

Business Administration and Business Economics

The History of Tax Administration of Kosovo and its Efficiency

Kida Nakije¹

Abstract: This document provides a brief description of the work in the field of taxation and efficiency in execution of Tax Administration of Kosovo (TAK), inspired by my work in this institution. This work presents the systematic connection of taxpayers, the Tax Administration of Kosovo (TAK) and revenue growth within a 12 year period. TAK work effect is conditioned by the level of the staff engagement which leads the tax policy, honest engagement of tax officials and effective enforcement of tax laws based on international best practices. This means that countries that have promoted European Union tax rules have significantly gained better working practices but also collecting the most revenue without applying penalties or closure of businesses. This study examines the short-and long-term effectiveness of TAK. We have found complementarities tax laws of the Republic of Kosovo with EU rules, implying a positive outbreak of their administration. This paper focuses on presenting positive sides as well as opportunities for a greater engagement to a general and dynamic framework for accountability and expected results in a short term. It also treats the policies that are directly and strongly incorporated in the work of TAK. Reducing of the risk of tax evasion, full integration of electronic payment system (E-banking) of taxpayers, the successful realization of the pilot project for the establishment of electronic files is a challenge for TAK. Low level of economic integration and political risk of the north of the country are the two elements that have a negative impact on the strength and the will of businesses to pay on the one hand and the effect of collecting revenue from TAK on the other side.

Keywords: background the Republic of Kosovo; TAK story; TAK management and reforms; revenue collected by the Tax Administration

JEL Classification: H71; M

1. Introduction

In this paper we will analyze the history of the Tax Administration of Kosovo (TAK), administration, reforms, efficiency and the various factors which stand on the foundation of development of the tax system. General developments in the region in the last two decades of the twentieth century have made these countries implement deep comprehensive social and economic reforms, which are extended in the tax system, too. TAK, has made a long way since its establishment in 2000.

¹ PhD(c), Tax Administration of Kosovo, Address: Street corner of “Dëshmorët e kombit” and “Bill Clinton”, 10 000 Prishtina, Kosovo, Tel: 038/200-255-59; 038/200-255-60; 038/200-255-61; 038/200-255-02, Corresponding author: nakije.kida@hotmail.com.

It is the beginning of the second decade of tax administration and Kosovo has achieved remarkable success in revenue collection as well as in its efficiency. Government tries to find the best methods for tax inflows through various types of taxes. During the implementation of tax policies, the government tries to provide low tax burdens and equal treatment for businesses and citizens. By the time Tax system has changed, it has advanced by adapting the EU regulations, but also keeping the specifics of our country (R. of Kosovo). TAK is the only authority that administers taxes, issues general administrative rules which are mandatory to apply for Tax Administration as well as for taxpayers. TAK provides a uniform application of laws and regulations relating to taxation. Central administration of taxes is a practice that 90 percent of countries have approved it. TAK manages the Value Added Tax (VAT), Personal Income Tax (PIT), Corporate Income Tax (CIT) and Pension Contributions (CC). TAK attempts to provide world-class service to the public, which is what they expect and deserve. With friendly taxpayers, greater accountability and performance improvement of tax officials which can be measured against the objectives set out in the collection of revenue. TAK operations can be increased if you create greater equity and expansion of the tax base. A taxpayer should be aware of what he expects from the Tax Administration, but also to get familiarized with the responsibilities as a user of the services. TAK is ready to use mechanisms to respond to the concerns of taxpayers as well as the collection of debts. Service standards of each tax officer should be: conscious and professional behavior, teamwork, integrity, mutual respect, justice and accountability. TAK responds to taxpayers' reactions if they are damaged, and it sets compensation through the Department of Tax Appeals if the officer did not meet professional standards in the determination of debt to him. The taxpayer is expected to keep accurate records, to ensure that all financial transaction records are kept for a minimum of six years. This is important for control purposes. This practice makes good sense for the business, but will also help you in financial planning and business decisions.

2. The Political and Economic Background of the Republic of Kosovo

With the implementation of political, economic and fiscal reforms, tax local institutions are facing a dynamic environment, more and more intense and highly competitive. Overall effectiveness of TAK is gradually increasing. This structural change has forced TAK institution to inspect the work of their branches and identify directions for improvement in order to find more successful alternatives in increasing staff engagement. Due to the elasticity of Kosovo economy, the current global financial and economic crisis, this paper has long term implications for the policy makers. Analysis of TAK efficacy, compared with countries in the region shows that it is not far from their practices. The world has been experiencing a severe economic contraction since 2007, the economies are slowing, businesses are

closed, and employment is in decline. The impact of the economic climate has not excluded Kosovo. For the problems that may arise in the context of tax administration cannot be blamed only the events in the Euro zone but also structural weaknesses of the economy of Kosovo which exist for a decade. The global crisis has revealed disparities in Kosovo too, which have remained un-addressed for a long time. Kosovo has no problem with debts or tax system, but there are problems with inefficiency wherever they work, leaving aside unemployment rate of 45%. Infrastructure and Energy are getting better thanks to capital investments made last 2 years. But the culture of corruption is not new and is being done by the Kosovars themselves. These shortcomings that Kosovo has, can not be healed from outside, but they must be confronted and fought by the Kosovars themselves. This can be done starting from the government, the opposition, civil society, the private sector but also from the individual who looks at them from a very different prism compared with the institution. Inaction and indecision in channeling issues will bear long-term consequences. If ever there was time to put aside party differences for the sake of Kosovo, now is the right moment. There is a long and difficult way to challenge these shortcomings, but Kosovo has plans to build stability, growth, development and prosperity for its citizens. Building sound foundations of Kosovo's economy can be made through:

- Establishment of fiscal discipline,
- Tax reform in terms of work efficiency,
- Keeping simple and equitable tax system,
- Fighting bureaucracy, nepotism and corruption,
- Environment and Waste Management,
- Investment Promotion,
- Alternative Energy,
- Controlling of balances and debt of the public sector,
- Rationalization of the work of public bodies,
- Improvement of the central government management,
- Increased revenue collection,
- Modernized Marketplace,
- Increased competition,
- Management of public sector payments.

3. Establishment and Functioning of the Central Fiscal Authority (CFA)

In accordance with the authority granted by Resolution 1244 (1999) of United Nations Security Council, on 10 June 1999, taking into account the regulation no. 1999/1 of Nations Interim Administration Mission in Kosovo (UNMIK), as amended, dated July 25, 1999 on the Authority of the Interim

Administration in Kosovo and UNMIK Regulation no. 1999/16 of the Regulation, as amended, dated November 6, 1999 on the Establishment of the Central Fiscal Authority and other related issues, the first phase of meaningful tax system begins under the full authority of UNMIK. Central fiscal authority's strategic goal has been the development of a tax system that would make Kosovo self-sustaining from its fiscal resources, as early as possible. Just for this purpose, a modern tax regime which is suitable for investment and compatible with the EU has been developed. Central Fiscal Authority (CFA), led the tax policy and administration, treasury, customs, preparation, execution and monitoring of the budget. In late December 2001, it was announced unification of the Central Fiscal Authority with the Ministry of Economy and Finance. In the meantime specific authorizations will be defined to be maintained by UNMIK mainly those related to customs. The Ministry of Finance and Economy (MFE) plays an important role in the Kosovo government, being responsible for the financial management of the country, both at central and municipal levels. It was established through the transformation of the Central Fiscal Authority (AFQ), in September 2001 based on Regulation No. 2001/19. The scope of responsibilities is covered by a number of laws, regulations and administrative orders. Basic functions of the ministry include the creation and implementation of fiscal policies and administrative systems as well as economic analysis and macroeconomic projections, budget planning, creation and implementation of the Central Administration of Taxation (TAK and Customs), creation and implementation of the central Treasury and accounts. MFE organizational structure covers all important aspects of financial management and state revenue collection.¹⁾

4. Establishment and Functioning Revenues TAK

Under the direction and administration of UNMIK, Tax Administration was held on 17 January 2000. The first Director of TAK was an international expert hired by a USAID contractor. On purpose of instituting tax administration and procedures, on 12 April 2000 was declared the Regulation Nr.2000/20 on Tax Administration and Procedures. From October 2001 to February 2003, there were co-directors of USAID and Kosovo, one from each side, who shared the role of director. On 18 February 2003, the tax administration authority was transferred from UNMIK to the Ministry of Economy and Finance, and the director from Kosovo took over the

¹ FRIDOM - Rishikimi Funkcional dhe Organizimi, Institucional i Ministrive/ Functional Review and Institutional Ministries, p. 6.

duties of the Director of TAK. Since that time, TAK has operated as an autonomous organization, managed entirely by residents of Kosovo with the advice and assistance of international donor organizations in the first place, USAID, EU Pillar IV of UNMIK CAFAO EU.

Tax Administration is organized in two levels:

1. General Directorate
2. Regional Offices

The Central level is the General Directorate where the Director General and deputy directors compose the strategic management and have to set the vision for the development of TAK, while the local level is operational. TAK has also formed the territorial organization, which is composed of nine regions. TAK is responsible for collection of central government taxes, which include VAT in inner supplies, Income Tax Corporate, Personal Income Tax and Pension Contributions. There is a centralized document processing center, where all the declarations are processed. There has also been created a large taxpayers unit, which deals with the biggest taxpayers in Kosovo, also known as the best international practice. Tax legislation of Kosovo is recognized both by the IMF and the European Commission as a transparent legislation and at a good international level. In 2007, revenues exceeded forecast by 32%.

Annual revenues have consistently shown significant increase compared to previous years, although Kosovo has a relatively low economic development.

Table 1. Total revenues from TAK by taxes from 2000-2010, in million euros.

Tax type	Total
Hotels and Restaurants Tax	5,535,600.19
Presumptive Tax	114,529,529.07
Salary Tax	258,363,174.85
Value Added Tax	538,860,825.08
Pensions	479,932,246.83
Profit Tax	11,325,246.42
Tax on Rents	5,780,301.43
Personal Income Tax	81,749,524.37
Corporate Income Tax	74,247,584.26
Interest Tax, Dividend	63,130,197.61
Total:	1,630,454,210.11

Table 2. Income Tax and Pensions, January-November/2012, TAK, November 2012

Type of Tax	Revenues
Presumptive Tax	123,696.94
PT-Profit Tax	99,601.69
VAT -Value Added Tax	11,197,140.24
Source Tax	48,741,893.08
PD-Big Individual Business	28,215,318.76
WR –Real Estate Tax	8,276.85
CD-Corporate Tax	59,494,442.04
KP-Pension Contribution	96,211,032.99
TOTAL	352,094,136.50

Revenues collected during the period January-September 2012, are in the amount of 203.4 million euros, compared with the projection provided, they were conducted for 97% or less for 6.4 million euros. If we compare the period January-September 2012, with the same period last year, revenues in this period are higher for 10.0 million or 5.1%. So, there was 70.6% of planned revenue for 2012.

Table 3. Revenues January-September 2009-2012 in millions (TAK, 2012)

Years	Revenues
2009	137.9
2010	158.7
2011	193.4
2012	203.4

Source: (TAK, 2012)

TAK has got the work unit for plan and analysis which deals with planning, analyzing and designing of revenues in the short and long term. A projection made in 2010 looks like this:

Table 4. Revenue projection 2007-2015 by TAK

Years	Revenues
2007	192
2009	222
2009	206
2010	225
2011	252

2012	275
2013	297
2014	306
2015	315

Source: Plans and Analysis Division, TAK 2010.

Tax administration has successfully completed an assessment of meeting EU standards¹. In an effort to achieve these values, taking care to its specifications, the tax administration to us is being governed by the principle of credibility, transparency, neutrality, efficiency and simplicity. The mission of Tax Administration in Kosovo is to increase the maximum voluntary compliance, in accordance with the laws and regulations, provide professional, transparent and efficient service for taxpayers. This can be best achieved through the Department of accomplishment which has an obligation to provide the best, efficient, complete, timely support for performing the function of Taxpayer education.

5. Improving the Tax System in Kosovo

Kosovo has spent a long way in improving the tax policy but there is still room for improvements, such as training of tax officials, control, department of complaints forcing the inner control and increase the transparency of administrative decisions. There is still a challenge in designing a tax system that enhances welfare and reduces distortions, realizing sufficient income. Reducing tax evasion by large businesses is a high priority on improving the income gap. Elite's failure to pay taxes will not only cause loss of revenue but it also will damage the legitimacy of TAK. In this context TAK uses information from third parties and assessing indirect tax obligation. The use of third-party information includes using data from Customs, banks, institutions that are against money laundering. A minimum of information is a signal that encourages tax control for individuals who are not registered as taxpayers. Since 2010 the legislation has required keeping the cash journal that allows knowing the origin of each transaction. Some sentence cases send a clear signal that it is being worked. Besides the legal sanctions, all those who avoid taxes should be denounced publicly by communicating their names through media, travel ban or even prison sentences. The possibility of applying these measures raised the question of forming of the investigative unit within TAK, which operates efficiently and very successful. Kosovo currently generates over 52% of revenues from VAT, which is called a successful tax indeed. Regarding Corporate Tax and Personal Income, they have lagged behind, so it is in the

¹ Tax Administration of Kosovo (TAK), 2000-2012

majority of countries (Arnold & Javorcik, 2009; Sjöholm & Lipsey, 2006). Many countries use tax incentives to attract investment. In Kosovo, this is not necessary because tax rates are among the lowest in the region.

The Government of Kosovo should adopt a number of financial incentives aiming the support of industries that are strategic for the national economy and promote the local development. It is also necessary to think about new business tax break and remission of old business penalties. In Kosovo, there have been two remissions of penalties since 2008 which have significantly been used by taxpayers to pay their debts. Also there have been offered tax returns and refunds of VAT to businesses that are in investment and to NGO-s which deal with non-profitable activities. To micro and small businesses should be applied a simple tax with a fixed base of 150 euros tax, and 1/3 pension for businesses with a turnover up to 25,000 euros.

This quote would have positive effects on the reduction of the administration of this tax expenditure on the one hand, and on the other hand the orientation of tax officials to more efficient control medium and large businesses with over 25,000 euro turnover would obey the VAT regime (VAT entry limit is practically over 50,000 euro). With the expansion of the VAT base, the businesses that so far have been out of this rule, have created gaps of loss of income and have used their undeserved privileges (94% of businesses) would be connected in the VAT chain. With this turnover scale, unserious businesses would be eliminated, but previously TAK should subsidize giving them favors to use a period of six months to work without paying tax (tax holiday). VAT threshold reduction should be applied since 2014 and the rate of VAT which is currently 16 percent should not increase until 2016. But in terms of reduced rates is necessary to apply the rate of 5% for food goods, energy, and water for household that would have positive social effects at the poorest layers of the population.

6. Improving the Efficiency of TAK

Kosovo in support of and in cooperation with experts from Kosovo and international donors such as the IMF, USAID, has made reforms in weak organizational structures, training of tax officials, tax officials reorganization. Human Resources Management is upgraded but the compensation policy must be revised. The use of information technology has made it possible that daily work be electronically recorded, which contributes to the formation of electronic files. It should be focused on good governance and integration with the code of conduct which affects the improvement of the tax authority's reputation. TAK should begin with a broad range of tax information publications and public information programs. There are still a number of challenges for TAK regardless of the design

of tax policies that are reasonable and not far from international best practices. An advantage of TAK human resources in relation to many other countries is the level of education, higher and superior compared to others who have a college education. The payment of tax officials should be made in relation to income collected from his work. Increased flexibility of contracts of the tax officials would easily dismiss those who have poor performance and replace with young and educated people. Application of high-performance inspectors incentives and non-corruptive will develop their professional skills and motivation to work. Pilot program of disclosure and the use of cash registers has resulted successful. TAK objective is to offer payment through E-banking. Better use of information technology has made securing connections between computer programs used by TAK and Customs data and other public agencies. Although TAK has reduced the number of inspections, and their opening is made through the method of risk, there are available resources to open automatically tax audits of those businesses that have concealed the origin of sales acquisitions, capital expenditures, etc.. It is very urgent to control the wage tax where the informality is too high. Also a case for control is any requirement for the tax return to the taxpayers when they show tax overpayment. Submission of a request for refund is subject to mandatory control. TAK reforms must be accompanied by reforms in the field of law enforcement. Arrangements with the police should be made to ensure closer supervision to prevent tax fraud. This includes tax officials' assurances and assistance in finding missing people and property or even investigation of the cases when tax officials are included in bribes. Such cooperation between different public agencies exists to some extent, and appears promising in the future. Revenue efficiency will increase if TAK:

- Stimulates businesses not to pay penalties when for the first time introduce the employee;
- Stimulating of business investments;
- Increasing of the real estate control;
- Allocation of controls based on risk by eliminating the automatic controls;
- Increasing the inspectors' control;
- Greater use of information by third parties as indirect way of evaluation;
- Training of each tax official;
- Increasing the capacities of the department of complaints;
- Strengthening the system of internal control and disciplinary measures in framework of TAK.

In recent months, the department of Information Technology has been able to develop and implement a number of the following systems:

1. Electronic Declaration System - EDI
2. Integration system for business registration
3. Call Center

4. Electronic files (Dossiers)
5. Technical Support Application
6. Application for registration of daily activities
7. Training and personal development plan
8. Reports redesigning in Share Point

7. Microeconomic Effects of Lower Tax Rates in Kosovo

Income Tax in Kosovo is the lowest in the region, and this affects the effect of increasing net income as tax is higher. This stimulates individuals and businesses to use the additional revenue or capital increase welfare. The government has approved lower rates for all types of taxes by encouraging workers and businesses to work and reinvest harder, increasing in this way the country's capital and employment. If additional fee were applied, then labor productivity would multiply. Low taxes are favorable for residents of Kosovo because it reduces the growth of poverty for low-income families. Indirect taxes affect the aggregate demand for goods and services. The ecologically clean goods manufacturers should be subsidized in order to increase the use of their goods. Increased obligations should be applied on harmful goods to the health of population in order to reduce demand. According to recent empirical literature, tax rates and developed infrastructure are important factors for attracting investments. Investments of the recent years in road infrastructure will have impact on reducing of the business cost transactions and creation of new business links with the countries in the region.

8. Tax Administration VAT in Particular

The tax administration has the exclusive responsibility to administer the Value Added Tax and Customs Service on behalf of the Tax Administration; it will evaluate, levy and cash the Value Added Tax imports and exports, as the only bodies that are responsible for implementation of the application of VAT. These two bodies apply and implement VAT in Albania, too. In most of the countries the VAT administration is made by the bodies discussed above. Expanding the tax base with new taxes, especially the application of Value Added Tax, raised the need for capacity building of staff, information technology, organization and administration, which as a consequence are creating new expenses. Jobs of the Value Added Tax administration represent all tax administration jobs, because the application of this tax into practice requires a more prepared staff who would be able to administer and be competitive with the staff of EU member countries or the countries of the region. It is important to provide the necessary conditions for practical application of laws and regulations, so that the revenue collection becomes easier and with less expenses. Formation of organizational structures and

creation of Taxpayers Education offices since the beginning of TAK work, information of taxpayers about the procedures of application of VAT became easier as well as for final customers as the last load carriers of VAT. Reason for mobilizing staff and all legal infrastructure, is the nature of VAT, which as a tax does not endure slow, unprofessional administration. Tax payers and the general public is informed in time with the reasons of Value Added Tax implementation, the tax advantages compared with taxes it has replaced, such as the sales tax. Important is the experience of Great Britain and Germany, with the best experts in this field who are practically involved in various international organizations, fortunately providing professional and technical support for Kosovo, too. This expert help is being also used by the Customs, which is also one of the main actors in collecting VAT at the border. It is characteristic that the Kosovo Customs Department has moved forward, regarding organization, operation and administration of VAT. It should be noted that in terms of the generated expenses about education, for VAT implementation lead countries like Korea, and with regard to the longer term of the intensive campaign to make VAT functional is Great Britain. In Sweden, VAT implementation costs were enormous, more than 3% of the revenues collected from VAT, which exceeds the cost of any other countries in Europe, whereas in other states this percentage goes up to 2%. There are no such parameters for Kosovo as this tax was applied from the initial phase of TAK establishment in parallel with other taxes, but one thing is sure that there was an immediate need for staff growth to administer and manage the tax, according to estimates TAK today employs 757 workers at all levels, which means that each year about 63 new employees have been recruited. VAT administration costs in Kosovo are considered not too large, due to the high threshold of revenues in VAT (€ 50,000), while in many European countries the threshold is 10,000 € and above. In the increased costs influence the application of reduced rates, which in Kosovo is only 16% standard rate with some exemptions for certain goods. In European countries apart from the standard and zero rates, two other reduced rates are applied, not less than 5% and no higher than 8%, depending on which items the country gives priority to. The Value Added Tax (VAT) was applied on 1 July 2001, being used and applicable in almost all the countries of Europe and beyond.

9. Kosovo Tax Administration Employees

Since the establishment TAK has employed skilled workers in the field of economy and law who will deal with Managing duties and tax control. In the beginning when a small number of types of taxes began to be applied for the first time, a symbolic staff was employed, in the early 2000 35 workers were self employed, where the first management structures were formed, to be known as the first generation of employees in this important institution of post-war Kosovo. Now it is known that the TAK staff has reached the number of 757 employees, with the

constant request for this number to grow. Total of 13,871 VAT registered businesses. Of them are small importer and exporter 2581, and 11289 active declaring VAT (circulation over 50,000 Euro). Total number of employees at ATK are 757 employees, 284 are tax inspector who worked in the audit department and other staff working from Director to domestic helpers. The relationship between the inspectors and businesses with a VAT is that where an inspector controls about 49 businesses. Innovation in progress of information technology system will enable improvements in data processing options which so far has not been adequate to monitor taxpayer compliance and management control procedures. The taxpayers' database has not been precisely monitored. With the implementation of fiscal numbers, it is possible to establish a reliable data base. The introduction of fiscal cash registers in use is another innovation. It is also very important to create tax officials incentive schemes depending on demonstrated performance, job responsibility, experience, training, etc. This would create an incentive and increase TAK workers engagement in education, control and annual revenue collections. Professional training of the tax administration staff of the R. of Kosovo through various trainings with local and international experts and exchange of experiences with tax institutions developed countries and developing countries that have passed the stage of transition, is a big help for Tax Administration of Kosovo. Having broaden the tax base with new taxes, especially the application of Value Added Tax, the need to improve the tax administration employees raised with rapid steps. In 2012, referring to the census of 1980s, Tax Administration in Kosovo has a tax employee for 6,689 residents in Kosovo (1,899,743 inhabitants in Kosovo, Kosovo statistics), while it is estimated that most countries have a tax employee for less than 1000 inhabitants. There were 617 tax and customs employees in Kosovo in 2001 or an employee for 3,079 inhabitants. At the same time in Latvia a respective employee is for respective employee is for 571 people. (Riinvest, 2011) From this derives that the number of tax staff in Kosovo compared to the number of population and the tasks they face is very small.

10. Tax Administration and its Cooperation with the EU and USAID

Tax Administration of Kosovo recent years has undertaken a series of reforms in order to improve the legislation. EU and USAID have provided advice and support through training that have set it up in its current state of development, the past 10 years have been challenging. Cooperation with the International Monetary Fund and the World Bank has had a positive impact in terms of implementation of advanced practice in fiscal policy and administration of laws and functioning of the Kosovo Tax Administration. Kosovo's economic integration into the EU is a desire Kosovo people but it is also a challenge which we are constantly dealing with. This integration, which will necessarily be implemented, seeks for a more modern management of TAK, because as a very important link in the implementation of

laws, regulations and guidelines, staff organization, management of policies developed within it, helps it be competitive with other countries in the region. This preparation is being done with the assistance of international experts, especially those from USAID, in collaboration with the IMF donations. In the last decade many other countries have been forced to initiate fiscal reforms. This is what is happening in Kosovo too, in the beginning very slow reforms, but in the last few years these reforms are fast and very important especially in the application of taxes, reducing tax rates and training its staff by experienced international and local experts in these areas. Dominant objective of these fiscal reforms has been minimizing of disproportions, improving the efficiency of the administration and stimulating of the economic growth. The effect these tax reforms would have is supposed to be neutrality and less intervention in the factors operating in the market. By bringing the most advanced management methods and adapting it to the its specificities, our country is trying to have a redistribution right fiscal burden, facilitating of assessment and tax collection practices and improving the distribution of income. Tax administration in our country, is oriented to move in these directions exactly:

- a) Application of the lowest rates in the region for all types of taxes;
- b) It is planned to expand the base of much greater involvement in VAT taxpayers, by reducing turnover threshold in the near future up to 25,000 or 30,000 €;
- c) Perfection of the tax administration, fighting corruption and negative elements without administrative abilities of its employees.

11. Administrative Costs in Particular VAT Tax

Research undertaken for the costs of tax enforcement have been done in the most developed countries (Australia, Canada, Great Britain, Netherlands, USA, etc.), because it is part of the tax policy. Apart from experts, research has been done by scientific individuals in order to convince policy makers consider that enforcement costs participate enough compared with the income derived from taxes. In the Czech Republic there were two major reforms in 2003 and 2005, where the main goal was to reduce administrative costs, and provide an attractive basis for new investments.¹ Moreover, in Germany in 2002 were added to law some tax privileges. This was done in order to reduce the complexity of tax legislation, in order to reduce administrative costs as for individuals, companies and the tax administration.² Assess how much they are spending on the implementation of the VAT was impossible. This is similar to the case of Kosovo regarding these assessments have not estimated the cost of VAT implementation yet. Great Britain

¹ See Balco, National Report Czeek Republic.

² See Horner, National Report Germany.

has made votes for the cost of the VAT implementation, and it has concluded that the implementation cost of this tax is among the most extensive of any other taxes. Some researchers such as Sandford, Slemrod Agel, Vaillancourt, Allers, Tra Nam, have reached the following conclusions from their results, that implementation costs are relatively high as the administrative costs can reach up to 10% of tax revenues. Important estimates for VAT administration costs and other taxes come from Slovenia, where by the analyst Maja Klun, high cost may affect the international competitiveness of companies, and this affects the reduction of voluntary compliance, may cause excessive load of taxes. This assessment for VAT taxpayers was made in January-March 2001. The reasons for this assessment were considering the fact that VAT contributes in the largest part of income tax. Slovenia has made a complete analysis of tax administration costs compared to many other countries of the region, including Kosovo, and that these indicators could be used to make comparisons of our country in the future. There should be extracted TAK statistics regarding the relationship between the various expenses such as management expenses, in proportion to the percentage of income, expenses of management in relation to Gross Domestic Product (GDP), administration costs in relation to the number of Kosovo taxpayers, administration costs in relation to employees in Tax Administration. This analysis should include the costs of Taxpayer Advocate, police involvement in the collection of revenue, but it should not include other costs such as frequent changes in the law since in Kosovo there are still occurring VAT reforms. In the operating costs should be included the consulting expenses, monthly expenses for computer programs which manage VAT records and time spent preparing tax returns, establishing files.

12. Fiscal Reforms with Particular Emphasis on VAT

Tax reform is an essential element of the National Strategy for the Development of Kosovo. The aim of the reform program is to ensure that Kosovo has a tax system that is simple, fair and competitive. Payment of fees should not be a physical burden, nor should it result in the loss of productive time and energy of TAK staff. Establishment of the Office large taxpayers (TTU) has been productive, involving about 4% of taxpayers who are responsible for paying 80% of taxes in Kosovo. This is nearly the same for most countries in the region and further. Fiscal reforms in 2005 and later in 2009 made the tax system in Kosovo be the most facilitating and promoting for business development compared to other countries in the region. These reforms have shown positive performance in revenue collection, but the economy is not showing positive rates. There should be taken some steps with regard to the award of investment and development priority of agriculture and manufacturing, as this positive trend can create revenue positive elements of development only in a short period of time, but it does not offer sustainable

development trends of the economy in the longer term.¹ Reforms are constantly taking place in institutional infrastructure, TAK staff training through various trainings by international and local experts. It is very necessary to improve the system of payments that they have to go through banks etc.. It is very important the implementation of the Law on VAT Nr.03/L-146 which entered into force on 1 July 2010. There are also issued the guidelines and public explanations that support this law, such as the Administrative Instruction 10/2010 on VAT. It is too substantial the implementation of Law Nr.03/L-222 on Tax Administration and Procedures which replaced the Law No.2004/48 on Tax Administration and Procedures. Substantial reform is done for all taxpayers, who carry the movement of goods and services and the payments for them are not carried through banks, they are required to enter and use the fiscal system through the use of fiscal devices for recording cash payments on cash and mandatory issuance of the tax voucher.

13. Conclusions and Recommendations

There are a lot of debate points on the policy and economy efficiency of Kosovo which aim gathering collective capabilities to combat the economic crisis, negative phenomena such as corruption, raising morale for work, the elimination of tax evasion, good governance and sustainable development. Most importantly is creating good habits to work in public institutions and the establishment of a framework of sustainable development which will raise living standards. It is considered to be a success if this difficult period of global crisis is overcome not only by the commitment of the government, but it should be considered as a task of the society in general. Our history is full of missed opportunities in the past, now it is in our honor to work for the national interest. It is patriotism to pay voluntarily taxes without penalties. We have the potential to exploit the whole world through young population and many natural resources, but they should be used for the general welfare. If we look at our problems in a constructive way then there are good days ahead. Fiscal policy in Kosovo-oriented reforms is modeled on three priorities: simplifying the tax system, creating transparency and clear procedures and safety legislation is being implemented fairly. By the time, it is also becoming increasingly clear that raising taxes with the aim of increasing budget revenues can be self-destructive, so after receiving authority from international fiscal policy in Kosovo, it went towards reducing taxes. Creating a stable network of local institutions would affect the stimulation of savings, investments, etc.. Tax administration should have high standards to meet the staff that works, and also the salaries should be specific in relation to public service employees. These criteria will affect the work with dedication that TAK workers would make, and simultaneously the same staff would double the collected revenues. Strengthening

¹ FMN, 2010.

revenue collection does not mean higher taxes for those businesses that pay their dues. Expanding the tax base eases the tax burden on the formal sector. A review on low rates of tax collection in comparison to the region shows the broad extent of evasion. Government in the framework of its tax administration should support formal private sector, and should find the ways to shut existing paths in tax legislation. It is very important for our country to have a mid-term development strategy, so that millions of euros spent could go in terms of creating a platform that brings positive results in terms of employment, as well as for economic stability. The legal framework that regulates the field of taxation in Kosovo must undergo a more profound and substantive reform, not taking steps towards raising tax rates but expanding businesses that will be included in the VAT regime, and obtain more rigorous measures regarding the prevention of fiscal evasion. Tax rates are competitive in the region and this was done with the 2009 reforms, but being fragile Kosovar business regardless tax rates have been reduced, they have not created a cyclical movement that would give us to understand that the economy is moving towards stability.

TAK reforms should be based on circular movements enabling each employee express performance there where the maximum could be given. Logistics reform would create job satisfaction. Formation of computerized files enables a quick and correct job, and it will not create stagnation in the classification and accessibility. Creating incentives to work is one of the driving factors to result which is revenue collection for the state budget, and simultaneously reducing opportunities to corrupt tax officials. According to estimates optimal threshold for VAT is 25,000 euros that would mean wide-ranging but not all inclusive, it would help VAT revenues not be increased by raising the rate of VAT, but the expansion of the threshold. Increasing the VAT rate for the next 5 years will not have a positive impact, as it will slow down the development of the economic power of businesses and it also will reduce the investments.

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Does Corporate Social Responsibility Improve Financial Performance of Nigerian Firms? Empirical Evidence from Triangulation Analysis

Ismail O. Fasanya¹, Adegbemi B.O. Onakoya²

Abstract: This paper examines the impact of Corporate Social Responsibility (CSR) on Financial Performance of Firms in Nigeria. This study utilizes both primary and secondary data. The questions were structured in such a way as to gather pertinent and specific information on how effective Corporate Social Responsibility (CSR) has improved the financial viability of firms in Nigeria. This paper employs both descriptive and quantitative techniques in which chi-square technique and content analysis was used to test the significance relationship among the frequencies. The study reveals that proper and effective CSR goes a long way in improving the trend of firms' financial performance in Nigeria using Cadbury Nigeria Plc. as the study area. It was observed that CSR could be a key instrument to the financial development of any organizations through the process of giving back to the community.

Keywords: CSR; Firms Performance; Chi-Square; Content Analysis; Nigeria

JEL Classification: C80; L25

1. Introduction

Corporate Social Responsibility (CSR) is a term describing a company's obligations to be accountable to all of its stakeholders in all its operations and activities. It is a concept describing a company's obligations to be accountable to all of its stakeholders in all its operations and activities on a voluntary basis. The literature is replete with other definitions of CSR. The concept in the opinion of Windsor (2001) is open to conflicting interpretations. Some authors have equated corporate social responsibility to morality (Phillips & Margolis 1999). Some described it as corporate citizenship (Carroll, 2004). Rugman & Verbeke (1998) included environmental responsibility. Nicolau (2008) defines socially responsible

¹Lecturer, Department of Economics and Financial Studies, Fountain University, Osogbo, Nigeria. Address: Oke-Osun, P.M.B. 4491, Osogbo, Osun State, Nigeria, Tel: (+234) 8053148920, Corresponding author: fascojnr@yahoo.com.

²Lecturer, Department of Economics, Tai Solarin University of Education, Ijagun, Nigeria. Address: Ijagun, Ijebu-Ode, Ogun State, Tel: (+234) 8164696001, e-mail: adegbemionakoya@yahoo.com.

companies as those which in profit-making operational decisions, considers the full scope of environmental impact and balances the needs of stakeholders.

Despite the need for business to be morally conducted, one of the primary concerns in CSR discussions is whether organizations pursue it for economic reasons or simply because doing so has intrinsic merit. Some studies have imputed philanthropy (Carroll, 2004) and altruism (Lantos, 2001) reasons. However, there have been few empirical tests in support of the intrinsic merit motive, which makes CSR practice susceptible to the popular accusation of being a gimmick for profitable public relations and marketing strategies. For Rapti & Medda (2012), the main force that drives companies to adopt corporate social responsibility is CSR's financial benefits. Recent studies indicate that a large majority of Chief Executive Officers believe that CSR can improve a firm's competitiveness which is critical to its future success (Accenture and UNGC, 2010). Carroll's (1999) admonition is that the corporate entity firm should strive to make a profit, obey the law, be ethical, and be a good corporate citizen. The common underlying understanding of the CSR concept is the voluntary engagement of companies in integrating their business operations with the social and environmental concerns of their stakeholders.

However, the causal relationship between the interaction between CSR and Financial Performance (FP) is not clear. Empirical studies by Weber (2008) point toward a simultaneous relationship-interaction between both variables. Friedman (1970) reports a negative link since CSR increases costs and therefore worsens a firm's competitive position. Arlow and Gannon (1982) submitted that social responsiveness is neither positively nor negatively, directly related to FP of a firm. This contrast to the opinion of Cardebat and Sirven (2010) that CSR spending is expressly intended to help profits as well as to generally enhance corporate financial performance overtime.

From the discussions above, the evaluation of the impact of CSR on firms' performance is considered important in view of limited research on this topical issue in Nigeria. This paper is therefore, aimed at filling this gap by examining Cadbury which is of the leading listed companies in Nigeria. This research would thereby enrich the existing literature as it provides empirical evidence in the context of Nigeria.

The remainder of the paper is organized as follows. Section two deals with the literature review and conceptual analysis of the study. In Section three, the methodological framework of the study is pursued while the empirical results are discussed in section four. Section five concludes the paper.

2. Review of Literature

2.1 Theoretical Basis of Corporate Social Responsibility

The corporate social responsibility theory states that, the firm offers some sort of value in terms of public benefit or public service which represents a significant swap between the firm and the important stakeholders (Murray & Vogel, 1997). Several determinants of CSR has been identified in the literature to include government (Moon, 2004), national business systems (Edwards, 2004), personal values (Hemingway & Maclagan, 2004) etc. The growing societal expectations from business organisations are similar to the current global quest for peace, prosperity and fight against terrorism, global warming and poverty. Campbell (2000) argued that business organizations are by necessity indebted to the society in the form of a social contract.

Friedman (1961) argued that the primary responsibility of firms is to pursue profits within the limits of the law. Korhonen (2002) reiterated the 'dominant social paradigm' (DSP) of profit maximization for the owners of the firm. The economic logic being that issues as competitive advantage, cost minimization, equilibrium, market efficiency, optimal returns on investments (including labour) and market dominance are the bedrock of modern capitalism. The pursuit of profit in its operations therefore has no place for emotions, feelings and benevolence (Hall and Soskice, 2001). The capitalist economic genre is often rewarded in terms of increase in shareholders wealth and firm growth; although it sometimes leads to market failures (i.e. monopolies, pollutions, etc.). One of the key drivers of the capitalist economic logic is the fact that it is measurable. This measurability lends great significance to the 'bottom-line' accounting philosophy on which the success or failure of firms are benchmarked. Thus, business enterprises strive to ensure that the bottom-line looks good at all times even at the expense of other things.

Nevertheless, this logic is not inherently anti-welfare as most anti capitalists would tend to argue and all things being equal, the logic promises to deliver global economic development. The shareholders perspective of corporate social responsibility is anchored on the economic and legal responsibilities firms owe to their owners. The stakeholder theory of CSR posits that an organisation's commitment to operate in an economically and environmentally sustainable manner while recognizing the interests of its stakeholders will lead to enhanced FP in the long run (Freeman, 1984, 1994). Companies should therefore incorporate the interests of everyone who can substantially affect, or be affected by, the welfare of the company positively or in the negative. The contention is that companies may engage in CSR in order to achieve sustainable business growth through improved efficiency and enhanced reputation, brand, and trust (Porter & Kramer, 2002, 2006, 2011; Russo & Fouts, 1997).

The social impact hypothesis is predicated on the stakeholder theory which advocates that when the needs of the various corporate stakeholders are met, the financial performance (FP) of the firm may be enhanced (Freeman, 1984). In essence, this hypothesis portends that when the implicit aims of stakeholders, are satisfied, a company's reputation will positively impact on its FP. Conversely, the disappointment of groups of stakeholders may have a negative financial impact (Preston & O'Bannon, 1997). Mullins (2002) suggests the grouping of stakeholders under six main headings: shareholders, employees, customers, government, community and the environment, and other business interface including suppliers, trade unions, business associates and competitors.

The trade-off hypothesis deals with the neoclassical economists' position that socially responsible behaviour will result in few economic benefits arising from increased operational costs will reduce profits and shareholder wealth (Waddock & Graves, 1997). In effect, a negative impact of Corporate Social Performance (CSP) on FP is expected which reflects the classic Friedman position, supported by Vance (1975) finding that "...corporations displaying strong social credentials experience declining stock prices relative to the market average" (Preston & O'Bannon, 1997). This view supports the findings of the study by corporate managers in line with the managerial opportunism hypothesis, may pursue their own private objectives to the detriment of both shareholders and other stakeholders (Weidenbaum & Sheldon, 1987). The rationale as advanced by Preston and O'Bannon, (1997) is the need by managers to maximize their own short term private gains when FP is strong. The reverse strategy of conspicuous social programs is deployed when FP weakens in order to offset disappointing results.

Allouche and Laroche (2005) propounded the positive and negative synergy hypotheses. A positive catalyst suggests that higher levels of CSP lead to an improvement of FP, which in turn provides the opportunity of reinvestment in socially responsible actions. This is in conjunction with the slack resource hypothesis of Waddock and Graves (1997) which predicts that better FP potentially results in the availability of slack resources that may increase a firm's ability to invest in socially responsible domains such as community and society, employee relations or environment. A virtuous circle may the develop leading to a self-reinforcing simultaneous and interactive positive relation between CSP and FP. However, according to the negative synergy hypothesis, higher levels of CSP lead to decreased FP, which in turn limits the socially responsible investments. There may then be a simultaneous and interactive negative relation between CSP and FP, forming a vicious circle.

Some authors have argued that the stakeholder perspective of corporate social responsibility ought to extend to the concept of accountability. Swift (2001) describes accountability as the requirement or duty to provide an account or justification for one's actions to the principal. This form of accountability can

easily be glimpsed from that characteristic of principal-agent relationship, which is central to the firm as an economic and legal entity. In the same line of thought, Gray et al. (1988) contends that the firm's accountability is to the wider society because of the inherent social contract between the society and the business. The idea is that business derives its existence from the society which can be enforced through the market forces that punish or reward corporate behaviour (Swift, 2001 & Korten, 2004). The next section examines some literature on the relationship between CSR and FP.

2.2. Empirical Links between Corporate Social Responsibility and Financial Performance

Rapti and Medda (2012) studied the relationship between the CSR and FP in the Airport financial performance using the Valuation Multiples methodology and applying it for the UK Manchester Airport. The result shows a negative or non-existent relationship between CSR and FP according to the commonly used ratios in the air transport industry - EBITDA (Earnings before Interest, Taxes, Depreciation, and Amortization) value, and Net Assets (the owners' equity). A sample of 179 publicly held Canadian firms was selected by Makni et al (2009) to evaluate the causal relationship between CSR and FP covering years 2004 and 2005. Using the "Granger causality" approach, the study find no significant relationship between a composite measure of a firm's CSP and FP, except for market returns. On the other hand, the environmental dimension of CSP had a significant negative impact on return on assets, return on equity, and market returns. This is consistent, with the trade-off hypothesis and, in part, with the negative synergy hypothesis which states that socially responsible firms experience lower profits and reduced shareholder wealth in the short run.

The relationship between the CSR and financial performance of banks in Japan, US and UK was investigated by Keffas and Olulu-Briggs (2011). The study utilised thirty-eight financial and economic ratios based that covered the major scope of financial performance - Asset quality, Capital, Operations and Liquidity. In addition, they used Data Envelopment Analysis - a non-parametric linear programming technique to create a piecewise linear frontier that facilitates the determination of the efficiency levels. The findings reveal that banks that incorporate CSR have better asset quality; capital adequacy; and are more efficient in managing their asset portfolios and capital. The relationship between CSR and FP were positive.

The effect of CSR-related shareholder proposals that pass or fail by a small margin of votes for financial performance was examined by Flammer (2012) and reported that although CSR is a valuable resource which engenders superior financial performance, it is bedeviled with decreasing marginal returns. Findings of Khanifar

et al (2012) suggest mixed results across different industries. In this Pakistani study, Iqbal et al (2012) obtained data on 156 listed companies on Karachi Stock Exchange for 2010 and 2011. The results of the study conclude that CSR has no effect on financial performance FP in terms of market value of the share and financial leverage.

Comparing the Islamic and Conventional banks, Haniffa and Hudaib (2007) argue that the former being based on ethical precepts as dictated by the Shari'a, are expected to be more socially responsible than their conventional counterparts. The investigation conducted by Haniffa and Hudaib on this matter reported absence of information regarding four dimensions: commitments to society, disclosure of corporate vision and mission, contribution to and management of *Zaka* (Islamic charity) and benevolent loans, and information regarding top management. El Mosaïd and Boutti (2012) also attempted to evaluate the level of CSR in Islamic banks and analyze the relationship between performance indices Return on Average Assets (ROA) and Return on Equity (ROE) with the corporate social responsibility disclosure based on data obtained from the annual reports of 8 Islamic banks for years 2009 and 2010. The study applied simple regression models the result of which indicates absence of statistically significant relationship between the CSR and the performance index. However, Arshad et al. (2012), was more successful in establishing significantly positively relationship between the performance Islamic banks as measured by ROA and ROE and CSR in a study on a sample of Malaysian Islamic banks during years 2008 to 2010.

In Nigeria, while ascertaining that CSR has the potential to make positive contributions to the development of society and businesses, the investigation by Uadiale and Fagbemi (2012) utilise a sample of 40 audited financial statements of quoted companies. The study examines the impact of CSR activities on financial performance measured with Return on Equity (ROE) and Return on Assets (ROA). The results show that CSR has a positive and significant relationship with the financial performance measures. Also, Luper (2013) examines economic responsibility of Nigerian banks in financing of Small and Medium Scale Enterprises (SMEs), which the author believes is one of the key sectors that can drive the economy of the nation. The study which covered ten years (from 2001-2010) applied descriptive statistics and sample t-test which shows that there is no significant improvement in SMEs financing in Nigeria. This indicates that Nigerian Banks are not committed to their CSR (economic responsibilities) of financing to SMEs which is critical in mitigating these economic challenges and enhancing economic growth. This is also corroborated by the findings of Akanbi and Ofoegbu's (2012) study of the effect of CSR on organizational performance in the banking industry with a particular reference to United Bank for Africa. The study which used primary data in which two hundred and fifty employees of the bank

were interviewed revealed that the dimensions of corporate social responsibility have effect on organizational performance.

In short, the results of research on the relation between CSR and FP vary depending upon the models, data and countries of analysis. Therefore, the debate over the impact of CSR on FP is on-going and left open to further study.

3. Methodology

There are several methods for measuring CSR. Ahmed et al (2012) identified two acceptable methods for measuring CSR. The first method is a reputation index, generated by Moskowitz (1972), where knowledgeable observers rate firms on the basis of one or more dimensions of social performance. The reputation index rate a number of firms as outstanding, honorable mention, or worst (Moskowitz, 1972). The second method is the Content analysis used by Bowman and Haire, 1975; Anderson & Frankle, 1980). This approach analyses the extent of the reporting of CSR activities in a firm's publications and particularly in the annual report. Other methods recorded in literature is the deployment of the stakeholder-weighted CSR index which aggregates the index scores for CSR sub-dimensions to measure CSR (Akpınar et al. 2008 as cited by Iqbal et al., 2012). Yet another method is obtaining the perception of stakeholders through the deployment of survey questionnaire (Akanbi & Ofoegbu, 2012).

In this study, as advocated by Saunders et al (2009), triangulation which is the use of different data collection technique within one study in order to achieve a more accurate research has been applied. In order to vitiate the impact of perception bias, the use survey questionnaires have been augmented with the content analysis which involves tracing of sentences of each component of the CSR disclosed in annual reports of Cadbury Nigeria PLC.

The use survey questionnaires and semi structured interviews was employed. The questionnaires were structured in such a way that respondents were required to tick their preferred choices among provided options and to give their unbiased answers where possible. Specifically, the socio-economic and demographic characteristics of respondents including the age, marital status and composition, the sex and educational attainment of the respondents were carefully considered. Adequate care was taken to minimize ambiguity and bias while drafting the questionnaire.

The data collected from the questionnaire was analyzed using the descriptive analysis. The simple percentage is calculated by dividing the total number of questions answered by the total number of questions and then multiply by 100. For inferential purpose, the chi-square is employed. The chi-square method is calculated as thus:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where

χ^2 = Chi-square

O = Observed frequencies

E = Expected frequencies

In case $\chi^2 = 0$; it shows agreement between the observed and the expected frequencies. However, if $\chi^2 > 0$, there is no agreement. In essence, the greater the value of χ^2 , the greater is the variation between the observed and the expected frequencies.

4. Data Presentation and Analysis

4.1. Presentation of Data of Respondents

4.1.1. Profile of Respondents

The population of the study is 1021 which constitute the total number of staffs of the company. A stratified random sample of 198 respondents cutting across different strata of the company was selected. A total of 187 questionnaires were returned. The company has a pool of literate and educated workforce required for manning the operations of a foremost manufacturing company. More than half of the respondents (92.3%) are educated beyond SSCE/GCE O' level. Most of the respondents to the questionnaire are junior staffs (43.9%). The others are fairly evenly divided between the middle and senior staffs. The male respondents represent 30.5% of the total respondents, while 69.5% is for female which is explained by the simple fact that higher percentages of workers in the company are female. Also, majority of the respondents are within the working age. There are no child labourers in the company which is consistent with the labour laws. Furthermore, majority of the respondents indicate that they are married with 42.8%. 17.1% being single, 29.4% are separated while 8% are divorced. Only 2.7% of the respondents indicated to have been widows and widowers.

4.1.2 General Responses of Respondents

The respondents also expressed opinions on other matters relating to the link between CSR and FP.

- Majority of the respondents (96.3%) indicated that the company practices CSR while only 2.7% of the respondents indicated otherwise and 1% of the respondents claimed to be ignorant of the practice.
- Also, most of the respondents (91%) opined that it is necessary for companies to be socially responsible but 5.3% think otherwise.
- Most of the respondents (60%) indicated that it is not proper to make it CSP mandatory for a company.
- Majority of the respondents (89.3%) indicated that the practice of social responsibility is not a waste of resources.

4.1.3. Analysis of Research Related Questions

The hypothesis to be tested is that in the null, corporate social responsibility has no impact on the financial performance of an organization. The key questions to be evaluated are presented in Table 1 together with the respondent scores.

Table 1. Key Questions and Respondents' Scores

Question	No. of Respondents	Yes	No	Don't Know
Does corporate social responsibility increase a company's profit?	187	120	60	7
Does the provision of social services increase a company's sales?	187	117	50	20
Do you think your company, Cadbury is practicing social responsibility to increase its financial performance?	187	126	50	11

Source: Field Survey, 2013

The result Chi-Square analysis is presented in Table 2.

Table 2. Chi-Square Analysis

O _i	E _i	O _i -E _i	(O _i - E _i) ²	(O _i - E _i) ² /E _i
120	97.4	22.6	510.76	5.24
117	97.4	19.6	384.16	3.94
50	97.4	-47.4	2246.76	23.07
60	83.11	-23.11	534.07	6.43
50	83.11	-33.11	1096.27	13.19
126	83.11	42.89	1839.55	22.13
7	9.5	-2.5	6.25	0.66
20	9.5	10.5	110.25	11.6
11	9.5	1.5	2.25	0.24
				86.5

Source: Computed by the Authors. 2013

X^2_c (Chi-Square Calculated) = 86.5

$X^2_{0.01,4}$ (Chi-Square tabulated at 1 percent level) = 13.28

As earlier stated, if X^2_c is greater than $X^2_{0.01}$, we reject the null hypothesis (H_0) and therefore accept alternative hypothesis H_1 however, if $X^2_c < X^2_{0.01}$ we accept the null hypothesis (H_0) and, therefore, reject the alternative hypothesis (H_1). From the chi-square analysis above, it can be seen that X^2_c is greater than X^2_{t-} , these suggest that CSR practiced by Cadbury Nigeria has a statistically significant impact on its revenue and profit. However, from the Chi-square analysis the impact is little.

4.2. Content Analysis

In 2006 the Board of Cadbury Nigeria PLC announce breaches in its accounting systems and controls leading to over statement of the profit which in turn led to write down of profit to loss level between =N=1billion and =N=2 billion¹. The company therefore recorded losses for the next three years but turned around thereafter. In 2011, the profit before tax stood at =N=5 billion. The financial CSR outlay fluctuated yearly from 2007 and 2011. A cursory review of the relationship between the CSR and Profit before Taxation (PBT) shows no discernible linkage (Fig. 1).

¹ <http://www.cadburynigeria.com/news.php>

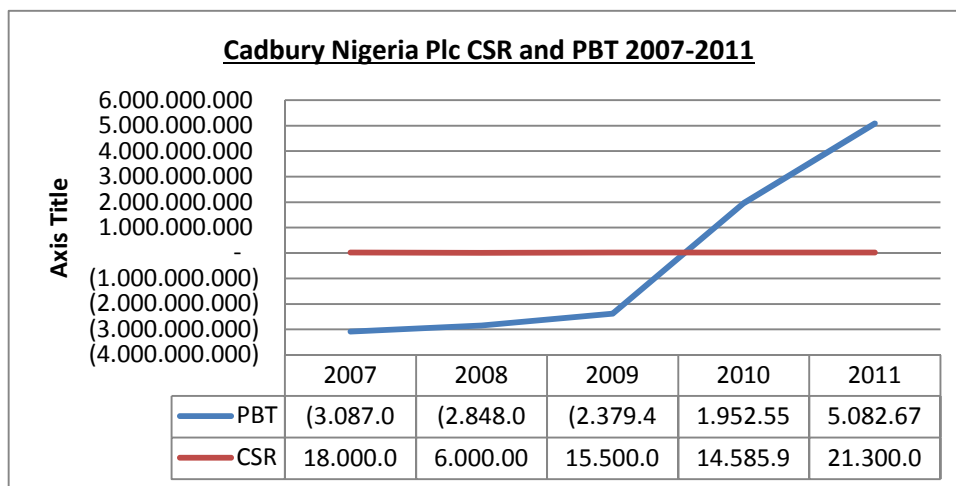


Figure 1. Cadbury Nigeria PLC Corporate Social Responsibility and Profit Before Tax 2007-2011

Source: Company's Annual Financial Statements (2007 to 2011)

The company in 2011 disbursed a total financial donation of =N=21.3 million “to a few areas of great societal needs where the most impact could be made”. This was an improvement of about 50% over the previous year. The company also reported the donation of undisclosed products and employees' time committed to volunteering in community programmes. An examination of the content of CSR spending in 2011 however reveals that out of the =N=21.3 million, =N=19.4 (89.9%) were for marketing related purposes for Cadbury children's day talent drive and nutritional training for health and education workers. Given the paltry financial contributions of the company to the community, the majority of which were for self-serving marketing development, the company cannot be said to be socially responsible.

5. Conclusion

The study, using Cadbury Nigeria Plc. as case study examined the relationship between CSR and financial performance. It was observed that CSR could be a key instrument to the financial development of any organizations and that profit making is at the heart of the current growing trends in corporate social responsibility practice and not morality. The perception of majority of the workers of the company that the company practices social responsibility in order to increase its financial performance is not consistent with the content analysis of the financial report of the company. The divergence in the findings can be attributed to the fact

that the company does not report the value of companies products donated at not-for-profit instances. The cost values of the employees' time expended on community assignment are also not captured. Therefore, the perception of the staffers that the company is actively engaged in CSR activities is not corroborated by the financial records. Arising from the findings, this study recommends that the company focuses on a niche social programme for which it could be identified as a socially responsible organisation.

What has been presented so far is not a set of arguments to undermine corporate social responsibility as a management concept and practice, rather it is an attempt to sell corporate social responsibility practices to firms, and as such contribute to the legitimization of corporate social responsibility as a neutral management practice. The moral obligation for firms to be responsible should derive from the legal responsibilities accorded them by the economic system and dominant social paradigm. For corporate social responsibility practice to be truly relevant, it has to be compatible to the business language. The study recommends that an effective CSR goes a long way in improving the firms' financial performance in Nigeria

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Marketing Status in SMEs, Industrial versus Consumer Companies

Shahram Azad¹, Hamed Hemmati²

Abstract: The purpose of this paper is to seek differences between the status of marketing in SMEs selling consumer goods and those sell industrial goods. The research is a field study conducted with 112 Small and medium sized enterprises located in the five biggest industrial cities of Iran. The results of this research show that there are significant differences in the marketing status between consumer and industrial goods SMEs such as doing market research in the internal status of marketing (role of marketing) and market structure in the external status of marketing (relevance of marketing). This research fills a gap in the literature relating to the differences of marketing in SMEs. It has a comprehensive view in this regard.

Keywords: Marketing status; SMEs; Consumer marketing; industrial marketing

JEL Classification: M31

1. Introduction

A precept of the marketing concept contends that business achieves success by determining and satisfying the needs, wants, and aspirations of target markets. Few would argue that this determination and satisfaction of target market wants and needs is critical for firm success. These concepts, traditionally thought to be part of the marketing function of the firm, have fueled scholars' interest in the role of marketing within the firm (e.g., Becherer et al., 2003; Berthon et al., 2008; Moorman & Rust, 1999; Simpson & Taylor, 2002; Webster, 1981, 1992, 2003; Webster et al., 2003).

The small and medium sized enterprises sector plays a significant role in the world economy and marketing in SMEs is a contentious issue among both academics and practitioners (Brodie et al., 1997; Gilmore et al., 2001) and has been so for more

¹ Department of Management, Islamic Azad University (Ahar Branch), Iran, Address: No 159, 7th Boostan St., Pasdaran Ave. Tehran 19585/466, Tel: +98 426 2228211, Fax: +98 426 2228211, Corresponding author sh-azad@iau-ahar.ac.ir.

² Department of Management, Islamic Azad University (Ahar Branch), Iran, Address: No 159, 7th Boostan St., Pasdaran Ave. Tehran 19585/466, Tel: +98 426 2228211, Fax: +98 426 2228211, e-mail: h-hemmati@iau-ahar.ac.ir.

than 20 years (Cromie, 1990). Despite the widespread researches on the marketing in SMEs, few have been involved on the differences of marketing in SMEs. This paper sets out to describe the status of marketing in SMEs in two groups, businesses selling consumer goods and businesses selling industrial goods. We seek a precise and comprehensive comparison between these different sectors. Simpson and Taylor's (2002) Role and Relevance of Marketing model was used to relate the marketing status in the sectors. The model explains the marketing status with two dimensions, the role of marketing within the organization and the relevance or need for marketing demanded by the external business environment (Simpson & Taylor, 2000; 2002). In this research, we seek to answer the following questions:

- Do the differences between the status of marketing in SMEs selling consumer goods vs. businesses selling industrial goods mostly come from internal or external factors?
- What are different in the status of marketing in SMEs, between industries vs. consumer goods companies?

2. Literature Review

This literature review summarizes this literature in order to offer a contextual backdrop for this research. This involves reviewing the literature on SME marketing, and the related literature on marketing in consumer and business industries. Further, as a foundation for the research design, Simpson and Taylor's (2002) Role and Relevance of Marketing model is proposed as a framework for design and analysis in this work. Our study focuses on the marketing status. Various authors have examined the status of marketing in firms (e.g. Becherer et al., 2003; Berthon et al., 2008; Moorman & Rust, 1999; Simpson & Taylor, 2002; Webster, 1981, 1992, 2003; Webster et al., 2003) and since the 1980s, the marketing has been shown to have varying status in the firms.

There is considerable evidence which shows that small business success (Smith, 1990) and survival (Blankson & Stokes, 2002; Brooksbank et al., 1999, 2004) is dependent on the firms marketing efficiency, with many authors citing lack of marketing awareness as a key cause of company failure (Fuller, 1994; Gadenne, 1994; Hogarth-Scott et al., 1996; McLarty, 1998; Murdoch et al., 2001).

Small businesses characteristics influence the ways in which they informally implement the marketing planning process. Small businesses tend to focus on short-term goals rather than long-term objectives due to time constraints (Beaver & Harris, 1995) and prefer action rather than planning (Matthews & Scott, 1995). Various authors agree that SMEs owner/managers prefer simple, pragmatic and intuitive marketing planning over complexity and formality (Carson, 1999; McCarton-Quinn & Carson, 2003; Lancaster & Waddelow, 1998), although Walker

et al. (1992) found evidence that firms with formal marketing plans outperformed those without. Such a pragmatic and intuitive approach to marketing planning has its roots in the nature and management of small firms. Small businesses differ in their business objectives and management style from large businesses (Leppard & McDonald, 1987). They also operate under severe financial and human resource constraints, lack specialized marketing expertise and often seek controlled growth rather than sales maximization, market share and profit like larger firms (Gilmore et al., 2001). SME's have the advantage of having closer contact with customers and are more flexible, responsive to change and more innovative than larger firms. They rely significantly on word-of-mouth for promotion (Stokes, 2000; Stokes & Lomax, 2002) and utilize personal social and business networks for information gathering, idea testing and advice and draw on experiential knowledge to intuitively develop their competencies (Carson, 1999; Carson & McCarton-Quinn, 1995; Gilmore et al., 2001; Hill, 2001a, b; Stokes, 2000). Some researchers suggest that it is difficult to disentangle such networking and relationship building from entrepreneurial action, and thereby imply that marketing orientation goes to the core of the innovativeness that is essential to SME success (Hult et al., 2003; Wilson & Stokes, 2004; Zontanos & Anderson, 2004).

As the marketing literature has evolved over recent decades, we have witnessed the emergence of a number of classic dichotomies. Such dichotomies suggest that marketing practice is "different" for firms with different types of customers (e.g. consumer vs business), different market offerings (e.g. goods vs services), different geographic scope (e.g. domestic vs international), or different size and age characteristics (e.g. small vs large, or newer vs more established firms) (Coviello & Brodie, 2001). The consumer or industrial dichotomy was established in the marketing literature by a number of persuasive theoretical works, each of which essentially argues that industrial markets are different from consumer markets along a number of dimensions (Ames, 1970; Cooke, 1986; Lilien, 1987; Webster, 1978). For example, Lilien (1987) argues that industrial markets are unique due to their derived demand, long purchase cycles, and a varying and fragmented market structure. Industrial buyers are described by Lilien as heterogeneous in terms of their number and size, and often multiple individuals are involved in the purchase decision process. He argues that systems-selling typifies industrial marketing, with products sold in a decentralized manner. From a managerial perspective, Ames (1970) also argues that marketing in the industrial world is more of a general management responsibility than in consumer firms, and both he and Webster (1978) note that industrial markets are characterized by functional interdependence and buyer-seller interdependence.

Compared with the literature stream surrounding the status of marketing, inquiry on this topic has been more limited for two different sectors in small and medium sized enterprises, consumer and industrial sectors. Many studies have attempted to

define marketing and outcomes of marketing for Small businesses in general or to examine the status of marketing in one sector of industries. Carson (2001) and Sui and Kirby (1998) traced the evolution of marketing and the various approaches to SME marketing. Other authors have attempted to develop hypothetical and empirical models of marketing for Small businesses. Sui et al. (2004), Julien and Ramangalahy (2003) and Berthon et al. (2008) showed how strategic marketing practices such as knowledge of current market conditions and consumer tastes were positively related to SME performance. Becherer et al. (2003) examined internal environmental factors such as the background and decision processes of CEOs. One aspect of marketing, promotional efforts was found to be a key influence in performance of Small businesses (Wood, 2006). Market orientation as a driver of SME business performance has also generated scholar interest (Blankson & Stokes, 2002; Fillis, 2002; Pacitto et al., 2007). Finally, authors have studied underlying reasons for the characteristics of SME marketing practices. Simpson et al. (2006) examined drivers of marketing effort such as the presence of a marketing department and marketing representation at the board level. There are a number of approaches to measuring marketing status, performance and effectiveness. The literature of market orientation has, for example, spawned a number of “scales” or “instruments” for measuring the status of marketing exhibited by firms (Blankson & Omar, 2002; Deng & Dart, 1994; Deshpande et al., 1993; Gray et al., 1998; Kohli & Jaworski, 1990; Narver & Slater, 1990). Amongst the models and instruments for considering marketing status, Simpson and Taylor’s (2002) Role and Relevance of Marketing model is a particularly useful basis to do this research. It is grounded in the SME sector, especially it clearly describes internal and external marketing environment in SMEs. The model is somewhat descriptive in nature. It was shaped based on the internal organization for marketing activities (i.e. the role of marketing) and the demands of the external competitive business environment (i.e. the relevance of marketing) (Simpson et al, 2006).

3. Hypotheses

We first consider whether the type of customer affects the status of marketing within a small or medium size company. Firms serving industrial markets have fewer customers (as compared with consumer markets) and have closer partnerships with their customers (Heide & John, 1992). These partnerships involve more aspects of the firm and, consequently, the marketing department no longer serves as the primary link between the firm and its customers (Homburg et al., 1999). In firms serving consumer markets, the marketing function serves as the primary link between the firm and its market. Thus, it stands to reason that the marketing status is better in these firms.

H1: There is a significant difference in the status of marketing in SMEs, between companies selling consumer and those selling industrial goods.

Differences of the marketing status in SMEs, between industrial and consumer companies, could be divided into two groups, internal and external differences. Simpson and Taylor (2002) called these two groups role (internal) and relevance (external) of marketing. If, generally, there is a significant difference in the status of marketing between companies selling industrial goods and those selling consumer goods, we would seek to examine two more hypotheses related to differences in role and relevance dimensions.

At the end of the 1970s and the beginning of the 1980s a series of controversies took place on the issue of the specificities of industrial and consumer marketing. For some scholars (Bonoma & Johnston, 1978; Corey, 1976; Webster, 1979) industrial marketing situations show unique characteristics that must be distinguished from consumer marketing: a small number of customers for any given supplier, buyer-seller interdependence and the existence of the durable customer supplier relationship (Cova & Salle, 2007).

H2: There is a significant difference in the internal status of marketing in SMEs, between companies selling consumer and those selling industrial goods.

H3: There is a significant difference in the external status of marketing in SMEs, between companies selling consumer and those selling industrial goods.

Our research adds to the SME literature stream by comparing the status of marketing in SMEs (consumer industries and business industries) with a deep view of both internal and external environment.

4. Research Design

The broad aim of this research is to investigate differences in the status of marketing in Small and medium sized enterprise between businesses selling consumer goods and companies selling industrial goods from two dimensions, internal and external marketing environment. We employed a Face to Face survey of SMEs of the five biggest industrial towns in Iran, using a list came from Iranian Organization of Small Industries and Industrial Towns¹. The list, totaling 3585 businesses, was screened to ensure only Small businesses were included in the statistical society. Interviewers were sent to 144 Small businesses of which 50 per cent were businesses selling consumer goods and 50 per cent were businesses selling industrial goods. Of the 144 Small businesses were visited, 112 acceptable questionnaires were returned, a response rate of 78 percent. The questionnaire was targeted at marketing managers, marketing directors or managing directors,

¹ www.iraniec.com.

whichever was appropriate and who had knowledge of marketing within the company. No inducements were included for participation in the survey. Instead, the research director of Islamic Azad University (Ahar Branch) prepared a letter asking members to participate. Several steps were taken to address nonresponse error and other external validity concerns. First, on receipt of the completed questionnaires from interviewers, respondents were contacted by telephone to verify that they personally participated in the survey and were top managers of their firms. Table 1 shows the sample profile.

Table 1. Sample profile

Size	Business type		Total
	consumer	industrial	
1-9	19	10	29
10-19	10	17	27
20-49	18	18	36
50-99	7	10	17
100-149	2	1	3
Total	56	56	112

The questionnaire was developed by designing questions based on the Simpson and Taylor's work (Simpson & Taylor, 2002). The role of marketing, representing the status of marketing inside SMEs, was measured using a 12-item scale (alpha 0.87) and the relevance of marketing, representing the status of marketing outside of SMEs, was measured using a 16-item scale (alpha 0.79). A five-point Likert scale, anchored by Very high and very low, was used to record responses.

5. Findings

Hypotheses testing

Mann-Whitney test was used to test the hypotheses. We ran three examinations on all issues, Status", issues of the internal status of marketing, Role" and issues of the external status of marketing, Relevance".

H1 proposed that there is a significant difference in the status of marketing in SMEs, between companies selling consumer and those selling industrial goods. We found support for this (Sig<0.05, 0.013). There is a significant difference in the status of marketing in SMEs, between companies selling consumer and those selling industrial goods.

H2 stated that there is a significant difference in the internal status of marketing in SMEs, between companies selling consumer and those selling industrial goods. We found support for this (Sig<0.05, 0.032), so there is a significant difference in the internal status (role of marketing) of marketing in SMEs, between consumer and industrial goods companies.

H3 stated that there is a significant difference in the external status of marketing in SMEs, between companies selling consumer and those selling industrial goods. Despite hypotheses H1 and H2, we did not find support for H3 (sig>0.05, 0.068), therefore there is no significant difference in the external marketing status (relevance of marketing) in SMEs, between consumer and industrial goods companies.

Differences in Marketing Status

Mean responses were calculated for the 12 questionnaire items of role of marketing and for the 16 questionnaire items of relevance of marketing for both the industrial and consumer goods companies. The mean scores for the 28 items were then tested utilizing Mann-Whitney test to determine where significant differences were present between industrial and consumer product SMEs. The mean ranks and Mann-Whitney tests are presented in Table II (role of marketing) and in Table III (relevance of marketing). Mean scores above the scale midpoint of 3 were generally considered agreement answers while those scores below the midpoint were generally considered disagreement response. While the cutoff point is arbitrary, it does reflect that scores above the midpoint should indicate higher levels of agreement than scores below the midpoint. Statistically significant differences in the internal status of marketing (role of marketing) between consumer and industrial goods SMEs were seen in terms of four items: Marketing Performance Measurement, Doing Market Research, and Pricing Based on Market Research and Placing Based on Market Research (sig<0.05, dark area of the table II).

Table I. Differences and Similarities between Status of Marketing Variables (Role of Marketing) for Consumer and Industrial Product SMEs. Mann-Whitney Tests (Non-Parametric Test)

Independent Variables (Role of Marketing)		Mean		Sig.
		Consumer	Industrial	
Q6	Business planning	3.13	3.14	0.725
Q7	Marketing strategic planning	3.11	3.25	0.504
Q8	New product development	3.56	3.62	0.686
Q9	Promotion and ads planning	3.16	2.87	0.151
Q10	Customer data base developing	3.11	3.00	0.710
Q11	Competitors analysis	3.58	3.50	0.488
Q14	Improving plans based on marketing assessment	3.38	3.18	0.199
Q15	New product development based on market research	3.34	3.30	0.800
Q12	Marketing performance measurement	3.45	3.07	0.026
Q13	Doing market research	3.18	2.84	0.035
Q16	Pricing based on market research	3.45	2.95	0.003
Q17	Placing based on market research	3.38	2.79	0.000

Table 3. Differences and Similarities between Status of Marketing Variables (Relevance of Marketing) for Consumer and Industrial Product SMEs. Mann-Whitney Tests (Non-Parametric Test)

	Independent Variables (Relevance of Marketing Items)	Mean		Sig.
		Consumer	Industrial	
Q19	Have a competitive policy	3.59	3.59	0.827
Q24	Low need to marketing because of a stable and guaranteed market	2.05	2.32	0.114
Q27	People are market oriented	3.41	3.12	0.114
Q29	Want to develop their markets	4.21	3.98	0.443
Q31	Want to sale current products in current markets in future	4.29	4.07	0.215
Q33	Want to sale new products in new markets in future	4.15	4.04	0.339
Q18	Stability of markets	2.77	3.21	0.020
Q20	Intensity of competition in market	4.13	3.23	0.000
Q21	Ease of entrance into market for newcomers	3.32	2.64	0.002
Q22	Market is in hands of a few firms	1.75	2.46	0.000
Q23	Ability to influence on market by a few firms	2.07	2.77	0.000
Q25	No need to marketing to do business at present and in future	1.93	2.29	0.031
Q26	Necessity of internal coordination to get marketing aims	4.36	4.07	0.045
Q28	Marketing is critical for firms	4.13	3.52	0.001
Q30	Want to sale current products in new markets in future	4.75	4.39	0.004
Q32	Want to sale new products in current markets in future	4.27	3.93	0.034

As the tables show, differences in the internal status of marketing between consumer and industrial small and medium sized companies were less than differences in the external status of marketing including Stability of Markets, Intensity of Competition, Ease of Entrance into Market, A few Firms control Markets, Ability to Influence on Market, No Need to Marketing, Necessity of internal coordination, Marketing is critical, Willing to sale current products in new markets and Willing to sale new products in current markets. There were not significant differences in six items of the external status of marketing (relevance of marketing) ($\text{sig} \geq 0.05$, light area of the table III).

6. Conclusions

The result of this study found some interesting differences between consumer and industrial goods SMEs.

The mean analysis shows four differences in four items of the dimension of the internal marketing status. Industrial sector answered almost all questions related to “Doing Market Research” (q13, q16, q17) and also item “Promotion and Advertising Planning” (q9) below 3. Since firms serving industrial markets have fewer and have closer partnerships with their customers (Heide & John, 1992), they do little market research and have fewer tendencies to plan for advertising and promotion. It means that the main differences in the internal marketing status between consumer and industrial goods SMEs relates to customer type. Indeed, Contrary to consumer goods SMEs, industrial goods SMEs prefer to have direct and individual relationships with their customers.

Although the test of hypothesis H3 did not prove that there are significant differences in the external marketing status, we found three main differences in this dimension including: “Market Structure” (q18, q20, q21, q22, and q23), Need to Marketing” (q25, q26 and q28) and relatively “Marketing Strategies” (q30, q32).

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A New Measure of Distributive Justice by Data Envelopment Analysis

Yutaka Ueda¹, Yoko Ohzono²

Abstract: Traditionally, distributive justice has been measured with multiple question items to which respondents indicate the degree to which their working situation corresponds with those described in the question items. This article proposes an alternative method to measure distributive justice, using the data envelopment analysis (DEA) approach. We apply an efficiency measure calculated in DEA for the inputs/outcomes ratio to judge distributive justice in the organization. Using the data collected from accounting workers who live in the Tokyo metropolitan area, the results of correlation analysis show that this new measure of distributive justice has significant positive correlations with all three satisfaction variables in a male sample, and with one satisfaction variable in a female sample, providing some justification for using this new variable as a measure of distributive justice.

Keywords: data envelopment analysis; organizational justice; distributive justice; satisfaction

JEL Classification: M19

1 Introduction

Organizational justice has received a huge amount of attention from researchers in organizational behavior (OB). Organizational justice, that is, how fair an employee judges the behavior of the organization to be (Greenberg, 1987), is considered to include multiple aspects of fairness in organizational systems. Typically, distributive justice, procedural justice, and interactive justice have been considered dimensions of organizational justice (Brockner & Wisenfeld, 1996; Bies, 1987). Further, in the literature of OB, these dimensions of organizational justice have been examined as antecedents of workers' attitudes and behaviors (Greenberg, 1990).

Among these three dimensions of organizational justice, the concept of distributive justice is rather simple. It is based on the idea that "employees determine their perception of fairness in the workplace by comparing the equity of the ratio of their

¹ Professor, Seikei University, Address: 3-3-1, Kichijoji-kitamachi, Musashino-shi, Tokyo, 180-8633, Japan, Tel: +81422-373589, Corresponding author: ueda@econ.seikei.ac.jp.

² Associate Professor, Josai University, Japan, Address: 1 Gumyo, Togane-shi Chiba-ken 283-8555, Japan, Tel.: +81-475-55-8855, Fax: + 81-475-53-2194, e-mail: yoko.ohzono@nifty.com.

inputs to their outcomes in comparison to those of their co-workers” (Fields, 2002, p. 163). Although the ratio of inputs to outcomes is the basic concept of distributive justice, researchers have to consider how they can actually collect data about distributive justice from workers (respondents) when they plan to conduct empirical studies using the data. Usually, researchers collect the data by asking workers to answer multiple questions regarding the degree to which these workers perceive an organization’s fairness in a situation where the organization is expected to take care of its workers in a fair manner. However, through these questions, researchers actually have no way to tell whether or how workers evaluate the equity of the ratio of their inputs to their outcomes in comparison with those of their co-workers.

In contrast to past researchers’ approach, this article proposes a new idea: utilizing data envelopment analysis (DEA) to measure distributive justice. First, this article explains the basic idea of DEA. Second, it calculates a distributive justice variable through DEA and examines the relationship between this variable and satisfaction variables, using data collected from Japanese working persons. Results show the possibility and limitations of using this variable to measure distributive justice.

2. The DEA Approach and Its Effectiveness as a Measurement of Justice

DEA was created as one of the applications of the linear programming (LP) method and has been used as a method of comparing production efficiency between decision-making units (DMUs) (Cooper, Seiford, & Tone, 2007; Hirao, 2012; Shinmura, 2012). In DEA, DMUs are considered entities that have independent managerial authority, at least to some degree, and function similarly to each other. Typical DMUs are shops selling similar products, schools teaching students of similar generations, and teams in a sports league. However, in respect of the definition of DMUs as entities for which specific inputs and outputs can be identified, individual persons can also be considered DMUs. As a matter of fact, in research in organizational behavior, it is important to compare production efficiency of individual workers and identify what an inferior worker should do to approach the performance of a superior person. Some past studies have used DEA to compare efficiency of individual persons, such as Major League Baseball (MLB) pitchers (Chen & Johnson, 2010), supervisors of basketball teams (Fizel & D’Itri, 1999), managers of football teams (González-Gómez, Picazo-Tadeo, & García-Rubio, 2011), and politicians (Wei, 2007, 2008).

Further, application of DEA to analysis of individual behaviors can go beyond such simple comparison of performances of individual persons. In the classical equity theory of motivation (Adams, 1965), workers feel satisfaction when they perceive that the organization deals with them and other comparable workers on a fair basis.

Concretely described, workers psychologically calculate a ratio (i.e., outcomes/inputs) between rewards they receive from an organization, as outcomes, and their contributions to the organization, as inputs, and compare their own ratio with those of other available and comparable others. If their own ratio is perceived as lower than others' ratios, they are frustrated with the situation and try to remedy it by using various strategies, including biasing perceptions. If they perceive they cannot remedy it, they may even get out of the situation (quit the job). Organizational justice research took the basic framework of this equity theory and treated the perceived fairness based on this outcomes/inputs ratio as distributive justice.

The outcomes/inputs ratios of a person and others are originally based on individuals' psychological calculations; hence, it is considerably difficult for any researcher to elicit and examine them empirically. As a matter of fact, past researchers have used multiple items to measure respondents' perceptions of how fairly rewards are distributed by their organization. For example, Sweeney and McFarlin (1997) proposed 11 distributive justice items, and Niehoff and Moorman (1993) developed 5 distributive justice items. Other researchers have also created and proposed original items regarding distributive justice (Joy & Witt, 1992; Parker, Baltes, & Christiansen, 1997; Welbourne, Balkin, & Gomez-Mejia, 1995).

In contrast to these traditional methods, here we consider the possibility of using the idea of the efficiency ratio in the DEA approach to measure the degree of distributive justice. If inputs of the efficiency ratio are regarded as contributions of an individual worker to the organization and outcomes are rewards from the organization to him or her, this efficiency ratio in DEA can represent the measure of that worker's distributive justice. In the DEA approach, comparative efficiency values of individual entities are calculated, with the maximum efficiency converted to 1. When the calculated value for an individual is 1, it means, from the standpoint of a distributive justice argument, that the person is considered fairly treated in the organization. There might be more than one worker whose value is 1, and these workers constitute the efficiency frontier of fairly treated workers. When this value is below 1, it means the worker is positioned somewhere inferior to the efficiency frontier and is unfairly dealt with in the organization, even if he or she adopts the most optimistic viewpoint.

It might be controversial whether other DMUs in the DEA approach can be regarded as "comparable others" in the equity theory. However, a "gestalt" comprising others around an individual worker is often emphasized as comparative others rather than specific others in equity theory (Summers & DeNisi, 1990), and so this method is considered one of the meaningful approaches to organizational justice research. Further, it might also be suggested that not only distributive justice, but also procedural and interactive justice, should be considered in organizational justice theory. Even so, this method is considered important in

research on organizational justice because the past method of measuring distributive justice is not consistent with the original concept of equity ratio, as discussed above, and this method can be used complementarily with the traditional method to collect data regarding organizational justice.

3. Hypothesis

One of the most difficult problems with applying the idea of equity theory to empirical study is how to determine the output (outcomes) and the input (contributions) of the basic ratios for self and comparable others. Outcomes are considered to be composed of intrinsic rewards and extrinsic rewards. For example, a sense of attainment and self-growth is typical of the former, and wage is considered one of the latter. In this study, both a sense of self-growth and wage are included as outcomes. On the other hand, we considered factors like labor hours and perceived ability as workers' contributions. It is needless to explain that how long workers spend at their job is included in their contribution. Further, perceived ability should be included in their contribution because workers tend to think they make a huge contribution to the organization if they evaluate their own ability very highly. Workers are unlikely to feel unfairness if they perceive that co-workers who have higher ability than they do get more money. Therefore, we can calculate the index of efficiency of each worker as below. Here, input and outcome weights are respectively denoted by v_1 , v_2 and u_1 , u_2 .

$$\theta = \frac{u_1 \text{ a sense of self growth} + u_2 \text{ wage}}{v_1 \text{ labor hours} + v_2 \text{ perceived selfability}}$$

We assume all workers at least implicitly perceive their own θ and evaluate how fairly they are treated in the organization by comparing this θ to others' ratio. We further assume that "others' ratio" is not a specific person's value, but a sort of gestalt composed of ratios of workers with the same job category. DEA can provide an effective tool to compare the levels of efficiency of DMUs (workers). If a worker's efficiency is high (i.e., it is evaluated at or close to 1 in DEA), it means the worker's treatment is in his or her favor, so he or she is considered more satisfied with the current situation. In contrast, if a worker perceives his or her θ as lower than the gestalt, she or he feels unfairly dealt with in the organization and is dissatisfied with the current working situation. To summarize this point, we can propose the following basic hypothesis.

Hypothesis: The inputs/outcomes ratio of a worker calculated through DEA, a ratio that represents distributive justice to that worker, will positively influence the worker's satisfaction with a current work situation.

4. Research Method

4.1. Sample

This study utilized data from “Working Person Survey, 2010” by Recruit Works Institute (RWI). RWI has conducted a similar survey every two years since 2000. RWI deposited the data at the Center for Social Research and Data Archives (SSJDA), Institute of Social Science, University of Tokyo, to give researchers permission to use the data. The survey was conducted among workers (full-fledged, contracted, part-time, etc.) who lived within a 50-kilometer radius of the Tokyo metropolitan areas (Tokyo, Kanagawa, Chiba and Saitama Prefectures) and were 18 to 59 years old. Although previous versions of the survey were conducted by a placement method, this time all the respondents answered the questionnaires through the Internet. The total sample size is 9,931 (5,753 male workers; 4,178 female workers).

We assumed workers tend to regard other workers who have the same job as they do and live in an area similar to theirs as comparable to them. Therefore, these data are very useful for specifying the gestalt of workers because the survey was conducted in a specific urban area in Tokyo and the sample of the survey is divided into more than two hundred job categories.

In this study, we used only the data for workers in accounting jobs. We chose this job category because, in comparison with sales and production, we believe accounting work has to be based on standard accounting principles and practices, and the job contents are not so different among various organizations. Further, we divided the data by gender because, based on current Japanese culture and work environment, it is rare that workers compare their situation with that of opposite-gender workers even if they are in the same job category. Final sample size was 318 (133 male, 185 female).

4.2. Measures

As already described, we chose labor hours and perception of one’s ability as the input values. Data about average labor hours per week were used as the former. As the latter, an original questionnaire had 12 items and asked respondents to indicate the degree to which they considered they had each of the abilities necessary for their work. Based on the result of exploratory factor analysis of responses to these 12 items, we regarded perceived ability as classified into three sub-categories, and we used an average of responses to the items constituting each sub-category as the variable for that sub-category. These sub-categories are human relations ability (6 items, $\alpha = 0.838$), problem analysis ability (7 items, $\alpha = 0.880$), and current job performance ability (2 items, $\alpha = 0.910$).

As outcomes received from the organization, wage and a sense of one's growth were used. The former is associated with extrinsic rewards, and annual income (10,000 Japanese yen as a unit) was used as the variable. The latter is related to intrinsic rewards, and we measured it with a five-point-scale item ranging from "realize self-growth" (5) to "do not realize self-growth" (1).

As satisfaction measures, three Likert-type five-point-scale items were considered. These items were for assessing respondents' satisfaction with the workplace, the organization, and the job, respectively. Although internal reliability was very high ($\alpha = 0.894$), we treated them separately because investigating various relationships between our measure of justice and different areas of satisfaction was necessary to explore effectively the possibility of the measure.

4.3. Analytical Process

There are multiple models regarding return to scale in DEA models. Although the most basic model is the Charnes-Cooper-Rhodes (CCR) model, which assumes constant returns to scale, the Banker-Charnes-Cooper (BCC) model was adopted in this study because it is not realistic to assume that wages and sense of growth would be doubled if skill or labor hours were doubled in a Japanese work environment.

5. Result

Table 1 and Table 2 show results of correlation analysis using data of the male sample. Table 1 displays correlations of initial variables that compose inputs and outcomes for the ratio representing distributive justice, and Table 2 exhibits correlations between our distributive justice variable and satisfaction variables. According to Table 1, correlations between any two ability variables are comparatively highly positive, but correlations of them with labor hours per week are close to zero. Further, a correlation between annual income and a sense of self-growth is also insignificant. This means that the two input variables represent different aspects of workers' contribution to the organization from each other and that the two output variables are also different. These insignificant correlations mean there are multiple aspects of inputs and outcomes, and that can be just as well for confirmation of the effectiveness of application of DEA to research in organizational justice.

Table 1. Inter-correlations of input or outcome variables (male workers, accounting job)

variables	means	Std. Dev.	1	2	3	4	5
1. human relations ability	3.623	.662					
2. problem solving ability	3.727	.670	.617**				
3. current job execution ability	3.724	.892	.471**	.695**			
4. labor hours per week	44.910	9.455	.001	.000	-.008		
5. annual income	589.993	244.185	.302**	.359**	.268**	.094	
6. a sense of self-growth	3.194	.969	.218*	.181*	.128	-.074	.150

N = 134, ** : p < .01, * : p < .05

Table 2 shows correlations of our distributive justice variable with each of three areas of satisfaction, using the data of male accounting workers. As shown in this table, all three correlations are significantly positive, meaning that the traditional idea of a positive effect of distributive justice on satisfaction is also confirmed through this new variable. This result is supportive of our hypothesis.

Table 2. Inter-correlations regarding distributive justice and satisfaction (male workers, accounting job)

variables	means	Std. Dev.	1	2	3
1. workplace satisfaction	3.261	.941			
2. organization satisfaction	3.537	.881	.718**		
3. job satisfaction	3.366	.914	.832**	.725**	
4. distributive justice	.820	.111	.195*	.288**	.241**

N = 134, ** : p < .01, * : p < .05

In contrast, Table 3 and Table 4 show results of correlation analysis using a female sample. As is the case with a male sample, correlations between any two input variables and between the two output variables are still insignificant. However, one difference of the correlations in Table 3 from those in Table 1 is the relationship between annual income and perceived ability. In the case of a male sample, the correlations of annual income with human relations ability and problem solving ability were significant. In contrast, in a female sample, only a correlation between annual income and current job execution ability is significant.

Table 3. Inter-correlations of inputs or outcome variables (female workers, accounting job)

variables	means	Std. Dev.	1	2	3	4	5
1. human relations ability	3.626	.557					
2. problem solving ability	3.568	.585	.508**				
3. current job execution ability	3.549	.759	.350**	.536**			
4. labor hours per week	35.087	10.803	.002	.006	-.119		
5. annual income	315.557	157.978	.007	.106	.165*	.466**	
6. a sense of self-growth	3.216	.954	.155*	.248**	.196**	.042	.041

N = 185, ** : $p < .01$, * : $p < .05$

Table 4. Inter-correlations regarding distributive justice and satisfaction (female workers, accounting job)

variables	means	Std. Dev.	1	2	3
1. workplace satisfaction	3.314	.902			
2. organization satisfaction	3.654	.794	.653**		
3. job satisfaction	3.443	.833	.704**	.562**	
4. distributive justice	.802	.126	.140	.274**	.115

N = 185, ** : $p < .01$, * : $p < .05$

Table 4 displays correlations between our distributive justice variable and satisfaction in a female sample. Although distributive justice has a significant positive correlation with only one of three areas of satisfaction, this significant correlation accords with our hypothesis.

6. Discussion and Conclusion

This article proposed a new variable to measure distributive justice, adopting the method of the DEA approach. Past study on organizational justice showed workers are more satisfied with their work environment if they perceive a high level of organizational justice, and our study revealed that our distributive justice variable also has positive correlations with many of the satisfaction variables, as expected. This result implies our new variable is reasonably effective in representing distributive justice.

One advantage of this method is consistency with the basic idea of an inputs/outcomes ratio in equity theory. As discussed, past studies adopted multiple question items, asking the degree to which respondents agree with sentences regarding how fairly they are dealt with in the organization. However, even if workers answer these question items adequately, their answers do not necessarily indicate that they have calculated such a ratio of their perceived contribution and outcomes from the organization. In contrast, a DEA approach directly calculates the ratio of input and output, and it can be said that this value is what the equity theory actually assumes.

On the other hand, there are some disadvantages in this method. First of all, neglect of workers' perceptual aspect might be a serious disadvantage associated with this method. Researchers examining the effect of organizational justice on attitudes and behaviors of workers actually focus, not on the actual, or institutional, aspects of organizational justice, but on workers' perception of organizational justice. Therefore, traditional organizational justice theory admits that each worker, who has a different perspective from others, considers a different set of people as "comparative others" even if workers are placed in objectively the same work environment in the organization. In contrast, this method assumes that each worker's perception is influenced, or determined to some degree, by a rather comprehensive situation that is composed of the sum of all workers' situations and that can be aggregated by compiling all the responses of workers. The degree to which each worker is fairly dealt with is measured with a gap between that worker's responses and those of others as a whole.

Further, even if the assumption of this method is valid, difficulty in specifying concrete contributions to and outcomes from the organization is also a problem. However, this is a problem, not with this method, but with the framework of the equity theory or organizational justice theory. In fact, the idea of the equity theory is essentially abstractive, and what workers really consider as inputs and outcomes is not deeply considered. Researchers focusing on distributive justice also leave the judgment of concrete inputs and outcomes to workers, who answer abstractive question items about how fairly rewards are distributed.

Despite some limitations, we believe the method using the DEA approach can give clues to help researchers reconsider measures of organizational justice again. We expect and encourage future study to use and improve this new method to further advance organizational justice theory.

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Comparing the Resulted Strategies from the SWOT and the SPACE (Electricity Company as Case Study)

Abolfazl Sherafat¹, Khadijeh Yavari², Sayyed Mohammad Reza Davoodi³, Nima Bozorgzadeh⁴

Abstract: The present study was aimed to compare the implementation of two models in terms of strategic planning. In order to this, firstly, several field studies have been done in terms of the SWOT and the SPACE analysis. In the next step, a team of the middle and senior managers that have studied in terms of SWOT analysis seek to identify the organization's strengths, weaknesses, opportunities, and threats and then develop their related strategies. They also develop and indicate the SPACE questionnaire. Based on the results of this questionnaire and determining the organization's strategic position, they strive to develop the appropriate strategies. Finally, the strategies that have been derived from these models were compared to each other and their strengths and weaknesses were analyzed.

Keywords: strategic plan; SWOT analysis; SPACE model

JEL Classification: L10

1. Introduction

The organizations analyze their potencies and environmental conditions in the frame of strategic planning and develop realizable goals and their realization methods based on them. It is important to know that how to develop a dynamic and applicable strategic planning for the organization. There are different methods for developing the organizations' strategic plans. In the present study, two methods have been used from several methods. Generally, it is impossible to recognize that

¹ PhD Candidate, Department of Industrial Management, Faculty of Management, University of Tehran. Address: Al-e-Ahmad Ave. Tehran, Iran, 14155-6311, Tel: (+98 21) 88003575, 88007095, Fax: (+98 21) 88006477, Corresponding author: sherafat.a@ut.ac.ir.

² B.A Graduate of Industrial Management, Yazd University, Address: P.O. Box 89195-741, Iran. Tel: +98 (351) 725 0119, e-mail: sherafat.a@ut.ac.ir.

³ PhD student, Department of management, Dehaghan Branch, Islamic Azad University, Isfahan, Iran, Address: Islamic Azad University, Dehaghan Branch, Dehaghan Blvd, Isfahan, Iran, 81595-158, Tel: (+98)-3222622210, Fax: (+98) - 3222627311, e-mail: smrdavoodi@yahoo.com.

⁴ Bachelor of Business Administration, Dehaghan Branch, Islamic Azad University, Isfahan, Iran, Address: Islamic Azad University, Dehaghan Branch, Dehaghan Blvd, Isfahan, Iran, 81595-158, Tel: (+98)-3222622210, Fax: (+98) - 3222627311, e-mail: nima.it.us@gmail.com.

which method is better than other. Its success depends on different factors such as organization's conditions, size, goals, and maturation, accessible resources, and the managers' regards.

In this study a team of the organizations' senior managers and the direct members seek to identify the organization's strengths, weaknesses, opportunities, and threats after collecting the primary data through two different methods. In the next step, the related strategies of the SWOT have been recognized. Also the team members indicate the questionnaires after determining its criterions. Based on the resulted scores from these questionnaires through agreement method, the organization's strategic position has been determined and the strategies were recognized based on them. Finally, the resulted strategies from two models were compared to each other and their strengths and weakness were analyzed.

2. Literature Review

The matrixes are the most important factors for determining the organizations' strategies that make the rapid use of the information and decision makings through collecting and summarizing information in a table. Several models have been suggested based on these instruments that each of them has its own strength and improvable points that are selected based on the organization's size and its type. The Strengths, Weaknesses, Opportunities, and Threats (SWOT) matrix and the Strategic Position and Action Evaluation (SPACE) matrix, Quantitative Strategic Planning Matrix, Boston Consulting Group, and General Electric Model are the important models (Ahmadi & Fathollah, 2012). Several studies have been done in terms of such models and their implementation in the different organizations. Additionally, these models have been used in Iran. Many studies have been done about these models and their implementation in different organizations and also such instruments have been used in Iran such as the study of Pegah Milk Company that has been done based on the SWOT Matrix and using SPACE for defining its strategies (Siavashan, 2012, pp. 66-74). It can be said that the SWOT model is an appropriate and more applicable method in the strategic studies. Indeed, the SWOT and SPACE are the starting point in the strategy formulation (Griffin, 2012). As the previous paragraphs show several studies have been done in terms of SWOT and SPACE models, but there are some studies that have done to compare these models.

3. Introducing the Models

These models have been introduced and their characteristics have been indicated in this section.

3.1. The SWOT Analysis

The Strengths, Weaknesses, Opportunities, and Threats (SWOT) matrix is a summary and effective model for recognizing the strengths, weaknesses, opportunities, and threats in a systemic manner. This method seeks to analyze the internal and external conditions and then develop a beneficial strategies for its survive based on them (Ahmadi & Fathollah, 2012). In other words, this method is a glance image from the organization's present conditions (Bamford, 2010).

There are nine cells in this matrix that eight steps should be passed to create it

Table 1. Developing the strategies from the organization's internal and external conditions

	Strengths	Weaknesses
Opportunities	SO strategies	WO strategies
Threats	St strategies	WT strategies

Each two factors are compared to each other in every step and its goal is not to recognize the best strategy, but is to determine the more implementable strategy.

The organization strives to exploit the external opportunities through its internal strengths in the SO strategy implementation. Managers prefer that their organization is in a situation that is able to exploit the external trends through its internal strengths.

The goal of the WO strategies is that the organization seeks to improve its weaknesses through exploiting the external opportunities. Sometimes, there are appropriate opportunities in the external environment, but the organization is not able to exploit such opportunities because of its internal weaknesses.

The companies seek to decrease the effects of external threats through their strengths in the ST strategies implementation. This does not mean that the powerful company facing threats in its environment inevitably.

The organizations that implement the WT strategies have defensive position and their goal is to decrease internal weaknesses and prevent from external environment's threats. The organization that has internal weaknesses and facing many external threats, it is can be resulted that it has a perilous position. Indeed, this organization seeks to its survive and strive to decrease its activities for its maintenance (decrease strategies), integrate with other companies, express its bust, or dissolve itself. (David, 2010), (Weihrich, 1982), (David F., 1986), (Shirt, 1993), (Radder, 1998).

3.2. The SPACE Model

The Strategic Position and Action Evaluation (SPACE) model is offered as a developed version of the Boston Consulting Group (BCG). Axis of this model shows both internal and external dimensions. Financial strengths and competitive advantages are the main internal measures and environmental stability and industry strength are the main external measures.

In order to use the SPACE matrix for determining the organization's strategic position, the following six steps should be passed.

- The sub-criteria of every main criterion (including financial strength, competitive advantage, environmental stability, and industry strength) are listed.
- The sub-criteria of financial strength and competitive advantage are scaled from +1 (worst) to +6 (best) and the sub-criteria of the environmental stability and industry strength are scaled from -1 (best) to -6 (worst).
- These sub-criteria values are summed and then are divided to the sub-criteria frequency so that the main criteria mean is resulted.
- Every main criterion's mean is specified on the diagram axis.
- Mean of the financial strength, competitive advantage, environmental stability, and industry strength are summed together.
- Zero point and the resulted point are connected to each other. The resulted line indicates type of the organization's strategy that can be assertive, competitive, defensive, and conservative strategies. (Weihrich, 1982)

There are four strategic positions (including financial strength, competitive advantage, environmental stability, and industry strength) that can be suggested for the organization based on its position (David F., 2010).

4. Case Study: Electricity Power Company

In order to compare these two methods, they were implemented in an electricity power company and then their results were compared to each other. These results were indicated in the later sections.

4.1. Introducing the Studied Organization and its Experiences in Terms of Strategic Plan Implementation

Electricity Company That Studied is established to produce, transit, distribute, and sell the secure electricity for all of the electricity users. This company also includes

different assistances such as planning, development, exploitation, financial, human resources, and logistic assistances.

The first study on the strategic planning is started in 1993. In the 1995, the first version of strategic plan software that has been developed in the PIP method was used in this company. This plan is developed for 5 years, but some problems and difficulties prevent from its growth.

The companies managers decided to develop the strategic plan in another manner that has possibility of rapid changes. The strategic plan development was done in the BSM method in seven steps after several advices and counsels.

In 2012, the organization decides to apply and implement the SPACE model for defining its strategic position.

4.2. Using the SWOT Matrix for Developing the Organization's Strategies

The goal of SWOT is to select the most appropriate strategies through comparing the internal strengths with weaknesses and comparing external opportunities with threats (Böhm, 2008). In order to identify the company's strengths, weaknesses, opportunities, and threats, a team of senior managers and directors strived to analyze the information in several sessions. In order to this, all of the members indicate their own opinions about strengths, weaknesses, opportunities, and threats and then their information was collected. This information is indicated in the following section.

Strengths & Weaknesses

S1: achieving most profit from industrial applicants because of high price of electricity	W8: period of project conditions evaluation
S2: high percent of electricity sale	W9: strategic process and macro planning
S3: direct interaction with applicants through agent	W10: reliable information system
S4: appropriate installation capacity	W11: process-oriented management implementation
W1: high prices	W12: technology management
W2: asset problems	W13: suppliers and contractors management
	W14: employees' performance evaluation system
W3: customer satisfaction	W15: senior managers' empathy
W4: supplying the applicants' demand for electricity	W16: group working and team working
W5: customer compensation system	W17: employees' satisfaction
W6: appropriateness of the organizational	

structure with its projects
 W7: project management system

Opportunities & Threats

- O1: providing conditions for private section’s participation in the electricity industry especially in electricity production
- O2: possibility of using banking services
- O3: geographical position of this province and its location in the country’s electricity transition network cloverleaf
- O4: master industrial and mineral applicants and demanders in this area
- O5: exclusiveness of the organization’s mission
- O6: environmental conditions for using the renewable energies
- O7: possibility of applying modern methods in contract management
- O8: informational and communicational infrastructures in the region
- O9: expert manpower
- O10: possibility of developing the employees’ skills (in the projects of facilities establishment and development)
- O11: appropriate work cultures in the region
- T1: master applicants bust
- T2: inflation
- T3: boycott
- T4: economic inaction
- T5: elimination of the governmental supports (through perfect implementation of the electricity market)
- T6: deficiency of the contracting and consulting companies especially native companies
- T7: little ability in new technology import
- T8: fundamental change in supplying electricity method
- T9: exclusiveness of some of the facilities suppliers
- T10: long-term period of decision making in the high level organization
- T11: unserviceable rules
- T12: attracting qualified manpower through other organizations
- T13: interaction with advanced countries in terms of manpower educations

The following strategies were derived after identifying, examining, and confirming the previous strengths, weaknesses, opportunities, and threats. The strengths, weaknesses, opportunities, and threats were indicated in the table 2 and their numbers also were indicated.

Table 2. The derived strategies from comparing the strengths, weaknesses, opportunities, and threats

Strategies	From SWOT
Increasing the resources and income	W2+O1,2 و S1,2+ T1,2,3,4
Managing the capital budget attraction	W2+ T3,4,5
Increasing the customers’ satisfaction	W3,5+ T10,11 و S4+O3,4 و S3+T1,2,3,4

Increasing activities in the electricity market	S4+ O3,4 و S1,2+T 1,2,3,4
Supplying the electricity timely	W4+ O4,6
Improving processes performance	W13+ T3,6,9 و W11+T10,11 و W1+T9,10,11
Improving the facilities exploitation	S4+ O3,4
Improving the outsourcing management	W1,3,4+ O1,9
Managing the projects	W13+T3,6,9 و W6,7,8+O7,10
Increasing the employees' productivity	W17+ T12
Developing the employees' synergy	W12+T7,8,10 و W15,16 +O11
Increasing the employees' satisfaction and motivation	W17+ T12
Promoting the inter-organizational communications	W15,16+ O11
Developing the learning and innovation	W10+O9,10 و W12+T7,8,10

As indicated in the previous sections, the main goal of the SWOT is to recognize the strategies that are derived from overcoming external opportunities on the external threats and preserving the strengths and preventing from internal weaknesses (Rowe. A.J. R.O.Mason & K, 1982).

4.3. Using the SPACE Matrix in the Organization

In order to implement the SPACE model, a team of senior managers and directors that have had concentration on the internal and external issues has been established. Also it should be remembered that some of the SPACE sub-criteria that are indicated in the previous sections cannot be applied in the electricity company; therefore, it is necessary to modify them. In order to this, several sessions have been implemented and finally seven sub-criteria for industry strength, 10 sub-criteria for environmental stability, 7 sub-criteria for competitive advantage, and 8 sub-criteria for financial strength have been considered.

Final version of the questionnaire has been developed after applying necessary changes in it. These questionnaires were indicated by team members, but their results have significant differences that it is resulted after some examinations that the team members have different perceptions from questionnaire's items. Because of these differences, it is necessary to assimilate the measures concepts and the team members' perceptions from the questionnaire items. Several sessions have been established with experts and their definitions have been asked to the measures and sub-criteria. Because of the different perceptions of the respondents from questionnaire's items and measures, it is necessary to result a common perception.

In order to this, different definitions of the measures and sub-criteria have been discussed in these sessions and finally a common definition has been resulted by team members. In order to this, the questions have been discussed in this session and then an alternative has been scored and if any agreement could not be resulted, then the mean method has been used.

After collecting information, the scores results were concluded that include 3.125 for financial strength, 2.85 for industry strength, 2 for competitive advantage, and 3.2 for environmental stability. Therefore, it is resulted that this company's position is competitive position.

The results of the SPACE method is this company indicate that this company's strategic position is competitive position. With regard to the company's strategic position, it is necessary to some modifications be done in the financial strength and environmental stability. The collected scores on financial strength indicate that some sub-criteria have low scores in the matrix such as asset potency, capital in operation, profit per share, and ratio of sale price to total price. Also inflation rate, technological changes, and ecological problems have low scores in the environmental stability. Several strategies have been developed based on these measures and sub-criteria in different sessions. These strategies include increase in the resources and income, costs management, budget attraction management, decrease in the crimes, planning for improving facilities and resources and systems exploitation, loan, increase in the productivity, create some attractions for investing in the industry.

Although the strategic position of the company indicates its industry strength and competitive advantage salience in comparison to other dimensions, but it is necessary to attend industry strength and competitive advantage dimensions for improving the company's conditions. In the industry strength it is necessary to consider the measures that have low scores on this matrix. These include resources exploitation, ability of using the capacity in the industry strength and product life cycle in the competitive advantage. The previous efforts not only can improve the financial conditions, but also are able to increase the company's conditions in terms of industry strength and competitive advantage.

5. Conclusion

It is necessary to compare two models' results in this section and its resulted conclusions. The comparison of the company's strengths, weaknesses, opportunities, and threats indicate several strategic efforts that consider some dimensions such as financial, process, manpower, customers, and users. These two models have some similarities and dissimilarities. The SWOT analysis refers to the issues directly and it can be resulted that this has quality conditions, but the

SPACE model examine quantitative issues through concentrating on scores. Speed of two models is high and their similarity and ease are relatively similar. It is possible to achieve a comprehensive view from organization through examining strengths, weaknesses, opportunities, and threats. It is necessary to examine the surrounding issues through considering financial strength, industry strength, environmental stability, and competitive advantage in the SPACE model. It is possible to develop the organizational micro strategies after determining opportunities, weaknesses, strengths, and threats in the SWOT model, but the SPACE model determine the company's strategy after defining its strategic position. In other words, it can be concluded that the SWOT results the macro strategies from micro strategies, but the SPACE derives micro strategies from macro strategies. It seems that the SWOT achieves more perfect and accurate results through concentration on the opportunities, weaknesses, strengths, and threats. But the SPACE model perceives the organization's strategic position rapidly and then develops its strategies with regard to the resulted conditions.

One of the main limitations of the SWOT is that the collected data may not be timely. On the other hand, the respondents may have different perceptions of the SWOT and also they may apply their individual regard and viewpoint rather than actual information (David F., 1986).

Also it seems that there are two main defections in developing and suggesting strategies through SWOT matrix:

1. although the goal of suggesting the SO, ST, WO, WT strategies is to communicate the organization with its external environment factors in order to maintain its survive and activities, but the organization's growth and excellence may be disregarded by the strategists. Therefore, it is necessary to locate organizational goals in the appropriate position of the table so that solutions suggestion not only considers the organization's survive in line with environmental factors, but also consider the organizational growth and excellence.
2. the suggested solutions are derived from interaction between an environmental factor with an internal factor and it is impossible to consider all of the environmental factors and internal factors for developing and suggesting strategies. Therefore, a set of the combinative solutions and macro strategies that are derived from the SO, ST, WO, WT strategies in the common area of this matrix are suggested.

The strategies that are suggested from internal and external factors analysis are the main strategies for organization's move from present situation to the long-term goals. (Ahmadi & Fathollah, 2012).

With regard to the company's position in the SPACE matrix that indicates competitive position; several strategic efforts are suggested that include several

dimensions such as financial, process, facilities, applicants, and customers. One of the most important defections of the SPACE model is different perceptions from measures and sub-criteria that influence scores and finally cannot determine the organization's strategic position favorably. Distance of the determined strategic position point from axis can be indicator of the position pragmatism, but its closeness to the axis increase the axis sensitivity and necessitate its continuous screening. This meant that if the point is close to the zero or one of the axis, a few change in the sub-criteria concept and conditions can change its score and then change its strategic position. High speed of this model in determining the organization's position and also developing strategies makes it more applicable. Also it should be remembered that high speed in determining the strategic position can prevent from senior managers' exhaustion and boredom in developing strategic plan. Also there are several differences in these models applications, but their results are similar to each other.

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Accounting and Auditing**The Global Financial Crisis and the Performance of Capital Markets of Developing Economies: Lessons from Nigeria****Edirin Jeroh¹**

Abstract: In recent times, economies worldwide are believed to be interrelated. This led to the interdependence of financial institutions such that developments in any part of the world, affects other parts as well. Thus, this study examines the extent to which the recent global financial crisis influenced the performance of capital markets in developing economies, with emphasis on the Nigerian Capital Market. The cointegration technique with its implied Error Correction Model was adopted. The results of the parsimonious ECM revealed amongst others that the recent global financial crisis does not have a severe negative impact on the performance of the Nigerian capital market. Based on the above, it was recommended amongst others that efforts must be made by the CBN and other regulatory bodies to ensure that reforms are made to reduce the over dependence on foreign borrowing by financial institutions in Nigeria as this will help to cushion the effect of credit crunch in advanced countries on the Nigerian economy.

Keywords: economic meltdown; stock market; all share index; credit crunch; market capitalization

JEL Classification: G01

1. Introduction

A capital market, according to Ologunde, Elumilade and Asaolu (2006), is a collection of financial institutions set up for the granting of medium and long term loans. It is a market, as Ologunde et al. (2006) further noted “for government securities, corporate bonds, and the mobilization as well as the utilization of long term funds for development – the long term end of the financial system”. In line with the above assertion, Murinde (2006), opine that capital markets are markets for trading long term financial securities, including ordinary shares, long term debt securities such as debentures, unsecured loan stock and convertible bonds. More specifically, one must note that the capital market in any economy provides the mechanism through which investors interact directly or indirectly (through

¹ Lecturer II, Department of Accounting and Finance, Delta State University, Nigeria, Address: PMB1 Delta State, Abraka, Nigeria, Tel.: +2348028336086, Corresponding author: jeroh4laff@yahoo.com.

financial intermediaries) with borrowers, by making available, their surplus funds to those who intend to borrow them for use in their respective businesses.

As a market that synchronizes the different portfolio preferences of investors and financial intermediaries, the capital market is paramount to the acceleration of the economic development of economies across the globe (Oladipupo, 2010; Okafor & Arowoshegbe, 2011; Idolor & Erah, 2011; Ogege & Ezike, 2012 and Otto, Ekine & Ukpere, 2012). This is why most governments pay reasonable attention to the activities of the market since it is not only crucial, but also central to the entire capital mobilization process (Ologunde et al., 2006) which gives room for the creation of goods and services meant for the satisfaction and well being of the citizenry of any country.

Jeroh (2010) believes that the global financial system has in the last ten years witnessed rapid growth and substantial structural change, leading to globalization of financial markets in the world over. This has however resulted in an interrelatedness of world economies owing to the fact that the world is becoming a global village and there seem to be an integration of financial markets (Ajakaiye & Fakiyesi, 2009) which has spearheaded a form of rapid flow of capital across the globe. This interrelatedness of world economies in addition to the integration or connectivity of financial markets (Sanusi, 2011) is believed to have magnified the contagious effects of the recent global financial crisis or meltdown with implications for the transmission of financial policies on economies globally simply because any development in any part of the world affects other parts as well.

Over the years however, the Nigerian Capital Market is believed to have experienced series of shocks, and in recent times, a downturn in economic activities believed to have been induced by significant divestment by foreign investors as a result of the *ill wind* of financial recession that blew financial markets all round the globe (Jeroh, 2012). It is on this background that this study is designed to take a second look at the impact of the recent global financial crises on capital markets, with specific reference to the Nigerian capital market.

In view of the above, the following research question and hypothesis have been developed for this study.

Research Question

How severe was the impact of the recent global financial meltdown on the performance of the Nigerian Capital Market?

Hypothesis Of The Study

In order to achieve the objective of this study and to find answers to the research question stated above, the following research hypothesis was formulated and tested:

H₀: The recent global financial meltdown does not have a severe negative impact on the performance of the Nigerian capital market

H_A: The recent global financial meltdown has a severe negative impact on the performance of the Nigerian capital market

2. Review of Related Literature

Meaning of the Global Financial Crises

Global financial crisis otherwise known as global economic meltdown, or financial meltdown or economic crisis refers to a situation where financial institutions begin to loose substantial amount or parts of their value. The term has been referred to as “*a financial turmoil*” (Igbatayo, 2011), and “*a tsunami*” (Chossudovsky, 2009). According to Nwokah, Anyanwu and Momodu (2009:60) “*global financial meltdown* is a recognition of the globalized economy as we have today”. This is because in about twenty five years before now, it is believed that an economy can easily be singled out or isolated from any identified problem(s) associated with the world economy, since as at then, financial markets were not as integrated as we find them today (Jeroh, 2010). This global financial crisis has caused considerable slowdown in most economies of the world today (te Velde, 2008; and Ujunwa, Salami and Umar, 2011). Despite government initiatives to contain the effect of this global financial crisis on their countries, many still believe that the worst is yet to come (Enebeli-Uzor, 2008; and te Velde, 2008). No doubt however, significant challenges have been posed on economies globally, since the crisis has exposed weaknesses in the functioning of the global economy (Ashamu & Abiola, 2012), thereby leading to a call for a reform in the international financial structure.

Origin and Cause of the Crisis

Jeroh (2010) asserts that opinions vary regarding the origin of the recent global financial meltdown (2007 -2009). The frequently canvassed opinion is that the crisis started in the United States of America (USA), caused in part by mortgage crises resulting from failure on the part of households to make higher payments on mortgages in 2007 (Avgouleas, 2008; Aluko, 2008; Enebeli-Uzor, 2008; Soludo, 2009; Sanusi, 2011; Jeroh, 2010; Igbatayo, 2011; Ajao and Festus, 2011 and Ashamu and Abiola, 2012) causing the global credit market to come to a standstill in July, 2007 (Avgouleas, 2008). Igbatayo, (2011), strongly believes that what began as a meltdown of the United States sub – prime mortgage market in 2007, had grown steadily into a full blown economic crisis by 2008, wiping out trillions of dollars of financial wealth, undermining global trade and investment and putting the real economy on a course of protracted recession around the world.

The recent global financial crisis as noted by Ashamu and Abiola (2012) has some important common elements with previous financial crisis in Asia, Mexico and

Russia in terms of causes and consequences. Accordingly, varying weights have been placed on certain complex factors identified by experts and commentators to be the cause of the global financial crisis. Some of these causes in the views of Adamu, (2009) include the inability of homeowner to make their mortgage payments, poor judgment by the borrower and/or lender, speculation and overbuilding during the boom period, risky mortgage products, high personal and corporate debt levels, financial innovation that distributed and concealed default risks, central bank policies, and regulation. Hence, Kalu (2009) believes that the crisis resulted from laxities in the US financial and regulatory system. This is because the dramatic increase in the expansion of credit to a sub-sector (sub – prime mortgage) was not properly checked, until 2006, when according to Igbatayo (2011) it unraveled.

Prior to the period of the global financial meltdown, there was a period of strong global growth, growing capital flows, and prolonged stability. A period where market participants sought higher yields without an adequate appreciation of associated risks, and failed to exercise proper due diligence. In addition to this fact, it was very obvious that policy makers and other stakeholders failed to appreciate and address the risks that were building up in financial markets.

In line with the above, Avgouleas (2008) enumerated the causes of the crisis as: breakdown in underwriting standards for subprime mortgages; flaws in credit rating agencies' assessments of subprime Residential Mortgage Backed Securities (RMBS) and other complex structured credit products especially Collateralized Debt Obligations (CDOs) and other Asset-Backed Securities (ABS); risk management weaknesses at some large at US and European financial institutions; and regulatory policies, including capital and disclosure requirements that failed to mitigate risk management weaknesses.

The Global Financial Crisis and the Nigerian Capital Market

Generally speaking, the recent global economic meltdown had implications on emerging and developing economies with specific reference to Africa. In fact, the crisis is believed to have occurred at a period when the continent as noted by ECA and APF (2008) had attained an average growth rate of real output above 6.2% with a decline in inflation rate to single digits.

The debate on whether the global financial crisis will affect, or had affected Nigeria, attracted a lot of opinions. At the onset, some authors argued that with the developments in the banking sector, the crisis will have little or no impact on the Nigerian Capital Market. Others argue that the Nigerian Capital Market was yet to be fully integrated into the international financial architecture, as such, what is affecting the US and other Markets in Europe had nothing to do with the Nigerian Market. In line with this argument, Ibegbu (2009) pointed that Nigeria is not as inter – dependent on the global capital systems as other nations on the continent to

the extent that it should be adversely affected by the global crisis. At this juncture, one must note however that although the Nigerian economy, prior to the crisis in 2007, performed below projection, with an estimated GDP growth of 6.2% which was below the set target of 10% (Ajakaiye & Fakiyesi, 2009), but by the year 2007, market capitalization was said to have grown by 74.7% which however fell in 2008, by 45.8% (Okereke-Onyiuke, 2009). In view of this development, Oladipupo (2010), opine that Nigeria's capital market before the recent financial crisis happened to be one of the most profitable investment havens. In his view, the global economic meltdown had over the years, eroded market capitalization and has also reduced the level of the All Share Index in the market, leading to the opening of what he described as "a can of worms and black boxes" which made eight bank Chief Executive Officers (CEOs) and their Directors to loose their jobs. It is in view of the above that the researcher seeks to determine the extent to which the Nigerian Capital Market was adversely affected by the recent financial crisis and to ascertain whether the negative trends in the market if any, could solely be attributable to the recent global financial crisis.

Research Methodology

Unlike most works in the area of global financial crisis and the Nigerian economy/capital markets to date, this paper utilized secondary data. The Vector Error Correction Model (VECM) was employed in analyzing the data obtained for the study. This is aimed at knowing the extent to which the recent global financial crisis had impacted on the performance of capital markets of developing economies, using the Nigerian Capital Market as a case study.

Statistical Procedure

As noted earlier, the Vector Error Correction Model (VECM) was used to analyse the data obtained for this study. This is because the model restricts the long run behaviour of the endogenous variables from converging to their cointegrating relationships, while allowing for a short run adjustment (Gujarati, 2003). The VECM is of the form stated below:

$$\Delta Y_t = \alpha \beta' Y_{t-1} + \sum_{i=1}^{j=1} \Gamma_j \Delta Y_{t-1} + \pi + \zeta_t, t = 1, \dots, T$$

Where Y_t is a vector of the endogenous variables which include market capitalization, value of equity, liquidity ratio, prime lending rate and a dummy variable. The α parameter measures the speed of adjustment through which the variables adjust to their long run values and the β' vectors are estimates of the long run cointegrating relationships among variables in the model. The π is the drift parameter and is the matrix of the parameters associated with the exogenous

variables. The stochastic error term is also included in the specification. The model to be estimated is thus stated below:

$$MCAP = b_0 + b_1PLR + b_2LR + b_3VEQ + b_4FCDUM + U_t$$

Where:

PLR = Prime Lending Rate

LR = Liquidity Ratio

VEQ = Value of Equity

FCDUM = Dummy variable capturing the global financial crises. It assumes the value of 1 prior to the period of the global financial crisis and 0 during the period of the global financial crisis.

L = Natural Logarithm.

The first stage of the test is a test of whether the variables are stationary or not.

Results and Discussion

Unit Root Test

The Augmented Dickey Fuller (ADF) unit root test was used to test whether the variables are stationary or not as well as their order of integration. The summary of the ADF unit root test is shown in Table 1 below:

Table 1. Summary of ADF Unit Root Test Result

Variables	Level Data	1 st Diff	1% CV	5% CV	10% CV	Order of Integration
PLR	-2.08	-4.94*	-3.69	-2.97	-2.62	I (1)
MCAP	-1.15	-4.41*	-3.69	-2.97	-2.62	I (1)
LR	-2.18	-4.86*	-3.69	-2.97	-2.62	I (1)
VEQ	-2.61	-5.82*	-3.69	-2.97	-2.62	I (1)

NB: * denotes statistically significant at the level of 1 percent.

The ADF unit root test result shown in Table 1 above indicates that none of the variable was stationary. However, after taking the first difference, they became stationary. This however permits us to go to the next stage which is the co-integration test.

Co-integration Test

In order to test for the long run relationship among the variables, we adopted the cointegration test. The Johansen Cointegration test was used for this purpose. This test is preferable to the Engel granger test because it permits more than one cointegration equation. The result of the Johansen Cointegration test is as shown in Table 2 below:

Table 2. Summary of The Johansen Cointegration Test Result

Hypothesized	Trace	5 Percent	1 Percent
No. of CE(s)	Eigenvalue	Statistic	Critical Value
None*	0.594963	49.24292	47.21
At most 1	0.499813	23.93720	29.68
At most 2	0.121162	4.539533	15.41
At most 3	0.032434	0.923198	3.76

Hypothesized	Max-Eigen	5 Percent	1 Percent
No. of CE(s)	Eigenvalue	Statistic	Critical Value
None	0.594963	28.30572	27.07
At most 1	0.499813	19.39767	20.97
At most 2	0.121162	3.616335	14.07
At most 3	0.032434	0.923198	3.76

Both the trace statistics and the max-eigen statistic indicate 1 cointegrating equation. The existence of at least 1 cointegrating equation permits us to estimate the over parameterize and the parsimonious ECM model.

Over parameterize and Parsimonious ECM Result

The results of the over parameterize Error Correction Mechanism (ECM) is shown in Table 3 below:

Table 3. Summary of Overparameterize ECM modeling: DLMCAP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLPLR	0.124842	0.348785	0.357935	0.7251
DLPLR(-1)	-0.315315	0.389721	-0.809080	0.4303
DLPLR(-2)	0.525107	0.155080	3.386038	0.0025
DLLR	-0.269845	0.412400	-0.654327	0.5222
DLLR(-1)	0.714930	0.087195	8.199218	0.0000
DLLR(-2)	0.249174	0.354412	0.703063	0.4921
DLVEQ	0.407183	0.059263	6.870795	0.0000
DLVEQ(-1)	-0.004988	0.052609	-0.094807	0.9256
DLVEQ(-2)	-0.024420	0.044826	-0.544774	0.5934
FCDUM	0.040153	0.202416	0.198369	0.8453
ECM(-1)	-0.173256	0.056385	-3.072751	0.0044
C	0.274675	0.087468	3.140286	0.0063

$R^2 = 0.67$, $AIC = 0.99$. $SIC = 1.56$, F statistic = 30.79, $DW = 1.85$.

The parsimonious ECM model was gotten by deleting insignificant variables from the over parameterize ECM model.

The result of the parsimonious ECM model is shown in Table 4 below:

Table 4. Summary of Parsimonious ECM Result Modeling: DLMCAP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLPLR(-2)	0.889766	0.181262	4.908717	0.0000
DLLR(-1)	0.685214	0.077328	8.861098	0.0000
DLVEQ	0.466654	0.111772	4.175055	0.0003
ECM(-1)	-0.844961	0.300682	-2.810148	0.0000
C	0.245646	0.058154	4.224065	0.0003

$R^2 = 0.74$, $AIC = -0.62$, $SIC = -0.86$, $FStatistic = 40.96$, $DW = 2.04$.

The dummy variable for global financial crisis was not significant and was thus deleted from the parsimonious ECM model. The result shows that the liquidity ratio lagged by 1 period has significant influence on the level of market capitalization. The prime lending rate also had a significant and positive impact on the level of market capitalization in Nigeria. The elasticity which is almost unity is an indication of the importance of the prime lending rate in influencing the level of market capitalization in Nigeria. The value of equities with relatively lower elasticity has a statistically significant and positive impact on the level of market capitalization in Nigeria. The statistical significance of the ECM which is also negatively signed indicates a satisfactory speed of adjustment. This suggests that about 84 percent of the errors were corrected in each period.

Vector Error Correction

The result of the Vector Error Correction is shown in Table 5 below:

Table 5. Summary of VEC Result

Cointegrating Eq:	ConitEq1
MCAP(-1)	1.000000
PLR(-1)	-168.7620 (70.8319) [-2.38257]
LR(-1)	-130.6703 (47.6401) [-2.74286]
VEQ(-1)	0.151723 (0.04334) [3.50081]
C	-19781.11

Error Correction:

D(MCAP)

D(PLR) D(LR)

D(VEQ)

ConitEq1 -0.053965 0.0013110.001595 20.14470

(0.02591) (0.00052) (0.00109) (6.04138)

[-2.08258]

[2.50550]

[1.46421]

[3.33445]

The result of the VEC indicates that the market capitalization equation represents the true co integrating equation. The other variables are statistically flawed. They either have the wrong sign or are not statistically significant.

Diagnostic Test Checks

The diagnostic test is used to test the null hypothesis and to know whether errors are normally distributed, whether they are homoskedastic and whether such errors are serially correlated. The summary of the diagnostic test result is shown in Table 6 below:

Table 6. Diagnostic Checks

Jarque – Bera			
Jarque – Bera	0.87	Probability	0.66
Breusch Godfrey Serial Correlation LM Test			
F Statistic	0.196	Probability	0.823
White Heteroskedasticity			
F Statistic	2.26	Probability	0.06

The result in Table 6 indicates an acceptance of the null hypothesis. This means that errors are normally distributed and that there is no serial correlation in the error term. The result also shows that the errors are homoskedastic (that is, they have constant variance). The result of the stability test is shown in Fig. 1 below:

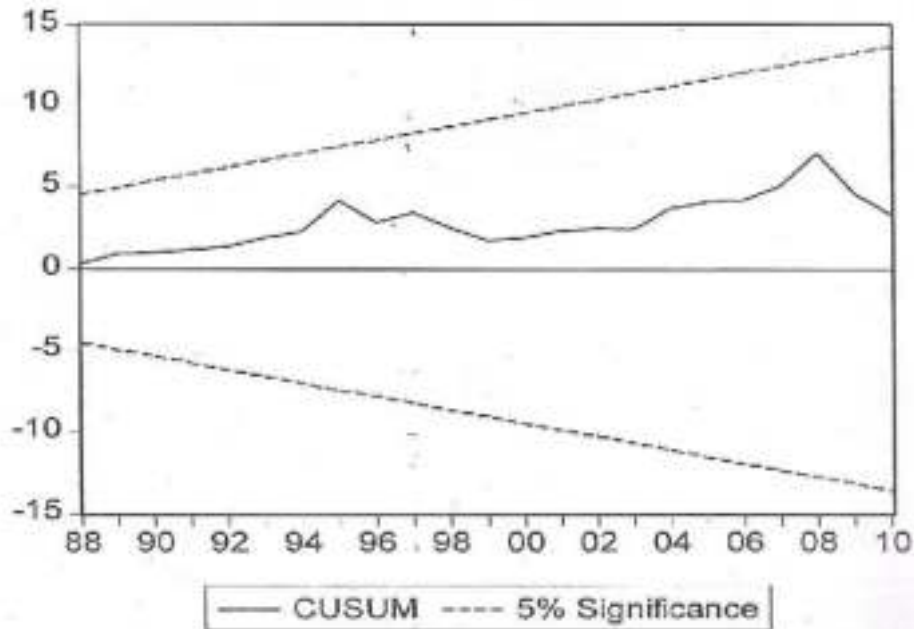


Figure 1. CUSUM Stability Test

The Cumulative Sum Squares (CUSUM) stability test shows that the model is stable because the CUSUM straight line is in between the two 5 percent lines.

3. Conclusion

The results from this study have some important implications regarding the impact of the recent global financial crisis on the performance of the Nigerian capital Market. The dummy variable for global financial crisis was not statistically significant. This is an indication that the global financial crisis did not have a severe negative impact on the Nigerian Capital Market. This result suggests a validation of the null hypothesis that the recent global financial crisis does not have a severe negative impact on the performance of the Nigerian Capital market. Several factors accounts for this development. First, Nigeria is a mono-economy with crude oil as a major source of earnings. The global financial crisis adversely affected mostly industrialized and emerging economies with diverse production base whose capital markets were globally integrated. Another plausible reason for this could be the strategic decisions taken by the Central Bank of Nigeria which includes the injection of liquidity into the capital market by the Central Bank of Nigeria (CBN) during the early period of the crisis.

Recommendations

The findings of this study should not be a cause for celebration for the relevant authorities in Nigeria; rather, it constitutes a source for worry for a country like Nigeria. This is because there is a potential danger of relying on only one major source of foreign exchange for a country. In short, the Nigerian budget is usually tied to a particular price of crude oil and when the prices of crude fell in the global market due to the economic meltdown, the budget was systematically reduced. This trend, if allowed to persist, will have a significant adverse effect on the entire economy. This therefore calls for the need of the Federal Government to be more committed to infrastructural development especially in the Manufacturing and Power sectors respectively as this will help to cushion the effect of shocks or breakdowns in one sector on the entire economy.

The recent reforms in the Nigerian banking sector could be seen as “*a stitch in time*”. Probably, the current trends in the Nigerian capital markets simply could be “a tip of the iceberg” if not for the reforms which came at the time it was needed most in the country. Thus, much still need to be done. The recent losses recorded by the nationalized banks under the Sanusi regime (present CBN Governor) is an indication that all is yet to be well with the banking sector. We must not forget that most of the activities of the Nigerian Stock Exchange are directly and indirectly dominated by trends in the Nigerian banking sector.

At the international level, there is need for a reform in the financial structure of integrated markets such that lapses in any single market can easily be checkmated and if possible corrected to avoid the kind of chain reaction that was recently experienced resulting from the happenings in the US sub prime mortgage market.

Efforts must be made by the CBN and other regulatory bodies to ensure that reforms are in place to see that since our stock market is dominated by the activities of banks in Nigeria, the operations of Nigerian banks must not depend heavily on foreign borrowing. This will to some extent checkmate the effect of credit crunch in advanced countries on the Nigerian economy.

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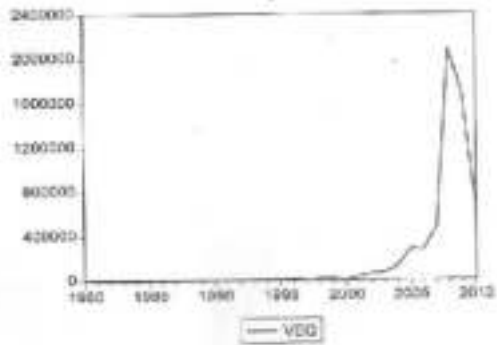
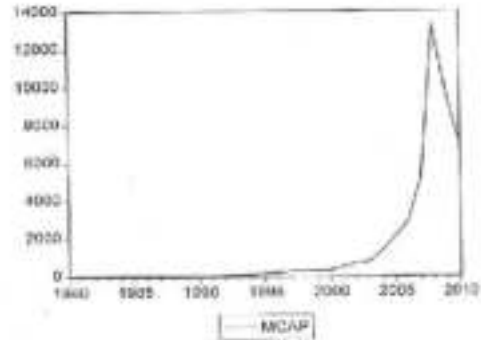
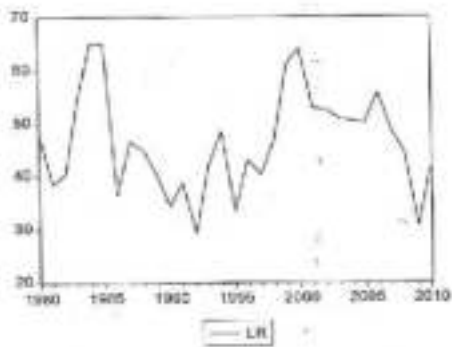
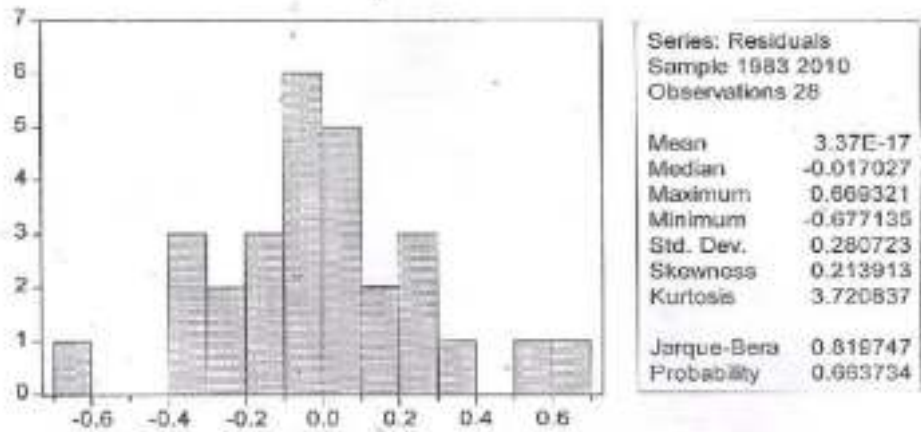
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APPENDIX



Methods for Determining the Degree of Underestimation or Overrating of Shares Using PER Analysis

Andreea Vasiliu¹, Neculai Tabara²

Abstract: Multiples method used in evaluating companies started to gain increasingly more credibility to the specialists compared to the traditional business evaluation methods. There are many studies, both theoretical and empirical, that focus on this topic especially on the accuracy of determining multiples and choosing the peer group (comparable company group selection). The objective of this research is to evaluate the shares listed on the Bucharest Stock Exchange by using multiples method, more precise to determine the degree of underestimation or overrating of shares using PER analysis. The research methodology is a constructivist one, the orientation being one explanatory. Methods and techniques used are quantitative analysis, ARIMA model, correlation and regression. For data collection we used the information from different authorized institutes such as Bucharest Stock Exchange Market, National Agency of Fiscal Administration and the National Institute of Statistics. Research findings can be summarized as follows: calculating growing rate by using the information listed in the balance sheet will lead to an underestimate of the shares, PER lead to an overvaluation of shares, compound average and regression analysis provides the most plausible method of determine the degree of underestimation or overrating of shares for listed companies. The study contributes to the development of company valuation method using multiples.

Keywords: PER; growing rate; comparative method

JEL classification: D46; G11; L25; L74; M41

1. Introduction

Comparative method, also named multiple or analog method (Thauvron, 2007), is one of the most used techniques for the determination of value of companies. Multiple method represents the base of investment or trading decisions for corporates, investment groups, private companies and private investors (Schreiner, 2007, p. III). “Where directly observable prices for identical or similar assets are

¹ PhD Student, “Alexandru Ioan Cuza” University of Iasi, Faculty of Economics and Business Administration, Doctoral School of Economics, Accounting Department, Romania, Address: 11 Carol I Blvd, 700506, Iasi, Romania, Tel:+40 (232) 201000, Fax:+40 (232) 201121, Corresponding author: andreea_vasiliu_1986@yahoo.com.

² Professor, PhD, “Alexandru Ioan Cuza” University of Iasi, Faculty of Economics and Business Administration, Department of Business Administration, Accounting Department, Romania, Address: 11 Carol I Blvd, 700506, Iasi, Romania, Tel:+40 (232) 201000, Fax:+40 (232) 201121, e-mail: neculaitabara@yahoo.com.

available at or close to the valuation date, the direct market comparison approach is generally preferred “ (IVSC, Proposed New International Valuation Standards, iunie 2010, p. 16). Comparison approach is based on a process in which market value is obtained by analysing relevant and related companies, comparing these firms and estimating the value of company by using multiple (Anghel, Oancea Negescu, Anica Popa, & Popescu, 2010, p. 230).

The method is based on the accounting principles. It is easier to apply compared with the discounted cash flow method or dividend method (Schreiner, 2007, p. 1). The approach is based on the principle that transactions with similar assets (property, business) provides empirical evidence on enterprise value (Anghel, Oancea Negescu, Anica Popa, & Popescu, 2010, p. 229), resulting in equal or approximately equal value (Maxim, 2010, p. 435). The fundamental principle for this approach is the substitution principle which sustains that the informed buyer would not pay for a good (business) more than the amount that would buy a comparable good with the same utility (Isfanescu, Serban, & Stanoiu, 2003, p. 109).

This paper addresses one of the problems of this method namely seeking to determine the most plausible way of determination of multiple that will provide an enterprise value more and more close to the real one. The purpose of the research is to determine which of the shares listed on the Bucharest Stock Exchange Market (BVB) are underestimated or overrated. In this sense the research is based on two directions, one which presents the main theoretical aspects of the problem and the second one which provides some empirical evidence by implementing the methodology for the companies listed on BSE. The study aims to bring more clarity on the comparative method for valuating companies. In the process of evaluating companies by using analogical method we can identify the following problems: selection of relevant multiples depending on the purpose of valuation; selecting comparable firms, estimating multiple for the peer group (Schreiner, 2007, p. 53).

2. Literature Review regarding Comparative Method

Although this method is widespread, the literature gives a rather inadequate approach and does not explain clearly the working methodology. Compared with discounted cash flow method update cash flow, comparative method is more difficult to deal with. Most of specialists confirm the importance of this approach because of its importance in investment decisions.

Regarding the theoretical approaches, the authors who have studied the comparative method in evaluating companies are: Damodaran (2002), Palepu, Healy & Bernard (2000), Thauvron (2007), Pratt (2008), Schreiner (2007).

At the empirical level were prepared numerous studies on this method, most focusing on a limited sample of companies or years, taking into consideration a limited set of multiples.

Regarding the accuracy of estimating multiples for business or shares evaluation important studies belong to Kaplan and Ruback, Gilson, Hotchkiss and Ruback. In their work they argue and demonstrate that the discounted cash flow method and analog method gives only an orientated market value. They conclude that the business value obtain using discounted cash flow method undervalue transaction with an average error of -18.1%. They also demonstrate that analog method has higher accuracy. Another area of research concerns residual value of the company. They calculate it by using EBITDA and EBITDA multiple predicted. The analytical result shows that the values obtained exceed 10% on the real ones. Although their method does not provide a true picture is much closer to it than values obtained through accounting methods (Kaplan & Ruback, 1995). Other authors compare the market value of firms in financial difficulties with the estimated future cash flows and EBITDA forecast. Although the average error has a significant value, these two methods are more relevant than others (Gilson, Hotchkiss, & Ruback, 2000).

For identifying comparable companies, important studies belong to Boatsman & Baskin. They show that the average error is lower when firms are chosen based on similarity of historical revenue growth rate (Boatsman & Baskin, 1981). It is also lower when we choose comparable companies based on the similarity of financial performance indicators rather for those chosen based on membership in an economic sector (Alford, 1992).

On the topic of the multiples specific for an industry field, Barker and Tasker conclude that in practice we are using PER and price to book value multiples in the financial sector, price to operating cash flow multiples in trade (Schreiner, 2007, p. 19).

Some of the empirical studies addressed another issue, namely that of combining multiples in the analysis. By using both the price to earnings multiples and price to book value multiples in valuation of companies the value obtained is closer to the true image (Cheng & McNamara, 2000). In the same way some authors calculate enterprise value by using a multiple produced by the combination of income and book value (Penman S. H., 1998). An analysis of ten different market multiples leads to the following conclusions: income multiples give a value closer to the true image than those based on sales and cash flow. They also must be calculated on the basis of forecasts (Liu, Nissim, & Thomas, 2002).

3. Fundamental Concepts of Determining the Degree of Underestimation or Overrating the Action Using PER Analysis

In order to develop this subject we believe necessary to establish some theoretical considerations regarding the following terms: PER.

Price earnings ratio- *PER*- is the most widely used multiple (Damodaran, 2002, p. 659). PER was for the first time defined in the early 1930 by Benjamin Graham (Schreiner, 2007, p. 41). The simplicity of its calculation enables its use in defining a value for new shares on the market. PER is used to determine the value of capital to shareholder. Price earnings ratio is the ratio between market price per share and earnings per share (Tchemeni, 1993).

The most important problem regarding PE formula is how we define Earnings per share. Price to earnings ratio can be calculated using three types of denominators:

- current PER, where the earnings per share is the net income of the company for the last fiscal period, divided by number of share outstanding;
- trailing PER, where the earnings per share is the net income of the company for the most recent 12 months divided by number of share outstanding;
- Forward PER, where we use estimated income for the next 12 months instead of net income for the last 12 months (Thauvron, 2007, p. 158).

Regarding the number of shares they can include or not the preferential ones. Income per share calculation can be done in two ways, diluted or undiluted. When it is undiluted (basic earnings per share) the current number of securities is held. When it is diluted issuable securities must be taken into account (stock-options, convertible bonds) and their impact on net income and the number of shares on the market (Thauvron, 2007, p. 159). These evaluation choices result in different PER values and default values for enterprise analysed. Thus in a period of steady growth in revenue, forecast PER is less than trailing PER, which in return is less than the current PER (Damodaran, 2002, p. 7, ch 17).

Generally a PER below 10 is considered low, between 10 and 20 is moderate, and above 20 is considered expensive (Graham & Zweig, 1973, p. 70). Thus, a company with a PER less than 10 is undervalued, between 10 and 20 reflects the fair value and a company with a PER greater than 20 is overrated. In our opinion, such an approach ignores the growth prospects of the company. PER indicator is more than a measure of a company's past performance. It takes into consideration growth prospects.

To determine whether a share is correctly valued by the market it is useful to estimate a theoretical PER. In this case we use discounted dividend model. Using this model we can found the determinants of PER. Thus: PER increases with increasing of the rate of dividend distribution, PER decreases when risk increases, the PER increases if the rate of revenue growth is (Damodaran, 2002, p. 6 ch 18) .

Thus the discriminant analysis of PER is based on the Gordon model. According to it, the value per share is based on expected dividends, the cost of capital to shareholders and expected growth in dividends:

$$P_0 = \frac{DPS_1}{k_c - g_n}$$

Where: P_0 - current market per share; DPS_1 - dividends for the year $n+1$; k_c - minimum rate of return required by shareholders = cost of capital to shareholders; g_n - expected growth rate of dividends.

Gordon model applies to companies with a growth rate lower than the nominal growth of the economy and for those who have a stable dividend policy. Otherwise by applying this model we will have wrong results regarding market price per share especially when we pay less dividends and we are concern with accumulating cash. In this case we will have underappreciated shares (Damodaran, 2002, pg. 5, ch 13).

Based on this assumption and dividing both sides of the equation with income per share (EPS_0) we have:

$$\frac{P_0}{EPS_0} = \frac{DPS_1}{EPS_0 \times (k_c - g_n)}$$

$$PER = \frac{DPS_1 \times (1 + g_1)}{EPS_0 \times (k_c - g_n)}$$

If we choose to calculate predicted PER, which take into account future revenues, then we have:

$$\frac{P_0}{EPS_1} = PER_1 = \frac{PR}{k_c - g_n}$$

Where $PR = \left(\frac{DPS_1}{EPS_1} \right) \times (1 + g_1)$ on rate of dividends distributed: $PR = 1 - \frac{g_n}{ROE_n}$

According to this model, the value of a security is equal to the present value of its future dividends. Initially, they will know relatively high growth (at rate g), then a second time, infinite, where growth will be more moderate (at a rate g_n). Growth in the first period is stronger than in the second stage. Because the risk is different in these two periods, the cost of equity (k_c) will be (Thauvron, 2007, p. 160).

Assuming that the company will go through two periods of growth namely one explicit and one unexplained than, for the period 0, PER will be:

$$PER = \frac{P_0}{EPS_0} = \frac{\left(\frac{DPS_1}{EPS_1} \right) \times (1 + g_1)}{k_c - g_n} \times \frac{(1 + g)^n}{(1 + k_{e,hg})^n} + \frac{\left(1 - \frac{g_n}{ROE_n} \right) \times (1 + g)^n \times (1 + g_n)}{(k_{e,st} - g_n) \times (1 + k_{e,hg})^n}$$

Where: EPS_0 earnings per share for year 0; P_0 market per share for the year 0; g income growth rate for the first n years; g_n income growth rate for the following years after year n ; $k_{e,hg}$ cost of capital for the first n years; $k_{e,st}$ cost of capital after n

years; ROE_{ng} net income/ equity in the first n years; ROE_{st} net income/ equity after n years.

Thus, PER is determined by:

- the dividend distribution rate and ROE as follows: PER increases if dividend distribution rate increases for any given growth rate g, PER is directly proportional to ROE;
- risk through capital cost k_e , as follows: PER is reduced if the risk is increased;
- expected growth rate as follows: PER increases if g increases;
- PER is even higher as the distribution of benefits is more important, the risk is low and growth is strong (Thauvron, 2007, p. 159).

Another issue raised by the multiple refers to how it can be used for comparisons between companies, markets and over time. Usually, in practice the current PER is compared with an historical average PER to see if the share is overrated or not. A relevant approach refers to the comparison of current PER with the one forecast based on determinants. Thus, if one considers all the other indicators constant may conclude the following:

- an increase of interest rate leads to an increase of the cost of capital and a decrease in PER;
- an increase in the growth rate g will lead to an increase of PER;
- an increase in ROE will lead to an increase in PER (Damodaran, 2002, pg. 12, ch 18).

Although it is the most used multiple, PER is applied many times wrong because it ignores its link with financial indicators (Thauvron, 2007, p. 157). Facing the current PER with the theoretical one for a company is particularly useful in quantitative portfolio management because it allows automatic identification of companies that appear undervalued (Thauvron, 2007, p. 161).

To evaluate a company we have to multiply the Net income (average PER for the peer group: $V_k = \frac{Net\ income_{company\ i}}{PER_{peer\ group}}$). Sometimes it is chosen to calculate the relative PER which is the ratio between PER and market PER (Fernandez, 2002, p. 29): $PER_{relative} = \frac{PER_{company}}{PER_{market}}$.

This method allows taking into account the differences that may exist between different markets. Therefore, the method has no interest unless the peer group is composed of listed companies in different markets (Thauvron, 2007, p. 163).

To evaluate a company based on relative PER, it should be multiplied through the PER of the market where the company is listed and net income of the firm:
 Value to shareholders = $PER_{relative} \times PER_{market} \times Net\ income_{company}$

PER relative is used especially in two situations: when the national peer group is not relevant; to give, over a long period of time, landmarks on the historic value of a company or sector in relation to market (Thauvron, 2007, p. 164). To conclude that a firm is undervalued only because it's multiple is lower than the sector average can be a hasty attitude. To remove any doubt we proceed by entering into the equation a growth rate.

If: PER_1 is the multiple for the company, PER_m is the multiple for the peer group, PEG_m is the multiple for the peer group, g is the growth rate of company α we will have a PER_2 as following: $PER_2 = PEG_m \times g$,

Where: PER_2 = PER calculated by using PEG and g ; PEG_m = average price earnings growth rate; g = income growth rate.

In this case we can find the following situations:

- $PER_2 < PER_1 < PER_m$ The share is overvalued
- $PER_m < PER_1 < PER_2$ The share is undervalued.

4. Empirical Study

The research uses constructivist methodology, based on analysing individual behaviour of firms as a basis in developing theoretical system.

The form of scientific research is one applied. It makes the transition from practice to theory, being in the same time an inductive approach. We also have an explanatory research, which proposes to describe causal relationships to verify statements previously advanced and to facilitate prediction.

Research approach is from a quantitative point of view, with a positivist orientation. In the research we use statistics and econometrics methodology. The relationship between researcher and researched is neutral. The selection of the companies investigated is achieved through statistical sampling for short periods. Methods and techniques used are quantitative analysis, statistical, ARIMA model, correlation and regression

For data collection we process the information from various underlying systematic presentation documents, statistics, accounts and financial trade. All that information is from: Bucharest Stock Exchange market, National Agency of Fiscal Administration and the National Institute of Statistics.

The objectives that we want to achieve through the following applications are:

- O1 Evaluation of shares listed on Bucharest Stock Exchange through multiples method

The research questions are:

- Q1 Which calculation method is more efficient for rate g ?
- Q2 Which PER provides an accurate assessment of the value of shares?
- Q3 To what extent the income growth rate is influenced by cost of capital and dividend distribution rate?
- Q4 Which companies listed on the Bucharest Stock Exchange in the first category have over or understated shares?
- Q5 Which are the relevant methods for analysing of shares?

The assumptions related to research questions are:

- I1 G rate calculation using the information listed in the balance sheet will lead to an underestimate of the share.
- I2 Current PER unlike forward PER leads to an overvaluation of the share.
- I3 PER increases if the dividend distribution rate grows for any given growth rate, PER is directly related to ROE, PER decreases if the risk is increasing, PER grows if g is increasing.
- I4 There are significant differences between values obtain because of the driver taking into consideration.
- I5 Composed average and regression analysis give the most plausible method for share analysis.

a. Preliminary Stage for Analysis

In order to realise this research and testing the hypotheses above we have performed a series of tests to determine all the necessary indicators. A first analysis is to determine the growth rate of net income. In achieving this goal we use time series analysis. The parameters of the model that we construct explain past values of variables, predict fluctuations and define the impact of certain events on normal behaviour. The model used is ARIMA (Autoregressive Integrated Moving Average) known as the “Box-Jenkins Model” performed by using the SPSS 19. Using this method we obtain the following:

Table 1. Forecasted growth rate g for the companies listed in the first category

Abv	Net income 2011	Forecast net income 2012	Forecast net income 2013	G using past information	Forecast g
ALR	228309982	217609359	213632766	39.00%	-3.26%
ATB	20298909	17753084	17304270	16.60%	-7.53%
AZO	365196441	336368302	310819116	202.93%	-7.74%
BCC	-31989275	-22551320	-20164951	-154.08%	20.04%
BIO	14220788	7232635	9430298	-3.66%	-9.38%

BRD	465265368	555457159	600794704	15.89%	13.77%
BRK	-15599615	5041184	-949995	-23.35%	6.74%
COFI	-51905451	53053821	-51904125	-154.55%	2.19%
ELMA	15075281	14145920	13310943	69.15%	-6.03%
IMP	-22261046	-19982189	-17948190	-15445.41%	10.21%
OIL	545419	3324081	3221562	40.81%	253.19%
OLT	-278342623	-248140339	-223437618	-169.87%	10.40%
PREH	917740	1972559	2589315	25.91%	73.10%
RPH	10687756	10687745	10687734	98.22%	0.00%
SIF1	63006519	62150330	61608024	13.25%	-1.12%
SIF2	192922595	192921753	192920911	25.57%	0.00%
SIF3	207727564	141220356	108157314	122.07%	-27.71%
SIF4	65336350	65086772	64839446	8.51%	-0.38%
SIF5	83442670	85604623	85782329	30.15%	1.40%
SNP	3685607226	2497578684	1924846431	-106.82%	-27.58%
SOCP	7092137	4834381	4813033	27.89%	-16.14%
TBM	-19411417	-10887077	-5960379	-51.33%	44.58%
TEL	90913316	69498540	67706861	191.60%	-13.07%
TGN	379571465	338301520	312655883	15.57%	-9.23%
TLV	131870976	170116179	176851626	28.55%	16.48%

Figure 1. Distribution for forecast g

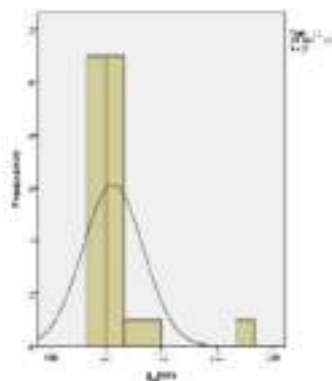
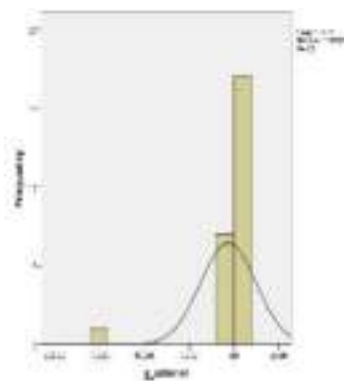


Figure 2. Distribution for historical g



Such analysis is used to determine the rate g to be used in the regression equation and also answer to a question of this empirical research, namely: Q1: Which calculation method is more efficient for rate g ? With the assumption: I: G rate calculation using the information listed in the balance sheet will lead to an underestimate of the share.

As can be seen in the histograms above most predicted g values are found around 0, being a normal distribution, whereas for historical g we cannot speak of a normal distribution having outliers and concentration of positive values. Previous growth rate is calculated based on the arithmetic average of growth rates for each year; this is why fluctuations attach great importance to the result.

Expected growth rate can be obtained also through a regression analysis of its determinants. However computing difficulty impedes such an analysis. Thus we recommend using the calculation of forecast net income through ARIMA model.

b. Distribution of PER in the First Category

A critical step in using the PER for stock market analysis is represented by how the multiple is distributed within the market sector. In this section we analyse the distribution of PER on BVB, first category. We analyse both current and forward PER, the latter calculated using the results obtain on a previous stage.

Table 2. Current and trailing PER for the companies listed on BVB, first category

Class	Company	Net income 2011	Forecast net income 2012	Market price per share 2011	Number of shares 2011	Current PER	Forward PER
C	<u>ALR</u>	228309982	217609359	2.2990	713779135	7.19	7.5409
C	<u>ATB</u>	20298909	17753084	0.3690	568007100	10.33	11.8061
C	<u>AZO</u>	365196441	336368302	2.1860	526032633	3.15	3.4186
K	<u>BCC</u>	-31989275	-22551320	0.0508	3146290494		
C	<u>BIO</u>	14220788	7232635	0.1707	1094861499	13.14	25.8402
K	<u>BRD</u>	465265368	555457159	9.7050	696901518	14.54	12.1763
K	<u>BRK</u>	-15599615	5041184	0.1039	338681867		6.9803
F	<u>COFI</u>	-51905451	53053821	0.0097	630041255		0.1152
C	<u>ELMA</u>	15075281	14145920	0.1687	676038704		8.0622
F	<u>IMP</u>	-22261046	-19982189	0.1567	197866574		
H	<u>OIL</u>	545419	3324081	0.1351	582430253	144.27	23.6716
C	<u>OLT</u>	-278342623	-248140339	0.8330	343211383		
C	<u>PREH</u>	917740	1972559	1.3510	48533419	71.45	33.2404
G	<u>RPH</u>	10687756	10687745	0.6695	291005550	18.23	18.2291
K	<u>SIF1</u>	63006519	62150330	0.8645	548849268	7.53	7.6344
K	<u>SIF2</u>	192922595	192921753	1.0310	519089588	2.77	2.7741
K	<u>SIF3</u>	207727564	141220356	0.4542	1092143332	2.39	3.5126
K	<u>SIF4</u>	65336350	65086772	0.7990	807036515	9.87	9.9071
K	<u>SIF5</u>	83442670	85604623	1.0440	580165714	7.26	7.0755
K	<u>SNP</u>	3685607226	2497578684	0.3534	56644108335	5.43	8.0150
H	<u>SOCP</u>	7092137	4834381	0.2679	343425744	12.97	19.0311
C	<u>TBM</u>	-19411417	-10887077	0.0358	369442475		
D	<u>TEL</u>	90913316	69498540	12.4300	73303142	10.02	13.1105
H	<u>TGN</u>	379571465	338301520	191.3500	11773844	5.94	6.6595
K	<u>TLV</u>	131870976	170116179	0.9835	1773658066	13.23	10.2541

Based on data in the table above, the following figure shows the distribution of PER rates for companies listed on the Bucharest Stock Exchange in May 2012.

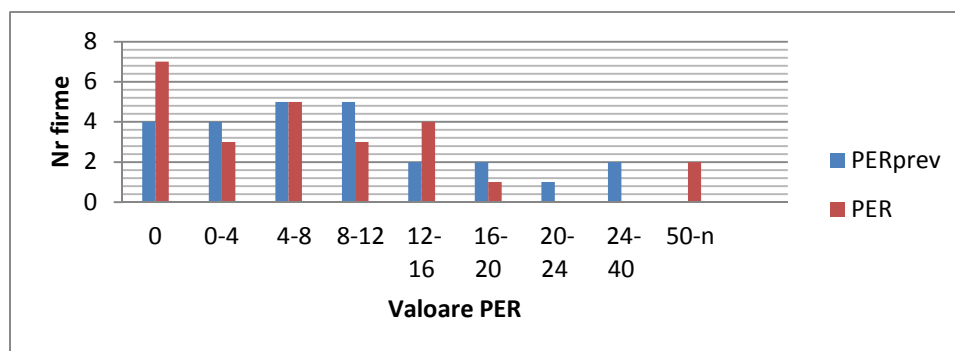


Figure 3. Current(PER) and forward PER(PERprev)

The table below show the main indicators of descriptive statistics for current and forward PER namely: arithmetic mean, median, mode, standard deviation, minimum, maximum.

Table 3. Descriptive statistics for current and trailing PER

	PER current	PER forward
Mean	20	11,40
Median	9,87	8,06
Mode	144.27	23.67
Minimum	2.39	2.77
Maximum	144.27	33.24

A comparative analysis leads to the conclusion that forward PER is an indicator that reflects the true image unlike current PER. The arithmetic mean and median for forward PER are significantly lower than those for current PER, reflecting an overvaluation of companies using current PER. We also observed significant differences between the minimum and maximum for current PER that leads to a distribution that is not normal, unlike forward PER. Mean, median and mode are almost equal to forward PER, meanwhile for current PER there are major differences. This analysis provides answer to the following question:

Q: Which PER provides an accurate assessment of the value of shares??

I: Current PER unlike forward PER leads to an overvaluation of the share.

c. PER Determinants

We can approach this subject of PER determinants by using regression analysis with SPSS 17 with the following variables:

Table 4. Regression analysis variables

Field	Abs	Net income 2011	g	ke	PR	Current PER
C	ALR	228309982	-0.03	0.15	0.99	7.19
C	ATB	20298909	-0.08	0.07	0.43	10.33
C	AZO	365196441	-0.08	0.33	0.00	3.15
K	BCC	-31989275	0.20	-0.10	0.00	
C	BIO	14220788	-0.09	0.09	0.77	13.14
K	BRD	465265368	0.14	0.67	0.25	14.54
K	BRK	-15599615	0.07	-0.21	0.00	
F	COFI	-51905451	0.02	-0.85	0.00	
C	ELMA	15075281	-0.06	0.06	0.18	
F	IMP	-22261046	0.10	-0.07	0.00	
H	OIL	545419	2.53	0.00	3.63	144.27
C	OLT	-278342623	0.10	0.34	0.00	
C	PREH	917740	0.73	0.00	0.00	71.45
G	RPH	10687756	0.00	0.12	0.00	18.23
K	SIF1	63006519	-0.01	0.10	0.87	7.53
K	SIF2	192922595	0.00	0.34	0.59	2.77
K	SIF3	207727564	-0.28	0.27	0.90	2.39
K	SIF4	65336350	0.00	0.06	1.00	9.87
K	SIF5	83442670	0.01	0.13	0.90	7.26
K	SNP	3685607226	-0.28	0.20	0.48	5.43
H	SOCP	7092137	-0.16	0.07	0.00	12.97
C	TBM	-19411417	0.45	-0.29	0.00	
D	TEL	90913316	-0.13	0.04	0.00	10.02
H	TGN	379571465	-0.09	0.12	0.92	5.94
K	TLV	131870976	0.16	0.07	0.00	13.23

Where: k_e is the cost of equity calculated by dividing net income to equity; PR= dividend distribution rate calculated by dividing dividend per share to net income per share.

By using this data, the regression equation is:

$$PER=22,421+63,748g-22149k_e-10,817PR$$

This part answer to the following question:

Q3 To what extent the income growth rate is influenced by cost of capital and dividend distribution rate?

The assumptions related to research questions is:

I3 PER increases if the dividend distribution rate grows for any given growth rate, PER is directly related to ROE, PER decreases if the risk is increasing, PER grows if g is increasing.

By analysing the results we can observe that two of the assumptions are demonstrated: PER grows if g is increasing, PER decreases if the risk is. Regarding the first assumption, the research does not sustain it. This is a problem that will be investigated in future research.

d. Results and Future Research

Although PER can be used in many types of analysis we choose to evaluate the shares listed on BVB, first category.

A first approach can analysis the underestimation or overrating of share by comparing the current PER with market average. By using the descriptive statistics for current PER we have the following situations:

Table 5 Comparative analysis using different averages

Abv.	Current PER	Arithmetical	Median	Harmonic	compound
ALR	7.19	underestimated	underestimated	overrated	underestimated
ATB	10.33	underestimated	overrated	overrated	underestimated
AZO	3.15	underestimated	underestimated	underestimated	underestimated
BIO	13.14	underestimated	overrated	overrated	overrated
BRD	14.54	underestimated	overrated	overrated	overrated
OIL	144.27	overrated	overrated	overrated	overrated
PREH	71.45	overrated	overrated	overrated	overrated
RPH	18.23	underestimated	overrated	overrated	overrated
SIF1	7.53	underestimated	underestimated	overrated	underestimated
SIF2	2.77	underestimated	underestimated	underestimated	underestimated
SIF3	2.39	underestimated	underestimated	underestimated	underestimated
SIF4	9.87	underestimated		overrated	underestimated
SIF5	7.26	underestimated	underestimated	overrated	underestimated
SNP	5.43	underestimated	underestimated	underestimated	underestimated
SOCP	12.97	underestimated	overrated	overrated	overrated
TEL	10.02	underestimated	overrated	overrated	underestimated
TGN	5.94	underestimated	underestimated	underestimated	underestimated
TLV	13.23	underestimated	overrated	overrated	overrated

A second approach uses a comparison of forecast PER calculated through regression equation and current PER:

Table 6. Comparative analysis using regression

Categories	Abbreviate	Current PER	Forecast PER	State
C	ALR	7.19	6.39	overrated
C	ATB	10.33	11.45	underestimated
C	AZO	3.15	10.14	underestimated
C	BIO	13.14	6.07	overrated
K	BRD	14.54	13.66	overrated
H	OIL	144.27	144.51	underestimated

C	PREH	71.45	68.92	overrated
G	RPH	18.23	19.83	underestimated
K	SIF1	7.53	10.12	underestimated
K	SIF2	2.77	8.47	underestimated
K	SIF4	9.87	10.08	underestimated
K	SIF5	7.26	10.70	underestimated
H	SOCP	12.97	10.56	overrated
D	TEL	10.02	13.28	underestimated
H	TGN	5.94	3.98	underestimated
K	TLV	13.23	31.28	underestimated

We can observe a strong correlation between compound average and forecast PER.

Table 7. Synthesis of comparison methods using PER

	Arithmetical	Median	Harmonica	Compound	Forecast PER
Number of companies with shares underestimated	16	8	5	11	11
Number of companies with shares overrated	2	10	13	7	7

This part of the research gives answers to the following questions:

- Q4 Which companies listed on the Bucharest Stock Exchange in the first category have over or understated shares?
- Q5 Which are the relevant methods for analysing of shares?

The assumptions related to research questions are:

- I4 There are significant differences between values obtain because of the driver taking into consideration.
- I5 Composed average and regression analysis give the most plausible method for share analysis.

Future research will focus on other multiples such as PEG. On the other hand in a future article we will present the implications of using Economic Value Added in analysing share's value.

5. Acknowledgements

This work was supported by the European Social Fund in Romania, under the responsibility of the Managing Authority for the Sectoral Operational Programme for Human Resources Development 2007-2013 [grant POSDRU/CPP 107/DMI 1.5/S/78342]

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Macroeconomics and Monetary Economics**Romania's Financial Market and Foreign Trade Impaction****Gina Ioan¹, Catalin Angelo Ioan²**

Abstract: In the actual economic crisis, the financial market and the balance of trade of Romania are sensible chapters of the economic policy. The paper analyses some aspects of the financial market and also the trends of exports and imports between Romania and the major partners, on global and also on groups of goods arriving at the conclusion that if Romania was on a good road till 2010, the actual tendency being to grow the deficit of the balance of trade.

Keywords: balance of trade; export; import

JEL Classification: G1

1. Romania's Financial Market Impaction

The existence of a diversified financial market represents an evolutionary process in which the money markets are the first to be developed in order to support capital market development. Recent researches were focused, with technological progress as the main engine of economic growth on the importance of financial institutions and capital markets.

A country with a developed capital market has more opportunities for development and rapid mobilization of investment in key sectors of the economy. Capital market also serves to effectively allocate capital to the highest return on investment.

Both experience and the literature shows that developed countries have exploited intensively two channels to mobilize resources positively influence economic growth and development: money market and capital market (Geert & Campbell, 1997).

¹ Assistant Professor, PhD in progress, Danubius University of Galati, Faculty of Economic Sciences, Romania, Address: 3 Galati Blvd, Galati, Romania, Tel.: +40372 361 102, Fax: +40372 361 290, e-mail: gina_ioan@univ-danubius.ro.

² Associate Professor, PhD, Danubius University of Galati, Faculty of Economic Sciences, Romania, Address: 3 Galati Blvd, Galati, Romania, Tel.: +40372 361 102, Fax: +40372 361 290, Corresponding author: catalin_angelo_ioan@univ-danubius.ro.

The capital market development in Romania is not spectacular; it continues to be now in the process of development, characterized by a low degree of intermediation from developed countries.

An explanation of underdevelopment in terms of capital market in Romania is poor corporate governance and internal business orientation mainly to the banking system. An important role in the financial market is the stock market has perceived as the most active instrument of financing the economy. Companies listed on the stock exchange have multiple advantages: attracting investors with significant visibility among their, various development opportunities and, not least, real time assessment of the business. Although in his work, Bucharest Stock Exchange showed spectacular results reflected in increasing BET, especially in 2002 and 2004, however remaining a modest presence in international financial landscape. Compared to European countries, market liquidity remained low which prevented capital market to fulfill its main function to attract capital to growing companies.

Until 2007, the capital market in Romania has been a positive development, and from the first months of 2008, financial market instability and international macroeconomic imbalances had reduced market capitalization and operations.

BET – the benchmark index of the capital market, has recorded in 2008 a decrease of over 70%. Transposed data chart below highlights the sensitivity of the domestic capital market to international economic and financial developments. Once the effects of the financial crisis were felt in Romania, the capital market was characterized by high volatility. 2009 has recorded a positive development due to reduced risk aversion of investors on the stock market. Volatility was amplified again, however, and indexes fell as a result of the sovereign debt crisis started in Greece in 2010.

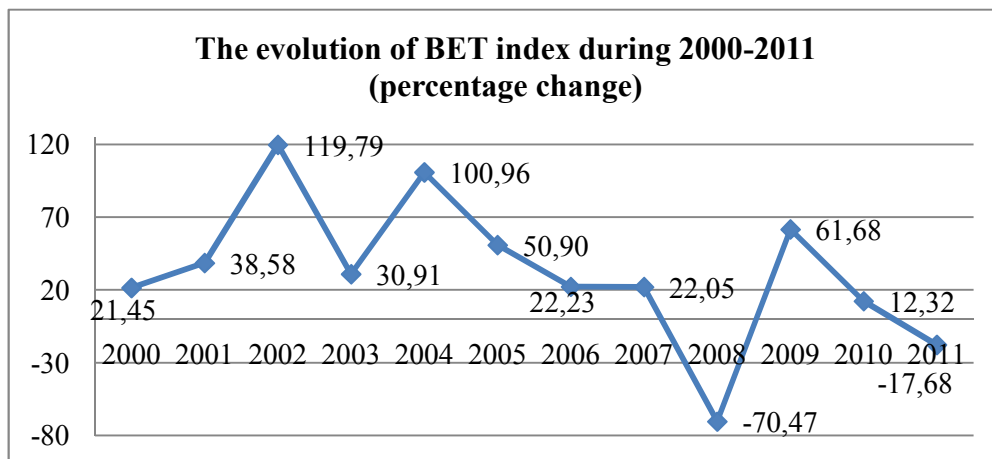


Figure 1.

Source: Bucharest Stock Exchange

The contraction of the capital market led to lower stock market liquidity, measured as the ratio of annual trading volume and market capitalization. Market capitalization peaked in 2007, about 24.6 billion euros and in 2008, under the financial turmoil that has seen a decrease of 52% to a low of 11.6 billion euros.

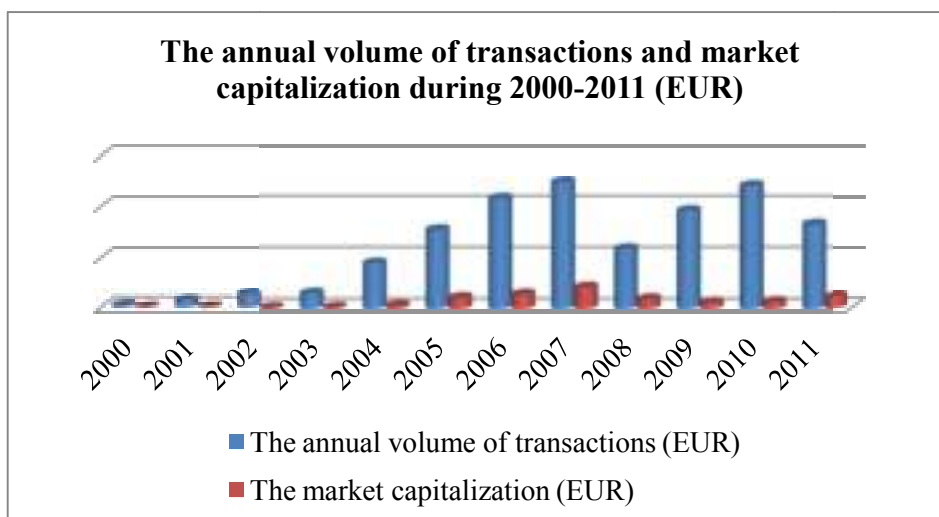


Figure 2.

Source: Bucharest Stock Exchange

The partial comeback in 2009, stagnation in 2010 and the decrease with 17.68% in 2011 are signs of market failure capital of Romania. Consolidation, together with the identification of an efficient management of the stock exchange, current issues remain to be resolved.

Capital market inefficiency in our country is reflected in the low level of activity in the primary market and the low volume of trading securities on the secondary market. The main problem is the low liquidity of the stock market driven by supply and demand of marketable instruments. Once solved this problem, the Bucharest Stock Exchange will become more attractive both for domestic private sector and for large foreign investors and capital markets can be an effective source of financing.

2. Romania's Foreign Trade Impaction

Along final consumption (private consumption and public consumption) and gross fixed capital formation, another component of domestic demand which offset the positive dynamics in a slightly declining domestic demand was net exports.

The positive dynamics of net exports of 14.1% in 2009 and 2.1% in 2010 was driven by lower exports of goods and services by 6.4% and imports by 20.5% in 2009 and growth in exports by 14% and imports by 11.9% in 2010.

We can say that in 2010, external demand was the engine of economic growth in Romania, following the recovery of the EU economy, the country's main trading partner.

In 2011 there is a decrease in the contribution of net external demand to GDP formation, the overall effect of global economic slowdown, particularly in the euro zone.

In absolute, the reduction of exports of goods in 2009 was 4641 billion euros, 80% due to the decrease in volume and 20% lower foreign prices.

In the case of imports, the reduction of 16879 billion euros in 2009 was driven by lower volume in 88% and 12% of lower foreign prices.

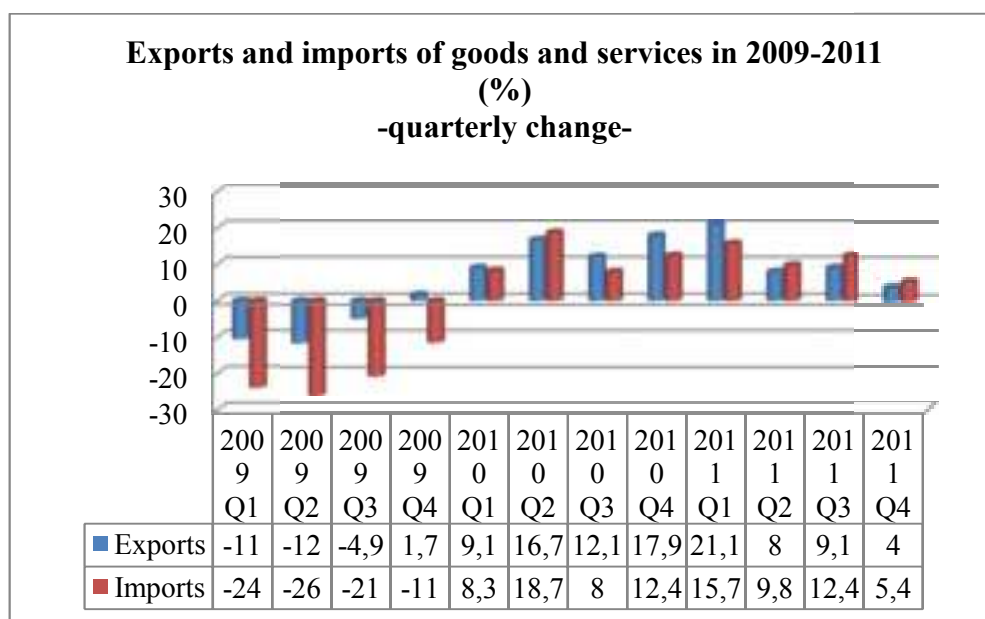
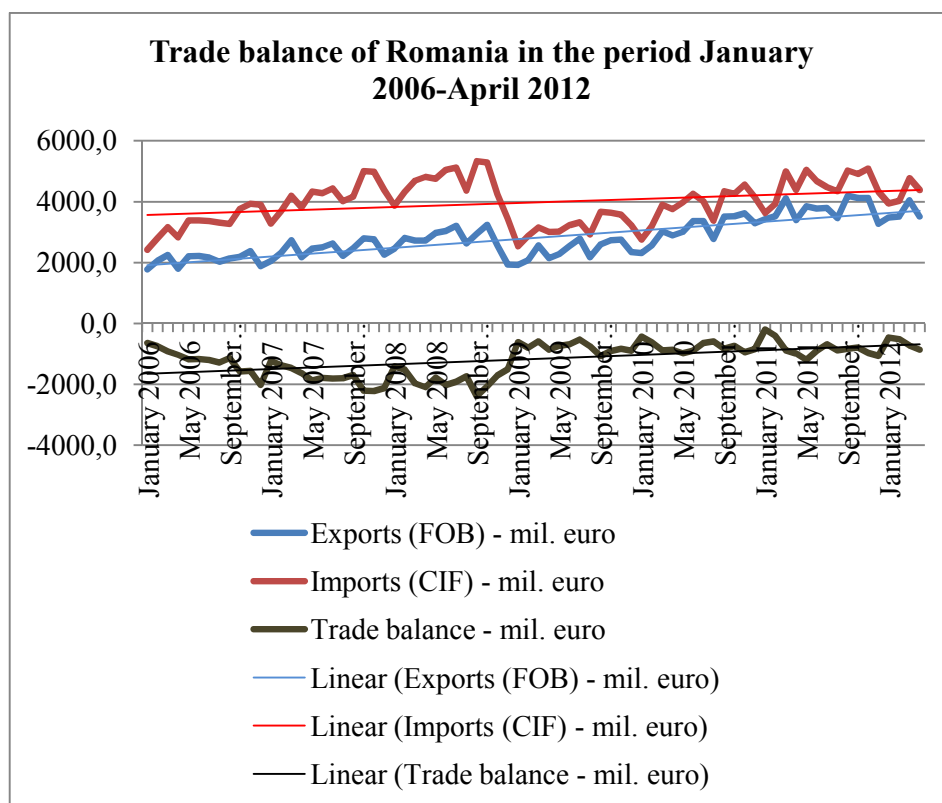


Figure 3

Source: INSSE

An analysis of foreign trade in the period before the crisis in 2012, shows that the general trend foreign trade was one upward.

If the average FOB exports in Euros in Romania increased by 1.72% per month, the euro CIF imports decrease by 1.52%.

**Figure 4***Source: INSSE*

The analysis of the trend shows an actually good at first glance, namely that an increase in average monthly exports 23.741 million corresponds to an average increase in imports of 10.886 million monthly, therefore a tendency of the trade balance to reduce with an average 12.855 euros monthly.

On the other hand, the trade deficit of about 9 billion euro annually leads to the conclusion that progress is more than insignificant. Romania's main partner in foreign trade activity is the European Union with an average weight of 71.66% in the export and import – 71.55%.

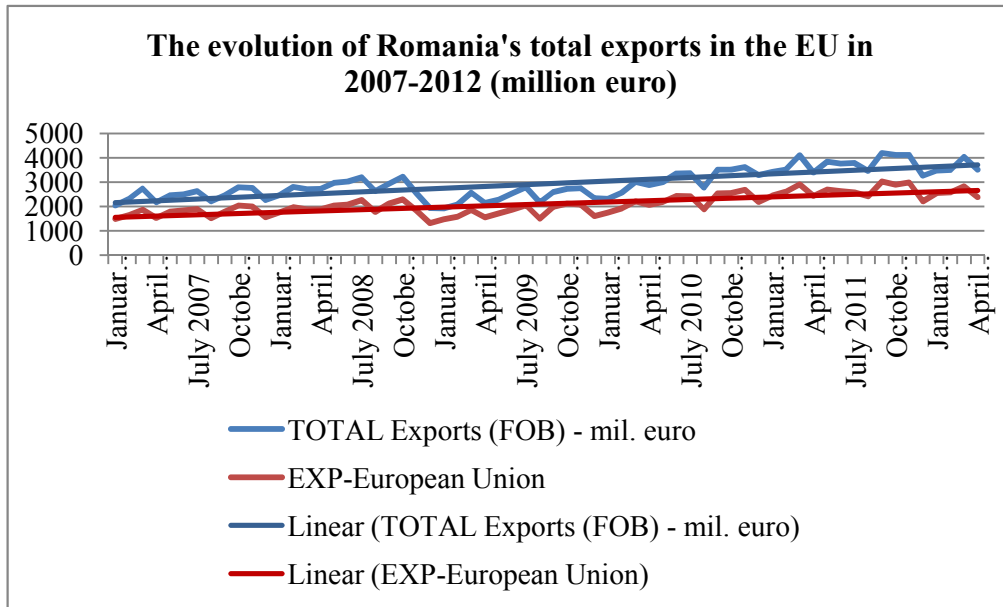


Figure 5

Source: INSSE

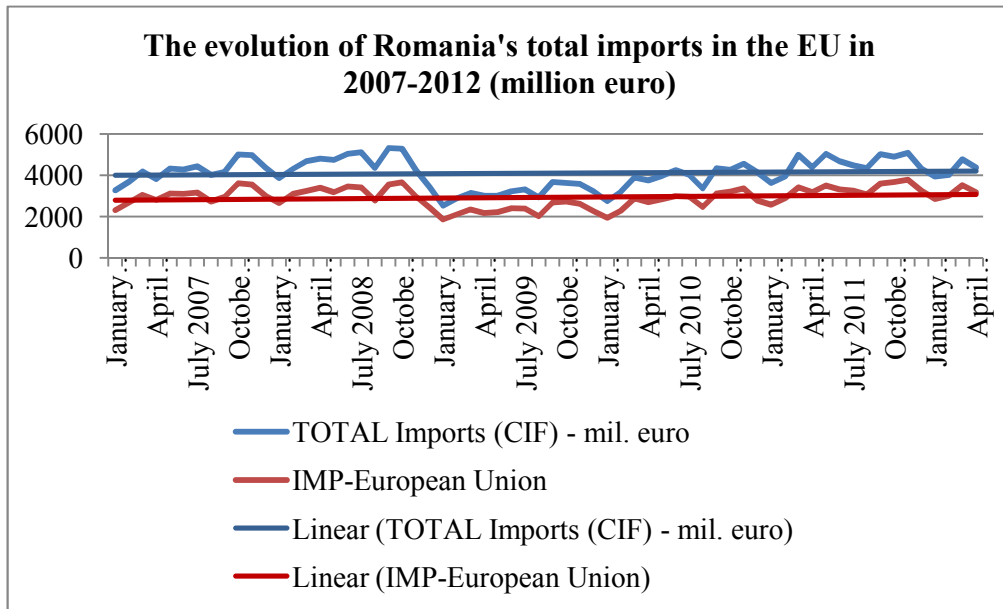


Figure 6

Source: INSSE

On continents, exports situation reveals an average weight of 6.97% to Asia, to Africa 2.56%, 2.74% to America and only 0.13% for Oceania. Relative to imports, Asia has an average share of 12.26%, Africa - 0.60%, America - 2.74%, Oceania - 0.12%.

Our main trading partners are located in somewhat different dynamic positions. Thus, in the case of Germany which has an average share of 25.79% of total exports and 33.67% of the total Romanian imports, statistical analysis revealed a trend of significant increase in export activity by an average of 5.777 million month respecting the previous month, while imports are increased compared to the previous month with only 0.682 million.

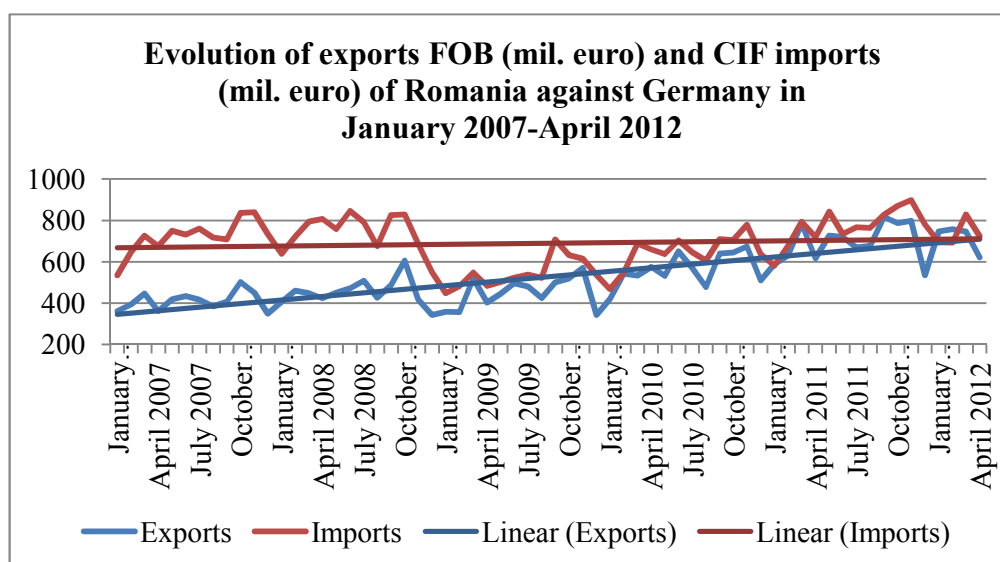


Figure 7

Source: INSSE

For the second trading partner - Italy, there is a monthly increase of exports of 0.988 million at an average share in total 20.79%, while imports decrease monthly 0.667 million (share in Romania's total imports of 23.38%).

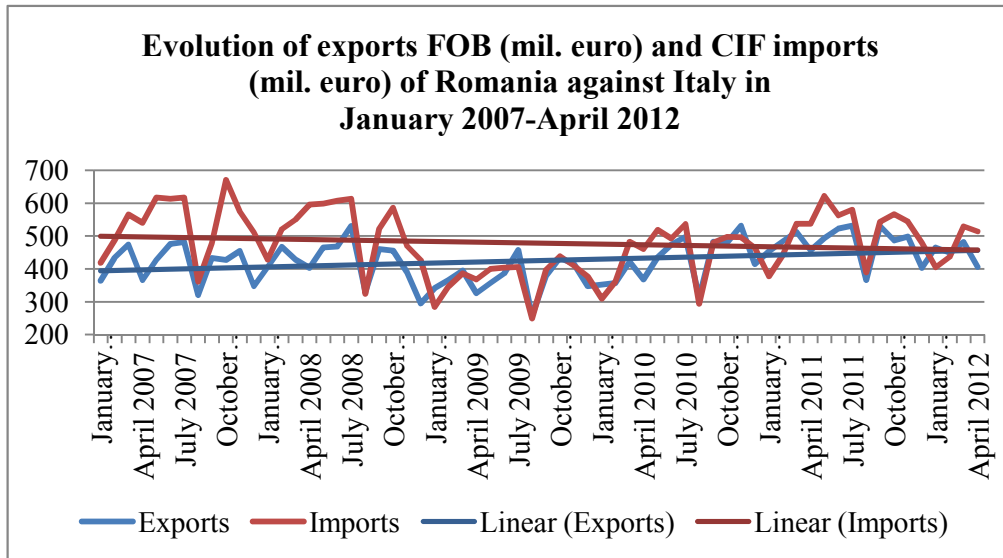


Figure 8

Source: INSSE

Relative to the other major trading partners of Romania, one can observe an upward trend higher (France, Turkey, Hungary, United Kingdom, Bulgaria, Russian Federation) or less (Austria, USA, China) pronounced exports, but also of imports, exceptions are given by France, Austria, USA (very small decreases) and Turkey and the Russian Federation (with a massive reduction of imports). A massive increase in imports can be seen from China, recorded an average monthly rate of 2.28% compared to the previous month.

Relative to product categories, there is a tendency to increase exports in relation to imports at the category “Food and Live Animals” and a dynamics particularly encouraging to “Beverages and Tobacco”.

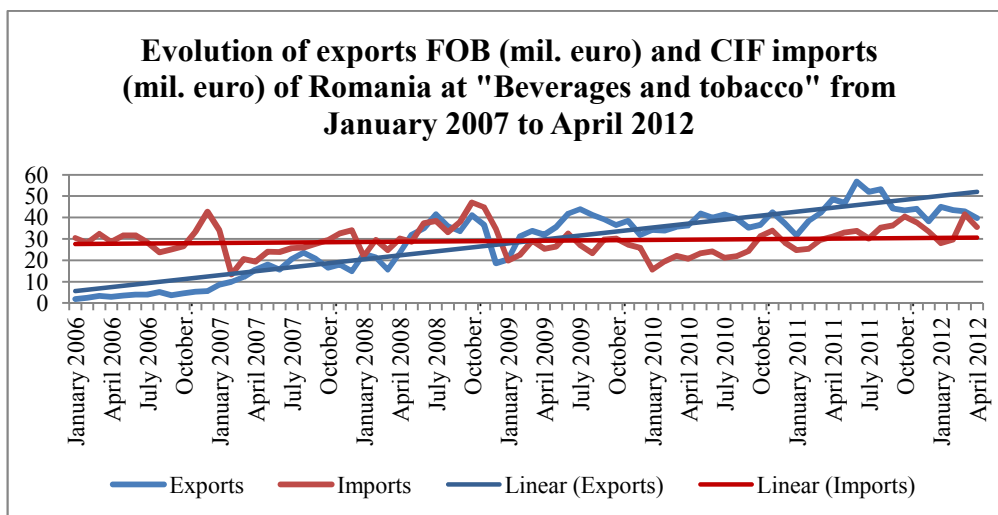


Figure 9
Source: INSSE

While in the “Crude materials, inedible, except fuels” and „Processed products mainly classified by raw material” trade balance is positive and the trend is clearly exports than imports, the category “Mineral fuels, lubricants and related materials” is characterized by a relatively constant both export and import. The situation is particularly encouraging is the category “Machinery and transport equipment” where the trade balance became positive in recent months, the trend of net exports outpacing imports.

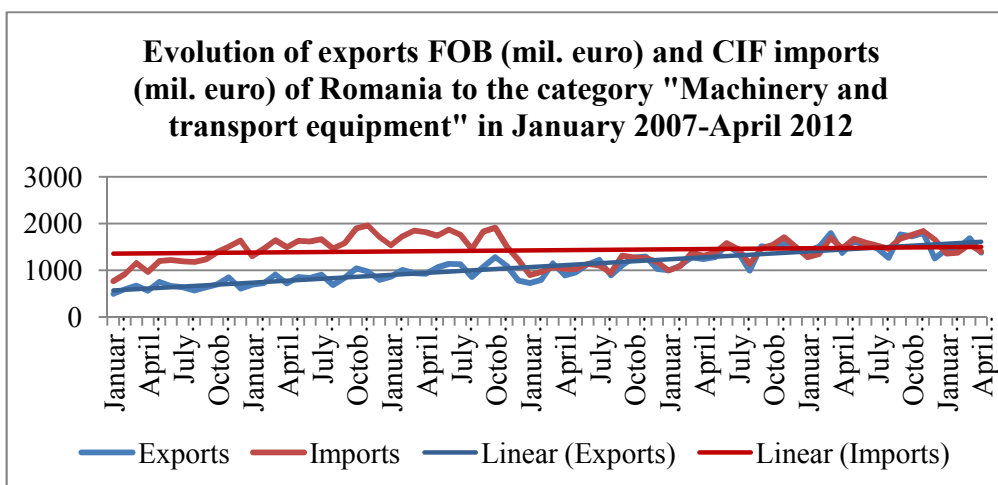


Figure 10
Source: INSSE

Relative to the dependence of exports for foreign exchange (Appendix 1), the regression analysis performed shows a relationship of the form:

$$\text{Exports} = 6360.7561 \cdot \text{Exchange Rate} - 3629.5051$$

with a correlation coefficient of 0.756 and an R^2 value of 0.5715. Therefore, the above equation explains the dependence of exports for foreign exchange rate of 57.15%, the rest being due to other factors.

From the above relationship, is inferred that an increase of 0.01 of the rate leu-euro, the export volume increased by $6360.7561 \cdot 0.01 = 63.6$ million lei.

The dependence of imports for foreign exchange (Appendix 2), explained by the regression analysis shows a relationship of the form:

$$\text{Imports} = -49726.5201 \cdot \text{Exchange Rate} + 28559.3272$$

with a correlation coefficient of 0.431 and an R^2 value of 0.1857. Therefore, the above equation explains the dependence of imports for foreign exchange rate only in 18.57%, the rest being due to other factors.

For this reason, it can be concluded that if exports take account of economic regularities, a high current currency involving a larger volume of exports, in the case of imports this depends very weakly. The model of economic growth based on domestic absorption is reflected in the openness of the Romanian economy (measured by $(\text{imports} + \text{exports}) / \text{GDP} \cdot 100$), lower compared to other countries in the region, members of the Eurozone. For a country like Romania with insufficient internal market, reported at the production capacity, the openness of the economy should be higher, such as the Czech Republic, Slovakia and Hungary. Another factor is the unfavorable contribution to a lesser extent exports to openness.

Table 1. Indicators of foreign trade activity

	2009	2010	2011
	%		
Share of exports in GDP	30,47	35,49	38,07
Share of imports in GDP	36,97	41,68	43,87
Openness of the economy	67,45	77,16	81,94
Coverage of imports by exports	82,42	85,14	86,78
Penetration of imports on the domestic market	34,72	39,25	41,46

Trade deficit	6,50	6,19	5,8
% of total exports/imports			
Exports EU	74,3	72,2	72,5
Imports EU	73,3	72,5	72,6

Source: Own calculations based on INSSE, NBR

In 2009-2011, the openness of the Romanian economy has decreased due to lower share of trade in GDP compared to previous years. During the analyzed time series (2000-2011), the openness minimum was reached in 2009 (67.45%) and its maximum was 86.95% in 2005. Coverage of imports through exports (Exports/Imports·100) has increased in the past three years, which means an improvement in the trade balance on the basis of a lower trade activity (to a greater extent in imports in 2009) or on increasing of exports respecting imports (2010 with 2.1%).

Another indicator that reflects the efficiency of foreign trade is the import penetration on internal market ($\text{Imports}/\text{GDP} + (\text{Imports} - \text{Exports}) \cdot 100$) and shows what proportion of domestic demand is met by imports. The maximum value of this indicator was reached during the economic boom, while imports have provided over 44% of domestic demand (44.22% in 2005 and 44.10% in 2007), while the minimum was recorded in 2009 with the 34.72%, once with the demand reduction because the internal economic crisis.

Empirical researches show that small countries have a high import penetration (Hungary, Czech Republic, Slovakia, Estonia over 70%, Luxembourg – 218%) and large countries have a lower rate (US – 16.4%, Japan – 16.2%). In Romania, in the analyzed period, the growth of this indicator was not accompanied by an equivalent increase in the export market, particularly during the economic boom, which shows deterioration in competitiveness.

3. Conclusions

For sustainable growth and competitiveness, boost exports strategy must consider tradable goods incorporating with an innovative technology and hence high value added. The current strategy is based on exports less competitive and more at cheaper prices compared to Western Europe and the depreciation of the national currency. A country with competitive exports and real domestic production capacity is less vulnerable to external shocks.

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Appendix 1**FOB exports, Exchange rate LEI/EUR in the period January 2006-April 2012**

Data	Exports (FOB) mil. lei	Exchange rate lei/euro	Data	Exports (FOB) mil. lei	Exchange rate lei/euro
January 2006	6491.4	3.6445	March 2009	11106.1	4.2821
February 2006	7498.3	3.5404	April 2009	9132.3	4.1954
March 2006	8191.3	3.5074	May 2009	9674.9	4.1689
April 2006	6564.1	3.4911	June 2009	10778.5	4.2126
May 2006	8062.5	3.507	July 2009	11843.7	4.2168
June 2006	8072.6	3.5482	August 2009	9324.1	4.2185
July 2006	7884	3.5723	September 2009	11066.1	4.2389
August 2006	7412.2	3.5277	October 2009	11744.7	4.2848
September 2006	7786.5	3.527	November 2009	11835.3	4.2881
October 2006	7981.7	3.5192	December 2009	9928.1	4.2248
November 2006	8677.3	3.4954	January 2010	9616.7	4.1409
December 2006	6849.8	3.414	February 2010	10557	4.1179
January 2007	7056.9	3.3937	March 2010	12395.8	4.0879
February 2007	7832.7	3.3824	April 2010	11906.2	4.1285
March 2007	8872.4	3.3694	May 2010	12515.1	4.1743
April 2007	7310.1	3.3349	June 2010	14200.7	4.2396
May 2007	8148	3.285	July 2010	14397	4.2611
June 2007	8114	3.2264	August 2010	11830.4	4.2389
July 2007	8333.6	3.1337	September 2010	14981.5	4.2642
August 2007	7157.7	3.2237	October 2010	15053.2	4.2798
September 2007	8273.8	3.3466	November 2010	15553.2	4.2931
October 2007	9473.5	3.3525	December 2010	14143.5	4.2925
November 2007	9518.4	3.4707	January 2011	14631	4.2622

December 2007	8091.6	3.5289	February 2011	14973.5	4.2472
January 2008	9241.1	3.693	March 2011	17220	4.1646
February 2008	10563.7	3.6528	April 2011	13954.9	4.0992
March 2008	10175.7	3.7218	May 2011	15810.9	4.112
April 2008	10170.5	3.6426	June 2011	15738.7	4.1929
May 2008	11017.5	3.6594	July 2011	16107.5	4.2405
June 2008	11230.1	3.6557	August 2011	14714.6	4.2501
July 2008	11717.9	3.5792	September 2011	17944	4.282
August 2008	9404.2	3.5268	October 2011	17780.9	4.3238
September 2008	10662.7	3.6254	November 2011	17910.8	4.3536
October 2008	12152.1	3.7454	December 2011	14190.5	4.3267
November 2008	9587.4	3.7753	January 2012	15061.5	4.3428
December 2008	7612.8	3.9153	February 2012	15264	4.3506
January 2009	8096.8	4.2327	March 2012	17656.2	4.3652
February 2009	8948	4.2839	April 2012	15374.5	4.376

Appendix 2

CIF Imports, Exchange rate LEI/EUR for the period January 2006-April 2012

Data	Imports (CIF) mil. lei	Exchange rate leu/euro	Data	Imports (CIF) mil. lei	Exchange rate leu/euro
January 2006	8818.2	0.2744	March 2009	13972.9	0.2335
February 2006	10202.8	0.2825	April 2009	13005.8	0.2384
March 2006	11522.4	0.2851	May 2009	12955.1	0.2399
April 2006	10319.3	0.2864	June 2009	13957.0	0.2374
May 2006	12343.5	0.2851	July 2009	14175.3	0.2371
June 2006	12325.5	0.2818	August 2009	12510.2	0.2371

July 2006	12246.3	0.2799	September 2009	15899.6	0.2359
August 2006	12085.5	0.2835	October 2009	15651.8	0.2334
September 2006	11930.2	0.2835	November 2009	15449.4	0.2332
October 2006	13729.7	0.2842	December 2009	13712.2	0.2367
November 2006	14348.2	0.2861	January 2010	11579.2	0.2415
December 2006	14215.6	0.2929	February 2010	13226.7	0.2428
January 2007	11743.4	0.2947	March 2010	16199.2	0.2446
February 2007	12583.1	0.2956	April 2010	15535.3	0.2422
March 2007	14315.2	0.2968	May 2010	16678.5	0.2396
April 2007	12791.5	0.2999	June 2010	18208.3	0.2359
May 2007	14328.5	0.3044	July 2010	17186.5	0.2347
June 2007	13922.9	0.3099	August 2010	14461.0	0.2359
July 2007	14026.6	0.3191	September 2010	18545.8	0.2345
August 2007	12933.9	0.3102	October 2010	18204.0	0.2337
September 2007	13906.1	0.2988	November 2010	19616.5	0.2329
October 2007	16887.3	0.2983	December 2010	17765.5	0.233
November 2007	17276.6	0.2881	January 2011	15483.9	0.2346
December 2007	15927.3	0.2834	February 2011	16729.8	0.2354
January 2008	14547.8	0.2708	March 2011	20952.1	0.2401
February 2008	16329.6	0.2738	April 2011	18024.7	0.244
March 2008	17872.5	0.2687	May 2011	20709.6	0.2432
April 2008	18149.4	0.2745	June 2011	19526.5	0.2385
May 2008	17662.2	0.2733	July 2011	19008.2	0.2358
June 2008	18867.0	0.2735	August 2011	18466.7	0.2353
July 2008	18810.4	0.2794	September 2011	21470.2	0.2335
August 2008	15689.7	0.2835	October 2011	21167.7	0.2313

September 2008	19476.8	0.2758	November 2011	22040.1	0.2297
October 2008	20034.1	0.267	December 2011	18763.0	0.2311
November 2008	15982.8	0.2649	January 2012	17067.4	0.2303
December 2008	13728.7	0.2554	February 2012	17514.3	0.2299
January 2009	10983.7	0.2363	March 2012	20834.8	0.2291
February 2009	12656.5	0.2334	April 2012	19166.1	0.2285

Evolutions of the Social Sphere and of the Labour Market in Process of European Integration – is the Nordic Model Worth Following?

Alina Georgeta Ailincă¹, Floarea Iordache²

Abstract: Economic integration in Europe knows different stages and degrees of integration, Economic and Monetary Union (EMU) being the penultimate stage which involves harmonizing fiscal and monetary policies. In this respect, in the desire to show the contribution to the increasing of economic integration in the European Union (EU), the article sets as the **objectives**, in tandem national-European, the identification of discrepancies of social indicators of EU countries in report to the targets of the Europe 2020 strategy. Thus, we used an **approach** based on a case study of EU countries, comparing the performance of social indicators in EU countries against European targets. The **results** showed that the Nordic countries are the closest to the social objectives of the Union, offering a good performance of these indicators. The **prior work** in the literature identifies many types of social models, from which the Nordic model is described as the one that provides the highest level of social welfare. Thus, the **value** of the study consists in clearly pointing out the qualities of the Nordic social model, arguing with figures and information why it may be more appropriate to its expanded implementation at the level of the European Union. As far as social policies of EU member states may be at least partially adapted to meet the performance of Nordic social model, the research can have several benefic **implications**, especially for policy makers.

Keywords: Europe 2020; social cohesion; social convergence;

JEL Classification: E24, I21, I25, I32

1 Introduction

Global financial and economic crisis has affected some aspects of the European economy and the euro area, so that a qualitative analysis of discrepancies between the social indicators of European Union countries in relation to the targets set by Europe 2020 strategy is extremely interesting in the current context. Moreover, following the evolution and other social and economic indicators than those mentioned by Europe 2020 strategy, we can argue that the Nordic countries register

¹ Scientific Researcher 3rd degree, PhD student, Centre of Financial and Monetary Research “Victor Slăvescu”, Romania, Address: Academy House, 13 Calea Septembrie, B Building, 5th Floor, Bucharest, Romania, Tel. +4 0726237636, Corresponding author e-mail: alina.glod@gmail.com

² Scientific Researcher 3rd degree, PhD, Centre of Financial and Monetary Research “Victor Slăvescu”, Romania, Address: Academy House, 13 Calea Septembrie, B Building, 5th Floor, Bucharest, Romania, Tel.:+4 0722866967, e-mail: floarea.iordache@yahoo.com.

performances compared to other EU countries. Thus, the article proposes an identification of gaps of social indicators of EU countries in achieving the targets set by the Europe 2020 strategy, with emphasis on the realities of the Nordic countries, which are offering a good performance of these indicators, as well as other indicators from the economic and social sphere.

The context of the current global financial and economic crisis led to a deepening and an intensification of economic and social problems, highlighting structural weaknesses in Europe's economy. In order to solve the difficulties the EU has proposed a strategy to allow the exit from the crisis and the transform of the EU into a smart, sustainable and inclusive economy characterized by high levels of employment of labor productivity and social cohesion. Thus, the EU has defined its developing direction until the year 2020 through the Europe 2020 strategy, in which vision the Europe's social market economy is described by the fulfillment of three mutually reinforcing objectives. These priorities aim at: - a “smart” growth, namely an economy development based on knowledge and innovation; - a “sustainable” growth, for example promoting a greener economy, more competitive and more efficient in terms of resource utilization - an “inclusive” growth, namely promoting an economy with a high rate of employment, able to provide social and territorial cohesion.

2 Literature Review

The literature abounds in the studies and information related to the European integration, economic integration, macroeconomic convergence, social convergence and there is a broad set of indicators used as proxy for human welfare. Numerous studies (Mankiw et al., 1992; Barro & Sala-i-Martin, 1997; Lopez-Bazo et al., 1999; Bivand & Brunstad, 2005) use GDP developments in order to assess the degree of human welfare and macroeconomic convergence at international, regional or local level. For the social convergence process are often used a wide range of social indicators such as life expectancy, infant mortality, environmental degradation, literacy, enrolment in various educational levels (Bourguignon and Morrisson, 2002; Becker et al., 2005; Dorius, 2008). The results concerning social convergence are often ambiguous or mixed, which is not surprising especially since studies are selecting either different geographical and temporal areas or different indicators.

Given the extensive “baggage” of studies on convergence and in particular social convergence at international, regional and local level, we have tried to detach ourselves and to realize just an analysis at the regional level, dealing with Europe and especially EU countries according to indicators of the Europe 2020 strategy. Moreover, noting that the best results have been obtained by the Nordic countries, we have argued on the basis of previous research (e.g. Ferrera, 1998, Bertola et al.,

2001) why the Nordic social model seems to have the best reaction to the requirements of the Europe 2020 strategy.

3. Methodology

The methodology consists of a qualitative and comparative approach at the level of European Union countries, without trying the use several techniques as β -convergence, σ -convergence and kernel density estimates. The study is aiming to be more like a pleading, substantiated with figures and information, for the Nordic model as far as future research will prove that it is useful and adjustable to the realities of the euro area countries and the European Union as a whole.

4. Realities of the Social Field and Labour Market in the European Integration Process - Discrepancies in report with Europe 2020 targets

In order to meet the objectives of the strategy, at least in terms of socio-economic aspects, the European Commission has selected several indicators (e.g. employment rate (%), research and development expenses as a percentage of GDP, the rate of early school leaving (%), tertiary education (%) and reducing the population at risk of poverty or social exclusion (% of total population)) through which it should be achieved a characterization of the structure, interdependencies and changes in time of different socio-economic phenomena in the European Union in relation to a number of EU objectives.

Objectives are interrelated and translated into national targets and trajectories, they aim at:

- 75% of the population with age between 20 and 64 years should have a job;
- 3% of EU's GDP should be invested in research and development (R & D);
- The rate of early school leavers should be under 10% and at least 40% of the young generation should have a tertiary degree;
- Number of persons at risk of poverty should be reduced by 20 million of people at the EU's level.

Indicators proposed by Europe 2020 strategy are only a part of statistical indicators that characterize the extent to which social area, including labour market and demographic aspects are in a process of convergence or divergence, describing the process of European integration.

We can notice that although we speak in Europe 2020 strategy of objectives having a social character, not all indicators proposed belong strictly to this sphere (e.g. early school leaving and tertiary education, spending on research and

development). However, at European level there is logic for choosing these indicators or these selection criteria for improving the Union's social performance. Labour force and implicitly a good rate of employment of the labour force provide the sustainability of Union's economies; expenses to support research and development ensures the creation of jobs and hence a good employment of the active population; early school leaving and tertiary education represents the maximum and respectively the minimum to which educational level should reach in order to maintain an adequate level of employment and hence economic and social security of the EU countries and the reduction of the population at risk of poverty or social exclusion expressed in number of individuals, is an "centralizer" indicator of the success or failure of reaching the others. However, there are many interdependencies between these factors, their performance being often mutual conditioned (e.g. an increased risk of poverty in the EU population could jeopardize further education and foster youth to drop out school).

Though Europe 2020 strategy is in the Commission's view, a credible exit strategy, to pursue the reform of the financial system, to ensure budgetary consolidation for long-term growth, and to strengthen coordination within the Economic and Monetary Union.", however, it is integrated into a series of projects, programs, strategies and pacts that are centered rather on achieving stability and financial sustainability (particularly of the public finances) than achieving social and human stability. Furthermore, through restrictive policies aimed at the reduction of sovereign debt and the mitigation of financial markets unrest - objectives placed in the center of policies ensuring stability and financial sustainability - achieving the objectives of the development of social market economy has become impossible or at least extremely difficult. Instead, reaching social and human stability and sustainability would make a solid and relevant base for economic and financial sustainability in the EU and worldwide.

For this reason, choosing of the Europe 2020 strategy as a benchmark for assessing the status and trends of social domain (implicitly of labour market) may constitute that starting point, concrete and objective, in order to see if and to what extent the social sustainability defines at least a part of economic and financial sustainability of European Union. The relevance of this approach starts with defining the scope of the analysis, more precisely an analysis of discrepancies between social indicators of European Union countries and Europe 2020 set targets, in order to monitor the effectiveness of social and labour market strategies and policies, highlighting the extent to which the social indicators are getting close or not of European targets, pointing out the realities of the countries that perform in this area.

The analysis of indicators in terms of measurement of the discrepancy between reality and the objectives set by the strategy could, at least partially, answer to a series of questions such as:

- Are the indicators and chosen targets the most relevant to characterize the state and the social developments in the European Union?
- Can make a real contribution to the improvement of the social performance of the Union?
- Can motivate also the choice of other indicators (implicitly targets) regarding social policy and labour market?
- Are the monitoring and social management tools used effectively in order to support the social policies in the field?
- Can contribute to more rigorous and targeted planning of the policies concerned?

To all these questions the answer may be yes, if we consider that the results of the measurement between the objectives of the strategy and the current situation should provide sufficient evidence on positive or negative measures already implemented by Member States and which have led to this situation, and what could be done in addition to remedy the shortcomings noticed in the social convergence.

Thus, given the Eurostat data and seeking the discrepancy between employment rate (%) and the proposed target of the Europe 2020 strategy (which is 75%), on average over four years (2008-2011), we see that in the top ranking on the convergence of the indicator are countries like Sweden (79.4%), Netherlands (77.9%), Denmark (77.2%), Cyprus (75.4%), Austria (75%), in ongoing convergence we can notice countries like: Germany (74.9%), Finland (74%), Czech Republic (71.2%), Estonia (71%), Portugal (71%), Slovenia (70.9%), Luxembourg (70%) and France (69.5%), while the remaining EU member countries are well below the target of the Europe 2020 strategy.

When referring to research and development expenses (as a percentage of GDP) compared with the Europe 2020 target (3%) we can notice (according to Eurostat data), as the average three-year trend (2008-2010), that in the top investors in this area are countries such as Finland (3.8%), Sweden (3.6%) and Denmark (3%) and in a convergence process towards this goal are countries such as Germany (2.8%), Austria (2.7%) and France (2.2%), the rest of Member States of the European Union can be considered as not making enough effort to comply with the target of the strategy concerning R&D.

When concerning the early school leaving rate (%), which according to the strategy should not exceed 10% of the young population, we can see from Eurostat data that in the period 2008-2011, on average, only certain countries have been preserved in this limit (Slovenia (4.9%), Czech Republic (5.2%), Slovakia (5.2%), Poland (5.3%), Lithuania (8%), Luxembourg (8.6%), Austria (8.9%), Sweden (9.8%), Finland (10%)), the rest of the European Union placing themselves over this limit.

The indicator targeting at least 40% of the younger generation having higher education, namely the indicator of tertiary education (%) according to Eurostat statistics reveals that only countries such as Ireland (48.6%), Finland (45.8 %), Cyprus (45.7%), Luxembourg (45.2%), Sweden (44.8%), Belgium (43%), France (42.8%), Lithuania (42.4%), Netherlands (40.8%), Denmark (40.6%), Spain (40.1%) seem concerned with this problem. However, the indicator of reducing the population at risk of poverty or social exclusion (% of total population) determines that in the certain trend of convergence towards the strategy goal are countries such as the Czech Republic (14.8%), Netherlands (15%), Sweden (15.5%), Luxembourg (16.8%), Finland (17.3%), Austria (17.3%), Denmark (17.4%), Slovenia (18.3%), France (18, 8%) and Germany (19.9%).

Thus, we see that on average, taking into account all the above indicators and assessing them for a period of 4 and 3 years, depending on Eurostat data availability, only Sweden, Finland and Denmark tops the rankings of social convergence, other countries trying shyly achieving the Europe 2020 goals.

Without taking into account the negative aspects, we shall only refer to these three countries with good performances in the social field and labour market.

5 Social Convergence a Reality or Utopia? Why Nordic Model May Be Worth Following?

As it is known, there is not a general consensus regarding the most viable social model, but Western social models are often an example for all countries, demonstrating that not only economic development is not jeopardized by a conscious and rational development of a model social but also many times it have supported each other.

Literature broadly identifies four distinct types of social models, which group countries with similar social policies and practices: - Mediterranean countries (e.g. Spain, Greece, Italy, Portugal) which are using a model based on social insurance, where benefits are allocated based on insured status; - Anglo-Saxon countries (e.g. UK and Ireland), which assigns employees a great deal of social transfers and assumes a well-developed social network; - continental countries (e.g. France, Germany, Austria, Belgium and Luxembourg), where the employees contributions finance the social security schemes and - the Nordic countries (e.g. Sweden, Denmark, Finland, Netherlands, Norway), which carry out relatively high social spending and define eligibility depending on the nature of citizenship, using a wide range of active social policies and instruments, while imposing liberal expansionary fiscal policy in order to support these extensive social programs (Ferrera, 1998, Bertola et al., 2001). Therefore, it is no wonder why the social protection in the European Union, the Nordic countries (Sweden, Finland and

Denmark) offers a higher level of social protection, while Mediterranean countries (Greece, Italy, Portugal and Spain) gives the lowest level of social protection, often intervening in setting the pensions and wage regulations.

Thus, we can say that the Nordic model, which groups countries such as Denmark, Iceland, Sweden, Norway and Finland, is built on a system of mixed economy that has at its heart the welfare state - a universal health insurance system based on a high level public spending financed rather by high level of taxes (the progressive type), than by social security contributions. This model contributes to strengthening individual autonomy, ensuring the universal provision of basic human rights based on maximizing labour force participation on labour market, on promoting gender equality, on high levels of social benefits, as well as an extensive redistribution of wealth. Northern active labour market policy aims two main objectives: - providing access to the labour market of every citizen through incentive programs, education and labour market integration, and - providing the necessary labour force for companies through policies of reducing unemployment.

It should not surprise us the distinct vision on the economy and social realities of the Nordic countries since they have always had, even before the year 2000, a GDP per capita in purchasing power parity well above the EU average and the average euro area. These countries reflects an economy structured, modern, liberalized and prosperous based mainly on strong industrialization, which may explain the rapid recovery of GDP growth after 2009 when indeed in this year along with the rest of Europe, according to Eurostat data, the rate GDP growth suffered a sharp contraction also in these countries. The increased competitiveness of these countries is also reflected in the model of “flexicurity” (successfully implemented especially in Denmark), which marks a high freedom of the labour market that allows rapid hiring and firing of employees (extremely high freedom of employers - flexibility) while offering, between jobs, a high unemployment allowance for those who have lost their jobs (which mean safety, security). Sustained by a high level of taxation, according to Eurostat data for recent years, the workforce is well educated in these countries, the percentage of people with a poor education is well below the European average, the rate of persons in a process of lifelong learning is at least twice the European average (e.g. in 2011, the indicator Life-long learning (%) was 8.9% for the EU27, while in Denmark it was 32.3%, in Sweden it was 25% and in Finland it was 23.8%), the active life in employment is much higher than the European average (e.g. in 2010, the average for the three countries was 38.8 years, above the EU27 average of 34.5 years), the gender inequality in terms of income is below the European average (at least for Denmark and Sweden), the rate of persons employed at the risk of poverty is well below the European average and the long-term unemployment rate stands at less than half the European average. All these indicators show that the Nordic economic and social model is successful and where a large part of society is working for the society (about 40%

of employees work in the public sector). Also the education, from primary, secondary and higher education, is free of charge and the graduates of secondary and upper school aged over 18 can apply for student social aid, receiving internationally recognized qualifications, including in English.

In the Nordic countries, the family plays an important role in social construction, for which the state supports families through income transfers and income complex networks (Leira, 2002). Nordic countries, despite differences of the ideological, political and social systems from each others, have been grouped together to emphasize that family policies in these countries are designed to support dual social responsibility: family and work. Led by a rather social-democratic rationale, the Nordic model imposed the state as an important factor in the development of family policies, providing adequate social services and support, a model based on universalism, being different from countries' state with liberal politics (e.g. UK, Canada and the United States) which intervenes selectively only when the family can not provide an adequate income for a decent everyday living. According to Gauthier (1996) and Ferrarini (2003), this situation is reflected by the social spending allocated to sustain the family, being much higher in the Nordic countries compared to countries with a rather liberal policy. Nordic model also tries to equalize the role of women and men in the family and in society in general, considering that this creates a more harmonious social development.

Expanded social role of family policies is highlighted also by Esping-Andersen (1999), social actions concerning the family are not only on behalf of supporting the children but also of sustaining the population structure, in general, and in particular of the birth rate. Therefore, Esping-Andersen (1999) points out that a low birth rate and an inadequate population structure is a direct consequence of family policies insufficiently developed, which do not allow earlier return to work of the mothers, because of lacking social infrastructure (e.g. nurseries, kindergartens and schools subsidized by public funds) in order to allow this. Poverty seems also a consequence of precarious family policies, the part-time work and the poorly paid work favouring also the limited capacity of families of getting out of poverty (Forssén, 2003). However, the Nordic model seems to elude the poorly designed pattern of the family policy. The Nordic countries differ from others not only by a high share of social spending, but also by high rates of female employment, the social benefits increasing at the same time with the rising of the participation rates of women in the labour market. Increased participation of women in the labour market in the Nordic countries was due to the public sector expanding, which helped women to get rid of a number of tasks they have been taking in the family (Montanari, 2000). Thus, we can say that the benefits were mutual, on the one hand, the increase of the public sector has facilitated the return of women to the labour market, on the other hand, the women returning to the labour market has led

to a gradual growth in employment in the public, both in the medical and social services (starting with the 70s and 80s).

6 Conclusions

The analysis undertaken towards the identification of discrepancies in achieving social indicators of the European Union countries in report to the targets set by Europe 2020 strategy showed that the Nordic countries are the closest of the social objectives of the Union, providing a good compliance with these indicators, but also of the others from the social and economic sphere. Thus, if we refer to the employment rate, to the spending with research and development as a percentage of GDP, to the rate of early school leaving, to the proportion of young people with higher education and to reducing the population at risk of poverty or social exclusion we can notice that on average, taking into account all the above indicators and assessing them for a period of 4 and 3 years, depending on Eurostat data availability, only Sweden, Finland and Denmark are in the leading position on social convergence, other countries trying shyly to reach the Europe 2020 objectives. Referring only to these three countries which are performing in social field and labour market and fits them as belonging to the Nordic social model, we notice that they can be described as well-structured economies and industrialized, modern and prosperous, with a GDP per capita expressed in purchasing power parity superior to the European Union and to the euro area average, with a social model that offers both enhanced freedom of the labour market and adequate protection of employees (a high unemployment aid). In these countries the education, employment and gender equality in labour income plays a fundamental role, which is why women are part of active labour market unlike other countries, which are often being the source and the destination of important social benefits. For this reason, the European Union should focus attention on the Nordic model in the sense of developing a social policy more closely in supporting families and especially women. Facilitating an easier integration of women into the labour market and providing an income equivalent to the men can help reduce poverty, increase education among young people, rise of birth rates and generally a more appropriate demographic structure to the present and future budgetary constraints of EU countries.

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Countercyclical Economic Policies in Times of Crisis

Gina Ioan¹

Abstract: The countercyclical policies aimed to correcting excessive economic activity and reducing negative effects of crisis and economic recovery. In Romania we identify a series of causes that led to the economic crisis like: the mismatch economic policy mix with business cycle phases, underdeveloped capital market, the mismanagement of public expenditure, the shortage of skilled labor and many other.

Keywords: countercyclical; crisis; economic activity

JEL Classification: A1

1. Countercyclical Economic Policies

The economic policies in crisis conditions, named also countercyclical, aimed at correcting excessive economic activity and reducing negative effects of crisis and economic recovery. They are based either on aggregate demand influence or the influence of aggregate supply.

Countercyclical policies vary in a business cycle. If in the boom conditions, countercyclical policies should consider measures to stabilize the economy, in recession phases, they should aim recovery measures supporting economic activity, stimulate investment, stimulate consumption, boost credit or production.

Measures of economic recovery policies, based on Keynesian theory, which have influenced the aggregate demand, can be grouped into three broad categories:

The public expenditure policy that is based on increasing governmental spending in times of crisis, even at the cost of increasing deficit in order to stimulate aggregate demand through state acquisitions and public sector investment. In Romania, the economic development from 2009 to 2011 shows that was an increasing at costs with a result in a budget deficit but not with a stimulating the aggregate demand.

¹ Assistant Professor, PhD in progress, Danubius University of Galati, Faculty of Economic Sciences, Romania, Address: 3 Galati Blvd, Galati, Romania, Tel.: +40372 361 102, Fax: +40372 361 290, Corresponding author: gina_ioan@univ-danubius.ro.

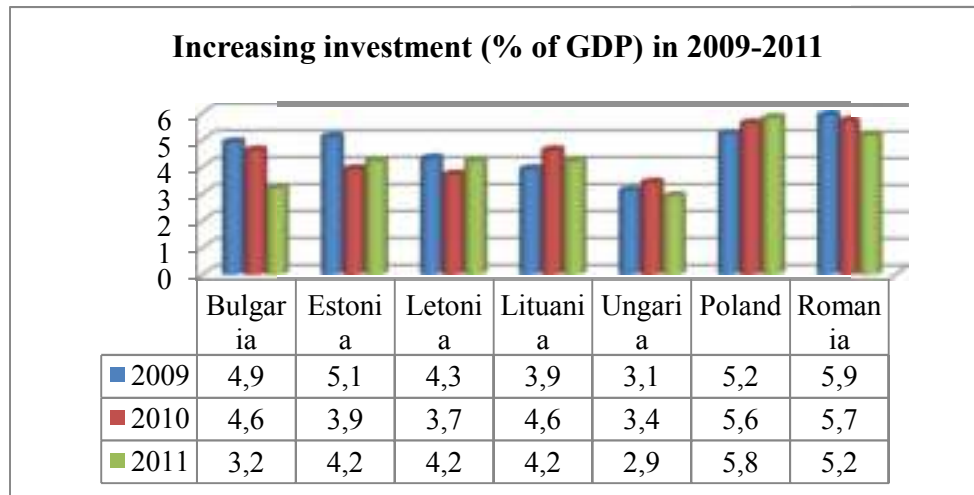


Figure 1

Source: Eurostat

Public investment fell as a share of GDP since 2009, reaching in 2011 a level of 5.2%, the maximum being reached 6.6% in 2008. Compared with emerging countries in Eastern Europe, Romania is ranked second in the share of public investment in GDP, after Poland (5.7% in 2011). Romania has had, in 2011, a growth rate of 2.5%, the lowest with Hungary and Bulgaria with a growth rate of 1.7% each, from which we conclude that most public investment were unable to generate additional multiplier effects and training necessary for stronger economic growth.

1. Monetary and credit policy which aims to boost stimulate credit for an upper level of the aggregate demand and ensure an optimal level of employment by lowering the interest rate during the recession and curb demand by raising interest rates during the economic expansion.

In Romania it happened quite different in terms of monetary and credit policy. During the economic boom, interest rates were low and the lending process has been relaxed. Contrary to economic theory, in the phase of recession interest rates have shown a certain rigidity in the downward trend especially for governmental loans, while increasing the degree of tightening credit conditions. These measures fully procyclical are generated primarily by the behavior of banks, which cannot be countercyclical in terms of risk and instability, their purpose being to increase or maintain profits.

2. Tax policy, which can stimulate consumer demand and investment, reducing taxes during the recession and increasing taxation in the phase of expansion in order to limit the aggregate demand and mitigate inflation.

The economic crisis has brought changes in terms of fiscal policy. The crisis management adopted by each country, meant for some increasing tax burden, for others its reduction. In Romania, the tax burden increased from 17.5% in 2009 to 19.1% in 2011. VAT increased by 5 percent as well as in Greece (18% to 23%), the largest increase in EU after Portugal, where it increased by 6 percent (from 17% to 23%). Countries of Central and Eastern Europe, Bulgaria, Estonia, Lithuania, Hungary and Czech Republic have decreased tax burden, some of them with spectacular results in economic recovery.

From the above, we conclude that countries that have adopted a policy of stimulating faithfully aggregate demand had remarkable growth: over 5% Lithuania and Latvia, and Estonia over 7%.

We bring into question the countercyclical policies aimed primarily influencing aggregate supply by providing a favorable climate for free market and a non interference of the state in its mechanisms of operation. This is a new doctrinal orientation, called supply doctrine, published in the 80s in response to Keynesian theory that through its representatives Arthur Laffer, Norman True, Paul Craig Roberts believes that a dirigisme by a tax system which leads to stagnation of productivity initiative discourage. The supply doctrine is based on Say's law outlets and focuses on stimulating productive activity of entrepreneurs, the aggregate demand being a consequence of the supply not a cause of it.

Policies aimed at stimulating economic recovery by offering savings and domestic investment, foreign investments, reduce the tax (direct taxes), public spending cuts. They contest the efficacy of systematic deficit and the Keynesian investment multiplier.

For Romania to adopt such a policy to encourage the supply and production, the private sector is in great need of economic and fiscal incentives accompanied by investment in infrastructure and human capital and a stable and competitive business environment.

Both policy to stimulate demand and the supply side there are tools in a greater or lesser influence on economic growth. It would therefore be desirable effective combination of the two types of countercyclical policies. An offer of goods and services not adequately meets demand and vice versa, will be adopted policy but not only generates the expected effects. Furthermore, we believe that concerted action of the free market with the state through transparent surveillance and predictable policy meet internal and external economic shocks we face.

Crisis management should be a complex and continuously supported on multiple levels (economic, political, social) from the pre-crisis, during its deployment and post-crisis phase to reduce and maintain control negative effects follow as small economic and social plan.

The premise of crisis management is the prompt and appropriate response of policy makers at international and domestic events that threaten the economic stability of the country. During crisis management, an important role is the readiness of the management team consists of government ministries, prefectures, municipalities to ensure a healthy economic environment (Kyloh, 2009).

An effective crisis management depends on the coordination of regional efforts, particularly in the European Union as a leader in the G20 through special joint measures to promote financial stability and real economic recovery.

As Romania was a country severely affected by the crisis management strategy should aim at long-term sustainability, setting the necessary stage foundation for economic recovery and macroeconomic stability and ensuring its financing capacity.

2. Conclusions

In 2008, the world economy went into the greatest economic crisis since the Great Depression of 1929-1930. Because of the high degree of interdependence of world economies were affected both developed and emerging economies.

Growth periods were found to be poorly managed economic crisis demonstrated inability regulatory institutions to adapt to economic realities.

In late 2008, after a period of unbalanced growth based on high demand and low production, Romania entered the crisis.

The fact that the Romanian banking system has not been contaminated by toxic assets (one of the main causes of the global financial crisis) was not enough for Romania to be avoided recession. The real economy has experienced economic decline after a long period of economic boom also accompanied by the accumulation of macroeconomic imbalances: the current account deficit, budget deficit and public debt.

Analyzing external circumstances, the economic crisis has spread to the Romanian economy through three main channels: trade, financial and confidence.

Prolonged and destabilizing effect of economic crisis on Romania and elsewhere, was amplified by the fact that our country is already facing a crisis of a structure generated of an ineffective adaptation by domestic production to international circumstances, the loss of competitiveness leading to negative impact on the balance of payments.

At the root of the economic crisis that Romania still faces, we can identify common causes that led to the global crisis and the national economy and specific causes.

Common causes are:

1. Cheap money policy pursued by Central Banks;
2. Increasing asset prices in the housing market;
3. Uncontrolled expansion of credit;
4. Increased appetite for high-risk assets;
5. The phase shift between the financial system controlled by Central Banks and the real economy

Specific causes of the national economy are:

1. The mismatch economic policy mix with business cycle phases;
2. Underdeveloped capital market;
3. The mismanagement of public expenditure;
4. The overgrowth of consumption relative to savings and investments;
5. The unpredictability's fiscal policy which has been a key generator of risk, negatively influencing investment decisions and consumption decisions;
6. The shortage of skilled labor;
7. The increased share in GDP of services and commerce to the detriment of industry, the only sector that can lead to sustainable economic growth;
8. Poor collection of financial resources from the state budget;
9. Strongly influenced the elections cycle both phases of the business cycle and monetary and fiscal policy decisions.

2009 and 2010 meant for Romania, years of economic contraction. In the European Union, in 2010, few were countries that have economic contraction: Ireland, Greece, Spain, Latvia and Romania.

Two consecutive years of economic downturn is explained in the case of Romania, through the imbalances accumulated during the period 2000-2008 and that the most important levers of state led to the amplification of business cycle variations.

A mix of economic policies while countercyclical prudential could restrain the aggregate demand expansion, component has played an important role in overheating. Another factor that has contributed to macroeconomic instability extension was the public debt structured wrong. Large current account deficit clearly shows that Romania is dependent on loans. In Romania, part of the state loans has as destination the budget deficit and debt refinancing and elsewhere were channeled into investment projects without, however, generate multiplier effects on real output. For macroeconomic stability and sustainable growth, Romania must

renounce to the chaotic growth model based mainly on consumption and orientation towards a model based mainly on efficient investment, exports competitive and highly skilled workforce. However, given the global macroeconomic instability and particularly in the euro area, to achieve and maintain stability we need to develop other sectors and growth engines. Industry, which had a relevant contribution to growth in 2011, was developed based on external demand and the conditions under which exporters were favored by exchange rate depreciation. It can also be put emphasis on production for the domestic market. Economic policies that act to stimulate economic growth must include a suitable tax system, mechanisms to stimulate research and development. Both economic realities and economic growth models lead to the idea that innovation influences a largely economic growth process. How innovation can be promoted only through investment, we can say that these are the most effective way to sustainable growth.

Crisis management and the solutions to leave the crisis depend largely on the initiatives promoted by politicians and political force measures which they have at their disposal to achieve those objectives (Daianu, 2009). Macroeconomic policies should be established in a broader framework, able to rethink the evolution of the Romanian economy and shift position that we could get both on the European and world markets

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Energy Consumption and Economic Growth Nexus: Evidence from Pakistan

Aneel Salman¹, Nadia Asghar², Tahir-ul-Mulk Kahlon³,

Muhammad Waqas Chughtai⁴

Abstract: Energy is considered a key ingredient for economic growth of a country. It increases not only the employment but also the living standards of individuals. This paper has objective to find the extensive association between energy consumption and economic growth in Pakistan from the periods of 1978 to 2012 by applying Johansen co integration, error correction model and the granger causality test which present the unidirectional causality between energy consumption and economic growth, it starts from consumption to growth. The results also conclude that less prices and drop off energy shortfalls, favourable policies and reduced uncertainty may lead to economic growth for Pakistan. This study also defines the significance of energy sector and suggests direct investment in this sector by utilizing local energy resources.

Keywords: GDP; productivity; granger causality

JEL Classification: C22; E23; O47

1. Introduction

Power is always considered an important factor for economic growth of a country which not only enhances the productivity as well as the employment which may lead to increase living standards of the people. In Pakistan, with the passage of time increase in industrialization the demand of energy has risen. But due to squeeze resources and poor management the energy crisis is rising day by day. Now it is a prominent threat for the present scenario and also a big hurdle for future advancement. As the result, Pakistan has inverse relation with other world in a

¹ PhD, HOD Management Sciences and Humanities, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, KPK Pakistan. Address: Topi, Khabar Pakhtoon Khwa 23640, Pakistan, Tel.: +92 938271858, e-mail: aneelsalman@yahoo.com.

² Research Scholar, National Defence University Islamabad-Pakistan, Address: Service Road E-9 Islamabad 44000, Pakistan, Tel.: +92 512008125292, Corresponding author: nadiaasghar21@yahoo.com.

³ Assistant Professor, National Defence University Islamabad-Pakistan, Address: Service Road E-9 Islamabad 44000, Pakistan, Tel.: +92 512008125292, e-mail: tahir@ndu.edu.pk.

⁴ Research Scholar, National Defence University Islamabad-Pakistan, Address: Service Road E-9, Islamabad 44000, Pakistan, Tel: +92 512008125292, e-mail: mwchughtai@yahoo.com.

technological era. But in the United States, there is not any association found between energy consumption and GDP which may lead to increase employment and economic development (Yu et al, 1987). The other developing countries are working on alternatives energy sources e.g. solar energy, air energy and coal etc and having positive results but governments of Pakistan are just trying individually to defuse the crises and struggling to fulfil the basic needs of life.

Electricity has strong significance for economic prosperity and developing socio-economic status of the country. There is strong integration is found between energy consumption and gross domestic product for economic growth by showing unidirectional relationship (Kraft & Kraft, 1978). It is important for domestic use, industrialization and also to maintain strategic rationale because bidirectional association between Gross Net Product and economic growth may lead to economic development of the country (Gum & Hwang, 1992). The both energy consumption and economic growth have co integration and unidirectional causality with each other and their direction of causality starts from consumption to development (Alam & Butt, 2002)

Now a day, Pakistan is suffering a serious energy crisis in shape of gas and electricity load shedding for almost 20 hours in rural areas and 12 hours in urban areas. It has disturbed all the social sectors education, agriculture, transportation and industrial sector etc. All these sectors are not only facing energy crises but also suffering enormous financial losses. It is investigated in Pakistan that there is strong correlation found between energy consumption and economic growth by using log linear regression measures. Energy resources like coal, gas and electricity have positive association with the economic development of developing countries like Pakistan. It is also concluded that capital, labor, power spending and economic growth were strongly integrated and causality from power spending to economic escalation (Hwang & Gum, 1992).

2. Objective of the Study

- To find the relationship between energy consumption and economic growth in Pakistan
- To suggest some policy implications for the development of energy sector

3. Problem Statement

Energy consumption is considered a key element for economic development. It is important to investigate that the energy consumption has any relationship to economic growth (GDP) or not. If the relationship is found then what is the direction of the relationship? Does energy consumption affect the GDP? This paper addresses all these questions.

4. Literature Review

The inefficiency of energy sector in Pakistan has been investigated more than many times by the different researchers. Pakistan has been facing energy crises for many years which have made the confused situation in the socio-economic condition of Pakistan.

Filippini and Pachauri (2004) analyze that the increasing inclination of industry, rising population, income escalation, and developed urbanization become the causes of rising energy consumption in the past and it will also improve in future. It is the dire need of heavy investment to handle the demand of power resources. They also conclude that the demand of energy consumption is high as compare to the limited supply of resources. It is very necessary for the time the good economic progression and promotion and also managing the exploited demand of energy is done by efficient utilization of power resources and proper management for maintaining demand.

Adnan and Riaz (2008) investigate that energy consumption and economic growth has bidirectional relationship between each other in the short run while they have unidirectional relationship between energy consumption and economic growth in the long run. The fact is that the energy consumption does not escort the economic growth in the long term; it is because of the high energy prices increase the cost of business which has negative impact on economic growth. Moreover, when energy price changes, it creates uncertainty that also distresses the economic development of the country.

Qayyam and Khan (2008) conclude that there are 60 to 70 percent people of Pakistan who have accessed to energy consumption. They are interconnected with the nation's energy network which presents that as the electrification will increase the demand and also needs more efficient planning for electricity management. The fluctuated prices and use of both domestic and industrial equipments have increased the consumption of electricity.

Ankasha et al (2009) state that the rising energy prices in international market has accelerated the electricity prices which have faultily exaggerated the people of Pakistan. There has been immense load shedding of about 8 hours to 16 hours daily started in all over the country.

Jamil and Ahmad (2010) define the unidirectional relationship between electricity prices and real income for electricity consumption. The results show that outcomes of long run elasticity analyze the electricity demand as income elastic while the price is inelastic with predictable symbols and implication. On the other hand, in short run major sectors present both income and price inelastic electricity demand.

Haider and Alter (2011) investigate that the current energy crises have captured the whole economy. These crises have seriously affected the household

consumption and the industrial demand that may lead to increase unemployment, poverty and other social problems. They also state that industrial sector has faced huge financial losses for 160 Billion rupees and the employment loss of 4, 30,000 laborers. The industrial growth has decreased from 2.4 to 1.2 percent in the last few years due to rising power shortfalls. It has not only affected the growth of industrial sector but also pulled back the economy of Pakistan.

5. Hypothesis

H₀: There is no significant relationship between energy consumption and economic growth.

H₁: There is a significant relationship between energy consumption and economic growth.

6. Research Methodology

This paper analyzes the extensive association between power spending and economic escalation in Pakistan for the period of years 1978 to 2012. The Gross Domestic Product (GDP) has been taken as dependent variables which is presenting economic growth while energy consumption is taken as independent variable. The data is obtained from Economic Survey of Pakistan (1978-2012) and Pakistan Energy Year Book (various issues). The Log Linear Model is designed as following:

$$\text{LNGDP} = \beta_0 + \beta_1(\text{LNEC}) + \mu$$

Where:

LN = Natural Logarithm

GDP = Annual Growth Rate of GDP

EC= Energy Consumption

μ = Error Term

β_0 = Constant

β_1 = Slope of Coefficient (Energy Consumption)

This is a time series data which may have the problem of unit root. Therefore, Augmented Dickey Fuller (ADF) test is applied to make the data stationary while Johnson co integration test is also used to measure the long run relationship between the variables. Moreover, Granger causality test is applied to find out the causal relationship between the variables.

7. Results and Discussion

The paper has the objective to find the relationship between energy consumption and economic growth of Pakistan from period of years 1978 to 2012. The time series data mostly presents the non stationary tendency and the measured regression results may define false outcomes. Therefore, it is important to insure the stationary of the data, so Augmented Dickey Fuller (ADF) has been applied at level and at first difference. The Table 1 describes the results that the variables are non stationary at level carry unit root but at first difference the data is stationary which indicates that the difficulty of unit root has been cut off from data. The variables are incorporated with order of 1, I (1).

Table 1. ADF Unit Root Test

VAR	Levels	First Derivative	Results of ADF
LNGDP	-4.457587	-7.971727*	I(1)
LNEC	-4.256294	-4.437432**	I(1)

*Note: * 5% level of Significance
 ** 10% level of Significance*

The Johansen co integration test has been applied to measure the relationship between the variables. The Vector Autoregressive (VAR) model has been applied to estimate the best Lag length and strengthen the orders. The “FPE, AIC AND SC” criteria describe the Lag length and carry the “Lag 1” as supreme choice. The Johansen co-integration results present the trace and maximum eigenvalues in both Table 2(a) and Table 2(b) respectively. The trace result (Statistics) points out two co integrated equations and greatest eigenvalue which defines two co integrating association. Thus, it is concluded that all the variables are found co integrated and have long run relationship.

Table 2(a). Johansen Co Integration Test (Trace Statistics)

Hypothesized No. of CE(s)	Eigenvalue	Trace Stat	5% Critical Value	Prob
None *	0.546215	38.39445	19.29881	0.0001
At most 1 *	0.482745	14.26489	4.892469	0.0001

* presents the rejection of the null hypothesis at the 5% level significance

Table 2(b). Co-Integration Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Trace Stat	5% Critical Value	Prob
None *	0.546215	23.78116	13.12465	0.0071
At most 1 *	0.482745	14.26489	4.892469	0.0000

* presents the rejection of null hypothesis at the 5% level significance

Source: Researchers’ own calculations

The existence of co integration between variables shows the extensive association between variables. It presents the existence of error correction model that combines the short and long term effects describing how much the prior disequilibrium is removed from the present year. Table 3 shows the existence of error correction term in the model. The value of “-0.37” for increase in GDP that describes about 37% of the prior disequilibrium has been removed from current year.

Table 3. VEC Model

Err. Cor:	D(LNGDPGR)	D(LNEC)
Coint-Eq1	-0.376470	0.006578
	(0.24221)	(0.01075)
	[-1.54352]	[0.61531]
D(LNGDPGR(-1))	-0.020303	-0.004745
	(0.28243)	(0.00743)
	[-0.07238]	[-0.56198]
D(LNGDPGR(-2))	0.062119	0.008202
	(0.21657)	(0.00647)
	[0.29741]	[0.26045]
D(LNEC(-1))	12.26242	0.357456
	(7.62841)	(0.25924)
	[1.43627]	[1.38668]
D(LNEC(-2))	-11.00620	-0.387918
	(8.17874)	(0.24498)
	[-1.32671]	[-1.57844]
C	-0.287987	0.066542
	(0.89416)	(0.02713)
	[-0.32978]	[0.57181]

Source: Researchers' own calculations

Table 4 present the results of Granger Causality test which describe the directions of relationship between variables. There is unidirectional causality is found between energy consumption and economic growth and the direction of causality starts from energy consumption and economic growth. It indicates that energy consumption lead to economic growth.

Table 4. Granger Causality Test

Null Hypothesis:	N	F-Stat	Prob
LNEC does not Cause LNGDP	35	3.50634	0.13227
LNGDP does not Cause LNEC	35	0.53302	0.06779

Source: Researches' own calculations

Table 5. Results of Coefficients

VAR	Coefficient	t-stat	Prob
Constant	1.34691	7.13227	0.00001
Energy Consumption	0.57692	5.06779	0.00000
R2: 0.972791			
F-Statistics: 649.3621			

Source: Researches' own calculations

The results of regression analysis are presented in Table No 5 which describes that all the coefficients are found significant at 5% level of significance. Coefficient value of energy consumption indicates that 1% increase in energy consumption lead to 57% increase in GDP of country.

8. Policy Implication

- There should be an efficient use of energy resources both in domestic and industrial sector by managing demand and supply of energy.
- Government should focus on alternate energy resources like coal, wind power, solar energy etc and may establish more dams for hydel power generation.
- The government should introduce bio-gas projects as alternative source of energy.
- The policy makers should invite foreign invest
- ors to make joint ventures in both air and coal power generation in Pakistan.

9. Conclusion

The paper identifies the relationship between energy consumption and economic growth in Pakistan for the years 1978 to 2012 by applying Johansen Co Integration, Vector Error Correction model and Granger Causality test. The results conclude that energy consumption has significant and long run relationship to GDP. A unidirectional causality is found between energy consumption and economic growth from Granger Causality test. It proves that energy consumption is one of

the important factors for economic growth. Energy consumption enhances the production level in the economy and when production increases it generates employment opportunities in the country, hence reduces the unemployment and poverty as well.

The paper concludes that energy consumption plays a vital role for the development of the country. Currently, Pakistan is facing number of economic problems like unemployment, inflation and low production level etc. At the same time there is a serious short fall of electricity in the country. Therefore it is a dire need to fulfil the shortage of energy by increasing the production of electricity or by using some other alternates energy resources like solar and wind etc. So that Pakistan may become a developing country by overcoming the sluggish growth in the economy.

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Tourism and Sustainable Development**The Experience Economy in Thai Hotels and Resort Clusters: The Role of Authentic Food**Thanan Apivantanaporn¹, John Christopher Walsh²

Abstract: This paper explores the relevance of authentic Thai food in contributing to the experience economy in Thai hotels and resort clusters. Although hotels and other tourist institutions in Thailand have been making some sporadic attempts to incorporate specifically Thai food and beverage (F&B) elements into their overall product offering, this has rarely been attempted in a thoughtful and systematic manner, despite the importance of F&B in determining overall levels of customer satisfaction and the importance attached to incorporating ‘Thainess’ into the hotel and tourism industry. This paper draws on qualitative research and personal observation undertaken in a wide range of Thai hotels with a view to identifying emergent value-adding clusters in the domestic hospitality sector. The paper describes and categorizes the uses of Thai F&B currently and identifies shortcomings in industry vision, which leads to recommendations for both hotel and resort managers and also to those responsible for national level tourism development efforts. The paper also recognizes the problematic nature of the concepts of ‘authenticity’ in this context and attempts to reconcile differing conceptions. The paper contributes to improving the quality and value of Thai hotels in the larger tourism industry.

Keywords: hospitality; Thailand; tourism

JEL Classifications: L83; M31

1. Introduction

Thailand is seeking to escape the Middle Income Trap by restructuring its economy and taking more advantage of the possibilities offered by the creative and knowledge economies. In terms of one of its more visible industries and one which is particularly important in earning foreign currency, that is tourism, incorporating creative economy elements entails drawing upon added value in the various components of the tourists’ experience. This has been approached with an eye for

¹ PhD Candidate, Shinawatra University, Bangkok, Thailand, Address: 197 Viphavadi-Rangsit Rd., Samsen Nai, Phayathai, Bangkok, 10400, Thailand, Tel.: +66 (0) 2650-6011 to 12, Fax: + 66 (0) 2650-6033, e-mail: thanan.ted@gmail.com.

² Assistant Professor at Shinawatra University, Bangkok, Thailand, Address: 197 Viphavadi-Rangsit Rd., Samsen Nai, Phayathai, Bangkok, 10400, Thailand, Tel.: +66 (0) 2650-6011 to 12, Fax: + 66 (0) 2650-6033, Corresponding author: jcw Walsh@siu.ac.th.

authenticity, not only because the panoply of Thai cultural features and institutions is widely held among decision makers in the country to be a source of genuine competitive advantage but also because that advantage is thought to be sustainable. In other words, including elements of authentic Thai culture into the tourism experience will not only be a way of raising margins but also a means of distinction for competitor destinations. Within the overall mix of goods and services that make up the tourist experience, the food and beverages (F&B) sector is of particular importance because it is a sector tourists cannot avoid, because it represents a significant proportion of daily expenditure and because it is a convenient means of adding value to basic products by drawing upon local expertise and supplies, which have the advantage of being comparatively low-cost, especially in comparison with the costs incurred in providing international best practice with respect to international cuisine.

Thai food already has a good reputation around the developed world and a large number of restaurants have opened, giving people the opportunity to try staples of the Thai table. In a survey by CNN of the world's 50 most delicious foods, five Thai dishes were included, *tom yum kung*, *nam tok moo*, *som tam*, *phad tai* and the overall winner *massaman* curry. Tourists are familiar with these kinds of dishes and generally interested in trying them in an authentic setting and preferably without having to pay premium import prices. Another survey, the Visa and Asia Pacific Travel Intention Survey, 2010, indicated that the main reason given by visitors for visiting Thailand was for the Thai food (61%), followed by prices (60%), shopping opportunities (54%), natural attractions (54%) and unique cultural features (49% - this was a multiple choice question and respondents could select more than one answer). It is certainly true that F&B related issues regularly feature in strategic plans for industry development and economic development generally in such top-level bodies as the National Economic and Social Development Board (NESDB) and the Tourism Authority of Thailand (TAT). However, that level of interest and appreciation has not yet been incorporated into the product offerings of Thai hoteliers and related resort managers. Few seem to understand the awareness of Thai F&B features or of Thai cultural institutions among the international tourism market and, therefore, are not well-placed to be able to take advantage of it. Instead, most follow patterns of standardization that are common in other multinational industries in which a common service pattern and service mentality are employed as a means of benchmarking employee performance, regularizing product offerings and reducing costs of inputs. It is apparent that there is a mismatch, therefore, between the opportunities apparently available from accessing elements of the Experience Economy as part of tourists' experience of Thai tourism and the product offerings currently made available. It would be beneficial to the industry and the economy as a whole if some means were to be found that could close this gap. F&B elements will be crucial additions to the marketing mix in fixing the gap.

This situation has yielded three basic research questions to be addressed by this study, which are as follows:

1. To what extent, if any, are Thai F&B incorporated into the unique value proposition offered by various hotels in important destinations around the country?
2. How are Thai F&B elements articulated and demonstrated as part of guests' experiential cultural discovery?
3. To what extent, if at all, do guests perceive Thai F&B as offering a value added service?

The current study attempts to provide some answers to these questions as part of a larger attempt to understand how the Thai tourism industry may be used to contribute to the knowledge and creative economies and, thereby, participate in the exit from the Middle Income Trap. To do this, the paper now continues with a brief literature review outlining the various concepts that are considered in this project, moves on to a description of the methodology employed to collect data and then, in the second part of the paper, the principal findings are described and discussed and then recommendations are drawn from the findings observed. The paper is then concluded, with a brief acknowledgement of what is known about the subject to date and how future research may be used to contribute to an improvement in the situation.

2. Literature Review

2.1. Food and Beverages in the Tourism Experience

Food and beverages (F&B) consists of all the services provided to guests within hotels or other forms of tourist-based accommodation intended to make a profit. It includes those elements provided as part of the tourism package, that is inclusive breakfasts and complimentary room products, as well as elements provided above and beyond the package, including in-room and facility dining, external shows and events incorporating F&B and so forth. There are various models of marketing both these forms of F&B and many forms of practice have resulted in the adoption of international best practice as a means of dealing with variability in local labour forces and as a result of the internationalization of hotel management and management norms in the field. In general terms, this has meant that standardization has been based on an international norm or, perhaps more accurately, a small set of international norms, as symbolized most clearly in breakfast buffets which are divided, very broadly, between Continental, American and Asian. It is possible to find selections based on other ethnicities (e.g. Indian, Arabic) but only in specific locations. Instead, F&B items from 'exotic' locations – that is, not from the core areas – have been incorporated into the basic offering. For

at least two decades, therefore, exotic cuisine has become an increasingly important part of the international tourism experience and act as multi-impersonal motivators (McIntosh *et al.*, 1995). In other words, exotic F&B presented in a safe and hygienic manner acts by itself to attract many tourists, without it having to be spelled out exactly what kinds of dishes are likely to be made available. It has been argued that tourists are also able via these means to gain some insights into social relations of food production and an entry into an authentic travel experience by trying exotic cuisine (Fields, 2002). Consequently, gastronomic tourism, whether from an instrumental or an incidental perspective, has become an increasingly common field of study for tourism scholars (Boniface, 2003; Cohen & Evieli, 2004; Hall & Sharples, 2003; Hjalager & Richards, 2002). As the tourism industry matures in various aspects, it has become evident that exotic F&B have become part of an alternative paradigm to the sun-and-sand holiday. There may be some crossover between the two but the concept of authenticity represents a point of bifurcation with the comfort seekers, who might like to see a little hint of exoticism on the menu but not have to be confronted with it in reality.

2.2. Culture

This paper concerns itself with the notion of Thai culture from an authentic perspective. The authenticity aspect will be considered below; here, it is necessary to consider the nature of culture. This is a complex issue inasmuch as every different field of study takes a somewhat different view of culture and has devoted considerable effort in expounding and unpacking the concepts contained within the definition that suits it. This paper is rooted in a management paradigm and, consequently, takes a definition of culture that has been exercised within management studies. Perhaps the most influential of these is provided by Hofstede (e.g. Hofstede, 1984), who described culture in terms of the impact that it has on the way that people behave, that the behaviour of people is within reason predictable given understanding of the cultural underpinning and that it is further possible to identify recognisable patterns within overall behaviour that are further explicable with respect to additional typologies of cultural impact. In this respect, the work of Maslow is rightly considered of the highest rank. He described a hierarchical pyramid of desires, with the lowest level of safety and food, with higher levels of better quality of life, personal relationships, self-fulfilment and up to the level of self-actualisation (Maslow, 1987). As a result, management studies tends to focus on a model of cultural practice that is, on the one hand, inclusive of some people and exclusive of others and, on the other hand, manifested in forms of behaviour in terms of norms, beliefs and values (Peters and Waterman, 2004). This is a definition that is characteristic of management studies in that it maximizes operational value at the expense, if necessary, of sophisticated, nuanced niceties. This is the definition of culture that will be used in the current paper.

2.3. Authenticity

The contemporary notion of authenticity has its roots in existential philosophy, in which it is considered to be the ability and willingness of a person to live true to her or his own nature. One way to judge whether a person, including the self, is living in an authentic manner is by judging the nature of production or work. Theodor Adorno highlighted the problems attendant on trying and failing to live an authentic life (2002). The issue was further analysed by Walter Benjamin (1999), who argued that since art in the modern age (the 'age of mechanical reproduction') is radically different from art created in the past, the way of considering art should also be treated differently and should be based, primarily, on politics. This difference is represented by the concept of modernity or modernization: "To be modern is to find ourselves in an environment that promises us adventure, power, joy, growth, transformation of ourselves and the world – and at the same time, that threatens to destroy everything we have, everything we know, everything we are (Berman, 1988:15). From a management perspective, this definition of modernism will immediately bring to mind Schumpeter's (2010) description of capitalism as being a form of 'creative destruction.' Both modernization and capitalism result in the creation of new ideas, new concepts and new products which come into being by changing, deforming, transforming and eradicating the past. All that is solid, in other words, turns into air. As part of the contemporary commercial experience, therefore, tourism products should be read and interpreted with respect to a political understanding of the production process and the social relations of production. The authenticity of the tourism process depends, therefore, both on the degree to which an accurate model of the production process is embedded in the products and services offered and is also represented in the moment of consumption. However, it is known that in the context of tourism, genuine authenticity is rarely to be found so much as 'staged authenticity' (MacCannell, 1973). There will always be a gap between staged and genuine authenticity, given the nature of contemporary tourism, although an extensive treatment of this subject is beyond the scope of the current paper.

2.4. The Experience Economy

The concept of the experience economy is found in the work of Pine and Gilmore (1999), although it has of course been in practice for a much longer period of time. The premise is that people will enjoy a consumption process to a greater extent if all of their senses are engaged with the performance of providing the good or service involved. This means that each product offering should be part of a theatrical performance for which a premium fee can be charged. The relationship

between the performance in reality and the act represented from an authentic perspective is clearly problematic. The commercial perspective requires that an experience must be relevant and meaningful and incorporate features such as novelty, surprise and learning (Poulsson and Kale, 2004). There have nevertheless been attempts to link the experience economy concepts to operational tourism experiences (Oh, Fiore and Jeoung, 2007), which indicates that some researchers at least believe that the gap is not insurmountable.

3. Methodology

This study is based on a programme of qualitative research that has been conducted as part of a larger doctoral research project relating to the experience economy in boutique hotels in the tourism industry in Thailand. A total of 30 face-to-face, in-depth interviews were conducted with a variety of hoteliers, hotel experts and consultants, TAT research director, foreign and domestic guests and members of the judges' panel of the Thailand Boutique Hotel Award, 2011. Interviews followed a semi-structured approach that enabled respondents to explore issues of interest to them and not be involved with irrelevant areas. Each interview was, therefore, different. Areas of exploration within the overall body of interviewing included the extent to which Thai F&B product offerings are incorporated within value propositions within hotels, how Thai F&B product offerings are articulated and demonstrated within the experiential and cultural discovery of guests within hotels and the extent to which guests perceived Thai F&B product offerings to be value-added services.

The qualitative interviewing has been supported by a literature review of secondary data and, also, an intensive exploration of relevant websites displaying Thai F&B content as hotel offerings. Thirdly, researchers participated in and observed hotel dining sites and venues at a range of hotel dining sites and venues and, in particular, at the Sukothai Historical Park

Extensive note-keeping and transcription of interviews (which took place in both Thai and English as necessary) contributed to a database that was subsequently interrogated using content analysis techniques. Outputs included the categorization of hotels according to their mode of offering Thai F&B within a typology of different strategies, categorization of guests' experiential engagement and understanding of perceived value received by customers.

4. Findings

Currently, the use of Thai F&B can be categorized into three types of business model:

1st Model: these are hotels or resorts which continue to provide typical offerings that mainly focus on the room's 'core value' and other stereotypes (auxiliary) services. Thai F&B is not highly enhanced or incorporated into the hotel's conceptual offering. Hotels in this category are often typical city centre businesses, with important meeting venue services and food offerings very much matching the industry standard of American breakfast and international lunch and dinner options. This group of hotels focuses on providing meeting facilities, equipment and general variety of food, with care taken to provide parking space. For those hotels also located in tourist attraction areas can also provide some local tourist activity services. This type of hotel represents the bulk of the industry in Thailand and they are examples of red ocean swimmers in that they lack product uniqueness but are characterized by adherence to industry standards.

2nd Model: these hotels or resorts feature different offerings from the first type and they tend to provide a hybrid model of F&B provision. That is, they might provide added value service to the guest experience from a variety of components, which may include featuring Thai F&B and some location-specific features. For example, there are hotels that offer typical American breakfast supplemented by local specialities such as *khao soi* or *khanom jeen* in the north and north-east or, in the south, *dim sum* and Trang coffee, together with grilled pork skewers. These features supplement the core services and are additions to them rather than substitutes. The hotel's core values are still to be found in the rooms, the meeting venues and equipment and facilities. One example of this approach is found at the Amphawa Resort and Spa in Samut Songkhran province, which has a core offering of meeting facilities combined with local tourist attractions but the hotel restaurant has a strong reputation locally for its use of the *pla-too* fish (mackerel), which is a renowned delicacy of the Central region and one which is not easy to find elsewhere. The location-specific *pla-too* fish dishes are aimed at creating a sense of location-specific authenticity. This second type of hotel is becoming more common as new small and boutique hotels are being opened by entrepreneurs who understand the need to differentiate their product and to articulate its uniqueness. F&B offerings are considered to be part of a holistic experience that might also feature such elements as hotel architecture, story and legacy, as well as other added-value lifestyle activities.

3rd Model: this category features F&B services as part of the core offering and as representatives of key service values. This type of hotel positions itself as a destination with innovative ambience, authenticity and a distinctive food menu. They are places that attempt to articulate local stories and legacy through staff

members, ambience, service, architecture and tourist related activities that, together, aim to engage all five of the senses. Thai F&B are highly integrated into the core values of the hotel and guests are also able to participate in food presentation, cookery lessons, trips to local food producers and farmers' markets and so forth. One example of this is the Sukhothai Treasure Resort and Spa, which features a spectacular dinner experience within the setting of the private and exclusive cultural dining facility within the Sukhothai Historical Park. Guests can enjoy what is presented as authentic northern style Thai food within the heritage-based environment. It is a form of staged authenticity, of course.

This third type positions itself as a destination not only for the purpose of the room but also for the purpose of cultural exchange activities and a holistic approach. Food is used as a means of becoming a cultural gateway to understanding a different culture and its identity in a sustainable manner (Hale and Mitchell, 2000). This type of hotel aims at being a niche competitor with specific customers quite different from the generic or semi-generic approaches of the preceding two models. While the first two models follow basic push and pull motivational factors in seeking to attract customers (Crompton, 1997; Yuan and McDonald, 1997; Uysal and Hagan, 1993), the third type relies on a higher order of motivation according to the Maslovian hierarchy of desires. The destination is portrayed according to a theatrical metaphor in which there are four critical elements: actors; audience; setting and performance (Fisk and Bitner, 1992). The model uses a theoretical business framework as a stage and every place is the theatre (Pine and Gilmore, 1999). The key success factors are based on harmony and consistency of manner and tone as part of a 'creative value chain.' An additional factor is that each hotel in this category can make a claim to having cultural capital of some sort. For example, the Rachamarkara Hotel at Chiang Mai features spectacular architecture in the Tai Yai style and the menu boasts Tai Yai specialities as a means of promoting cultural values.

Table 2. Range of Experiential Engagement Activities Available to Guests

Experiential Engagement Activities	
1	Chef cooking demonstration
2	Unique food decoration performance
3	Cookery lessons
4	Trips to local food producers and farmers' markets
5	Personal cooking and selecting own ingredients from local sources
6	Dining experience in a cultural and historical environment
7	Dining experience with culturally-infused dramatic performances and dances
8	Selection of Thai regional dishes with local fresh fruit and Thai desserts for breakfast menu; typical menu is the American breakfast and western bakery items with local pineapples, papayas and water melons
9	Local set menu features home-made regional dishes while typical hotels offer stereotyped and generic menu selections

Source: Original research

5. Discussion

In the table below (see Table 2), customer engagement is categorized in three levels along the vertical axis, indicating the three business models identified above. Across the horizontal axis, three columns itemize the degree of customer engagement, from low to high and, also, columns for both customer perceived value and the competitive business model.

Table 3. Degrees of Customer Engagement

Hotel Model Type	High-Customer Engagement	Medium-Customer Engagement	Low-Customer Engagement	Customer Perceived Value	Competitive Business Model
1st Model			X	Nothing New	Commoditized Service
2nd Model		X		New Learning Experience	Value-Added Service
3rd Model	X			Extraordinary Experience	Value Creation

Source: Original Research

The hotel or resort business model is largely dependent on the relevant firm's market positioning and strategy, while the perceptions of customers of the value of F&B offerings can become crucial competitive inputs and the value added can differentiate the overall product offering. Consequently, there is a definite need for the infrastructure of capital-cultural resources and the knowledge and understanding provided can capitalize the theoretical framework with respect to both dramaturgical and theatrical metaphors.

6. Recommendations

For the government, it should consider highlighting and branding the culinary industry within the framework of the creative and cultural economy, with various ministries involved: the Culture Ministry would preserve and conserve authentic marks of cultural history, the Industry Ministry would be involved in strengthening products and services, with standardization of production also an important issue; meanwhile, the Tourism Ministry and TAT should be involved in promoting culinary tourism and the Public Health Ministry would be concerned with food safety and hygiene. Finally, the Science and Technology Ministry would organize research and development of new and heritage products and the Agriculture Ministry would be responsible for upgrading upstream agricultural production in terms of both quality and quantity. The role of government accords with what has already been written in the literature. For example, the government's role in highlighting and branding the 'culinary tourism' as part of the creative and cultural

economy concepts has been addressed (Handsuh, 2000; Bernard and Zaragoza, 1999; Hjalager and Corigliano, 2000; Bessiere, 1998; Cusack, 2000). The purpose of culinary expression as a means of gaining attention from tourists has also been described (Santich, 1998; Macdonald, 2001; Bessiere, 1998), as has its role in improving industrial competitiveness (Crouch and Ritchie, 1999) and creating distinct added value at a preferred destination (Telfer & Wall, 1996; Handsuh, 2000).

Meanwhile, at the firm level, hotel management should consider:

1. What knowledge they require in order to incorporate creative and cultural capital into their competitive business models.
2. How to incorporate the practical framework of dramaturgy and the theatre metaphor.
3. How to bring hotel staff to a position in which they can access location-specific knowledge and ability to prepare and present food as required.
4. In order to cater for more diversified target segments, the Thai Culinary sector should be further developed to enable the creation of a wider range of dining outlets. Thai fusion food should be highlighted and developed so that it becomes more creative and dynamic such that it becomes an internationally-renowned brand that does not remain static in its originality.

Although the F&B sector has been receiving some attention in research concerned with tourism, F&B as a pull factor generally has seen little attention. It is suggested that Thai F&B be considered as a value-added service that seeks to distinguish competitive advantage over other, non-unique hotels. In truth, conventional accommodation outlets in Thailand have long competed on the basis of undifferentiated products and services such as the hotel and room facilities, albeit in connection with leading edge architectural design (which is a common fascination among Thai entrepreneurs) combined with mostly dull, standard F&B selections irrespective of wherever the hotel might be located: pineapple, water melon and papaya are always found (and usually found alone) on the buffet tables despite the incredible richness of selection of fruits available in Thailand.

However, it should not be taken for granted that simply providing authentic Thai F&B would be sufficient for creating a successful pull factor for hotels in the country. Not only should it be considered in a mature and sophisticated manner but the element of cultural expression should be demonstrated both in the tangible aspects of the physical production of dishes but also in the intangible aspects of experience, memory and satisfaction. In this context, the underlying paradigm of the dramaturgical experience economy, including the actor-audience-script-setting construct, will be an important theme in delivering a (so it is to be hoped) delightful experience. These features are brought together at the dining experience

brought together at the Sukothai Historical Park. The experience is demonstrably inauthentic in that it bears little if any relationship with an appropriate consideration of the social relations of F&B production (such things might be found to a slightly greater extent in some home-stay experiences). However, as staged authenticity, it does its job in pulling in domestic and international tourists, neither of which may be expected to have any meaningful understanding of Thai history.

Table 4. Roles for the Public Sector in Promoting Culinary Industry in the Experience Economy

Task	Agency
Preserve and conserve values and authenticity	Ministry of Culture
Standardise and upgrade quality of products and services	Ministry of Industry
Promotion and branding of culinary tourism	TAT/Tourism Ministry
Assure food safety and hygiene standards	Ministry of Public Health
R&D on food innovation and technology	Ministry of Science and Technology
Increasing agricultural yields through developing and importing advanced technology in seeding, planting and harvesting	Ministry of Agriculture and Cooperatives

Source: Original Research

Table 5. Roles for the Private Sector in Promoting Culinary Industry in the Experience Economy

Area of Management	of Hotel Practice
Knowledge management organization	Cultural resources (food or culinary culture) will need to be accumulated and sustained through creativity and innovation
Experience and dramaturgical approach	Capitalizing on the theme of actor-audience-script-setting and incorporating these into the best show performance for a memorable experience
Marketing and branding	Strategic positioning in terms of art and culture, ways of life, beliefs and rituals is set for unique and differentiated service design and marketing campaign
Human resource engagement	Hotel staff must be able to access food knowledge and be trained in food processing, food presentation, food preservation and the use of food as storytelling
Food technology and innovation	To broaden its existing market penetration so as to become an internationally renowned food icon, the Thai fusion food style should be addressed from a more creative and dynamic perspective. Consequently, the public and private sector cooperative issues need to be addressed.

Source: Original Research

It is clear that these goals can only really be achieved by means of collaboration between the private and public sectors.

7. Conclusion

From the findings described in this paper, it is evident that (staged) authentic Thai F&B have become one of the more significant ingredients involved in enhancing the cultural content of tourists' experience in Thailand. This sector can become, therefore, an important means of distinguishing hotels from generic competitors employing F&B merely as a form of supplementary service in the business model. This paper suggests that Thai hoteliers have, to date, rarely capitalized effectively on well-known examples of Thai cuisine, which has achieved a stellar reputation in the international tourism journalist media. This is despite the fact that there is a growing demand in tourists' desire and motivation for cuisine-based resort travel (Santich, 1998; Macdonald, 2001; Bessiere, 1998). However, there are some parts of the overall industry which have recognized the importance of F&B in the overall product offering and these efforts are to be encouraged with the appropriate level of institutional support. Longitudinal research will assist in determining whether the hotels looking forward in this manner are gaining in success and relevance or not.

This paper represents an exploratory study of Thai hotels in this category. It is limited by narrowness of scope and ability with respect to time and place. More research will assist in broadening understanding of the issues involved to a greater extent. The need for genuine authenticity in production throughout the Thai economy is, in particular, an important potential stimulus for future growth in moving beyond the Middle Income Trap.

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Impact of Climate Change on Employment in Nigeria

Muritala Taiwo Adewale¹, Awolaja, Ayodeji Muyideen², James Olurotimi³

Abstract: Nigeria as a developing country in African continent is one of the major suppliers of crude oil in the world and the effect of climate change on her employment status cannot be over-emphasized. Employment debates have been of high discussion in the world news. Nigeria, due to its vulnerability to climate change is moving towards investing on the renewable energy industry so as to militate the effects of climate change as well as economic advancement. This paper through the use of exploratory methods, aims to explore the existing literatures to examine the impact of climate change on employment, be it – in the short; medium and long term. The results were presented through statistical charts. However, this study discovered that effects of climate change was felt over the longer term when technical change and innovation would lead to more job creation, productivity improvements and growth. The study therefore recommends that all the stakeholders should raise awareness on the environmental effects of climate change and focus on policies that militate against the adverse effect of climate change and inevitably having impact on jobs, working conditions and incomes in many sectors.

Keywords: climate change; employment; crude oil, mitigation; renewable energy; Nigeria

JEL Classification: Q01; Q43; Q54; 055

1. Introduction

The Global community including the G-8 (super-powers of the world) has come up with a consensus to address the problem of climate change. This consensus requires a cut in global greenhouse gas emissions of at least 50% by the middle of the century (Stern, 2007). Going by the adjustments agreed upon by the global community, it will require holistic changes in the way economies are structured as well as changes that will spread into every aspect of economic life. Nigeria as a developing country in Africa continent is one of the major suppliers of crude in the world and the effect of climate change on her employment status cannot be over-

¹ Assistant Lecturer, Department of Economics and Financial Studies, College of Management and Social Sciences, Fountain University Osogbo, PMB 4491, Osun State Nigeria, Tel.: +2348034730332; +2347054979206, Corresponding author: muritaiwo@yahoo.com.

² Department of Business Administration, Ekiti State University Ado-Ekiti, Address: PMB 5363 Ekiti State Nigeria, Tel.: +2348035766663, e-mail: ayodeji@yahoo.ca

³ Department of Business Administration, Ekiti State University Ado-Ekiti, Address: PMB 5363 Ekiti State Nigeria, Tel.: +2348035766663, e-mail: olurotimijames@gmail.com.

emphasized. Hence, this paper through the use of descriptive exploratory methods, aims to explore existing literatures relating to the impact of climate change on employment in addressing the impact of climate change on employment, be it – in the short; medium and long term in Nigeria.

Employment debates have been of high discussion particularly in Nigeria due to its vulnerability to climate change effects. Hence, Nigeria is moving towards investing on the renewable energy industry so as to militate the effects of climate change as well as economic advancement. This is because, renewable energy replaces conventional fuels in four distinct areas: electricity generation, hot water/ space heating, motor fuels, and rural (off-grid) energy services (REN21, 2010). Although, all forms of energy are expensive, but as time progresses, renewable energy generally gets cheaper, while fossil fuels generally get more expensive and hence, the world is shifting towards increasing employment in the renewable energy industry (Reuters, 2009a). This study intends to explore through the review of literatures the impact of climate change on employment in three stages. (That is short-term, medium term and long term).

2. Literature Review

2.1 Theoretical Framework

2.1.1 Short Term Effects of Climate Change Policy on Employment

In the short term there will be job creation and loss in directly affected industries. Jobs will be lost in carbon-intensive sectors and new jobs will be created in low-carbon sectors (for example, to run a wind farm). Although, the energy sector is a relatively small direct employer and source of value added to the economy due to the fact that Nigeria has not actually delve into massive labour intensity in this industries (NBS 2006). Nonetheless, Nigeria, in the short term derives employment benefit from the renewable industry through the use of biofuel in the petroleum industry, aviation industry and agriculture industry (NESREA 2009).

To put this effect into perspective, Kammen et al. (2006) emphasised a comprehensive employment effect of renewable energy technologies as put together in table I. He suggests that renewables are more labour-intensive than conventional energy, both in terms of manufacture and, to a lesser extent, the operation of facilities. A switch to low-carbon technologies should thus lead to net job creation because movement of worker from fossil fuel industry would lead to unemployment in the short term as shown in table I.

However, employment benefit that can be derived from the renewable energy would sensitize the government officials as well as all the stakeholders in embracing climate change policies that would foster rapid economic development

through adoption of global climate change policy of switching to a low-carbon technology.

Table I essentially shows ‘comparative static’ results, comparing the jobs available in a renewable energy installation with those in a fossil fuel plant. So if the demand for labour relative to other factors is to rise, the new technologies have to raise the labour–capital ratio, and not just the labour–output ratio.

Table 1 showing Average employment over the life of a facility (jobs/MW)

Renewable Energy	Construction, Manufacturing Installation	O&M and Fuel Processing	Total Employment
Solar PV	5.76–6.21	1.20–4.80	7.41–10.56
Wind	0.43–2.51	0.27	0.71–2.79
Biomass	0.40	0.38–2.44	0.78–2.84
Coal	0.27	0.74	1.01
Gas	0.25	0.70	0.95

Source: Kammen et al. (2006). (Jobs per Megawatt)

Laid-off workers may not immediately find a new employment job in the growing renewables industry as they have different abilities and the jobs have different requirements. Matching old workers to new jobs takes time. Limited short-run flexibility of real wages can further contribute to fluctuations in output, employment and unemployment. Babiker and Eckhaus (2006) and Küster et al. (2007) include sectoral rigidities in labour mobility and in wage adjustments as a factor in a computable general equilibrium model to evaluate the impact of climate policy measures on overall economic performance. Furthermore, Küster et al. (2007) show that unemployment rises as a result of negative growth effects when subsidies for renewable energy technologies are applied, while unskilled workers are more seriously affected than skilled ones. However, they assume a comparatively lower labour intensity for renewable energy technologies.

2.1.2 Medium Term Effects of Climate Change Policy on Employment

The medium run effect is characterised with adjustment in the behavioural changes and value chains thereby enabling the climate change policy to cut across the economy. For instance, as suggested by Kammen et al. (2006), a reduction in coal-fired power generation will lead to upstream job losses in the mining industry and rail freight. Demand for rotor blades (for wind turbines), silicone (for solar panels), and low-carbon appliances will grow at the expense of more polluting equipment. Stricter building standards will accelerate the refurbishment of the housing stock,

creating jobs in the construction sector. There will be new jobs for carbon traders, wind power engineers and climate change consultants.

The reduction in corporate demand will have economy-wide repercussions on output and employment. The magnitude of this budget effect depends on the price differential between low-carbon technologies and conventional solutions. The lower the differential (for example because gas prices are high), the lower will be the budget effect. For win-win measures such as energy efficiency improvements, the budget effect could even be positive. Recent increases in energy prices and international efforts to price carbon are likely to improve the competitiveness of renewable energy technologies and thus increase employment impacts.

2.1.3 Long Term Effects of Climate Change Policy on Employment

In the longer term, jobs will be created in research and the development of low-carbon technologies as a show of evidence from IEA, (2011) reports that renewable energy technologies is becoming cost-competitive in an increasingly broad range of circumstances, in some cases providing new investment and job opportunities without the need for specific economic support. The core of the argument is that the arrival of new technologies with wide-ranging applications (such as information technology or, earlier, the steam engine) will trigger a process of technology diffusion, adaptation and experimentation. The need to adopt the new technology will create a wave of secondary innovations as industries adjust their processes and adapt the technology to their specific requirements. This process, which may take place over a long period of time, will increase the demand for (skilled) labour (Aghion, 2001).

The key issue in this context is whether expenditures for the development and employment of new energy technologies are complementary to or substitutes for other investment options. Other authors (e.g. IEA, 2000) appear more optimistic, by highlighting the fact that additional knowledge gains through learning-by-doing could boost cost reductions. Notwithstanding the uncertainty in cost estimates, Weyant (2004) concludes from a survey of the underlying literature that overall welfare will be higher if policies to induce innovation start earlier rather than later.

Nigeria, blessed with enormous human and natural endowments is endowed with a population of 155 million in 2009, (NPHC, 2009). National Environmental Standards and Regulations Enforcement Agency (NESREA) have revealed that developing countries like Nigeria contribute the lowest to climate change but they are the most vulnerable to the effects of climate change. According to National Bureau of Statistics (2006), Nigeria had a labour force of 57.21 million. In 2003, the unemployment rate was 10.8 percent overall; urban unemployment of 12.3 percent exceeded rural unemployment of 7.4 percent.

3. Methodology and Data

This paper through the use of exploratory methods, aims to explore the existing literatures to examine the impact of climate change on employment, be it – in the short; medium and long term in Nigeria. The purpose of this study is to come up with a set of potential supporting activities of climate change that influence employment in Nigeria. According to the latest available information from 1999, the labor force employment sectors are categorized into agriculture, services, industry. The sectors are as follows: 70 percent in agriculture, 20 percent in services, and 10 percent in industry. The study was mainly based on information derived from secondary sources. Secondary data employed for this study were collected from a cross section of National Bureau of Statistics and government agency such as National Population and Housing Census.



Figure 1. Showing Labor force – by occupation: agriculture 70%, industry 10%, services 20% (NBS, 2006)

3.1. Labour Market Trends

The labour force in Nigeria has continued to grow in line with the growth in population and natural age-specific transition in the economy. The labour force as shown in figure I above depicts percentages by occupation which they occupy. The labour force grew from 47 million of which 87 percent were employed in 1999, to 54 million of which 88.9 percent were employed in 2005. Aggregate wage employment in industries and businesses¹³ increased from about 3.66 million in 1999, to about 4.52 million in 2005. Overall, aggregate employment in Nigeria grew at 3.76 percent per annum, between 1999 and 2005. The gender dimension of the structure of employment is shown in Table 2. This is well illustrated in figure 2 and 3 below. Until the beginning of the 1980s, unemployment was not a serious problem in Nigeria.

Table 2. Distribution of Economically Active Population by Sector and Sex, 2005, % in Each Sector, % in the Labour-Force

	Women	Men	Women	Men
Agriculture	21.8	78.2	32.8	46.2
Manufacturing	12.3	87.7	4.2	3.0
Services	39.1	60.9	63.0	50.8

Source: Calculated using data from NBS (2006)

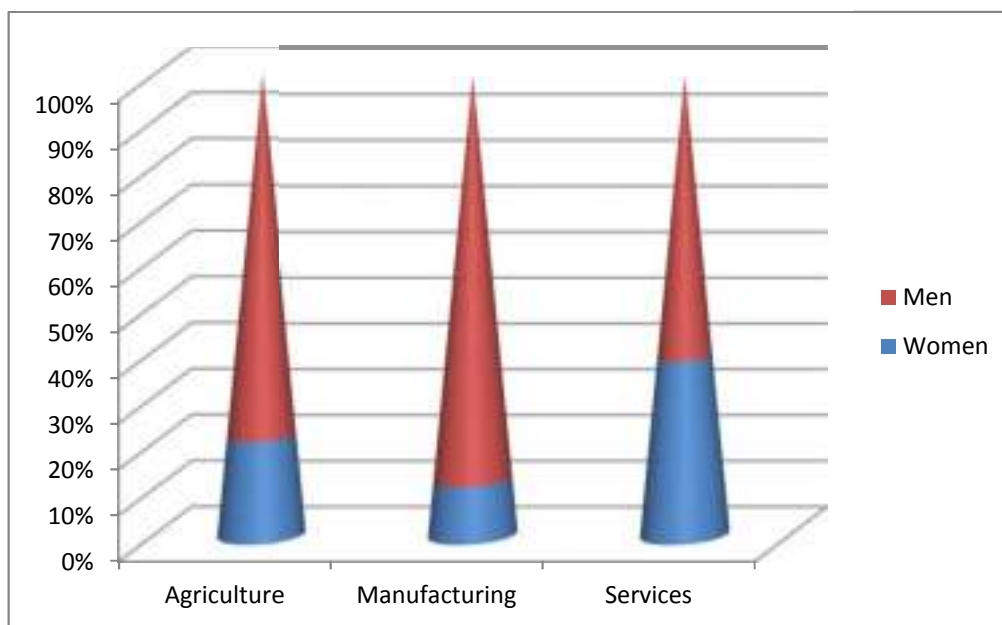


Figure 2. Showing Distribution of Economically Active Population By Sector & Sex Percentages in Terms of Sectors

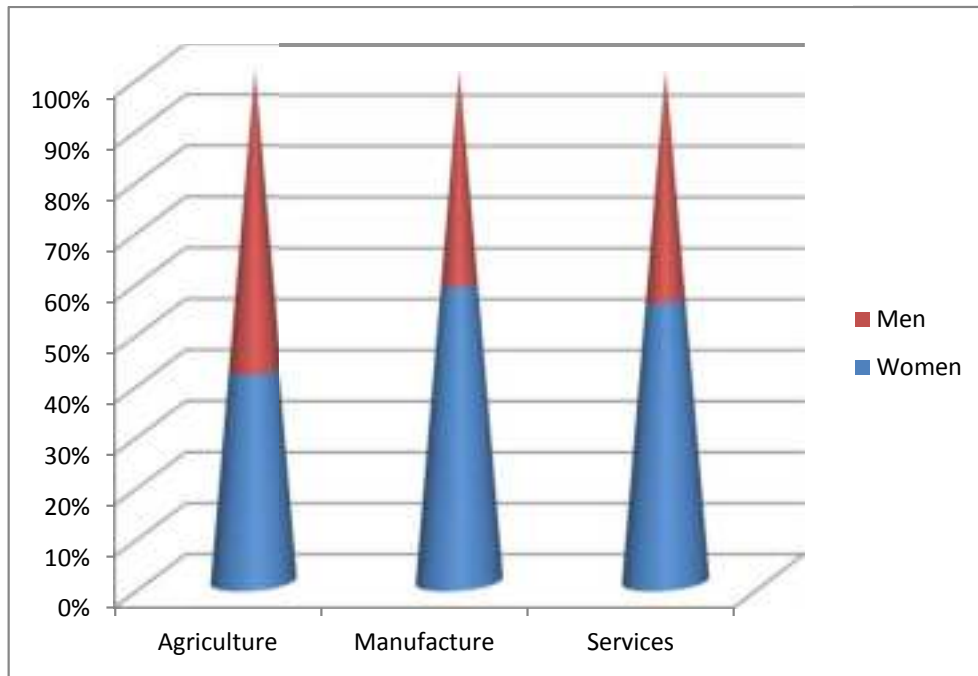


Figure 3. Showing Distribution of Economically Active Population By Sector & Sex Percentages in Terms of Labour Force

4. Conclusion and Recommendation

This paper through the use of descriptive exploratory methods, aims to explore existing literatures relating to the impact of climate change on employment in addressing the impact of climate change on employment, be it – in the short; medium and long term in Nigeria.

Climate change also leads to sea-level rise with its attendant consequences, and includes fiercer weather, increased frequency and intensity of storms, floods, hurricanes, droughts, increased frequency of fires, poverty, malnutrition and series of health and socio-economic consequences, thereby leading to a positive shift in the way each country is addressing the effect of climate change. In Nigeria, this climate change has a cumulative effect on employment through the short term, medium term and long term. Although, all forms of energy are expensive, but as time progresses, renewable energy generally gets cheaper, while fossil fuels generally get more expensive and hence, the world is shifting towards increasing employment in the renewable energy industry (Reuters, 2009b).

This study concludes that in the short term, low-carbon technologies are more labour-intensive than conventional fossil fuel solutions and the effect it has on

climate policy should be positive because it leads to net job creation. Although, at the International Confederation of Free Trade Unions conference held at Hague, it was stressed that on a short term, closing down industries that contribute to global warming will create unemployment but it will lead to more jobs creation in other sectors that embark on producing alternatives energy.

The medium term effect of climate change on employment was characterised with economy wide effect. On the one hand, comparative advantage creates export related jobs in the low carbon technological industry while on the other hand; unilateral action could result in a loss of competitiveness in the fossil fuel industry leads to migration of jobs elsewhere. However, it was discovered that the biggest effects will be felt over the longer term, when technical change and innovation would lead to more job creation, productivity improvements and growth.

The study therefore recommends that all the stakeholders; both government and private enterprises should raise awareness on the importance of climate change, and its attendant effects on the environment. Also, government agencies should implement policies that will militate against the adverse effect of climate change that will inevitably have an impact on jobs, working conditions and incomes in many sectors.

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Economic Development, Technological Change, and Growth

Romanian Healthcare System at a Glance

Christiana Brigitte Balan¹, Petronela-Simona Mantaluta²

Abstract: The Romanian healthcare system is facing constant challenges to produce high quality care with low costs. The paper aims to analyze the efficiency of the Romanian healthcare system in terms of resources allocation. The evaluation and the dimension of healthcare system efficiency are important for identifying a balance between the resources required and the health outcomes. Previous studies describe the Romanian healthcare system as a system in transition. This study focuses on the relationship between the inputs and outputs of the system. In order to assess the efficiency of the Romanian healthcare system we use Data Envelopment Analysis approach. Both input and output healthcare indicators are observed for the period 1999-2010 and the years when healthcare inputs have been used efficiently are identified. The results show that human, financial, and technological resources have been used at maximum capacity in 1999, 2003, 2004, 2007 and 2010. Though efficiency is defined differently by diverse stakeholders, healthcare policies should focus on rising the responsibility of communities and individuals for better treatments and services and better access to information on healthcare providers. The paper is an empirically based study of the healthcare resources allocation in Romania.

Keywords: Efficiency; Health resources; Data Envelopment Analysis

JEL Classification: C67; H51; I18

1. Efficiency of Healthcare System

There are many ways to define efficiency, such as restraining resources, benefits higher than costs, shorter time, or best outcomes. Whatever the definition and the area of interest are, it becomes compulsory to consider efficiency whenever we aim to reach development, evolution and wellbeing.

The increased use of this concept in issues related to economy, made efficiency become synonym to economic efficiency. It means obtaining the highest output with a fixed volume of resources. In the same time, it is desirable to reach the output in a smaller time or, to maximize the output in a fixed time period.

¹ Senior Lecturer, PhD, University "Alexandru Ioan Cuza" of Iasi, Romania, Address: 22 Ave. Carol I, 700505, Iasi, Romania, Corresponding author: christiana.balan@uaic.ro.

² MSc, University "Alexandru Ioan Cuza" of Iasi, Romania, Address: 22 Ave. Carol I, 700505, Iasi, Romania, e-mail: simona.mantaluta@yahoo.com.

Efficiency is expressed numerically as the ratio between output and input or between outcomes and resources (Matei & Bailesteanu, 1996).

When defining efficiency, one should take into consideration the components of efficiency, such as efficacy, social impact, costs and time (Jaba & Robu, 2011). The efficacy expresses in which measure the desired outcomes are attained. It represents the ratio between the real and projected outcomes (Manea, 2011).

In health, the efficient allocation of resources is the main component of the health system along with other aspects related to health system structure, healthcare services, drug policies, and hospitals services (Couturier, 2009).

The efficiency of healthcare system represents the dimension of costs that allow for any improvement in the health system. When assessing two different strategies with the same efficacy, the one less costing is also the most efficient one (Donabedian, 1990).

The analysis of efficiency allows to study the relationship between health resources (equipments, goods, human resources) and both the intermediate (number of patients under treatment, waiting time) and final results (longevity, quality of life) (Palmer & Torgerson, 1999, Chirila & Chirila, 2012, Anton, 2013).

The health system efficiency may be assessed through three dimensions (Palmer & Torgerson, 1999): technical efficiency (the highest improvement is made with fixed resources; if the same outcome could be achieved with fewer resources, than we use the concept of technical inefficiency); productive efficiency (involves maximizing the output or the outcomes for a given level of resources and minimizing the costs for the results set) and allocative efficiency (it considers not only the productive efficiency of resources for maximizing the results, but also the efficiency of results distribution; it occurs when resources are allocated for the benefit of society) (Health Care Services, 2006).

Efficiency is an essential part of healthcare systems that have to be dimensioned, reported, and optimized (Committee on Quality of Health Care in America, 2001). The issues related to measurement and expression of efficiency in the healthcare systems are at the core of the healthcare policies. It is important to avoid losses, whether equipment, consumables, energy and information.

Efficiency is also defined as: diminished use of resources to achieve the same or better results (MedPAC, 2007); dimensioning care costs or using resource associated to a specified level of quality of healthcare (National Quality Forum, 2011); a component of performance that is dimensioned by studying the relationship between output and input (McGlynn, 2008); offering specific care at the smallest cost (National Commission for Hospitals Accreditation, 2010).

The common point to all definitions is that evaluation and dimensioning of efficiency in healthcare involves taking into account interactions between inputs

(human, material resources, financial. and informational resources) and outputs (number of patients treated or discharged, waiting time) in relation to the final results of the health system (changes in health status of the population, increasing the number of lives saved or deaths avoided).

Measuring the efficiency may be achieved at three levels: at the system level, by various diseases, and by sub-sectors of the healthcare system (European Commission and the Economic Policy Committee, 2010). The analysis of the healthcare system as a whole takes into account the interaction between sub-sectors so that, even if each sub-sector is highly efficient by itself, the improvement in the relationship cost-efficiency of the entire system may be achieved, either by relocating the patients or the resources between sub-sectors.

2. Romanian Healthcare System and Resources

Many countries face disparities between available resources and demand for health services. Romanian healthcare system has major dysfunctions, with repercussions on the health of the population. According to a report of the Presidential Commission, the Romanian healthcare system is one of the most inefficient in Europe and it is characterized by lack of transparency in the funds allocation and inefficient use of resources” (Healthcare Commission, 2008).

In search of ways to improve efficiency of using resources, the experiences of other countries are a good example, however, it is necessary to adapt to the conditions of the national system.

The analysis of the efficiency of the healthcare system should converge to the following actions: the available resources should not be wasted; the outcomes should be achieved at minimal cost; the type and quantity of outcomes should be consistent with people needs (Vladescu, 1999).

Therefore, efficiency is related to the way in which human, material, financial, and information resources are used to achieve the objectives at the expectation level of the of service users.

The resources of the healthcare system in Romania are financial, human, material and information resources.

There are different types of financial resources, according to the provider. The hospitals of national interest are funded by the Ministry of Health, while other hospitals are funded by local authorities, Municipality or County Council, and the Ministry of Health funds only the purchase of high-performance equipment. The biggest problem arises from the need to make available a minimum set of fair and effective interventions for the high incidence of communicable and non-communicable diseases. The healthcare system encourages the treatment of

patients in hospitals, therefore the expenditures on in-patient units have the highest share of total expenditures. For the health sector development, it is necessary to restructure health expenditures so that resources are more focused on ambulatory care and prevention programs rather than in the hospitals or medication. Also, inadequate funding of primary health care in rural areas causes the patient to come to the doctor too late, requiring thus more expensive treatment and longer hospitalization time (Romanian Academic Society, 2010).

The human resource is represented by the medical and non-medical workforce that enables public health intervention. It is the most important resource of the health system (Health Commission, 2008). The small number of doctors in Romania is justified by the large amount of immigrants in other parts of the world. In early 2007; there was an export of 6,000 thousand doctors that have decided to practice abroad. Estimates show that, in the next period, around 10,000 specialist doctors are expected to emigrate (Pupaza, 2011). An alarming situation emerged in hospitals where there is a shortage of specialists in important areas such as cardiovascular and thoracic surgery, geriatrics or radiotherapy. The explanation resides in the attractive salary and better working conditions than in Romania. The red cod limit set by the WHO for a country to implement policies to limit emigration is 2%. In Romania, the level is 10%, but does not seem to be sufficient to rise awareness of the situation of the health system (Pupaza, 2011). Material resources of the healthcare system refer to the infrastructure represented by the number of beds, number of hospitals, high-tech equipment. The number of hospital beds decreased in the last ten years by 21% due to the IMF requirements to reach the EU levels by 2013. This measure, however, affects the functionality of the Romanian health system. Current hospital infrastructure in Romania is poor, only 6.5% of hospitals are ranked in the top category (maximum of performance), meaning they have a minimum of medical devices: digital radiology, computed tomography, magnetic resonance imaging and angiography. Most hospitals (58%) are ranked as fourth and fifth category (Ministry of Health, 2011). Despite the shortcomings of the system, equipment purchase dynamics in Romania is accelerated. Technological advances in health infrastructure creates potential for new methods of diagnosis and treatment with the inherent risk of price changes in the health sector.

3. Data and Method

a. Data

An easy way to comply with the review paper formatting requirements is to use this document as a template and simply type your text into it. Headers, footers or page numbers must not be included. The paper must be set as follows:

For the analysis of the efficiency in the allocation of resources in the Romanian healthcare system, we used two categories of data: input and output indicators.

The input indicators of the healthcare system are: number of physicians, number of pharmacists, number of dentists, number of hospital beds, and health expenditure. The number of physicians, pharmacists and dentists represents the human resource of the health system. Data are taken from the World Health Organization database, HFA-DB. Data on the number of hospital beds are taken from the database of the National Institute of Statistics of Romania. If for other health indicators, Romania has a backward position in the ranking of European countries, when considering the number of hospital beds, Romania is ahead of countries like Poland, Austria, Malta and Hungary. Compared with 1999, in 2010 the number of beds decreased significantly, with a percentage of 20%. By the Ordinance 48/2012 of the Ministry of Health a number of 125,639 beds were approved for 2012, less than the number recorded for 2010 (132,004 beds), that is 5.84 beds per thousand inhabitants. The health expenditure indicator represents the absolute costs in million USD (national currency /U.S. dollar).

The output indicators are life expectancy at birth and infant mortality rate. These indicators are the outcomes of the health system resulting from the use of resources. Life expectancy at birth estimates the average number of years a person would live, while maintaining unchanged the age-specific death rates for a reference year. Infant mortality rate represents the number of deaths between 0-1 years reported per 1000 live births in the same period and area.

Both indicators are observed for Romanian healthcare system for twelve years, during the period 1999-2010. The data are from the World Health Organization Database.

b. Method

DEA (Data Envelopment Analysis) is a non-parametric linear programming technique used to create efficient frontiers and assess the efficiency of certain decisions. DEA estimates the maximum potential output for a given set of inputs. DEA measures the relative efficiency of various organizations or units (branches, departments, individuals) with multiple inputs and outputs. The organizations or units under consideration are called decision-making units or DMUs. DEA calculates the resource savings that can be achieved by making each inefficient unit as efficient as the best practice (Sherman & Zhu, 2006).

The results generated by DEA may be explained in various ways. Thus, 100% efficiency is achieved by any DMU, if and only if, none of the inputs or outputs can be improved without changing in worse the inputs or outputs. Also, a DMU is rated as 100% efficient, given the information available, if and only if, the

performance of other DMUs can not be improved without affecting the inputs or outputs (Seiford & Thrall, 1990).

DEA models can assess the relative technical efficiency for each unit, allowing a distinction between efficient units and inefficient decision. Those DMUs identified as most efficient (on the frontier) are evaluated with a value equal to one, whereas the extent of technical inefficiency of other units is based on the Euclidian distance of the input-output ratio of the frontier (Coelli, 1998).

A range of DEA models were developed according to the way efficiency is measured. There are two categories: models oriented towards inputs (input oriented models) and models oriented towards outputs (output oriented models). DEA input oriented models define the efficiency frontier, aiming at reducing at maximum, for each DMU, the use of resources while maintaining the output constant. Output-oriented models keep constant the inputs while producing a maximum possible output.

If the relationships between inputs and outputs for efficient DMUs is linear or non-linear, the models are classified as CRS (Constant Returns to Scale) or VRS (Variable Returns to Scale). CRS reflects the fact that output will change by the same proportion as inputs are changed (e.g. a doubling of all inputs will double output); VRS reflects the fact that production technology may exhibit increasing, constant and decreasing returns to scale (Pascoe, et al. 2003). An example of CRS and VRS frontier for a model with one input and one output is presented in Figure 1. The efficient frontier allows to identify both efficient decision units, such as units A B, C, D and E that are placed on the border, and inefficient units such as F. The unit C represents the most productive scale size (Banaeian et al., 2011).

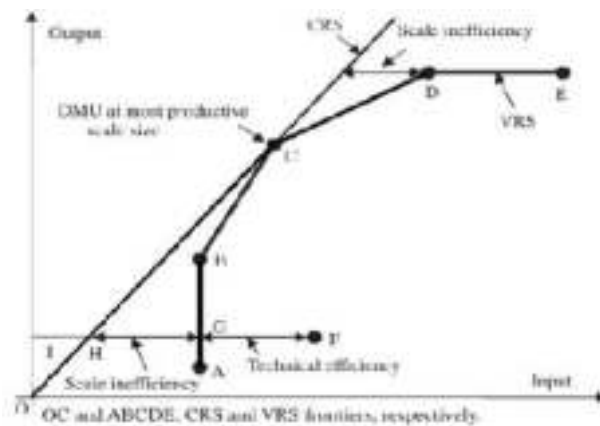


Figure 1. CRS and VRS models

Source: (Banaeian et al., 2011, p. 187)

The relationship among different forms of efficiency is given by the ratio:

$$\text{Scale efficiency} = \frac{\text{Technical efficiency}}{\text{Pure technical efficiency}} = \frac{\text{CRS score}}{\text{VRS score}}$$

DEA is applied with the free trial version of the software DEAFrontier^{TM1}.

4. Results

The paper presents the results of the DEA input oriented model with constant returns to scale (CRS) or variable returns to scale respectively (VRS). The DEA input oriented model allows to define the efficiency frontier so that for each decision unit (DMU) the aim is to reduce the maximum possible amount of resources but to maintain constant the output level. Thus, we can assess if, over the years, resources have been used efficiently, considering the outcomes obtained in the health system.

Based on the outcomes obtained in the Romania healthcare system, we calculated the values of technical efficiency (resource use), per years, and we summarized them in Table 1. The ratios between CRS and VRS scores are the scale efficiency.

Table 1. Efficiency scores of the resources use in the health system

DEA Input Oriented Model				
DMU	Technical Efficiency		Scale efficiency	Returns to scale
	CRS	VRS		
1999	1.00000	1.00000	1	constant
2000	0.98739	1.00000	0.98739	decreased
2001	0.97965	0.99549	0.98408	decreased
2002	0.99736	1.00000	0.99736	increased
2003	1.00000	1.00000	1	constant
2004	1.00000	1.00000	1	constant
2005	0.98508	0.98515	0.99999	decreased
2006	0.98824	1.00000	0.98824	decreased
2007	1.00000	1.00000	1	constant
2008	0.98720	1.00000	0.98720	decreased
2009	0.98211	1.00000	0.98211	decreased
2010	1.00000	1.00000	1	constant
Mean	0.99230	0.99840	0.99390	

Parameters shown in Table 1 represent technical efficiency of the considered units. We note that for 2001 technical efficiency is $TE = 0.97965$. This means that in 2001, the consumption of resources could be reduced by 2% without adversely affecting the output. The number of doctors could be reduced from 43,574 to

¹ DEAFrontierTM software available at www.deafrontier.net/frontierfree.html.

42,687, the number of dentists from 8,208 to 7,274, the number of pharmacists from 7,083 to 6,523, health expenditures from 2,183.93 to 1,935.5 and the number of beds from 167,888 to 164,470.

For 2009, technical efficiency (of the CRS model) equals $TE=0.98211$, representing that, in 2009, consumption of resources could be also reduced by about 1.79% without diminishing the output. Thus, the system could either have made a significant saving of resources or could use the given resources to improve the output. Therefore, the health system could have been dispensed with 901 physicians, 422 dentists, 566 pharmacists, 233.8 USD and 2,484 hospital beds. Available resources of the health system have not been used at maximum capacity, so the waste was quite important.

The percent of savings, based on the CRS model, are presented in Table 2.

Table 2. The percentage of resources used inefficiently, resulting from minimizing the input

DMU	Ratio
2001	2.035%
2009	1.789%
2005	1.492%
2008	1.280%
2000	1.261%
2006	1.176%
2002	0.264%

The results show that 5 years present maximum efficiency of resource use, in other words, the resources have been used without losses. In 1999, 2003, 2004, 2007 and 2010 human, financial, technological were used at maximum capacity, so we can not minimize any more their value without influencing the output.

On the other hand, in 2000, 2001, 2005, 2006, 2008, 2009 the efficiency score (CRS) shows a downward trend. The maximum percentage of efficiency obtained by minimizing the amount of resources is noticed for 2001, followed by 2009 and 2005. In contrast, in 2002, the value of wasted resources is minimum.

The level of resources that health system could be dispensed with, when reaching the same level of outcome or the maximum efficiency threshold, are presented in Table 3.

Table 3. Amounts of inefficiently used resources after minimizing the input (based on CRS model)

DMU	Input Slacks				
	Physicians	Dentists	Pharmacists	Expenses	Hospital beds
1999	0.00	0.00	0.00	0.00	0.00
2000	24.77	614.28	416.18	0.00	0.00
2001	0.00	766.66	415.25	203.97	0.00
2002	0.00	956.46	493.53	576.67	0.00
2003	0.00	0.00	0.00	0.00	0.00
2004	0.00	0.00	0.00	0.00	0.00
2005	450.33	0.00	0.00	362.87	0.00
2006	0.00	0.00	355.05	183.82	0.00
2007	0.00	0.00	0.00	0.00	0.00
2008	3.19	0.00	753.43	3636.48	0.00
2009	0.00	198.58	351.48	67.96	0.00
2010	0.00	0.00	0.00	0.00	0.00

Maximum number of physicians used inefficiently is found in 2005, the number of dentists (956) in 2002, and the number of pharmacists in 2008 (753). Regarding financial resources, in 2008 the system could save 3,636.47USD of the total expenditure of the health system in Romania without affecting the outcomes.

5. Conclusions

In the paper, we approached the analysis of the efficiency of the healthcare system. Financial, human and technological resources of the Romanian healthcare system are insufficient to allow implementing all necessary measures in order to improve the health status of the population. However, a prioritization of actions is necessary in order to reach higher efficiency of resource use.

The analysis of the efficiency of the healthcare resource use show that, over the last 12 years, the resources could have been used more efficiently. In 2010, we see a maximum efficiency of resource use, considering the outcomes delivered by the healthcare system, in terms of life expectancy and infant mortality. The average technical efficiency is 99.23% implying that 0.77% of overall resources could be saved by raising the performance to the highest level.

The main issue of the Romanian healthcare system relies not only in the under funding, but also in inequalities in medical workforce and equipment distribution and access of old persons, children and deprived families to healthcare services.

The Romania healthcare reform should focus on rising the responsibility of communities and individuals for better treatments and services, higher safety and satisfaction, increased transparency, and better access to information on healthcare providers.

6. Acknowledgement

This work was co-financed by the European Social Fund through Sectoral Operational Programme Human Resources Development 200732013, project number POSDRU/89/1.5/S/59184 “Performance and excellence in postdoctoral research in Romanian economics science domain”.

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Regional Development Disparities and the Provision of Services of General Interest. A Case Study on the Health Care Services Availability in the North-East Region of Romania

**Daniela-Luminita Constantin¹, Raluca Mariana Grosu², Claudiu Herteliu³,
Dorel Ailenei⁴, Adriana Dardala⁵**

Abstract: This paper proposes an inquiry into the issue of availability of services of general interest, offering as case study the health care services in the North-East region of Romania. The interregional and intraregional (within North-East region) disparities in terms of health care services provision are examined in relation to the overall regional development disparities, confirming that the concern with providing a minimum level of social SGI to all citizens has conducted to health care service disparities lower than those in terms of GDP per inhabitant. The paper also provides relevant evidence on the impact of demography, especially in terms of population density on the availability of health care services.

Keywords: services of general interest; health care services; availability; North-East region; Romania

JEL Classification: R12; R13; R50

1. Introduction

The services of general interest (SGI) hold an important place in relation to the European model of society, referring to general functions and objectives that are essential for the implementation of fundamental citizen rights and for the accomplishment of economic, social and territorial cohesion goals (Bjørnsen et al., 2013; Constantin et al., 2013). A wide range of activities are included in this

¹ Professor, PhD, Academy of Economic Studies, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +40213191900, Corresponding author: danielaconstantin_2005@yahoo.com.

² Assistant Professor, PhD, Academy of Economic Studies, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +40213191900, e-mail: petrescu_raluca_mariana@yahoo.com.

³ Associate Professor, PhD, Academy of Economic Studies, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +40213191900, e-mail: claudiu.herteliu@gmail.com

⁴ Professor, PhD, The Bucharest University of Economic Studies, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +4 021 319 1900, e-mail: dorel_ailenei@yahoo.com.

⁵ Associate Professor, PhD, Academy of Economic Studies, Romania, Address: 6 Piața Romana Bucharest 010374, Romania, Tel.: +40213191900, e-mail: reveiua@ase.ro.

category, such as: water, gas, electricity supply, transport, postal services, telecommunications, sewage services, education, health care, social housing, etc. The Green Paper on SGI (CEC, 2003) classifies them into three categories, namely *services of general economic interest*, provided by large network industries (e.g. electricity, gas, transport, telecommunication, postal services), *other services of general economic interest* (e.g. water supply, waste management, public service broadcasting) and non-economic services and services without effect on trade. The services in the third category are not subject to specific EU rules, competition, state aid rules and are usually named *social services of general interest* (e.g. education, health care, child care, social housing, etc.) (EC, 2011).

SGI reflect the obligation of public authorities to provide them at certain standards in terms of quality, availability, accessibility and affordability, an important issue in this respect being the *minimum level of SGI* for individuals and enterprises. It brings into discussion terms like thresholds, critical mass, vulnerability applied to local community and regional level. Given the heterogeneity of the EU territories it is not possible to determine quantitative levels of SGI at EU level. Instead, these levels are subject to national policies in relation to ideologies, institutions, macroeconomic performance, also reflecting moral values, demographic structures, traditions, life style aspects, etc. (Rauhut and Littke, 2013; ESPON, 2012).

Besides the socio-economic dimension involved in these discussions, which envisages the provision of SGI to *everyone*, the territorial dimension has to be considered too, as it emphasizes the provision of SGI *everywhere*. The latter is closely related to the territory types relevant to SGI, in line with ESPON territory types, as follows: densely populated regions (metropolitan, urban), sparsely populated regions (sparsely populated, outermost, island, mountainous, rural) and swing regions (border, coastal, industrial, transition) (ESPON, 2012).

This paper aims to investigate how the above considerations are reflected in the case of the North-East region of Romania, which has been selected as one of the nine regions included in the case studies of the project entitled "Indicators and Perspectives for Services of General Interest in Territorial Cohesion and Development (SeGI)", in which the Bucharest University of Economic Studies has been one of the partners. The case studies have aimed to explore the issues of quality, accessibility, availability and affordability in the provision of SGI in regions specific to various SGI types of territories. The North-East region has been chosen as a relevant example of border, rural, intermediate region according to ESPON typology (ESPON, 2012). In this paper the case study results have been updated and discussed with an emphasis on health care services availability. More precisely it compares the situation of health care regional disparities to the overall regional development disparities, seeking to reveal whether the obligation of providing a minimum level of social SGI to all citizens has conducted to health care service disparities lower than those in terms of GDP per inhabitant.

2. Regional Development Disparities in Romania. The Situation of the North-East Region

The latest data issued by Eurostat for GDP per capita at PPP indicate that Romania was situated at 47% of the EU average in 2010, being ranked the last but one among all EU-27 states. She also displays high amplitude of regional disparities (Table 1): between the most developed Romanian NUTS2 region – Bucharest-Ilfov, with a GDP per capita at PPP of 111% of the EU average and the weakest region – North-East, with only 29% of the EU average there is a relative distance of 3.87:1.

Table 1. Regional disparities in Romania in terms of GDP per capita (PPP) in 2010

Region	GDP per capita		
	Euro, PPP	As % of the EU average	As % of the national average
North-East	7,000	29	61.4
South-East	9,400	38	82.5
South	9,500	39	83.3
South-West	8,800	36	77.2
West	12,900	53	113.2
North-West	10,200	42	89.5
Centre	10,900	45	95.6
Bucharest-Ilfov	27,100	111	237.7
Romania	11,400	47	100

Source: authors' processing based on Eurostat data

In fact, North-East region ranked the third among the least developed NUTS2 regions of the EU in 2010. It recorded a very slow growth compared to 2004¹,

¹ 2004 is the year when the „Convergence” regions for 2007-2013 were established.

when it counted for 24% of the EU average, compared to Bucharest-Ilfov which increased from 68% of the EU average in the same year to 111% in 2010. North-East region is still characterized by a high share of employment in agriculture, namely 49.1% in 2010 (the highest in Romania), a household income per inhabitant of 85.6% of the national average and a share of only 2.4% of total FDI in Romania in the same year, while the share of population is 17.3%. The share of urban population in the North-East region was 42.9% in 2010, compared to 54.9% for the whole country.

However, when it comes to demographic indicators, the situation is different: in 2011 the density of population was 100.3 inhabitants per sq km (compared to the national average of 89.8 inhabitants per sq km), the live birth rate was 9.8 live births per 1000 inhabitants (compared to 9.2 at national scale) and the natural increase, even if negative, was higher than the Romania average (-1.3 natural increase per 1000 inhabitants compared to -2.6 for the whole Romania).

North-East region displays significant variations between its counties (NUTS3 level) with regard to the share of urban population (from 45% in Bacau and 42.7% in Suceava to 37.6% in Neamt), population density (from 150 per sq km in Iasi and 107.6 in Bacau to 82.9 in Suceava and 84.2 in Vaslui (both of them under the national average)), live births rate (from 11.1 per 1000 inhabitants in Suceava and 10.5 in Iasi to 9.1 in Botosani and 8.2 in Neamt (both below the national average) and the natural increase rate (0.5 per 1000 inhabitants in both Iasi and Suceava compared to -3.2 in Neamt and -3.3 in Botosani (a more important decrease than the whole country's average)).

The regional development and demographic disparities which characterise the North-East region will be examined in the next section in connection with the disparities in terms of health care services in order to respond the research question launched by this paper.

3. Interregional and Intraregional (North-East region) Disparities regarding the Health Care

3.1. General Considerations Regarding Health Care In North-East Region

In 2011, out of the total number at national level corresponding to each category, the North-East Region registered the following percentages: 13.8% of the hospitals, 4,6%¹ of the clinics, 14.0% of dental clinics, 16.0% of pharmacies, 16.0% of family medicine clinics, and 14.0% of specialized medical offices. The number of hospital beds in Romania was of more than 128,5 thou. (19,6 thou. of them representing 15.2% of the total were located in the North-East). Thus, on average, 6.0 beds per 1000 inhabitants were in Romania while in the North-East Region a value slightly lower than 5.3 beds was registered.

Out of the total number encountered at the national level per each category, in the North-East Region were registered: 12.9% of doctors, 14.6% of dentists, 14.2% of pharmacists and 16.1% of the persons with medium qualification in healthcare. In these conditions, it is observed that the access to the healthcare professionals, of the people in the North-East Region is hampered by its relative scarcity. Thus, in the North-East, on average, one doctor was responsible for 546 patients (compared to 406 nationally), a dentist was responsible for 1,899 patients (compared to 1,599 nationally), a pharmacist was responsible for 1,783 people (compared to 1,465 nationally) and a persons with medium qualification in healthcare was responsible for 182 people (compared to 169 nationally).

3.2 Health Care Disparities Analysis

When the disparities in terms of health care services are analyzed, number of hospitals, number of hospital beds and number of physicians are most frequently taken into consideration. In accordance with the frame built by the ESPON project on SGI for regional typologies that provide evidence on SGI patterns at regional scale, hospital beds per inhabitant is employed as a background indicator for availability of main health care treatment while physicians per inhabitant serves for estimating the availability of first aid treatment (ESPON, 2012)..

In terms of hospitals number the North-East region counts for 64 hospitals, which represent 13.8% of the total hospitals number in Romania (Table 2). This share is lower than the share of population, indicating a weaker representation for this indicator in the North-East region compared to other regions. However, the relative distance in terms of hospital beds per 100 thousand inhabitants between North-East

¹ The big difference between this value and the reference population (17.3%) can be explained by the fact that an important share of clinics in Romania are private, and, since the financial resources of the population in the North East region are lower, their ability to represent the clientele for clinics is lower. Consequently, following the market principles in the North East region are fewer clinics.

region and the national average is only 1.29:1, lower than the relative distance between the national average and the North-East region in terms of GDP per capita, which is 1.63:1.

Table 2. Interregional and intraregional (North-East) disparities in Romania in terms of hospitals number in 2011

	Hospitals	Hospitals per 100 thou inhabitants
ROMANIA	464	2,2
<i>North - West</i>	69	2,5
<i>Center</i>	58	2,3
<i>North - East</i>	64	1,7
Bacău	13	1,8
Botoșani	7	1,6
Iași	25	3
Neamț	5	0,9
Suceava	10	1,4
Vaslui	4	0,9
<i>South - East</i>	49	1,8
<i>South - Muntenia</i>	57	1,8
<i>Bucharest - Ilfov</i>	84	3,7
<i>South - West Oltenia</i>	39	1,8
<i>West</i>	44	2,3

Source: authors' processing based on primary data provided by the Statistical Yearbook of Romania, 2012

The intraregional disparities with regard to the number of hospital beds are presented in both Table 2 and Map 1. They indicate the gap between Iasi county and the rest of the region, reflecting the higher economic situation and higher population density of this county compared with the other counties of the North-East region.



Map 1. Number of hospitals in the North-East Region at NUTS3 level, 2011

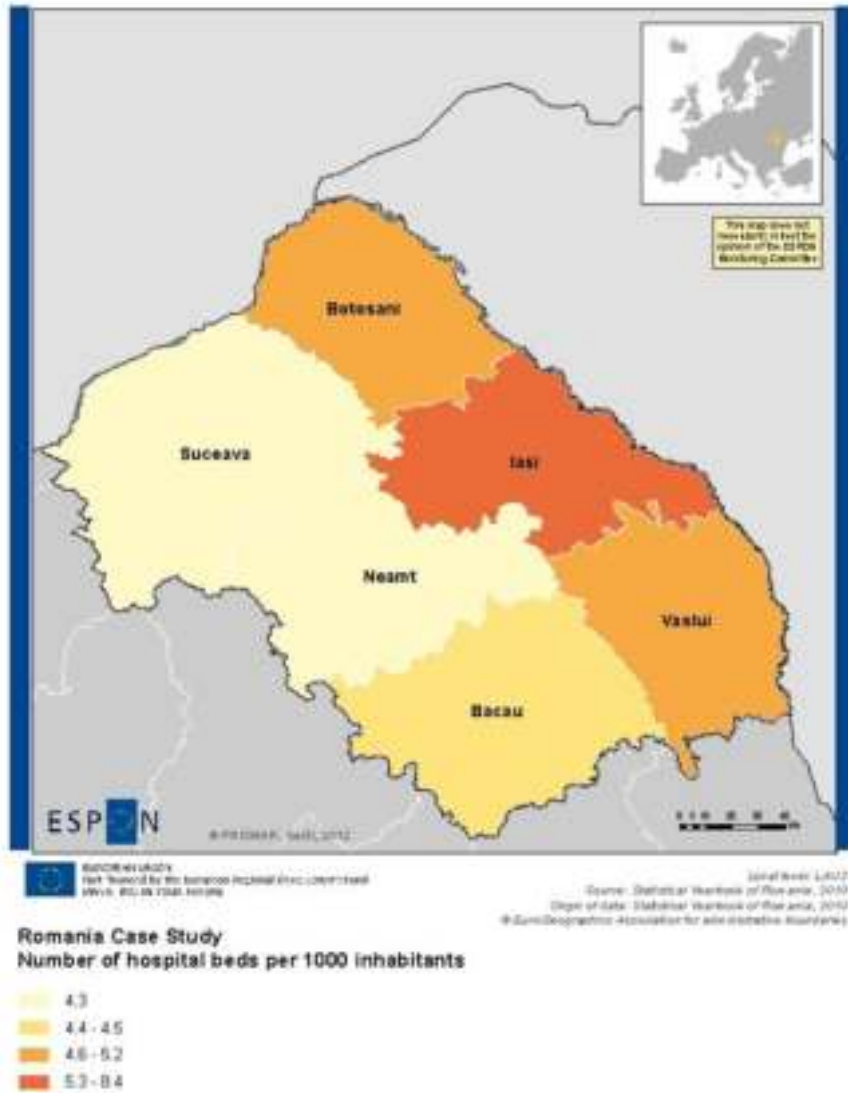
Source: Statistical Yearbook of Romania 2012, National Institute of Statistics

As regards the number of hospital beds per 1000 inhabitants (Table 3 and Map 2), the North-East region has a relative distance of 1.13:1 as against the national average, much lower than the gap in terms of GDP per capita. Moreover, this indicator records a higher level in North-East region than in South-East and South-Muntenia regions, both these two regions having a higher development level than North-East. Instead, the intraregional disparities are bigger, Iasi county having a number of 8.4 beds per 1000 inhabitants whereas all other counties of the North-East region being below 5, less than both the North-East and national average.

Table 3. Interregional and intraregional (North-East) disparities in Romania in terms of hospital beds in 2011

	Hospital beds	Hospital beds per 1000 inhabitants
ROMANIA	128501	6
<i>North - West</i>	17954	6,6
<i>Center</i>	15703	6,2
<i>North - East</i>	19591	5,3
Bacău	3131	4,4
Botoșani	2193	4,9
Iași	6938	8,4
Neamț	2259	4
Suceava	2968	4,2
Vaslui	2102	4,7
<i>South - East</i>	13545	4,8
<i>South - Muntenia</i>	14543	4,5
<i>Bucharest - Ilfov</i>	21996	9,8
<i>South - West Oltenia</i>	12352	5,6
<i>West</i>	12817	6,7

Source: Authors' processing based on primary data provided by the Statistical Yearbook of Romania, 2012



Map 2. Hospital beds per 1000 inhabitants in the North-East Region at NUTS 3 level, 2011

Source: Statistical Yearbook of Romania 2012, National Institute of Statistics

When it comes to the number of physicians and people per physician ratio, data must be analysed in a different manner: the less people per physician the better. The gap between North-East region and the whole Romania is 1.39:1, again lower than the GDP per capita gap. And, again, the situation is better than in South-East and South Muntenia regions (Table 4). Nevertheless, the amplitude of intraregional disparities in the North-East region is considerable, of 2.87:1, resulting from the

lowest ratio in Iasi county, of 282 and the highest in Vaslui County, of 808 people per physician. It reflects the big discrepancy in the standards of living between Iasi County, where one of the biggest growth poles and largest university centers of Romania – the city of Iasi - is located and Vaslui, a county characterized by chronic underdevelopment and poverty. In addition, whereas Iasi county has the highest population density (much higher than the national average), it is significantly lower than the national and region's average in Valsui county. The situation is more nuanced in the North-East region in terms of total number of physicians (Map 3), mirroring the hierarchy in terms of GDP per capita: Iasi is followed by Bacau, Suceava and Neamt.

Table 4. Interregional and intraregional (North-East) disparities in Romania in terms of doctors and physicians number in 2011

	Physicians	People per physician ratio
ROMANIA	52541	406
<i>North - West</i>	7714	351
<i>Center</i>	6039	417
<i>North - East</i>	6765	546
Bacău	1024	696
Botoșani	592	751
Iași	2917	282
Neamț	790	710
Suceava	888	798
Vaslui	554	808
<i>South - East</i>	4763	587
<i>South - Muntenia</i>	4499	721
<i>Bucharest - Ilfov</i>	11825	191
<i>South - West Oltenia</i>	4636	480
<i>West</i>	6300	303

Source: authors' processing based on primary data provided by the Statistical Yearbook of Romania, 2012



Map 3. Number of physicians in the North-East Region at NUTS 3 level, 2011
Source: Statistical Yearbook of Romania 2012, National Institute of Statistics

4. Concluding Remarks

The analysis of the statistical data with regard to health care services in the North-East region of Romania points out the concern with the minimum provision of social services of general interest, the disparities of the corresponding indicators between North-East region and national average being significantly lower than those in terms of GDP per capita.

The results also highlight the impact of demography on the distribution of SGI: health care services are concentrated in agglomerations and county capital

municipalities and other urban centres, confirming the overall conclusions of the ESPON project on SGI (ESPON, 2012). Also, the accessibility features are associated to the North-East region's territorial aspects that are reflected by the ESPON typology on NUTS3 level, namely border, rural, intermediate region. The revealed interregional and intraregional (within North-East region) health care services disparities represent a challenge for the applying of the future cohesion policy and SGI management at local level. Their interpretation can suggest realistic starting points for the health care strategies and policies in Romania, in accordance with the territorial cohesion principles focused on rebalancing objective (in relation to the equity and fairness promotion), growth and development and the territorial orientation of the cohesiveness efforts.

5. Acknowledgement

The paper is mainly based on the authors' contribution to the applied research project *Indicators and Perspectives for Services of General Interest in Territorial Cohesion and Development (SeGI)*, led by the Royal Institute of Technology (KTH), Sweden, with Bucharest Academy of Economic Studies as one of the partners involved. It has been financed by the ESPON 2013 Programme and this financial support is gratefully acknowledged. Texts and conclusions stemming from research projects under the ESPON programme presented in this paper do not necessarily reflect the opinion of the ESPON Monitoring Committee.

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