs, as it requires multiple ways records and disclosure. With such a record, it is possible to obtain valuable information about competitors of the company. However, this may incur additional charges on accounting and analysis, expanding the scope of accounting, as well as on information on current costs.

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Conclusion

To summarize, we can draw the following conclusions:

- Outsourcing some types of activities helps to achieve such goals as cost saving, flexibility in operations and quick response to client requests. Outsourcing is an important element of maintaining the competitive position of the organization on the market. In addition, the main point of outsourcing is redesign, the aim of which is to improve the quality of work in accordance with customer's requirements.
- Cost accounting system is essential; it allows forming the information base for making effective managerial decisions. Outsourcing accounting allows you to target the rational use of funds intended for the execution of the order in accordance with the pricing groups.
- Considering cost accounting, it is possible to use ABC method because of the division of company infrastructure, processes and activities, unrelated directly to the company but having a significant role for economic and financial indicators. The cost of outsourcing contracts has a decisive influence on purchase, operation, distribution and sales decisions. At the same time, outsourcing is connected with some risks that should be considered not only in relation to a particular field or function, but also in the diversity of risks or their combination. The main criteria of making decisions are to ensure business continuity.
- It is necessary to take into account planning and company strategy in the process of cost-benefit analysis and making decisions of outsourcing contracts to determine the strengths and weaknesses of the company, the effectiveness of environmental opportunities and threats and the adoption of a systemic and strategic plans.
- Costs and separate cost accounting, the process of management accounting at the enterprises should be based on Uniform corporate automated control system of finances and resources and can be used with accounting outsourcing. The recommended system can improve the quality of accounting information and help to make the correct managerial decisions by all authorities.

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Creating Methodological Instruments for Innovation Project Assessment under Uncertainty Conditions

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Abstract:

The research evidences that there is no uniform approach to the assessment of an innovation project. To form an unbiased assessment of an investment project, its separate features have been studied and the authors' definition has been given; the difference between an innovation and an innovation investment project has been found, criteria for the classification of innovation projects have been studied, methodological approaches to the assessment of an innovation project from the point of view of efficiency, competitiveness, innovativeness, uncertainty and risks, as well as risks management have been systemized. Among numerous methodological approaches to innovation project assessment it was reasoned that under uncertainty the most preferable is the innovation stability of a project. As a result, methodological instruments have been created for the assessment of an innovation project comprising the following stages: 1) study of innovation project functioning via identification of risk types and uncertainty; 2) finding universal autonomy coefficient (financial stability) of an entity in funding of innovation activities characterizing both the success of a project and innovation situation risk; 3) implementation of comparative efficiency theory in the assessment of an innovation project; 4) assessment of the uncertainty of a project via finding its stability; 5) formulation of motivated conclusion on the condition of an innovation project by innovation activity-related staff.

Keywords: project, innovation, innovation stability, innovation uncertainty, innovation risk, real options, improvement project.

JEL Classification: O31, O22.

Introduction

As the practice shows, few national organizations implement innovation projects and certainly are able to assess them.

For the assessment of an innovation project it is important to identify the notion of an innovation project. Despite the fact that innovation project assessment issues are long-developed, so far at the Russian and international levels there has been no uniform approach to the notion of an innovation project. The national law (Federal Act No. 127-FZ of 23.08.1996 on science and state scientific and technical policy, Zavlin 2000, Korobeinikov, Korshunov and Trifilova 2002) characterize an innovation project as a set of steps in innovative activity in various modifications which create it together. Baiburtyan, Mamiy (2011) and Sklyarova (2011) define constructive features of an innovation project in the course of innovation activity. Novikov (2010) studies it via a system of interrelated innovation programs. Vertakova and Simonenko (2008), Yevgrafova and Krasnikova (2011),

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Yesengalieva and Mutanov (2012), Fatkhutdinov (2013) integrate the interpretations via a set of steps, target management, set of documents. Sometimes, the notions of an investment innovation project and innovation project are identified.

Meantime, there are a lot of criteria for the classification of innovation project types. Different definition of the essence and content of an innovation project greatly complicates the preparation of instruments for its assessment.

Regarding the implementation of methodological approaches of an innovation project, pluralism is noted. Vertakova, Simonenko (2008) offer to identify the assessment of an investment project and an innovation project, while Krylov, Vlasov, Ovodenko (2003), on the contrary, have the opposite opinion; the basis of various assessment methodologies consists of efficiency, competitiveness, innovativeness, uncertainty, risk and other criteria. The national legislator does not provide for a uniform methodology for the assessment of an innovation project in the federal statistical instruments for monitoring innovative activity.

All the above causes to develop a set of instruments for innovation project assessment much accounting for the requirements of the federal statistical instruments for monitoring innovative activity and the conditions of innovation project realizability which evidences the rationale of this research.

The purpose of this research is to develop a methodological set of instruments for the assessment of the notion of an innovation project accounting for the uncertainty of project environment and realization. The objectives of this research are: from theoretical and methodological positions to describe the points of view on the notion of an innovation project and to express the authors' position on that matter; to study and classify the types of innovation projects; to assess the applicability of many methodological approaches under uncertainty and risk; to develop methodological instruments to innovation project assessment aimed to find the stability of a project under uncertainty upon approbation in the practice of a commercial entity.

The theoretical and methodological basis of this research consists of the works of national and international economy scholars. The methodological basis of this research is the scientific and logical approach to the study of the essence, content, methodologies of innovation project assessment. Using synthesis, detailization and generalization, grouping, formalization, abstract logical, analytical, comparative, economic statistical, expert assessment methods, the essence and content of the notion of an innovation project were identified, the authors' position was rationalized on the classification of its types, and methodological set of instruments for its assessment was made and tested.

Working hypothesis of this research is based on a conceptual assumption that methodological instruments for innovation project assessment should be oriented at the assessment of its innovative stability. That suggests the following: specification of the essential and substantial characteristic of an innovation project; systemizing its types; differentiation of investment innovation projects and innovation projects; systemizing methodological approaches to innovation project assessment admitting their independence regarding its assessment; development of methodological instruments for its assessment under uncertainty. Theoretical and methodological significance of this research is as follows: the notion of an innovation project was formed, the authors' position on the classification of its types was reasoned; preferable instruments for innovation project assessment were rationalized and realized.

The practical significance of this research is the development and application of an approach to innovation project assessment oriented both to find its innovative stability and break-even analysis of the entity realizing it.

Conclusion

So, the conducted research may be developed in the following: formulation of updated methodological instruments for assessment of innovation project under uncertainty and risk conditions; development of uniform national methodology of innovation project assessment; considering at the state level of the opportunity to include innovation project assessment in the federal statistical instruments for monitoring innovative activity; implementation of other approaches to innovation project assessment from the perspective of efficiency and competitiveness accounting for the specifics and environment of an organization.

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Predicting Bankruptcy using Multi Discriminant Analysis in Sugar Industry

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Abstract:

The study is about examining and predicting the financial health of sugar industry using multi discriminant analysis. The study has taken a sample of 27 sugar companies and data for eleven years 2005-2015 is taken from the financial statements of the companies. It is found that out of 27 sample companies none are in safe zone, 6 companies are in grey zone and 21 companies are in the red zone or distress as far as financial health is concerned. This is the true reflection of the sugar industry today which is bogged down by plethora of problems like high cost of procurement and low realization towards final product which resulted in the companies into distress.

Keywords: financial distress, multi discriminant analysis, bankruptcy, Altman Z score, sugar industry.

JEL Classification: G 33.

Introduction

India is an agrarian economy and is the second largestproducer of sugar in the world contributing to 15% of the world's sugar production (2014-15). Brazil being the largest producer of sugar, contributes 22% to the total world sugar production. Indian sugar industry has a capital investment of about Rs. 12,500 million (US$ 190 million), employs around 0.5 million skilled and semi skilled employees directly and supports about 50 million sugar cane growing farmers. The annual turnover of the industry is estimated to be around Rs. 410,000 million (US$ 6,212 million) as of 2015. India produces about 300 to 350 million metric tons of sugarcane and produces 24 to 26 million metric tons of sugar. Maharashtra, Uttar Pradesh and Karnataka are three top sugar producing states in the country contributing to about 75% of the production.

Sugar cane is the raw material used in sugar industry in India. Sugar cane is perishable and cannot be transported over a long distance. Hence, most sugar producing factories are located close to the sugar cane growing areas. The industry suffers from some peculiar problems. In India the price of sugar cane procuredfrom farmers are fixed by the government which the sugar companies are bound to pay. However, the sugar prices are market driven and determined by the international prices. Indian sugar companies find it extrmely difficult to export sugar and compete in the international markets. This is because of increased supply of sugar by the world leader Brazil coupled with the falling Brazillian currency Real, which has brought down the international prices of sugar. The other problems which the industry faces are low yield of sugar cane (65-70 tons per hectare compared to 90 tons in Java), short crushing season of 4 to 7 months keeping the sugar mills idle for the rest of the year, fluctuating production trends, low rate of recovery (10% as against 14-16% in Australia), high cost of production, small and uneconomical size of mills with outdated machinery. These resulted in decreasing profitability and worsening working capital situationin the sugar industry. This gave the researchers impetus to do research on understanding the financial situation in sugar industry using multi discriminant analysis the Altman's Z score.

Bankruptcy prediction and understanding the company's financial situation is very useful from various perspectives. Early detection can help shareholders reduce losses by taking corrective steps, banks and financial institutions to assess and take better decisions in extending credit facilities and mitigate risk and most importantly companies in early detection to rectify their financial position.

Conclusion

The financial situation of sugar industry is examined using Altman'sz score. However, the Indian Sugar Industry is facing are examined increasing cost of sugar cane and falling prices of sugar leading to low profitability. The biggest challenge to the policy framers in India is to fix the sugar cane prices optimally, that would ensure viability both to farmers and sugar producers, of course keeping the concerns of the consumers in mind.

The Govt of India appointed a committee (Rangarajan Committee) some years ago to give recommendations for the revival of the sugar industry. The committee has recommended that the price of sugar cane be linked to realization price of sugar and be based on revenue sharing. Accordingly, 70% of the realizations of sugar along with by-products is to be paid by sugar mills as a price for sugarcane. In the alternative 75% of the realizations of sugar alone is to be paid. Indian states of Karnataka and Maharashtra have already partly implemented this and have met with success. However, other state governments are yet to follow. It is to be noted that other top sugar producing counties viz. Brazil, Thailand and Australia have already linked sugar cane procurement to sugar pricing. The industry may also perform well with better intervention from the government towards building compulsory buffer stocks, diverting part of sugar cane production towards production of ethanol, re-structuring the industry debt and better support prices for exports. The Government of India can put India solidly on the world sugar map by proactively announcing and implementing a National Sugar Policy. The first element of this would be linking the sugar cane prices to sugar.

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Optimization Method of Cash Balance

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Abstract

Temporarily free funds management implies determining the optimal balance. Traditionally it is considered that the optimal cash balance is the balance when total value of lost profit and transfers is minimal due to non use of temporarily free funds. It is possible to determine the necessary cash balance on the settlement accountor cash on hand, and the necessary part of cash balance for conversion into short-term securities (deposits) in order to make a profit with the use of modern economic and mathematical models of optimal cash balance calculation (Baumol, Miller-Orr, Stone). Thus mathematical models of optimal cash balance calculation consider just two interrelated type of assets which are cash and short-term securities (deposits), and two types of factors determining optimal cash balance which are lost profits and the cost of transfer. In this case some factors remain unaccounted, in particular, expense for maintenance of financial responsibility of an enterprise. Such expense arises if there aren't enough funds to extinguish financial liabilities. Changing of cash balance is purely deterministic in some models, while this changing has the only stochastic nature in others that does not match the reality.

Thus, the task of an utmost importance is further developing the model of cash optimization, which is the aim of this research. Methodology of this research is based on the use of the systematic approach, which takes into account the interaction of various factors that determine the value of optimal cash balance, as well as regression analysis. As a result, the new economic-mathematical model is developed in order to calculate optimal balance of available funds. It differs from previously developed models and takes into account muchmore factors. This model uses statistical data for each particular enterprise as a basis for determining equations, which reflect the cash balance impact on the valueof costs and losses that are accounted in the model.

Keywords: cash, optimization of cash balance, cash management, economic and mathematical model, Baumol's model, Miller-Orr model, Stone's model.

JEL Classification: C10, M41.

Introduction

The effective cash management is essential in the situation of inflation, reduction of consumer demand, low solvency of enterprises and other crisis phenomenaof the modern world economy. An enterprise's earnings, profitability ofassets, its solvencyand investment opportunities depend on cash management effectiveness. One of the most important cash management tool is to maintain cash balance at the optimum level. Traditionally it is considered that the optimal cash balance is the balance when total value of lost profitdue to nonuse of temporarily free funds and transfers are minimal.

Economic and mathematical models were developed to calculate the optimal cash balance such as: W. Baumol's model (Baumol 1952), Miller-Orr model (Miller and Orr 1966), Stone's model (Stone and Bernell 1972). All these models allow calculating the optimal amount of cash balance when it is necessary to determine the amount of money that should be invested in short-term securities. The base of the developed models' objective function is

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minimalexpenseof transfers and minimal total value of lost profitdue to nonuse of temporarily free funds. At the same time these models don't take into account demand for cash in order to fund operating activities of an enterprise, they don't take into account expense that arise due to lack of cash (cost of short-term loans, penalties and interest on overdue obligations). It appears that these models consider principally cash and securities and don't pay enough attention to cash flow of operating activity. Thus, the task of an utmost importance is enhancing the said models taking into account the cash required for operating activities and the costexpense that arise due to lack of cash.

Conclusion

The authors represented a new economic mathematical model for accounting of optimal cash balance. The model is not limited by the definition "cash – securities" and considers need of finances for the main organization activity. The model also accepts any type of spare cash investment and considers the lost profit as a decrease of purchasing power of finance nonuse.

At the same time the system of management accounting should be developed for the practical model application. Besides, the subject of further research should be an accurate algorithm of management actions to provide the actual cash balance. All of this defines directions of further research in the sphere of cash balance optimization.

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Labour and Social Relations as the Economical Category and the Efficiency of the Regional System of Labour and Social Relations

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Abstract:

An economic instability which is associated with the continuing economic crisis of 2008-2010, aggravated by oil prices downturn and Western economic sanctions against Russia, leads to deterioration of the of regions of the Russian Federation. A systemic regulation of social and labour relations in the Russian economy is important in order to return the Russian economy to sustainable development at the present stage. The aim of our research is development of the main ways to increase the functional efficiency of regional system of the social and labour relations. Authors offered a methodology based on evaluation of efficiency of the social and labour relations of the region. The systemic approach, which presupposes the overall and deep studies of social and labour relations, was also used in the research. Mathematical method of statistics factor analyses) and the method of expert review were also used. On the basis of the authors' methodology (evaluation of the efficiency of the social and labour relations) the rating of Ural region territories was prepared in terms of the efficiency of social and labor relations regulation, identified the advantages and disadvantages of the social and labour relations regulation in different regions of the Russian Federation. The results of the research allow define the strategy of development of the social and labour sphere of the region in modern conditions.

Keywords: regional economics, regulation, labour relations, evaluation methodology, rating of efficiency.

JEL Classification: F66.

Introduction

1.1. Problem setting

The aim of this researchis to define the term of social and labour relations as the economical category, to develop the theoretic and methodological basis of their systematic regulation including the definition of the terms "labour relations", social and labour relations". The aim also includes the identification of the levels of social and labour relations, definition of the term "social and labour relations", development of the basic ways of their efficiency rise. The reform of 1990s has led to the production decline, decrease in the quality of life, poverty. Most of the workers lost their social and labour status. The reform negatively affected the labour motivation. As a result, labour has lost its value; the possibilities of participation in management fell down, the contradictions between the interests of workers and capital owners intensified. At the beginning of the 21st century there were some tendencies for the stable development of market economy in the Russian Federation. But at the present they are undermined by the world crisis. People faced the problems of unemployment and social and labour relations regulation. Now there are

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plenty of unsolved problems, which make obstacles to the work efficiency rise such as: unemployment, different incomes of population, incomes below subsistence minimum, draw backs in regulation of social and labour relations.

It is necessary to conduct an accurate study of social and labour relations efficiency and it can be proved by the following:

- necessity of efficient and motivated labour and the absence of its mechanism in different regions.
- necessity of system regulation of social and labour relations of the region and the absence of the mechanism of its theoretical and methodological bases.
- necessity of labour and social relations efficiency rise in different regions on the ground of coordinated functioning of various institutions of regional system of social and labour relations.

The stable economy development and its rise largely depend on the state and development of social and labour relations at different levels. The importance of social and labour relations efficiency rise for the region and for the theoretical and practical formation of effective regional policy as well as its complexity require profound theoretical grounds and methodological developments.

Conclusion

The authors suggest future work to further improve the techniques (updating a set of indicators to calculate the efficiency) and the implementation of the methodology of social and labour relation in the computer program with the help of Visual Basic in Excel. This program may be used while social and labour relation efficiency evaluation in any constituent entity of the Russian Federation.

The practical value of the research results in its complex and systematic character, which allows to use it while teaching such subjects as "Labour economy", "Social and labour relations of the region" and others as well as while development of learner's guides and profound studies of the social and labour relations problem at higher school in the future.

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