OURNAL of Applied Economic Sciences



Volume XI Issue 3(41)

Summer 2016

ISSN-L 1843 - 6110 ISSN 2393 - 5162

Editorial Board

Editor in Chief

PhD Professor Laura GAVRILĂ (formerly ŞTEFĂNESCU)

Managing Editor

PhD Associate Professor Mădălina CONSTANTINESCU

Executive Editor

PhD Professor Ion Viorel MATEI

International Relations Responsible

Pompiliu CONSTANTINESCU

Proof - readers

Ana-Maria Trantescu-English

Redactors

PhD Assistant Cristiana **Bogdănoiu** PhD Assistant Sorin **Dincă**



European Research Center of Managerial Studies in Business Administration http://www.cesmaa.eu Email: jaes_secretary@yahoo.com Web: http://cesmaa.eu/journals/jaes/index.php

Editorial Advisory Board

Claudiu ALBULESCU, University of Poitiers, France, West University of Timişoara, Romania Aleksander ARISTOVNIK, Faculty of Administration, University of Ljubliana, Slovenia Muhammad AZAM, School of Economics, Finance & Banking, College of Business, Universiti Utara, Malaysia Cristina BARBU, Spiru Haret University, Romania Christoph BARMEYER, Universität Passau, Germany Amelia BĂDICĂ, University of Craiova, Romania Gheorghe BICĂ, Spiru Haret University, Romania Ana BOBÎRCĂ, Academy of Economic Science, Romania Anca Mădălina BOGDAN, Spiru Haret University, Romania Giacommo di FOGGIA, University of Milano-Bicocca, Italy Jean-Paul GAERTNER, l'Institut Européen d'Etudes Commerciales Supérieures, France Shankar GARGH, Editor in Chief of Advanced in Management, India Emil GHIŢĂ, Spiru Haret University, Romania Dragos ILIE, Spiru Haret University, Romania Cornel IONESCU, Institute of National Economy, Romanian Academy Elena DOVAL, Spiru Haret University, Romania Camelia DRAGOMIR, Spiru Haret University, Romania Arvi KUURA, Pärnu College, University of Tartu, Estonia Raimund MIRDALA, Faculty of Economics, Technical University of Košice, Slovakia Piotr MISZTAL, Technical University of Radom, Economic Department, Poland Simona MOISE, Spiru Haret University, Romania Mihail Cristian NEGULESCU, Spiru Haret University, Romania Marco NOVARESE, University of Piemonte Orientale, Italy Rajesh PILLANIA, Management Development Institute, India Russell PITTMAN, International Technical Assistance Economic Analysis Group Antitrust Division, USA Kreitz RACHEL PRICE, l'Institut Européen d'Etudes Commerciales Supérieures, France Mohammad TARIQ INTEZAR, College of Business Administration Prince Sattam bin Abdul Aziz University (PSAU), Saudi Arabia Andy STEFĂNESCU, University of Craiova, Romania Laura UNGUREANU, Spiru Haret University, Romania Hans-Jürgen WEIßBACH, University of Applied Sciences - Frankfurt am Main, Germany

OURNAL of Applied Economic Sciences

Journal of Applied Economic Sciences

Journal of Applied Economic Sciences is a young economics and interdisciplinary research journal, aimed to publish articles and papers that should contribute to the development of both the theory and practice in the field of Economic Sciences.

The journal seeks to promote the best papers and researches in management, finance, accounting, marketing, informatics, decision/making theory, mathematical modelling, expert systems, decision system support, and knowledge representation. This topic may include the fields indicated above but are not limited to these.

Journal of Applied Economic Sciences be appeals for experienced and junior researchers, who are interested in one or more of the diverse areas covered by the journal. It is currently published quarterly in Spring (March), Summer (June), Fall (September) and Winter (December).

Journal of Applied Economic Sciences is indexed in SCOPUS www.scopus.com, CEEOL www.ceeol.org, EBSCO www.ebsco.com, and RePEc www.repec.org databases.

The journal will be available on-line and will be also being distributed to several universities, research institutes and libraries in Romania and abroad. To subscribe to this journal and receive the on-line/printed version, please send a request directly to jaes secretary@yahoo.com.

Journal of Applied Economic Sciences

ISSN-L	1843 - 6110
ISSN	2393 - 5162

Table of Contents

1	Tomáš SADÍLEK Marketing and Visitor's Satisfaction	331
2	Amine AMAR, Imane El WAHLI, Zine Elabidine GUENNOUN, Youness LAAROUSSI Fractal Analysis of Moroccan Dirham Exchange Rate: Theory and Comparative Results	340
3	Loredana VĂCĂRESCU HOBEANU The Major Role of the Small and Medium-Sized Enterprises in the Market Economy	351
4	Olga ANDREEVA, Evgeniy SHEVCHIK Organizational and Financial Mechanism of New Russian Industrial Policy: Systemic Approach	364
5	Korhan KARACAOĞLU, Aslı KAPLAN An Examınatıon of the Relationship between Procrastination and Self-Efficacy: an Empirical Study	374
6	Pakasa BARY, Rani SETYODEWANTI Variation of Regional Trade Agreement Impact across Member Countries: Case of Southeast Asia	379
7	Claudio DI BERARDINO, Gianni ONESTI, Alessandro SARRA Impact of Distributive Services on the Productivity Growth: The Case of Italian Industrial Districts	385
8	Jaroslav KOREČKO, Ivana ONDRIJOVÁ, Roman VAVREK, Stanislav PEREGRIN The Principle and the Development of Vallue Added Taxe Gap in Slovakia and in the European Union	401
9	Dana KISELAKOVA, Beata SOFRANKOVA, Jarmila HORVATHOVA Impact of Risks on the Enterprise Performance in the European Union by using Enterprise Risk Models	410
10	Mohammad Tariq INTEZAR, Ahmed Saied Rahama ABDALLAH, Venkata Sai Srinivasa RA	100

Opportunities and Challenges of Dates Industry in Saudi Arabia: A Study of AlKharj Region ... 428



11	Enikő KORCSMÁROS, Monika ŠIMONOVÁ Selected Representatives of Regional Institutions to Support Small and Medium Enterprises in Slovakia	435
12	Jaka SRIYANA Optimum Size of Government Spending in Indonesia	441
13	Aparna CHOUDHARY, Sandeep MONDAL, Kampan MUKHERJEE Green Supply Chain Management: Genesis, Trends and Phases	450
14	Saranya RAKSONG The Determinants of Money Demand Function in the ASEAN-5 Countries	461
15	Ana KUNDID NOVOKMET, Anja BANOVIĆ Why Do the Minimum Capital Adequacy Ratios Vary Across Europe?	472
16	Mahesh Chandra JOSHI, Mukta KUKREJA Emerging Profiles of Indian Outward Foreign Direct Investments	488
17	Olga GRUSHINA, Gennady KHOMKALOV The Housing Problem in the Light of Market Imperfections Theory	501
18	Arif Pirvelievich SHIHVERDIEV, Natalya Alekseevna MIHALCHENKOVA, Egor Ivanovich EREMEYEV Methodology of the Assessment Industrial and Raw Agglomerations of the North: Results of Application. Case Study Komi Republic	512
19	Pavel Aleksandrovicv BATAYKIN, Asya Shamilevna KHASANOVA, Valeriy Vladimirovich SHLYCHKOV, Aidar Ravilevich TOUMASHEV, Marina Viktorovna TOUMASHEVA Economic Growth in the Conditions of Resource Constraints: Ordinal Approach to Optimization of Macroeconomic Production Structure	521
20	Wannuda PETPAIROTE, Nongnit CHANCHARAT Corporate Governance, a Shield of Bankruptcy	532

Marketing and Visitor's Satisfaction

Tomáš SADÍLEK University of Economics¹, Prague, Czech Republic tomas.sadilek@vse.cz

Abstract:

The aim of the paper is to describe regional marketing as its own applied discipline of regional economics and to illustrate the method of visitors' satisfaction measurement in the field of regional marketing and tourism. Firstly, there are presented term regional marketing, various theoretical approaches, differences between company marketing and regional marketing, history of regional marketing and its applications. There are also demonstrated satisfaction measurement methods with focus on satisfaction pyramid method and Customer Satisfaction Index. In the field part, successful Czech experience with satisfaction measurement in the tourism and key outcomes from satisfaction research are introduced. The main research output is setting factors with the highest level of satisfaction and sinking trend of visitors' satisfaction in last three years. The project was ordered by Moravian-Silesian region to detect information about visitors of region for changing a marketing strategy in tourism.

Keywords: regional marketing, tourism, marketing research, satisfaction measurement.

JEL Classification: M31, R10.

Introduction

Regional marketing has in last couple of years increasing importance in theory as well in practice. Although people did not know regional marketing as a concept in past, they intuitively used some basic rules. Various locations strived to address potential investors, inhabitants or tourist. The theory of regional marketing has appeared 30 years ago as a systematic approach to manage certain localities (cities, counties, countries and regions) and there is customer orientation. Regional marketing uses many methods and tools common for company marketing (or profit organizations marketing). There are used situation analysis, SWOT analysis, positioning, branding, marketing research methods, marketing communication and other. One of the marketing research methods, which are suddenly still not very frequent in the Czech Republic, is satisfaction measurement.

The structure of this study is divided in several parts. First pharagraph called "Regional marketing" presents theoretical approaches, history and application of regional marketing and define its differences to business marketing. Next paragraph is about customer satisfaction in regional marketing, where some approaches to customer satisfaction are described. In the fourth part, "Results and discussions", methodological framework, with research questions and information about samples are presented and then outputs from national research on tourist visitors' satisfaction support previous theories. The goal of the research is to present, how is regional marketing and measurement of visitors' satisfaction in the Czech Republic used. Research question of the study are: (1) How intensive is utilization of visitors' satisfaction in regional marketing? (2) What are the main factors which visitors evaluate by highest satisfaction? and (3) How CSI (Customer Satisfaction Index) has been developed since 2010 till 2014. The results of the survey are discussed and its implications for public authorities.

¹ W. Churchill sq. 4, 130 67 Prague 3, Czech Republic

The main contribution of the article is a description and utilization satisfaction measurement as a one of marketing techniques in the field of regional marketing, which is until now not very used in the Czech Republic. There are presented contemporary information about regional marketing, its theory, history and applications. Presented methods of satisfaction measurement are suitable for practical use and there are also used in the project of visitors' satisfaction measurement in Moravian-Silesian region. Even though, regional marketing has still more important role in the regions and countries, it is not implemented as a complex approach to managing these spatial areas (like in companies), but almost only same chosen methods and techniques. Very important output or regional marketing is also to set marketing strategy to address potential visitors.

The main findings of presented research example in the field part of article are distribution of total satisfaction, factors with the highest level of satisfaction and also sinking trend of visitors' satisfaction in last three years.

Acknowledgement

The article has been supported by project IGA "Analysis of quality labels utilizations on the Czech foodstuff market and efficiency of campaigns for their support", No. F2/94/2015".

- [1] Fornell, C., Johnson, M.D., Anderson, E.W., Cha, J., Everitt Bryant, B. (1996). Growing the trust relationship [Electronic version], *Journal of Marketing*, 60(4): 7-18. Retrieved [February, 2016], from Cornell University, School of Hospitality Administration site: <u>http://scholarship.sha.cornell.edu/articles/431/</u>
- [2] Fortenberry, J.L. (2012). *Nonprofit Marketing*, Burlington, MA: Jones.
- [3] Homburg, Ch., Giercing A., Hentschel, F. (1999). Der Zusammenhang zwischen Kundenzufriedenheit und Kundenbindung, *Die Betriebswirtschaft*, 59(2): 174-195.
- [4] Ježek, J. (2010). Aplikace městského marketingu v praxi: vývoj, očekávání, realita (kritický pohled), E+M Ekonomie a Management, 4: 123-134.
- [5] Kadár, M. (2014). The Settlement Branding. Case Studies on City Branding in Transylvania, *Transylvanian Review of Administrative Sciences*, 10(SI): 55-69.
- [6] Kutscherauer, A. (2006). Regionální a municipální management. Souhrnná výzkumná zpráva, Ostrava.
- [7] Lošťáková, H. (2009). Diferencované řízení vztahů se zákazníky. Praha: Grada Publishing.
- [8] Meyer, J.A. (1999). Regional marketing, München, Verlag Franz Vahle.
- [9] Petrea, R., Petrea, D., Olau, P.E., Filimon, L. (2014). Place Branding as Efficient Management Tool for Local Government, *Transylvanian Review of Administrative Sciences*, 9(SI): 124-140.
- [10] Plaček, M., Půček, M., Jetmar, M. (2014). Collaborative benchmarking of municipalities in the Czech Republic current experience, *The NISPAcee Journal of Public Administration and Policy.*
- [11] Půček, M., Špaček, D. (2014). Strategic public management selected experiences with BSC implementation, *Transylvanian Review of Administrative Sciences*, 10(41): 146-169.
- [12] Rumpel, P. (2002). Teritoriální marketing jako koncept územního rozvoj, Ostrava: Ostravskáuniverzita.
- [13] Ryglová, K., Machalová, J., Vajčnerová, I. (2010). The specification of consumer satisfaction intourism with the use of geographic IT tools, Acta Universitatis Agriculturae et Silviculturae Mendeleianae Brunensis, 58: 433– 444. DOI: <u>http://dx.doi.org/10.11118/actaun201058060433</u>
- [14] Sadílek, T. (2012). Students Satisfaction with the Study Programme of Adult Education at University of Ostrava and Tomas Bata University in Zlín, *Littera Scripta*, 5(2): 15-25.
- [15] Spáčil, V., Tvrdý, L., Martiník, I. (2003). Hodnocení spokojenosti se studiem na EkF VŠB TU Ostrava, *Ekonomická revue,* Ostrava: Vysoká Škola Báňská – Technická Univerzita, (4): 71-84.
- [16] Stăncioiu, A.F., Theodorescu, N., Pârgaru, I., Vlădoi A.D., Băltescu, C. (2011). The Image of the Tourism Destination a Supporting Element in the Development of the Regional Tourism Brand Study Case: Muntenia,

Theoretical and Applied Economics, Volume XVIII, 2(555): 139-152.

- [17] Sucháček, J. (2008). Territorial marketing in the Czech Republic: a trial and error process, Paper presented at 48th Congress of the European Regional Science Association, Liverpool, UK.
- [18] Zamazalová, M. (2008). Spokojenost zákazníka, Acta Oeconomica Pragensia, (4): 76-82. DOI: <u>10.18267/j.aop.135</u>

Fractal Analysis of Moroccan Dirham Exchange Rate: Theory and Comparative Results

Amine AMAR Faculty of Sciences Rabat, Department of Mathematics and Computer Science University Mohammed V-Agdal², Maroc <u>amar.abd@gmail.com</u>

Imane EI WAHLI Faculty of Sciences Rabat, Department of Mathematics and Computer Science University Mohammed V-Agdal, Maroc elwahli.officiel@gmail.com

Zine Elabidine GUENNOUN Faculty of Sciences Rabat, Department of Mathematics and Computer Science University Mohammed V-Agdal, Maroc <u>guennoun@fsr.ac.ma</u> Youness LAAROUSSI Faculty of Sciences Rabat, Department of Mathematics and Computer Science University Mohammed V-Agdal, Maroc laaroussi.vouness@gmail.com

Abstract:

Given the central position occupied by the exchange rate and its important role in terms of equilibrium of the supply of and foreign currency demand, its analysis appears among the most active areas of economic research. In this regard, researchers were developed several parametric and non-parametric approaches to model exchange rate behavior. Among these methods, we are particularly interested to fractional Brownian motion (fBm) to model the complexity of used series. The main step of this model is the estimation of Hurst index, which plays a very important role in the research of processes with self-similarity proprieties.

In this paper, we analyze firstly, the evolution of two important series of exchange rates which have a significant impact on the Moroccan economy. In the second, we carry out a comparative analysis of the Hurst exponent statistical properties, using geometrical, temporal, spectral and multi-scale analysis estimation methods. The choice of the efficient method is evaluated in terms of robustness and efficiency.

Keywords: exchange rate, fractal, fractional Brownian motion, Hurst exponent.

JEL Classification: C13, C14, C15, C60, E52, F31.

Introduction

Exchange rate has been one of the most active areas of economic research over the last years. It occupies a central position in monetary policy, where it may serve as a target or a key macroeconomic instrument. This indicator may be actively managed, in conjunction with other components of monetary policy, with the aim of achieving desired objectives in the areas of inflation or balance of payment. To achieve these goals, monetary authorities can adopt diverse exchange rate regimes. Morocco, for example uses a fixed one, since April 25, 2001. Due to the importance of exchange rate, several theoretical and empirical studies were established with aim the monitoring and the high accurate and precise modeling of the exchange rate evolution. In this context, the objective of this paper is twofold: on the one hand, we analyze and examine the evolution of two important series of exchange rate which have a significant impact on the Moroccan economy, namely "Euro/MAD" and "Dollar/MAD". On the other hand, we exploit the concept of fractal analysis for measuring the complexity of those series. To achieve this, we present the daily evolution of exchange rate series (Euro/MAD) and (USD/MAD) in the second section. The third one describes briefly fractional Brownian motion and fractal dimension concepts. The empirical estimates are discussed in section four. The paper ends with results and discussions.

²4 Avenue Ibn Battuta BP 1014 RP, Rabat, Morocco

The dynamic of exchange rate, considered as a key macroeconomic indicator, is entirely determined by a wide range of economic, financial, political and social factors. This fact has not been without effects the stability of the banking system, prices and competiveness. Consequently, the study of exchange rate behavior appears to be of great importance. In this regard, many researchers tried to adjust several models and among them we find a Fractional Brownian motion (fBm), which requires the estimation of the so-called Hurst exponent.

In this paper, we conduct a comparative analyze of different estimators of this index using geometrical, temporal, spectral approaches and methods based on a multi-scale analysis. The comparison is based on a simulation of a synthetic fBm signal with a specific Hurst index values. The estimation of this index will be evaluated in terms of bias (robustness) and variance (efficiency).

The retained value in our study consecrated to analyze the (USD/MAD) and (Euro/MAD) series, exhibits Brownian motion (fBm with H very close to 0.5) of the exchange rates time series. In simple words, the both series indicate the performance of Random walk, which means that there is no correlation between the present and future values. This fact is partially due to the fixed adopted regime of exchange rate in Morocco which was chosen by monetary authorities to ensure the stability of MAD in terms of nominal effective exchange rate and to reduce the fluctuation effect of international currencies.

Thus, our main contribution in this paper is to prove the behavior of Random walk of exchange rate, which is attributed to the adopted regime. This choice has a direct negative effect in terms of competitiveness and a positive effect on price stability, hence the importance of studying the fixity-flexibility choice, which represents a real dilemma for monetary authorities, in terms of benefits and risks.

- [1] Abry, P., Veitch, D. (1998). Wavelet analysis of long-range-dependent traffic. *Information Theory, IEEE Transactions on*, 44(1): 2-15.
- [2] Benassi, A., Cohen, S., Istas, J. (1998). Identifying the multifractal function of a Gaussian process. Statistical and Probability Letters, 39: 337–345.
- [3] Bertrand, P.R., Hamdouni, A., Khadhraoui, K. (2010). Modelling NASDAQ Series by Sparse Multifractional Brownian motion. *Methodology and Computing in Applied Probability*. DOI: <u>http://dx.doi.org/10.1007/s11009-010-9188-5</u>
- [4] Black, F., Scholes, M. (1973). The pricing of options and corporate liabilities. The Journal of Political Econonomy, 81(3): 637–654. DOI: <u>http://www.jstor.org/stable/1831029</u>
- [5] Cheng, X., Xia, M., Pan, R. and Wang, D. (2013). Price time series long memory analysis and prediction study. *Journal of Theoretical and Applied Information Technology*. 49(1): 241-247.
- [6] Coeurjolly, J.-F. (2000). Simulation and identification of the fractional Brownian motion: a bibliographical and comparative study. *Journal of Statistical Software*, 5: 1-53. DOI: <u>http://dx.doi.org/10.18637/jss.v005.i07</u>
- [7] Coeurjolly, J.-F. (2005). Identification of the multifractional Brownian motion. *Bernoulli*, 11 (6): 987–1008. DOI: http://dx.doi.org/10.3150/bj/1145993980
- [8] Geweke, J., Porter-Hudak, S. (1983). The estimation and application of long-memory time series models. *Journal of Time Series Analysis*, 4: 221-238. DOI: <u>http://dx.doi.org/10.1111/j.1467-9892.1983.tb00371.x</u>
- [9] Guyon, X. Leon, G. (1989). Convergence en loi des H-variations d'un processus gaussien stationnaire sur R. Ann Inst Poincaré, 25: 265–282.
- [10] Ezzahid, E., and Maouhoub, B. (2014). Capital Account Liberalization and Exchange Rate Flexibility: Scenarios for the Moroccan Case. *Economics, discussion Papers*.
- [11] Fadlallah, A., Boghiri, A., Mouhil, I. (2014). Que coûtent les mésalignement du taux de change à l'économie marocaine? Dossiers de Recherches en Economie et Gestion, Numéro spécial: Décembre 2014.
- [12] Guasoni, P., Rásonyi, M., Schachermayer, W. (2008). The fundamental theorem of asset pricing for continuous processes under small transaction costs. *Annals of Finance*. 6(2): 157 – 191. DOI: <u>http://dx. doi.org/10.1007/s10436-008-0110-x</u>

- [13] Hurst, H.E. (1951). The long-term storage capacity of reservoirs. Transactions of the American Society of Civil Engineers, 116: 770-799.
- [14] Istas, J. and Lang, G. (1997). Quadratic variations and estimation of the local Hölder index of a Gaussian process. Annales de l'Institut Henri Poincare (B) Probability and Statistics, 33(4): 407–436. DOI: <u>10.1016/</u> <u>S0246-0203(97)80099-4</u>
- [15] Jennane, R., Harba, R., Jacquet, G. (2001). Méthodes d'analyse du mouvement brownien fractionnaire: théorie et résultats comparatifs. *Traitement du Signal*, 18(5-6): 419 436.
- [16] Kirichenko, L., Radivilova, T., Deineko, Z. (2011). Comparative analysis for estimating of the Hurst exponent for stationary and nonstationary time series. *Information Technologies & Knowledge*, 5: 371–388.
- [17] Kristoufek, L., Vosvrda, M. (2013). Measuring capital market efficiency: Global and local correlations structure. *Physica A*, 392: 184–193. DOI: <u>http://dx.doi.org/10.1016/j.physa.2012.08.003</u>
- [18] Kristoufek, L., Vosvrda, M. (2014). Commodity futures and market efficiency. *Energy Economics*, 42: 50–57. DOI: <u>10.1016/j.eneco.2013.12.001</u>
- [19] Laaroussi, Y., Guennoun, Z., Amar, A. (2015). New Hybrid Method to Model Extreme Rainfalls. International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering, 9(4): 331-336. DOI: scholar.waset.org/1999.6/10001084
- [20] Lamperti, J. (1962). Semi-stable stochastic processes. Trans. Amer. Math. Soc., 104: 62–78. DOI: <u>http://dx.doi.org/10.1090/S0002-9947-1962-0138128-7</u>
- [21] Lau, W-C., Erramilli, A., Wang, J., Willinger, W. (1995).Self-Similar Trac Generation: The Random Midpoint Displacement Algorithm and its Properties. *IEEE International Conference on Communications*. 1: 466-472.
- [22] Lo, A.W. (1991). Long-Term Memory in Stock Market Prices, Econometrica, 59: 1279-1313. DOI: http://dx.doi.org/10.2307/2938368
- [23] Lobato, I., Robinson, P.M. (1996). Averaged periodogram estimation of long memory. Journal of Econometrics, 73: 303-324. DOI: <u>http://dx.doi.org/10.1016/0304-4076(95)01742-9</u>
- [24] Mandelbrot, B., van Ness, J. W. (1968). Fractional Brownian Motions, Fractional Noises and Applications. SIAM Review, 10: 422-437. DOI: <u>http://dx.doi.org/10.1137/1010093</u>
- [25] Taqqu, M.S., Teverovsky, V., Willinger, W. (1995). Estimators for long range dependence: an empirical study, *Fractals*, 3(4): 785-788. DOI: <u>http://dx.doi.org/10.1.1.55.8251</u>
- [26] Wornell, G. (1990). A Karhunen-Loève like Expansion for 1/f Processes via Wavelets. IEEE Trans. Inform. Theory, 36: 859-861. DOI: <u>http://dx.doi.or/10.1109/18.53745</u>
- [27] Zohuri, B. (2015). Dimensional Analysis and Self-Similarity Methods for Engineers and Scientists. Springer.
- *** World Bank (2006). Fostering Higher Growth and Employment with Productive Diversification and Competitiveness. Volume I: Synthesis.

The Major Role of the Small and Medium-Sized Enterprises in the Market Economy

Loredana VĂCĂRESCU HOBEANU Faculty of Legal, Economic and Administrative Sciences Craiova Spiru Haret University, Romania loredana.hobeanu@yahoo.com

Abstract:

The small and medium-sized enterprises (SMEs) have always played a special role in the economic and social life of the countries based on a market economy, being at the basis of revival of many economies. The dynamism, the flexibility, the mobility, the innovative potential means the characteristic of SMEs, being considered essential for the cohesion of the economic structure, for the economic growth and for the creation of the new jobs. The present paper aims to highlight the importance and necessity of the creation and development of the small and medium-sized businesses in the countries which are based on the market economy, starting from the definition of the concept in the various authors' vision in the field, continuing with the presentation of specific features of the small and medium-sized businesses and with the presentation of the main classification criteria of these. At the end of the paper we highlight the role and importance of the small and medium-sized businesses, as generators of the biggest part of the Gross Domestic Product of every country and by providing the jobs for the majority of the occupied population.

Keywords: micro-entreprises, small enterprises, medium-sized enterprises, turnover, number of employees, total assets.

JEL classification: M13, M21.

Introduction

In the recent decades SMEs have an experienced spectacular development, occuping an important place in the economic structures of the most countries of the world, gaining the appreciable proportion as number, the employees and turnover in all the companies. We can say that one of the characteristic features of the current stage of evolution and of the modern economies is the spectacular development of SMEs. Basing on these affirmations the paper presents the SMEs which are in the forefront of the economic development.

The largest part of the gross domestic product (GDP) occurs within the small and medium-sized enterprises, the majority of the occupied labour force works in SMEs, the most dynamic companies in the top fields-computer science, genetics, biotechnology, management consulting, engineering, etc.-are or were SMEs until a few years ago, and a big part of the recent inventions and innovations was generated by SMEs.

In the first part of the paper we begin to items of a general nature concerning the definition of SMEs. The acronym "SMEs" entered in the current language to refer to small and medium-sized enterprises, a category of the big companies. The main reason for which it is necessary to have a definition of small and medium-sized enterprises is that in the last period, at the level of very many countries, there is wanted the implementation of the industrial (preferential) policy regarding this type of companies. The rigorous analysis of definitions relating to small and medium-sized enterprises leads to a division of them into two subcategories: on the one hand the definitions using the quality criteria, being named the sociological and analytical criteria and, on the other hand, those use quantitative criteria. From the category of the quantitative definitions there is the most important definition from the European Union level which is also adopted and in the Romanian legislation.

Thus in the European Commission Recommendation there is stated: "the category of the micro enterprises, small and medium-sized enterprises (SMEs) is made from enterprises which employ fewer than 250 persons and which have an annual net turnover of up to 50 million euro and/or hold total assets until 43 million euro." In the second paragraph, we present the distinctive features of them according to the various specialists' opinion in the field. Brief characteristics of SMEs are: small size or relative reduced size; specialization; extremely dynamic demographics; difficulties that they meet at the entrance or exit on/from the market; high innovative potential; flexibility; workers' polivalence; insufficiency of available capital. The penultimate paragraph will describe the most relevant criteria for the classification of small and medium-sized enterprises as: property type, type of market and operating space, growth rate and rate of innovation. In the last paragraph we will insist on the role of SMEs in the economy: it generates the biggest part of GDP of each country, it provides the jobs for the majority of the occupied population, it generates in a large proportion the technical innovations of the economy, it increases the competitive nature of the markets, etc.

In Romania, after 1990, there was produced a veritable explosion in the field of creation and development of SMEs, which determined their strong affirmation in the national economy, the high growth of their contribution to the achievement of GDP, at the increase of the exports and at the creation of new jobs. In spite of the inherent difficulties the transition process of the Romanian economy to the market economy and in spite of the insufficient attention granted to the problems of SMEs, in the first years of transition there was emerged a distinct sector of this category of businesses, whose institutional framework developed and strengthened continuously, thus occuping a definite place in the configuration of the economy assembly.

In the present paper we started defining SMEs, stressing that there is not a widely recognized definition of SMEs, in the literature being many approaches, leaving from the different philosophies regardings on the size of the company and of the expression and quantification ways. The analysis of definitions relating to SMEs determined the division into two subcategories: on the one hand the definitions using quality criteria and on the other hand, the definitions are using the quantitative criteria. We presented the three criteria of the European Commission for the definition of SMEs, namely: average number of employees, total assets and turnover.

We also presented, with the help of a figure, a ranking of SMEs according to European recommendations, depending on the size of the three indicators, distinguishing three types of companies: medium-sized enterprises, small enterprises and micro-enterprises. In the next paragraph we showed the distinctive features of SMEs according to many authors. Dynamism, flexibility and adaptability, resistance in the crisis conditions represent the characteristic features of SMEs, which are regarded as essential for the creation of new jobs. It explains that the trend of concentration of the economic activity are reversed in favor of often the small-sized units, whose role becomes major in the restructuring the economies, in achieving a balance of the activities on the national territory and thus in the economic growth.

Finally, SMEs, although by definition are relatively reduced in size, present a remarkable complexity and variety, characteristics and specific functionality, whose knowledge and taking into account are compulsory in order to amplify their economic and social performances.

- [1] Borza, A. (2009). *Management of small and medium-sized businesses*, FSEGA Publishing House, Cluj Napoca.
- [2] Constantinescu, D. (2008). *Management. Functions. Structures. Processes*, Universitaria Publishing House, Craiova.
- [3] Julien, P.A. (1994). Les PME: Bilan et perspectives, Less Presses Inter Universitaires, Cap-Rouge, Quebec.
- [4] Kirchhoff, B.A. (1998). *Mythes and Facts about Firm Survival, în Renaissance of SME's* in a Globalized Economy KMU Verlag.
- [5] Russu, C. (1999). Strategic Management, ALL Beck Publishing House, Bucharest.
- [6] Sasu, C. (2003). Initiating and business development, Polirom Publishing House, Iaşi.
- [7] Torres, O. (1999). Les PME, Dominos. Evreux: Flammarion.
- [8] Walters, J.S. (2006). The great power of small business, Curta Veche Publishing House, Bucharest.
- [9] Criveanu, I., Dragomir, Gh., Mitrache, M. (2007). *Management*, Sitech Publishing House, Craiova.
- [10] Frohlich, E.A., Hawraken, P.M., Lettmayr, C.F., Pichler, J.H. (1994). *Manual for Small Industrial Business-Project Design and Appraissal,* UNIDO, Viena.
- [11] Julien, P.A., Morin, M. (1996). *Mondialisation de l' Economie et PME Quebicoises, Sainte Foy*: Presses Universitaires du Quebec.
- [12] Julien, P.A., Morel, B. (1986). La Belle Entreprise, Boreal, Montréal.
- [13] Longenecker, J.G., Moore, C.W., Petty, J.W., Palich, L.E. (2006). Small Business Management. An Entrepreneurial Emphasis, Thomson South Western.
- [14] Nicolaescu, O., Nicolescu, C. (2006). *How to be successful in life and in business*, Economic Publishing House, Bucharest.

- [15] Nicolaescu, O., Nicolescu, C. (2008). *The Entrepreneurship and Management of the Small and Medium-sized Businesses*, Economic Publishing House, Bucharest.
- [16] Birley S., Westhead P. (1990). Growth and Performance Contacts between Types of Small Firms, Strategic Management Journal, 11 (7): 535–557. DOI: 10.1002/smj.4250110705
- [17] Dew, N., Read, S., Sarasvathy, S.D., Wiltbank, R. (2011). On the entrepreneurial genesis of new markets: effectual transformation versus causal search and selection, *Journal of Evolutionary Economics*, 21(2): 231-253.
- [18] Fillion J. (1997). Entrepreneurship: Managers and Small Business Owner Managers in EC, Working Paper, no. 97.
- [19] Frank, H., Luejer, M. (1997). Reconstructing Development Processes. Conceptual Basis and Empirical Analysis of Setting up a Business, *International Studies of Management* Organization, 27(3): 34-63.
- [20] Kambil, A. (2008). What is your recession playbook? *Journal of Business Strategy*, 29(5): 50 52. DOI: http://dx.doi.org/10.1108/02756660810902341
- [21] Kocak, A., Edwards, V. (2005). Independence and co-operation among small businesses: the case of the Turkish shotgun industry in a period of recession. *International Journal of Entrepreneurial Behavior & Research*, 11(3): 186 – 200. DOI: http://dx.doi.org/10.1108/13552550510598781
- [22] Petrakis, P.E., Kostis, P.C. (2012). The Role of Knowledge and Trust in SMEs, Journal of the Knowledge Economy, 6(1):105-124. DOI: 10.1007/s13132-012-0115-6
- [23] Woitrin, M. (1966). Enquete sur la station des petites et moyennes entreprises industrielles dans les pays de la CEE=Survey on the situation of small and medium industrial entreprises in the countries of the EEC. Studies: Competition Series 4 (EU Commission-Working Document).
- [24] Wynarczyk, P. et al. (1993). Managerial Labour Markets in Small and Medium Sized Entreprises, Routledge.
- [25] Kushnir, K.A (2010). Universal Definition of Small Entreprise: A procustean bed for SMEs? Available from: <u>http://psdblog.worldbank.org/psdblog/2010/08/a-universal-definition-of-small-enterprise-an-urgent-need-to-lay-in-the-procrustean-bed.html</u>
- [26] Gibson, T., Van der Vart H.J. (2008). *Defining SMES: A Less Imperfect Way of Defining Small and Medium Enterprises in Developing Countries*. Available at: <u>http://www.businessgrowthinitiative.org/ResourceCenter/</u>
- [27] Recklies Dagmar (2014). *Small and Medium-Sized Enterprises and Globalization*, Available from: <u>http://www.themanager.org/strategy/global.htm</u> SMEs in Germany: Facts and Figures.
- [28] Hirigoyen, G. (1984). Contribution à la connaissance des comportaments financiers des moyennes entreprises industrielles et familiales, Thèse de doctorat d'Etat de Sciences de gestion, Université de Bordeaux I.
- *** Recommendation 361/2003/CE.
- *** Law 346/2004 regarding the establishment and development of small and medium-sized entreprises, with subsequent amendments.
- *** Government Ordinance no. 27/2006 amending and supplementing Law no. 346/2004 is regarding the establishment and development of small and medium-sized entreprises.

Organizational and Financial Mechanism of New Russian Industrial Policy: Systemic Approach

Olga ANDREEVA Rostov State Transport University³, Russia <u>a o v@mail.ru</u> Evgeniy SHEVCHIK Rostov State Transport University, Russia o011mv@yandex.ru

Abstract

Under the conditions of global uncertainty and unbalance of domestic economic policy, organizational and financial mechanism of new Russian industrial policy should ensure possibility for realization of risk-oriented strategies for Russian companies, i.e., it should include topological strategies of transforming investment, institutional modeling, increase of the quality of business environment, projecting and realization of financial tools, implementation of interactive technologies of monitoring and control, evaluation of initial and final effectiveness of projects, and possibility for correction of parameters of program documents on the basis of data on modification of external environment, transformed technologies of artificial neuron networks and processes means of financial diagnostics for achievement of high-precision financial engineering for the purpose of resource provision of development of Russian non-financial companies.

Keywords: industrial policy and clusters, management, investment and financial mechanism, corporate finances, risks, development management, infrastructural projects.

JEL Classification: G63, L52.

Infrastructural development and incorporation as organizational outline of new Russian industrial policy

Experts with liberal views criticize domination of companies with state participation in Russia – but it should be acknowledging that, for the purpose of anti-crisis regulation and in view of global geopolitical risks, use of possibilities of large state corporations for provision of realization of economic goals is well reasoned. This is caused by the fact that private investors cannot be quickly and effectively integrated into projects which are to some extent related to provision of economic security: private capital is oriented at self-preservation and reproduction, that's why it is unlikely that private investors will be able to be good intermediaries in long and expensive projects under the conditions of unstable external environment.

It should be noted that development of startups in Russian economy is not excluded – quite on the contrary, it is welcomed, but direction of innovational business should correspond to strategic interests of Russia, but not popularize technologies oriented at forced development of consuming society. The thesis on "a priori ineffectiveness of state companies", declared by liberal expert society, is not justified: contemporary economic history showed that effectiveness of business is determined not by structure of owners.

Firstly, the very definition "effectiveness" does not have generally accepted treatment and metrics. Secondly, index indicators of profitability (which are often used as effectiveness metrics) are often determined by the level of informational perturbations in market. Thirdly, financial results of companies' activities are influenced by quality of business environment which depends on many economic and – more often – non-economic factors. A vivid example of illegality of a priori statements on effectiveness is growth of Gazprom, which – under the difficult geo-economic conditions – exceeded the index MSCI World Energy Sector Index (*Bershidsky 2015*). Rosneft's results are worse, but it is still in the growth area. Index PMI (Project Management Institute) in Russia exceeded 50, which shows recovery of business activities.

It should be taken into account that tendencies for incorporation are preserved in economy of Western countries: thus, large private investors lobbied the Agreement in free trade between the European Union and the USA, or Transatlantic Trade and Investment Partnership (TTIP). Large Western investors are interested in attempt of changing institutional norms of regulation of rules of business, crating precedents of presumption of investors' interests over sovereign interests of countries-members of the future agreement, thus ensuring barriers of entering the market for Eurasian and Asian companies. This example is indicative for understanding modern tendencies of

³ 2 Rostov Strelkoviy Polk Narodnogo Opolcheniya Sq., Rostov-on-Don, Russia

doing business under the conditions of high uncertainty: only those who create business environment can make it predictable, controllable, and certain.

In our opinion, this is a reason for preservation of tendency for incorporation and enlargement of business: large corporations have a possibility for provision of necessary terms of functioning, and small and medium business not has such possibility, as this option contradicts fundamental basis of competition.

Modeling of parameters of local business environment by large corporations gives them a possibility for reduction of force majeur expenditures, i.e., expenditures which lead to bankruptcy and further sanation of market during negative phase of economic cycle. Transnational companies work in business environment by the same principles as large corporations with state participation. The only difference is that the latter can be involved by country's government into realization of projects which are strategically important for national economy.

Large corporations, regardless of property structure, can form and model local business environment for conduct of their own business, i.e., internalize their transaction costs in their topological strategies in order to control them. In Russian practice, local level of executive power shows low effectiveness in part of provision of institutional conditions for doing business, which makes corporate structures look for methods, mechanisms, and tools of using administrative resource for overcoming institutional destructions. Official state's entering the structure of owners reduces risks of shadow business and development of corruption schemes. It is wrong to think that opportunistic behavior and rental schemes during cooperation of business and government are an end in itself for large investors. In present Russian reality, there are a lot of examples in which positive cooperation of business and the state led to the positive result (projects in Ulyanovsk and Rostov Oblasts, Krasnodar Krai; at the federal level, there is an example of realization of large projects by the Federal road agency Rosavtodor within public-private partnership).

For Russia, large corporations with state participation are, as a matter of fact, drivers of neo-industrial growth. Their task is to provide basic production infrastructure for further attraction of private investors within publicprivate partnership. Thus, one of the vivid examples of that is construction of transfer hubs for railroad, car, and air travels. Construction of multimodal complexes in the suburbs of large cities ensures investment attractiveness of residential areas and development in the sphere of trade and entertainment services and solved the problem of deurbanization. This is one of the few examples of positive cooperation of state and private capital, realized within the model of transforming investment, which is a trend in investment activities for developing countries.

Large geopolitical risks, negative dynamics of energy markets, and significant risks caused by global threat of extremism makes transnational infrastructural projects in Asian-Pacific region of top-priority nature for provision of anti-crisis possibilities of the global economy.

Thus, the research "World Energy Outlook 2015" (International Energy Agency 2015), published on June, gives 2 scenarios of development of energy market. Basic scenario is oriented at recovery of market due to increased demand from India, China, countries of Africa, Middle East, and South-Eastern Asia, by means of joining the energy infrastructure of previously uncovered regions. According to the basic scenario, IEA forecasts the equilibrium price of \$80/barrel by 2020. The second scenario supposes longer period of low oil prices: by the end of the decade, there should be equilibrium price of \$50/barrel, and by 2045 – growth to \$85/barrel. The basic scenario is built on idea of reduction of oil offer due to reduction of oil production and further disappearance of certain players from the market due to low break-even point; low prices scenario is built on the idea of preservation of current volumes of oil production. It should be noted that India and China are distinguished in the IEA research: China, being the largest consumer of energy resources, focuses at further development of energy effectiveness strategy, which shows preservation of trend for change of structure and volume of demand for energy resources. In its turn, India is the most perspective market as 1/5 of the country's population does not have access to electric supply.

Satisfaction of new needs requires combined development of energy and transport infrastructure, including pipeline transport. According to the Turkish newspaper "Aksam" (Aksam, 2015), at the G20 Summit in Antalya, Turkey, the EU supported three critically important infrastructural projects which will make Turkey the energy port of Europe: gas pipeline Tesla, which will go from Greece to Austria, Trans-Anatolian gas pipeline (TANAP), which will transport Caspian natural gas to Europe, and Trans-Caspian gap pipeline (TCP), which will supply Azerbaijani and Turkmen natural gas to Turkey.

These facts show the growth of significance of energy security under the conditions of increase of the global crisis tendencies, and this problem opens new perspectives for regionalization, as a growing tendency of the global economy. Provision of energy security requires diversification of energy sources and their types, which leads to significant costs of switching and necessity for technological modernization of energy consuming equipment.

On the threshold of expected third wave of global crisis, investments into modernization and diversification of own energy infrastructure could be allowed only by certain countries. Energy sources will be a dominating factor of development by the time of transfer to the fifth and sixth technological modes in most developed and developing countries.

Issue of export substitution in the energy market for Russia is being solved: a large portfolio of joint projects with Asian partners is initiated – they suppose not only export of energy sources but development of basic infrastructure necessary for industrial production. Negotiations between Russia and Germany on construction of Nord Stream 2 along the bottom of the Baltic Sea were renewed – together with the Turkish pipeline, it will replace the previously used branch of the pipeline through Ukraine, which will lead to increase of economic decline in this country, which became a trigger of geopolitical tension between Russia, the EU, and the USA.

Experts state that quotas from the EU to Ukraine – even under the condition of their full use – will not allow replacing shortfalls in income due to embargo, implemented by Russia as part of counter-sanctions (Blinov 2015).

This means aggravation of difficult socio-economic state of Ukraine, which will lead to migration of population to the EU – which is a negative factor for European economy which has faced force majeur expenditures due to migrants from Middle East, including "financial refugees".

At the threshold of the third wave of global economic crisis, transnational infrastructural projects are capable of enlivening business activities and providing sources of economic growth of whole regions in the global economic environment. However, order of business should include the issue of provision of security of large infrastructural objects against diversion attacks, as the region of realization is subject to risks of extremism. At present, it is possible to state that large transnational infrastructural projects should be realized with participation of such countries as Russia, which proved its capability of protecting civilization from extremism (Forsyth 2015). We focus attention on the fact that in new reality, capability of provision of military security of specific territory is a factor of its investment attractiveness, which should be taken into account by companies of corporate sector of economy in their investment programs.

- [1] Andreeva, O.V. (2014). Adaptive stability as the conceptual model for managing Russian corporate structures in modern geoeconomic environment, *Review of Applied Socio-Economic Research*, 8(2): 13-28.
- [2] Bershidsky, L. (2015). It Pays Too Well to Run a Russian State Company. The official website Bloomberg [online] <u>http://www.bloombergview.com/articles/2015-11-19/it-pays-too-well-to-run-a-russian-state-company</u> (Accessed 21 November 2015).
- [3] Forsyth, J. (2015). Obama's weakness has helped Putin and Isis'. The official website "The Spectatior" [online] <u>http://new.spectator.co.uk/2015/11/president-obama-is-to-blame-for-the-strength-of-isis/</u> (Accessed 21 Nov. 2015).
- [4] Aksam (2015). G20 ilk meyvesini verdi'. The official website newspaper "Aksam" [online] <u>http://www.aksam.com.tr/guncel/g20-ilk-meyvesini-verdi/haber-463211</u> (Accessed 21 November 2015).
- [5] Rao, S., Bush, J. (2015). RPT-Investment tide may have turned for crisis-hit Russia. The official website REUTERS.COM [online] <u>http://www.reuters.com/article/2015/10/21/russia-investment-idUSL8N12L1</u> <u>Q72015 1021#y4AFJfQZuE1upDip.99</u> (Accessed 21 November 2015).
- [6] Rapoza, K. (2015). Russia Getting More Money from Asia as Sanctions Scare Europeans, The official website "Forbes" [online] <u>http://www.forbes.com/sites/kenrapoza/2015/11/15/russia-getting-more-money-from-asia-as-sanctions-scare-europeans/</u> (Accessed 21 November 2015).
- [7] Auzan, A.A. (2015). Track effect. Problem of dependence on trajectory of previous development evolution of hypotheses, *Bulletin of Moscow University, Series 6: Economics,* 1: 3-17.
- [8] Blinov, M. (2015). Can the EU replace Ukraine's loss of Russian market? [E-source] / M. Blinov / Official website inosmi.ru, publication date: 20.11.2015, <u>http://inosmi.ru/economic/20151120/234509242.html</u> (Date of access: 21.11.2015)
- [9] Glazyev, S.Y. (2015). Regarding targeting of inflation, *Issues of Economics*, 9: 124-135.
- [10] Zubov, M. (2015). Waiting for 75 rubles for dollar: economic crisis created by Russian government interview of scientific head of Institute of Economics of RAS, R. Grinberg [E-source] / M. Zubov / Official web-site of newspaper "Moskovskiy Komsomolets" / Issue No. 26961 dated November 12, 2015, <u>http://www.mk.ru/economics/2015/11/11/zhdem-75-rubley-za-dollar-ekonomicheskiy-krizis-sozdaet-rossiys</u> <u>koe-pravitelstvo.html</u> (Access date: 21.11.2015).
- *** Evolution of APEC risks. The official website APEC Philippines 2015 [online] <u>https://apec2015ceosummit.ph/</u> (Accessed 21 November 2015)
- *** International Energy Agency (2015). World Energy Outlook 2015. [online] The official website International Energy Agency World Energy Outlook" [online] <u>http://www.iea.org/publications/freepublications/publication/</u> <u>WEB_World EnergyOutlook2015ExecutiveSummaryEnglishFinal.pdf</u> (Accessed 21 November 2015)
- *** State Duma of the RF (2015). Main directions of monetary policy were discussed at joint meeting of three committees / Official web-site of the State Duma of the RF / News/ Publication date: 03.11.2015 access: URL http://pda.duma.gov.ru/news/273/1365951/ (Access date: 21.11.2015)
- *** NBCH (2015). Against the background of general decline in the market of crediting of SME, 3rd quarter of 2015 saw growth of number of loans for development of business and purchase of equipment [E-source] / Official web-site of the National Bureau of Credit Histories NBKI.RU / Publication date: 10.11.2015 access: URL http://www.nbki.ru/press/pressrelease/?id=11842 (Access date: 23.11.2015)
- *** FSSS of the RF (2015a). Business activity of organizations in Russian in October 2015 [E-source] / Official website of the Federal State Statistics Service – access: URL <u>http://www.gks.ru/bgd/free/B0403/IssWWW .exe/</u> <u>Stg/d06/219.htm</u> (Access date: 21.11.2015)

- *** FSSS of the RF (2015b): Dynamics of investments into basic capital in the Federal State Statistics Service [E-source]/Official web-site of the Federal State Statistics Service access: URL <u>http://www.gks.ru/free_doc/2015/b15_01/image1803.gif</u> (Access date: 21.11.2015)
- *** FSSS of the RF (2015c). Regarding financial results of organizations' activities in January-August 2015 [E-source] / Official web-site of the Federal State Statistics Service access: URL <u>http://www.gks.ru/bgd/free/B09_03/lssWWW.exe/Stg/d06/218.htm</u> (Access date: 1.11.2015)
- *** Central Bank of the RF (2015). Financial state of the largest enterprises in 2st half of 2015 [E-source] / Official web-site of the Central Bank of the RF access: <u>http://cbr.ru/analytics/financial_condition/financial_condition_2015_1.pdf</u> (Access date: 23.11.2015)

An Examination of the Relationship between Procrastination and Self-Efficacy: An Empirical Study

Korhan KARACAOĞLU Faculty of Economics and Administrative Sciences University of Nevşehir Hacı Bektaş Veli, Turkey <u>kkaracaoglu@nevsehir.edu.tr</u>

Aslı KAPLAN School of Foreign Languages University of Nevşehir Hacı Bektaş Veli, Turkey <u>akaplan@nevsehir.edu.tr</u>

Abstract

Procrastination is used in a broad sense to postpone or defer the things until tomorrow. Many variables such as task avoidance, uncertainty, fear of failure, low self-esteem can be mentioned as the antecedents of procrastination in the literature; in addition, low self-efficacy is also considered one of the antecedents of procrastination. Self-efficacy refers to individuals' belief in fulfilling the specific tasks successively through needed behavior patterns and cognitive processes. In this respect, the primary objective of this study is to examine the relationship between self-efficacy and procrastination. The study uses a structural equation model (SEM) to produce causal relationship and analyze the data from 281 employees in Nevsehir Haci Bektaş Veli University, in Turkey. The results showed that there was a negative relationship between self-efficacy and procrastination; besides, self-efficacy had low rate to account for procrastination

Keywords: Procrastination, self-efficacy, structural equation modelling.

JEL Classification: M10, M12, M19.

Introduction

Procrastination derives from Latin word *procrastinare* which means "defer till the morning" (Neenan 2008). There is no common definition among the researchers for identifying the concept of procrastination. (Ferrari and Özer 2009) Ajayi and Osiki (2008) define procrastination as avoidance of completing the necessary tasks or postponing them. Van Eerde (2003), however, identifies procrastination as behavioral tendencies or characteristics to delay or defer fulfilling a task or making decisions. Ferrari *et al.* (2005) defines procrastination as frequent delays for starting or completing a task till deadline. Procrastination may be linked to task avoidance, uncertainty, a fear of failure (Zarick and Stonebraker 2009), laziness, fear of not performing well, fear of making mistakes, and hesitation (Ajayi and Osiki 2008), lack of motivation, deficient self-regulation, external focus of control, perfectionism, trait and state anxiety, a fear of failure, low self-confident, low self-efficacy, and low self-esteem (Ackermann and Gross 2005, Steel 2007). Self-efficacy, one of the antecedents aforementioned above, can be defined as individuals' belief in performing the specific tasks successively through needed behavior patterns and cognitive processes. (Luthans and Peterson 2002)

The relationship between self-efficacy and procrastination was firstly introduced by Bandura (1986). Bandura states that as long as adequate levels of ability and motivation exist, self-efficacy belief will influence an individual's task initiation and continuation (Chu and Choi 2005). Reviewing the literature, academic procrastination has predominantly been handled. However, few studies concerning general procrastination have been discussed in the literature. The study conducted by Klassen *et al.* (2008) showed the impact of academic self-efficacy and self- esteem on academic procrastination.

The study revealed that individuals who had high level of self-efficacy showed less procrastination and procrastination was related to low-self esteem. Another study carried out by Wolters (2003) stated that students with high level of self-efficacy and mastery orientation tend to show less procrastination when getting to work on academic tasks. In accordance with the results of the study, academic procrastination was negatively associated with mastery orientation and self-efficacy. Lowinger *et al.* (2014) researched the relationship between academic procrastination and self-efficacy on Chinese international students. They concluded that there was a negative relationship between academic procrastination and self-efficacy. Unlike academic procrastination and self-efficacy. Unlike academic

procrastination, one of the limited numbers of studies with regard to general procrastination was carried out by Haycock *et al.* (1998). The study inferred that procrastination was significantly associated with self-efficacy and anxiety.

There was a negative relationship between procrastination and self-efficacy and there was a positive relationship between procrastination and anxiety. Another study was performed by Tuckman (1991). The research conducted on college students manifested that there was a negative relationship between procrastination and self-efficacy. Students who described themselves as time wasters, deadline avoiders, pleasure seekers doubted their own capability and performed less effort in a voluntary task. In this framework, the aim of the study is to examine the relationship between self-efficacy and procrastination. On the basis of the literature mentioned above, it is alleged that the increase in employees' self-efficacy has a reducing effect on procrastination. In this respect, the hypothesis of the study is summarized as follows: "self-efficacy beliefs of employees working in a university will affect negatively procrastination behavior".

The causal relationship between procrastination and self-efficacy, one of the antecedents of procrastination were discussed. Models and hypothesis defining the causal relationship were analyzed as a means of structural equation modeling and the mentioned relationship was studied. Therefore, the hypothesis of the research was stated as "self-efficacy belief of university staff will affect negatively procrastination behavior". Data gathered from 281 academic and administrative staff working in Nevsehir University were tested using statistical analysis. The results of the study are as follows.

According to the results of the study, there was a negative relationship between self-efficacy and procrastination. In addition to this, self-efficacy had low rate to account for procrastination. This conclusion demonstrated that one point increases in self-efficacy level of employees resulted in 0.39 decrease in procrastination. Considering the average values about variables, it was found out that employees had higher level of self-efficacy and lower level of procrastination. Another result was related to the explanatory power of self-efficacy on procrastination remained at (0.15) level and was relatively low. When considered with other antecedents that influence procrastination, this result can be regarded as a reasonable rate.

The results derived from the research are limited to employees working in Nevsehir. Based on the analysis using totally 281 available data, it is not expected to reach powerful generalisations. In particular, as employees had relatively high level of education and culture, self-efficacy level of employees was turned out to be high, procrastination level low. For this reason, the results obtained from the research should be assessed with both limitations and constraints. Future research should examine reasons and outcomes of procrastination and its relationship with other concepts in detail. Besides, procrastination should be treated with different and larger sampling. Such research will not only enrich our theoretical understanding of procrastination, but also shed important light on literature.

- [1] Ackermann, D.S., Gross, B.L. (2005). My Instructor Made Me Do It: Task Characteristics of Procrastination. *Journal of Marketing Education*, 27(1): 5-13.
- [2] Ajayi, A.I., Osiki, P.M. (2008). Procrastination among the Undergraduates in a Nigerian University: Implications for Time Management, *International Business Management*, 2(4): 126-131.
- [3] Brewerton, P., Milliward, L. (2001). Organizational Research Methods, Sage Publication.
- [4] Chu, A.H.C., Choi, J.N. (2005). Rethinking Procrastination: Positive Effects of "Active" Procrastination Behavior on Attitudes and Performance. *The Journal of Social Psychology*, 145(3): 245-264.
- [5] Çokluk, Ö., Şekercioğlu, G., Büyüköztürk, Ş. (2010). Sosyal Bilimler İçin Çok Değişkenli İstatistik SPSS ve LISREL Uygulamaları, Ankara: PegemAkademi.
- [6] Ferrari, J.R., Özer, B.U. (2009). Chronic Procrastination among Turkish Adults: Exploring Decisional, Avoidant, and Arousal Styles. *The Journal of Social Psychology*, 149(3): 302-307.
- [7] Ferrari, J.R., O'Callaghan, J., Newbeign, I. (2005). Prevalence of Procrastination in the United States, United Kingdom, and Australia: Arousal and Avoidance Delays among Adults. *North American Journal of Psychology*, 7(1): 1-6.
- [8] Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L. (2006). *Multivariate Data Analysis*, Sixth Edition, New Jersey: Pearson/Prentice Hall.
- [9] Haycock, L.A., McCarthy, P., Skay, C.L. (1998). Procrastination in College Students: The Role of Self-Efficacy and Anxiety. *Journal of Counseling & Development*, 76: 317-324.
- [10] Klassen, R.M., Krawchuk, L.L., Rajani, S. (2008). Academic Procrastination of Undergraduates: Low Self-Efficacy to Self-Regulate Predicts Higher Levels of Procrastination. *Contemporary Educational Psychology*, 33: 915-931.
- [11] Lowinger, R.J., He, Z., Lin, M., Chang, M. (2014). The Impact of Academic Self-efficacy, Acculturation Difficulties, and Language Abilities on Procrastination Behavior in Chinese International Students, *College Student Journal*, 48(1): 141-152.

- [12] Luthans, F., Peterson, S. (2002). Employee Engagement and Manager Self Efficacy: Implications for Managerial Effectiveness and Development. *Journal of Management Development*, 21(5): 376-387.
- [13] Neenan, M. (2008). Tackling Procrastination: An REBT Perspective for Coaches. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 26: 53-62.
- [14] Schwarzer, R., Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), Measures in health psychology: A user's portfolio. *Causal and control beliefs*, 35-37.
- [15] Seo, E.H. (2008). Self-efficacy as a Mediator in the Relationship Between Self-oriented Perfectionism and Academic Procrastination, Social Behavior and Personality, 36(6), 753-764.
- [16] Steel, P. (2007). The Nature of Procrastination: A Meta-Analytic and Theoretical Review of Quintessential Self-Regulatory Failure. *Psychological Bulletin*, 133(1): 65-94.
- [17] Tuckman, B.W. (1991). The development and Concurrent Validity of the Procrastination Scale. Educational and Psychological Measurement, 51: 473-480.
- [18] Van Eerde, W. (2003). A Meta-Analytically Derived Nomological Network of Procrastination. *Personality and Individual Differences*, 35: 1401-1418.
- [19] Wolters, C.A. (2003). Understanding Procrastination from a Self-Regulated Learning Perspective. Journal of Educational Psychology, 95(1): 179-187.
- [20] Yılmaz, V., Çelik, H.E. (2009). LISREL ile Yapısal Eşitlik Modellemesi- I, Ankara: Pegem Akademi.
- [21] Zarick, L.M., Stonebraker, R. (2009). I'll do it Tomorrow. The Logic of Procrastination. *College Teaching*, 57(4): 211-215.

Variation of Regional Trade Agreement Impact across Member Countries: The Case of Southeast Asia

Pakasa BARY Economic and Monetary Policy Department, Bank Indonesia, Indonesia <u>pakasa b@bi.qo.id</u> Rani SETYODEWANTI Indonesia Resident Representative Office, IMF, Indonesia <u>rsetvodewanti@imf.org</u>

Abstract:

This paper investigates whether the impact of a Regional Trade Agreement (RTA) may vary across members. We use several specification of gravity model using panel-bilateral manufacturing trade data during 1990-2012, and comparing the trade creation and trade diversion effects across countries in Southeast Asia due to the implementation of an RTA. Additionally, this paper also investigates the changes of the relative effects before and since the Asian financial crisis.

The estimation results suggest heterogeneity of RTA impact across members. In particular, one country has the lowest trade creation impact and significant trade diversion compare to three other members, while there are several countries did not show trade diversion. Further investigation indicates that the trade diversion arises after the Asian financial crisis. Moreover, the crisis also lowers intra-regional trade bias in some countries, but vary in magnitude and significance.

Keywords: international trade, ASEAN, AFTA, regional trade agreement, gravity, economic integration.

JEL Classification: F10, F14, F15.

Introduction

In general, a regional trade agreement (RTA) lowers trade barriers between member countries. It promotes trade creation between member countries, but to some extent may also create trade diversion, which is against efficiency (Viner 1950). This paper focuses on the case of Association of South East Asian Nations (ASEAN) which has a regional trade agreement named ASEAN Free Trade Area (AFTA) since 1992. Previous literatures indicate that AFTA has relatively strong trade creation effect but no trade diversion effect (*for example*, Elliott and Ikemoto 2004, Kien 2009). Further, Bary (2015) provides some indication that the trade creation and trade diversion effect might be time-variant.

As AFTA is a relatively old agreement, the observations are sufficient for a more specific investigation. This paper extends the discussion into cross-sectional variation, i.e. whether the impact of AFTA varies between countries. Moreover, this paper considers the effect of Asian financial crisis, as the observations focus on ASEAN countries and the crisis had triggered a substantial change on the relative prices and a permanent current account reversal in ASEAN countries (Moreno 2008), and hence potentially altering trade flows structurally.

The main contribution of this paper is that the RTA impacts are investigated on two extended contexts: First, to assess possible variations on RTA impacts between member countries, and second, to investigate whether AFTA impacts are different before and since the Asian financial crisis across member countries.

We have analysed the AFTA impacts across countries in ASEAN, by allowing variation of the effect across countries as well as their variation before and after the Asian financial crisis. The results suggest that AFTA impacts are heterogeneous across member countries, and the crisis have modified the impact to some extent, in which the impact changes is also varies across member countries.

The results suggest that the effectiveness of an RTA to enhance the trade will not be the same across members, although the agreement itself is generally mutual among members. These suggest that factors that are specific to countries (e.g. trade facilitation, factor conditions, trade promotion) are responsible for this heterogeneity. Implicitly, this results also suggest that measuring trade creation and trade diversion on average basis, as performed on many previous estimates using gravity model, are likely cannot accurately predict the impact on a particular country.

There are several limitations in this study. We notice that as we still use some restriction of how multilateral resistance terms varies across observations, we can only interpret the parameters in relative sense, i.e. to compare across countries or across time, but not the exact number of the trade multiplier due to a regional trade agreement. Second, due to data availability, only several countries can be assessed. Given the scope of this research, one possible area for further researches is identify factors affecting the heterogeneity of RTA impacts across member countries, which possibly relates to trade facilitation or other idiosyncratic factors.

Acknowledgement

This views expressed on this paper are those of the authors and does not necessarily represents the views of Bank Indonesia or the IMF.

- Anderson, J. E., Van Wincoop, E. (2003). Gravity with Gravitas: A Solution to the Border Puzzle. American Economic Review, 93(1): 170-192. <u>http://dx.doi.org/10.1257/000282803321455214</u>
- [2] Baier, S.L., Bergstrand, J.H. (2007). Do free trade agreements actually increase members' international trade? *Journal of International Economics*, 71: 72–95. <u>http://dx.doi.org/10.1016/j.jinteco.2006.02.005</u>
- [3] Bary, P. (2015). The Time-Varying Impact of Regional Trade Agreement: Evidence from ASEAN. Asian Economic and Financial Review, 5(9): 1061-1075. <u>http://dx.doi.org/10.18488/journal.aefr/2015.5.9/102.</u> 9.1061.1075
- [4] Clausing, K.A. (2001). Trade creation and trade diversion in the Canada United States Free Trade Agreement, Canadian Journal of Economics/Revue canadienne d'Economique, 34(3): 677-696. <u>http://dx.doi.org/10.1111/0008-4085.00094</u>
- [5] Elliott, R.J.R., Ikemoto, K. (2004). AFTA and the Asian crisis: help or hindrance to ASEAN intra-regional trade? Asian Economic Journal, 18(1): 1-23. <u>http://dx.doi.org/10.1111/j.1467-8381.2004.00179.x</u>
- [6] Feenstra, R.C., Markusen, J.R., Rose, A.K. (2001). Using the gravity equation to differentiate among alternative theories of trade, *The Canadian Journal of Economics / Revue canadienne d'Economique*, 34(2): 430-447. <u>http://dx.doi.org/10.1111/0008-4085.00082</u>
- [7] Kien, N.T. (2009). Gravity model by panel data approach: an empirical application with implications for the ASEAN Free Trade Area. ASEAN Economic Bulletin, 26 (3): 266-77. <u>http://dx.doi.org/10.1355/ae26-3c</u>
- [8] Koo, W.W., Kennedy, P.L., Skripnitchenko, A. (2006). Regional Preferential Trade Agreements: Trade creation and diversion effects. *Review of Agricultural Economics*, 28(3): 408-415. <u>http://dx.doi.org/10.1111/j.1467-9353.2006.00306.x</u>
- [9] Moreno, R. (2008). Experiences with current account deficits in Southeast Asia, In *Current Account and External Financing*, edited by Cowan, K., Edwards, S. and Valdes, R.O., pp. 537-582, Central Bank of Chile.
- [10] Santos Silva, J.M.C., Tenreyro, S. (2006). The log of gravity. The Review of Economics and Statistics, 88 (4): 641-658. <u>http://dx.doi.org/10.1162/rest.88.4.641</u>
- [11] Shepherd, B., Wilson, J.S. (2009). Trade facilitation in ASEAN member countries: Measuring progress and assessing priorities. *Journal of Asian Economics*, 20: 367–383. <u>http://dx.doi.org/10.1596/1813-9450-4615</u>
- [12] Soesastro, H. (2002). The ASEAN Free Trade Area: A critical assessment. *The Journal of East Asian Affairs*, 16(1): 20-53.
- [13] Viner, J. (1950). The Customs Union Issue, Carnegie Endowment for International Peace.

The Impact of Distributive Services on the Productivity Growth: The Case of Italian Industrial Districts

Claudio DI BERARDINO Department of Management and Business Administration University "G. d'Annunzio" of Chieti-Pescara, Italy <u>c.diberardino@unich.it</u> Gianni ONESTI Department of Management and Business Administration University "G. d'Annunzio" of Chieti-Pescara, Italy <u>g.onesti@unich.it</u> Alessandro SARRA Department of Economics University "G. d'Annunzio" of Chieti-Pescara, Italy sarra@unich.it

Abstract:

The relationship between tertiary activities and productivity growth has been extensively studied over the past decades. Research has shown that, within tertiary activities, distributive services play a key role in this dynamic. This framework overturns the traditional view of services as unproductive activities, usually responsible for a structural burden that slows down the evolutionary dynamics of the economic system. Given the slow pace with which the process of modernization of services is moving forward, Italy seems to be making an important exception to this general conclusion. It should be noted that empirical research that approached this problem in the past was usually based on data at the national level. Such an approach does not consider the strong heterogeneity that usually exists between territorial clusters within a nation. In order to overcome such limitations, this paper focuses on the impact of distributive services on productivity growth at the local level, using the Italian industrial districts as a unit of analysis.

The results show that in industrial districts the growth of the employment share of distributive services is the consequence of a positive integration with the industrial activities. In the industrial districts, in addition, distributive services make a positive contribution to the productivity growth of the whole economy and to the productivity growth of the industrial sector, confirming that no structural burden seems to be at work. On the contrary, non-district manufacturing areas do not show such positive trends, thus confirming the existence of a district effect.

Keywords: tertiarisation, distributive services, industrial districts, total productivity growth, industrial productivity growth.

JEL Classification: O14, O47, R10.

Introduction

It is widely recognized in economic and managerial literature that the growing weight of tertiarisation in modern economies has led to a deep reshaping of the relations between the tertiary sector and industrial activities, with a greater level of synergistic integration, which generates benefits in terms of productivity growth both at the firm and the general economic system level. This positive relationship appears weaker in Italy than in other developed countries. However, the studies conducted on the topic have considered the national average trends, without taking into account the strong territorial heterogeneity of the national economic system, which is the sum of very backward areas and modern and dynamic ones, such as those represented by clusters or industrial districts.

This heterogeneity raises the following issue: if (and how much) the relations between distributive services, industrial productivity and growth behave differently once evaluated at the local labour system (LLSs) level. To answer this question, an econometric model is estimated for the period 2001–2005, the only one for which data on value added of Italian LLSs are available. The paper is organized as follows: section 2 summarizes the literature on the relationship between distributive services and productivity growth and develops the research question; section 3 presents the data and the methodology used, and includes the econometric analysis; a discussion of the results and some concluding remarks are in section 4.

This paper analyses the effects of the increase of the employment share of distributive services, and whether it has a role in explaining total productivity and industrial productivity growth at LLSs level in Italy.

Recent literature has shown that some kinds of services, such as distributive services, can have a positive impact on the dynamic of productivity growth in advanced economies. This framework overturns the traditional view of services as unproductive activities, usually responsible for a structural burden that slows down the evolutionary dynamics of the economic system.

Given the slow pace with which the process of modernisation of services is moving forward, Italy seems to make an important exception to this general conclusion. It should be noted that the studies which in the past approached this problem are usually based on data at a national level. But, due to the coexistence in the Italian economic system of backward and advanced areas, the results achieved can be misleading. Actually, our study shows that conducting the analysis at the LLSs level, it can be seen that industrial districts show a strongly different dynamic when compared to the rest of the productive system.

In fact, two new, main elements emerge from our analysis. In the first place, the preliminary test carried out in the section 3.2 shows that in the industrial districts the growing employment in distributive services does not follow to a weakening of the industrial structure. In fact, it is not related to the loss of employees in industry, and there is rather a positive, synergistic integration between the distributive services and industrial activities. On the contrary, for manufacturing no-ID LLSs there is a negative correlation between the evolution of employment in the distributive services and in the industrial sector.

In the second place, our econometric analysis proves that the increase in the employment share of distributive services influences both the total and the industrial productivity growth. The conclusions, in this case, are quite clear: on the one hand, it can be said that in the industrial districts the so-called structural burden seems not to be at work; on the other hand, a positive integration between distributive services and industrial activities seems to be operating. These results are even more interesting when compared to the rest of the production system. Manufacturing non-ID LLSs, indeed, do not obtain analogous results. In other words, industrial districts show a peculiar trend and seem to implement, better than the other areas, the opportunities arising from structural change.

- Amighini, A., Rabellotti, R. (2006). How Do Italian Footwear Industrial Districts Face Globalization? *European Planning Studies*, 14(4): 485–502. DOI: <u>http://dx.doi.org/10.1080/09654310500421105</u>
- [2] Bacon, R., Eltis, W. (1978). Britain's Economic Problem: Too Few Producers. Palgrave Macmillan UK. DOI: <u>http://dx.doi.org/10.1007/978-1-349-15863-8</u>
- [3] Barro, R.J., Sala-i-Martin, X. (1992). Convergence. Journal of Political Economy, 100(2): 223-51. DOI: http://dx.doi.org/10.1086/261816
- [4] Baumol, W.J. (1967). Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis. *American Economic Review*, 57(3): 415–26.
- [5] Baumol, W.J. (2002). Services as Leaders and the Leader of the Services. In Productivity, Innovation and Knowledge in Services New Economic and Socio-Economic Approaches. Cheltenham, UK: Edward Elgar Publishing, Inc. DOI: <u>http://dx.doi.org/10.4337/1840649690.00017</u>
- [6] Becattini, G., Bellandi, M., De Propris, L. (2009). A Handbook of Industrial Districts. Edward Elgar Publishing.
- [7] Becattini, G., Coltorti, F. (2006). Areas of Large Enterprise and Industrial Districts in the Development of Post-War Italy: A Preliminary Survey. *European Planning Studies*, 14(8): 1105–38. DOI: <u>http://dx.doi.org/</u>10.1080/09654310600852415
- [8] Becattini, G., Dei Ottati, G. (2006). The Performance of Italian Industrial Districts and Large Enterprise Areas in the 1990s. *European Planning Studies*, 14(8): 1139–62. DOI: <u>http://dx.doi.org/10.1080/09654310</u> 600852423
- Bella, M., Mauro, L. (2008). Service Productivity in Italy: A Descriptive Analysis. *Economia Dei Servizi*, 2: 199–220. DOI: <u>http://dx.doi.org/10.2382/27347</u>

- [10] Bellandi, M. (2002). Italian Industrial Districts: An Industrial Economics Interpretation. European Planning Studies, 10(4): 425-37. DOI: <u>http://dx.doi.org/10.1080/09654310220130158</u>
- [11] Boschma, R. (2005). Proximity and Innovation: A Critical Assessment. Regional Studies, 39(1): 61–74, DOI: http://dx.doi.org/10.1080/0034340052000320887
- [12] Busato, A., Corò, G. (2011). I Distretti Nella Crisi: Declino, Adattamento o Innovazione? Argomenti, 32: 71–93. DOI: <u>http://dx.doi.org/10.3280/ARG2011-032004</u>
- [13] Castaldo, S. (2001). Retailing & Innovazione: L'evoluzione Del Marketing Nella Distribuzione. Egea, Milano.
- [14] Castells, M. (1972). La questionurbaine. François Maspero.
- [15] Chiarvesio, M., Di Maria, E., Micelli, S. (2010). Global Value Chains and Open Networks: The Case of Italian Industrial Districts. *European Planning Studies*, 18(3): 333–50. DOI: <u>http://dx.doi.org/10.1080/09654310903</u> <u>497637</u>
- [16] Corò, G., Micelli, S. (2007). I Distretti Industriali Come Sistemi Locali dell'Innovazione: Imprese Leader e Nuovi Vantaggi Competitivi Dell'industria Italiana. *Economia Italiana*, 1: 47–78.
- [17] De Marchi, V., Lee, J., Gereffi, G. (2013). Globalization, Recession and the Internationalization of Industrial Districts: Experiences from the Italian Gold Jewellery Industry. *European Planning Studies*, 22(4): 866–84. DOI: <u>http://dx.doi.org/10.1080/09654313.2013.771624</u>
- [18] De Rita, G., Varaldo, R. (2006). Distretti e servizi: una nuova via per lo sviluppo. *Economia dei Servizi*, 1: 31– 40. DOI: <u>http://dx.doi.org/10.2382/23063</u>
- [19] Dei Ottati, G. (2005). Global Competition and Entrepreneurial Behavior in Industrial Districts: Trust Relations in an Italian Industrial District.In *Trust and Entrepreneurship A West–East Perspective. Cheltenham*, UK: Edward Elgar Publishing, Inc.
- [20] Di Giacinto, V., Gomellini, M., Micucci, G., Pagnini, M. (2014). Mapping Local Productivity Advantages in Italy: Industrial Districts, Cities or Both? *Journal of Economic Geography*, 14(2): 365–94. DOI: <u>http://dx.doi.org/10.1093/jeg/lbt021</u>
- [21] Gordon, R.J. (1996). Problems in the Measurement and Performance of Service-Sector Productivity in the United States. NBER Working Paper, 5519. DOI: <u>http://dx.doi.org/10.3386/w5519</u>
- [22] Inklaar, R., Timmer, M.P. (2008). Accounting for Growth in Retail Trade: An International Productivity Comparison. *Journal of Productivity Analysis*, 29(1): 23–31. DOI: <u>http://dx.doi.org/10.1007/s11123-007-0062-6</u>
- [23] Inklaar, R., Timmer, M.P., Van Ark B. (2008). Market Services Productivity across Europe and the US. Economic Policy, 23(53): 139–94. DOI: <u>http://dx.doi.org/10.1111/j.1468-0327.2007.00194.x</u>
- [24] Lorenzini, E. (2011). The Extra-Urban Cultural District: An Emerging Local Production System: Three Italian Case Studies. *European Planning Studies*, 19(8): 1441–57. DOI: <u>http://dx.doi.org/10.1080/09654313.2011.</u> <u>586179</u>
- [25] Manser, M.E. (2005). Productivity Measures for Retail Trade: Data and Issues. Monthly Labor Review, 128(7).
- [26] Maroto-Sánchez, A. (2012). Productivity in the Services Sector: Conventional and Current Explanations. The Service Industries Journal, 32(5): 719–46. DOI: <u>http://dx.doi.org/10.1080/02642069.2010.531266</u>
- [27] Maroto-Sánchez, A., Cuadrado-Roura, J.R. (2013).Do Services Play a Role in Regional Productivity Growth Across Europe?. In Service Industries and Regions: Growth, Location and Regional Effects. Edited by Cuadrado-Roura J.R., 203–26. Berlin, Heidelberg: Springer Berlin Heidelberg. DOI: <u>http://dx.doi.org/10.1007/978-3-642-35801-2_9</u>
- [28] Maroto-Sánchez, A., Cuadrado-Roura, J.R. (2009). Is Growth of Services an Obstacle to Productivity Growth? A Comparative Analysis. Structural Change and Economic Dynamics 20(4): 254–65. DOI: <u>http://dx.doi.org/10.1016/j.strueco.2009.09.002</u>
- [29] Maroto-Sánchez, A., Rubalcaba, L. (2008). Services Productivity Revisited. The Service Industries Journal, 28(3): 337-53. DOI: <u>http://dx.doi.org/10.1080/02642060701856209</u>

- [30] Ling M. and Lee, S. (2013). Increasing Productivity of Distributive Trade through Retail Innovations: Evidence from Malaysia. *The International Review of Retail, Distribution and Consumer Research*, 23(3): 324–52. DOI: <u>http://dx.doi.org/10.1080/09593969.2013.764338</u>
- [31] Micucci, G. and Di Giacinto, V. (2009). The Producer Service Sector in Italy: Long-Term Growth and Its Local Determinants. Spatial Economic Analysis 4(4): 391–425. DOI: <u>http://dx.doi.org/10.1080/17421770903317637</u>
- [32] Morelli, G. (2008). Scelte Di Consumo E Modernizzazione Commerciale. Economia Dei Servizi, 2: 261-76. DOI: <u>http://dx.doi.org/10.2382/27352</u>
- [33] Muscio, A. (2006). From Regional Innovation Systems to Local Innovation Systems: Evidence from Italian Industrial Districts. *European Planning Studies*, 14(6): 773–89. DOI: <u>http://dx.doi.org/10.1080/09654310</u> <u>500496073</u>
- [34] Oi, W.Y. (1992). Productivity in the Distributive Trades: The Shopper and the Economies of Massed Reserves. In Output Measurement in the Service Sectors, 161–93. National Bureau of Economic Research, Inc.<u>http://EconPapers.repec.org/RePEc:nbr:nberch:7234</u>
- [35] Oulton, N. (2001). Must the Growth Rate Decline? Baumol's Unbalanced Growth Revisited. Oxford Economic Papers, 53(4): 605–27. DOI: <u>http://dx.doi.org/10.1093/oep/53.4.605</u>
- [36] Pellegrini, D. (2008). Le Relazioni Di Canale Nei Processi Di Creazione Del Valore. Economia Dei Servizi, 2: 237–50. DOI: <u>http://dx.doi.org/10.2382/27350</u>
- [37] Pellegrini, L. (1999). Funzioni commerciali: nuovo baricentro strategico nel sistema del valore dei mercati al consumo? *Industria & Distribuzione*, 75–84.
- [38] Pellegrini, L. (1985). The Distributive Trades in the Italian Economy: Some Remarks on the Decade 1970-1980. Review of Economic Conditions in Italy, 2(1): 191–220.
- [39] Pellegrini, L., Cardani, A.M. (1993). The Italian Distribution System. OECD Publishing. DOI:<u>http://dx.doi.org/</u> 10.1787/432322185650
- [40] Peneder, M. (2002). Intangible Investment and Human Resources. Journal of Evolutionary Economics, 12(1): 107–34. DOI: <u>http://dx.doi.org/10.1007/s00191-002-0103-2</u>
- [41] Peneder, M. (2003). Industrial Structure and Aggregate Growth. Structural Change and Economic Dynamics, 14(4): 427–48. DOI: <u>http://dx.doi.org/10.1016/S0954-349X(02)00052-8</u>
- [42] Pine, B.J., Gilmore, J.H. (2000). L'economia Delle Esperienze: Oltre Il Servizio. Etas libri. Milano.
- [43] Pugno, M. (2006). The Service Paradox and Endogenous Economic Growth. Structural Change and Economic Dynamics, 17(1): 99–115. DOI: <u>http://dx.doi.org/10.1016/j.strueco.2005.02.003</u>
- [44] Quintieri, B. (2006). I Distretti Industriali Dal Locale Al Globale. Rubbettino Editore.
- [45] Rabellotti, R., Carabelli, A., Hirsch, G. (2009).Italian Industrial Districts on the Move: Where Are They Going?, European Planning Studies, 17(1): 19–41. DOI: <u>http://dx.doi.org/10.1080/09654310802513914</u>
- [46] Rodriguez-Pose, A. (1999). Convergence or Divergence? Types of Regional Responses to Socio-Economic Change in Western Europe. *Tijdschrift Voor Economische En Sociale Geografie*, 90(4): 365–78. DOI: <u>http://dx.doi.org/10.1111/1467-9663.00079</u>
- [47] Rodrik, D. (2013). Unconditional Convergence in Manufacturing. Quarterly Journal of Economics, 128(1): 165– 204. DOI: <u>http://dx.doi.org/10.1093/qje/qjs047</u>
- [48] Rullani, E. (2006). La nuova economia dell'immateriale. *Economia dei Servizi*, 11:41-60. DOI: <u>http://dx.doi.org/10.2382/23064</u>
- [49] Rullani, E. (2012). Produttività cercasi, disperatamente: per un nuovo rapporto tra manifattura e servizi. Economia e Società Regionale, 3: 24-54. DOI: <u>http://dx.doi.org/10.3280/ES2012-003003</u>
- [50] Sasaki, H. (2007). The Rise of Service Employment and Its Impact on Aggregate Productivity Growth. Structural Change and Economic Dynamics, 18(4): 438–59. DOI: <u>http://dx.doi.org/10.1016/j.strueco.</u> 2007.06.003

- [51] Sforzi, F. (2002). The Industrial District and the "New" Italian Economic Geography. European Planning Studies, 10(4): 439–47. DOI: <u>http://dx.doi.org/10.1080/09654310220130167</u>
- [52] Sforzi, F., Lorenzini, F. (2002). I Distretti Industriali. In IPI-Ministero Delle Attività Produttive, 20-33. Roma.
- [53] Sforzi, F. (2009). The Empirical Evidence of Industrial Districts in Italy.In A Handbook of Industrial Districts, 327-42. Edward Elgar Publishing.
- [54] Signorini, L.F., Omiccioli M. (2005). Economie Locali E Competizione Globale: Il Localismo Industriale Italiano Di Fronte a Nuove Sfide. Il Mulino. Bologna.
- [55] Signorini, L.F. (2000). L'Effetto Distretto: Motivazioni E Risultati Di Un Progetto Di Ricerca. In Lo Sviluppo Locale. Meridiana Libri.
- [56] Spithoven, A.H.G.M. (2000). An explanation for the rising share of services in employment. *International Journal of Social Economics*, 27(12): 1205-1230. DOI: <u>http://dx.doi.org/10.1108/03068290010353064</u>
- [57] Sylos-Labini, P. (1974). Sindacati, Inflazione E Produttività; English Trans. Trade Unions, Inflation and Productivity, Lexington (Mass.). Laterza. Bari.
- [58] Timmer, M.P., Inklaar, R.C. (2005). Productivity Differentials in the US and EU Distributive Trade Sector: Statistical Myth or Reality. Groningen Growth and Development Centre. Available at: <u>http://EconPapers.repec.org/ RePEc:gro:rugggd:200576</u>
- [59] Timmer, M.P., Ypma, G. (2006). Productivity Levels in Distributive Trades: A New ICOP Dataset for OECD Countries. s.n.
- [60] Triplett, J.E. and Bosworth B. (2004). *Productivity in the US Services Sector: New Sources of Economic Growth*. Brookings Institution Press.
- [61] Van Ark, B., Inklaar, R. and McGuckin, R.H. (2003). ICT and Productivity in the United States and Europe: Where Do the Differences Come from? CESifo Economic Studies, 49(3): 295–318. DOI: <u>http://dx.doi.org/10.1093/cesifo/49.3.295</u>
- [62] Varaldo, R. and Dalli, D. (2011). Le Relazioni Strategiche Tra Industria E Distribuzione. Sinergie Italian Journal of Management, 255-94. DOI: <u>http://dx.doi.org/10.7433/S61-62.2003.14</u>
- *** ISTAT (2001). Distretti industriali e sistemi locali del lavoro. Roma: Istituto Nazionale di Statistica.
- *** ISTAT (2008). Tavole di dati. Valore aggiunto ai prezzi base, per Sistema Locale del Lavoro e settore di attività economica Anni 2001–2005.
- *** ISTAT (2012). Banche dati, tavole di dati e note metodologiche. Occupati nei Sistemi Locali del lavoro. Periodo di riferimento: Anni 2004–2011. Published: december 2012. <u>http://www.istat.it/it/archivio/78342</u>
- *** ISTAT (2014). Atlante Statistico dei Comuni, Censimento generale dell'industria e dei servizi 2001. <u>http://www.istat.it/it/archivio/113712</u>

The Principle and the Development of Value Added Tax Gap in Slovakia and in the European Union

Jaroslav KOREČKO University of Prešov, Faculty of Management⁴, Slovakia jaroslav.korecko@unipo.sk Ivana ONDRIJOVÁ University of Prešov, Faculty of Management, Slovakia ivana.ondrijova@smail.unipo.sk Roman VAVREK University of Prešov, Faculty of Management, Slovakia <u>roman.vavrek@unipo.sk</u> Stanislav PEREGRIN University of Prešov, Faculty of Management, Slovakia stanislav.peregrin@smail.unipo.sk

Abstract:

In this article we would like to search the similarity respectively the diversity of gap on Value Added Tax in selected EU countries. The analysis is based on theoretical background about tax gap. Besides the dimension of VAT Gap in Slovakia and in selected European states we have analyzed also other significant indicators, which affect the VAT Gap. Than we have focused on the situation within the European Union and compared the Member States among themselves. During the comparing we observed some similarity between countries we have examined. We used the cluster analysis to verify this assumption of similarity. Main objective of the article is to explore several indicators affecting the VAT Gap and compare them in selected European countries.

Keywords: tax gap, VAT, European Union, cluster analysis.

JEL Classification: H20, H25, H26.

Introduction

Report on Fight against Tax Fraud, Tax Evasion and Tax Havens (2013) shows that an estimated 1 trillion \in in public money is lost due to tax fraud and tax avoidance every year in the EU. This alarming size of the tax gap represents a rough yearly cost of 2000 \in for every European citizen. The average of the tax lost in Europe today exceeds the total amount that Member States spend on healthcare, and it amounts to more than four times the amount spent on education in the EU. The current tax gap in Europe represents not only an alarming loss of public revenue but also a danger for the safeguarding of the EU social model based on quality public services available to all. It is a threat to the proper functioning of the Single Market and a dent to the efficiency and fairness of tax systems within the EU. The loss of revenues continues to increase the deficit and debt levels in the Member States right at the most crucial time of fighting the crisis. Due to tax fraud and tax avoidance, funds available to foster public investment, growth and employment are waning. (European Parliament 2013)

⁴ Konštantínova 16, 080 01 Prešov, Slovakia

The tax Gap in Slovakia moved in the period 2000-2015 between 16.6% (minimum value in 2003) and 39.9% (peak in 2012). Among EU States Slovakia belongs to countries with highest tax gap on Value Added Tax. The lowest VAT Gap in the EU generally records Finland, Netherlands and Sweden. There are few significant factors that affect VAT Gap in a state. It is especially the tax policy, tax rates, willingness and capacity to pay, consumption of population, GDP growth etc. In the last few years, Slovak government is trying to prevent tax evasion on VAT due to several measures like reduced VAT rate on basic groceries, sales receipt lottery, stricter controls of retailers etc. But these are measures that help to reduce the tax gap only on a small scale. There are more effective tools and methods for reducing the VAT Gap. In several sectors of Slovak economy are employee salaries under sized, there are too high differences between individual in comes groups, successful entrepreneurs are burdened by high taxes etc. To avoid tax evasion, it is necessary to create a more favorable business environment. These are the areas where we see room for improvement. There might help the cluster analysis that had created clusters of countries with similar features. There are countries with poore rout comes and countries with better results within the clusters. Therefore, observing, learning and cooperation is the way forward, the way to improvement and rectification.

Cluster analysis fundamentally confirmed the intuitive division of countries during working on the paper. There are four groups of similar countries according to hierarchical clustering and three clusters as a result of nonhierarchical method. However, the results are almost the same by using both methods. The most numerous one is group 3. In cluster number 1 stand out especially Luxembourg, Estonia and Malta. Luxembourg because of very low VAT Gap, Estonia and Malta because final consumption growth values. In ellipse of cluster two protrude Romania, which is characterized by highest VAT Gap among all analyzed countries. On the boundary of third cluster is Greece. Reason for that is the most significant decline in final consumption.

Acknowledgement

This paper is supported by the grant KEGA 037PU-4/2014 of the Cultural and Educational Grant Agency of the Slovak Republic.

- [1] Alm, James, and Borders, K. (2014). Estimating the "Tax Gap" at the State Level: The Case of Georgia's Personal Income Tax. *Public Budgeting & Finance, 34(4): 61-79.* DOI: http://dx.doi.org/10.1111/pbaf.12050
- [2] Litavcová, E., Bucki, R., Štefko, R., Suchánek, P., Jenčová, S. (2015). Consumer's behaviour in east Slovakia after euro introduction during the crisis. *Prague Economic Papers*. 24(3): 332–353.
- [3] Mazur, Mark J., Plumpley A.H. (2007). Understanding the Tax Gap. *National Tax Journal*, 60(3): 569-576. DOI: http://www.jstor.org/stable/41790406 (accessed January 25, 2016)
- [4] Pison, G., Struyf, A., Rousseeuw, P.J. (1998). Displaying a clustering with CLUSTPLOT. Computational Statistics & Data Analysis, 30: 381-392. Available at: <u>https://wis.kuleuven.be/stat/ robust/papers/1999/</u> pisonstruyfrousseeuw-displayclusplot-csda-1999.pdf (accessed February 15, 2016)
- [5] Remeta, J., Gábik, R., Alexová, M. (2015). *Daňový report Slovenskej Republiky 2015 Economic analysis.* Institute for Financial Policy. Ministry of Finance of the Slovak Republic.
- [6] Toro, J. et al. (2013). Assessment of HMRC's tax gap analysis. IMF Country Report No.13/314.
- [7] Warren, N., McManus, J. (2007). The Impact of Tax Gap on Future Tax Reforms. *Australian Economic Review*, 40(2): 200-207. DOI: 10.1111/j.1467-8462.2007.00461.x
- [8] Yongzhi, Niu, and Cohen, R. (2011). Personal Income Tax Gap for Business Income Earners in New York State: From the Real Estate Tax Perspective. *Journal of State Taxation*, 29(6): 27-37.
- *** Measuring tax gaps 2015 edition -Tax gap estimates for 2013-14 (2015). HM Revenue & Customs 2015. <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/470540/HMRC-measuring-tax-gaps-2015-1.pdf</Titre</u>
- *** REPORT on Fight against Tax Fraud, Tax Evasion and Tax Havens. (2013). Committee on Economic and Monetary Affairs (2013/2060(INI)) European Parliament.

- *** Study to quantify and analyse the VAT Gap in the EU 27 Member States. (2013). <u>http://ec.europa.eu/</u> taxationcustoms/resources/documents/common/publications/studies/vat-gap.pdf
- *** Study to quantify and analyse the VAT Gap in the EU Member States. (2015). <u>http://ec.europa.eu/</u> taxation_customs/resources/documents/common/publications/studies/vat_gap2013.pdf
- *** The VAT Gap: Questions and Answers. (2015). <u>http://europa.eu/rapid/press-release_MEMO-15-5593_en.htm</u>

Impact of Risks on the Enterprise Performance in the European Union by using Enterprise Risk Models

Dana KISELAKOVA Faculty of Management, University of Presov, Slovakia <u>dana.kiselakova@unipo.sk</u> Beata SOFRANKOVA Faculty of Management, University of Presov, Slovakia <u>beata.sofrankova@unipo.sk</u> Jarmila HORVATHOVA

Faculty of Management, University of Presov, Slovakia jarmila.horvathova@unipo.sk

Abstract:

We analyse an impact of systematic and unsystematic risks on the performance of production systems in the period of 2003-2015 by creating of novel enterprise risk models, with focus on Slovakia within the euro area. The method of this paper is based on the methodology of Capital asset pricing model in comparison with Buildingup I Model and Building-up II Model (proposed in Czech Republic), used by the valuation Cost of Equity and its applications on Slovak conditions. For the risk analysis we used and compared data of food sectors in selected countries of the EU. By testing hypotheses was confirmed Hypothesis 1 that the valuation Cost of Equity with application of systematic risks using expected market data (based on CAPM) was lower than the valuation with application of business and financial risks using expected market data (based on Building-up I). Results proved that systematic risks have a lower impact on the enterprise performance than unsystematic risks. Finally, we constructed novel 3-dimensional Enterprise Risk Models according to Slovak market conditions using our approach to modelling, scoring of risks and prediction models. We confirmed Hypothesis 2 that the enterprise performance reached the better position with the application of systematic risks and forecasting of risk parameters using prediction methods and ex ante data (in ERM2) than with the application of risk parameters based on historical data (in ERM1). Models can be applied by the modelling and strategic planning as early warning models worldwide.

Keywords: business risks, financial risks, systematic risks, unsystematic risks, risk premiums, valuation of Costs of Equity, performance, Enterprise Risk Model.

JEL Classification: C51, C52, G32, D81.

Introduction

Risk is the category that affects enterprise existence and performance worldwide (Koscielniak 2014). Each activity on global markets is risky therefore enterprise or economic subject cannot predict the results of financial, investment or other decisions in entrepreneurship. In the classification of enterprise risks on global market conditions, it is necessary to pay attention to the risks that come into capital pricing models and calculating Costs of Equity. For calculation of discount rate for the valuation of the enterprise and its performance is needful to formulate the main risks of business activities.

For this paper, we focus on empirical risk analysis in enterprise activities and especially risks, that come into the valuation Cost of Equity in models and consequently into the calculation of the company's performance models. To manage risks more effective, risks can be divided as follow (Marik *et al.* 2011):

- business and financial risks that are necessary to be known in the case, when we summarize the input for the valuation Cost of Equity with the application of the particular partial risk,
- systematic and unsystematic risks on the market, are necessary to be known in relation to the purpose, that the valuation is being made for and to the model that is used for assessment. β coefficient as systematic risks has been modified to levered β coefficient. Risks arising from the internal enterprise environment are representing the group of unsystematic risks. These ways of looking at risks were investigated in many empirical studies such as by Klucka (2006), Olibe *et al.* (2008), Lopez Espinosa *et al.* (2013), Marshall (2015), Vicente *et al.* (2015).

The research questions and research problems are as follow.

As a result of impact of global risks exposure increases the probability and dimension of financial losses in entrepreneurship in global context. Which enterprise performance models, capital pricing models and risk forecasting models based on risk controlling is necessary to apply in managerial practice for the purpose of early identification, quantification, minimization, prevention and forecasting of risks more comprehensive? How to measure and estimate more effectively the Cost of Equity for firms, predict risks better and the relationship between risk and expected return on assets using in managerial practice?

Business risk (Marik et al. 2011) consists of:

- sector risk the dynamics of the sector, sector dependence on the business cycle, innovation potential of the sector, determining trends in the sector,
- risk of the market on which the business operates market capacity, risk of achieving lower sales, the risk
 of market penetration,
- risk of competition competition and competitiveness of the products, prices, quality, research and development, advertising and promotion, distribution and service,
- management risk vision, strategy, key employees, organizational structure,
- risk of the production process evaluation in terms of production risk, technological opportunities of production, labour force, suppliers,
- other business risk factors level of fixed costs, position of the business towards customers and suppliers, entry barriers into the sector.

Financial risk (Marik *et al.* 2011) can be evaluated by financial indicators: Indebtedness (Debt/Equity ratio), Interest Coverage (EBIT (Earnings before interests and taxes)/interest expense), Debt Service Coverage Ratio (Coverage repayments from Cash Flow), Enterprise Safety indicator (Share of net working capital on current assets), Current ratio and Quick ratio, Average Collection Period, Inventory Turnover.

Statistical tools and techniques are the methods of analysing and quantifying of the risk and can express numerical level of risk (Fotr and Soucek 2011). Risk represents uncertainties by which we are capable, using different methods; quantify the probability of deviation of the actual states, processes or results from expected values. In theory the risk is understood as the possibility of either positive or negative deviation. In practice we understand risk often only as the negative possibility (Oscatka 2015). The risk represents probability that the actual results will be in disparity from the planned (expected) results in either negative or positive sense. Table 1 shows the general distribution of risks into systematic risk according Damodaran (2009, 2014b) and unsystematic risk according Neumaierova and Neumaier (2002).

RISK	RISK SPECIFICATION	S/U	I/E	
Beta-β	β , levered $\beta,$ unlevered $\beta,$ total β	Systematic	External	
Equity Risk Premium	ERP = R _m - r _f	Systematic	External	
Country Risk premium	CRP	Systematic	External	
$CRP = Default Spread * \frac{standard deviation in the equity market in the country}{standard deviation in the long term bond issued by the country}$				
Inflation	Statistical Office of the Slovak Republic	Systematic	External	
Financial	Fundamental factor – Current Ratio	Unsystematic	Internal	
Business	Fundamental factor – Return on Assets	Unsystematic	Internal	
Lower stocks liquidity on the market	Fundamental factor – Equity	Unsystematic	Internal	
Financial structure	Fundamental factor - Interest coverage	Unsystematic	Internal	

Table 1 - Systematic and unsystematic risks and their classification

Source: Neumaierova and Neumaier (2002), Damodaran (2009, 2014b)

Business and financial risks according Marik *et al.* (2011) are not strictly divided into systematic and unsystematic risks, but these risks are mixed together and arise from expected market development. This fact will be interesting for our further research and next modelling.

Based on above mentioned conclusions, we can assume the still attraction of the CAPM as the most appropriate model for valuation and quantification of Cost of Equity (Heckova *et al.* 2014, Horvathova and Mokrisova 2015). Abbas *et al.* (2015) found out that all three factors in Fama and French Three Factor Model are significant in explaining cross-sectional variation in average stock returns and hence the three-factor is important at explaining cross-sectional average returns on national markets.

It is necessary to modify these models to conditions of Slovak Republic. The encompassment of the financial risk is the target as from calculations it is evident that liquidity is the main problem of the food industry. Based on the above mentioned it is possible to set the following general conclusions, which we have reached also in our previous study (Sofrankova, Horvathova and Kiselakova 2014):

- Although there are numerous problems with the application of CAPM, it is the only theoretically based model of Cost of Equity valuation and is recognised throughout the world as a model of calculation discount rate of market valuation.
- This model should be applied in such a way that market risk and β were used based on the US data and these were supplemented by Risk premium of given country.
- Modification and supplementation of Cost of Equity by significant Equity Risk premiums of particular enterprise are recommended especially with emphasis on replenishment of unsystematic risk.
- It is recommended to use the calculation of Total β, if the requirement of diversification is not metbut this method of calculation leads to high values of equity valuation.
- For Slovak conditions -in this case is advisable- appropriate to apply Building-up I model (Marik 2011) with the modification for assessment and forecasting risks more comprehensive from expected market development.
- In the case of using and focusing on unsystematic risk is advisable to apply Gradual Counting Risk Premium Model of valuation of equity (GCRPM) with acceptation unsystematic risks.
- In order to diversify, minimize and predict risks better and more comprehensive on global markets and to streamline enterprise performance in managerial practice for effective risk management we can use ERMs. (Olton and Glowacki 2014).
- In the case, when we calculated the Cost of Equity with the acceptance of business and financial risk (the systematic and unsystematic) was the Cost of Equity higher than the price calculated with the acceptance of systematic risks. For the predicted year of 2015 was the price difference 2.12%. This difference represents the influence of unsystematic risks that can influence the company or the industry respectively.

Main findings:

Based on the presented facts and creating of novel 3D Enterprise Risk Models (ERM) we managed to confirm the Hypothesis 1 that the valuation Cost of Equity with application of systematic risks using historical data was lower than the valuation Cost of Equity evaluated with the application of business and financial risks, which arise from expected market development. Similarly, we managed to confirm Hypothesis 2 -The reached resulted enterprise performance was better in ERM2, including systematic risks and business and financial risks with application data from expected market development. The impact on the resulted enterprise performance in ERM2 was at the lower level from the risk point of view. The reached resulted enterprise performance was lower, worse in ERM1. The impact on the enterprise performance in ERM1 was at the higher level, including historical data in the ERM1 from risk viewpoint. The comparison of our 3-dimensional models was based on the comparison of risks, including in the models. We found out that the enterprise performance reached the better position with the application of systematic risks and the estimation and forecasting of risk parameters using prediction methods and ex ante data (in ERM2) than with the application of risk parameters based on historical data (in ERM1).

By testing hypotheses, we concluded that the most significant impact on performance of the enterprise has just financial risk, which was determined by low current liquidity and high indebtedness of the analysed company. It is confirmed that the systematic risks have a lower impact on performance of the enterprise, which the company or the industry can influence, as unsystematic risks.

Finally, it is important to emphasize the fact that CAPM is still the most suitable and most applicable model for calculating the Cost of Equity. But it is important to take into the account that this model accepts only systematic risks. Because of that it is suitable to add chosen unsystematic risks, or apply universal Building model with the use of business and financial risks, as the supplementary model to the CAPM. Besides the stated, this model is also great tool for future risk prognosis and serves well as an early warning model of sorts. But important is the

applicability of models for national markets, for practitioners to decision-making processes and convergence of models in practice.

The empirical results thus obtained are highly valuable input that can be used in the construction of early warning models focused on predicting the risk development and their impact on the performance of production systems in Slovakia and in the future worldwide in order to reduce and more effectively predict risks on global markets.

Acknowledgment

This paper is one of the partial outputs of the current research project VEGA No. 1/0791/16 – "Modern approaches to improving enterprise performance and competitiveness using the innovative model - Enterprise Performance Model to streamline Management Decision- Making Processes" and VEGA No. 1/0173/15 – "Analytical view on aspects determined the development of cross-border mergers and acquisitions in the European area" solved at Faculty of Management, University of Presov in Presov, Slovak Republic.

- [1] Abbas, N. et al. (2015). A Study to Check the Applicability of Fama and French, Three Factor Model on KSE 100-Index from 2004-2014. International Journal of Financial Research, 6(1): 90-98. DOI 10.5430/ijfr.v6n1p90
- [2] Damodaran, A. (2009). Equity Risk Premiums (ERP): Determinants, Estimation and Implications A Post-Crisis Update. *Financial Markets, Institutions & Instruments,* 18: 289–370. DOI: 10.1111/j.1468-0416.2009.00151.x
- [3] Damodaran, A. (2014a). The data page. Available at: <u>http://people.stern.nyu.edu/adamodar/New</u> <u>HomePage/data.html</u> (accessed July 17, 2015).
- [4] Damodaran, A. (2014b). *Equity Risk Premiums: Looking backwards and towards*. Available at: <u>http://people.stern.nyu.edu/adamodar/pdfiles/country/ERP.pdf</u> (accessed July 22, 2015).
- [5] Eraslan, V. (2013). Fama and French Three Factor Model: Evidence from Istanbul Stock Exchange. *Business and Economics Research Journal*, 4(2): 11-22.
- [6] Fama, E.F. *et al.* (1993). Institute Differences in the Risk and Returns of NYSE and NASD stocks. *Financial Analyst Journal*, 49(1): 457-472.
- [7] Fama & French. (2004). The Capital Asset Pricing Model Theory and Evidence. *Journal of Economic Perspectives*, 18(3): 25 46.
- [8] Filip, P., Grzebyk, M., Kaliszczak, L. (2010). Development of the small and medium enterprises in Poland in the comparison with European Union member states. Rzeszow: Publishing Rzeszow University, Monography nr. 10.
- [9] Fotr, J., Soucek, I. (2011). Investment decision-making and porject management. Prague: Grada Publishing.
- [10] Fuenzalida, D., Mongrut, S. (2010). Estimation of Discount Rates in Latin America: Empirical Evidence and Challenges. *Journal of Economics, Finance and Administrative Science*, 15(28): 7-43.
- [11] Hammami, Y., Lindahl, A. (2013). Estimating and testing beta pricing models on industries. Journal of Economics and business 69(9-10): 45 - 63. [Online]. <u>http://www.sciencedirect.com/science/article/pii/S0</u> <u>14861951300043Xdoi:10.1016/j.jeconbus.2013.05.003</u>
- [12] Heckova, J., Chapcakova, A., Badida, P. (2014). Actual problems of the evaluation of enterprises by mergers and acquisitions. *Journal of Economics*, 62 (7): 743-766.
- [13] Horvathova, J., Mokrisova, M. (2015). Comparison of CAPM inputs for cost of equity calculation in EU-28. Interdisciplinarity in theory and practice, 6: 9-14. [electronic source] <u>http://www.itpb.eu/index.php/ct-menu-item-3/15-economics/130-comparison-of-capm-inputs-for-cost-of-equity-calculation-in-eu-28</u>
- [14] Horvathova, J., Izarikova, G., Mokrisova, M., Suhanyiova, A. (2014). Applying correlation matrix to identify the main factors influencing enterprise performance and their utilization to create credit worthy model. *Journal of Applied Economic Science*, Volume IX, 3: 359-372. <u>http://cesmaa.eu/journals/jaes/files/JAES2014Fall.pdf</u>

- [15] Chira, I., Marciniak, M. (2014). Risk change during crises: How to purely local companies differ from cross listed firms? Evidence from European crisis of 2010-2012. *Journal of Economics and Business*, 74(7-8): 11-23. Available at: <u>http://www.sciencedirect.com/science/article/pii/S0148619514000174_DOI10.1016/j.jeconbus.2014.03.001</u>
- [16] Chung, Y.P. et al. (2006). Asset Pricing When Returns Are Non normal: Fama French Factors versus Higher – order Systematic Comoments. The Journal of Business, 79 (2): 923-940.
- [17] Kliestik, T., Valaskova, K. (2013). Corporate Economics and Management. University of Zilina. Accessible at: <u>http://ke.uniza.sk/assets/journal/Number12013.pdf</u>
- [18] Klucka, J. (2006). Risk management and assessment of business performance. BIATEC, 8: 22-25.
- [19] Koscielniak, H. (2014). An improvement of information processes in enterprises the analysis of sales profitability in the manufacturing company using ERP systems. *Polish Journal of Management Studies*, 10(2): 65-72.
- [20] Lam, K. (2005). Is the Fama French Three Factor Model better than the CAPM? W.A.C Bennet Library, Simon Fraser University.
- [21] Lee, Ch. F. (2009). A dynamic CAPM with supply effect: Theory and empirical results. The Quarterly Review of Economics and Finance, 49 (3): 811-828. DOI:10.1016/j.qref.2009.01.001
- [22] Lintner, J. (1965). The valuation of risks assets and the selection of risky investments in stock portfolios and capital budgets. *The Review of Economics and Statistics*, 47(1): 13 -37.
- [23] Lopez Espinosa, G., Rubia, A., Valderrama, L., Anton, M. (2013). Good for one, bad for all: Determinants of individual versus systemic risks. *Journal of Financial Stability* 9(3): 287-299. <u>http://www.sciencedirect.com/science/journal/15723089/9/3</u> DOI:10.1016/j.jfs.2013.05.002.
- [24] Marik M. et al. (2011). Enterprise performance and evaluation methods. Prague: Ekopress, pp. 225-365.
- [25] Marshall, C. M. (2015). Isolating the systematic and unsystematic components of a single stocks or portfolio standard deviation, *Applied Economics*, 47(1): 1 -11. DOI: 10.1080/00036846.2014.959652
- [26] Mirdala, R. (2015). Real Exchange Rates, Current Accounts and Competitiveness Issues in the Euro Area. Journal of Applied Economic Sciences Volume X, Winter 2015, 7: 1093 - 1124. <u>http://cesmaa.eu/journals/jaes/files/7%2837%29%20Winter%202015%20JAES%20online.pdf</u>
- [27] Mirza, N., Shahid, S. (2008). Size and Value Premium in Karachi Stock Exchange. The Lahore Journal of Economics, 13 (2): 1-26.
- [28] Moerman, G. A. (2005). How Domestic is Fama and French Three Factor Model? An Application to the Euro Area. Erasmus Research Institute of Management. <u>http://dx.doi.org/10.2139/ssrn.738363</u>
- [29] Neumaierova, I., Neumaier, I. (2002). *Performance and market value of the firm.* Prague: Grada Publishing, pp. 128-379.
- [30] Olibe, K. O., Michello, F.A., Thorne, J. (2008). Systemic risk and international diversification: An empirical perspective. *International Review of financial Analysis*, 17(4): 681 – 698. <u>http://www.sciencedirect.com/</u> <u>science/article/pii/S1057521907000646DOI 10.1016/j.irfa.2007.09.004</u>
- [31] Olton, I., Glowacki, D. (2014). The risk associated with employees' errors in enterprises with critical infrastructure defined in executive's terms. *Polish Journal of Management Studies*, 10(2): 126 132.
- [32] Oscatka, J. (2015). Costs of private and outside capital. <u>http://www.fce.vutbr.cz/veda/ dk2004texty/ pdf/07</u> <u>Soudni%20inzenyrstvi/701Soudni%20inzenyrstvi/OscatkaJiri.pdf</u> (accessed July 22, 2015).
- [33] Reeves, J. J., Wu, H. (2013). Constant versus Time-Varying Beta models: Further Forecast Evaluation. *Journal of Forecasting*, 32(3): 256-266. DOI:10.1002/for.1268
- [34] Sharpe, W. (1964). Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk. *Journal of Finance*, 19 (3): 25 42.
- [35] Sofrankova, B., Horvathova, J., Kiselakova, D. (2014) Analysis and Quantification of Systematic and

Unsystematic Risk and their Impact on Enterprise Performance in Slovakia. Abstracts of 2nd International Conference on Economics, Finance and Management Outlooks. Kuala Lumpur, pp. 28.

- [36] Vicente, L.A.B.G., Cerezetti, F.V., De Faria S. R., Iwashita, T., Pereira, O.R. (2015). Managing risk in multiasset class, multimarket central counterparties: The CORE approach. *Journal of Banking & Finance*, 5 (2): 119-130. <u>http://www.sciencedirect.com/science/journal/03784266/51doi:10.1016/j.jbankfin.2014.08.016</u>
- *** Ministry of Agriculture and Rural Development of the Slovak Republic. 2014. The Concept of development of food industry 2014 2020. [Online] <u>http://www.pdbela.sk/DOQ/2.2%Conception of food development 2014-2020.pdf</u> (accessed June 22, 2015)
- *** National Bank of Slovakia. 2015. [Online]http://www.nbs.sk/sk/statistical-data/monetary-and-bank-statistica (accessed June 23, 2015)
- *** Statistical Office of the Slovak Republic. 2014. [Online] https://slovak.statistics.sk (accessed June 24, 2015).

Opportunities and Challenges of Dates Industry in Saudi Arabia: A Study of AlKharj Region

Mohammad Tariq INTEZAR College of Business Administration- Hotat BaniTamim Prince Sattam bin Abdulaziz University, Saudi Arabia <u>t.mohamad@psau.edu.sa</u>

Ahmed Saied Rahama ABDALLAH College of Business Administration- Hotat BaniTamim Prince Sattam bin Abdulaziz University, Saudi Arabia <u>a.abdallah@psau.edu.sa</u>

Venkata Sai Srinivasa RAO College of Business Administration- Hotat BaniTamim Prince Sattam bin Abdulaziz University, Saudi Arabia <u>s.muramalla@psau.edu.sa</u>

Abstract

Production of dates in Saudi Arabia has a major contribution in the development of the country's economy as well as its' agricultural sector. In terms of production as well as exports of dates, Saudi Arabia is in the forefront of other countries in the world. The market for dates in Saudi Arabia is also fulfilling the needs of local markets. The geographical and climatic conditions of the country have several advantages to further increase the production of dates and their exports to compete at international markets. Almost 25% area and 40% of total production in Saudi Arabia is from AlKharj region of the kingdom. A sample of 44 respondents representing farmers, customers, and marketers are surveyed and the data results of their opinions on opportunities and challenges of the industry are analyzed. By using SPSS, goodness fit and item fit analysis of data has been also tested.

The study results identified several opportunities for dates marketing and however concluded that the farmers and traders are faced difficulties in marketing of their produced dates. Based on the analysis of study results, it is also proposed that by the ways of date festivals, easy hiring of labor and, awareness of financial support schemes from the government would definitely support the industry and its stakeholder to face the challenges at present.

Keywords: Dates, challenges, opportunities, production, marketing, AlKharj.

JEL Clasiffication: D24, E23.

Introduction

Among the several agricultural products, dates of different varieties produce in Saudi Arabia attracted not only the local markets but also the world food industry. The country stood at the second place in the world in terms of production of dates, the marketing of dates has been an ever-ending challenge in front of the kingdom to handle the demand and supply conditions in general and specifically during the month of Ramadan (Fasting) because of rising prices in the season. On the other side, the companies that are involved in marketing of dates in Saudi Arabia does obviously have some equal opportunities to reach the consumer base and therefore a strategic approach in needed to grab this opportunity. According to the news published in Saudi Gazette, dated 28 July 2014, the total production of dates in Saudi Arabia reached to 1.1 million tons was covered under the crop from 25 million palm trees spread around 157,000 hectares. This amount of magnitude in production of dates enables the kingdom to reach at 17% of world produced dates and 5% of its production is consistently involved in packaging and exporting by following the international food processing and exporting standards. However, producing more than 160 famous types of dates, all companies in the kingdom are still facing several challenges in terms of identifying ways to reach their consumers. Some reasons might have been considered for this kind of challenges that are facing by the marketers in the kingdom. The potential consumer base with high disposable income and diversified markets covered in three primary regions manifested with cities like Jeddah in Western Region, Dammam in Eastern Province and Rivadh city in Central part of the Kingdom.

Even a strong independent network of distribution channels for dates in the kingdom is moving the produced at the farm level facilitating the marketers to reach all the market regions in the kingdom by a timely storage and a careful handling of processing of dates, which are highly perishable. There is no uniform structure in technology or infrastructure at the company level to support the unique marketing system adapted by the marketers in the kingdom.

Therefore, some companies sell the dates at their farm gates (on-farm selling); either they marketed directly to the final consumers before shifted to the wholesale markets. However, some companies are having good vendor relationships at wholesale markets and hence they handed over the production to the wholesalers at local markets instead of handed over to the processing plants for packaging and exporting the dates. Sometimes, it looks like some of those companies more organized in distribution of dates through the agents and institutions, which also perform similar functions like other channels ultimately reach the final consumers. Each kind of these channels has their own advantages and disadvantages in terms of attracting the markets and occupies a considerable amount of market share. Despite the fact that all these channels are biasing from grading the dates and their value propositions in generating a good market for each kind of variety and types of dates they are producing at their farms. Even minor differences in adapting different channels do cost more to the companies in terms of quality management. Hence, the quality management of distribution channels does determine the final value in terms of careful handling, harvesting, processing, grading, packaging, shipment and transportation of dates that are produced in the kingdom.

In pursuit of policy matters to adapt a pricing strategy for marketing of dates in the kingdom, the ministry of agriculture is encouraging farmers to avail the loans and subsidies for infrastructure development not only to produce the dates at lower costs but also to adapt a reasonable price to attract the consumers. In fact, the prices vary in terms of variety of dates and their different qualities. In extension to develop the sector, the government also providing, free of cost supporting services to the farmers for the safety of their production and storage facilities. The agriculture research centers and other related agencies are also constantly monitoring the climate and weather conditions in the kingdom to provide up to date information to the farmers to increase the productivity of dates. In this context, the importance of study the challenges and opportunities prevailed with reference to production and marketing of dates in the AlKharj Region, Saudi Arabia presented in this study.

The study investigates opportunities and challenges of date industry in Saudi Arabia an empirical study of AlKharj region with reference to production and marketing of dates. Using goodness fit and item fit analysis of data; the result shows the items from one to thirty-two items in the table ranging from challenges and opportunities by the opinion and viewpoints of farmers, customers and marketers. It is apparent that farmers and traders face difficulties in marketing their own produce. Challenges are complex and ranged from production to marketing aspects.

For promotional of the dates in AlKharj there is need to organize dates festival regularly in the region, make easy procedures for hiringlabors, need government support to farmers, traders and agencies through short term and long terms schemes, provide facilities for storing of dates. Hence, if attention is properly given upon the suggestions in the study there will be positive change in date business in the region.

Acknowledgements

Authors of the study would like to extend their gratitude towards the project funded by Deanship of Scientific Research, Prince Sattam bin Abdulaziz University (PSAU), Saudi Arabia.

- [1] Albert G. (1941). The American Date Industry. Available at: <u>http://www.avocadosource.com/CASYearbooks/</u> CAS 261941/CAS 1941 PG 126-130.pdf
- [2] Alimirzaei, E., Asady, A. (2011). Individual Factors Affecting Farmers' Motivation to Participate in Date Growers' Organizations in Khuzestan. *Research Journal of Applied Sciences, Engineering and Technology*, 3(8): 725-730. Available at: <u>http://maxwellsci.com/jp/abstract.php?jid=RJASET&no=132& abs=05</u> (accessed March 11, 2015)
- [3] Amer, J., Hussain, F. (2001). *Iraqi Date Industry Marketing and Post-Harvest Issues. Agriculture Reconstruction and Development Programme for Iraq.* Available at: <u>http://www.iraqi-datepalms.net/uploadedfiles/iraqi%20dates%20industary.pdf</u> DOI: <u>http://dx.doi.org/10.1057/9781137271648.0007</u>
- [4] Aridah, A. and Shaloofan F. (2014). Economic study of estimating cost function dates production in Murzuq, Southwestern Libya. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, 14(2): 7-12. Available at: <u>http://managementjournal.usamv.ro/index.php/scientific-papers/581-an-economic-study-of-estimating-cost-function-dates-production-in-murzug-southwestern-libya</u>
- [5] Bond, T., Fox, C. (2015). Fundamental Measurement in Human Sciences, 3rd Edition. Routledge Publishing.
- [6] Fehaid, K. (2014). Saudi Arabia produces 17 percent of world's dates. The Saudi Gazette. Retrieved from http://saudigazette.com.sa
- [7] Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M. (2013). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks: Sage.
- [8] Jannarone, R.J., Yu, K.F., Laughlin, J.E. (1990). Easy Bayes estimation for Rasch-type models. *Psychometrika*, 55(3): 449-460.
- [9] Loutfy I. El-Juhany. (2010). Degradation of Date Palm Trees and Date Production in Arab countries: Causes and Potential Rehabilitation. Australian Journal of Basic and Applied Sciences, 4(8): 3998-4010. <u>http://faculty.ksu.edu.sa/69123/abs/Date%20palm%20degradation.pdf</u> (accessed on March12, 2015)
- [10] Mahmoudi et al. (2008). Enhancing Date Palm Processing, Marketing & Pest Through Organic Culture. Journal of Organic Systems. (3).2: 29-39. <u>http://mcegypt.me/wp-content/uploads/2014/07/Dates-Global-Research-Report.</u> (accessed March11, 2015)
- [11] Markhand, G.S et al. (2010). Fruit Characterization of Pakistani Dates. Pakistan Journal of Botany, 42(6): 3715-3722. Available at: <u>http://www.pakbs.org/pjbot/abstracts/42%286%29/04.html</u> (accessed on March10, 2015)
- [12] Mikki, S.M. (2011). Present status and future prospects of Dates and dates Palm industries in Saudi Arabia. Available at: <u>http://www.pubhort.org/datepalm/datepalm1/datepalm1_41.pdf</u> (accessed March13, 2015)

- [13] Mojtaba, A. et al. (2010). Efficiency of date marketing system in Sistan & Bluchestan of Iran; a marketing margin approach, agric. Econ. Czech, 56(1): 43–50. <u>http://www.agriculturejournals.cz/publicfiles/15057.pdf</u> (accessed March 12, 2015)
- [14] Momin Bullo. (2011). Date crop of Khairpur. <u>http://www.ksez.com.pk/flashbooks/Date%20Crop%20of%20</u> <u>Khairpur%20.pdf</u> (accessed March 11,2015)
- [15] Thompson, J.G. (1916). The Nature of Demand for Agricultural Products and Some Important Consequences. *Journal of Political Economy*, 24(2): 162. Available at: <u>http://www.jstor.org/stable/pdf/1822553.pdf?</u> <u>acceptTC=true</u>
- [16] Varden Fuller. (1951). Marketing California Dates, variable supply and quality, thin but widespread demand create problems to be overcome by orderly marketing. <u>http://ucanr.edu/repositoryfiles/ca504p2-71599.pdf</u> (accessed March 10, 2015)
- *** Food and Agriculture Organization of the United Nations. (2000). Study of the main European markets for dates and the commercial potential of non-traditional varieties. Available at: <u>http://www.fao.org/3/a-y2745e.pdf</u> (accessed March 13, 2015)
- *** Inma Agri Business Programme. (2008). Dates Value Chain Analysis and Opportunities for Iraq. Available at: https://www.inma-iraq.com/sites/default/files/tr_dates_value_chain_july08.pdf (accessed on March14, 2015)
- *** Sindh Board of Investment. (2010). Dates Processing Unit. Government of Sindh, Pakistan. http://www.sbi.gos.pk/pdf/Dates-DPP.pdf (accessed March 10, 2015)

Selected Representatives of Regional Institutions to Support Small and Medium Enterprises in Slovakia

Enikő KORCSMÁROS J. Selye University, Faculty of Economics⁵, Slovakia <u>korcsmarose@ujs.sk</u> Monika ŠIMONOVÁ J. Selye University, Faculty of Economics, Slovakia <u>simonm@ujs.sk</u>

Abstract:

The main economic functions of SMEs include also their contribution to regional development. Welldeveloped business environment is essential for the development of Slovakia and its regions, thus contributing to the growth of the economy of market. In those facts it is a role for government to encourage and create favourable conditions for competition and minimizing respectively or eliminate administrative barriers hindering business activities. The interaction between region and SMEs requires a build / support the existence of a series of regional institutions / centres whose mission is to help SMEs in various situations. In this article we will focus on selected representatives of regional institutions to support small and medium enterprises in Slovakia using secondary sources and prime research and point out their essential activities.

Keywords: regional institution, SME, support.

JEL Classification: R 11, R 50

Introduction

The main economic functions of SMEs include also their contribution to regional development. Welldeveloped business environment is essential for the development of Slovakia and its regions, thus contributing to the growth of the economy of market. Considering these facts, the role for government is to create favourable conditions for competition and minimizing respectively or eliminate administrative barriers hindering business activities. The interaction between region and SMEs requires a build / support the existence of a series of regional institutions / centres whose mission is to help SMEs in various situations.

⁵ Bratislavská 3322., 945 01 Komárno, SLOVAKIA

Key role in regional development is played by small and medium enterprises, local authorities, agencies of the ministries, resp. agencies set up to support businesses and project consulting. Because of the wide range of regional support institutions, we examine the selected representatives of regional institutions on support for SMEs.

Based on theoretical studies of literature we are convinced, that regional support institutions/centres have higher efficiency if they can rely on the support of further institutions. After mapping the essential activities of selected representatives based on secondary research and theoretical studies, we applied a questionnaire research to examine their activity in Nitra Region. After conducting primary research, we can conclude, that it is necessary to raise awareness of regional support institutions/centres, build a feedback system between supported enterprises and institutions, determine the basic foundations of cooperation between regional support institutions/centres and academia, resp. educational institutions in Nitra county and improve the cooperation with umbrella organizations in the county.

- [1] Butoracová-Šindlerová, I., Morovská, I. (2009). Podnikateľské prostredie v Slovenskej republike z pohľadu inovačných príležitostí a bariér regionálneho rozvoja. [The business environment in the Slovak Republic in terms of innovation opportunities and barriers to regional development] In: KUTOLIČ, R. ed.: Zborník vedeckých prác katedry ekonómie a ekonomiky. [online]. 2009. ISBN 978-80-555-0005-8 http://www.pulib.sk/elpub2/FM/Kotulic10/ [accessed 26.07.2015]
- Kubrická, M. (2012). Podpora malého a stredného podnikania v Slovenskej republike 2012. Sprievodca iniciatívami. [Support for SMEs in the Slovak Republic 2012. Wizard initiatives.] [Online]. Bratislava, apríl 2012. 302 p., 70.s. <u>http://www.sbagency.sk/sites/default/files/sprievodca iniciativami 2012 0.pdf</u> [accessed 26.07. 2015]
- [3] Russev, S., Šúbertová, E. (2013). Manažment projektov v podnikaní a informatizácií (pri prechode k znalostnému manažmentu). [Project management in business and informatization (the transition to knowledge management] Bratislava: Kartprint, s.177-183. ISBN 978-80-89553-13-6, 466 s.
- *** Podnikanie a zamestnanie na Slovensku (7), Inštitucionálna podpora. [Entrepreneurship and employment in Slovakia (7) institutional support.] [online]. Komapol, s.r.o., Bratislava, 2010. 97 p., ISBN 978-80-969121-5-5, <u>http://www.upsvar.sk/buxus/docs//SSZ/OISS/Publikacie_Podnikanie_a_zamestnanie_na_Slovensku/Instituci</u> <u>onalna_podpora.pdf</u> [accessed 26.07.2015]
- *** Slovenská záručná a rozvojová banka. [Slovak Guarantee and Development Bank] Official web page. [online]. http://www.szrb.sk/Default.aspx?CatID=4 [accessed 26.07.2015]
- *** Združenia podnikateľov Slovenska. [Entrepreneurs Association of Slovakia] Official web page. [online]. http://www.zps.sk/Priority-ZPS [accessed 26.07.2015]
- *** Združenie mladých podnikateľov Slovenska. [Young Entrepreneurs Association of Slovakia] Official web page. [online]. <u>https://zmps.sk/o-nas/ciele.html [</u>accessed 26.07.2015]

Optimum Size of Government Spending in Indonesia

Jaka SRIYANA Department of Economics Universitas Islam Indonesia, Indonesia jakasriyana@yahoo.com

Abstract:

The purpose of this study is to analyze the optimum size of government spending that maximizes economic growth in Indonesia. This research considered non linear models in analysis of economic growth as a function of government spending and other economic variables. Using the time series data of the period 1970 -2014, the empirical model reveals that relationship between government spending and economic growth follows the inverted U-curve. This finding confirms the existence of Armey curve for the Indonesian case. The optimum level of government spending that maximizes economic growth was found at 12.552% of GDP which is lower than the recent level. The result reflects that Indonesia is not in the safe fiscal zone. This upward trend in the share of government spending in the recent years meant that the government spenditure in the 2010s, but it failed to encourage the national economy on the high stable economic growth. This paper recommends the government to evaluate the quality of allocation in order to achieve higher economic growth.

Keywords: fiscal, government, spending, budget, armey, policy.

JEL Classification: E62, O40, C22.

Introduction

Government size is one of the main issues in the budget management in some countries. Meanwhile, economic growth is the most important macroeconomic variable reflecting the economic performance of a country. Several recent studies have attempted to identify the relationship between government spending and economic growth in the last decade (De Witte and Moesen 2010, Ekinci 2011, Herath 2012, Tsaurai and Odhiambo 2013). Several literatures state that fiscal policy, especially the level of government spending plays significant role in managing economic growth. Otherwise, some countries experienced over spending in certain periods causing high inefficiency in their budget management. (Herath 2012, Rahmayanti and Horn 2011)

Indonesian government has increased its role to the economy since the monetary crisis which leads the government budget into high debt. In fact, government spending as the main instrument of fiscal policy has played more important role in supporting economic growth in Indonesia (Marks 2004). The impact of government sector on the economy is indicated by the effect of government spending on the main various macroeconomic indicators. During the last decade, the government has experienced sharp increases in its spending in order to maintain the economic growth stability. In fact, this policy has a positive impact on output indicated by a stable economic growth in this period, but its consequence is that the government embarked upon a debt trap. Moreover, the Indonesia's fiscal performance was also indicated in disequilibrium situation for long period (Sriyana 2015). An important factor may have caused such situation is inappropriate level of government spending indicating the government size is not in its optimum level.

The optimal size of the government becomes a problem in Indonesia that has attracted the attention of this study. Indonesian economy has experienced some stages of economic growth and stabilization in the last two decades. Furthermore, the central government has applied an expansionary fiscal policy which probably lead the government spending level is far away from its optimum. Total government spending as a percent of GDP has grown continuously in the last decade and is close to an average of about 21% of GDP. Meanwhile, economic growth has suffered from the government spending which has been above optimal levels in the country. Furthermore, it is necessary to identify the effect of government spending on economic growth and to find the optimum level of government spending in Indonesia regarding to maximize economic growth.

This study reveals information about the optimum size of government spending growth in Indonesia that maximizes economic growth. Based on the economic growth model, the empirical equation shows that linier term of government size, quadratic term of government spending, and investment are positively significant affect economic growth. Export variable as proxy of the openness indicator of the country is negatively influence economic growth. In addition, using second model with the dependent variable is log of GDP presents that government spending is strongly significant determine the dependent variable. Furthermore, these two models are used to determine the optimum size of government spending that maximizes economic growth.

In answering the question as to whether government expenditure increases or decreases economic growth, the regression analysis that uses economic growth validates a nonlinear relationship between government expenditure and economic growth. The results are generally consistent with the previous findings; therefore, government spending and economic growth are positively correlated. Moreover, excessive government expenditure is negatively correlated with economic growth. These phenomena reveal the existence of Armey curve based on the data for Indonesia. The empirical model also presents that investment strongly promotes economic growth. Unexpected result was found regarding the negative role of export on economic growth. The result of an alternative analysis using Scully model, which employs real GDP as a proxy for economic growth, is similar with another one. It confirms the findings of the first regression analysis. The novelty of this study is that increasing of government size along period of research does not cause higher economic growth although it is still in the low level. This finding also reveals that economic growth is represented by a productive government budget.

In this paper, examining the optimal size of government that maximizes economic growth in Indonesia confirms that the government is not in the safe zone. The overall results suggest that the optimal level of government spending is 12.552 % of GDP. This result is in line with other empirically studies which show that generally the government size should be reduced. The government size for developing countries should be evaluated if economic growth is to be maximized. Furthermore, Indonesia has a serious problem regarding to the budget management quality. This is due to the inefficiency of allocation of scare resources in the public sector and the crowding-out effect phenomena. The increase of government investment has negative effect on private investment. Reducing the government budget size will discourage the economy; meanwhile an excessive spending does not support economic growth. This paper recommends the government to evaluate the quality of allocation in order to achieve more productive spending.

Concerning further research on government size, it is important to test the relationship between the quality of budget management and government size. This paper also recommends estimating the optimal composition regarding the productive assessment of public expenditure. Evaluating some aspects of budget allocation would be a significant contribution to the research question on the optimal size of government.

Acknowledgment

The author would like to thank to The Centre for Economic Studies, Department of Economics, Universitas Islam Indonesia, and Yogyakarta for providing the fund for this research.

- [1] Afonso, A., Schuknecht, L., Tanzi, V. (2003). Public Sector Efficiency: An International Comparison. In *European Central Bank Working Paper* (p. 242).
- [2] Akpan, U. F., Abang, D.E. (2013). Does Government Spending Spur Economic Growth? Evidence from Nigeria. *Journal of Economics and Development Studies*, 4(9): 36–52.
- [3] Armey, R. (1995). *The Freedom Revolution*. Washington DC: Rognery Publishing Co.
- [4] Asimakopoulos, S., Karavias, Y. (2015). The impact of government size on economic growth: A threshold analysis. Granger Centre Discussion Paper (Vol. 15). <u>http://dx.doi.org/10.1016/j.econlet.2015.12.010</u>
- [5] Chen, S.T., Chen, C.C., Kim, Y. (2011). Economic Growth and Government Size in OECD Countries: New Evidence from the Quantile Regression Approach. *Economics Bulletin*, *31*(1): 416–425.
- [6] Chen, S.T., Lee, C.C. (2005). Government size and economic growth in Taiwan: A threshold regression approach. *Journal of Policy Modeling*, 27(9): 1051–1066. <u>http://dx.doi.org/10.1016/j.jpolmod.2005.06.006</u>
- [7] Christie, T.A.L., Rioja, F. K. (2014). Government Expenditures, Financing, and Economic Growth in Cape

Verde. Journal of Economics and Development Studies, 2(4): 1–19. http://dx.doi.org/10.15640/jeds.v2n4a1

- [8] De Witte, K., Moesen, W. (2010). Sizing the government. Public Choice, 145(1-2): 39–55. <u>http://dx.doi.org/</u> <u>10.1007/s11127-009-9527-7</u>
- [9] Ekinci, A. (2011). What Is The Optimum Size of Government: A Suggestion References. *International Journal of Economics and Finance Studies*, 3(1): 45–54.
- [10] Herath, S. (2012). Size of government and economic growth: A nonlinear analysis. *Economic Annals*, 57(194): 7–30. <u>http://dx.doi.org/10.2298/EKA1294007H</u>
- [11] Marks, S.V. (2004). Fiscal sustainability and solvency: theory and recent experience in Indonesia. Bulletin of Indonesian Economic Studies, 40(2): 227–242. <u>http://www.tandfonline.com/doi/pdf/10.1080/0007491042</u> 000205295
- [12] Mehrara, M., Keikha, A.R. (2012). Government size and economic growth in Iran. *International Journal of Economics and Research*, 3(2): 52–60.
- [13] Mutascu, M., Milos, M.C. (2009). Optimal size of government spending. The case of European Union member states, Annales Universitatis Apulensis Series Oeconomica, 11(1): 447-456.
- [14] Olaleye, S.O., Edun, F., Bello, H.T., Taiwo, S. B. (2014). Government Expenditure and Economic Growth in Nigeria: An Empirical Empirical Analysis of the Armey Curve in Nigeria. *The Romanian Economic Journal*, 17(51): 47–66.
- [15] Pevcin, P. (2004). Does optimal spending size of government exist? In *European Group of Public Administration Conference*, (1–4 September 2004). Ljubljana, Slovenia.
- [16] Rahmayanti, Y., Horn, T. (2011). Expenditure Efficiency and the Optimal Size of Government in Developing Countries. *Global Economy and Finance Journal*, 4(2): 46–59.
- [17] Rajabi, E., Muhammad, J. (2013). Government Expenditure and Economic Growth in ASEAN-5: Long Run Tendencies and Short Term Adjustment. *International Journal of Research in Commerce, Economics & Management*, 3(7): 85–90.
- [18] Sheehey, E. (1993). The effect of government size on economic growth. *Eastern Economic Journal*, *19*(3): 321–328.
- [19] Sriyana, J. (2015). Long run Fiscal Disequilibrium: an Indonesian case. *Journal of Applied Economic Sciences*, 10(2): 253–261.
- [20] Tsaurai, K., Odhiambo, N. M. (2013). Government expenditure and economic growth in Zimbabwe: an ARDLbounds testing approach. *International Journal Economic Policy in Emerging Economies*, 6(1): 78–90.

Green Supply Chain Management: Genesis, Trends and Phases

Aparna CHOUDHARY Department of Management Studies Indian School of Mines, Dhanbad, Jharkhand, India <u>aparnachoudhary17@gmail.com</u> Sandeep MONDAL Department of Management Studies Indian School of Mines, Dhanbad, Jharkhand, India <u>mondal.s.ms@ismdhanbad.ac.in</u> Kampan MUKHERJEE Department of Management Studies, Indian School of Mines Dhanbad⁶, India Indian Institute of Management Kashipur⁷, Uttarakhand, 244713, India <u>kampan_m@hotmail.com</u>

Abstract:

Green Supply Chain Management (GSCM) has emerged as an important organizational philosophy to achieve the competitive advantage by reducing environmental risks and improving ecological efficiency. Research on GSCM has grown substantially over the past two decades. This paper represents a brief report on various issues of GSCM on the basis of literature survey. The paper eventually contains two parts – literature survey and discussion of existing trends and phases representing functioning of GSCM. To serve this purpose 274 research articles published during 1996 through 2015 were reviewed. Knowledge extracted from the survey of the literature helps in understanding the existing trends and various concepts related to GSCM. The discussion of existing trends and various phases constitute a relevant knowledge base and will help industry and academia in developing a better understanding about GSCM.

Keywords: Green supply chain management, green design, green procurement, green operations, reverse logistics, performance measurement.

JEL Classification: M11, Q52, Q53.

Introduction

With the increase in environmental concern, the topic "green supply chain management" has received substantial attention in the field of industry and academia. Organization faces new challenges and opportunities in addressing the environmental issues. Green supply chain management (GSCM) has unique issues related to competitive advantages, scarcity of resources, and environmental performance (Zhu *et al.* 2007). Zhu and Sarkis (2007) have addressed that organizations need to incorporate green supply chain practice in their supply chain activities to reduce environmental pollution. The benefit of GSCM includes all the stakeholders directly or indirectly. It helps in controlling pollution and wastages at each level of the supply chain (Vachon and Klassen 2006). All the stake holders, like suppliers, customers, manufacturers and society gets benefited by practicing GSCM. Considering the importance of GSCM, descriptive study has been done in this study. To serve this purpose 274 research paper published during 1996 through 2015 have been carried out. On the other hand, knowledge extracted from the survey gives rise to the development of various concepts and issues related to GSCM. These concepts are discussed under the heads of different phases of GSCM. The paper is structured as follows: Genesis of GSCM is given in Section 2, followed by method of literature survey in Section 3. The present and past trends of GSCM are discussed in section 4. Section 5 describes conclusions and future scope of the research.

⁶ Jharkhand, 826004 India

⁷ Uttarakhand, 244713, India

This paper represents an overview of green supply chain management. The overview is based on the literature of GSCM which provides a better understanding of GSCM with an integrated approach. To meet this purpose, papers were segregated year wise, country wise, methods wise and on the basis of its focused area of study. Number of papers published in recent years indicates that there is rising interest and concern of green issues among researchers. This study gives a glimpse of the past and the present trend of the study on GSCM. The study shows increasing trends in GSCM research in developing countries like India, China and Taiwan. Survey method is mostly preferred by researchers while studying the GSCM. There is less study on relationship management with suppliers and customers. For GSCM practice, there should be more study on environmental collaboration with the supply chain partners. Although there is a remarkable amount of publications related to GSCM, but still there is a different viewpoint on GSCM. It is treated as operational philosophy of management, a business culture, and a business strategy to gain competitive advantage. These different interpretations are not mutually exclusive rather overlapping each other. However, the prime objective of GSCM, improving the environmental performance along with improving the operational efficiency remains unchanged. This study has taken broad outlook at GSCM and the relevant issues related to it.

The key themes that came out of the GSCM literature over the last twenty years are the concept of green design, green procurement, green operations, reverse logistics and performance management. All these aspects of analysis about the literature survey, and explaining the different phases of GSCM will significantly contribute to the literature of GSCM and further reinforce in the creation and dissemination of particular theories.

It is suggested to formulate a combination of various tools and techniques to address various issues in GSCM. A significant contribution by the researches is needed in the area of GSCM and its implementation in SMEs sector. More study should be conducted to find the association between adoption of GSCM and evaluation of its performance. More study need to be conducted to establish trade-off between environmental and economic performance caused by GSCM.

- Abdallah, T., Farhat, A., Diabat, A., Kennedy, S. (2012). Green supply chains with carbon trading and environmental sourcing: Formulation and life cycle assessment. *Applied Mathematical Modelling*, 36(9): 4271-4285. DOI: 10.1016/j.apm.2011.11.056
- [2] Amemba, C.S., Nyaboke, P.G., Osoro, A., Mburu, N. (2013). Elements of Green Supply Chain Management. *European Journal of Business and Management*, 5(12): 51-61. DOI: 10.1016/S0959-6526(02)00062-8
- [3] Bhateja, A.K., Babbar. R., Singh S., Sachdeva, A. (2011). Study of green supply chain management in the Indian manufacturing industries: a literature review cum an analytical approach for the measurement of performance. *International Journal of Computer Engineering Management*, 13: 84–99.
- [4] Bowen, F.E., Cousins, P.D., Lamming, R.C., Faruk, A.C. (2001). Horses for courses. *Greener Management International*, (35): 41-60. DOI: http://dx.doi.org/10.9774/GLEAF.3062.2001.au.00006
- [5] Carter, C.R. Ellram, L.M. (1998). Reverse Logistics: A Review of the Literature and Framework for Future Investigation. *Journal of Business Logistics*, 19 (1): 85- 102.
- [6] Carter, C.R., Rogers, D.S. (2008). A framework of sustainable supply chain management: moving toward new theory. International journal of physical distribution & logistics management, 38(5): 360-387.
- [7] Darnall, N., Jolley, G. J., Handfield, R. (2008). Environmental management systems and green supply chain management: complements for sustainability? *Business Strategy and the Environment*, 17(1): 30-45.
- [8] Diabat, A., Kannan, D., Mathiyazhagan K. (2014). Analysis of enablers for implementation of sustainable supply chain management – A textile case. *Journal of Cleaner Production*, 83: 391-403. DOI: 10.1016/j.jclepro.2014.06.081
- [9] Dowlatshahi, S. (2000). Designer-buyer-supplier interface: theory versus practice. International Journal of Production Economics, 63(2): 111-130. DOI: 10.1016/S0925-5273(99)00009-2
- [10] Ferguson, M.E., Toktay, L.B. (2006). The effect of competition on recovery strategies. Production and operations management, 15(3): 351-368.

- [11] Fleischmann, M., Beullens, P., Bloemhof-Ruwaard, J.M., Wassenhove, L.N. (2001). The impact of product recovery on logistics network design, *Production and Operations Management*, 10(2): 156-173.
- [12] Fleischmann, M., Bloemhof-Ruwaard, J.M., Dekker, R., Van der Laan, E., Van Nunen, J.A., Van Wassenhove, L.N. (1997). Quantitative models for reverse logistics: a review. *European Journal of Operational Research*, 103(1): 1-17. DOI: 10.1016/S0377-2217(97)00230-0
- [13] Fleischmann, M., Krikke, H.R., Dekker, R. Flapper, S.D.P. (2000). A characterization of logistics networks for product recovery. Omega, 28: 653–666.
- [14] Gimenez, C., Sierra, V. (2013). Sustainable Supply Chains: Governance Mechanisms to Greening Suppliers. *Journal of Business Ethics*, 116(1): 189-203.
- [15] Govindan, K., Rajendran, S., Sarkis, J., Murugesan, P. (2013). Multi criteria decision making approaches for green supplier evaluation and selection: a literature review. *Journal of Cleaner Production*, 1-18. DOI: 10.1016/j.jclepro.2013.06.046
- [16] Guide, V.D.R., Wassehove, L.N.V. (2001). Managing product returns for remanufacturing. Production and Operations Management, 10 (2): 142–155.
- [17] Gungor, A., Gupta, S. M. (1999). Issues in environmentally conscious manufacturing and product recovery: a survey. Computers and Industrial Engineering, 36(4), 811-853.
- [18] Handfield, R., Sroufe, R. Walton, S. (2004). Integrating environmental management and supply chain strategies, *Business Strategy and the Environment*, 14 (1):1-19.
- [19] Hervani, A.A., Helms, M. M., Sarkis, J. (2005). Performance measurement for green supply chain management, *Benchmarking: an International Journal*, 12(4): 330-353. DOI: http://dx.doi.org/10.1108/ 14635770510609015
- [20] Igarashi, M., de Boer, L., Fet, A.M. (2013). What is required for greener supplier selection? A literature review and conceptual model development, *Journal of Purchasing and Supply Management*, 19(4): 247-263.
- [21] Jiang, C., Sheng, Z. (2009). Case-based reinforcement learning for dynamic inventory control in a multi-agent supply-chain system. *Expert Systems with Applications*, 36(3): 6520-6526.
- [22] Kinobe, J.R., Gebresenbet, G., Vinnerås, B. (2012). Reverse Logistics Related to Waste Management with Emphasis on Developing Countries - A Review Paper. *Journal of Environmental Science and Engineering*, 8(1): 1104-1118.
- [23] Kumar, S., Luthra, S., Haleem, A. (2013). Customer involvement in greening the supply chain: an interpretive structural modeling methodology. *Journal of Industrial Engineering International*, 9(1): 1-13.
- [24] Lin, C.Y., Ho, Y. H. (2011). Determinants of green practice adoption for logistics companies in China, *Journal of Business Ethics*, 98(1): 67-83.
- [25] Luthra, S., Kumar, V., Kumar, S., Haleem, A. (2011). Barriers to implement green supply chain management in automobile industry using interpretive structural modeling technique: An Indian perspective. *Journal of Industrial Engineering and Management*, 4(2): 231-257.
- [26] Martha, T., Houston, P. (2010). Purchasing: The key to successful green strategy, China Logistics & Purchasing, 7: 20-22.
- [27] Min, H., Galle, W.P. (2001). Green purchasing practices of US firms. International Journal of Operations & Production Management, 21(9): 1222-1238.
- [28] Pohlen, T. L., Farris, M.T. (1992). Reverse logistics in plastics recycling. International Journal of Physical Distribution & Logistics Management, 22(7): 35-47. DOI: http://dx.doi.org/10.1108/09600039210022051
- [29] Porter, M.E., van der Linde, C. (1995). Toward a new conception of the environment competitiveness relationship, *Journal of Economic Perspectives*, 9: 97–118.
- [30] Preuss, L. (2001). In dirty chains? Purchasing and greener manufacturing. *Journal of Business Ethics*, 34(4): 345-359.

- [31] Rao, P. (2002). Greening the supply chain: a new initiative in South East Asia. International Journal of Operations & Production Management, 22(6): 632-655.
- [32] Rogers, D.S., Tibben-Lembke, R. (2001). An examination of reverse logistics practices. *Journal of business Logistics*, 22(2): 129-148.
- [33] Sarkis, J. (2012). A boundaries and flows perspective of green supply chain management, *Supply Chain Management: an International Journal*, 17(2): 202-216.
- [34] Sarkis, J., Zhu Q., Lai K.H. (2011). An organizational theoretic review of green supply chain management literature, *International Journal of Production Economics*, 130(1):1–15. DOI:10.1016/j.ijpe.2010.11.010
- [35] Seitz, M., Peattie, K. (2004). Meeting the closed-loop challenge. California Management Review, 46(2): 74-89.
- [36] Sezen, B., Çankaya, S.Y. (2013). Effects of Green Manufacturing and Eco-innovation on Sustainability Performance, *Procedia-Social and Behavioral Sciences*, 99: 154-163. DOI:10.1016/j.sbspro.2013.10.481
- [37] Srivastava, S.K. (2008). Network design for reverse logistics. Omega: The International Journal of Management Science, 36 (4): 535-548.
- [38] Srivastva, S. (2007). Green supply State of the art Literature Review, International Journal of Management Review, 9(1): 53-80
- [39] Sundin, E., Bras, B. (2005). Making functional sales environmentally and economically beneficial through product remanufacturing. *Journal of Cleaner Production*, 13(9): 913-925.
- [40] Vachon, S., Klassen, R.D. (2006). Extending green practices across the supply chain: the impact of upstream and downstream integration. *International Journal of Operations & Production Management*, 26(7): 795-821.
- [41] Wang, D., Gao S. (2003). Recycling of used batteries and environmental protection. *Recycling and Resources*, 6: 20–24.
- [42] Williams, E., Kahhat, R., Allenby, B., Kavazanjian, E., Kim, J., Xu, M. (2008). Environmental, social, and economic implications of global reuse and recycling of personal computers. *Environmental Science & Technology*, 42: 6446-6454. DOI: 10.1021/es702255z
- [43] Xiaoyan, W. (2012). Research on design management based on green remanufacturing engineering. Systems Engineering Procedia, 4: 448-454.
- [44] Zhu, Q., Sarkis, J. (2004). Relationships between operational practices and performance among early adopters of green supply chain management practices in Chinese manufacturing enterprises. *Journal of Operations Management*, 22(3): 265-289.
- [45] Zhu, Q., Sarkis, J. (2007). The moderating effects of institutional pressures on emergent green supply chain practices and performance. *International Journal of Production Research*, 45 (18-19): 4333-4355.
- [46] Zhu, Q., Sarkis, J., Geng, Y. (2005). Green supply chain management in China: pressures, practices and performance. *International Journal of Operations & Production Management*, 25(5): 449-468. DOI: http://dx.doi.org/10.1108/01443570510593148
- [47] Zhu, Q., Sarkis, J., Lai, K. H. (2013). Institutional-based antecedents and performance outcomes of internal and external green supply chain management practices. *Journal of Purchasing and Supply Management*, 19(2):106-117. DOI:10.1016/j.pursup.2012.12.001
- [48] Zhu, Q., Sarkis, J., Lai, K.H. (2007). Green supply chain management: pressures, practices and performance within the Chinese automobile industry. *Journal of Cleaner Production*, 15(11): 1041-1052, DOI: 10.1016/j.jclepro.2006.05.021

The Determinants of Money Demand Function in the ASEAN-5 Countries

Saranya RAKSONG Mahasarakham Business School, Mahasarakham University, Thailand saranya.r@acc.msu.ac.th

Abstract:

The purpose of this paper is to examine the long-run and short-run determinants of money demand function in the ASEAN-5 countries, including Thailand, Singapore, Malaysia, Philippines, and Indonesia. The research was conducted by using secondary data sets from the ASEAN- 5 countries, covering the time period from 1990 to 2014. The paper was started by using unit root test for detecting a stationary of each variable that included in the models. Then, co-integration approach was applied for estimating the long-run determinant of money demand function. After that, Vector Error Correction Model was used to test the short-run determinant of money demand function. The results indicate that income has relationship with money demand in Thailand, Singapore, and Indonesia. The exchange has effect in money demand in Indonesia. Price level has relationship with money demand in every country in ASEAN-5 except Thailand. In addition, change in domestic interest rate has significant related with money demand function in Singapore and Indonesia. However, the foreign interest rate has significant related with the long run money demand in Thailand, Malaysia, and Indonesia. The results of this research could be used as a guideline for the central bank in ASEAN counties to set an effectiveness monetary policy.

Keywords: money demand function, ASEAN 5, cointegration.

JEL Classification: E40, E41.

Introduction

After the Global Financial Crisis in 2009, many countries, including the ASEAN-5 countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) faced the unstable economic situation, such as reducing in export demand, where the export is a major growth of the countries. These lead to economic recession and unemployment crisis in the countries. In addition, some developed countries such as USA adopted an expansionary and accommodative monetary policy by lower interest rates and liquidity injection that caused huge capital inflows to the five ASEAN countries, which lead to appreciate currency and exacerbated export downturn. The uncertainty economic situation directly affects a quantity of money holding in economic system, which becomes unstable money demand in the countries. Since policy makers face the challenge of global financial turmoil, it is necessary to understand the behavior of money demand and the role of macroeconomic policy response in order to conduct efficiency monetary policy

The issue of money demand function had been one of the most concerns in monetary economics research, especially the relationship between money demand and its determinants since the stable of money demand plays an important role in economic system and economic growth, especially with respect to monetary policy conducting. If the demand for money is stable, the monetary authorities will be able estimate the effect of monetary policy on economics activities, and then they will be able to carry out monetary policy actions with greater confidence and more efficiency. In addition, the determinant of money demand has important implications for the selection appropriate monetary policy instruments. Therefore, understanding the money demand function and it determinant is a key successful for conducting monetary policy in any country (Rutayisire 2010).

Over the past decade, many researchers attempted to examine the relationships between the money demand and its determinant in both developed and developing countries. In Asian country, most papers emphasize on testing the effect of financial liberation on the stability of demand function. For example, Dekle and Pradhan (1997) investigate the effect of financial liberation and financial reform on instability of money demand in Southeast Asian countries. Khalid (1999) estimates the degree of foreign factor opportunity cost impact money demand in Southeast Morea, Philippine, and Singapore by applying the Johansen co integration technique and estimating an Error Correction Model with quarterly data from 1977:1 to 1993:4. He argues that money demand in those three countries has long run relationship with both domestic and foreign variables. James (2005) offered the new approach to analyse the effect effects of financial liberalization on the money demand in Indonesian. He found that liberalization plays a major role in determining money demand. Moreover, he claims that there is existence of long run relationship between broad money and its determinant when the proxy liberalization is included.

Journal of Applied Economic Sciences

As can be seen from the previous studies, most papers focus on stability on money demand function and the effect of financial liberalization on the demand for money but they seem to ignore the factors of money demand function, especially the money demand behavior in the ASEAN countries. Therefore, this paper aims to provide information on the relationship between money demand and its determinant in major five developing countries in ASEAN (ASEAN-5). This paper is one of the a few empirical researches that concerned both long-run and the short run equilibrium of demand for money in developing countries.

Theoretically, there are three motive of money demand. Firstly, transactions demand for money, which had positively related with income and inversely related to interest rates. Second motive called precautionary demand for money, which also positively related to income. The last motive is speculative demand for money, which had negative related with interest rates. However, many of previous studies and real world experience usually include the cost of credit in money demand estimation. Therefore, this paper aims to analyze money demand function and its determinant in the ASEAN-5 by applying both money demand theory and review from previous research. The paper applied econometric model for investigating the determinate of money demand function in the ASEAN-5 by using broad money (M2) as a proxy of money demand in each country in the ASEAN-5 since the M2 was adopted as monetary targeting in monetary policy in many developing countries. The major objective of this paper is to test a long run and short run equilibrium relationship between money demand and its determinants in the ASEAN-5 countries, including Malaysia, Philippine, Indonesia, Singapore, and Thailand.

Although the issue of money demand is very important for conducting monetary policy, there have been relatively few empirical studies of a stability of money demand in ASEAN countries. In addition, most of the studies have emphasized the relationship between money aggregates and a range of economic indicators, and placed less concern on the stability of the money demand. Therefore, this research analyzed the stability of money demand in the ASEAN 5 countries, including Thailand, Singapore, Malaysia, Philippines, and Indonesia. The research conducted by testing the relationship between money demand and its determinant by using co integration, error correction techniques

The result of the first stage in this research is the test of the stationary of each variable by applying the unit root procedure. The results of the ADF and clearly showed that all variables that were used in the research were integrated of order one (I(1)) and eligible for testing in the next step.

The second stag was the testing of the long run money demand relationship by using co-integration. In this stage, M2 money demand was adopted as a proxy of money demand in the ASEAN5 countries. The results of co-integration suggest that exists co-integrate vector in the money demand function in all countries in the ASEAN-5. The results of long run money demand function indicate that income elasticity has significant relationship with money demand function in Thailand, Singapore, and Indonesia, while it is not effect on long run money demand in other countries. Price level has long run relationship with money demand in every country in ASEAN-5 except Thailand. In addition, change in domestic interest rate has significant related with the long run money demand in Thailand, Malaysia, and Indonesia. In short-run, exchange rate is one of the import factors affecting money demand in Thailand, Singapore, and Indonesia.

- [1] Bahmani-Oskooee, M. (1991). The Demand for Money in an Open Economy: United Kingdom. *Applied Economics*. 23: 1037-1042.
- [2] Bahmani-Oskooee, M. (2001). How stable is M2 money demand function in Japan? *Japan and the World Economy*, 13(4): 455-461.
- [3] Bahmani-Oskooee, M. and Chomsisengphet, S. (2002). Stability of M2 money demand function in industrial Countries. *Applied Economics*, 34 (16): 2075-2083.
- [4] Bahmani-Oskooee, M., and Bohl. M.T. (2000). German monetary unification and the stability of the German M3 money demand function. *Economics Letters*, 66(2): 203-208.
- [5] Cargill, T. and Parker, E. (2004). Price deflation, money demand, and monetary policy discontinuity: a comparative view of Japan, China, and the United Stated. *North American Journal of Economics and Finance*, 15: 125-147.
- [6] Choi, D. and Oxley, L. 2004. Modeling the demand for money in New Zealand. *Mathematics and Computers in Simulation*. 64(10): 185-191.
- [7] Chowdhury, A. R. (1997). The financial structure and the demand for money in Thailand. *Applied Economics*, 29(3): 401-409.
- [8] Coenen, G., Leven, A. and Wieland, V. (2005). Data Uncertainty and the Role of Money as an Information Variable for Monetary Policy. *European Economic Review*, 49 (4): 975-1006.
- [9] Dekle, R., Pradhan, M. (1997). Financial liberalization and money demand in ASEAN Countries: Implications for Monetary Policy. *IMF Working Papers* No. 97/36, International Monetary Fund.
- [10] Dickey, D.A., Fuller, W.A. (1981). Likelihood Ratio Statistics for Autoregressive Time Series with a Unit Root. *Econometrica*, 49(4): 1057-1072.
- [11] Dickey, D.A. and Fuller, W.A. (1979). Distribution of the Estimators for Autoregressive Time Series with a Unit Root. *Journal of the American Statistical Association*, 74: 427-31.

- [12] Engle, R. F. and. Granger, C. W. J. (1987). Co-integration and error correction: representation, estimation, and testing. *Econometrica*, 55(2): 251-276.
- [13] Felmingham, B., Zhang, Q. (2001). The Long Run Demand for Broad Money in Australia Subject to Regime Shifts. Australian Economic Papers, 40(2): 146-155.
- [14] Ghosh, M. (2000). The Stability of Money Demand Function in Five Major Industrial Countries: Evidence from Cointegration Tests. *Indian Economic Review*, 35(2): 175-192.
- [15] Hansen, G., Kim, J.R. (1995). The stability of German money demand: Tests of the cointegration relation. *Review of World Economics*, 131(2): 286-301.
- [16] James, G.A. (2005). Money demand and financial liberalization in Indonesia. *Journal of Asian Economics*, *16*(5): 817-829.
- [17] Johansen, S. (1991). Estimation and Hypothesis Testing of Cointegration Vectors in Gaussian Vector Autoregressive Models. *Econometrica*, 59 (6): 1151-1180.
- [18] Khalid, A.M. (1999). Modeling Money Demand in Open Economies: The Case of Selected Asian Countries. Applied Economies, 13: 1129-1135.
- [19] Lim, G.C. (1993). The Demand for the Components of Broad Money: Error-Correction and Generalized Asset Adjustment Systems. *Applied Economics*, 25(8): 995-1004.
- [20] Lucas, J. (1988). Money demand in the United States: A Quantitative Review. Carnegie–Rochester Conference Series on Public Policy, 29:137–168.
- [21] Lucas, J. (2000). Inflation and Welfare. Econometrica, 62(2): 247-274.
- [22] Miller, S.M. (1991). An application of Cointegration and Error-Collection Modeling. Journal of Money, Credit, and Banking, 23(2): 139-154.
- [23] Rutayisire, M. J. (2010). Economic Liberalization, Monetary Policy and Money Demand in Rwanda: 1980– 2005. AERC Research paper 193, African Economic Research Consortium, Nairobi.
- [24] Sriram, S.S. (1999). Demand for M2 in an Emerging-Market Economy An Error-Correction Model for Malaysia. *IMF Working Paper No.* 99/173. International Monetary Fund.
- [25] Tang, T.G. (2007). Money Demand Function for Southeast Asian countries: An Empirical View from Expenditure Components. *Journal of Economic Studies*, 34(6): 476-496.
- [26] Valadkhani, A. (2005). Modelling Demand for Broad Money in Australia. School of Economics and Finance Discussion Papers and Working Papers, No 120, Queensland University of Technology.
- [27] Valadkhani, A. (2008). Long and Short Run Determinant of the Money Demand in Asian-Pacific Countries: An Empirical Panel Investigation. *Annual of Economics and Finance*, 9: 77 90.

Why Do the Minimum Capital Adequacy Ratios Vary across Europe?

Ana KUNDID NOVOKMET Faculty of Economics, University of Split[®], Croatia <u>akundid@efst.hr</u> Anja BANOVIĆ Croatian Chamber of Economy, County Chamber in Split[®], Croatia <u>banovicanja00@gmail.com</u>

Abstract:

In the paper we seek an explanation of disparities in the required minimum levels of the capital adequacy ratio. Attention is given to 40 European countries mainly in the pre-crisis period. Cluster analysis results justify a need for a discretionary approach of the national prudential authorities when adopting the supranational prudential recommendations, to be more precise, Basel Committee conclusions. In such a manner, lower regulatory burden, i.e. lower minimum level of capital adequacy ratio in this case, is and should remain a privilege of the more transparent, ethical and accountable economic systems with better country credit rating, higher GDP per capita and lower inflation rate. Despite insignificance of the banking sector variables in the cluster analysis, when linear regression method is adopted, variables such as bank concentration indicator and asset quality have the highest explanatory power. A conclusion can be made that the set-up of the minimum capital adequacy ratio should be carefully planned due to threats of loss in the economic output if the banking sector is over-regulated or on the other hand increased financial instability in case of being under-regulated.¹⁰

Keywords: banking regulation, capital requirements, commercial banks, cluster analysis, linear regression, and European countries.

JEL Classification: G21, G28, P51, O52, C38.

Introduction

Capital requirements regulation is one of the finest examples of the convergence in the regulation of the banking industry. What usually starts as Basel Committee i.e. supranational prudential institution's recommendations, soon after appears on the "to do list" of the national prudential authorities. However, criticism of the capital adequacy standard is widely present since their introduction in the late 1980s (Basel I) and despite their afterwards modification (Basel II and Basel III). The standard has changed the way in which banks measure and manage their risks, causing limitations in the credit growth as well as financial leverage usage. Thus, banking lobbies have regularly been opponents whenever capital requirements were on the agenda, while academicians investigated the potential side-effects and counter-effectiveness from the capital regulation implementation assuming that the "regulatory struggle" phenomenon¹¹ will eventually occur.

Namely, regulatory costs are usually sizeable what banks endeavour to avoid by performing so called "cosmetic" rather than true compliance with the regulatory rules or they even try to invent financial products and practices which are not regulated yet. The regulatory burden of implementing capital requirements is rather diverse with respect to the bank size, the banking sector characteristics and country in which banks operate. Some authors pinpoint country's characteristics as the factors of utmost importance for the capital adequacy standards implementation. For instance, Caprio and Honohan (1999) assume macroeconomic volatility, persistency in regulatory regimes, independence of prudential authorities from political pressures and overall institutional environment to be key determinants of certain regulatory strategy outcome. Moreover, Delis *et al.* (2009) conclude that capital regulation should be adapted to country specificities, while Morrison and White (2005) confirm that the size of capital requirements should be in inverse relationship with regulator's reputation which is approximated with the income level of certain country and various indices for the country's "rule of law" development level. Similarly,

⁸ Cvite Fiskovića 5, 21 000 Split, Croatia

⁹ Ante Trumbića 4, 21 000 Split, Croatia

¹⁰ This paper is an outcome of the diploma thesis written by A. Banović under the supervision of A. Kundid Novokmet at the university graduate degree program in Business Studies, Financial Management course of study, at the Faculty of Economics, University of Split. The diploma thesis oral exam was successfully completed on 16/09/2015.

¹¹ For more detailed explanation of the "regulatory struggle" phenomenon see e.g. Kane (1977).

Journal of Applied Economic Sciences

Volume XI, Issue 3(41), Summer 2016

Ribakova (2005) shows that there is a trade-off between supervisors' quality and minimum capital adequacy ratios, while Buck and Schliephake (2013) prove that only when both, supervision and minimum capital requirements instruments are implemented the costs of preventing the collapse of financial intermediation will be minimized. On the other hand, some authors uphold the view that disparities in the regulatory burden *i.e.* the minimum capital adequacy ratios and other regulatory instruments will alter the problem of cross-border regulatory arbitrage (Acharya 2003, Moshirian 2011, Marinč *et al.* 2014) and thus point out a necessity of increasing harmonization in regulatory instruments between countries, especially in the European union (Marinč *et al.* 2014) which promotes the idea of financial and economic integration, levelling the playing field and recently affirmed the project of creating the banking union.

Although it is clear that financial and economic integration enable faster transmission of the crisis events (see *e.g.* Nasreen and Anwar 2015) it is still questionable whether global regulation can be effective mechanism for preventing future financial crisis. Whatever the case might be, two contrast views regarding desirability of differences in the capital regulation among different countries inspired our research which aims to detect factors that justify disparities in the minimum capital adequacy ratios using a sample of 40 European countries.

The remainder of the paper is organized as follows. The next section reviews the survey of literature. The third section discusses the empirical strategy and research findings, while the last section concludes the paper.

Inequalities in regulatory costs from the capital requirements implementation in the world of banking without borders might amplify the problem of cross-border regulatory arbitrage. Thus, harmonizing the content of various regulatory measures became prominent goal on the agenda of supranational policymakers, especially after the recent financial crisis and troubles that global banking i.e. providing banking services on a global scale caused to national prudential authorities as well as to the lenders of last resort. Standardization of rules is of particular relevance for the EU which since recently promotes the establishment of banking union as one of catalysts for fulfilling what the EU "project" stands for - the international financial and economic integration. However, some differences in the prudential instruments will always exist as discretionary policies remain an option for at least non-EU and non-Eurozone countries in periods of financial stability as well as a part of crisis management for all countries in extraordinary times.

With respect to the emerging debate on the two opposing views about regulation *i.e.* harmonization of rules vs. more discretionary approach in setting rules, in this research we focused on the minimum capital adequacy ratios in Europe and investigated the factors which might explain differences between them. To be more precise, we hypothesized that the country's development level i.e. its macroeconomic and institutional development as well as its banking sector characteristics impact the regulatory requirements about the minimum capital adeguacy ratio. The secondary data collected for a sample of 40 European countries were tested by using the univariate and multivariate statistics. ANOVA and Kruskal-Wallis test were helpful in order to detect variables which might have explanatory power in the K-means cluster analysis. Due to relatively small sample size and rather large number of potential explanatory variables cluster analysis was conducted separately for banking sector variables, macroeconomic variables and institutional development variables. It was found that countries with more stable macroeconomic environment i.e. lower inflation, higher GDP per capita and lower probability of sovereign debt default have lower regulatory requirements considering bank capital adequacy ratio. In addition, countries with higher transparency of policymaking, more ethical behaviour of firms and better corporate reporting practices also have lower capital requirements. Altogether, a conclusion can be made that countries with better macroeconomic performance and more developed institutions have lower systemic risk and therefore decrease their regulatory burden. On the other hand, banks which are doing business in countries with the opposite characteristics are perceived as more fragile and are requested to have higher capital adequacy which serves to limit their excessive risk-taking and to decrease social costs in case of their instability. Another explanation is that prudential authorities in more developed economies have better know-how to perform banking supervision, and thus their quality in supervising becomes a substitute for the quantity of minimally required capital adequacy. Differences in the clusters when banking sector variables were set out as clustering variables were not statistically significant, although concentration indicator had some significance in ANOVA results for clusters.

Besides partial cluster analysis for each group of variables a stepwise linear regression analysis was performed in order to obtain results from an integrated analysis i.e. analysis which took into consideration all independent variables at once. According to the latter approach, banking sector variables, to be more precise, concentration indicator, bad debt indicator and dummy variable for banking crisis shaped the final regression model. Thus, non-performing loans add to minimum capital adequacy ratio, while bank concentration and occurrence of banking crisis have negative impact on the aforementioned ratio. While the regulator's response to lower asset quality is expected, it seems that higher concentration of the banking sector works the same way as the bank size in the researches with the bank-level data. Namely, large banks usually have lower capital adequacy in comparison to small-sized banks due to their better market position in raising capital, more developed risk management practices, possibilities of providing services to prime customers and finally the too-big-to-fail phenomenon. In the same way, more concentrated banking sectors imply lower refinancing and asset risks and more tolerant prudential authorities. Alternative explanation could be that some developed countries have sizeable concentration ratios, and thus a negative effect of concentration to capital adequacy occurs. Finally, the most of countries that were among the first hit by the banking crisis were the most developed European countries and thus negative impact of the crisis on the capital adequacy is somewhat less unusual. In addition, capital adequacy is more crisis prevention or ex ante prudential instrument, which could be perceived as ex post instrument when there are bank failures and necessity to decrease costs from their occurrence.

It is evident how adoption of the two statistical techniques led us to different explanations regarding the drivers of the minimum level of capital adequacy ratios in European countries. Despite that, the main caveat of the research remains the same in both cases and can be summarized in the following way: there is an empirical justification for the praxis of designing the regulatory policies by taking into consideration country's characteristics

whereas less stringent regulation can be an option only for more developed countries. Altogether, uniform prudential regulation might still not be a desirable solution despite threats of unequal regulatory burden and cross-border regulatory arbitrage. Nevertheless, we strongly encourage further studies in this field in order to obtain more convincing results regarding our conclusions and/or proposals for methodological improvement.

- [1] Abu, N., Karim, M.Z.A. (2015). The Causal Relationships among Corruption, Political Instability, Economic Development and Foreign Aid: Evidence from the Economic Community of West African States. *Journal of Applied Economic Sciences*, 10, (1)31: 20-33. Available at: <u>http://www.cesmaa.eu/journals/jaes/files/</u> <u>JAESspring%201(31).pdf</u> (accessed 27/02/2016)
- [2] Acharya, V.V. (2003). Is the International Convergence of Capital Adequacy Regulation Desirable? The Journal of Finance, 58(6): 2745-2782. DOI: 10.1046/j.1540-6261.2003.00621.x
- [3] Boudriga, A., Boulila Taktak, N. and Jellouli, S. (2009). Banking Supervision and Nonperforming Loans: A Cross-Country Analysis. *Journal of Financial Economic Policy*, 1(4): 286-318. DOI: <u>http://dx.doi.org/10.</u> <u>1108/17576380911050043</u>
- [4] Brewer III, E., Kaufman, G.G. and Wall, L.D. (2008). Bank Capital Ratios Across Countries: Why Do They Vary? Journal of Financial Services Research, 34(2): 177-201. DOI: 10.1007/s10693-008-0040-9
- [5] Buck, F. and Schliephake, E. (2013). The Regulator's Trade-Off: Bank Supervision vs. Minimum Capital. *Journal of Banking and Finance*, 37(11): 4584-4598. DOI: 10.1016/j.jbankfin.2013.04.012
- [6] Caprio, G. and Honohan, P. (1999). Restoring Banking Stability: Beyond Supervised Capital Requirements. *Journal of Economic Perspectives*, 13(4): 43-64. DOI: 10.1257/jep.13.4.43
- [7] Delis, M.D., Tran, K. and Tsionas, E. (2009). Quantifying and Explaining Parameter Heterogeneity in the Capital Regulation–Bank Risk Nexus, *Munich Personal RePEc Archive*, Paper No. 18526, November. Available at: <u>https://mpra.ub.uni-muenchen.de/18526/1/MPRApaper_18526.pdf</u> (accessed 15/09/2011)
- [8] Demirgüç-Kunt, A., Detragiache, E. and Merrouche, O. (2010). Bank Capital: Lessons from the Financial Crisis, International Monetary Fund, Working paper No. 10/286, December. Available at: <u>https://www.imf.org/</u> <u>external/pubs/ft/wp/2010/wp10286.pdf</u> (accessed 15/09/2011)
- [9] Fang, Y., Hasan, I. and Marton, K. (2014). Institutional Development and Bank Stability: Evidence from Transition Countries. *Journal of Banking and Finance*, 39: 160-176. DOI: 10.1016/j.jbankfin.2013.11.003
- [10] Fonseca, A.R. and González, F. (2010). How Bank Capital Buffers Vary Across Countries: The Influence of Cost of Deposits, Market Power and Bank Regulation. *Journal of Banking and Finance*, 34(4): 892-902. DOI: 10.1016/j.jbankfin.2009.09.020
- [11] Gropp, R. and Heider, F. (2009). The Determinants of Bank Capital Structure, European Central Bank, Working paper series, No. 1096, September. Available at: <u>https://www.ecb.europa.eu/pub/pdf/scpwps/</u> ecbwp1096.pdf?7e04a84aa874ed33ccc1cfee2a5a5ec3 (accessed 15/09/2011).
- [12] Hellmann, T.F., Murdock, K.C. and Stiglitz, J.E. (2000). Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough? *American Economic Review*, 90(1): 147 -165. DOI: 10.1257/aer.90.1.147
- [13] Jokipii, T. and Milne, A. (2008). The Cyclical Behaviour of European Bank Capital Buffers. Journal of Banking and Finance, 32(8): 1440-1451. DOI: 10.1016/j.jbankfin.2007.12.001
- [14] Kane, E.J. (1977). Good Intentions and Unintended Evil: The Case against Selective Credit Allocation. Journal of Money, Credit and Banking, 9(1/1): 55-69. DOI: 10.2307/1991999
- [15] Klomp, J. and de Haan, J. (2014). Bank Regulation, the Quality of Institutions, and Banking Risk in Emerging and Developing Countries: An Empirical Analysis. *Emerging Markets Finance and Trade*, 50(6): 19-40. DOI:10.1080/1540496X.2014.1013874
- [16] Kundid Novokmet, A. (2015). Cyclicality of Bank Capital Buffers in South-Eastern Europe: Endogenous and Exogenous Aspects. *Financial Theory and Practice*, 39(3): 139-169. DOI: 10.3326/fintp.39.2.2

- [17] Le Leslé, V. and Avramova, S. (2012). Revisiting Risk-Weighted Assets: Why Do RWAs Differ Across Countries and What Can Be Done About It? *International Monetary Fund*, Working paper No. 12/90, March. Available at: <u>https://www.imf.org/external/pubs/ft/wp/2012/wp1290.pdf</u> (accessed 14/02/2016)
- [18] Marinč, M., Mrak, M. and Rant, V. (2014). Dimensions of Bank Capital Regulation: A Cross-Country Analysis. *Panoeconomicus*, 61(4): 415-439. Available at: <u>http://www.doiserbia.nb.rs/img/doi/1452-595X/2014/1452-595X1404415M.pdf</u> (accessed 11/10/2015)
- [19] Mooi, E. and Sarstedt, M. (2011). A Concise Guide to Market Research: The Process, Data, and Methods Using IBM SPSS Statistics. Springer Berlin Heidelberg. DOI: 10.1007/978-3-642-12541-6
- [20] Morrison, A.D. and White, L. (2005). Crises and Capital Requirements in Banking. American Economic Review, 95(5): 1548-1572.DOI: 10.1257/000282805775014254
- [21] Moshirian, F. (2011). The Global Financial Crisis and the Evolution of Markets, Institutions and Regulation. *Journal of Banking and Finance*, 35(3): 502-511. DOI: 10.1016/j.jbankfin.2010.08.010
- [22] Nasreen, S. and Anwar, S. (2015). How Economic and Financial Integration Affects Financial Stability in South Asia: Evidence from Panel Cointegration Analysis. *Journal of Applied Economic Sciences*, 10(2/32): 207-222. Available at: <u>http://cesmaa.eu/journals/jaes/files/JAESspring%202(32).pdf#page=46</u> (accesed 27/02/2016)
- [23] Posner, E. (2014). How Do Bank Regulators Determine Capital Adequacy Requirements? *Coase-Sandor Institute for Law & Economics*, Working paper, No. 698, September. Available at: <u>http://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=2370&context=law_and_economics</u> (accessed 10/02/2016)
- [24] Ribakova, E. (2005). Liberalization, Prudential Supervision, and Capital Requirements: The Policy Trade-Offs, International Monetary Fund, Working paper, No. 05/136, July. Available at: <u>https://www.imf.org/external/pubs/ft/wp/2005/wp05136.pdf</u> (accessed 15/09/2011)
- [25] Valencia, F. (2010). Bank Capital and Uncertainty, International Monetary Fund, Working paper, No. 10/208, September. Available at: <u>https://www.imf.org/external/pubs/ft/wp/2010/wp10208.pdf</u> (accessed 15/09/2011)

Emerging Profiles of Indian Outward Foreign Direct Investments

Mahesh Chandra JOSHI Lovely Professional University, India <u>mcjahd@gmail.com</u>

Mukta KUKREJA Lovely Professional University, India <u>muktalpu58@gmail.com</u>

Abstract

Emerging economies are coming forward and contributing large share of FDI outflows in world's total FDI outflows. In the global economy, India has spring up as major recipient of FDI and also significant outward investors. Due to the strategic importance of Outward FDI Indian companies spreading their footprints by making Greenfield and brownfield investments across the globe. There is a need to study the status of emerging India in terms of OFDI country. In this paper attempt is made to analyze the FDI outflows from India. The study tries to explore trends of Outward FDI to exhibits the sector-wise and year-wise distribution of Indian direct investments abroad. The period of study covers the data from 1996 to 2014. Additionally, the study attempts to provide list of top foreign acquisition by Indian firms' industry-wise, sector-wise. From the results obtained, Singapore is the most preferred investment destination by Indian corporates followed by Mauritius, Netherland, USA and UAE. India is showing unprecedented growth in FDI outflows, there is a need of appropriate investment promotion efforts and home country government supporting terms of bargaining with host country government for implementation of projects should be given to boost the confidence of Indian companies.

Keyword: emerging economies, India, outward FDI, market- seeking, internationalization of firms, acquisition.

JEL Classification: D40, F23, F63.

Introduction

After gaining success in attracting bulk inward FDI emerging economies (EMEs) are increasingly becoming a major source of foreign direct investment in global scene. Through internationalization Indian multinational companies are building high profiles worldwide. The investment development path (IDP) framework explains the relationship of outward and inward FDI flows and the level of economic development of the country (Dunning 1981, UNCTAD 2001, Narula and Guimon 2010). Over the past years, India's economic growth is based on its export driven policy which mainly concentrated in searching new markets for exports of goods manufactures in India. Through in the beginning Indian Outward FDI had concentrated in developing nations as its host nations. Path of Indian FDI outflows have been continuously changing from developed nations to developing nations as a location for investments. Internationalization of Indian firms depends on the nature of the host region, according to which Indian companies implement their OFDI activities in target market. Due to the strategic importance of Outward FDI Indian companies spreading their footprints by making Greenfield and brownfield investments across the globe. There is emergence need for growing Indian economy to open up its door of restricted FDI policy and become a global player to create a competitive image across the world by acquiring reputed brands and setting up its own production facilities abroad.

Over the last two decades, increased globalization has played a strong role in upbringing FDI activity and Internationalization of firms. In the recent years, Internationalization of firms from emerging markets in the form of Outward Foreign Direct Investment has undergone a rapid change. This upsurge is the results of economic reforms initiated since 1991, which results in increasing openness of markets, growing interdependence and strengthening economic ties in the world economy. Outward FDI provides an opportunity to Indian investors to access the markets globally and it eases the process to target the major export markets. Path of Indian FDI outflows have been continuously changing from developed nations to developing nations as a location for investments. Mainly firms invest overseas either by opening wholly owned subsidiary or by acquiring renowned brands to gain strategic advantage.

Motivation behind Indian FDI outflows ranges from market-seeking, resource -seeking, efficiency-seeking and strategic-seeking. Eminent scholars are looking to the motivations of Indian companies their FDI decision-making process (Pradhan 2007, Kumar 2008, Duanmu 2009, Anwar and Mughal 2011, Baskaran and Chaarlas 2012). The most important type of OFDI is efficiency-seeking where firms set up their operations on the basis of

the locational advantages to access the cheap resources. By doing this, they can earn the benefits of economies of scale and incur less costs. Thus both the home country and host country can take the advantages of value addition in their business operations in terms of sales, foreign assets and employment. Home country firms also experiences through learning by networking their firms globally. Outward investment policy regime was liberalized since 1992.

The academic literature has shown that emerging nations are coming forward and contributing large chunk of OFDI investment in world total share of FDI outflows. But it has shown that there is mixed results related with the FDI as a substitute or complimentary to the home country exports. Indian government initiated FDI outflows in slow pace then it has gained momentum. Department of commerce is the nodal agency which has published information on overseas investment till 1993. After that Indian Investment Centre, under the department of Ministry of Commerce has been opened but in 2005 it was wounded up. Now at present RBI is the sole agency publishing information on outward direct investment remittances – wise. Reserve bank of India has changed overseas investment policy from time to time. Basically RBI provides different routes for Overseas Investment. The rest of the paper will unfold as follows. The following section presents various schemes of overseas investment from India. Section 3 deals selective review of literature on Outward FDI. Section 4 provides analysis of FDI outflows in financial year 2013-14. It also attempts to make analysis of FDI outflows from India from period 1996-2012 remittance – wise. Additionally, it also reveals the preferred destination of Indian OFDI and its sartorial composition. Section 5 exhibits the major foreign acquisitions by Indian firms. At the end study concludes with the major findings and research implications.

Conclusion and research implications

Emerging powers are becoming important in trade and development. In this context, the above analysis shows that India after gaining success in attracting massive inward foreign direct investment, India has also become a major source of Outward Foreign direct investment worldwide. The study has provided complete data on FDI outflows remittance-wise d. FDI outflows are presented in terms of financial commitment which involves equity, loans and guarantee issues. It can be observed that at sectorial level of Indian economy, investors are investing outside in manufacturing sector to seek cost advantage and to get access to cheap raw material for production purposes keeping in mind of growing needs of Indian population. On the other side, financial Insurance, Real Estate Business and Business services help in providing employment to host country population. So we can conclude that outward FDI is an instrument of economic ties which helps in establishing good relation between India and various host nations.

Big Indian corporates like Tata, Bharti's and Wipro are acquiring brands globally to seek strategic advantages. It also provides opportunity to small scale and medium sized Indian enterprises to expand their business operations and take India to the new heights of success. Indian government provides different routes for doing overseas investments on the basis of specified rules applicable on different schemes. Assistance must be given in terms of financial support, legal support, provide basic political and macroeconomic stability that offers ability to investors to make normal business decisions. Government should put appropriate investment promotion efforts which facilitates dissemination of information related with the investment site and service existing and potential investors. By this endeavor government would contribute in bringing up the investors' confidence. It also provides country to put an impression on the world wide level and set their competitive image globally.

The above analysis raises a natural question: that does the Indian economy benefit or cost from direct investment abroad by its firm. The answer to this question has two side, home country as well as host country both get benefits against cost incurred by them. Firstly, the benefits arise from three different sources. The foreign earning adds to the capital account of Balance of Payments. It also benefits India's current account if subsidiaries create demand of exports in host country are in demand. Similarly, more exports lead to more employment in source country. Hence production of capital equipment's, intermediate complementary goods rises. Home country firms by exposing themselves in foreign markets will learn some valuable effects and return back in home country and creates spillover effects. This amounts to resource transfer effect.

Many investor nations now have government support programs in terms of investment overseas services includes project development, insurance programs to cover major types of investment risk. Government must provide support to the companies by giving information on opportunity available in other developing and developed countries. They must provide overseas investment services to the domestic firms such as investment insurance, finance at reasonable rates which help in boosting their confidence. Appropriate investment promotion efforts and home country government support should be given to boost the confidence of Indian companies. Home country should invite projects from companies and after that home country government should bargain with the host country government in the implementation of the projects.

The day is not far India will be a frontrunner in world Outward FDI the global scene. Indian MNEs will continue to invest in companies of developed-country, particularly now that they are more affordable due to the global crisis.¹ In addition, Indian MNEs are seeking more strategic investments in emerging markets, particularly in Africa.² According to a recent report, India might be the largest source of emerging market MNEs by 2024, with 20% more new MNEs than China, and over 2,200 Indian firms are likely to invest overseas in the next fifteen years (Pricewaterhouse Coopers)

- [1] Ahn, S., Dongheon, L., Siwook, L. and Cheonsik, W. (2005). The economic impacts of out bound FDI and trade: the case of Korea, *OECD Workshop on the Globalization of Production: Impacts on Employment, Productivity and Economic Growth,* Paris. 2005.
- [2] Anwar, A., Mughal, M. (2013). The role of Indian Diaspora in attracting Indian Outward FDI. *International Journal of Social Economics*. 40(11): 944-955.
- [3] Baskaran, A.S., Charlas, L.J. (2012). A Study of FDI from India. *Zenith International Journal of Business Economics and Management Research*, 2(6): 49-60.

- [4] Buckley, P.J., Casson, M.C. (1998). Analysing foreign market entry strategies: Extending the internalization approach. *Journal of International Business Studies*, 29(3):539-561.
- [5] Buckley, P.J., Clegg, L.J., Cross, A.R., Liu, X., Voss, H. and Zheng, P. (2007). The Determinants of Chinese Outward Foreign Direct Investment. *Journal of International Business Studies*, 38: 499-518.
- [6] Catherine, F.S., Rashid, H.A. (2011). Macroeconomic and Country Specific Determinants of FDI. *The Business Review*, Cambridge, 18(1): 219-226.
- [7] Derman, S., Jakobsson, A. and Soler, L. (2008). A Quest for Repositioning: The Emerging Internationalization of Chinese Companies. Asian Business & Management, 7: 115-142.
- [8] Duanmu, J. and Guney, Y. (2009). A Panel Data Analysis of Locational determinant of Chinese and Indian Outward Investment. *Journal of Asian Business Studies*, 3(2):1-15.
- [9] Dunning, J. and Narula, R. 2003. Foreign direct investment and governments: catalysts for economic restructuring. Routledge.
- [10] Dunning, J.H. (1980). Towards an Eclectic Theory of International Production: Some Empirical Tests. *Journal of International Business Studies*, 11(1): 9-31.
- [11] Dunning, J.H. (1988). The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions. *Journal of International Business Studies*, 19(1):1-31.
- [12] Fratianni, M. and Oh, C.H. (2009). Expanding RTAs, trade flows, and the multinational enterprise. *Journal of International Business Studies*, 40(7): 1206-1227.
- [13] Goh, S.K. and Wong, K.N. (2011). Malaysia's outward FDI: The effects of market size and government policy. *Journal of Policy Modelling*, 33: 497–510.
- [14] Khan, H. R. (2012). Outward Indian FDI-recent trends & emerging issues. "Address by Shri HR Khan, Deputy Governor of the Reserve Bank of India, at the Bombay Chamber of Commerce & Industry, Mumbai.
- [15] Kokko, A. (2006). The home country effects of FDI in developed countries. No. 225. Working Paper.
- [16] Kumar, N. (2007). Emerging TNCs: trends, patterns and determinants of outward FDI byIndianenterprises. *Transnational Corporations*, 16(1): 1-16.
- [17] Kwon, Y. C. and Hu, M.Y. (1995). Comparative analysis of export-oriented and foreign production-oriented firms' foreign market entry decisions. *Management International Review*, 325-336.
- [18] Lu, J., Liu, X. and Wang, H. (2010). Motives for Outward FDI of Chinese Private Firms: Firm Resources, Industry Dynamics, and Home Government Policies. *Management and Organisational Review*, 2(2): 223– 248.
- [19] Nayyar, D. (2008). The Internationalization of Firms from India: Investment, Mergers, and Acquisitions. Oxford Developments Studies, 36(1): 111-31.
- [20] Pantelidis, P. and Kyrkilis, D. (2005). A cross country analysis of outward foreign direct investment patterns. International Journal of Social Economics, 32(6): 510-519.
- [21] Pradhan, J.P. (2007). Trends, Patterns of Overseas Acquisitions by Indian MNC's, *Working Paper no.* 2007/10, Institute for Studies in Industrial Development, New Delhi.
- [22] Pradhan, J.P. (2008). Indian multinationals in the world economy: Implications for development. Bookwell Publisher.
- [23] Pradhan, J.P. and Singh, N. (2009). Outward FDI and knowledge flows: a study of the Indian automotive sector. *International Journal of Institutions and Economies*, 1(1): 156-187.
- [24] Ramamurti, R. and Singh, J.V. (2009). Emerging multinationals in emerging markets. Cambridge University Press.
- [25] Reinda, L., Claver, E. and Quer, D. (2013). The Internationalization ofIndian multinationals: determinants of expansion through acquisitions. *Journal of the Asia Pacific Economy*, 18(1):115-132.

- [26] Sauvant, K. P. (2008). The rise of transnational corporations from emerging markets. Edward Elgar.
- [27] Sauvant, K.P. (2010). The rise of Indian multinationals: Perspectives on Indian outward foreign directinvestment. Palgrave Macmillan.
- [28] Urata, S. and Kawai, H. (2000). The determinants of the location of foreign direct investment byJapanese small and medium-sized enterprises. *Small Business Economics*, 15(2): 79-103.
- [29] Zahra, S.A., Korri, J.S., Yu (2005). Cognition and international entrepreneurship: implications for research on international opportunity recognition and exploitation. *International Business Review*, 14(2): 129-146.
- [30] Zucchella, A., Palamara, G. and Denicolai, S. (2007). The drivers of the early internationalization of the firm. *Journal of World Business*, 42: 268-280.
- *** Ministry of Finance. Infrastructure and investment decision. Routes of overseas investment. <u>http://finmin.nic.in/</u> <u>the ministry/dept eco affairs/icsection/Routes for overseas investment.asp</u>.
- *** Price Waterhouse Coopers. Emerging multinationals (2010). //www.pwc.fr/assets/files/pdf/2010/04/ pwc emerging_multinationals.pdf
- *** Virtus Global Partners (2010). US-bound Acquisitionsby Indian Companies, vol. 3.2 (New York, July 2010).
- *** www.unctad.org
- *** www.worldbank.org

The Housing Problem in the Light of Market Imperfections Theory

Olga GRUSHINA Baikal National University¹², Russia <u>olga7771972@mail.ru</u>

Gennady KHOMKALOV Baikal National University, Russia hgv@isea.ru

Whether it is really impossible that all should start in the world With a fair chance of leading a cultured life, Free from the pains of poverty and the stagnating influences of excessive mechanical toil... But the answer depends in a great measure upon facts and inferences, Which are within the province of economics? And this it is which gives to economic studies their chief and their highest interest. Alfred Marshall

Abstract:

The housing problem in Russia is discussed in terms of social-economical and ideological-political problems of the state. Modern trends in the development of economical science methodology and their impact on the solution of housing issue in Russia are analyzed. Market imperfections and their role in the acute problem of housing availability in post-reform Russia are considered. The challenges in housing supply and demand and its equilibrium price in Russia are studied. The socially-oriented approach to the solution of housing problem is proposed.

Keywords: economic policy, market imperfections, housing supply and demand, social-oriented economy.

JEL Classification: A 130, J110, R310.

Introduction

Together with public health and education, the housing availability represents a long-standing challenge for social and economic community. In Russian federation, this problem seems to be especially contradictory. On the one hand, the social factor is interwoven with economical one. From the other hand, quality of the housing reflects social and economical status of individual and is incorporated to the concept of social welfare. In our opinion, the housing is a vital need, without which population dooms to degrade and die out, especially in the countries like Russia, where the people simple cannot live in the open air.

¹² Lenin st., 11, Irkutsk, Russia 664003

A brief review of general theoretical issues of the current development of "economic mainstream" allows us to make the following conclusions concerning the scope of our research.

Today the numerous market "imperfections" represent, on the one hand, "abnormal" deviations from dry Valrasian equilibrium, and, on the other hand, the understanding of deep social injustice (for which capitalism was always criticized) and non-realization of the idea of public welfare growth. It gave an impetus to the development of so-called socially oriented market economy (neosmitthianism, neomarxism, social capitalism) and to fierce dispute concerning the need for the state intervention in economy. The combined effect of three main imperfections (labor market, goods market and credit market) has aggravated the social aspect of the housing problem in the Russian Federation that indicates the need for formation of the state investment policy in sphere of housing construction.

The market imperfections in the modern world can be circumvented by the creation of special structures, institutes. The institutionalism is all-encompassing and ideologically faceless. To be more exact, it is multifaceted. Various institutional structures can be supported by different ideologies, and hence can solve the same "imperfections" problems in diverse fashion.

The housing problem can be solved from a position of different ideological priorities. Consequently, institutional and organizational mechanisms of its solution will also be different. One of the priorities is integration of the Russian Federation into world financial and economic system meeting the requirements of the latter as fill as possible. In this case, the prices for housing are obeyed to the market laws. Indeed, the higher prices are profitable for the construction companies, who do not wish to increase the construction volumes and the housing may be acquired by direct purchase or mortgage. The mortgage is beneficial for owners of the capital, but for housing buyers, the price of 1 m² will be considerably raised. The person, who is unable to purchase an apartment or take out a mortgage, is ideologically condemned and is marginalized. For this purpose, diverse social clichés are used, just to mention a few: "he works a little", "he found a bad job", "he got the wrong profession" or "he has many children". Representatives of strategic professions, for example, military men, are supported by the state. The others have to be confined in narrow houses of the Soviet epoch. The main consequence of such priority commitment is underdevelopment or even degradation of the human capital of the state.

Other priority is a *socially oriented*. It is aimed at the strategic development of human potential of the state and growth of the people prosperity. From this position, the housing is necessary for man to the same degree as basic level of education or food demand. Only in this case, a man can perfect himself *pro bono publicum*, without being afraid (in the case of mistakes, temporary difficulties and crisis), to be tightened by mortgage throttlehold, and to raise a family, without being afraid of necessity of long living in the confined space. New institutional strategy, which still does not exist in the Russian Federation, should be developed for the implementation of this priority of housing.

The concept of "dependence on development path" explaining a state-of-the-art of the economic processes, which are defined by historically random choice at the "road fork", does not hold up against criticism. All key evolution choices are prepared and made absolutely consciously and purposefully. In this sense, the mathematical apparatus, and, in particular, a synergetic explanation of bifurcation points and choice of a certain evolution way, which is involved in the scope of a target attractor, is much closer to truth. Importantly, this process is always based not on causality, but on idea, worldview fractal as the main driving force of human activity.

What ideology dominates today in the field economic research? Does it come back from the bifurcation point to a route proposed by A. Marshall, who has said that the economic should contribute to the growth of public welfare? And one of the main indicators of the latter is the housing and its availability.

- [1] Alchian, A. (1977). *Economic Forces at Work*. A. Alchian. Indianapolis.
- [2] Ananyin, O. (2007). What happens with economic science? Higher school of economics, 2nd Edition, pp. 258–264.
- [3] Arrighi, G. (1994). The Long Twentieth Century: Money, Power and the Origins of Our Times. Versa.
- [4] Blanchard, O. (2000). What Do We Know about Macroeconomics that Fisher and Wicksell Did Not? *The Quarterly Journal of Economics*, 115(4): 1375 1409.

- [5] Bowles, S. and Gintis, H. (2000). Walrasian Economics in Retrospect. *The Quarterly Journal of Economics*, 115(4): 1411 1439.
- [6] David, A.P. (2007). Path dependence a foundational concept for historical social science. Stanford University and the University of Oxford, *forthcoming in Cliometrica*.
- [7] Durlauf, S. and Young, HP. (2001). *The new social economics*. In Durlauf S, Young HP (eds) Social Dynamics. MIT Press, Cambridge.
- [8] Hume, D. (1754). Essays: Moral, Political and Literary. D. Hume. L.: Longmans: Green, 1898.
- [9] Kostyuk, V.N. (2004). Non-stationary economic processes. V. N. Kostyuk. M. Editorial URSS.
- [10] Makasheva, N. (2007). Ecomonic science in Russia in transformation period. N. Makasheva. Sources: experience of economic studies as structure and process. O. I. Ananyina [*et al.*], Higher school of economics. 2nd ed. M., pp. 400–426.
- [11] Marshall, A. (1930). Principles of Economics, A. Marshall. 8th ed. L. Macmillan.
- [12] Mesitov, A. Real delay in mortgage payment in Russian Federation exceeds 90 billion rubles. A. Mesitov. URL: <u>http://www.interfax.ru/realty/realty/realty/inf.asp?id=109555&sec=1457</u> [Accessed 2015, April 15]
- [13] Nevinnaya, I. (2010). Waiting for mortgage. I. Nevinnaya. URL: <u>http://www.rg.ru/2010/03/04/ipoteka.html</u>. [Accessed 2015, April 15]
- [14] Polyakovsky, G. (1996). Housing economics. Ed. G. Polyakovsky. M.: Delo, 214 p.
- [15] Samuels, W. (1981). Ideology in economical analysis. W. Samuels. Modern Economic Thought; Ed. S. Weintraub. 667p.
- [16] Samuelson, P. (2002). Foundations of Economic Analysis. P. Samuelson. SPb. (in Russian).
- [17] Weingart, P. (2010). A moment of truth for science: Consequences of knowledge society for society and science, pp. 193-202. The concept of knowledge society in modern social theory. RAN INION. Ed. D.V. Efremenko – M.
- *** Housing construction in the USSR and Russia (1918–2007). URL: <u>http://muacre.livejournal.com/54014.html</u> [Accessed 2016, February 22]
- *** Mortgage arrears grow every day. <u>Кризис 2015-2016</u> / <u>Недвижимость</u>. URL: <u>http://www.krizis-2015.ru/rost-zadolzhennosti-po-ipoteke-uvelichivaetsya-s-kazhdym-dnem.html</u> [Accessed 2016, February 19]
- *** Russian statistical annual. (2007). Statistical annual. Rosstat; Housing construction in the Russian Federation in 2007. *Statistical bulletin*. 2008. 6 (146): 19 29.
- *** What impedes to mortgage in Russia? URL: <u>http://moezhile.ru/ipoteka/problemy.html</u>. [Accessed 2016, February 19]

Methodology of the Assessment Industrial and Raw Agglomerations of the North: Results of Application. Case Study Komi Republic

Arif Pirvelievich SHIHVERDIEV Syktyvkar State University named after P. Sorokin¹³, Republic of Komi, Russia <u>shikverdiev@yandex.ru</u> Natalya Alekseevna MIHALCHENKOVA Syktyvkar State University named after P. Sorokin, Republic of Komi, Russia Egorlvanovich EREMEYEV Syktyvkar State University named after P. Sorokin, Republic of Komi, Russia

Abstract:

The article analyzes the results of applying the methodology for assessing the impact of regional economic structures in the socio-economic development of the northern regions of Russia. This is determined by the need to improve the theoretical and methodological aspects of the assessment. The purpose of the study is testing a methodical approach to assessing the impact of industrial raw agglomerations of the northern region (the Republic of Komi). Implementation targets demanded formulation and solution of the following tasks: 1) approve the methodical approach to assessing the impact of industrial raw agglomerations on the socio-economic development of the northern region; 2) prove methodical approach to assessing the impact of assessing the impact of industrial raw agglomerations on the socio-economic development of the northern region.

Keywords: industrial and raw material agglomeration, territory development, impact assessment, socio-economic development.

JEL Classification: 014.

Introduction

The impact of regional economic structures in the socio-economic development of the northern region has been researched in the works of such scholars as E.A. Zakharchuk, V.S. Drums, I.V. Makarov, V.G. Loginov Y.U. Nesterenko, N.Y. Vlasov, S.Y. Yurpalov, V.A. Yatnov, A.F. Stepchildren, M.B. Petrov, A.G. Shelomentsev, O.V. Gubin, V.N. Lazhentsev, V.P. Lukanicheva, L.V.Chayka, as well as foreign researchers and practitioners within the designated works: M.E Porter, Ch Ketels., M. Delgado (Porter *et al.* 2007). Special attention is paid to the problems of the North. (Eremeyev 2015)

The object of the study is the northern region as organizational and economic space formation and development of industrial raw agglomerations. The subject of the study is organizational and economic relations in the process of formation and development of industrial raw agglomerations in the northern regions.

Basic research methods: systematic analysis, summary and grouping of data, comparison and analogy, generalization, project approach in the framework of study and practice of implementation of management decisions (Lazhentsev 2008).

¹³ Oktyabrsky Avenue, 55, Syktyvkar, 167000, Republic of Komi, Russia

To improve the system of organizational and economic mechanism of industrial raw material agglomeration in the northern regions, we bringing these rates in line with the mining capacity will reduce the impact of negative factors of the northern specifics of the socio-economic development of the northern regions (in particular, increased transport costs) and still use the potential territory most productively (to increase the depth of processing and added value), which will increase the effectiveness of PSA and efficiency. This area of the improvement scheme of organizational and economic mechanism of industrial raw material agglomeration in the northern regions may be most successfully implemented using the PPP model, given the potential inflow (return) of private capital into Russia.

- [1] Porter, M.E., Ketels, C., Delgado, M., Bryden, R. (2007). Competitiveness at the Crossroads. Choosing the Future Direction of the Russian Economy, Mimeo, 112 p.
- [2] Eremeyev, E.I., Shihverdiev, A.P., Shelomentsev, A.G., Belyaev, V.N. (2014). Methodology of the industrial raw agglomerations in the Northern regions. *Corporate management and innovative development of the North, Herald Scientifically Research Center of Corporate Law, Management and Venture Investment,* 3: 120-141. Available at: http://vestnik-ku.ru/articles/2014/3/9.pdf
- [3] Eremeyev, E.I. (2015). Theoretical and methodological aspects of the territorial agglomerations. *Basic Research: An Electronic Scientific Journal*. 2(2): 352-356. Available at: <u>http://rae.ru/pdf/2015/2-2/36816.pdf</u>
- [4] Donskoi, S.E, Shelomentse, A.G, Kozlova, O.A. (2006). *Evaluating the impact of development of mineral resources of Russian regions: Preprint*. Yekaterinburg: Institute of Economics of UB RAS, p.30.
- [5] Lazhentsev, V.N. (2008). Actual problems of the Russian North (theory and recommendations). Corporate management and innovative development of the North: Moskov. SIC Corporate. Right, Exercise and Venture. Investment Syktyvkar State University. Available at: <u>http://koet.syktsu.ru/vestnik/2008/2008-2/6/6.htm</u>
- [6] Lazhentsev, V.N. (1997). Economic and social problems of the North as a subject of research. North in the Russian economy. Proceedings scientific-practical. Conference, 7-8 October. Goskomsever RF KEPS at the Head of the Komi Republic, IEPS Komi Science Centre. Syktyvkar, 1998. pp. 41-47.
- [7] Lazhentsev, V.N. (2003). Experience of complex research problems of territorial development. Syktyvkar. pp.141, 192.
- [8] Lazhentsev, V.N. (2010). Social and economic problems of the North: the methodology and experience of integrated regional studies (scientific report). Available at: <u>http://www.iespn.komisc.ru/seminar2012/</u> materials/Book2012-1.pdf
- [9] Lazhentsev, V.N. (2012). North specificity of scientific research and regional policy (for example regions of resource type). *Economics Region*, 4: 17-27.
- [10] Lazhentsev, V.N. (2007). Theory and practice of spatial integration interregional interaction. Horizons of economic and cultural development: Proceedings of the Second Plenary Session of the North socio-ecological congress / hole. Ed. VA cherries. Moscow, Nauka, pp. 64-68.
- [11] Lazhentsev, V.N. (2010). Spatial development (examples of the North and the Arctic). *Proceedings of the Komi Science Center*, Ural RAN. Syktyvkar. 1: 97-104.
- [12] Razumovsky, V.M. (2010). Modern problems of regional studies. *Proceedings of the St. Petersburg State University of Economics*. 4: 125-130.
- [13] Shelomentsev, A.G, Ratner, A.V. (2012). Theoretical aspects of the formation of clusters for the development of mineral resource base. The economy of the region. Yekaterinburg: Institute of Economics, Ural Branch of the Russian Academy of Sciences, 1: 242-247.
- [14] Shelomentsev, A.G., Doroshenko, S.V. (2012). Innovative forms of poorly developed territories of Russia. Corporate management and innovative development of the economy of the North: Bulletin of the Research Center of corporate management and venture investment, Syktyvkar State University. Available at: http://vestnik-ku.ru/articles/2012/2/12.pdf

- [15] Shelomentsev, A.G., Belyaev, V.N., Doroshenko, S.V., Shvets, S.M. (2008). Economic mechanisms of environmental governance: concept, types, characteristics, Preprint. Yekaterinburg: Institute of Economics of UB RAS, p. 42.
- [16] Shelomentsev, A.G., Doroshenko, S.V., Belyaev, V.N., Ilinbaeva, E.A. (2012). Directions of perfection of economic mechanisms of environmental management. Herald of the Chelyabinsk State University. *Ekonomika.* 39: 66-72.
- [17] Tatarkin, A.I, Zakharchuk, E.A. (2007). The transformation of the financial sustainability of the territories in the implementation of the "Ural Industrial - Ural Polar". The region's economy. Yekaterinburg: Institute of Economics, Ural Branch of the Russian Academy of Sciences, 2: 37-48.
- [18] Shikhverdiyev, A.P., Mikhalchenkova, N.A., Oganezova, N.A., Tkachyov, S.A. (2015). Formation of national innovative system of social and economic development of the region. *Corporate management and innovative development of the North: Herald scientifically research center of corporate law, management and venture investment. Syktyvkar State University.* 2: 93-119. Available at: http://vestnik-ku.ru/articles/2014/3/9.pdf.
- *** Problems of the North. (2005). Scientific Council for Regional Development; ISEiEPS Komi Science Centre; IEP Kola Scientific Center RAS. Moscow-Syktyvkar-Apatity of KSC RAS, P. 55-57, 32-35, 83.
- *** Problems of sustainable use of transboundary areas: Materials of the International Conference. (2006). Ed. PY Baklanov, SS Ganzeya. Vladivostok.

artoumashev@mail.ru

Economic Growth in the Conditions of Resource Constraints: Ordinal Approach to Optimization of Macroeconomic Production Structure

Pavel Aleksandrovicv BATAYKIN Chuvash State University named after I.N. Ulyanov¹⁴, Russia <u>vestnik eps@mail.ru</u> Asya Shamilevna KHASANOVA Kazan National Research Technical University named after A.N. Tupolev – KAI¹⁵, Russia <u>khasanovaas@mail.ru</u> Valeriy Vladimirovich SHLYCHKOV Kazan National Research Technical University named after A.N. Tupolev – KAI, Russia <u>shlichkov valery@mail.ru</u> Aidar Ravilevich TOUMASHEV Kazan National Research Technical University named after A.N. Tupolev – KAI, Russia <u>artoumashev@mail.ru</u> Marina Viktorovna TOUMASHEVA Kazan National Research Technical University named after A.N. Tupolev – KAI, Russia

Abstract

This article approaches the problems of economic growth and development in the conditions of limitation and nonreproducibility of part of the natural resources that determine the limits of extensive growth. An ordinal approach employed in microeconomic theory in the interpretation of the rational production was used to justify the criterion of optimization of the production structure at the macro level of the economic system and to determine the conditions under which the maximum possible rates of balanced economic development within existing resource constraints are achieved. An analysis of the proposed model reveals the feasibility of the threats associated with the possible ecological and economic collapse in the conditions of the extensive economic growth. At the same time, it confirms the possibility to avoid negative scenarios of development related to the reduction of stocks of non-reproducible natural resources and weakening of the recreational opportunities of the ecological system. The conclusion was justified that the conditions for sustainable development are balanced economic growth, optimization of the macroeconomic structure of production, large-scale investment in the development and implementation of "closing" technologies that reduce demand for energy and raw materials while maintaining and expanding the production capacity of the economic system, as well as the formation of an effective innovation system that ensures implementation of scientific achievements and new technical and technological solutions in the production process.

Keywords: economic growth, sustainable development, rational production choice.

JEL Classification: O14, R19, L69.

Introduction

Mankind has felt the absolute lack of the necessities in life for a long time, and even after getting the advanced technology able to meet the basic necessities of life and to ensure acceptable living standards for the majority, it continues to see a higher meaning of industrial activity and the initial source of demand in the increasing private consumption. The economic growth is in most cases considered to be a condition for the population welfare gain and satisfaction of its growing needs. (Jones 2002)

Most economists reasonably believe that economic growth, understood as the increase in the gross domestic product, leads to the accumulation of wealth, expands the potential possibilities of the national states in addressing poverty and in solving other social problems, and considers the high rate of economic growth as one of the most important guidelines of the economic policy. Due to this, the task of ensuring the conditions for sustainable growth and overcoming the threats posed by the resource constraints is in the focus of scientists from neo-Keynesian and neoclassical schools of thought, exogenous and endogenous growth theories (Solow 1988, 2000, 2004, Kaldor 1961, Harrod 1966, Hansen 2012, Tietenberg 2005, 2006, Romer and Nelson 1996, Witt 2001, Ruttan 2001).

¹⁴ Cheboksary, Moskovsky Avenue, 15, 428015

¹⁵ 10, Karl Marks Street, Kazan, 420111

The theory of economic growth in the context of resource constraints in Russia has been developing almost independently within the framework of solving the common challenges faced by humanity. It was originally developed by the scientists who are better known in the world as representatives of the natural sciences – biogeochemistry and mineralogy, population genetics and geography (Toumashev and Toumasheva 2015).

Many researchers, starting from J. Schumpeter (Schumpeter 1982), maintain a positive view on the opportunities offered by economic growth and differentiate economic growth and economic development, giving preference to the latter. Schumpeter defined the economic growth as the quantitative increase in the goods and services produced and consumed in the economy regardless of the qualitative change in the structure of the public product and the existing system of technological ties.

Modern system analysis assumes that the development shall objectively include the multiple reproduction of a certain object; deviations in the newly created objects from the previous samples that arise in reproduction; unequal preservation of various deviations, selective choice of the most successful of them in terms of optimizing the trajectory of economic development and improving the functioning of the system. According to this criterion, J. Schumpeter defined the economic development as the accumulation of positive qualitative changes that act as a result of implementation of progressive changes in engineering, technology and organization of production and emergence of new types of products and services that better meet the needs of society.

The parameters of the volumes of national production achieved by individual countries currently serve as the main indicator of the level of their development and production and technical strength. In some cases, these indicators are absolutized; the performance of the national economy at the macro level is assessed without taking into account the real content of GDP and the equation of its branch structure. It is expected that the economic growth expressed in the GDP growth expands the resource capacities of the society and allows to increase the production of final consumption goods in any case. This theoretical position has been used in practice in the course of economic reforms in the post-Soviet space.

The existence of an alternative point of view cannot go unnoticed (Forrester 1971, Meadows *et al.* 2004, Mesarovic and Pestel 1974, Brown 2011). Several researchers of resource and environmental problems caused by the expansion of the production scale of human activity and increase in the world population consider the economic growth as a real threat to the existence of civilization (Rees *et al.* 1998, Auty 2001). On their opinion, the uncontrolled economic growth can result in the systemic collapse associated with the depletion of natural resources on the planet. The very posing of the question about the instability of the dynamics of development of national economies and the world civilization as a whole was first set out in the report to the Club of Rome titled "The Limits to Growth" (Meadows *et al.* 1974), which reveals the results of a study of immediate and long-term consequences of strategic decisions related to the development paths chosen by the mankind. The report's findings were based on an analysis of statistical data on the basis of a systemic approach with the use of mathematical modeling techniques. The report rationalizes the position that the threat to the stability of the functioning and development of the world civilization originates from the exhaustion of the growth resources. According to its authors, the world population should have doubled every 33 years with an annual growth of 2.1%.

Despite the fact that the real population growth rate appeared significantly lower than projected and the world's population grew at a slower rate (it increased by 1.7% in 1982), it does not eliminate the severity of the problem. The world's population exceeded 7 bln by 2013. According to D. Meadows and his co-authors, the statistically stated population growth comes into conflict with the biological productivity of the Earth, which objectively leads to a shortage of food and raw materials. Dennis Meadows confirmed his commitment to his theoretical position in 2012 during a visit to Moscow, saying: "Russia is also making efforts to become more economically and technologically efficient. But it must be clearly understood that the more effectively you move in one direction or another, the lower the potential survival rate of such a system will be" (Meadows 2012). The fact that the existing mechanism of development in the environmentally-filled niche occupied by the mankind is imperfect was highlighted in further reports to the Club of Rome, prepared by Jan Tinbergen, Ragnar Frisch (Vane and Mulhearn 2010, 2011), Ervin Laszlo (Laszlo, Ervin 1994), and Report to the World Bank written by a group of economists and ecologists led by Goodland, Daly and El Serafy in 1991. (Goodland *et al.* 1991)

The founder and leader of the movement "New Right" in France, Alain de Benoist (Benoist 2007), sharply criticized the dominant model of the consumer society that leads to the destruction of nature. He formulates a program of anti-growth movement and the ecological economy based on ideas of reducing the excessive production and consumption. His criticism and normative judgments are largely based on moral and ethical arguments and may have additional rationale of the suggested measures to ensure the development sustainability.

Considering the problem of the natural constraints of economic growth, one cannot ignore the concepts of a sustainable state of the economy of the economic and ecological nature, which criticized the neoclassical growth theories. It primarily relates to concerns to the works of one of the founders of the International Society for Ecological Economics, Herman Edward Daly (Daly 2007). Considering the growth constraints as a means of solving environmental problems, he introduced the concept of the economy in a sustainable state, the initial resource (physical) components of which are limited and do not change over time. The main parameters of this economy are population, real GDP, level of energy and other material resources consumption, which, in his opinion, should be maintained at a level not higher than the carrying capacity of the ecological system in which it operates. In some cases, the need to reduce production is suggested in order to achieve the desired state to the extent not exceeding ecological requirements. (Jackson 2009)

Even if the increase in private consumption is considered as a goal of production and economic development is considered as the main way to achieve it, a problem of allocating resources between unproductive consumption and investment persists. Options for possible solutions are illustrated by the production capacity curve, within which the choice is made between current consumption (goods for the present) and real investments (goods for the future).

At first glance, the dilemma lies in the fact that the growth in consumption increases the current level of life, while reducing the rate of economic development and an increase in welfare of the population in the future. Obviousness of this interpretation is convincing but cannot be considered the proof of its full validity. For example, if the amount of current consumption is reduced to zero, thus bringing the savings ratio (savings and investment) in GDP up to 100%, the economic growth won't accelerate but stop, as the necessary conditions for reproduction of the labor factor will be eliminated. The problem of the growth acceleration is not always solved by increasing the savings share – it is a special, though the most common, case. The optimization of allocating resources between savings and consumption is the condition for high rates of sustainable development. (Shlychkov and Nestulaeva 2015)

Introduction of the assumption about the possibility of intensive development of the labor force not limiting the reproduction with its population to the theory of growth is a significant achievement of the authors of the endogenous theory of growth (Romer 1986 or Lucas 1988). Improving living conditions –quality of food, health services, and in particular the general and vocational training – becomes the element of the expanded reproduction of resources in this context, and expenditure for this purposes act as investment in human capital. As a result, in the face of rapid technological development, even with constant population with an increase in investment and the accumulation of capital, a situation may emerge described by not decreasing but constant capital returns. In a simple model of endogenous growth $Y = A \cdot K$, which establishes the dependence of the production volume Y on the total capital K, the marginal productivity of capital, unlike R. Solow's model, is not a decreasing variable but a constant, parameter A describing the nature of this dependence is not changed depending on the amount of capital employed. Given the prediction of emergence of a new generation of more efficient technology, the appearance of the phenomenon of its increasing return, provided that workforce quality improves, can be theoretically assumed. With this approach, the population growth and increasing its qualifications and vocational skills should be considered as an increase in resource potential rather than just the emergence of new customers applying for additional share of the "public pie". (Shlychkov, Vedin, Khasanova 2015)

Conclusion

The proposed model indicates the objective possibility of a situation in which the use of the resource-saving (closing) technologies may prevent ecological and economic collapse and ensure the preservation of the sustainable and balanced economic development, as well as the realization of such a production function as the development and perfection of human nature, the formation of a more advanced, creative and functionally effective population. Intensive economic development will require not so much population growth as the growth of its quality.

Constraints of growth in such a system are limited mainly not by deficiency of natural resources, but by the lack of scientific and technical knowledge, level of development of methods and technology and qualification of the workforce. In order to ensure sustainable development in this scenario, it is necessary to maintain a heavy share of spending on fundamental and applied research, general and vocational education in the structure of gross product and the availability of an effective innovation system that can form the conditions of transformation of scientific knowledge into energy saving technologies. The problems of structural unemployment, which objectively emerge in the market system along with its technical and technological development, involve anticipating structural changes in the field of vocational training.

References

- [1] Roy, A., Douglas, G. R. G. D. (1964). *Mathematical Economics* (Studies in Statistics and Scientific Method, No. 3, Second edition). Macmillan, St. Martin's Press.
- [2] Auty, R.M. (2001). *Resource Abundance and Economic Development* (WIDER Studies in Development Economics, 1 Edition). Oxford University Press, pp: 360.
- [3] Benoist, A. (2007). Demain, la décroissance! Penser l'écologie jusqu'au bout. Edite, pp: 199.
- [4] Brown, L.R. (2011). World on the Edge: How to Prevent Environmental and Economic Collapse. Lester Russel Brown. W.W. Norton && Company, pp: 223.
- [5] Buchanan, J.M. (1959). Positive Economics, Welfare Economics, and Political Economy. *Journal of Law and Economics*, 2: 124-38.
- [6] Daly, H. (2007). *Ecological Economics and Sustainable Development: Selected Essays of Herman Daly*. Cheltenham, UK: Edward Elgar Publishing, pp: 270.
- [7] Edgeworth, F.Y. (2012). Mathematical Psychics an Essay on the Application of Mathematics to the Moral Sciences (Classic Reprint). London (UK): Forgotten Books, pp: 156.
- [8] Feldstein, M.S. (Editor) (1987). *The Effects of Taxation on Capital Accumulation* (National Bureau of Economic Research Monographs). University of Chicago Press, pp: 480.
- [9] Forrester, J.W. (1971). World Dynamic. Cambridge, pp: 144.
- [10] Goodland, R., Daly, S. and Serafy, S.El. (1991). *Environmentally Sustainable Economic Development: Building on Brundtland,* World Bank Environment Working Paper, 46(July). Washington DC: World Bank.
- [11] Harrod, R. (1966). Towards a Dynamic Economics: Some Recent Developments of Economic Theory and Their Application to Policy. Leningrad: Macmillan; Later ptg. of the 1948 edition.
- [12] Hansen, A.H. (2012). Monetary Theory and Fiscal Policy. Literary Licensing, LLC, June 30: 246.
- [13] Hicks, J.R. Sir (1980). Causality in Economics. Basic Books; First Edition edition, pp: 124.
- [14] Jackson, T. (2009). *Prosperity without growth? The transition to a sustainable economy*. Published by the Sustainable Development Commission, March: 132.
- [15] Jones, Ch.I. (2002). Introduction to Economic Growth. 2nd Edition, New York, NY: W.W. Norton & Co., pp: 256.
- [16] Kaldor, N. (1961). Capital Accumulation and Economic Growth. Eds., Lutz, F. and D. Hague. The Theory of Economic Growth. N.Y.: St. Martin's Press, pp: 177-222.
- [17] Keynes, J.M. (2011). *The General Theory of Employment, Interest, and Money*. Create Space Independent Publishing Platform, November 15: 168.

- [18] Laffer, A.B. and Moore, S. (2014). An Inquiry into the Nature and Causes of the Wealth of States: How Taxes, Energy, and Worker Freedom Change Everything. Wiley; 1st Edition, pp: 368.
- [19] Laszlo, E. (1994). The choice: evolution or extinction? New York, NY: J.P. Tarcher/Putnam, pp: 315.
- [20] Lucas, R. (1988). On the Mechanics of Economic Development. Journal of Monetary Economics, 22: 3-42.
- [21] Meadows, D.L. (2012). The world system is far beyond the limits growth. Date Views: 28.03.2016. http://ecoreporter.ru/node/778.
- [22] Meadows, D.H., Rander, J. and Meadows, D.L. (2004). Limits to Growth: The 30-Year Update. Chelsea Green Publishing, 3rd Edition, pp: 338.
- [23] Meadows, D.H., Meadows, D.L., Randers, J. and Behrens, W.W. (1974). The Limits to Grow A Report for the Club of Rome's Project on the Predicament of Mankind. New York, pp: 338.
- [24] Mesarovic, M. and Pestel, E. (1974). Mankind at the Turning Point. New York: Dutton, pp: 210.
- [25] Pareto, V. (2014). Manual of Political Economy: A Critical and Variorum Edition. Oxford: Oxford University Press; 1st Edition (June 3): 720.
- [26] Rees, W.E., Wackernagel M. and Testemale, Ph. (1998). Our Ecological Footprint: Reducing Human Impact on the Earth (New Catalyst Bioregional Series). New Society Publishers, pp: 160.
- [27] Romer, P.M. (1986). Increasing Returns and Long-run Growth. Journal of Political Economy, 94(5): 1002-1037.
- [28] Romer, P.M. and Nelson, R.R. (1996). Science, Economic Growth, and Public Policy. Technology, R&D, and the Economy. Eds., Smith, B.L.R. and C.E. Barfield. Washington: Brookings Institution and American Enterprise Institute. Reprinted in Challenge, March-April: 9-21.
- [29] Ruttan, V. (2001). Technology, Growth, and Development. New York: NY: Oxford University Press.
- [30] Selke, S., Auras, R., Nguyen, T.A., Aguirre, E.C., Cheruvathur, R. and Liu, Y. (2015). Evaluation of Biodegradation-Promoting Additives for Plastics. Biosystems and Agricultural Engineering, Michigan State University, US. *Environmental Science and Technology*, 49(6): 3769–3777.
- [31] Schumpeter, J.A. (1982). The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle (Social Science Classics Series). Transaction Publishers (January 1). New Brunswick (USA) and London (UK), pp: 244.
- [32] Solow, R.M. (2000). Growth Theory. Oxford: Oxford University Press: An Exposition, 2nd Edition, pp: 220.
- [33] Solow, R.M. (1988). Growth Theory and After. *American Economic Review, American Economic Association*, 78(3): 307-317.
- [34] Solow, R.M. (2004). *Structural Reform and Macroeconomic Policy* (International Economic Association Series). Palgrave Macmillan, pp: 170.
- [35] Shlychkov, V.V., Vedin, N.V. and Khasanova, A.Sh. (2015). A Quarter Century of Reform of the Russian Economy: Is it Wandering in a Maze or Jogging in Place? *Indian Journal of Science and Technology*, 8(S10): 1-11. DOI: 10.17485/ijst/2015/v8iS10/84883
- [36] Shlychkov, V. and Nestulaeva, D. (2015). Economic science and evolution of economic agents' expectations formation process. Asian Social Science, 11(19): 82-89. DOI:10.5539/ass.v11n19p82
- [37] Tietenberg, T. (2005). Environmental and Natural Resource Economics. New York: Harper Collins, 7th Edition, pp. 482.
- [38] Tietenberg, T.H. (2006). Innovation in Environmental Policy, Economic and Legal Aspects of Recent Developments in Environmental Enforcement and Liability. Aldershot, Brookfield: Edward Elgar, pp: 269.
- [39] Toumashev, A.R. and Toumasheva, M.V. (2015). The problem of the limits to growth: the Russian traditions of scientific research. The 4th International Congress on Interdisciplinary Behavior and Social Science 2015 (ICIBSoS 2015), Kazan, Russia: Kazan Federal University, pp: 35-38.

- [40] Vane, H.R. and Mulhearn, C. (Eds.) (2010). Simon S. Kuznets, Theodore W. Schultz, W. Arthur Lewis and Robert M. Solow (The Pioneering Papers of the Nobel Memorial Laureates in Economics). Edward Elgar Pub, pp: 451.
- [41] Vane, H. and Mulhearn, C. (2011). Ragnar A.K. Frisch, Jan Tinbergen and Lawrence R. Klein (Pioneering Papers of the Nobel Memorial Laureates in Economics Series) Edward Elgar Pub, pp: 432.
- [42] Veblen, Th. (2008). The Theory of the Leisure Class. BiblioLife, pp: 308.
- [43] Veblen, Th. (2006). Conspicuous Consumption (Penguin Great Ideas). Penguin Books, pp: 112.
- [44] Witt, U. (2001). Economic Growth What Happens on the Demand Side? Introduction. *Journal of Evolutionary Economics*, 11: 2–18.

Corporate Governance, a Shield of Bankruptcy

Wannuda PETPAIROTE Faculty of Management Science, Khon Kaen University, Thailand <u>theee_nf@hotmail.com</u> Nongnit CHANCHARAT Faculty of Management Science, Khon Kaen University, Thailand <u>mnongn@kku.ac.th</u>

Abstract

The primary aim of the paper is to review previous literature with respect to corporate governance, bankruptcy prediction in various ways and the importance of the variables used in predicting bankruptcy. The paper attempts to conduct a literature review, to analyze and synthesize the data from previous studies illustrating the variables used to predict bankruptcy or survival of the business in many developed countries in a group of developed countries such as Italy, the United States, Australia, New Zealand, Spain and France as well as those in a group of developing countries such as China, Malaysia and Thailand. The literature review could gather structural variables of corporate governance. Obviously, the relevant studies reviewed used both quantitative and qualitative research methodologies such as multiple regression, the pooled ordinary least squares, Altman's z-score, t-test, ordinary least squares regression, survival analysis, cox proportional hazard technique, questionnaires (Likert scale), probit regression, generalized least square, McKinsey approach and competing-risks model and so on; and also they have used various variables indicating the corporate governance of the company, leading to the business survival. This research is a beginning point of taking the variables gathered from such literature review in quantitative modeling of study.

Keywords: Corporate governance, bankruptcy, company survival.

JEL Classification: G34.

Introduction

The good corporate governance for listed companies in the year 2012 was the implementation of 15 corporate governance practices in accordance with the Stock Exchange announcement in 2006, equivalent to corporate governance of the Organization for Economic Co-operation and Development (OECD 2004), that is the prototype of the laws and practices of corporate governance of the government and World Stock Exchanges, consisting of principles and good practices divided into 5 categories.

The concept of corporate governance is simply defined as "corporate governance is the relationship between many parties involving making a decision in the aspects of performance and direction of the company". There are three major parties including the board, chief executives of the company and shareholders. The board controls the executives in determining the company direction such as creation of enterprise value and also the major shareholders can appoint a committee (Monks and Minow 2008). The structure of the corporate governance composed of three main groups: shareholders, board of directors and chief executives who play an important role in involving lower-potion persons in other groups such as stakeholders, audit committee and independent board.

Based on literary review, it is found that all these factors affect the bankruptcy of a company listed on the Stock Exchange of Thailand.

Conclusion

This paper has conducted a literature review and synthesized the structural variables of corporate governance related to firm performance in order to create the model used to predict survival or failure of the business. It also has collected the samples in many countries such as China, Italy, the United States, Malaysia, Australia, New Zealand, Spain, France and Thailand, and a variety of both quantitative and qualitative statistical studies such as analytical methodologies of multiple regression, the pooled, ordinary least squares, Altman's z-score, the interest coverage ratio (ICR), t-test, ordinary least squares regression, survival analysis, cox proportional hazard technique, questionnaires (Likert scale), probit regression, generalized least square, McKinsey approach and competing-risks model and etc.

According to the literature review, it was found that each research used similar variables such as board size; positions combination of Chairman and CEO; and shareholders' concentration etc. Based on agency theory, there are important people including the audit committee and independent board involved in monitoring the management and power balance to avoid conflicts of interests. However, it is to be noted here that there is no previous research investigating in this following contexts such as a relationship between the proportion of female board and firm performance. This is a new studied context in Thailand. In the year 2009, the female board caused a variety of ideas, consistent with the improvement of corporate governance for listed companies.

Consequently, there is a study of these variables for creating a better model to predict the survival of business. The research methods of the past studies such as those of Xie *et al.* (2003), Chiang and Chia (2005), Minguez-Veraand Lopez- Martinez (2010), Hu, Tam and Tan (2010) and Chitnomrath *et al.* (2011) were the long term studies, which may give inaccurate results because when the businesses were experiencing financial failure or were closed down, the samples studied would have incomplete information used as predictive information. While there will be the survival analysis of the business with Cox proportional hazard technique, such samples can be used to study perfectly.

The only limitation of this study included a reviewof thevariables governancestructurewhich is non-financial variable, and a lack of the literature review relating to the financial variables such as Profitability Ratios, Liquidity Ratios, Activity Ratios and Leverage Ratios as the financial variables can be used to explain the relationship between corporate governance and bankruptcy. If there is a study of bothvariables, this researchwill be more complete and will indicate the more complete information. (Hensher, Jones and Green 2007)

Acknowledgements

We would like to thank KKU-Integrated Multidisciplinary Research Cluster, National Research University Project of Khon Kaen University (MIE-2554-Ph.D-03) and the Faculty of Management Science, Khon Kaen University, for the research funding.

References

- Abdullah, S.N. (2006). Board structure and ownership in Malaysia: The case of distressed listed companies. Corporate Governance, 6(5): 582-594. DOI: <u>http://dx.doi.org/10.1108/14720700610706072</u>
- [2] Adams, R.B. and Ferreira, D. (2007). A theory of friendly boards. *Journal of Finance*, 62(1): 217-250.
- [3] Adams, R.B. and Mehran, H. (2011). Corporate performance, board structure and their determinants in the banking industry. Federal Reserve Bank of New York Staff Report, no. 330.
- [4] Al- Ajmi, J. (2009). Audit firm, corporate governance, and audit quality: Evidence from Bahrain. Advances in Accounting, incorporating Advances in International Accounting, 25(1): 64-74. DOI: http://dx.doi.org/10.1016/ j.adiac.2009.02.005
- [5] Apadore, K., and Zainol, S.S.B. (2014). Determinants of corporate governance and corporate performance among consumer product industry in Malaysia: A theoretical model. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(2): 159-165. DOI: http://dx.doi.org/10.6007/IJARAFMS/v4-i2/836
- [6] Arthur, N., Garvey, G., Swan, P. and Taylor, S. (1993). Agency theory and management research: A comment. *Australian Journal of Management*, 18(1): 93-102. DOI: http://dx.doi.org/10.1177/031289629101 600103

- [7] Azmi, I.A.G. and Barrett, M.A. (2013). Women on boards and company financial performance: A study of Malaysian SMEs. Paper presented at the Proceedings of 3rd Global Accounting: Finance and economics conference.
- [8] Beasley, M.S., and Salterio, S.E. (2001). The relationship between board characteristics and voluntary improvements in audit committee composition and experience. *Contemporary Accounting Research*, 18(4): 539-570. DOI <u>http://dx.doi.org/10.1506/RM1J-A0YM-3VMV-TAMV</u>
- [9] Beiner, S., Drobetz, W., Schmid, M.M. and Zimmermann, H. (2004). Is board size an independent corporate governance mechanism? *International Review for Social Sciences*, 57(3): 327-356.
- [10] Bonazzi, L., and Islam, S.M.M. (2007). Agency Theory and Corporate Governance: A Study of the Effectiveness of Board in their Monitoring of the CEO. *Journal of Modeling in Management*, 2(1): 7-23.
- [11] Brown, P., Beekes, W. and Verhoeven, P. (2011). Corporate governance, accounting and finance: A review. *Accounting and Finance*, 51: 96-172.
- [12] Bull, I. (2001). Inheritance in family business the "long" merchant family problems concerning generation change The social science history association 2001 annual meeting. (pp. 193-210). Chicago.
- [13] Bupakarakul, S. (2008). The relationship between corporate governance and performance of companies listed on the stock exchange of Thailand. Chaing Mai University.
- [14] Chancharat, N., Chandrasekjar, K. and Gary, T. (2012). Board structure and survival of new economy IPO firms. Corporate Governance: An International Review, 20(2): 144-163.
- [15] Chiang, H.T. and Chia, F. (2005). An empirical study of corporate governance and corporate performance. *Journal of American*, 6(1): 95-101.
- [16] Chitnomrath, C., Robert, E. and Theo, C. (2011). Corporate governance and post-bankruptcy reorganization performance evidence from Thailand. Asian Review of Accounting, 19(1): 50-67. DOI <u>http://dx.doi.org/10.</u> <u>1108/13217341111130551</u>
- [17] Coleman, A.K. (2007). Corporate governance and shareholder value maximization: An African perspective. African Development Review, 19(2): 350-367. DOI <u>http://dx.doi.org/10.1111/j.146782 68.2007.00165.x</u>
- [18] Coles, L.J., Naveen, D.D. (2008). Boards: Does one size fit all? Journal of Financial Economics, 87: 329-356.
- [19] Daily, C.M. and Dalton, D.R. (1994). Bankruptcy and corporate governance: the impact of board composition and structure. Academy of Management Journal, 37: 1603-1617.
- [20] Dwyera, S., Richard, O. and Chadwick, K. (2003). Gender diversity in management and firm performance: The influence of growth orientation and organizational culture. *Journal of Business Research*, 56: 1009–1019.
- [21] Eyenubo, A.S. (2013). The impact of bigger board size on financial performance for firms: The Nigerian experience. *Journal of Research in International Business and Management*, 3(3): 85-90.
- [22] Fich, E.M. and Stezak, S.L. (2008). Can corporate governance save distressed firms from bankruptcy? An empirical analysis. *Review of Quantitative Finance and Accounting*, 30(2): 225-251. DOI: http://dx.doi.org/ 10.1007/s11156-007-0048-5
- [23] George, T.P. and Karibo, B.B. (2014). Corporate governance mechanisms and financial performance of listed firms in Nigeria: A content analysis. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, 1(2): 103-128.
- [24] Goktan, M.S., Kieschnick, R. and Moussawi, R. (2006). Corporate governance and corporate survival. Working paper, University of Texas at Dallas.
- [25] Graham, J.R., Hazarika, S. and Narasimhan, K. (2011). Corporate governance, debt and investment policy during the great depression. *Management Science, forthcoming.*
- [26] Haniffa, R. and Hudaib, M. (2006). Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance and Accounting*, 33(7): 1034-1062. DOI: http://dx.doi.org/10.1111/ j.1468-5957.2006.00594.x

- [27] Hensher, D.A., Jones, S. and Greene, W.H. (2007). An error component logit analysis of corporate bankruptcy and insolvency risk in Australia. *Economic Record*, 83(260): 86-103. DOI: http://dx.doi.org/ 10.1111/j.1475-4932.2007.00378.x
- [28] Hermalin, B.E. and Weisbach, M.S. (2000). *Boards of directors as an endogenously determined*. Retrieved September, 9, 2011 from http://www.faculty.haas.berkeley.edu/hermalin/601herma.pdf
- [29] Hermalin, B. and Weisbach, M. (2003). Boards of directors as an endogenously determined institution: a survey of the economic literature. *Economic Policy Review*, 9: 7-26.
- [30] Ho, S.S.M. and Wong, K.S. (2001). A study of the relationship between corporate governance structure and the extent of voluntary disclosure. *Journal of International Accounting, Auditing and Taxation*, 10(2): 139-156. DOI: http://dx.doi.org/10.1016/S1061-9518(01)00041-6
- [31] Hu, W.H., Tam, K.O. and Tan, G.M. (2010). Internal governance mechanisms and firm performance in China. *Asia Pacific Journal Management*, 27(4): 727-749.
- [32] Hui, H. and Jing-Jing, Z. (2008). Relationship between corporate governance and financial distress: An empirical study of distressed companies in China. *International Journal of Management*, 25(4): 654-664.
- [33] Hutchinson, M. and Gul, F. (2004). Investment opportunity set, corporate governance practices and firm performance. *Journal of Corporate Finance*, 10(1): 595-614. DOI: <u>http://dx.doi.org/10.1016/S0929-1199(03)00022-1</u>
- [34] Intekhan, P. and Ussahawanitchakit, P. (2009). Earnings Management in Thailand: Effects on Financial Reporting Reliability, Stakeholder acceptance and Corporate Transparency. *Journal of International Finance and Economic*, 9(3): 1-23.
- [35] Jensen, M.C. and Meckling, W.H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs, and Capital Structure. *Journal of Financial Economics*, 3: 305-360.
- [36] Jiamsakul, S. (2007). The performance effects of transparency and disclosure, and board of directors: The case of SET 100 Thailand. The joint doctoral program in business administration, Chulalongkorn University, Thammasat University, and nation institute of development administration.
- [37] Johnson, S., Boone, P., Breach, A. and Friedman, E. (2000). Corporate governance in the Asian Financial crisis. *Journal of Financial Economics*, 58: 141-186.
- [38] Joo, A.H. (2009). Association between board characteristics and accounting conservatism. Auckland University of Technology, Malaysia.
- [39] Kanyakiti, P. (2010). The relationship between good corporate governance, the responsibilities of the board of directors and the normal rate of return than the ordinary: A case study of a group of companies listed on the stock exchange of Thailand SET 50. Thammasat University.
- [40] Keong, L.C. (2002). Corporate governance: An Asia- pacific critique. Hong Kong: Sweet and Maxwell Asia.
- [41] Khan, H.A. (2004). Global markets and financial crises in Asia: Toward a theory for the 21st century. New York: Houndsmills.
- [42] Krishnan, G. and Parsons, L. (2008). Getting to the bottom line: An exploration of gender and earnings quality. *Journal of Business Ethics*, 78: 65-76.
- [43] Langdon, D.S., McMenamin, T.M. and Krolik, T.J. (2002). US labor market in 2001: Economy enters a recession. *Monthly Labor Review*, 125(2): 3-33.
- [44] Lehn, K., Patro, S. and Zhao, M. (2009). Determinants of the size and structure of corporate boards: 1935-2000. *Financial Management*, 38(4): 747-780.
- [45] Letza, S., Kirkbride, J., Moores, J., Sun, X. and Smallman, C. (2008). Corporate governance theorizing: Limits, critics and alternatives. *International Journal of Law and Management*, 50(1): 17-32. DOI: http://dx.doi.org/10.1108/03090550810852086

- [46] Limpaphayom, S. and Connelly, J. (2004). Corporate governance in Thailand: Thai institute of directors association.
- [47] Luckerath- Rovers, M. (2011). Women on boards and firm performance. *Journal of Management and Governance*, 17(2): 491-509.
- [48] Maran, M. and Indraah, K. (2009). Can demographic diversity in top management team contribute for greater financial performance? An empirical discussion. *The Journal of International Social Research*, 2(8): 273-286.
- [49] Martin, H. (2005). New corporate governance: Successful board management tools. Germany: Springer Berlin.
- [50] Minguez-Vera, A., Lopez-Martinez, R. (2010). Female directors and SMEs: An empirical analysis. *Journal of Global Strategic Management*, 8: 30-46.
- [51] Mohamed, A., Monirul, A.H., Mahmud, H. and Lee, Y. (2009). Corporate governance and voluntary disclosure in corporate annual reports of Malaysian listed firms. *Journal of Applied Management Accounting Research*, 7(1): 1-20. DOI: http://dx.doi.org/10.1108/ 01140581311318940
- [52] Molero, E. (2011). Are workplaces with many females in management run differently? Journal of Business Research, 64: 385–393.
- [53] Monks, R.A.G. and Minow, N. (2008). Corporate governance. Chichester: Wiley.
- [54] Morris, M.H., Nola, N.M., Craig, E.W. and Susan, M.C. (2003). The dilemma of growth: Understanding venture size choices of women entrepreneurs. *Journal of Small Business Management*, 44(2): 221-244.
- [55] Nam, S. and Lum, C.S. (2005). Survey of banks' corporate governance in Indonesia, Republic of Korea, Malaysia and Thailand: Asian Deployment Bank Institute.
- [56] Niyomtrong, C. (2007). Corporate governance and operating results of listed companies: The stock exchange of Thailand specific services group, in 2005. Independent study of master accounting, Thammasat University.
- [57] Noor, Z.M. and Iskandar, T.M. (2012). Corporate governance and corporate failure: a survival analysis. *Persidangan Kebangsaan Ekonomi Malaysia Ke VII*, 684-695.
- [58] Pannarong, S. (2010). Corporate governance: The application tool to predict the business failures. RMUTP Research Journal, 4(2): 118-129.
- [59] Petpairote, W., Chancharat, N. (2015). The effects of women on the board on the firm performance of Thai listed companies. *Journal of Advanced Research in Law and Economics*, Volume VI, 1(11): 147-160.
- [60] Pietra, R.D., Grambovas, C.A., Raonic, I. and Riccaboni, A. (2008). The Effects of Board Size and "Busy" Directors on the Market Value of Italian Companies. *Journal of Management Governance*, 12: 73-91.
- [61] Pompe, P.M. and Bilderbeek, A.J. (2005). The influence of the year prior to failure selected for model building and the effects in a period of economic decline. *International Journal of Interlligent Systems in Accounting, Finance and Management*, 13: 95-112.
- [62] Pupanit, J. (2010). Corporate governance and the performance of companies listed on the stock exchange of Thailand. Thammasat University.
- [63] Roberto, D.P., Christos, A.G., Ivana, R. and Angelo, R. (2008). The effects of board size and "busy" directors on the market value of Italian companies. *Journal of Management and Governance*, 12: 73-91. DOI: <u>http://dx.doi.org/10.1007/s10997-008-9044-y</u>
- [64] Rommer, A.D. (2005). A comparative analysis of the determinants of financial distress in French, Italian and Spanish firms. Working paper, Danmarks national bank, Copenhagen.
- [65] Smith, A. (1776). The Wealth of Nation. 1 st Edition London: W. Strahan, 77-85. Retrieved January 15, 2012 from www2.hn.psu.edu/faculty/jmanis/adamsmith/wealthnations.pdf
- [66] Suleiman, S. (2014). Corporate governance mechanisms and accounting conservatism. *Journal of Management Policies and Practices*, 2(2): 113-127.

- [67] Susan, P., Gary, F.P. and Howard, F.T. (2002). Corporate governance and corporate failure: A survival analysis. Corporate Governance, 2(2): 4-12. DOI <u>http://dx.doi.org/10.11 08/14720700210430298</u>
- [68] Szep, I. (2007). Ownership concentration and firm performance on the Romanian RASDAQ market. Working paper, Central European University.
- [69] Tachapichaya, P. (2007). The relationship between corporate governance and the performance of industries companies of SET in 2005. Thammasat University.
- [70] Thanida, C., Robert, E. and Theo, C. (2011). Corporate governance and post-bankruptcy reorganization performance evidence from Thailand. *Asian Review of Accounting*, 19(1): 50-67.
- [71] Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics*, 53(1): 113-142. DOI: http://dx.doi.org/10.1016/S0304-405X(99)00018-5
- [72] Vafeas, N. (2005). Audit committees, boards, and the quality of reported earnings. Contemporary Accounting Research, 22(4): 1093-1122. DOI: http://dx.doi.org/10.1506/ 1QYN-2RFQ-FKYX-XP84
- [73] Vandegrift, D. and Brown, P. (2005). Gender differences in the use of high- variance strategies in tournament competition. *Journal of Behavioral and Experimental Economics (formerly The Journal of Socio- Economics)*, 34(6): 834-849.
- [74] Velnampy, T. (2013). Corporate governance and firm performance: A study of Sri Lankan manufacturing companies. *Journal of Economics and Sustainable Development*, 4(3): 228-235.
- [75] Wester, S.R., Fowell, H.C., Vogel, D.L., Wei, M. (2007). Gender role conflict and psychological distress: The role of social support. *Psychology of Men and Masculinity*, 8: 215-224.
- [76] Xie, B., Davision, W.N. and DaDalt, P.J. (2003). Earning management and corporate governance: The roles of the board and the audit committee. *Journal of Corporate Financial*, 9(3): 295-231.
- [77] Zong-Jun, W. and Xizo-Lan, D. (2006). Corporat governance and financial distress evidence from Chiness listed companies. *The Chinese Economy*, 39(5): 5-27.
- *** Big four firm network. (2015). An analysis of the 2014 financial performance of the world's largest accounting firms, Volume January, pp. 1-34, The 2014 big four firm performance analysis.
- *** Center of Corporate Governance. (2014). *The definition of corporate governance*. Retrieved June, 17, 2014, from http://cgthailand.org/SetCG/about/about.html
- *** NCGC. (2005). *National Corporate Governance Committee*. Retrieved October, 10, 2012, from <u>http://www.</u> cgthailand.org/SetCG/about/ncgcen.html
- *** The Organization for Economic Co-operation and Development (2004). *Principles of corporate governance*. Paris.
- *** The Stock Exchange of Thailand. (1999). Best practices of the audit committee. Thailand.
- *** The Stock Exchange of Thailand.)2005). The procedures and guidelines to continue a listed company that may be withdrawn and must prepare a rehabilitation plan. Retrieved March 27, 2014, from www.set.or.th/th/regulations/supervision/files/delist/rehabcot.doc



ISSN 2393 - 5162

ISSN - L 1843-6110