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The Evaluation of Regional Innovation Systems' Efficiency in New Member States of European Union: A Nonparametric Approach

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Abstract:

In most recent regional studies, especially in endogenous growth theory, regional innovative activities, knowledge spillovers, highly educated work force and investment in high technology products with high value added is considered as main factors of long term regional economic growth. The generation of products with high value added and structural changes in regional production structures require a lot of investment, especially in new member states of EU in Eastern and Central Europe with low level of innovative activity, as being modest or moderate innovators according to EU Innovation Scoreboard (European Commission, 2014). Do investments in an innovative activity pay off and is current regional labor creates efficient level of output – these questions are analysed in this paper by application of nonparametric data envelopment analysis (DEA) that is applied to indicate technical efficiency of regional innovation systems of EU new member states in Central and Eastern Europe.

The most technologically inefficient NUTS2 regions in Central and Eastern Europe are indicated in this research that means more attention from government institutions to these regions should be made to find available strategies to enforce higher level of regional innovative activity with current available resources, as regional maximal potential is not reached. For some inefficient regions it means that a lot of capital is invested in innovative activity but it still do not generate efficient output. From the one side, these regions have potential to growth by enforcing its innovative activity with current inputs, from the other side, it is a question if these regions have an ability to develop high technologies and more investments into innovative activities will pay off.

Keywords: regional innovation systems, regional efficiency, economic growth, data envelopment analysis.

JEL Classification: R10, R11, O00.

Introduction

Economic and social disparities remain significant problem in the context of economic integration and single market of the European Union (Burda, Severgnini, 2009; ESPON, 2012; Okubo, 2012). European regions have different business structure and „know how“ technologies, as well as, different levels of specialization in the innovative activities, that forms remaining economic disparities. As stated in „Europe 2020“ growth strategy, member states should strengthen their growth potential by improving productivity and expanding their innovative activities that foster higher value added and impacts better jobs creation (European Commission, 2013).

A systematic approach to innovation spillovers is needed to enforce new innovative activities. Innovative processes is reached by better cooperation and synergy between universities, public and private institutions in the region, forming better characteristics of social capital (Boschma, Martin, 2010).

More intensive innovative activities attract more financial resources to the region. The effective technological development and creation of innovative technologies influences the corporate decision to focus its activities in the economically more developed countries and to direct the flow of funds in these areas (COM (2004) 107). Thus, the high technological level of production and globally competitive production expands the potential for future growth prospects of the region.

Regional Innovation Systems are understood as a loose alliance of private and public interests, governmental institutions, enterprises and other organizations (Cooke 1992; Asheim and Gertler 2005, Doloreux 2003) and are believed to be the cause for the increased competitiveness and productivity in the region (Andersson, 2013). There are a large set of recent research works, analyzing regional innovation systems, their main component and driving factors. For example, Broekel *et al.* (2010), Autant-Bernard, LeSage (2011) evaluated knowledge spillovers between the different regions, Cai ir Hanley (2014) ranked the regions by

innovative system efficiency level, Bosco, Brugnoli (2010), Fritsch, Slavtchev (2011) evaluated a link between the efficiency of innovation system and productivity. It is stated, the region is technically efficient if it reaches maximum production output by efficiently using available resources that are relevant for the development of innovation (Fritsch, Slavtchev, 2011). The concrete contributions to increase competitiveness and productivity become the source of an innovation system and not the result of the regional innovation system, the loose alliance in the innovation system becomes an effect, and not the source, of the efforts to increase competitiveness and productivity (Andersson. 2011).

Our paper is based on the evaluation of regional innovation systems of EU new member states in Central and Eastern Europe by analyzing efficiency of regional innovation production function that was not analyzed in this territorial level.

The aim is to evaluate the efficiency of Central and Eastern European regional innovation systems, by analyzing financial and human resources in the region, that are emphasized in research literature as being important for the development of high level technology. As well as, inefficient European regions, that are lagging to exploit their resources, are identified. According to that, suggestions for better investment distribution between regions are given.

The novelty of this research is that the efficiency of regional innovation production function was not analyzed in this territorial level, even though this group of regions is still lagging in the field of innovative activities, knowledge spillovers and innovative products commercialization processes. The level of NUTS2 regions of new member states (from 2004) in Eastern and Central Europe is analyzed in this paper. Nonparametric methods, such as data envelopment analysis (DEA), full disposal hull (FDH) and order- α analysis is applied in this paper.

This research is made for a more detailed analysis of regional innovation resources, which form a base for regional development policies and a more efficient allocation of financial resources between different regions.

Conclusion

The differences between the regional innovation systems could be expressed by regional different levels of innovative resources and by disparities of regional efficiency to use available resources in optimal way and generate technology efficient output close to efficient frontier. Innovations are a complex factor that relates knowledge, social and human capital, production technology, creativity and "know how" technology. Different characteristics of these factors influence essential regional differences in the process of creating and commercializing innovative and high value added products and service in a region. The increase of resource intended for innovations does not necessarily determine a higher level of value added. It is described by the level of technical efficiency. Both aspects – the level of regional innovative resources and regional efficiency - are analyzed in this paper with more emphasis on regional efficiency evaluated by nonparametric data envelopment analysis method - DEA.

A method of nonparametric mathematical programming – DEA is commonly used for efficient studies and gives opportunities to compare and rank the efficiency of several decision making units, as well as, to identify weak spots of regional innovative development with current resources and investments that could give some clues for a formation of regional policy.

In this study output indicator – gross domestic product - is chosen to evaluate efficiency of a regional production function. In most research of regional innovation production functions the output indicator is a number of patents but it has some weakness in its calculation – the logic could be different between different territories. According to that, overall result of the economy – gross domestic product is chosen to find how innovative factors influence this indicator. Input indicators, as investments in science and technology development, human capital with higher education and workforce in high technology production and services, are analyzed to find whether these resources are used efficiently, in order to achieve a final economic result – the gross domestic product.

Regions of Central and East Europe are analyzed and ranked according to their achieved efficiency and level of innovative resources. From 40 analyzed regions 7 are considered technically efficient, from which 2 regions are of Slovakia's, 4 of Poland's and 1 of Czech Republic, mainly capital regions from more Central Europe. The analysis reflects that countries with efficient regions also have the least efficient regions, especially in Poland and Hungary. It reflects a high diversity of these countries in the process of creating innovative and high value added products because not all of the regions achieved a technically high efficient result with available resources even though investments are made.

Baltic countries are evaluated between the least technically efficient. Estonia distinguishes from Baltic countries because it has a relatively high investment flow into science and technology development and a

relatively high level of human capital highly educated. It means a lot of investment is made in this country but in the time of research the appropriate economic result is not reached. According to other countries production technology, with current level of resources Estonia could reach around 40% higher outputs. So more attention should be made in inefficient countries how to generate economic and more value added activity to generate higher level of innovative activity with current resources.

Regions in the Central and Eastern Europe could achieve 20% higher economic outputs by using available resources in more efficient way. So in technologically ineffective regions it is important to review the programs on how to achieve a higher economic output with available resource, how to evaluate possibilities to involve residents with high education level into high technology product manufacturing, and, how to attract more foreign companies to invest in high value added activity. In the effective regions it is necessary to pay more attention to expansion of resources because current regional inputs give a maximum possible economic result, comparing with analyzed regions.

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Indicator Structuring and Principles of Assessing Ukraine's Domestic Trade System in the Condition of Transformation

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Abstract

In this article, under the research results, the classification of indicators for evaluating the domestic trade system is carried out, which are structured aiming at conformity with the developed criterion Scheme of assessment of the domestic trade system. To evaluate the efficiency of the domestic trade system in the conditions of transformation the developed methodology is offered to be used, in which by means of calculation methods the institutional and transformational, social, economic and managerial efficiency is defined, which affect the integral efficiency indicator and change in the planned (estimated) period that allows to detect the most "problematic" subsystems, in which sufficient potential is not formed. The developed methodology allows us to estimate in complex the efficiency change of the domestic trade system in all subsystems and paying attention to all the criteria. The set of estimates by efficiency types allows us to calculate the efficiency integral indicator of the domestic trade system in the conditions of transformation during the planned (estimated) period compared with basic (previous). On the basis of the scientific research on the selection of criteria and indicators for the assessment of the domestic trade system basic principles of evaluating the efficiency of the domestic trade system are grounded, which are offered to be considered both in the methodological (systemacy, complexity, dependency, recourse return) and applied (scientism, objectivity, effectiveness, accounting and analysis) sense.

Keywords: domestic trade system, transformation, indicator, criterion, principle, evaluation, methodology

JEL Classification: L 810

Introduction

The analyzed theoretical principles of the domestic trade system transformation revealed a number of problems both of theoretical and practical nature, emergence and manifestation of which hinders the development of Ukraine's domestic trade. It is obvious that fundamental and applied scientific research is carried out to solve these problems. Moreover, both the processes taking place in the field, in the system of its management, and the processes affecting the field development outside, where inhibitory factors emerge and so on, are investigated.

To establish and confirm the hypotheses about the nature of the problems it is necessary to conduct empirical research based on the analysis of criteria and relevant indicators, regardless of the subject of study – the system of domestic trade as a whole, its separate subsystem or the system of its management.

Under the selection of indicators on the basis of which it is possible to assess each of the subsystems and which form the potential of the domestic trade system, we should take into account the reasonable structure of the domestic trade system, in which influence factors are defined both by each of the subsystems and considering their division into such ones, which are included into the system of domestic trade management and influence it from outside. The calculation of these indicators will provide an opportunity not only to assess the state of potential formation of the domestic trade system, but also to detect the reasons for changing efficiency – as an integral criterion for the evaluation of the system itself and the domestic trade development in general.

Conclusion

On the basis of the studies on determination of indicators and principles of assessing the efficiency of the domestic trade system in the conditions of transformation the following conclusions can be drawn:

- for assessing the domestic trade system in the conditions of transformation all the criteria, among which efficiency is integral, should be taken into account for which appropriate classification by criterion structure is used;
- assessment of the domestic trade system is not complete and objective, without taking into account the influence of factors on the potential, efficiency, competitiveness and managerial potential of the system and each of the subsystems, for which on the basis of social researches and expert estimates the importance of these factors is established;

- while assessing the efficiency of the domestic trade system its essence is taken as a basis – as an economic category, in which a relationship with productivity and efficient usage of resources is established;
- in the efficiency of the domestic trade system the degree of potential formation is reflected and the result of its implementation, which is manifested in changing the competitiveness of the field and major result indicators (including – profit, profitability and turnover);
- for assessing the efficiency of the domestic trade system in the conditions of transformation the developed methods are used in which by means of calculation methods institutional and transformational, social, economic and managerial efficiency is determined, affecting the integral efficiency indicator and change in the planned (estimated) period, allowing you to identify the most “problematic” subsystems, in which sufficient potential is not formed;
- assessing the efficiency of the domestic trade system is based on reasonable principles that have both methodological and methodical importance.

Summing up the mentioned above, we can state that the studies allowed us to ground the necessary set of instruments to develop the diagnosis methods of the domestic trade system in the conditions of transformation, the usage of which will enable the management entity to get current information about the state of the field, its problematic subsystems and make sensible decisions on the problem solution to the field development.

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The Role of Participation in the Design of Time Equations in the Time-Driven Activity based Costing – A Systematic Review of the Literature

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Abstract:

This article presents a systematic review of the literature related to the design of Time Equations in Time-Driven Activity Based Costing. In these linear equations, the times to perform activities can be collected through interviews or observation. The first method, including the participation of employees, has been seen a source of inaccuracy that hinders the success of the model. To dispel these critics, on the basis of the studies that support the participation of the users in the design of management accounting information systems, the review has been conducted around three research questions. First of all, the article wants to find the reasons that encourage the involvement of employees in the design of a TDABC system. Secondly, the article wants to search the conditions that able the participation of the employees to become a driver of success of TDABC. Lastly, the article wants to highlight the negative effects in work measurement models, such as the Time Equations, where only the stopwatch is used and employees do not have a say. The analysis of the literature shows a lacking and incomplete consideration of these aspects. For these reasons we leave a few suggestions for future research.

Keywords: time-driven activity based costing, time equations, participation, work measurement models, cost system design, literature review.

JEL Classification: M10, M41, L20

Introduction

The Time-Driven Activity Based Costing (TDABC), known as a system able to overcome the technical limits of the Activity-Based Costing (ABC), in order to work, needs equations built on the time measurements of activities. These times can be obtained using two techniques: observation or interview (Kaplan, Anderson, 2004; 2007). To these methods of time measurements can be given a traditional connotation of scientific management's techniques, using them as a Taylorized control device, or they can be viewed in a participatory system where the times equations are defined by involving employees. In this way, they may also enhance staff members' understanding of work processes and their commitment, which, in turn, might result in operational improvements (Hoozée, Bruggeman, 2010). Although the involvement of the employee in the design of Time Equations has been seen as a limit for the well functioning of the TDABC information system, which may produce noisier signals (Adkins, 2008; Namazzi, 2009), in this work we try to find evidence of the reasons and conditions that enable the participation to become the driver of success of this costing model (Anderson, 1995; Shields, 1995; Hunton, Gibson, 1999). Very few studies analyzed this research perspective and the present systematic review, to our knowledge, is the first to examine the participation of the employee in the design of Time Equations in the TDABC.

For our analysis, we use an interactive model, on the basis of the studies of Shields and Shields (1998), summarizing the objectives of the review in three research questions:

1. What are the reasons to consider the participation of the employee in the design of Time Equations?
2. What are the conditions that able the participation to become a driver of success of TDABC implementation?
3. What are the effects of a work measurement model where times are recorded only through the use of a stop watch?

The paper is divided in six sections. After a brief presentation of TDABC, the article overviews the studies on participation, the model of Shields and Shields (1998) and the time studies in scientific management. Subsequently, after a detailed description of the protocol used, the results are discussed and some suggestions for future research are presented.

Conclusion

As outlined in the previous paragraphs, there are very few articles that satisfy the three research questions. In these few articles just one considers, as a central argument, the reason to involve the employee (first research question), the conditions that enable the participation to gain benefits from the implementation of TDABC (second research question) and the effects of the use of the stopwatch as a technique to record the time drivers on the employee and on the performance of the model (third research question).

For the future research, first of all, we suggest that more attention should be paid to the behavioral management aspects of the model, in particular to the involvement of the employee in the definition of the Time Equations, since more attention has been focused on its technical side. Secondly, we suggest that successive case study on TDABC focus on the role of the involvement of the employee on the design of the Time Equations, showing like Hoozée and Bruggeman (2010) why the participation is needed and the conditions that enable the participation to achieve benefits from the implementation of the model. We suggest that future research could continue to use, as a parameter of their studies, the model proposed by Shields and Shields (1998) and so relate the antecedent of participation with social, economical and psychological theories to give a valid base to their findings. For what concerns the moderator variables, future studies should give a full description of the conditions that effect the relation between the participation of the employee and the success of the work measurement models. Future case studies concerning the design of the TDABC that continue to use a stopwatch should pay attention to the behavioral aspects of this technique, describing the effects that this technique has on the employee, during the implementation process of Time Equations, and the effects on the performance of the organization. In present of more articles that answer the research questions it would be interesting to do further research on those articles to gain more information about other issues, such as, for example, the business sector or the national culture. In relation with these two issues it would be instrumental to find eventual different effects that a participative approach has in different sectors and in different nations due to the different culture in the implementation of the model.

However, we need to take into account that in the present work the lack of results in number of articles could be due to the lack of articles, in management accounting, focused on the behavioral issues in the design of the TDABC and especially on the participation of the employee in the definition of Time Equations. Lastly, we should, also, consider that our protocol of work is not without any limits. We used as a parameter of selection of the article the Quality Journal Guide of ABS that is still used in the reviews but that has also been criticised on the way that the journals are selected (Hussain, 2011); consecutively this could have affected the number of articles found and commented in this paper.

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Strategies and Coordination among the Countries of the Euro and the Rest of the World

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Abstract

The following work aims to highlight how the coordination of budgetary policies and coordination between these and the monetary policy of the European Central Bank can take advantage of the relationships of interdependence among the countries of the Euro-zone, in order to maximise the welfare of the area or to minimise losses due to shocks. Cooperative strategies will be analysed, and their effects compared with those arising from non-cooperative strategies. The analysis is conducted through a model that describes the European Monetary Union as a set consisting of two countries (Italy and Germany) open to the rest of the world. Eventually we will attempt to demonstrate that cooperative solutions are more effective than non-cooperative solutions.

Keywords: budget policy, coordination, strategies, monetary policy, stabilization.

JEL Classification: E6, E62, E63

Introduction

Interdependencies between the Euro countries and the rest of the world may become apparent through a three-country model. The analysis is intended to represent the interdependence of Italy and Germany, which are part of the Euro area, and the interdependence between this area and the rest of the world.

In this context, an increase in government expenditures in one of two non-EMU countries leads to an increase in demand of global products of this country and the rest of the world, and a reduction of the global product of the second Euro country. In addition, this increase leads to a worsening of the trade balance and an improvement of the other country's trade balance and of the country-rest of the world.

As regards budgetary expansion in the country-rest of the world, it exerts a positive effect on the three global products and trade balance of the two European countries, while worsening the trade balance of the country-rest of the world.

Our speculation is that the trade balances of the three countries can be affected by external shocks. These influences are expressed by equations in reduced forms that bind the global product and the trade balance of each country to its own public expenditures and those of others. These relations form the constraints of the three budgetary authorities, of which each minimises a function of loss dependant on the amount of surplus between the current values and those deriving from their global product and their trade balance.

If the three countries behave in an uncooperative manner, we have a *Nash equilibrium*, which corresponds to policies whose effectiveness could be improved through a process of cooperation between the three countries.

If, on the other hand, cooperation concerns only the countries of the Euro zone, it does not guarantee better results than in the absence of coordination. In fact, let us see what happens, if we assume that external shocks worsen the trade balances of the countries of the Euro area and improve the balances of the rest of the world. The Euro-zone countries react to these shocks with restrictive budgetary policies that reduce the negative effect of shock on the trade balance. At the same time, we have a reduction in their activity and that of other countries, while the rest of the world will decide on a budgetary expansion that worsens their trade balance, improving that of other countries.

If the two Euro-zone countries coordinate their budgetary policies, but do not cooperate with the rest of the world, they will internalise the externalities of their economic policy measures, also conceding to the externalities of policies of the rest of the world. Therefore, without a coordination between the countries of the Euro area and the rest of the world, the intra-European externalities will be offset, at least partially, by the externalities of the policy of the rest of the world.

However, if the external shocks affect the Euro-zone countries and those of the rest of the world in the same manner, a limited cooperation will allow the European countries to achieve better results when compared to the absence of coordination (Godley and Lavoie 2007). In fact, in this context, the Euro-zone countries will bear only the externalities of economic policy of the rest of the world, instead of being affected negatively by infra-European externalities and of the rest of the world, of the same sign.

Therefore, in the absence of cooperation between the Euro-zone countries and those of the rest of the world, Italy and Germany will have an interest in accepting, or forgoing, such a coordination of their policies, depending on whether the shocks affecting Europe and the rest of the world are symmetrical or asymmetrical.

Conclusions

The work has highlighted the problems that arise in the absence of any coordination between the budgetary policies of the Euro-zone countries, and between these and the monetary policy of the European Central Bank. Without sufficient coordination, the Member States and the European Central Bank are engaged in a series of uncooperative and inefficient games, where no player is able to improve its position unilaterally by changing its policy.

The coordination of fiscal and monetary policies will generate a benefit for society as a whole (Šehović, 2014), leading every State, and the Central Bank, to modify coherently their strategies.

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Inward Foreign Capital Flows and Economic Growth in African Countries

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Abstract

The broad objective of the present study is to investigate empirically the impact of inward foreign capital flow along with some other explanatory variables namely gross capital formation, trade and human capital on economic growth using a balanced panel data spanning from 1977-2013 for 10 African countries. The Hausman's test suggests the use of random-effects model is preferable to fixed-effects model. The panel data estimates reveal that role of foreign capital inflows in the forms of FDI inflows and remittance are growth encouraging, whereas, the role of external debt is growth discouraging for African countries. In the same way, gross capital formation and human capital are positively related to economic growth. The empirical findings of the study suggest that policy makers should formulate a healthy and conducive business environment that stimulates both foreign and domestic investors in the host countries. Along with intensive and sincere efforts are also required to develop human capacity through sufficient educational funding across all levels and countries.

Keywords: foreign capital flows (i.e. FDI, remittances, debt), economic growth, panel data, Africa.

JEL Classification: C33, F21, F24, O16, N17

Introduction

The provision of much food, clothing, shelter, self-esteem and freedom are the utmost responsibility of every state. Where, economic growth and development needs to be sustained for long term without environmental degradation. Mostly, low incomes countries confront of a series of problems include adverse geography, fractionalization, corruption, lack of resource endowments, paucity of capital and finance. Therefore, low income countries require capital and finance to expedite the process of their growth and economic development. For that reason, one way is to enhance foreign capital flows which will largely help to exploit their resources efficiently. The Two-Gap model indicates that low income countries have to rely on the international capital flows to fill import-export and the savings-investment gaps Ghulam (2006). Foreign capital plays a significant role in focusing real resources into the desirable social overhead investment and of supporting an import surplus of consumer and capital goods that helps in the development process North (1956).

The role of foreign capital flows in the economic growth and development process in the host country has become one of the most discussed issues in the literature. Several erstwhile studies suggests that low incomes countries face saving-investment gap problem, while capital inflows influence the economic growth process by filling up this gap, expanding productivity, shifting technologies and improving competition (Moran *et al.*, 2005; Kobrin, 2005; Le & Atallah, 2006; Bashir *et al.*, 2014). Copious benefit provides by the foreign capital flow comprises contribution to the recipient economies capital formation and production capacity, modern technology, knowledge and enhance tax revenue. Along with the provision of capital, technologies and managerial skill, FDI inflows also may create job opportunities, activate domestic investors, broaden government revenue and as a result helps to improve living standards (Ngowi 2001; Gumus & Gungor, 2013). The inflows of foreign capital have long term impact on stock market development and promote investment (Yartey, 2008; Malik & Amjad, 2013; Azam & Ibrahim, 2014). Foreign capital flows encompasses on Foreign Direct Investment (FDI), foreign remittances, foreign debt and foreign aid. While, this study deals only with the first three forms of foreign capital flows.

In a report by UNCTAD (2004) mention that due to the insufficient resources to finance long run development particularly in Africa and to alleviate poverty looking for enhancing FDI has expected a noticeable place in the policies of African countries. The experience of some rapid-growing East Asian newly industrialized

economies has made stronger the belief that enhancing FDI could fill the resource gap of developing countries and get out of further build-up of chronic debt while mostly undertaking the causes of poverty Sachs (2004); Fasanya (2012). Mostly African countries as well as other emerging economies required extensive foreign capital flows to bridge their savings-investment and foreign exchange gaps, augment capital accumulation and economic growth indispensable to overcome pervasive poverty in these countries. However, in a study Asiedu (2004) note that even in the Sub-Saharan Africa's the policy environment improvements in, still the share of FDI in developing countries continues to decrease. The study also maintains that many reforms including institutional, upgraded its infrastructure and liberalized its FDI regulatory framework, while the degree of reforms are yet mediocre as compared to the other developing countries.. More and more economic development literature indicates that there is a strong constructive link between incoming foreign capital and economic growth (Alfaro *et al.*, 2004; Borensztein *et al.*, 1998; Orji *et al.*, 2014).

Regarding workers remittances inflow which is one another form of capital flows, the IFAD (2014) reported that "Remittances are the traditional means of financial support to family members back home". The report further added that remittances "promote effective and efficient regulation, adopt new technologies, expand access to financial services, and make more financial services available in rural areas through savings and investments." While, the study of Gupta *et al.* (2007), expounds that migrant remittances inflows are neither a remedy nor a substitute for a continued and internally persuaded development effort for curing the problems of poor countries.

Africa, a continent gifted with enormous natural, human resources, prodigious cultural, environmental and economic diversity, remains undeveloped. Maximum African nations undergo from military dictatorships, endemic corruption, civil turbulence and war, underdevelopment and extreme poverty, therefore, the UN classified it as least developed are in Africa. Several development plans have failed to provide the likely results. It has also been observed that the continent is fated to continuous poverty and economic servitude, even Africa has massive potential (Global Policy Forum 2014). According to the African Economic Outlook (2014, 2015) most African countries retained an average growth rate of around 4% in 2013. However, the data shows that growth performance heterogeneous extensively across regions. Growth in sub-Saharan Africa is recorded 5% in 2013 and is expected to be 5.8% in 2014. The fastest growth is recorded for East and West Africa in 2013 with 6% or above.

African Economic Outlook (2014, 2015) further added that foreign financial flows and tax revenues play a progressively imperative role in Africa's growth and development prospects. In 2013, total foreign inflows to Africa are recorded at US\$ 186 billion, and it is estimated that the external financial flows to be reached over US\$ 200 billion in 2014. Their composition has also improved increasingly with foreign investments and remittances from non-OECD countries supporting this constructive trend. Where, foreign investment, both direct and portfolio investment have now completely recovered from the 2009 economic crisis and is likely to touch over a record US\$ 80 billion in 2014, which is the biggest financial flow to Africa. Similarly, foreign remittances have been persistently increasing since 2009 and are estimated to touch US\$ 67.1 billion in 2014. In particular, FDI can be contributory to develop productive capacities and eliminate infrastructure bottlenecks, particularly energy and transport networks. Huge remittances inflows have been more buoyant to the economic and financial crisis of past years and, have appeared as a committed source of revenue for some 120 million African's people, while satisfying consumption, education and health expenditures.

Considerable progress in African's human development has been observed, where poverty levels are decreasing, incomes are increasing, and education and health results are improving. Africa's exports, driven by solid commodity prices, flourished quicker than any other region in the world in 2012 at 6.1%. In spite of this, in the same year Africa accounted for only 3.5% of world merchandise exports, and this has continued low over the years. Regional bodies have started essential initiatives to enhance regional industrialization and investment in regional infrastructure. Table 1 portrays international capital flows to Africa and Figure 1 show the trend analysis for foreign inflows to Africa and Figure 2 depicts the trend of Gross Domestic Product (GDP) growth (%) of Africa.

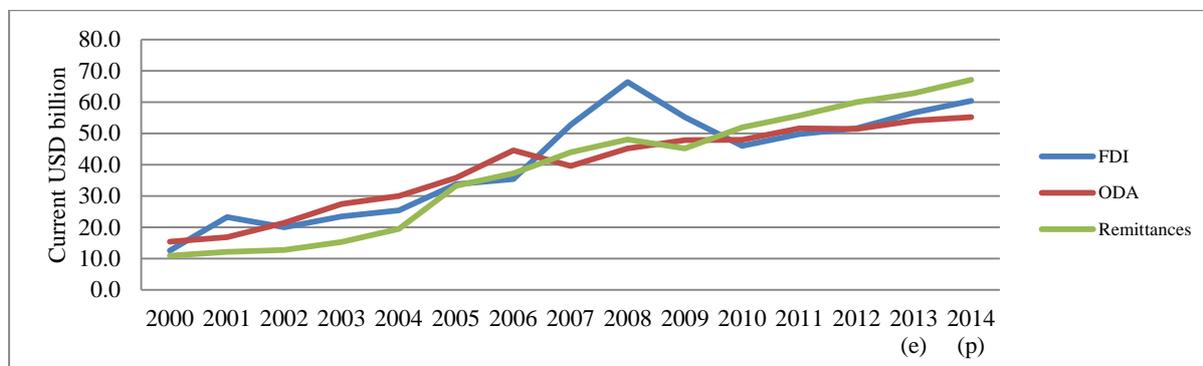
Table1. External capital flows to Africa

Years/ Capital flow	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013 (e)	2014 (p)
FDI	12.5	23.3	20.0	23.4	25.4	33.8	35.4	52.8	66.4	55.1	46.0	49.8	51.7	56.6	60.4
Portfolio investments	1.5	-3.6	-0.4	-0.7	6.9	6.3	22.5	14.4	-24.6	-0.3	21.5	6.8	22.0	12.2	23.9
ODA	15.5	16.8	21.4	27.4	30.0	35.8	44.6	39.5	45.2	47.9	48.0	51.7	51.5	54.1	55.2

Remittances	10.9	12.1	12.8	15.4	19.5	33.3	37.3	44.0	48.0	45.2	51.9	55.7	60.0	62.9	67.1
% GDP	6.8%	8.4%	9.3%	9.3%	9.7%	11.0%	12.3%	11.4%	8.7%	10.0%	9.6%	8.6%	9.1%	8.9%	9.3%
TOTAL	40.4	48.7	53.8	65.5	81.9	109.2	139.7	150.6	135.0	147.9	167.3	164.0	185.2	185.7	206.5

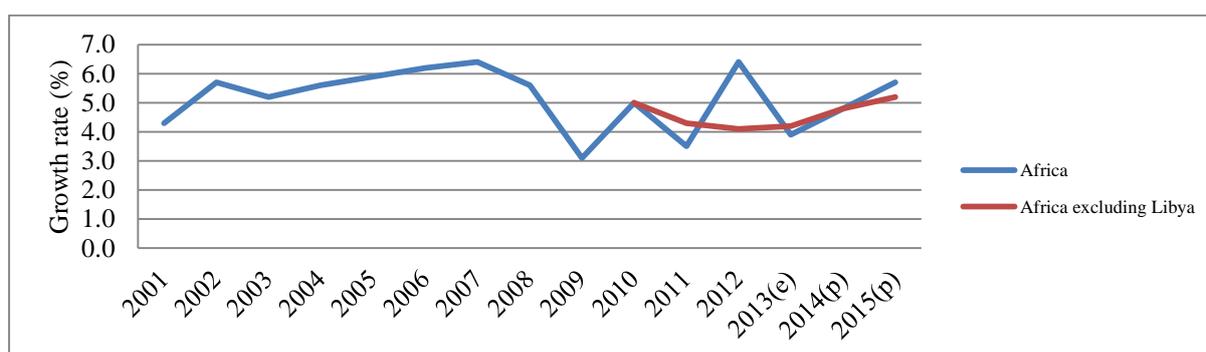
Source: OECD/ World Bank, IMF and African Economic Outlook data, 2014; <http://dx.doi.org/10.1787/888933032681>

ODA= official development assistance, (e) estimates and (p) projections



Source: OECD/ World Bank, IMF and African Economic Outlook data, 2014; <http://dx.doi.org/10.1787/888933032681>

Figure 1. International financial flows to Africa (2000-2014)



Source: OECD/World Bank, IMF and African Economic Outlook data, 2014; <http://dx.doi.org/10.1787/888933032681>

Figure 2. African's GDP growth rate (%)

Due to the lack of capital and finance which are direly needed to speed up the process of economic growth and development, it is important to focus on the enhancement of more inward foreign capital flows in the form of inward FDI and remittances to Africa. Therefore, the broad objective of this study is to evaluate the impact of various forms of inward foreign capital flows namely FDI, remittances and external debt along with some other explanatory variables include trade, gross capital capital and human capital on economic growth using a balanced panel data spanning from 1977 to 2013 for 10 African countries, more particularly from Sub-Saharan Africa. All countries are low income and lower middle incomes countries according to the World Bank classification on the basis of 2011 GNI per capita (Where, Lower middle income= US\$1026 to US\$ 4035, and Low income: US\$1025 or less). Countries included in this study are Benin (low income), Burkina Faso (low income), Cameroon (lower middle income), Kenya (low income), Lesotho, (lower middle income), Mali (low income), Niger (low income), Nigeria (lower middle income), Rwanda (low income), and Senegal (lower middle income). The outcomes of the study are expected will help the policy makers to formulate appropriate policy to boost economic growth and development as well as eliminate poverty. Also this study will add to the literature on the relationship between foreign capital flows and economic growth for Africa.

Following this introduction, Section 2 deals with the related literature review on the topic. Section 3 provides an overview of the empirical methodology used to estimate the parameters of the model and also explain variables and data. Section 4 interprets the empirical findings of the study, and Section 5 concludes the study.

Concluding remarks

The constructive role played by foreign capital inflows in the process of economic growth and development is evidently well documented by erstwhile studies. International capital inflows are equally important for African countries in order to boost their economic development process, where, African countries yet face many economic, social and administrative problems. Therefore, the main aim of this study was to investigate the impact of inward foreign capital flow (i.e. FDI, remittances and debt) along with some other explanatory variables namely gross capital formation, trade and human capital on economic growth of 10 African countries over the period ranging from 1977 to 2013. To select the appropriate method for parameters estimation, the Hausman's test suggest the use of random-effects model, however, the results of both the random-effects and fixed-effects are reported in the study. The panel data estimates reveal that foreign capital inflows in the forms of incoming FDI and remittance have significantly positive impact on the economic growth of African countries. By and large, the detected positive contribution of inward FDI and remittances in the growth process of African countries are a robust finding. It implies that the role of FDI and remittances are growth prompting, whereas the role of external debt is growth discouraging. Similarly, gross capital formation and human capital are positively related to economic growth.

The aforementioned empirical findings have an important policy implication. For each country to successfully reap the benefits of foreign capital inflows and domestic investments, its policy makers should formulate a healthy and enabling business environment that stimulates both foreign and domestic investors. Where, receiving external debt needs to be minimized to reduce further burden on the economy. Similarly, the government and management authorities should make intensive and sincere efforts in developing human capacity through sufficient educational funding across all levels as well across countries. This remains relatively the foremost way of achieving sustainable economic growth and development for African countries.

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Selection, Productivity Growth, and Multinational Subsidiaries: New Evidence from Korea

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Abstract:

This paper uses Korean firm-level manufacturing data to study the selections and productivity growth of multinational subsidiaries. A simple cross-sectional comparison may overstate the superior performance of multinationals by not controlling properly for the selection effects in acquisitions and divestures. This paper shows that multinational enterprises tend to acquire firms in the upper range of the productivity distribution and to divest relatively less productive affiliates. This study also shows that multinational subsidiaries tend to grow in productivity faster than domestic firms, but productivity growth is significant only in R&D intensive subsidiaries. The results emphasize the importance of complementarity between foreign ownership and R&D.

Keywords: multinational enterprises, productivity.

JEL Classification: F23, D24

Introduction

Foreign direct investment (FDI hereafter) has recently become an increasingly important phenomenon across the globe, especially for developing economies. The value of the worldwide stock of FDI amounted to 25 trillion U.S. dollars in 2013, having more than trebled since 2000. Meanwhile, a steady expansion in the share of FDI has flowed to developing and transition economies. The share reached 61.0% in 2013 compared to 19.3% in 2000 (UNCTAD 2014).

FDI is believed to be instrumental in the economic growth of host countries by, among others, facilitating the transfer of advanced technologies or organizational practices. It is generally taken for granted that multinational enterprises (MNEs hereafter) possess some technologies superior to those of local firms in the host countries. Existing empirical evidence suggests that multinational subsidiaries indeed have higher productivity than local firms. Their superior performance, however, could be due to MNEs' selective decisions to acquire higher-performing domestic firms. To assess fairly the advantages of multinationals and their contributions to the host countries, it is necessary to understand which domestic firms are more likely to be multinational subsidiaries. The need to control for this selection is particularly important as the most prevalent form of multinational entry is through cross-border acquisitions (or brownfield FDI) rather than through greenfield FDI (Guadalupe *et al.* 2012, Stiebale and Reize 2011).

This paper analyzes Korean manufacturing firms over the period 2006 to 2011 to examine the selection on productivity in acquisitions and divestures by MNEs and to compare productivity growth between multinational subsidiaries and domestic firms. The data available for the Korean manufacturing sector, due to its panel structure, allows one to follow the evolution of firm ownership and other characteristics over time. Compared to the experiences of developed countries, the case of Korean manufacturing will be more relevant to other developing economies which pursue growth strategies by opening domestic markets to foreign investors.

The results of this study show that firms with higher productivity are more likely to be multinational subsidiaries. This positive selection is in action not just in the process of acquisitions but of divestures as well: relatively less productive subsidiaries of MNEs tend to be divested. These findings suggest that the superior performances of multinational subsidiaries are overstated unless the selection of higher performing firms is properly controlled for. This paper also estimates the effects of foreign ownership on productivity growth. According to the results, foreign ownership per se does not enhance productivity growth. However, R&D intensive multinational subsidiaries tend to grow faster in productivity than other types of firms. This complementarity between R&D and foreign ownership partly explains the heterogeneity in the productivity within the group of multinational subsidiaries.

The remainder of this paper is organized as follows. Section 2 reviews related literature and section 3 describes the data set. In section 4, empirical results are presented. In the conclusion, policy implications and the limitations of this paper are discussed.

Conclusion

This paper examines the selections and productivity growth of multinational subsidiaries by analyzing Korean firm-level manufacturing data. An empirical analysis reveals that multinational enterprises tend to acquire and divest local affiliates based on productivity. This selection contributes to the observed productivity differences between multinational subsidiaries and domestic firms, in addition to the intrinsic advantages of MNEs. This study also shows that multinational subsidiaries tend to grow in productivity faster than domestic firms but productivity growth is visible only in R&D intensive subsidiaries. The results show the importance of the complementarity between foreign ownership and R&D and cast light on the nature of the benefits of the presence of foreign MNEs.

Some policy implications flow from the analysis of this paper. First, the beneficial effects of foreign ownership on the local economy may be limited without further R&D investment. To maximize the benefits of FDI, host countries need to design policies that encourage MNEs to engage in further R&D efforts at local affiliates. On the other hand, the study shows that R&D activities in domestic firms are much less effective in raising productivity than those of multinational subsidiaries. Thus, the growth strategies of developing countries will be less successful unless they tap into the superior technologies of MNEs.

Finally, a couple of limitations of this study should be mentioned. First, this study focuses on MNEs' acquisitions of local firms but mostly ignores the other mode of entry, green-field FDI. Although green-field investments warrant a study of their own, the data set for this study is not suitable to the purpose, as it does not cover small and young firms. Second, as discussed in the main text, positive externalities (or spillovers) would lead one to understate the differences between domestic firms and multinational subsidiaries. The literature, however, is inconclusive on the importance of such spillovers (Lipseý and Sjöholm 2005) and further studies are needed.

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The Effect of Financial Market Development on Corporate Capital Structure: Dynamic Panel Evidence from African Economies

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Abstract

Financial intermediaries, through their intermediation role in financial markets, play an important part in the financing choice of firms by reducing transaction costs and information asymmetries and providing liquidity to the financial system. To enhance the role played by banks and stock markets, some countries in Africa introduced a series of measures in their respective financial sectors. Consequently, this study examines how the banking sector and stock market development in selected African countries influenced the use of debt financing by non-financial firms. The study used a dynamic framework estimation technique on panel data of non-financial firms listed on the selected countries domestic stock exchange for the period 2003-2012. The results revealed a significant reduction in the use of debt by the firms, following banking sector development while stock market development did not have any significant effect on debt usage. This suggests that developments in the banking sector instituted efficient risk pricing which raised the cost of finance, thereby, leading to a lower use of debt. In addition, the reduction in use of debt suggests the presence of high information asymmetries associated with use of long-term debt.

Keywords: capital structure, banking sector development, stock market development, dynamic panel, Africa.

JEL Classification: G20, G32

Introduction

Extant literature suggests that development of financial markets usually result in reduction in costs due to use of external finance by firms and other businesses. Such costs include but are not limited to transaction costs, financial distress costs, bankruptcy costs and agency costs. Furthermore, the development of the markets lead to reduction in problems associated with moral hazard and adverse selection due to the use of external finance (Agarwal & Mohtadi, 2004; Demirguc-Kunt & Maksimovic, 1996).

In developed financial markets, market imperfections, such as information asymmetry, illiquidity of the market and high transactions costs are less likely to influence financing decisions of firms residing there. This is because the markets usually have high liquidity levels that encourage trading and well-organized mechanisms for efficient risk management and capital allocation (Chami, Fullenkamp, & Sharma, 2010). Hence, firms have fewer constraints towards accessing external finance. This is in contrast to the developing financial markets that are characterised by illiquidity, high transaction costs, thinness of trading, information asymmetry, limited source of external finance and other problems that arise in markets with imperfections (Murinde, 2012). These imperfections, in addition to a risky macro – economic operating environment, limit a firm's access to external finance (Bokpin, 2009). Firms in developing countries take into consideration these issues in their choice of financing methods for optimal investments and maximizing firm's value.

There are several motivations for this study. The first is that, most of the capital structure studies done in the African context focus on firm specific determinants of capital structure (Abor & Biekpe, 2009; Akinlo, 2011; Boateng, 2004; Gwatidzo & Ojah, 2009; Salawu & Agboola, 2008). Secondly, there are few cross-country studies examining the effects of financial market development on capital structure decisions, both in developed and developing markets (De Jong, Kabir, & Nguyen, 2008; González & González, 2014; Gungoraydinoglu & Oztekin, 2011). Cross-country studies, according to Fan, Wei, and Xu (2011), make it difficult to disentangle the effects of key institutional factors from other unimportant factors. Furthermore, the combination of developed and developing markets in a panel data set might lead to biased results. This is because the results could be driven by the developed market data, where the institutional environment and structure is quite different from the emerging markets (Fan, Titman, & Twite, 2012; Narayan & Narayan, 2013). We therefore cannot generalise results obtained from such estimations to both developed and emerging markets. For this reason, we chose

markets that have similar classifications and comparable level of development. Lastly, according to Kearney (2012), emerging financial markets are increasingly serving as avenues for investigation and re-examination of theories derived from developed markets.

Accordingly, this paper seeks to determine the aftermath of debt and equity market development in selected African countries on firms' capital structure decisions. This would enable us to ascertain the extent to which development of the debt and equity market has succeeded in promoting the use of either debt or equity, through alleviation of problems associated with the use of external finance. We therefore focus on countries classified as emerging and frontier economies in Africa¹. The classification is premised on their potential to become investment havens for international investors, who are seeking new investment opportunities and outlets to diversify their wealth to obtain higher returns.

The remainder of the paper is structured as follows. Section 2 presents an overview of financial market development in emerging and frontier markets in selected African economies. Section 3 reviews theoretical and empirical literature on financial market development and capital structure decisions. Section 4 describes the variables, sample selection, model and method of estimation. Section 5 presents the results and discussion of findings. Section 6 concludes with relevant policy implications drawn from the findings of the study.

Conclusion

Pursuant to several financial market development measures put in place by emerging and frontier markets in Africa, this study investigates the extent to which these measures have been successful in achieving the desired objective of easing access to either the debt or equity market. To carry out this investigation, we use the two-step difference GMM estimation technique on firm level and macroeconomic data from 599 firms in nine selected African countries, for the period 2003 to 2012. Our findings reveal that despite the financial reform measures introduced in the equity market, the use of equity as source of external finance does not have any effect on capital structure. Banking sector development on the other hand is significant and inversely associated with capital structure decision, as proxied by the leverage ratio for firms in the full sample and those in English common law countries. However, for firms in French civil law countries, banking sector development has a positive effect on the use of debt. The study also finds evidence of both the trade-off and pecking order theory of capital structure.

Given the inverse relationship of banking sector development with the use of debt, we suggest that policy makers put in place measures that not only increase and ease a firm's access to debt finance but that ensure that the cost is affordable, as the main objective of developing the market is to promote the use of debt. At the same time, they should introduce measures that would reduce information asymmetries and improve lending relationship. We also recommend that policy makers review stock market development measures to enable them to distinguish between the effective and non-effective ones, so that the equity market serves as an alternative source of long-term finance for firms. Future research could build on the limitations of this study. Firstly, it is difficult to generalize the findings to single country studies hence future research could investigate country specific effects. Secondly, the study did not take into account industrial classification of the firms that affect the level of debt in a firm's capital structure. Future studies could examine the extent industrial classification of firms affect the level of debt, following banking and equity market development.

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¹ Botswana, Egypt, Ghana, Kenya, Mauritius, Morocco, Nigeria, South Africa, Tunisia

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The Dependency of E-Market Seller Reputation on Buyers Behaviour

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Abstract:

Electronic market trust building mechanisms and related issues are commonly discussed topics in which identity identification and trust issues play a significant role in buyer behaviour. Current related research papers have identified several types of trust building mechanisms that vary in complexity. Almost all studies placed reputation mechanisms on the first place as the most trust generating mechanisms currently used on e-marketplaces. This paper captures partial results from a larger study on procurer's behaviour on e-markets that provide reputation mechanism in a form of rating and historical transactions information. Main objective of this paper is to identify the role of sellers' reputation affecting the procurers purchase behaviour. Analysis is based on data gathered by experimental approach based on Design of Experiment using a web based platform. Hypothesis testing is based on statistical and econometrical approach and also on data mining tools.

Keywords: reputation, trust, e-markets, sellers, decision tree.

JEL Classification: M15, O33.

Introduction

Despite the globalization trends, fast information transfer and availability of information sources is the business buyer seller relation in most cases characterised by a certain degree of information asymmetry, while it is usual that better knowledge and information about the quality of goods and services lies on the seller's side (Mishra *et al.*, 1998; Vajda *et al.*, 2009). In electronic markets where the physical interaction is replaced by almost anonymous electronic means can the information asymmetry lead often to seller's opportunistic behaviour.

Opportunistic behaviour on electronic markets has mostly the form of unexpected shipment delays caused on the seller's side, undelivered goods against payment or other frauds not respecting the contract conditions. Concerns about such practices can lead to buyers mistrust in on-line products and services, and so become a threat to e-markets in general (Choi *et al.*, 1997; Jarvenpaa *et al.*, 2000). All these undesirable practices increase buyers costs especially for hedging purposes (Šoltés and Rusnáková, 2013) and can also increase mistrust in e-markets.

Relatively early after the „boom“ in electronic commerce was the lack of trust identified as one of the most important barriers in usage of e-markets (Lee and Turban, 2001; Kuller, 2005; Delina and Dráb, 2010; Bálint, Bucko and Vejačka, 2012).

Discussion and conclusion

The role of trust does play a significant role in any business contractation phase. Trust on electronic markets can be supported by several trust building mechanisms from which reputation mechanisms were identified as the most significant. In this research socio-economic aspects of reputation mechanisms based on controlled experiment were analysed. Assumption that different eSkills of three respondents groups can have an impact on their behaviour when performing procurement was tested. Differences in sellers' ordering by these groups showed to be significant. Also differences in price premiums of these groups were identified. Although the descriptive statistics do showed some differences, the statistical test could not prove that. Comparing to research results in Resnick *et al.* (2006) research a 50 % lower average price premium was identified (4.3 %). This could be the result of respondent characteristics, and the construction of the experiment. A more detailed analysis and changes in the experiment could reveal other interesting relations.

The second part of this paper was focused on identification of the most important factors from reputation mechanisms or price using a decision tree and a rule set generation. This analysis supported the assumption that

rating as a reputation mechanism does affect the sellers probability for a successful purchase, and that it can also affect the final purchasing price. Both, the decision tree and rule set identified several factors among reputation mechanisms and price in all three databases. These results support the dominant role of reputation mechanisms. From both methods an indirect implication for sellers can be deducted: more than 75% of successful sellers had their price in the lower 25 percentile, global and internal rating better than 6, and had historical transactions between 1 and 10.

Results from this research can be used as a base for reputation mechanisms implementation in public procurement systems and setup of these systems. Reputation mechanisms serve also as a control mechanisms on specified electronic markets. Other settings, or trust building mechanisms influence on purchasing price or purchase probability can be the topic of authors' next research.

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On The Impact of the Concentration and the Share of Foreign Banks in Banking Assets on Selected Ratios in the Polish Banking Sector

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Abstract:

This paper presents the analysis of yearly data between 2003 and 2012 from the Polish banking sector. The impact of changes in the concentration of the banking industry and the share of foreign banks in banking assets on loan rates, costs and efficiency of the banking sector is analysed.

Keywords: concentration in the banking industry, interest rates, share of foreign banks in banking assets, Poland.

JEL Classification: E43, G21.

Introduction

The Polish banking sector is quite young one. Poland has been a member of the European Union since 2004, whereas, before 1989 the country had been under communist regime. As a result, the banking sector [similar to the one in capitalist economies] was developing intensively in 1990s.

At first, many new banks were created. However, they had too little capital. Moreover, the competition from foreign banks was high. As a result, after a short period mergers and takeovers started. Banks' structure became more adequate towards market expectations and benefits from economies of scale took place. Between 1993 and 2004 there were over 43 mergers. In 1993 most of the banking assets were controlled by domestic investors. In 2004 - by the foreign ones (Drachal, 2014a; Kokoszcyński, 2011; Kraciuk, 2006; Pawłowska, 2003; Stępień, 2004).

It is interesting to consider two aspects of banking sector: its concentration and the share of foreign investors. Both aspects have their advantages and disadvantages. Concentration can lead to more efficient use of capital, increase in innovations, ability to diversify capitals, etc. On the other hand, market structure becomes closer to oligopoly. This can result in worsening the consumers' position.

High share of foreign banks in the banking sector can lead to better loan rates, acceleration in the credit action and the intensification of the flow of know-how. On the other hand, it can also increase the risk. Moreover, foreign investors might rather exploit the country than invest in it. It is also worth to mention that, in case of the U.S. and the European Union; during the last ten years it has been observed that the number of banking institutions decreases, whereas the concentration ratios in the banking sectors increase (Świetlik, 2012).

Therefore it seems interesting to consider how changes in the concentration and in the share of foreign banks in banking sectors affect selected factors on the Polish market (Drachal, 2014b). Especially, that these topics are currently being discussed and there is no common opinion. Some other arguments are given, for example, by Piotrowski (2012) and Bartol and Rapkiewicz (2013).

Discussion and conclusion

It has been found that if the reference rate is assumed to be the benchmark rate, then the increase in the concentration results in lower average loan rates in the next period. On the other hand, the increase in the share of foreign banks in banking sector results in quick increase in average loan rates. Taking profitability of 52-week treasury bills or WIBOR 1Y as a benchmark rate leads to statistically not significant models. But if one considers particular types of loans, for example: rates for loans for households or consumption loans, then it seem that these rates are highly influenced by factors that are not discussed in this paper. Finally, it has been found that increase in the concentration do not worsen consumers' situation, but increase in the share of foreign banks in banking assets do.

The spread between average loan rate and deposit rate cannot be modelled solely by the considered independent variables. Therefore it cannot be concluded whether the concentration and the share of foreign

banks in banking assets have positive or negative impacts on credit terms (understood as financial attractiveness of loans in comparison with deposits).

The concentration and the share of foreign banks in banking assets have very positive impact on cost reduction. However, increase in concentration allows banks to reduce their costs more than the presence of foreign banks. This might be due to the fact that current concentration is low, so the benefits from its increase are not exploited yet. On the other hand, the flow of know-how from foreign banks has been present on the Polish market for over 20 years. So, foreign banks do not bring to domestic banks anything uniquely new.

The models for profitability of banks are statistically not significant overall. Therefore they can not be used to describe the impact of the concentration and the share of foreign banks in banking assets. Such a situation might be due to the fact that recent financial crisis has heavily influenced profitability of banks. It can be the major factor influencing their profitability.

The increase in the concentration does not lead to higher efficiency of banks. Although, it allows reducing the average employment, it also results in smaller net income from banking activity generated by one employee and in higher efficiency ratio.

Similarly, higher share of foreign banks results in smaller net income from banking activity per employee and per branch. It also increases efficiency ratio and the average employment. As a result, both concentration and share of foreign banks in banking assets do not increase banks' efficiency.

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Role of Wholesale Market in Ensuring Russian Food Safety under Conditions of Innovative Economy

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Abstract:

The article considers the role of wholesale market in ensuring Russian food safety. The meaning and components of wholesaling are analyzed. The necessity of further development of wholesaling is stipulated. Foreign experience of wholesale companies' operation is analyzed. New approaches to the development of the wholesaling branch of the Russian agricultural complex are proposed. Recommendations on implementing the wholesaling system in the activity of domestic entrepreneurship are given.

Keywords: wholesaling, food safety, innovative economy, infrastructure of commodity market.

JEL Classification: O30, O12.

Introduction

Under the conditions of external environment, the role of ensuring food safety of the country and protection of the internal market of goods and services from foreign manufacturers' unfair competition increases. One of the important factors that influence the maintenance of the Russian food safety is the availability of a far-reaching distribution network that provides continuous supply of products to people and raw materials for processing industry. The distribution network includes wholesaling as a basic branch. In the period of innovational development of the Russian economy the dependence of wholesaling increases as the activity of agricultural and processing companies that have an innovational component particularly need timely and high quality sale of products and supply of raw materials required for further production process (Sekerin V.D., Avramenko S.A., Veselovsky M.Y., Aleksakhina V.G., 2014). Besides, the development of the wholesaling branch contributes to the growth and development of retailing and increase in people's prosperity. Due to it, it is necessary to develop new measures contributing to strengthening the Russian food safety and development of domestic wholesaling. The role of wholesaling in ensuring food safety under conditions of innovative economy is defined by its place in the system of distribution. Herewith, it is necessary to take into account that any wholesale intermediary entering market relations can act both as a seller and as a buyer of ready products. It distinguishes them from end consumers and direct manufacturers of goods as well as defines the specificity of their marketing strategy that aims, on the one hand, to optimize purchases and, on the other hand, to organize sales. In the first case, while acquiring goods to earn profit in the process of re-selling, the wholesale buyer tries to purchase goods in places where the cheaper products are manufactured and in such a manner contributes to the extension of

specialization and concentration of production in the most favorable natural and economic zones and decrease in operating costs per unit of product. In the second case, having steady relations with retailers, specialized warehousing and transportation infrastructure, the wholesale company can inform manufacturers about consumers' demands and in such a manner influence the volumes, range and quality of the manufactured products. Herewith, giving assurances about selling the manufactured goods, the wholesale intermediary can considerably improve economic position of agricultural manufacturers.

Conclusion

Wholesaling and its subjects hold a specific place in the system of distribution on the commodity market of the country. They act as a linking branch between products manufacturers and consumers, define the relations between them, and play an important role in maintaining steadiness and efficiency of the country's commodity market functioning, as a whole.

The formation of efficient commodity distribution infrastructure must be a priority area of the agrifood market development and a necessary condition for ensuring food safety of the country under the conditions of globalization. Under contemporary conditions it is important to approximate the wholesaling branch to the production one that will provide the integrity and high quality of the products as well as will allow the producer of agricultural products to sell its products at higher prices that will contribute to the profitability of agricultural production.

The formation of today's market infrastructure is stipulated by the necessity to develop the agrifood market on the basis of close interrelation between agricultural manufacturers and wholesaling and retailing companies for providing continuous supply of people with domestically produced food.

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Modern Russian Practice of Investing in Human Capital Assets

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Abstract:

The article analyzes issues related to forming human capital assets. It is established that human capital assets are a strategic resource of both a specific organization and a country, in general. This article gives the definition, characteristics and evolution of the "human capital assets" category. The article determines that in spite of the multistructurality of the agricultural sector of our country, the consumer cooperation system continues holding a special place in it. Basic areas of investing in human capital assets are determined. The topicality of research these problematic for enterprises of the agricultural sector under the current conditions is stipulated. It is determined that to a large extent the efficiency of agricultural organizations and consumer cooperation functioning depends on investing in human capital assets. This article reveals the current state of staff training and shows the system of education of staff for agricultural sector. Methodological basis included dialectical methods of research: analysis, forecasting, and synthesis.

Keywords: human capital assets, investing in human capital assets, areas of investing in human capital assets, system of education, agricultural sector, consumer cooperation system.

JEL Classification: O15, M 50.

Introduction

Investing in human capital assets is an essential element for developing an efficient management model. Management theorists have been studying this issue in details during seventy years. It has resulted in the human capital assets theory generally accepted in the world practice. The main mechanism of its implementation is a large-scale investment policy. This theory concept has found its use in various areas of social and economic activity while fundamental provisions are taken into account and implemented both by heads of commercial structures and representatives of various state bodies of all levels of governance. The compliance with basic principles of this theory allows updating the company staff's skills and knowledge, enhancing its intellectual potential, and consequently improving the quality of people's life.

It is impossible to imagine transformation processes including contemporary organizations without the development of human resources. Directions and efficiency of reforms implemented in Russia including in the agricultural sector depend on the development of an efficient model of human capital assets management.

Conclusion

To sum it up, we would like to emphasize that investing in human capital assets is regarded as one of the crucial processes in forming the contemporary history of the Russian economy, and the human capital assets are one of its strategic resources. However, even with the current rates of investing in human capital assets, the necessity in their permanent development is maintained both for the cooperative sector and agriculture, in the whole. That's why we think that overcoming difficulties while training staff depends on a number of circumstances. However, for the most part they are not related to solving the whole complex of problems on social and economic arrangement of rural areas and, first of all, measures of state support on forming the staff policy.

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Central Bank Interventions and Foreign Exchange Rate Volatility in India: Before and After the 2008 Global Financial Crisis

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Abstract

The study empirically investigates the dynamic inter-relationship between central bank interventions and volatility of the Indian rupee – US dollar exchange rate during before and after the 2008 global financial crisis. It also examines the factors influencing the volatility of exchange rate by employing GJR GARCH framework. For analysis, the study has divided data into two periods: pre-crisis (from April 01, 2002 to January, 30 2008) and post-crisis (from February 01, 2008 to March 30, 2012). The following data was used by the study: monthly data on Indian rupee - US dollar bilateral exchange rate, net FII inflows, net dollar purchases and sales of RBI and inflation differentials between USA and India. The empirical results show that RBI interventions are effective in reducing the volatility of the Indian rupee – US dollar exchange rate during the pre-crisis period. However, RBI interventions seem to increase exchange rate volatility during post crisis. Finally the results suggest that higher FII inflows caused the Indian rupee to appreciate vis-a-vis the US dollar but this appreciation was accompanied by an increased volatility in the exchange rate.

Keywords: RBI, intervention, volatility, financial crisis, GJR GARCH.

JEL Classification: G15, G150

Introduction

The government of India introduced financial sector reforms in 1991. After reforms, India initiated the process of integration of its financial markets with global financial markets by permitting foreign institutional investors (FIIs) to invest in Indian capital market and allowing domestic companies to raise capital from abroad. The foreign currencies' inflows and outflows affected the rupee exchange value vis-à-vis the foreign currencies. The financial sector reforms also encouraged more export/import of goods and services contributing to foreign currency inflows/outflows which leads to increases in volatility of foreign exchange market in India.

In recent times, volatility in Indian foreign exchange market has increased due to global financial crisis which was originated in USA, 2008. This increased volatility has an adverse impact on the balance of payments, FDI flows and FII flows affecting the economic growth of the country. In order to reduce the adverse impact of the volatility in exchange rate, the RBI intervened in the Forex market. The intended objectives of RBI's participation in the forex market are stabilization of the exchange rate and building of foreign exchange reserves.

The monetary authorities in emerging economics such as India are concerned about the impact of central bank interventions on exchange rate volatility. There are many studies which have examined this issue. Some studies found that RBI intervention in foreign exchange market is effective in controlling volatility of exchange rate (Ranadive and Burange (2014), Behra (2005) and Domaç and Alfonso Mendoza (2004)). Behra (2005) investigated the impact of RBI interventions on volatility exchange rate by applying GARCH model. The study found that the volatility of the exchange rate reduced after RBI interventions. Domaç and Alfonso Mendoza (2004) find evidences that central bank interventions have reduced volatility in the foreign exchange market in Mexico and Turkey. However, other studies found that central bank interventions have increased the volatility of exchange rate and some studies found that central bank intervention does not have any impact on the volatility of exchange rate (Vadivel and Ramachandran (2013), Hassene Ben, Houssein Rachdi and Sami Mensi (2011), Ken

Miyajima and Carlos Montoro (2013)). Therefore, it is important to study the effect of central bank interventions on volatility in the Indian foreign exchange market.

The main objective of the study is to investigate the empirical relationship between the RBI interventions and exchange rate volatility. The study also investigates the influence of other factors on exchange rate volatility, namely demand and supply of currencies, interest rate differentials, inflation differentials and balance of payments position.

Final remarks

The study empirically examines the dynamic inter- relationship between RBI interventions and volatility of exchange rate during pre and post 2008 financial crisis. It also investigates other factors influencing exchange rate of rupee against dollar. The study employs GJR GARCH model to capture asymmetric volatility. The result reveals that RBI intervention is effective in reducing volatility of exchange rate during pre-crisis. However, RBI interventions seem to increase the volatility of exchange rate returns during post crisis. This is due to the possibility that volatility of exchange rate might be influenced by internal and external factors. Thus, RBI interventions are not effective to control the volatility in Indian foreign exchange rate during post financial crisis. Finally, result suggests that high FII flows lead to the appreciation of the rupee which erodes India's competitiveness in the international market. FII flows also increase the volatility in Indian foreign exchange market.

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