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The ROMANIAN ECONOMIC AND BUSINESS REVIEW (REBE) is a refereed journal published four times annually by the Romanian-American University. The editors invite submissions of articles that deal with important issues in economy and business. Papers that focus on specific phenomena and events affecting Romanian economy are particularly encouraged. Because REBE seeks a broad audience, papers should be comprehensible beyond narrow disciplinary bounds.

Manuscripts should not exceed 8,000 words and must conform to the REBE's style requirements, which are guided by The Chicago Manual of Style (14th edition). All submissions must include a cover sheet explaining the scope of the article, and including the authors' names and affiliations, telephone and e-mail address. The text should be single-spaced. References are cited with parentheses using the author/date/page style. *Example:* (Marcus, 2005, p. 74). Authors should use footnotes, not endnotes to add only short comments. Bibliography should include only references cited in the text, in the alphabetical order of authors. An abstract of no more than 200 words should be included.

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Dr. Bogdan Glăvan
Romanian-American University
Bulevardul Expoziției nr. 1B
București
E-mail: bogdan.n.glavan@gmail.com

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THE EFFECTS OF THE ECONOMIC CRISIS ON THE PUBLIC DEBT OF THE MEMBER STATES OF EUROPEAN UNION¹

Maria Cristina Stănescu *

Abstract

This paper propose to analyze the causes and effects of the economic crisis on public debt of Member States of the European Union and the measures undertaken by specialized authorities of the countries affected by the sovereign debt crisis. Much of the blame for the debt crisis can be attributed to irresponsible fiscal policies practiced by some EU Member States, and another part due to reckless bank lending practices. Fiscal discipline is one of the key elements of macroeconomic stability and this is especially relevant in a monetary union and the euro area, composed of sovereign states retain their tax liability policies. In the euro area, monetary policies and exchange rates are no longer able to cope with country-specific imbalances.

Keywords: crisis, public debt, gross domestic product, euro-zone.

JEL Classification H, H6, H63

1.Introduction

Global economic activity has been slowing down during the last months, as a result of transitional factors, but also as a result of the tensions on financial markets. Regional differences still persist in relation to cycling position of the different savings.

In the advanced economies economic recovery remains weak, while it is found that moderate growth in emerging economies.

In the member countries of the European Union, the debt-to-GDP ratio increased from 80.0% at end-2010 to 82.5% in late 2011 and in the euro area from 85.3% to 87.2%. A total of 14 member states reported a debt level of 60% of GDP in 2011. In late 2011, the lowest share of government debt to GDP were recorded in Estonia (6.0%), Bulgaria (16.3%) and Luxembourg (18.2%). In 2011, the 21 member

¹ Presented article at the 6th Edition of “Implications of Globalization and Integration into the European Union on Financing and Development of Foreign Trade” Conference, November 23-24, 2012, Romanian-American University, Bucharest

* Author is Lecturer of Corporate Finance at the Romanian American University, Bucharest. E-mail address: cristina_voinea21@yahoo.com

states, the share of public debt in GDP compared to 2010 and decreased for 6 member states: Germany, Estonia, Latvia, Luxembourg, Hungary and Sweden. The most significant increases in debt ratios between 2010 and 2011 were registered in Greece (20.4%, Ireland (15.7%), Portugal (14.4%) and Cyprus (10.2%).

2. State of the art

Public debt represents all internal and external obligations of the state at a time.[Stănescu Cristina ,Nedelescu Mihai, 2012]

The public debt means the state has a duty to third parties, such as individuals, businesses, banks, companies in the country or abroad, who bought bonds issued by the state to cover the financial needs of the state.

In 2011, the risks to euro area financial stability increased considerably in light of worsening sovereign debt crisis and increasing its negative effects on the banking sector. [Raport anual al Bancii Centrale Europene, 2012]

Uncontrolled growth of public debt is the main reason that investors punished European countries while keeping a climate of confidence in international financial markets

The budget is an important lever for the EU to deliver existing policy goals, to bring about change and to maximize the long-term impact of EU action.

Due to the difficult situation of the Greek economy, Greek authorities were suggesting that leaving from the European Union and stop using the euro as the nation's currency. Still, as bad as things are for Greece, they're not alone in their struggles.

Another country with major problems of public debt is the US, federal government's debt burden (\$15.5 trillion) is larger than the country's entire economy, measured in terms of gross domestic product (GDP). The GDP is simply the total market value of all goods and services a country produces in a year.

The nation's debt to GDP ratio now exceeds 100%. It means that all of the goods and services produced in the United States in one year still wouldn't be enough to pay off our nation's debt.

Public debt rose from 64% of GDP in 2007 to 101.7% in 2012, amid massive public spending for reviving the economy and social expenditures of the U.S. administration. They rose from 35% of GDP before the crisis to over 40% and the deficit from 3% to 8%. These are numbers which would have worried any European state and would have led to a sustained increase in financing costs. [www.finanteazi.ro/2012]

The gross domestic product (GDP) is one of the primary indicators used to gauge the health of a country's economy. It represents the total dollar value of all goods and services produced over a specific time period you can think of it as the size of the economy. Usually, GDP is expressed as a comparison to the previous quarter or year. For example, if the year-to-year GDP is up 3%, this is thought to mean that the economy has grown by 3% over the last year.[www.investopedia.com]

In the year 2012 it is estimated that debt level using the government methodology will be 33.9 % of the GDP, and, during the period 2013-2015 the estimated amount of government debt is below 33.5 % of the GDP was below the level required by the Maastricht Treaty of 60% of the GDP, and is an advantage for Romania, in view of the new rules relating to the level of public debt and budget deficit introduced by new rules of economic governance at European level, in which the concept of prudent budgetary policy becomes central.[Raport privind administrarea datoriei publice guvernamentale,2011]

At the end of the year 2010, the Romanian government debt level in accordance with the methodology ESA 95 has reached the 31,02 % of the GDP. Even if this indicator fits comfortably within the limit of 60% of the gross domestic product provided by the Maastricht Treaty, its rate of growth remains as technocrats. This is an additional reason for the adoption of a conduct proactive by continuing fiscal consolidation measures.

At the end of the year 2010 Romania ranks 4 between EU states with the lowest level of indebtedness that 31,0 % of GDP compared with Estonia (6.7 %), Bulgaria (16.3 %) and Luxembourg (19,1 %) . EU Member States with the highest level of indebtedness are: Greece (145%), Italy (118%),Belgium (96 %), Ireland (94) and Portugal (93%).

3. Causes of the global economic crisis and debt default of the Member States of the European Union

1. Most of come to crisis public debt can be traced to irresponsible fiscal policies practiced by certain Member States of the EU, and another part on bank loans imprudent practice, which has generated a real estate market.

2. Shares of large-scale rescue of the banking sector in certain Member States, financed with taxpayers' money, and frailty later world financial system have represented also important factors which have contributed to crisis. In the future there should be an effective reform of the banking sector worldwide, such as to prevent recurrence of such behaviors.

3. Public debt crisis - caused by the crises financial and tax – jeopardizes the existence of economic and monetary union (EMU) and require answers financial, economic and political effectiveness. This has highlighted in deficiencies of the Stability and Growth Pact as a mechanism of guarantee of fiscal responsibility in the Member States.

4. Fiscal discipline is one of key elements of macroeconomic stability and this is all the more relevant in a monetary union as well as euro area, made up of sovereign states that retain liability for their fiscal policies. In the euro area, national policies monetary and exchange rates are no longer able to make imbalances front

specific to each country. [Comitetul Economic si Social European,2010]. Apparent failure in relation to the compliance with tax rules governing the EU is above current global financial crisis, it could be argued that the risks inability to pay for the monetary union is a second phase of the crisis. After more than a decade of increase in the volume of credit easy which led in the formation of bubbles in real estate and constructions, followed by economic implosions in some member states, the latter have been caught in spiral of debts. The Governments of Greece, Spain and Portugal have not had to resort to measures to save, financed by tax payers, their bank systems during financial crisis, but their difficulties related to the debt threatens to destabilize the banks in the entire EU. This illustrates that the measures to rescue the banks, financed by taxpayers, have not been the main cause of the increase in public debt.

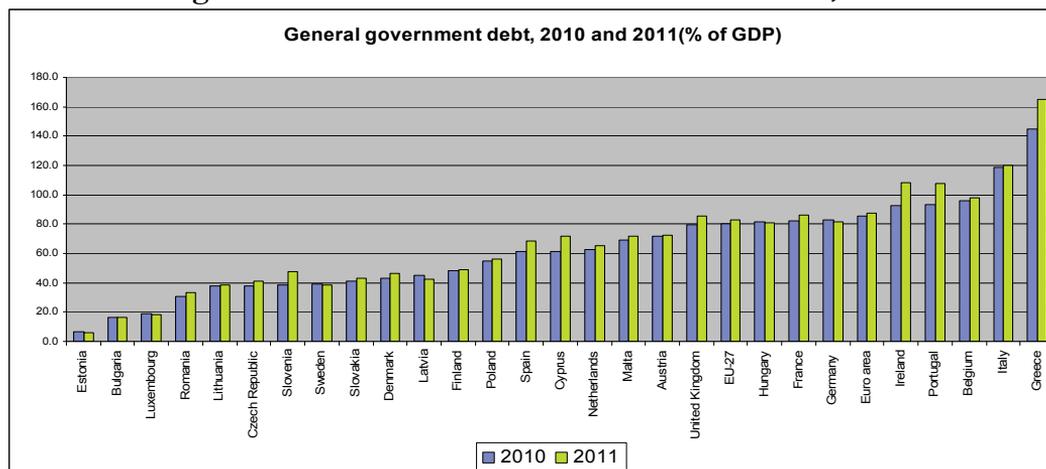
6. In the banking crisis, it has been said often that some banks were "too big to be allowed to go bankrupt", and now they speak of member states, which is faced with government debt on the rise, as being "too large to be allowed to enter in defaulting". Even though at a conceptual level the government interventions to save the banks on the basis of the well known-principle "too big to fail" or "too many to fail", was nothing more than another form of representing moral chance, in reality there are some situations in which the intervention of the government was mandatory. [Teodora Barbu, Georgeta Vintilă, Dan Armeanu, Mihai Nedelescu,2010] As tax payers have accepted with weight need to rescue the banks who have violated rules, are now prompted by international markets of the bonds an adjustment, which may be even higher, in the public finances in some member states. In the banking sector there was some inefficiency in meeting market order but the main purpose of any bank is that of insuring the best response to the customer's demand, therefore achieving customer satisfaction which leads to the increase of bank profit. [Preda Oana, Avram Emanuela, Furdui Iulia] The uncertainty created by the inability to pay the public debt also began to undermine itself the euro of causing fears that the problem could be extended to a number of member states in the euro area.

7. Public debt crisis is a crisis of confidence in the EU, in general, and in the euro area in particular. This requires a political solution, as well as financial. You could say with a certain be reasonably the Stability and Growth Pact has failed and now that Europe must create a new framework that fiscal and monetary able to stand up to more efficient economic results of serious negative or even of failure of a Member State. The main short-term challenge for the states that have an increased public debt is to restore the investor's and consumer's confidence [Preda Oana, Furdui Iulia, 2009]

Table no. 1 General government debt 2010 and 2011(% of GDP)

General government debt 2010 and 2011(% of GDP)	2010	2011
EU-27	80.0	82.5
Euro area	85.3	87.2
Greece	145.0	165.3
Italy	118.6	120.1
Ireland	92.5	106.9
Portugal	93.3	107.8
Belgium	96.0	98.0
France	82.3	85.8
United Kingdom	79.6	85.7
Germany	83.0	81.2
Hungary	81.4	80.6
Austria	71.9	72.2
Malta	69.4	72.0
Cyprus	61.5	71.6
Spain	61.2	68.5
Netherlands	62.9	65.2
Poland	54.8	56.3
Finland	48.4	48.6
Slovenia	38.8	47.6
Denmark	42.9	46.5
Slovakia	41.1	43.3
Latvia	44.7	42.6
Czech Republic	38.1	41.2
Lithuania	38.0	38.5
Sweden	39.4	38.4
Romania	30.5	33.3
Luxembourg	19.1	18.2
Bulgaria	16.3	16.3

Source Eurostat

Fig. no. 1 General Government debt to GDP 2010, 2011

Source: Eurostat, processing author

Most EU countries have a public debt above the maximum level of 60% required by one of the five quantitative criteria of Maastricht. The debt sustainability is not only the important but also the interest on the debt that you can redeem them, which can be achieved by replacing maturing liabilities with new payment obligations. This rate depends on the insurance market investor perceptions aimed against the risk of default.

1. Greece - Debt equals 165.3% of GDP [www.eurostat.com]

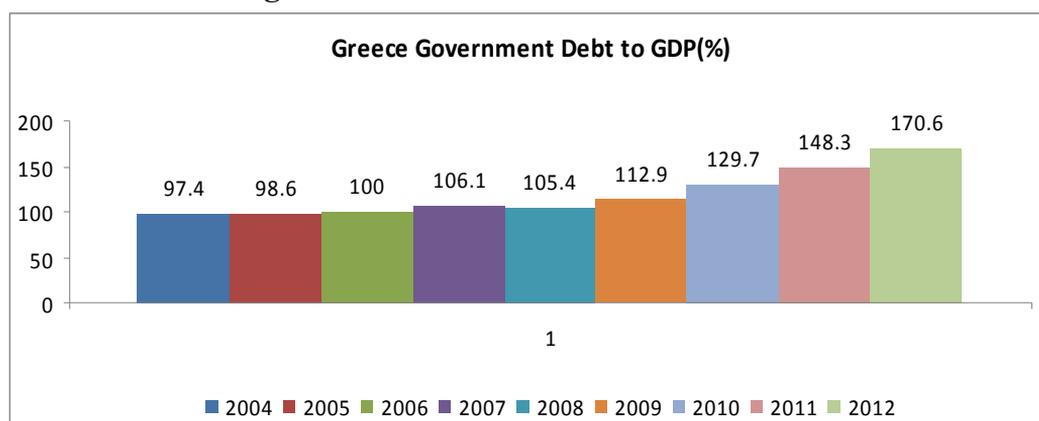
Anyone who has been paying attention to the euro-zone crisis is aware of Greece's dire financial situation. Greece's expensive social entitlement programs (including healthcare and pension systems), the 2008 financial crisis and an economy that has been shrinking for the past four years have resulted in plummeting tax revenues and sky-high government deficits.

Greece's budget deficit peaked in 2009, amounting to a massive 15% of the country's GDP. Since then, Greece's government has taken action, but despite passing politically toxic and unpopular austerity measures draconian cuts in the federal budget, for example government budget shortfalls amounted to a still elevated 9% of GDP in 2011.

To help them cover those kinds of budget shortfalls and give the country more time to shore up its debt, the International Monetary Found and the European Union granted Greece a second \$169 billion bailout if the country promised more spending cuts and increased taxes. Greece can expect a painfully slow economic recovery - expect the federal debt here to get worse before it gets much better.

Greece was the first in the country with the highest degree of indebtedness in conditions which public debt has grown in the first quarter of 2011 by over 20%.Greece's total public debt is about 350 billion euros. Public debt has grown last year from 115% to 144% of GDP, reaching now at 170.6% of GDP.

Fig. no. 2 Greece Government debt to GDP



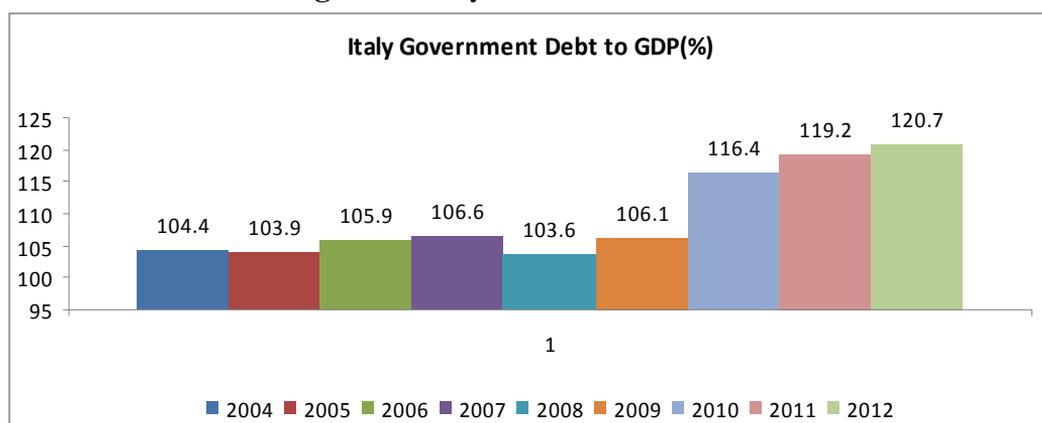
Source: Eurostat

2. Italy - Debt equals 120.1% of GDP [www.investinganswers.com]

Italy's sizable economy (the third largest in the European Union) may not have been threatened by a real estate bust like many others, but that hasn't stopped it from racking up serious public debt. Italy's inability to solve its debt and deficit problems stems from its shrinking economy. To this day, Italy's GDP is still 5% below its 2007 pre-crisis levels, and growth has been virtually stagnant for the past three years 0.4% in 2011, 1.3% in 2010 and 5.2% in 2009. Adding to its long-term challenges, Italy's low fertility rate and strict immigration policies will cause headwinds against future economic growth, meaning its public debt will likely stay around for a while.

Italy's public debt is affected by a low economic growth. In 2010, its GDP stepped up at a slower pace of 1.3%, after two years of recession. In 2011, Italy adopted a set of austerity measures in order to reduce the loan costs.

Fig. no. 3 Italy Government debt to GDP



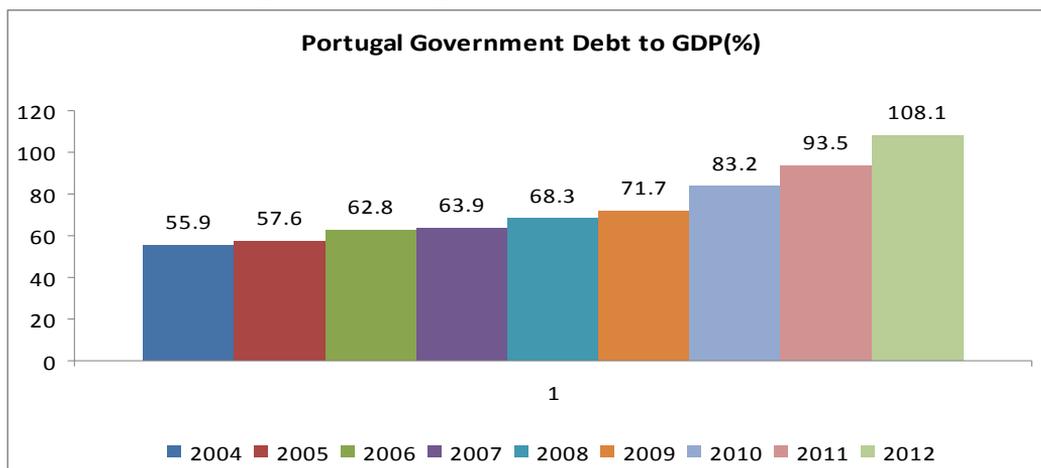
3. Portugal -Debt equals 107.8% of GDP

Weak or even negative economic growth in the past three years has kept Portugal from climbing out of its debt hole. Adding to the problem, Portugal's lack of a competitive labor force may keep the country's economy from growing much at all in the future. While the government is planning to boost exports and improve its citizen's skills to improve economic growth, you can expect Portugal's tax revenues to reduce and its public debt levels high, until those improvements actually come to fruition.

Portugal, with a public debt of 257 billion dollars, ranks second among European Union countries, with the highest degree of highest degree of debt.

In 2011, the country received one financial aid from the European Union and International Monetary Found .As a result of these receiving aid from the EU and IMF, the Portuguese Government has set reducing the budget deficit from 9.8% of GDP in 2010 to 4.5% of GDP in 2012, as in 2013 to reach the asked the EU 3%.

Fig.no. 4 Portugal Government debt to GDP



Source: Eurostat

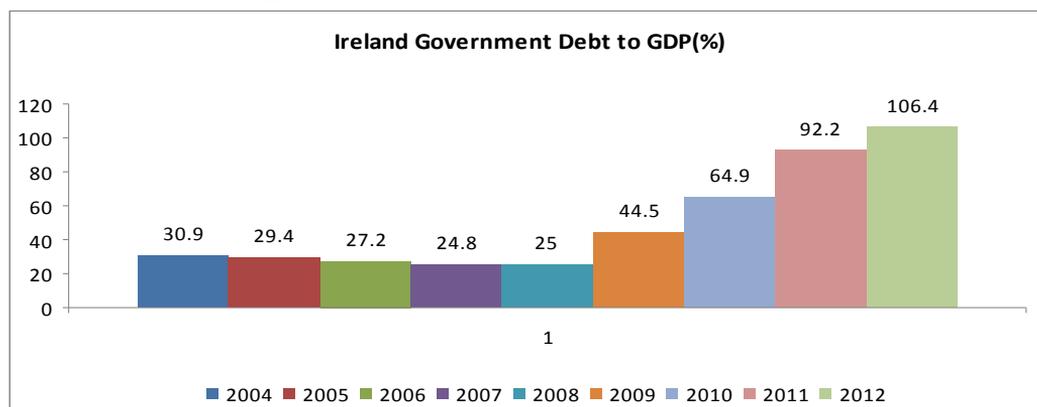
4. Ireland - Debt equals 106.95% of GDP

Ireland hasn't had much luck in curbing its debt problem in recent years. The 2008 financial crisis brought on a devastating housing market along with a series of large bank collapses. Despite making severe cuts in federal spending, the government's obligation to fund its flailing banking sector in 2010 gave Ireland the largest federal budget deficit in the world that year amounting to a whopping 32.4% of GDP. The bailout and the resulting budget deficit was so large, Ireland had to take out a \$112 billion loan package from the European Union and International Monetary Found just to avoid defaulting altogether on its sovereign debt.

In 2011, Ireland faced a reduced-but-still-high budget deficit worth 10.1% of its GDP. As the country slowly heals, Ireland's debt continues to be watched closely by the European Union to prevent more complications in the euro-zone debt crisis.

Ireland, which was considered the healthiest economy in the European Union, in early 2000, recorded the lowest unemployment rate of all developed countries came to classes during present on the 4th position among the most indebted EU countries. Since 2001, Ireland's public debt has grown by more than 500%.

Fig.no. 5 Ireland Government debt to GDP



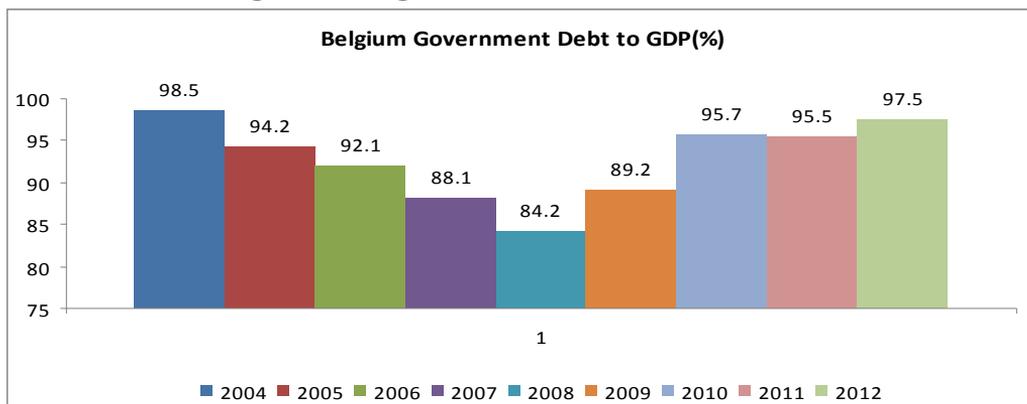
Source: Eurostat

5. Belgium -Debt equals 98% of GDP

The 2008 financial crisis wasn't cheap for Belgium. Like in the United States, Belgium's government was forced to provide its own expensive financial bailout, injecting capital into three of the country's major troubled banks [Hudspeth Christian,2012] Things have been looking up in the country over the past year, however. Unemployment fell from 8.3% to 7.7% in 2011. Also, GDP grew 2.0%, and the federal deficit decreased from 6% in 2009 to 4.2% of GDP in 2011. Nonetheless, with a debt-to-GDP ratio nearing 100%, many investors believe Belgium may be vulnerable in the short term to growing debt problems in the European Union. Belgium also faces two other major problems an increasingly aging population and rising social program costs that will cause headwinds when it comes to chipping away at its national debt.

Belgium's public debt in 1993 reached about 135% of GDP, but was subsequently reduced to 84% of GDP by 2007. In just four years, the ratio increased to almost 95% of Gross Domestic Product. In 2012, the country was forced to reduce costs by \$ 1.3 billion to respond new fiscal rules imposed by the European Union, aimed at preventing a new debt crisis in the euro area.

Fig.no. 6 Belgium Government debt to GDP

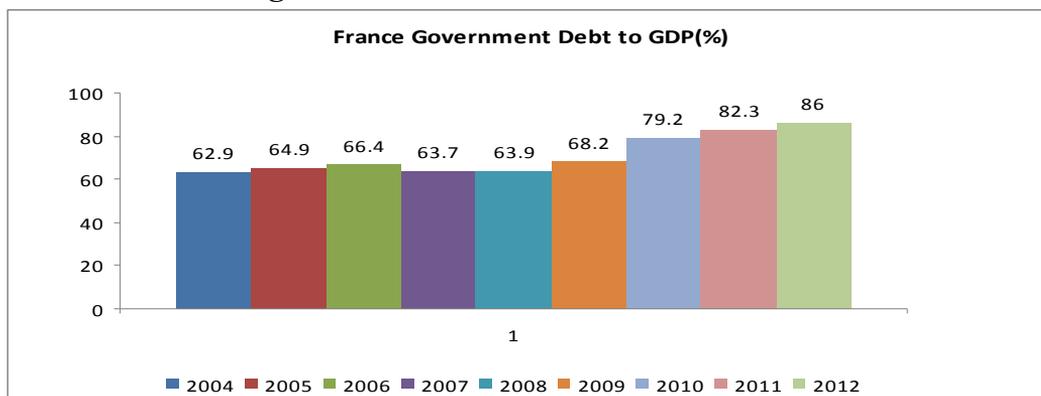


Source: Eurostat

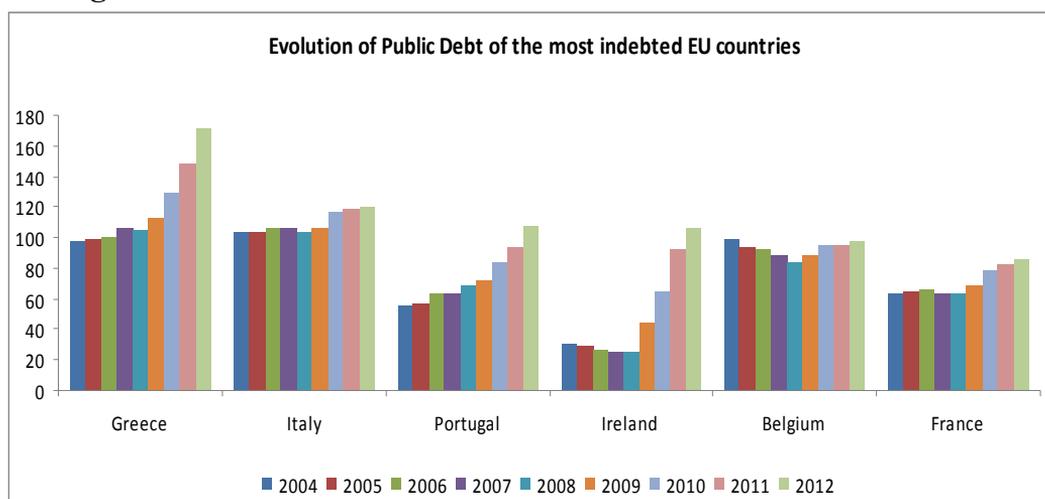
6. France -Debt equals 85.8% of GDP

A damaging combination of high unemployment (9.1% in 2011), lower than expected economic growth, depressed tax revenues and continuously heavy social spending has led to sharp increases in France's public debt., these factors have caused France's gross-national-debt-to-GDP ratio to skyrocket from 68% in 2008 to 86% in 2011[www.cia.gov] As economic headwinds persist, don't expect France's debt problems to go away anytime soon.

Fig.no. 7 France Government debt to GDP



Source: Eurostat

Fig.no. 8 Evolution of Public Debt of the most indebted EU Countries

5. Conclusions

It becomes clear that debt crisis could have been avoided if there had been a better governance in the Member States and in the EU and it is absolutely necessary that governance weakness in the past may not be repeated. To this end, be taken a series of measures to strengthen budgetary supervision in accordance with the Stability and Growth Pact. These measures effects :

- mutual monitoring the projects of the budget of the Member States;
- early application of the penalties in relation to the compliance with thresholds debt/equity ratio of 3% of GDP, and 60% of public duty;
- triggered excessive deficit procedure applicable if debt reduction does not take place early enough;
- greater independence for national statistical offices to their national governments.

Senior Officials of the European Union have been of the opinion that the attitude rating agencies was not as expected. German Chancellor has proposed creation of a new European agencies independent rating which can compete with the three major existing agents. It has been suggested also that Eurostat to obtain competence to public ratings of public finances of the member states. If he had already have these skills, the Eurostat could warn earlier that there is a crisis of the debt in Greece.

The Commission has been criticized for lack of vigilance and proactive to ensure the quality of the data on public finance national. This aspect refers to the matter wider monitoring, and the compliance examination which is located at the base of failure mechanisms of the Stability and Growth Pact. Any solution in the longer term must address these aspects effectively.

While banks in Greece, Spain and Portugal have not benefited from the measures of saving financed with taxpayers' money, the extent of such measures in the other parts of the EU and the USA has contributed for the exercise of a unprecedented pressures on the markets of the bonds by the state and accelerated into a crisis. It is necessary to implement effective measures to reform of the banking sector worldwide, such as to prevent recurrence of such financial instability, economic and social.

References:

Stănescu Cristina, Nedelescu Mihai, *Finanțe Generale*, Editura Universitară, București ,2012, pag. 199

Raport anual al Băncii Centrale Europene , 2012

www.finanteazi.ro/2012/12/sua-si-datoria-publica-fara-limita

www.investopedia.com/ask/answers

Raport privind administrarea datoriei publice guvernamentale, Ministerul Finanțelor Publice,2011

Consecintele crizei datoriei publice asupra guvernantei UE, Comitetul Economic si Social European,2010

Teodora Barbu, Georgeta Vintilă, Dan Armeanu, Mihai Nedelescu, Aspects of bank recapitalization, and it's impact on capital markets, *Annals of DAAAM for 2010 & proceedings of the 21th International DAAAM Symposium*, Editura: DAAAM International Vienna 2010, Vienna, 2010, ISSN 1726-9679, pag 291-292.

Preda Oana, Avram Emanuela, Furdui Iulia,-Relationship banking marketing and it's implications on Piraeus Bank, *Romanian Economic and Business Review*, Vol.4 , nr 2, pagina 96

Preda Oana,Furdui Iulia, *Elemente de marketing financiar bancar*, Editura Universitara, Bucuresti 2009, pag 24

www.eurostat.com

www.investinganswers.com/education/global-economic-crisis

Hudspeth Christian - *10 Countries Drowning In Government Debt*, 2012

www.cia.gov/library/publications/the-world-factbook

CONSIDERATIONS REGARDING METHODS AND VALUATION MODELS OF EQUITY COST OF THE COMPANIES¹

Mihai Nedelescu*

Abstract

For the enterprises, capitals are fewer and fewer and more expensive, and the expected profit in conditions of fierce competition, are more difficult, being accompanied by increasing risks more difficult to predict. The cost is the highest risk element, which accompanies the capital, because, is in inverse proportion to the profit: a higher cost leads to a lower profit. For attracting the sources of capital, a firm must spend certain sums, which are proportional to their price. The content of this paper tries an efficiency of financial structure for companies based on the minimizing of finance costs. In the purpose of efficiency of financial structure has followed the costs for variant of financial structure through point out models of analyses and assemble the costs recommended by international and national specialty literature.

Keywords: *capital cost, financial structure, financial sources, financial cost, efficiency.*

JEL Classification: G31, G32.

1. Introduction

At the enterprise level, managers must ensure necessary capital to lower costs and organize work in order to obtain the expected profit by all interested. „*Knowing from where to get capitals on time and at the lowest costs, where to place the smallest risks and how to get the desired profit as a result of their use to satisfy all the actors on the company stage is a real fascination.*“ [Stancu I. (1998)] In this vision, an enterprise to be able to ensure the financial stability, it must provide an "optimal capital structure", which aims mainly to minimize the cost of financing. [Davies, D. (2002)]

Improvement of optimal financing structure is itself a source of profit, reflected by increasing the share of cheap capitals. [Kuber, M (1992)]

Regardless their nature, all the capitals have a cost. The cost is the highest risk element, which accompanies the capital, because, is in inverse proportion to the profit: a higher cost leads to a lower profit. The capital is a product with a price and a cost supported by the user. For attracting the sources of capital, a firm must spend certain sums, which are proportional to their price. The respective expenses

¹ Presented article at the 6th Edition of “Implications of Globalization and Integration into the European Union on Financing and Development of Foreign Trade” Conference, November 23-24, 2012, Romanian-American University, Bucharest

* Author is Lecturer of Corporate Finance at the Romanian-American University, Bucharest. E-mail address: nedelescumihai@yahoo.com

represent the average of the marketing cost of the sources of capital, i.e. of the loans and the authorised share capital and equity.

The price level can influence buying or, on the contrary, giving up on a product. The price level ultimately influences the firm's ability to maintain on the market. [Preda, O. (2007)]

The financial institutions seek to settle the price in order to cover all the costs implied by the product development and promotion, making a profit in the same time. [Preda, O., Furdui I. (2009)]

2. Conceptual aspects of financing costs

A problem of great importance in the analyzing and evaluation of financial sources constitute the financial lever effect of capital about the financial costs of company. *"Can the company affect their costs, in a favorable or unfavorable way, by the diversity of the financial sources used?"* [Burton, Kolb, DeMong (2005)]

The financial cost keeps a direct bundle between the elaborating of capital structure and his financial structure. Has economic sense that the company tries to minimize the financial cost. The capital costs and the other costs, share a common characteristic in that of they can reduce the dividend size paid to stockholders.

If this financial costs can be affected by his capital structure, then the structure management capital is clear an important element of company's financial management.

The manner of introduction for the analyzing investments of project models from the investments expenses point of view is represented by the financial costs of capital. The cost of capital account concerns in evaluation of any investment project as much as integral financial from capital account, and mix financial.

Bet on literature there are a variety of criteria for selecting sources of financing for enterprises which the cost of capital is the most important criterion for their election. Without knowing this cost it can't follow maximizing the enterprise value. So in order to reduce the cost of capital, managers want permanent improvement of capital structure in favor of those financing sources who required as small remuneration of capital. The company has many possibilities of internationalization activity, but the variant chosen will be the one that best fits his/her interests in terms of risk and uncertainty. [Stănescu M.C., 2013]

To determine the cost of capitals, experts recommend using several methods of estimation, each of them having certain limitations regarding their application. The methods regarded in the literature as being the most relevant for establishing the cost of capital are: Gordon-Shapiro model of constant growth, differentiated growth patterns: DCF method (Discounted cash-flow), Bates model, Holt model, Molodovski model, CAPM (Capital asset pricing model) [Tobin (1958), Treynor (1961), Sharpe (1964), Lintner (1965), Mossin (1966), Brennan (1970), Black, Jensen, Scholes, Mayers (1972), Treynor, Black, Fama, MacBeth, Blume and Friend (1973), Solnik and Black (1974), Roll (1977), Ross (1977), Stambaugh (1982), Shanken, Kandel and Stambaugh (1987), Fama and French (1996), Dimson and Mussavian (1998)], APT method (Arbitrage pricing theory) [Ross (1976), Roll and Ross (1980), Chen, Roll și Ross (1986)].

Table no.1 Models and studies used in financial theory to determine the cost of own capitals of enterprise.

Gordon & Shapiro Model	The model is applicable to companies who require a policy of increasing dividends with a constant rate. The model has the disadvantage of unrealistic hypotheses, but is frequently used in practice due to the advantage of simplicity. The most disputable hypothesis is that of a constant growth rate of infinite duration. [Gordon & Shapiro (1956)]
Gordon & Shapiro Model (differentiated growth model)	The model takes into consideration two periods in the life of the company, which is a short period with an increase variable of dividends and an unlimited period with a constant growth rate of dividends. It thus requires forecasting dividends and steady growth rate. The cost of capital is determined by successive trials and interpolation. Also, it is used the sensitivity analysis for assessing the time when the dividends growth rate becomes constant.
Bates Model	Integrates factors that influence the market price of an action, meaning the cost of capital, the growth rate of the company, the distribution rate of dividends and the stock indicator PER of industry in which acts the company. Bates removes the restrictive hypothesis of constant growth rate and that of an alternation of periods with uniform growth or constant or zero. Solution of the equation represents the cost of equity determined by successive trials and interpolation. [Stancu (2007)]
Molodovski Model	Modolovwski introduces in its turn an economic growth with characteristics that it wants to be closer to the reality. Thereby Modolowski raising is characterized by three periods of growth characterized by the following rates: g_1, g_2, g_0 , where $g_1 > g_2$. These periods are appropriate to accelerated growth, temperate and stability, the stability being considered as having an unlimited horizon of time. And in this model reappears the hypothesis of infinite growth, forced by the complexity of growth model to offer a final formula with practical application. [Dragota (2006)]
Holt Model	Starts from the duration of recover (DUR), in number of years, of a current course, through net profit per action, through the PER, duration which is adjusted by the rate of profitability of equity. Based on various simulations and interpolations on profit growth rate, the current PER and an estimated recovering duration, can be calculated capital cost. [Stancu (2007)]

Capital Assets Pricing Model (CAPM)	<p>CAPM is used to estimate the cost of equity based on profitability of a balanced portfolio of shares on the stock market. In this model, the cost of equity expresses the hoped average annual rate of profitability of an investment on stock market for the acquisition of actions in a certain field of activity. Although the CAPM seems to have a high degree of accuracy and give the precise estimates for the cost of equity under conditions of perfect market, there are problems of its application. The formula uses a profitability of market average based on a diversified portfolio, but shareholders have not always such a portfolio, they being interested not by the market risk, but rather by a total risk which can't be appreciated with the β coefficient help. [Sharpe W (1965)]</p>
Build-up CAPM	<p>This model considers that the expected profitability of equity has two components, the degree of zero risk rate and the risk premium. Risk premium, in its turn, is composed by another three components: equity risk premium, the premium linked to the size of the company and the risk premium specific to the company. Corresponding to the terms of economic and political instability of each country, is determined a specific risk premium of the respective company.</p> <p>One of the novelties elements of this model is that the risk-free rate of profitability includes the estimated inflation for the period of maturity of governmental title. Also, as in case of the classical model, for estimating this rate it is used the historical data determined by Ibbotson Associates agency. Latest empirical studies have demonstrated that the degree of risk and implicitly the cost of capital, increase with increasing the company size, which explains the need to take into consideration this variable to estimate profitability on equity. [Patt (2002)]</p>
Arbitrage Pricing Theory (APT)	<p>The APT model differs from the CAPM by the fact that for measuring the systematic risk, don't use only one coefficient β but many coefficients β, which expresses the profitability sensitivity of an action of a listed company, to the modification of economic factors influence as: industrial production indices, the basic real rate, inflation rate on short term, inflation rate in long term and the failure risk of bonds yields rate of company at maturity. This model of estimating the cost of equity is based on a more realistic hypothesis according to which the profitability of an asset is determined by common factors of systematic risk as well as the specific risk factors that may be eliminated by diversifying the portfolio of titles. [Ross (1976)]</p>

Thus, the analyze purpose is to offer points of view to ensure the manager's financial decision, and on the base of the investment, representing one of the fundamental index that guides the company's financial activity. In theory they are a lot of analyses under restriction assumptions, from, the analyses in oblige company, the analyses of investment project financed integral from capital account, the analyses of investment project on company's structure.

3. Methods and models to assess the cost of equity of the company

The cost of equity is difficult to determine because it is not directly observable on the market as is the case of loaned capitals. To determine the cost of equity, experts recommend using several methods of estimation, each of them having certain limits regarding their application. Methods regarded in the specialty literature to be the most relevant for establishing the cost of capital are: Gordon-Shapiro model of constant growth, differentiated growth models: CAPM (Capital asset pricing model) [Lintner (1965)], APT (Arbitrage pricing theory).

3.1. Gordon & Shapiro model

Gordon & Shapiro model (1956) which involves a series of restrictive hypothesis: absence of fiscality and costs with transactions of bonds on the market; permanent growth of the dividends with a constant annual rate; amortization equal to the maintenance investments production capacity; investments obtained only from reinvesting the profit; infinite life duration of the emitting company.

According to the model of constant growth Gordon & Shapiro, if it predicts the fact that dividends will grow at a constant rate, then the price of the action becomes $P_0 = \frac{Div_1}{k_e - g}$ so it follows that $k_e = \frac{Div_1}{P_0} + g$. So the rate of profitability of equity depends on dividend yield ($\frac{Div_1}{P_0}$) and the estimated growth rate.

Determination of yield of dividends based on market data is relatively simple, but estimation of constant growth rate is difficult, which will lead to the success or the failure of this method [Harpern (1998)]. If growth rates from the past were relatively stable and the investors expect a continuation of the past data, the growth rate g can be calculated based on historical data of the company, taking into consideration either the rate of growth of dividends or on the earnings per share. Otherwise it requires an internal or external estimation of the rate of growth that intervenes in calculating the cost of equity.

Considering that the distribution of dividends rate is constant and the rate of profitability of new investment projects is equal to estimated profitability for the entire capital of the enterprise (ROE), the cost of equity has the following formula:

$$k_e = \frac{Div_1}{P_0} + \gamma \times ROE \quad [1]$$

Later, Gordon & Shapiro improved the model (the differentiate growth model) taking into consideration two periods of the enterprise life, that is a short period with

a variable growth of the dividends and an unlimited period with a constant growth rate of the dividends. The capital cost is determined by repeated and interpolating trials.

So it is recommended using the differentiated growth model, according to which the value of one share: [Dumitrescu, Dragotă, Ciobanu (2002)]

$$V_0 = \sum_{t=1}^{\infty} \frac{Div_t}{(1+k_e)^t} + \frac{Div_n + P_n}{(1+k_e)^t} \quad [2]$$

$$\text{where: } P_0 = Div_n \times \frac{1+k}{k_e-g}$$

n = number of years of variable growth;

$n + 1, \dots, \infty$ = number of years of growth with constant g .

The model Gordon & Shapiro has the disadvantage of certain unrealistic hypotheses, but is frequently used in practice due to the advantage of simplicity. Most debatable hypothesis is that of a growth constant rate on infinite period. Besides the teaching and historical importance, this model represented a starting point for the elaboration of some relevant models, like those of *Bates*, *Molodovsky* or *Holt*, which through the undertaken researches are trying to remedy the inconveniences generated by the cost analysis model developed by Gordon & Shapiro.

Bates model. Going on the line of Gordon & Shapiro model, Bates tries a finer shaping of economic growth of the company. He acts only in the direction to relaxing the hypothesis of constant and infinite economic growth, for the rest by acting in the same system of hypotheses of Gordon & Shapiro model, both the specific and the characteristic general to the whole financial theory. The financial increase described by Bates has two periods equivalent to momentum and economic stability, characterized by two growth rates (g). [Stancu (2007)]

Bates model integrates the factors influencing the market price of a share, meaning the cost of equity (k_e), the growth rate of the enterprise (g), the rate of distribution of dividends (d) and stock market indicator forecast PER of industry in which acts company. According to the model, PER from the basic period may be determined using the formula: [Dumitrescu, Dragotă, Ciobanu (2002)]

$$PER_0 = \frac{(d \times B + PER_n)}{A} \quad [3]$$

$$\text{where: } A = \left(\frac{1+k_e}{1+g}\right)^n \text{ and } B = (1+g) \times \left(\frac{1-A}{g-k_e}\right)$$

A and B represents multipliers for who were determined pre-calculated tables of Bates model that are used by investors for various simulations of influence factors of stock market course, after that it can establish and compare the initial value of PER with medium PER of the market, in purposes of the selection of investment in the most profitable shares. Bates model eliminates the restrictive hypothesis of constant growth rate g and that of alternating periods with uniform growth, either constant or zero. The solution of this equation of degree n represent the cost of equity k_e , determined by successive attempts and by interpolation.

Molodovski model. Example of Bates approach is taken over by Molodovsky, who introduces in its turn an economic increase with characteristics that will be closer to the reality. Thus the Molodovsky increase is characterized by three increasing periods characterized by next rates: g_1, g_2, g_0 where $g_1 > g_2$. These periods are appropriate to the accelerated, temperate growth and stability, the stability being considered as having an horizon of unlimited time. In this model reappears the hypothesis of infinite growth, forced by the complexity of the increase model, to offer a final formula with practical application. [Dragotă (2006)]

Formula of company value from Molodovsky model will be: [Dumitrescu, Dragotă (2000)]

$$V_0 = \sum_{t=1}^{n_1} \frac{Div_0 \times (1 + g_1)^t}{(1 + k_e)^t} \times \sum_{t=n_1+1}^{n_2} \left(\frac{1 + g_2}{1 + k_e} \right)^t + \frac{Div_0}{(1 + k_e)^{n_1+n_2}} \times \sum_{t=n_1+n_2+1}^{\infty} \frac{1}{(1 + k_e)^t} \quad [4]$$

By means of two new relations, the author introduces instead of absolute values V_0 and Div_0 , rates PER and d , the last being the rate of distribution of dividends: $V_t = PER_t \times P_{net}$, $Div_t = d \times P_{net}$ and by passing to the limit, we obtain: [Dumitrescu, Dragotă, Ciobanu (2002)]

$$\begin{aligned} PER_0 &= d \\ &\times \left\{ \frac{1 + g_1}{k_e - g_1} \times \left[1 - \left(\frac{1 + g_1}{1 + k_e} \right)^{n_1} \right] + \frac{1 + g_2}{(1 + k_e)(k_e - g_2)} \left(1 - \left(\frac{1 + g_2}{1 + k_e} \right)^{n_2} \right) \right. \\ &\left. + \frac{1}{k_e(1 + k_e)^{n_1+n_2}} \right\} \end{aligned} \quad [5]$$

We notice the disappearance of terms that appear in the model of Bates, PER_n , due to reintroducing the infinite growth hypothesis, but also a more complex dependence of growth rates that will raise new problems of estimation and foresight.

Holt model starts from the recovery period (DUR), into number of years, of the actual course, by the net profit per share, through the PER, which duration is adjusted with the profitability rate of equity according to the formula: [Brezeanu, Prajisteanu, Bostinaru (2002)]

$$DUR = \frac{\ln \left(1 - PER_0 \times \frac{k_e - g}{1 + k_e} \right)}{\ln \left(\frac{1 + g}{1 + k_e} \right)} \quad [6]$$

where: DUR = recovery time, and has reached to the equation: [Stancu (1997)]

$$\begin{aligned} 1 - PER_0 \times \frac{k_e - g}{1 + k_e} &= \left(\frac{1 + g}{1 + k_e} \right)^{DUR} \end{aligned} \quad [7]$$

In the case of Holt's model, DUR indicator offers us the image of company potential to cushion the investment of shareholders as soon as possible, and k_e represents the rate required by shareholders by PER and through this recovery period. Based on various simulations and interpolations on the increase rate of company profit, the actual PER and the duration of estimated overload, can be calculated the cost of equity as a solution to the above equation.

The models Bates, Molodovski and Holt are very complex, but is considered to be operational in conditions of more restrictive hypotheses, which gives them increased flexibility corresponding to complex business environment of the company. [Stancu (2007)]

3.2. Capital assets pricing model (CAPM)

CAPM model [Sharpe 1965] is used to estimate the own capital cost based on the return of a balanced stock portfolio on the stock market. In this model, the ownership equity cost expresses the expected annual average rate of the effectiveness of an investment on the stock market for acquiring stock in a certain activity field. Although CAPM model seems to have a high accuracy level and to render precise estimation for the ownership equity costs in condition of perfect market, there are certain problems when applied. The formula uses an average return of the market based on a diverse portfolio, but shareholders do not always have such a portfolio, being interested not in the market risk but rather in a general risk which cannot be estimated with the β coefficient.

At the basis of CAPM model are a series of hypotheses, such as:

- The investors are building their portfolios from financial assets such as shares, bonds and can borrow and grant credits at an interest rate risk-free.
- Investors have a behavior of Markowitz type, therefore the portfolios held by them are efficient or are located on an efficient frontier.
- Investors have homogenous expectations, that's why they estimated identical distributions for future profitability.
- The time horizon of investments is the same for all investors.
- There are no transaction costs or other charges afferent to the acquisition, respectively the sale of financial assets.
- Inflation rate is considered zero or if is different from zero, it can be considered perfectly anticipated.

The CAPM model is used to estimate the cost of equity based on profitability of a balanced portfolio of shares on the stock market. In this model, the cost of equity expresses the anual average rate of profitability of an investment on stock market for shares acquisition in a particular field of activity. [Dragota (2009)]

Calculation formula for k_e is: [Fama, French (2004)]

$$k_e = R_f + \beta \times (R_m - R_f) \quad [8]$$

where: R_f = profitability rate without risk;

β = systematic risk of investment (risk coefficient of the action);

R_m = average rate of profitability on stock market;

$(R_m - R_f)$ = market risk premium.

To apply the CAPM for estimating the cost of equity of an enterprise is required follow the following steps to determine the right CAPM: [Harpen (2008)]

1. It is estimated risk-free profitability rate (*risk-free rate*), R_f ;
2. It is estimated anticipated risk premium, RPM, the average rate of profitability on stock market minus risk-free profitability rate;
3. Is it estimated beta coefficient of assets, β , which is used as an index of assets risk. First index refers to beta coefficient of first order of company;
4. Are replaced previous values in CAPM equation, for estimating the required profit rate of concerned assets: $k_e = R_f + \beta \times RP_M$ From equation one can see that the estimating of k_e value by the CAPM method starts from risk-free interest rate, R_f , to which are added a risk premium equal to the risk premium on market, RP_M , increased or minimize so as to reflect the specific risk of those assets according to its beta coefficient.

Although the CAPM model seems to have a high degree of accuracy and give precise estimates for the cost of equity under conditions of perfect market, there are problems of its application. The formula uses an average profitability of a market based on a diversified portfolio, but shareholders have not always such a portfolio, they are not interested in market risk, but rather by a total risk that can't be appreciated with the β coefficient help. Also, it is unclear if the rate of profitability of governmental titles should be used on short or long term, and systematic risk and risk premium on market are difficult to determine. [Dragota (2009)]

Build-up CAPM model considers that the expected return of the ownership equity has two components: the rate for zero risk degree and the risk premium. The risk premium itself is formed of three components: the capital risk premium, the risk premium of the enterprise dimension and the enterprise associated risk premium. According to the conditions of economic and political instability of each country, a risk premium specific to that enterprise is determined.

According to this model, the cost of equity is determined by the formula:

$$E(R_i) = R_f + RP_m + RP_s + RP_u \quad [9]$$

where: $E(R_i)$ = profitability rate expected for the i action;

R_f = profitability rate for zero risk at date of valuation;

RP_m = general risk premium for market;

RP_u = risk premium attributed to a specific company or industry.

One of the innovative elements of this model is that the return rate without risk includes the expected inflation for the maturity term of the governmental title. Also, as in the classical model, to estimate this rate as in the case of the classical model, historical data issued by the Ibbotson Associates agency are used. Recent empirical studies demonstrated that the risk degree and thus the capital cost grows with the growth of the enterprise dimension, which explains the necessity to take this variable into consideration when estimation the return of the ownership equity.

Table no.2 Empirical studies about analyzing the CAPM model

Tobin (1958)	<p>An important contribution to the development of the CAPM model had it J. Tobin, who launched hypothesis of risk-free asset. This hypothesis has attracted other important elements in the development of subsequent models with valuable applications in financial theory: existence of certain interest rate that includes inflation and is not affected by interest risk; perfect liquidity of the money market, which involves the possibility to buy and sell indefinitely government securities at the same interest rate.</p> <p>Introducing the risk-free asset in the portfolio changes the efficient frontier shape from a parable to a right, resulting for each efficient combination of risky assets a dominating portfolio. Tobin introduces on next to objective decision of investment in risky assets based on utility maximization and that of the subjective investor's, which depends on the risk profil of each. So each investor will have an option that determines the maximization of subjective utility which takes into account the marginal rate of substitution risk-profitability each specific. [Tobin (1958)]</p>
Treynor (1961)	<p>Treynor model is based on assets valuation theory and is focused on the incorporation of risk in the market value of the assets, being introduced the insurable concept (insurable risks have a negligible effect on the cost of capital). This model shows that the risk premium for an investment is proportional to the covariance between investment and total investment on market. [Treynor (1961)]</p>
Sharpe (1964)	<p>Sharpe aims to determine a relation between assets prices and their risk characteristics in attempt to construct a theory of capital market balance in risk conditions. He notes that through diversification, a large part of the specific risk of an asset can be removed, and as a result of this risk can't influence significantly the asset price. [Sharpe (1964)]</p>
Lintner (1965) Mossin (1966)	<p>Lintner and Mossin come and improve the CAPM model, so the result model is that of homogeneous expectations of investors about profitability. [Lintner (1965) Mossin (1966)]</p>
Brennan (1970)	<p>Brennan shows that the structure of original CAPM model is maintained when it is introduced in the equation the taxation.</p>
Black, Jensen & Scholes (1972)	<p>The Black is trying to relax the hypotheses that support the CAPM. This shows how the model should be adapted when loans without risk are not possible. His version is known as CAPM with beta zero. The main limit of Black's model is related to hypothesis that on market are allowed short selling transactions.</p>

Mayers (1972)	Show that when the portfolio of market doesn't includes transacted assets, the CAPM model doesn't modify structure.
Treynor & Black (1973)	The portfolio is seen as a mix between a passive portfolio (stock index fund type) and an active portfolio relying on the relative performance of individual securities. Treynor-Black model shows how best to construct such portfolios, making connection between CAPM and Simplified Model for Portfolio Analysis of Sharpe (1963).
Fama & MacBeth (1973) Blume & Friend (1973)	They observed the relation linearity between profitability and beta coefficient. They also find out that the intersection and slope of the relation vary on different subperiods, which don't respect the traditional form of CAPM. This behavior also proven by later studies can be explained by CAPM with beta zero.
Solnik & Black (1974)	According to their researches, CAPM model can be extended to encompass international investments.
Roll (1977)	Roll demonstrates that market as has been defined in teoretical CAPM model, is not an exclusive market of shares, the stock index should include bonds, real assets, human capital and everything else, tangible or intangible, that represents a form of wealth. Roll affirm that the market portfolio used in the study of Black Jensen Scholes definitely is not the real one, and more, if real portfolio isn't known with any certainty, CAPM can't be tested. In Roll's opinion, CAPM tests represents, at most, tests of portfolio efficiency that approximates best the portfolio of real market according to the criterion average-dispersion, and can not be drawn conclusions behind their perform about CAPM validity.
Ross (1977)	Ross showed that for the CAPM model to be valid, it is necessary: a) the existence of a risk-free asset, or b) be allowed short selling transactions. If isn't respected any of the two requirements the CAPM model can not be applied in financial assets valuation. [Ross (1977)]
Stambaugh (1982)	An answer to Roll's criticism is using the portfolios that approximate best the market portfolio, portfolios that include extended sets of assets like bonds and real assets.
Shanken (1987) Kandel & Stambaugh (1987)	Roll's critique was attacked by Shanken, Kandel and Stambaugh by arguing that even if the stock market is not the one on which the real market portfolio is formed, it must be correlated with real market, even in this meaning they find proofs that the CAPM is not valid.
Fama & French (1996) Dimson & Mussavian (1998)	Empirical tests led to the determination of other risk factors affecting profitability measures. These factors include the ratio price/earnings, company size, the ratio between carrying value and market value [Fama, French (1996)] and a variety of other influences on titles prices (Dimson, Mussavian).

3.3. Arbitrage pricing theory (APT)

Ross (1976) developed the APT model like an alternative model for CAPM. Idea of APT is that only a small number of systematic influences affects medium profitabilities of long-term securities. APT is a multifactorial model opposed to the unifactorial market model of Sharpe's, its multifactorial characteristic allowing an asset to have not just one but several measures of systematic risk. Each measure reflects the asset sensitivity to corresponding influence factor. This aspect of APT seems similar to multiple beta coefficients of Merton's CAPM model, but the resemblance is apparent because APT rather highlights an arbitration relation than a condition of equilibrium. If assets don't have a specific risk than the expected profitability of any asset is a linear function dependent only on expected profitability of other assets. [Stancu (1999)]

When the assets contain specific risk, it's possible a portfolio formation in which this to be diversified. To achieve a complete diversification of the specific risk, a portfolio should include an infinite number of titles, with a finite set of assets, the APT restriction of valuation maintaining the validity only approximately.

APT model (Ross 1976) is different from the CAPM model because, in order to measure the systematic risk, it does not use one single β coefficient but several β coefficients which shows the return sensibility of a stock of a listed enterprise when exposed to modified influential economic factors. This model of estimating the ownership capital cost is based on the more realist hypothesis that the rehabilitation of an asset is determined by common factors of systematic risk, as well as by specific risk factors that can be culled through diversification of the title portfolio.

Table no.3 Empirical studies regarding the APT model analysis

The APT model	
Ross (1976)	The APT model has developed as an alternative to the CAPM. APT is a multifactorial model opposed to the Sharpe's model, its multifactorial characteristic allowing to an asset to have not just one but several measures of systematic risk. Each measure reflects the asset sensitivity to corresponding influence factor. [Stancu (2007)]
Roll & Ross (1980)	They use factorial analysis, a statistical technique that allows them to deduct factors from data on titles profitability. The results indicate the existence of four factors influencing the assets prices on capital market. The advantage is that the determining factors explain a high proportion of risks during the considered period. The reverse is that factors usually have not economic interpretation.
Chen, Roll & Ross (1986)	An alternative to factorial analysis is to use macroeconomic variables as risk factors. They find that shares prices are related to: industrial production growth, changing profitability gap between long-term government bonds and short-term bond, risk premium modification of risky bonds to risk-free bonds, the changes of expected inflation. After taking into account of these factors, stock market indices have no longer impact on profitability of normal individual shares.

Studies recommends taking in consideration five factors that influence systematic risk: [Copeland, Koller, Murrin (2000)]

- Industrial production index at macroeconomic level;
- Short-term interest rate;
- The inflation rate is calculated based on variation of general index of prices;
- The risk of failure, determined as the difference between the profitability of bonds on long-term with rating of AAA and that of bonds with BAA rating;
- Inflation, measured as difference between the interest rate at government bonds on long-term and the interest rate on short-term government bonds.

The APT model is a valuable development, which liberates valuation models that followed CAPM's of one of the hypotheses that have encumbered both the reasoning and empirical testing results of the latter. The multifactorial dependence suffers from the drawback of unidentified factors which determine the evolution of profitability.

4. Conclusion

In conclusion regardless their nature, all the capitals have a cost. The cost is the highest risk element, which accompanies the capital, because, is in inverse proportion to the profit: a higher cost leads to a lower profit. The capital is a product with a price and a cost supported by the user. For attracting the sources of capital, a firm must spend certain sums, which are proportional to their price. The respective expenses represent the average of the marketing cost of the sources of capital, i.e. of the loans and the authorised share capital and equity.

Thus, the analyze purpose is to offer points of view to ensure the manager's financial decision, and on the base of the investment, representing one of the fundamental index that guides the company's financial activity. In theory they are a lot of analyses under restriction assumptions, from, the analyses in oblige company, the analyses of investment project financed integral from capital account, the analyses of investment project on company's structure.

In Romania, the transparency and the completitude of financial information are in continuous development, but they found in the incipient phase. Thus, to have a necessary detailed information for the elaboration of a global study must be taken real information of financial indexes that should dovetail in the fundamental way with the one asked by theory. The main problem that it has to meet and offered as an example is the publishing of data about the debt and expenses with the rates. Thus the debts are not detailed after their nature in financial and exploitation, the majority of information referring generic to the sum of debt. In the expenses case, from the total of expenses are distinguished only the exploitation expenses, but for a fundamental analyses of loan capital costs is necessary a detail at the credit contracts level with the banks, about what the data are practically non existing.

References

- Brezeanu, P., Prajisteanu, B., Bostinaru, A., *Diagnostic financiar: instrumente de analiză financiară*, Editura Economică, București, 2002.
- Burton A. Kolb, Richard F. DeMong, *Principles of Financial Management*, Irwin, 2005.
- Davies, D., *The art of managing finance*, Mc Graw-Hill Book Company, New York, 2002.
- Dragotă, V., *Evaluarea acțiunilor societăților comerciale*, Editura Economică, București, 2006.
- Dragotă V. (coord), Dragotă M., Dămian O.A., Stoian A., Mitrică E., Lăcătuș C.M., Manăte D., Țâțu L., Hândoreanu C.A. *Gestiunea portofoliului de valori mobiliare*, Ediția a doua, Editura Economică, București, 2009.
- Dumitrescu, D., Dragotă, V., Ciobanu, A., *Evaluarea întreprinderilor*, Ediția a II-a, Editura Economică, București, 2002.
- Fama, French, *Multifactor Explanations of Assets Pricing Anomalies*, The Journal of Finance, 1996, vol. 51, no.1.
- Fama, French, *Value versus Growth: International Evidence*, The Journal of Finance, 1999.
- Eugene F. Fama, Kenneth R. French, *The Capital Asset Pricing Model: Theory and Evidence*, The Journal of Economic Perspectives, Vol. 18, No. 3. (Summer, 2004), pag. 25-46.
- Gordon, M.; Shapiro, E., *Capital equipment analysis: the required rate of profit*, Management of Science, Vol.3, 1956.
- Harpern, P., Weston, J.F. Brigham, E.F., *Finanțe Manageriale, Modelul canadian*, Editura Economică, București, 1998.
- Kuber, M., *Management consulting*, Editura AMCOR, București, 1992, pag. 274.
- Lintner, J., *Security Prices, Risk and Maximal Gains from Diversification*, The Journal of Finance, vol. XX, No. 4, December 1965.
- Lintner, J. *The Valuation of Risk Assets and the Selection of the Risky Investments in Stock Portfolios and Capital Budgets*, The Review of Economics and Statistics, 1965, pp 13-37.
- McKinsey & Company, Inc., T.Copeland, T.Koller și J.Murrin, *Valuation Measuring and Managing the Value of Companies*, John Wiley & Sons INC., 2000.
- Mossin, J., *Equilibrium in a Capital Asset Market*, Econometrica, 1966, pp 768-783.
- Pratt, S.P., *Cost of Capital – Estimation and Applications*, John Wiley & Sons INC., 2002.
- Preda, O., *Elemente de marketing international*, Editura Eurobit, Timisoara, 2007, pag. 65.
- Preda, O., Furdui I., *Elemente de marketing financiar bancar*, Editura Universitară, București, 2009, pag.119.
- Ross, S., *The Arbitrage Theory of Capital Asset Pricing*, Journal of Economic Theory, dec., 1976, pp.343-362.
- Ross, S., *The Capital Asset Pricing Model (CAPM), Short Sell Restriction and Related Issues*, The Journal of Finance, Vol. 32, No 1, 1977, pp 177-183.
- Sharpe, W., *Capital assets pricing: a theory of market equilibrium under conditions of risk*, The Journal of Finance, vol. XIX, no.3, September, 1964.

Stancu, I., *Finanțe. Teoria piețelor financiare. Finanțele întreprinderilor. Analiza și gestiunea financiară*, Editura Economică, București, 1998.

Stancu, I. (editor), *Articole fundamentale în teoria financiară*, DOFIN, București 1999.

Stancu, I., *Finanțe. Piețe financiare și gestiunea portofoliului. Investiții directe și finanțarea lor. Analiza și gestiunea financiară a întreprinderii*, Ediția a IV-a, Editura Economică, București, 2007.

Stănescu M.C., Analysis of the impact of Foreign Direct Investment performance on Romanian Economy, *Metalurgia International*, ISSN 1582-2214, vol XVIII , No 4-2013, pag 242-249.

Tobin, J., *Liquidity preference as behavior toward risk*, *The Review of Economic Studies*, vol. XXV, February, 1958.

Treynor, J., *Toward a Theory of the Market of Risky Assets*, unpublished manuscript, 1961.

THE ROMANIAN'S BANKING SYSTEM NEED TO FOCUS ON MARKETING¹

Oana Preda*

Abstract

The importance of the marketing activity is shown first by the continuous development of competition in the financial-banking sector in spite of the difficulties of entering and exiting a market, and second, by the globalization and the increased interest of the market players which determine high levels of intensity of the commercial activities in this sector.

Keywords: financial-banking marketing, Romanian banking system, customers expectations

JEL Classification: M30, M31, G21

1. Introduction

Public expectations regarding banks are changing. Customers want services most suited to their needs and as rapidly as possible. They want to know that the bank is in step with time, the pace of business and that they will be able to offer all the products of modern technology to conduct business in accordance with the trends.

Communication strategies of banks shifted from tradition, stability and confidence to flexibility, diversity, accessibility and speed.

Basing on more and more sophisticated and demanding customers, banks are increasingly focused on meeting customer needs at a pace unexperienced so far. Modernity and dynamism are about to become the new pillars of banking communication. Banks are continuously coming with new products, more and more diversified and adapted to be positioned and promoted. In this context, banks have focused particularly on the marketing budgets of these products and services.

According to a report published by the International Monetary Fund (IMF), the ongoing subprime crisis has cost the banking sector losses comparable to the total losses incurred in Japan's financial crisis in the late 1990s. [Barbu, Vintilă, Armeanu, Nedelescu (2010)]

Marketing in the banking and financial industry today must bring new forms of expression considering the rapid changes of the environment, where consumer

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* Oana Preda is Associate Professor at the Romanian American University, Bucharest, E-mail address: ocpreda@yahoo.com

society and mass production fosters competition and leads to continuous development of financial and banking products and services.

2. The evolution of the banking market in Romania

For many years, Romanians have put money in the bank just to be safe from the rising prices and to gain something more than this increase. Monthly accrued interest on deposits allowed the economy to more easily pass post-December inflation shocks. High inflation recorded until recently stimulated savings instead of credit strangled.

Products and services are suitable for everybody from students to business people, from credit for studies or holidays or cars until the mortgage or real estate. Loans are granted in RON or another foreign currency with fixed or variable interest rate, with a variable period of time.

The Romanian banks are highly interested in [Catoiu, Edu, Negricea (2012), pag.75]: brand perception (bank and products), brand attitude (bank and products), buying motives, product satisfaction, buying behaviour, buying intentions, segmentation studies, target markets, brand positioning, fidelity tactics and consumer reactions.

Commercial banks in Romania are forced to change their strategy. The fight for market share will no longer use the interest rate as a gun, but the arsenal of services offered to those who have already opened a bank account, through loyalty, by providing customized products by large-scale marketing campaigns.

Some banks have now also started door to door delivery of services. As a result, it is now possible to order cash or demand drafts to be delivered at home [Stănescu, Nedelescu(2010)]

The retail sector is the most desired by the banks and associations of banks, large retail networks, and they are not the only tha are racing. Credit and debit cards have related financial services more and more complex in order to gain customer loyalty. Thus, bank marketing arsenal is enriched every day.

The cards offered today by the Romanian banks already provide not only the possibility of cashing the owed revenues, such as pensions and wages, but also associated service packages, such as medical insurance for traveling abroad, emergency services or discounts on hotel accommodation services.

An account in the bank, plus huge possibilities offered by the Internet and mobile communications implies a serious simplification of everyday life. New products ranged as remote banking services such as mobile banking or Internet banking offered by the main Romanian banks, enables a variety of operations. [<http://www.hotnews.ro/stiri-arhiva>]

Paying the bills directly from your mobile phone, transferring money between card accounts and deposit or credit, regardless the currency used, are already offered by the commercial banks operating in Romania. By the Internet, bank accounts, payments and transfers can be accessed 24 hours a day, seven days a week.

Products and services offered by banks both global and domestic are in constant diversification. The diversification of the products and services required the restructuring of banks, making them more efficient and focusing more on customer relations, aiming to meet their needs. [Nedelescu, Stănescu (2012), pag.11]

Until recently, banks struggled to regain lost public confidence. Communication campaigns struggled to meet the need of safety and trust of customers, using reasons such as tradition and stability. On the other hand, products and banking services were almost the same, so their choice was based on the company. In this context, the banks having no other solution, were focused almost exclusively on corporate communication.[<http://www.wall-street.ro>]

These facts have changed in recent years, due to technology evolution, the offering bank really needs to keep up, but also due to achieving a threshold of stability in the banking market. Meanwhile, banks have set their identity positioned accordingly. In the same time, the increasing and more sophisticated demand of the bank customers, better acquainted to the new technologies, led to an explosion of offers on the banking market.

3. Focus on marketing - a must of the time

Available infrastructure provides the means by which financial service providers determine the best way of promoting their products or services.[Hooman Estelami(2007), pag.26]

Regardless of the method used in the market segmentation and selection of the target segments, the bank is trying to identify and respond to specific needs and to stand up to the expectations of the group.[Borza (Plăiaș) Ioana(2005), pag.164-165]

In order to develop a proper marketing strategy, a financial banking marketer must begin with the detailed knowledge of the financial product or service offered, and understanding properly the consumer behavior.

Banks have realized that they operate in a more dynamic environment and in order to meet customers' increasingly sophisticated needs, they have adopted marketing strategies aiming the diversification of the products and services, introducing alternative distribution channels and creating the reputation by how they are serving the clients.

Marketing in the banking industry focuses on the following activities:[Valerică Olteanu(2005), pag.31-32]

- identifying the need for products and services, evaluation of the application and the description of the consumer behavior of financial products and services,
- market segmentation, sizing and description of target segments,
- providing strategic market alternatives,
- study of the positioning and strategic positioning study of the alternatives,
- shaping the marketing mix of the bank's financial products and services,
- designing the product, price, promotion and distribution,

- design and implementation of marketing programs at central and local level (subsidiaries, branches) setting goals for the market,
- conducting marketing audits of the company's activities,
- design and implementation of complex programs aimed to increase the efficiency of the customers relations management.

Financial banking marketing is merging with the concern to improve the quality of products and services and to service customers.

Organizations adopted standards of quality, customer-oriented, aimed mainly to maintain the bank's soundness, credibility and honesty, professionalism and solicitude employees, reducing time to delivery of products/services, in order to obtain customer satisfaction.

Marketing approach in financial banking institutions presents a number of special features:

[Badoc (1995), pag. 10 – 11]

- the regulated nature of the sector in which they operate. Most of the times, the financial banking institutions can not control totally their offer or their own fares.
- the bank's risk. Banking risks are a source of unexpected expenses; their own management can stabilize revenues over time, taking the role of a shock absorber.
- the profitability of products and financial services. Can be seen close to reality after several years after the moment of selling.
- economic and sociological evolutions. Have an impact on financial institutions, from the perspective of profitability (the evolution of inflation and interest rates, declining consumer purchasing power, increasing unemployment etc.).
- social responsibility of banks. It is approached through the indirectly assumed responsibilities of the banks by their customers.
- the absence of protection of innovation. Banks do not have the possibility to file patents for inventions, making it difficult to differentiate products and services on long term.
- the level of knowledge of the consumers of financial services. Is relatively low because, on one hand, the frequent changes that occur within the banks ' offer, and on the other hand, the high enough number of the products and services advertised in the market.
- the high degree of market segmentation. There are multiple categories of consumer products and financial services, two of which have completely different needs and characteristics: individuals and legal persons.
- the existence of a relationship in time between the client and the bank. Financial institutions are concerned about detailed knowledge of customers and for developing a close and interactive relationship with them, in order to persuade them not to "migrate" to the competition.

- the duality of the relations between banks and clients. The activity of the financial-banking institutions is influenced by market trends and market dynamics, influencing the strategies of banks, generating thus, a mutual exchange of streams, with bidirectional active effects.
- the internal competition between different products and services offered by the same financial institution. It owes to the phenomenon of "cannibalism" that takes place between the products/services offered by the same bank.
- integration of the distribution channel. Requires the existence of an effective distribution network, both numerically, and the range of products and financial services offered.

In recent years a number of factors have significantly affected the financial-banking services market, with a major impact on the client-bank relationship: change consumer behavior; new policies of the state and government intervention; technological innovations; environmental protection.

Customer expectations have varied from one year to another, as a result of the evolution of lifestyles, driven by increasingly living standards, high degree of urbanization, the extension of the life-time.

The allocation of some important resources for new technologies in order to replace expensive labor, led to technical progress in the field, that accelerates the economic processes and keep under control large-sized databases about customer transactions, working around the world.

Among technological innovations, with financial application, you can enumerate:

- The introduction of plastic cards, which has simplified the system of payment in the economy;
- Adaptation of the mobile and fix system, in order to perform various operations (deposits, transfers, credits);
- Virtual banks appearing on the Internet offering banking products and services by electronic environment.

Due to these specific factors of the financial - banking market, for the financial institution the concept of market orientation and customer acquires the following meaning:

- the financial institution successfully meets client's financial needs through measures designed to identify new needs, to reshape financial products and services, to develop and introduce products and services to constantly create new needs;
- the financial institution has an organizational structure and operational flexibility that allows continuous adaptation to the financial needs of customers.

Customer problems tend to become the basis for developing new products, creating in addition other needs, because as long as it is asked to solve these problems, it can not give new ideas. Bank needs to match customer requirements.

Potential objectives of promoting the banking and financial services:
[Lovelock(2001), pag. 295]

- Creating memorable pictures of the bank and its services;
- Informing and raising awareness of unfamiliar public service;
- Creating service preferences communicating about its strengths;
- Encouraging test by offering promotional incentives;
- Familiarity with a customer before the service provision;
- Educate customers in the use of a service to obtain maximum benefit;
- Informing customers about delivery times best to avoid congestion;
- Resolve all customer complaints;
- Reducing uncertainty and risk perceived by customers by providing information and advice at any time;
- Recognize and reward your best customers and employees;
- Reposition permanently based services field;
- Provide guarantees.

An effective marketing strategy means addressing especially the customers, and competitors. Elements underlying the success of the marketing strategy plan aim both customer knowledge (demographics, motivations, needs, criteria taken into account in decisions about the use of financial products and services) and on the competition (such as financial institutions - banks, number, peculiarities in the SWOT analysis of competitors and so on).

Although in the activity of various banks are a number of similarities, it is impossible that two financial institutions to have an identical strategy. Regardless of type, the success achieved in its implementation is not in the long run, because it is taken quickly by competing banks.[Forțu(2011), pag.32]

The formulation of strategic options is based, on one hand on the market analysis, on the sector the bank operates and on the other hand, the need to identify sustainable competitive advantage and customer needs. Thus, the main objective of the financial institution is complete satisfaction of clients ' needs, in terms of profitability. If the product is not suitable for the requirements or is not available at the right place and at the right moment, "meeting" with the customer and his needs will not be achieved. If the price is set wrong, the bank cannot make profit (in case of return to a relatively low price) or the consumer does not use that product or service, with the same effect on the profitability of the bank. In practice, the four aspects (4Ps), cannot be addressed separately, they are permanently related.

Clients tend to become less loyal to the main bank and more willing to work with more than one credit institution, although to a large extent, they are satisfied with the one they are currently working with.

According to a study performed by Ernst & Young titled Global Consumer Banking Survey [<http://www.ey.com/GL/en/Industries/Financial-Services/Banking>] at the global level, the number of those who are clients of one bank has dropped to

31% in 2012, from 41% in 2011, while the number of those who work with two or three banks increased from 21% to 32% during the same period. This trend of multi-bankarization was due to the customer needs to get better rates (34%) and better services (34%). Globally, only 44% of customers state that their banks are trying to adapt the products and services to meet their needs. 70% of customers would be willing to provide more personal information, if this would improve the level of services and products they are using.

Due to accessibility at all time and comfort offered, internet PC home banking is becoming increasingly popular among the customers who make simple transactions. However, meetings at the agencies with the financial advisers remains essential for the overall level of satisfaction of clients, especially for complex transactions.

Customers want the flexibility to use different channels for different types of transactions or interactions with the bank, at different times during the week and appreciate the convenience interaction with the bank rather than access through a particular channel of distribution.

Customer loyalty programs are increasingly common. 27% of respondents say they are enrolled in such a scheme, 50% more than in 2011. However, customers expect more, the overwhelming majority being of the opinion that the use of three or more products from the same bank should attract enhanced services (86%), lower fees and better interest rates on savings accounts (91%).

Consumers appreciate very much the information and advices coming from the people they know and trust. Globally, the majority of consumers (74%) base on the recommendations of their group to get information about the bank, products and services. Moreover, 55% of consumers use online communities and social networks or advice.

Web sites that compare products, relatively unknown five years ago, now represents the second major source of information, influencing decisions to customers, outpacing the bank staff.

Social networks are also used to interact with the bank, one-third of clients used social networks to comment on the topic of who benefited and even have encountered to others in order to convey interesting offers.

In the survey were questioned 28.560 individual clients of the banks from 35 countries around the world.

The Romanian banking system is dominated by banks with foreign capital, which must meet both the requirements of the regulations in our country and in particular the requirements imposed by the supervisory bodies of the parent banks subsidiaries of our country will choose in most cases on the decrease of crediting or maintaining exposure to the same level. It can be said that from this point of view Romania is exposed to risk in its approach to ensure sustainable development and to achieve the convergence of its membership to the EU.

By applying proactive governmental policies, "*forward looking*" is necessary to conduct an analysis of such unfavorable scenario (resulting from the possible strategy

and business plans of global and regional banks with a presence in our country) and to avoid the situation when it becomes reality. In such circumstances it takes measures and alternatives to ensure the continuity of funding of the national economy (and population).[<http://www.bnro.ro/>]

Although the banking system shows a high degree of connectivity to the European banking system, the market share in terms of assets of banks with majority foreign capital continued to decrease to 81, 2% at the end of the first semester of 2012, on the base of active fixed selling and underperforming.

The majority of the Austrian-owned banks hold, similar to previous years, the largest market share (38% in June 2012). Group of banks with majority Greek capital has reduced the market share of 16.3% to 12, 9%, being sub-ranked of the Romanian capital banks, whose share in aggregate assets increased to 18.3%. [<http://www.ziare.com>]

From the point of view of the countries owning fund shares in capital of domestic banks and branches of foreign banks, by the end of 2011, the first three positions were still occupied by Greece (22, 9%), Austria (20.8%) and at large distance, Netherlands (11.5%).[<http://www.ziare.com>]

The banking sector in Romania has recorded a loss of 777, 3 million in 2011 and \$ 192 million in the first half of 2012. In general, the positive financial results have been obtained by the big banks.

4. Conclusion

Increasing competition in the banking system and the economic instability throughout the country, requires increasing efforts to adapt to environmental changes and maintain or strengthen the position on the market. The consistency and effectiveness of these efforts can be obtained only by targeting all activities in a modern vision of marketing. Banks that will best understand that success is a result of meeting the needs and requirements of the customers and will be able to induce this conviction at the level of each employee, will be able to create an organizational culture in this respect, will be the ones that will hold the best position in the market.

References

Teodora Barbu, Georgeta Vintilă, Dan Armeanu, Mihai Nedelescu, *Aspects of bank recapitalization, and it's impact on capital markets*, Annals of DAAAM for 2010 & proceedings of the 21th International DAAAM Symposium, Editura: DAAAM International Vienna 2010, Vienna, 2010, pag 291-292, ISSN 1726-9679

Iacob Catoiu, Tudor Edu, Costel Negricea - *The identification of the marketing approaches used in the Romanian banking sector – A market research*, Revista Economica, Marketing, Commerce and Tourism and a New Paradigm of Change, Supliment nr.3/2012

Cristina Stănescu, Mihai Nedelescu, *Developments in the Romanian Banking System*, Romanian Economic Business Review, Vol. 5, Issue 4-1, 2010, Romanian American

University, pag 97-103, ISSN 1842-2497, Specificatie BDI: EconLit, IDEAS, RePEc, EconPapers, Index Copernicus, Cotare CNCSIS: B +, pag.100

<http://www.hotnews.ro/stiri-arhiva-1231514-dobanzile-mici-cresc-serviciile-bancare.htm>

Mihai Nedelescu, Cristina Stănescu - *Produse și servicii bancare*, Editura Universitară, București, 2012, ISBN: 978-606-591-329-5

<http://www.wall-street.ro/articol/Marketing-PR/8354/Modernitate-vs-traditie-in-comunicarea-bancara-corporativa.html>

Hooman Estelami – *Marketing financial services*, Dog Ear Publishing, Indianapolis, 2007

Ioana Borza (Plăiaș) – *Studiu privind mixul de marketing bancar*, Teza de doctorat, București, 2005

Valerică Olteanu – *Marketing financiar bancar*, Editura Ecomar, București, 2005

M.Badoc – *Marketing management pur les societes financieres (banques, societes d'assurances)*, Edition d'Organisation, Paris, 1995

Christopher Lovelock - *Services Marketing*, Prentice Hall, 2001

Andreea Forțu – *Marketingul produselor și serviciilor financiar bancare*, Teza de doctorat, Universitatea Transilvania din Brașov, 2011

<http://www.ey.com/GL/en/Industries/Financial-Services/Banking---Capital-Markets/Global-consumer-banking-survey-2012--The-voice-of-todays-banking-customer>

<http://www.bnro.ro/Rolul-sistemului-bancar-din-Romania-in-reluarea-cresterii-economice-6092.aspx>

<http://www.ziare.com/bani/banci/bancile-in-2012-sute-de-sucursale-inchise-mii-de-angajati-concediati-1190742>

<http://www.ziare.com/bani/banci/bancile-cu-capital-majoritar-strain-au-peste-80-la-suta-din-piata-locala-1176400>

INTERNATIONAL SERVICES TRADE UNDER THE ECONOMIC CRISIS

Laura Cristina Maniu,
and Andreea Marin- Pantelescu*

Abstract

This paper presents the global evolution of trade in services compared with the one of goods in 2004-2011. The statistic numbers provided by WTO highlight the changes occurred during the economic crisis, in the hierarchy of the main exporters and importers of services.

The year 2009 represented an unfavourable period for international trade, but in the years 2010 and 2011 we can speak of a recovery, although the growth was slower in 2011 compared to the one in the previous year. In 2011, the growth rates of imports and exports of goods were lower than in 2010 (20% from 22% for imports and 19% from 21% for exports). As for the international flows of services, the growth rate in 2011 was 11%.

Keywords: services, trade, economic crisis, globalisation, economy

JEL Classification: F14, F20

1. Introduction

The globalisation of production and the trend of liberalizing the trade of goods also extended on services. Financial and information flows have facilitated the economic integration and the political closeness of states, have homogenized consumption needs of individuals. The services flows created both the logistical support of internationalization of economics and the economic policy instruments used in international trade liberalization.

“The globalization efficiently implemented, as was the case of the successful development of a large part of Eastern Asia, can contribute to pushing forward both developing countries and the developed ones” said Joseph E. Stiglitz (2008), winner of Nobel prize for economics.

Information technology and awareness of the importance of efficient services, especially manufacturing, are elements that have equally influenced the development of the tertiary sector to a large extent, so now this is no longer perceived as a consequence, but as a prerequisite for economic growth and development (Braga, 1996).

Many countries now allow foreign investment in newly privatized and competitive markets for key infrastructure services such as energy, telecommunications and transport. More people are travelling abroad for tourism

* Laura Cristina Maniu is Lecturer of Service Economy at the Romanian American University, Bucharest. E-mail address: laura.maniu@gmail.com

Andreea Marin-Pantelescu is Lecturer of Service Economy at the Bucharest University of Economic Studies. E-mail address: marindeea@yahoo.com

consumption, education, health services and also to provide a variety of services, from construction to software development. Thus, services represent the component of global economy which grows more and more rapidly, and trade and FDI (foreign direct investments) in services have recorded a higher growth than the trade of goods in previous years.

The demand for services has become more voluminous, more demanding, more informed, more homogeneous and more receptive to specialized companies' efforts to capitalize their offer and production capacities. All these have greatly contributed to expanding the range of services provided and speeding the pace of internationalization services transactions.

2. The impact of the economic crisis over the international services trade

Services contributes to more efficient use human resources material and financial needs of the population and society in general. It also stimulates growth, renewal and diversification of production of material goods and provide conditions for facilitating the distribution and consumption

Services that are customized by existing information can be enriched continuously so as to cover other needs of standard services, it is necessary to resort to some extent the action of outsourcing.

At the same time with increasing international trade, have emerged and have developed a number of tools to record their summary for a specified period. These tools are used by decision makers to develop trade policies, foreign policies, strategies and long-term financing, etc.. Balance of payments is the most important tool registration of claims and liabilities arising in the exchange of goods and services between one country and another due in a specified period (usually one year) and capital movements produced in the same period .

IMF defined ("Balance of Payments Manual", ed. 5th, 1994), the balance of payments is a statistical picture book as systematically recording all real flows, financial and monetary occurred among residents of an economy and the rest of the world during a period (usually one year). Are considered residents - domestic or foreign operators, natural or legal persons who live and operate normally and permanently in the country, including subsidiaries and branches of foreign companies. This category excludes embassies, consulates, international institutions and their representatives (included in non-residents). Basically, the difference between these two categories of operators envisages economic sense residence: the main center of interest or activity.

Individual categories of services are recorded in BOP: non-factor services balance of current operations (with international trade in goods), income from capital in two positions of the balance of capital movements (direct investments and other income from capital investments) , income from international labor migration heading remittances and government services in current transfers. Another aspect of international trade in services represents a slight decrease of the share of developed countries, with modest rates of growth in the share of developing countries and transition. According to the findings of James Hodge and H. Nordas, this is a result

of the liberalization of international trade in services. For developing countries the essential means of trading services is the mode 4 (presence of natural persons).

One reason for the existence of expensive and poor quality services in developing countries is relatively narrow market for these services. When supply is limited and demand is solvable, prices rise. Because there are few bidders, competition is limited and quality is poor.

There are always interrelated between market and goods market. Increase the volume of trade in goods, in recent years, spurred the trade in services.

The financial crisis will reduce export opportunities by reducing demand, especially for developing countries.

The size of exports with tradable services remains at a low level compared with the exports of goods.

In 2004 was recorded the highest growth rate of exports of goods (21.6%). Also, world exports with non-factor services experienced the highest growth rate in 2004 (20.8%). Over the next four years, the export of goods and tradable services exports experienced consistently from year to year.

Values for 2008 shows a slight increase in the volume of world exports (19.505 billion dollars), while the values for 2009 are declining, mainly due to lower volume of exports of goods.

**Table no. 1 The evolution of World Exports
of goods and services tradable 2004-2011**

Year	The world exports of good and services tradable (billion US \$)	World exports of goods (billions U.S. \$)	Growth rate over the previous year (%)	World exports of tradable services (billions U.S. \$)	Growth rate over the previous year (%)	The share of tradable services in total world exports (%)
2004	11429.9	9220	-	2209.9	-	19.3
2005	12958.4	10485	13.8	2473.4	12	19.1
2006	14890.9	12113	15.6	2777.9	12.4	18.7
2007	17241.5	13950	15.2	3291.5	18.5	19.1
2008	19505	15775	13.1	3730	13.4	19.12
2009	15528	12178	-22.8	3350	-10.1	27.51
2010	18901.4	15237.6	25.2	3663.8	9.4	19.38
2011	21349	17179	12.8	4170	13.9	19.53

Source: own calculations after World Trade Organization (WTO 2005-2012)

The year 2009 was a bad period for international trade, but in 2010 we can speak of a revival. Economic growth was more pronounced in the first half of the year and weakening in the second half of the year, when it was restricted mainly to the European Union because of the sovereign debt crisis that affected smaller euro area economies. However trade expansion was not maintained in 2010 and the following year due to the adverse impact of economic and financial crisis. International trade growth slowed considerably.

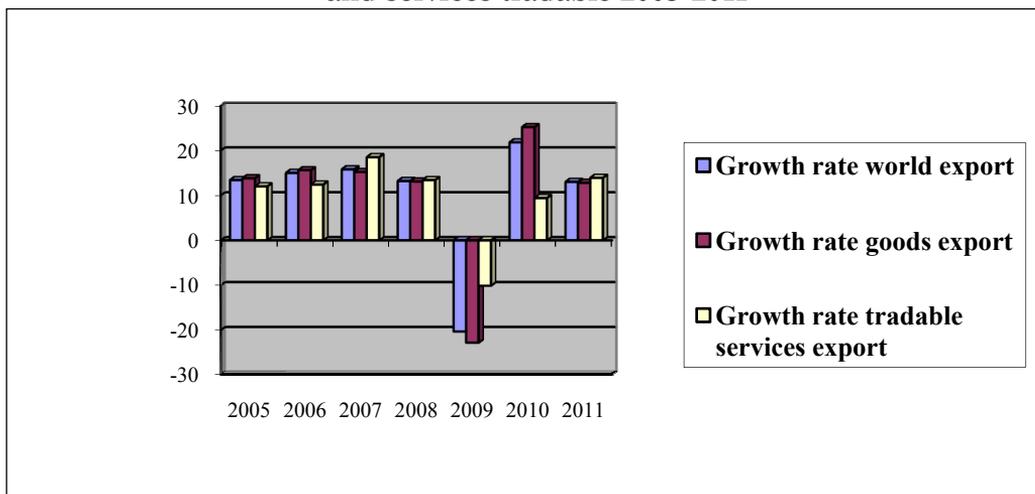
World exports of services totaled U.S. \$ 4.170 billion in 2011, representing a growth rate of 11% over the previous year. This increase over the previous year hide major differences in terms of growth rates in various regions and countries. In 2011, stands high growth rates for exports of services in CIS (19%: 15% transportation, 29% travel and 18% other services), Central and South America (13%: 15% transportation, 7% tourism and 17% other services), other regions of the world with growth rates approximately equal to the world average.

The evolution of international trade has been unequal during 2011, being marked by a succession of shocks, with what world economy faced. After the first trimester of 2011, they registered a very dynamic growth rate, international trade flows have been severely affected by the accelerated deterioration of global economic conditions, starting from the second half of the year 2011.

Services have kept unchanged the share of total trade in goods and services worldwide (of 20.22% in average of years 2004-2011).

In most regions of the world, the dynamic service flows exceeded the world average both exports and imports, except South America, Central America and Asia, where imports increased with 23% and 20% respectively. An impressive growth of services exports were recorded also Asia, thanks to China, whose exports of services increased (in 2010, the growth rate was 7.1% for export and 23.5% for import).

Chart 1: The evolution of world exports of goods and services tradable 2005-2011



From the beginning of 2004 until 2006, the growth rate of imports of goods and the service was quite slow, as in 2010 to reach the maximum of 21.4% for goods, and for services, 17, 8%. Imports has increased in countries in developing, representing the motor of recovery in external demand, contributing with 50% to the increase of global trade in 2010-2011, compared with 43% in average for the years 2004-2007, which preceded the crisis. During the economic crisis, imports of services in 2011 increased over the previous year from \$ 3510 billion to \$ 3955 billion dollars. Regarding the share of tradable services in total of world imports, it is also increasing in the past two years.

The year 2011, highlights a number of changes in terms of the growth rates of imports by regions and countries, distinguishing Central and South America (18%), CIS (19%), Brazil (22%), Switzerland (19 %), Russian Federation (23%) and China (23%). We can not overlook the dramatic decrease of exports and imports of tradable services in Asia compared with 2010 (from 23% to 11% for exports and 21% to 14% for imports), due to disturbances caused by the earthquake in global production networks and tsunami in Japan.

Table 3: Evolution of world imports of tradable goods and services in period 2004-2011

Year	World imports of tradable goods and services (\$billions SUA)	World imports of goods (\$billions SUA)	Growth rate comparing last year (%)	World imports of tradable services (mld.\$ SUA)	Growth rate comparing last year (%)	The share of tradable services in total world imports (%)
2004	11686,1	9569	-	2117,1	-	18,1
2005	13207,8	10857	13,5	2350,8	11,04	17,8
2006	15048,1	12428	14,5	2620,1	11,5	17,4
2007	17329,9	14244	14,6	3085,9	17,8	17,8
2008	19617,16	16127,16	13,3	3490	13,1	17,8
2009	15566	12421	-2,9	3145	-9,8	20,21
2010	18586,52	15076,52	21,4	3510	11,6	18,89
2011	19032	15077	0	3955	12,7	20,78

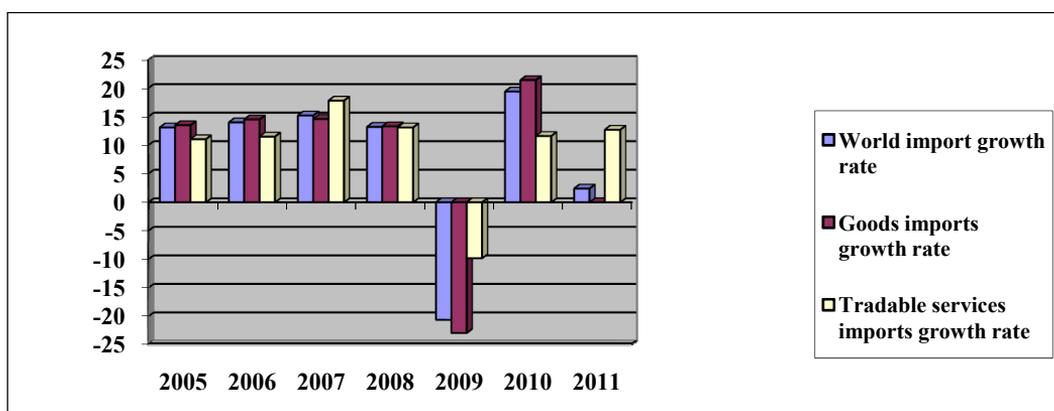
Source: own calculations on WTO - International Trade Statistics 2012

U.S. remains the most competitive country in the market of services and is the leading exporter and importer of services worldwide. In 2010, U.S. exports commercial services that worthed \$ 518 billion, representing 14% of world exports with services and imported services amounting to 358 billion dollars, a total of 10% from world imports of services. For the U.S. year 2011 was a benefic one in terms of trade in services, as exports increased in value (581 billion dollars), while imports of services reached \$ 395 billion. For 2011, the U.S. has the highest trade surplus in services worldwide of \$ 186 billion. United Kingdom took the place of Germany in

2011 in the top of the largest exporters of services, after the U.S.. The greatest contribution to British exports of services have the financial services and other business services category. China is the fourth in 2011, that has recorded a deficit of 55 billion dollars services.

The following positions among the largest exporters of services are occupied by France (4%), Japan (3.4%), Spain (3.4%) and India (3.3). India has managed in the last years to increase the volume of exports significantly (from 89.7 billion dollars to 137 billion dollars), and the balance of services is positive (13 billion dollars).

Chart 2: World imports of goods and tradable services evolution between 2005-2011



In 2011 there were some changes in the hierarchy of the main importers of services, but we might say not essential. First place was held by the U.S., followed by Germany (\$ 289 billion), China (\$ 237 billion), the UK (\$ 170 billion), Japan (\$ 166 billion), France (\$ 143 billion), India (\$ 124 billion) and the Netherlands (\$ 118 billion). As exporters, first 9 importers perform half (50.3%) of the purchases of services.

Table 4: Major exporters and importers of world trade in services in 2011

Position	Exporter	Val. (billion \$)	Share (%)	Annual growth rate (%)	Position	Importer	Val. (billion \$)	Share (%)	Annual growth rate (%)
1	USA	581	13,9	9	1	USA	395	10,0	7
2	UK	274	6,6	11	2	Germany	289	7,3	10
3	Germany	253	6,1	9	3	China	237	6,0	23
4	China	182	4,4	7	4	UK	170	4,3	6
5	France	167	4,0	15	5	Japan	166	4,2	7
6	Japan	142	3,4	3	6	France	143	3,6	9
7	Spain	140	3,4	14	7	India	124	3,1	7
8	India	137	3,3	11	8	Netherlands	118	3,0	12

9	Netherlands	134	3,2	16	9	Ireland	114	2,9	7
10	Singapore	129	3,1	15	10	Italy	114	2,9	5
11	Hong Kong, China	121	2,9	14	11	Singapore	114	2,9	18
12	Ireland	109	2,6	12	12	Canada	100	2,5	11
13	Italy	105	2,5	8	13	Rep.Coreea	98	2,5	3
14	Switzerland	94	2,3	15	14	Spain	93	2,4	8
15	Rep.Coreea	94	2,3	9	15	Russia	88	2,2	23

Source: WTO – *International Trade Statistics 2012*, p.30

Tradable services exports structure during 2007-2011 has not known significant changes. "Other services" were among the fastest growing components of trade in non-factor services. The share of this category in total exports increased from 51,2 in 2007 to 53,7% in 2011. This category includes beside buildings a range of services such as training, communications, personal services, entertainment and recreation, banking, insurance, etc. If we exclude trade in services conducted within the European Union and consider it a single entity, UE- 27 is the leading exporter and importer of tradable services sold worldwide. The following exporters of "other services" in top are the U.S. (\$ 352.3 billion), India (\$ 101.5 billion), China (\$ 98.3 billion), Japan (\$ 93.1 billion) and Singapore (\$ 72.7 billion). In North America, Europe and Asia, "other services" contributed more than half in tradable services exports in 2011. The percentage of this category of exports of services in North America was 59.5%. Unlike the "other services", the share of tourism in total exports of tradable services decreased from 26% in 2007 to 25.6% in 2011. Macao and China (\$ 38.5 billion) held the fourth position in 2011 among the largest exporters of tourism, increasing by 39%, surpassing Australia. China held the third position among the largest importers of tourism (\$ 72.5 billion), representing the largest increase since 2011 (32%).

Travels totaled 47.3% of service exports of Africa, 44.3% of the Middle East and 36.3% of Central and South America. The percentage increase in the Middle East (36.1% in 2005) was due to the rapid growth in tourism. The transports share in total exports of services in the period decreased from 23.7% in 2008 to 20.6 in the last year of analysis, due to the close connection of this category of services and trade with goods that have stalled in the second half of 2011.

Table 2.: Tradable services structure (%)

Tradable services exports	2007	2008	2009	2010	2011
Total, of which:	100,0	100,0	100,0	100,0	100,0
Transports	22,8	23,7	20,9	21	20,6
Tourism (Travel)	26,0	25,1	26	25,2	25,6
Other services	51,2	51,1	53,1	53,7	53,7

Source: WTO- World Trade in Commercial Services by Category, 2008-2012

Transport services increased by 9% in 2011 (totaling \$ 860 billion) in export and by 13% in import (\$ 1100 billion). Major exporters of transport services in 2011 were U.S. (\$ 78.9 billion), Japan (\$ 38.4 billion), Singapore and Republic of Korea (\$ 37.1 billion). The most significant growth compared to previous year is recorded in India (32%). China and the Russian Federation recorded the highest growth in imports of transport services in 2011 (27%).

References

- P. Braga. 1996. *The Impact of the Internationalization of Services on Developing Countries*, World Bank, Washington
- Cristiana Cristureanu. 2004 *Invisible economy. International transactions in services*, All Beck Publishing, Bucharest
- Joseph E. Stiglitz. 2008 *Mechanisms of globalization*, Polirom Publishing, Iasi
- J. Hodge, H.Nordas. 1999. *Trade in Services: The Impact on Developing Countries*, Chr. Michelsen Institute Publishing, Bergen
- A. Ghibuțiu. 2012. *Trends in International Trade Developments in 2011 and Prospects for 2012-2013*, World Economy Conjuncture 2012, IEM Publishing, Bucharest
- A. Ghibuțiu. 2012. *International Trade Developments in 2010 and Prospects for 2011*, World Economy Conjuncture 2012, IEM Publishing, Bucharest
- WTO. 2012. *International Trade Statistics*
- Gabriela Cecilia Stanciulescu, Marian Florin Busuioc, Monica Nicoleta Neacsu. 2010. *How to implement an effective environmental management using the reverse supply chains*, Metalurgia International vol. XV (2010) special issue no. 3, pag 59, ISSN 1582-2214

PARADIGM CHANGES IN THE INTERNATIONAL MANAGEMENT ENVIRONMENT AND IN THE ORGANIZATIONAL STRUCTURES¹

Georgiana Surdu,
Valeriu Potecea*

Abstract

Although the behavior of individuals in organizations has always been a topic of major interest both for researchers and for managers, the term "organizational behavior" is relatively new, but deserves to be emphasized that no organization will be successful if doesn't continuously adapts its managerial philosophies. One of the main challenges that face decision makers in companies who want to perform in the twenty-first century, whether logic is placed in management, leadership or corporate governance is related to a fundamental change in organizations, meaning an increasing complexity and dynamics and a turbulent environment in which they operate.

Keywords: management, organizational structures, organizational behavior

JEL Classification: M14, M16, L22

1. A wide perspective on the topic

In the XXI century, key resources are reported to abilities, intangible assets, tacit or explicit knowledge, intellectual capital, etc. Efficiency to which organizations are being led in the XXI century, will be influenced largely by the ability of managers to promote innovation, unconventional thinking, to distribute power among other members of the organization and especially the ability to build relationships of trust.

Both practically and theoretically, we are tempted to believe that in order to enter the global competition companies are forced to devote significant resources. And in certain circumstances it makes sense to think so. For example, to build an oil pipeline in Alaska entrepreneur must have a good financial capacity. On the other hand, smaller companies can succeed in a global economy, their strengths being proactive in addressing market and operational flexibility.

Companies operating internationally face a number of challenges, such as globalization of markets, maintaining standards of ethics and quality, consumer satisfaction, maintaining diversity, etc.

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* Georgiana Surdu is Assistant Professor of International Business at the Romanian-American University, Bucharest

Valeriu Potecea is Professor of International Business at the Romanian-American University, Bucharest

Given its external or internal factors, the organization tends through its life cycle to improve organizational structure, to flexible processes, to minimize costs etc. These changes that occur in the organization are designed to create optimal organization.

Through optimal we understand, as Explanatory Dictionary states "option that provides the greatest economic efficiency, that best suits pursued economic interests" and by optimizing we understand "improvement" or "finding the best solution for solving a particular problem."

2. Some theories and work frames

One of the theories that support organizational optimization process is that of Friedericke Taylor, which claims that these changes taking place within the organization should be based on concrete studies on the circumstances facing the company, in order to determine which method provides organization with best results. This approach of Taylor's scientific management statement applies to closed systems, analyzing only the functions of the organization.

On the other hand, Henry Fayol's approach focused on the design of the organization as a whole, it proposes principles like "every employee responds only to the upper one" (unity of command), or "similar activities within an organization should be grouped in one department " (unity of direction).

Both approaches, however, did not take into account the importance of context or external environment, which I believe is very important due to the complexity of international business. Many companies try to achieve a shift from hierarchical organizational structures to more flexible, decentralized and encourage horizontal collaboration, optimizing decision making and the organization's adaptability.

A team of researchers from Aston University, UK suggests that the size of the organization is the most important factor in the process of optimization. With this expansion (increase) of the organization appears a pressure from internal and external environment to become more bureaucratic, hoping in this way to control better the processes.

In my opinion, it is this tendency towards bureaucratization and centralization that proved fatal to many organizations. Looking from another angle I would say that these companies change their sizes becoming smaller or larger, with the internationalization process as a catalyst.

The same group of researchers at Aston University have checked whether similar companies in terms of size and organizational structure have similar behavior regardless of the country of origin and national culture. The study included seventy companies in the UK, U.S. and Canada and found that there is a similar behavior.

In my opinion, the cultures from which these companies come have a common core of development, very similar, which does not offer a major impact for the scientific approach. Would have been more relevant if chosen countries were culturally different, leaving other variables unchanged.

The American Professor John Kotter believes that organizations, regardless of size, are submitting to optimization process not only to become more efficient, but to survive in some changing markets. The basic rule in his view is "innovate or perish".

Table no.1 Comparison between twentieth century organizations and twenty-first century organizations (according to Kotter's opinion)

Twentieth century organizations	Twenty-first century organizations
Structure	Structure
Bureaucratic	Non-bureaucratic, with fewer employees and fewer rules
Multilevel	Fewer levels
Top-management must find solutions	Top management provides vision, employees solutions
Featuring policies and procedures that create internal complex interdependencies	Featuring policies and procedures that create internal minimum interdependencies being customer-orientated
Systems	Systems
Depends on the performance of several information systems	Depends on the performance of many information systems that provide special customer data
Share information only to directors	Share information to all employees
Provides training and support programs for management only	Offers training programs and support for many people in the organization
Organizational culture	Organizational culture
Internally oriented	Externally oriented
Centralized	With delegation
Slow decisions	Quick decisions
Closed	Opened
With risk aversion	With risk tolerance

Source: John P. Kotter, *The New Rules: How to Succeed in Today's Post – Corporate World*, New York, The Free Press, (1995)

There are other theories that address the issue of changes in the organizational architecture, among them we can mention *contingency theory*, which supports the study of events and situations and their influence on organizational structures and managerial behavior.

Another view is that of the *strategic choice approach*, which focuses on management decisions related to products and markets and their ability to influence the organizational structure. The underlying assumption of this approach is that the

organizational structure should serve for an optimum manner the organization's objectives, strategic decisions in international business, etc..

Contingency theory generated more research and studies, summarized as *"bureaucratic organizations, rigid, works best in a stable and predictable business environment, while decentralized organizations and less formal works best in an unstable environment and unpredictable business, as they allow the organization to adapt to unforeseen events and less fortuitous"*.

One of the analyzed topics, based on probability theory is the influence of external factors on the changes that occur in the organizational architecture, evaluation absolutely necessary when identifying the optimal structure is expected. Research in this field started in 1961 with Burns and Stalker's research, claiming that the best organizational structure can be obtained taking into account external factors of the organization. In 1967 Lorsch and Lawrence argued that organizations recorded the best results when there is a match between the organization's internal and external environment. The research of these authors have shown some common points:

- The focus is on the organization's external environment, internal environment is very little explored;
- Organizational design elements adapted to the external environment leads to better performance;
- There is no optimal organizational structure that suits all circumstances and to meet all requirements.

We can say that contingency theory is based more on reactive motives, adaptation and change coming from outside. If we look at contemporary dynamic business environment, we can say that contingency theory is largely one obsolete, more suited is the strategic approach, which involves focusing on influence strategic decisions and proactive thinking on the markets. In my opinion, an organization that is content just to observe market trends and movements competitors long without having a modern and well articulated own strategy will fail in the long run.

Although some authors, promoters of the situational theory considers strategy as "the process by which an organization adapts to external environmental pressures, but without being able to influence" the theory of strategic approach emphasis is more on the active role of leaders who have a strong impact on organizational design and their ability to meet some incidental factors

Thomas Peters and Robert Waterman argue that *"diagnose and solving organizational problems means looking for answers not only structural reorganization, but within a framework that includes structure and several of related factors."*

In the same paper and in subsequent studies, the authors cited claim that *"the complexity and multiple demands of competition, organizations simply cannot handle decisions in an entirely rational manner. No wonder, then, that a single blunt instrument such as organizational structure cannot be a major tool to change the organization generating the best effect"*.

Herbert Simon predicts several themes that dominate much of today's thinking on the organization and organizational structures. Simon's proposal to use the concept of "adequate solution" instead of "optimal solution" and the "limits of rationality" were actually pillars of this new economic trend of thought. His ideas are crucial. Economic paradigm has influenced not only for economist behavior, but also helped redefine the operational philosophy of the business organization as a whole. He argues that the most pressing challenge for managers is how to organize better, to maximize efficiency is obtainable within the organization.

Old division structure was one that judged between production and sales. This structure has been called functional organization. Some principles of organization, such as a man / a boss, limited range control group on activities, appropriate authority and responsibility, seemed universal truths.

What happened with this simple idea? Under the impact of the changes that have occurred in the business environment, companies have had to face new challenges fueled by their increasing size and complexity. For example, a company like General Electric, in a period of only eighty years has seen increasing size over a thousand times, both in terms of turnover and earnings. Much of the downsizing was achieved by entering into new sectors. At a certain level of size and complexity, functional organization, which is dependent on frequent interaction between all activities, may face many problems risking bankruptcy. As the number of people or businesses increases in arithmetic progression, the number of interactions needed to make things work grows in geometric progression. A company reaches a certain size and complexity exceeds a certain threshold must carry out decentralization to face new challenges.

3. Conclusions and perspectives

Today there are many types of organizational structures that companies can choose. Theory and practice in the organizational structure segmentation have established new vectors such as function, product, market, geographic, strategic business unit, etc. Reality has shown that as you add new dimensions, old ones don't disappear.

According to the author Helen Deresky, organizational structures must be optimized to keep up with the process of internationalization and international competition. In his view, the major variables for change are: business strategy, size, technology and culture available to countries where the organization operates. Optimizing organization is complex and difficult to achieve and usually dislikes managers.

In my opinion, the challenge facing contemporary organizations is how to implement that change that will affect the least the organization's ability to improve performance. Change is vital for contemporary organizations that want to succeed in the century we are in already over a decade. Change management is now a core competency for all organizations, not just those facing structural problems or financial. Regardless of the industry in which it operates, all organizations will need

to create new rules and identify players who will help them progress in the foreseeable future.

Reality shows that can transform how the organization can manage change and cannot be prescribed by any management model. It proved extremely difficult to give a clear answer about the optimal size of the company, at the time when action must be taken or the type of strategy that a company should follow to succeed.

Future organizations will need to create a more dynamic and flexible environment, in terms of structure and organizational culture, in order to face aggravated global competition, to changes taking place in the economy and in society, especially those induced by continuous innovation.

References:

- Achcaoucaou Fariza, Bernardo Merce, Castan Jose, *Determinants of Organisational Structures: An Empirical Study*, Review of International Comparative 566 Management, Volume 10, Issue 3, (2009)
- Burns Tom, G. M. Stalker, *The Management of Innovation*, Tavistock Publications (London) (1961)
- Child, J. (1972) "Organizational Structure, environment and performance: the role of strategic choice", *Sociology*, 6(1):1-22
- Daft Richard, Jonathan Murphy, Hugh Willmott, *Organization, Theory and Design*, South-Western, 2007
- Deresky Helen, *International Management, Managing Across Borders and Cultures*, Seventh Edition, Pearson (2011)
- Hickson D, Hinings C, McMillan C, Schwitter J, *The culture free context of organization structure: a tri-national comparison*, *Sociology*, Vol 8, No 1, 1974
- John P. Kotter, *The New Rules: How to Succeed in Today's Post – Corporate World*, New York, The Free Press, (1995)
- Kanigel Robert, *The One Best Way- Friederick Winslow Taylor and the Enigma of Efficiency*, New York, Viking, 1997
- Lawrence, P., Lorsch, J., "Differentiation and Integration in Complex Organizations" *Administrative Science Quarterly* 12, (1967), 1-30.
- Simon, H. A. (1997). *Administrative Behavior*, 4th Edition. Free Press
- Waterman Robert, Thomas J. Peters, *Structure is not organization*, *Business Horizons*, June 1980

OPTIMIZING THE MARKETING MIX - AN ESSENTIAL ELEMENT IN DEVELOPING COMPETITIVE STRATEGIES IN THE FIELD OF HIGHER EDUCATION

Monica Paula Rațiu,
Emanuela Maria Avram*

Abstract

The reason why marketing strategies were implemented in the field of academic activities, where intangible goods are being provided, was the similarity between these and the field of service provision. Higher education aims at preparing specialists in all fields of activity so as they can successfully meet the increasingly sophisticated labor and thus universities contribute significantly to the achievement of this desideratum and to the enrichment of knowledge in order to ensure social development. In this context, the present study emphasizes the 7 elements of the academic marketing mix by using a series of concrete examples. Given the fact that the main purpose of the implementation of the marketing strategies in the academic environment is that of facilitating the orientation of higher education institutions towards the market, after the elaboration of this paper, we have concluded that the academic marketing mix in higher education services is a concept which needs to be developed so as to ensure the academic success on a competitive market and to develop strategies to attract quality students, in this way higher education institutions being able to fulfill their mission to prepare specialists in all fields, thus providing education and contributing to the scientific development through their research.

Keywords: university, marketing mix, education services, strategy.

JEL Classification: M31, I23

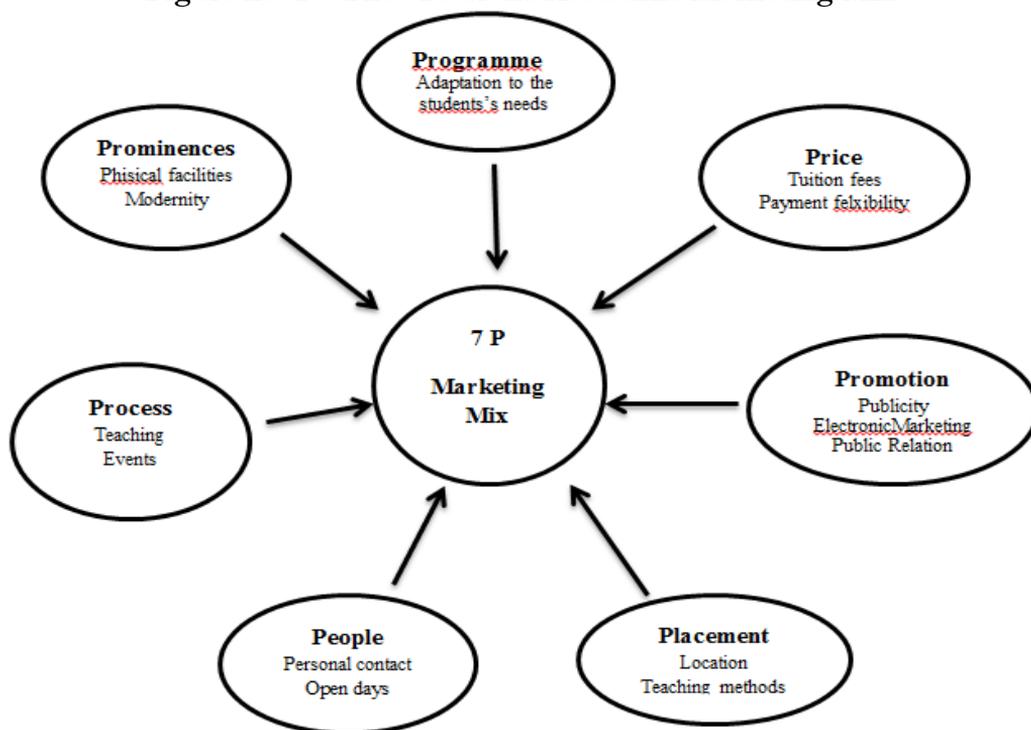
Introduction

In a society where competition is increasing, higher education institutions, more than ever, are developing and implementing marketing strategies meant to lead to the attainment of long-lasting competitive advantages. The existence of “*an external marketing and a provider-client relation marketing* alongside an internal marketing in the field of services, determined various specialists to propose the addition of another 3Ps to the existing 4Ps: *personnel, procedures and physical evidence.*” (Kotler, 2004, p. 275). Kotler and Fox (1995) identified the 7 elements of the marketing mix in the

* Monica Paula Rațiu – PhD, Associate Professor of Strategies in tourism and services at the Romanian-American University, Bucharest. E-mail address: monicapaularatiu@yahoo.com
Emanuela Maria Avram - PhD, Assist. Lecturer of Marketing at the Romanian-American University, Bucharest. E-mail address: emanuela.maria@yahoo.it

education field: *programs, tariffs, location, promotion, physical facilities, personnel and education processes*, as one can see in figure no. 1 below where the 7Ps of the academic marketing are presented.

Figure no. 1 – The 7Ps of the Academic Marketing Mix



Source: *Adaptation after – Ivy J. (2008) - A new higher education marketing mix: the 7Ps for MBA marketing*, The International Journal of Educational Management, vol. 22, no. 4, ISSN: 0951-354X, p. 294.

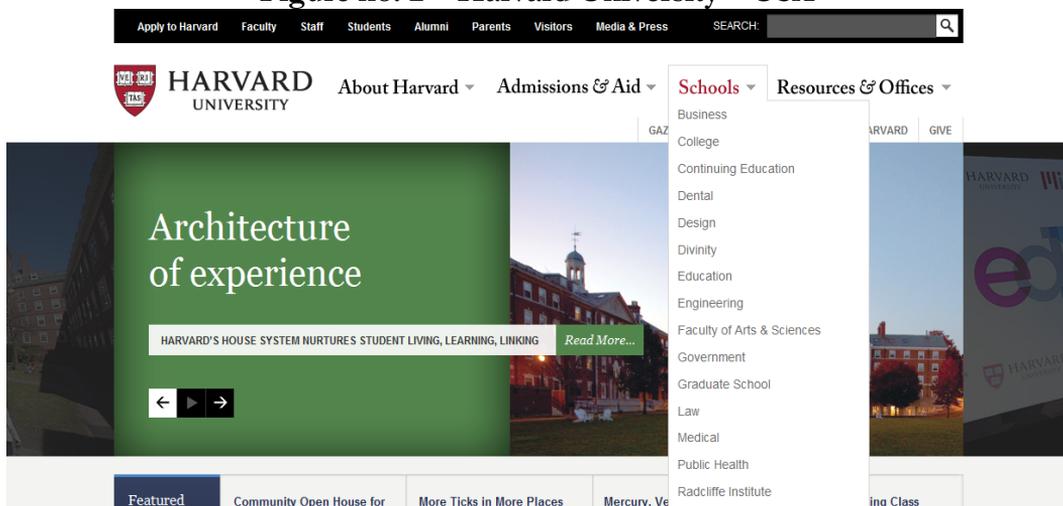
It can be noticed that in the area of services, to the 4Ps of the traditional marketing mix, i.e. product, price, placement and promotion, another 3Ps specific to this area are added: personnel, processes and prominences.

Based on the above-mentioned, this research, made of two parts, seeks to present the specificity of marketing mix in higher education services as an essential element in developing competitive strategies in the field of higher education. The first part describes the traditional elements of the marketing mix, the second part deals with the elements specific to the area of services and the final part is made of conclusions and propositions.

1. The traditional elements of the higher education marketing mix

”The concept of Marketing Mix was debated by McCarthy in 1960” (El-Ansary, 1974, p. 553) who introduced the 4Ps: product, price, placement and promotion. *The academic product* – the first element of the marketing mix in a higher education institution, whose main component are the **study programs**, is an extremely complex notion, representing what is subject to consumption, an ensemble of benefits destined to satisfying the knowledge needs existent in society. The most important decision universities have to make is that referring to the development of these so as to satisfy the needs of the higher education consumers. (Soedijati, Pratminingsih, 2011, p. 2125) Worldwide universities have developed extremely different study programs, concerning all fields of activity and areas of interest. In what follows, we shall exemplify the study programs developed by some universities classified by ARWU (The Academic Ranking of World Universities) as having the highest performance rates in 2012 (<http://www.shanghairanking.com/ARWU2012.html#>), based on data availability.

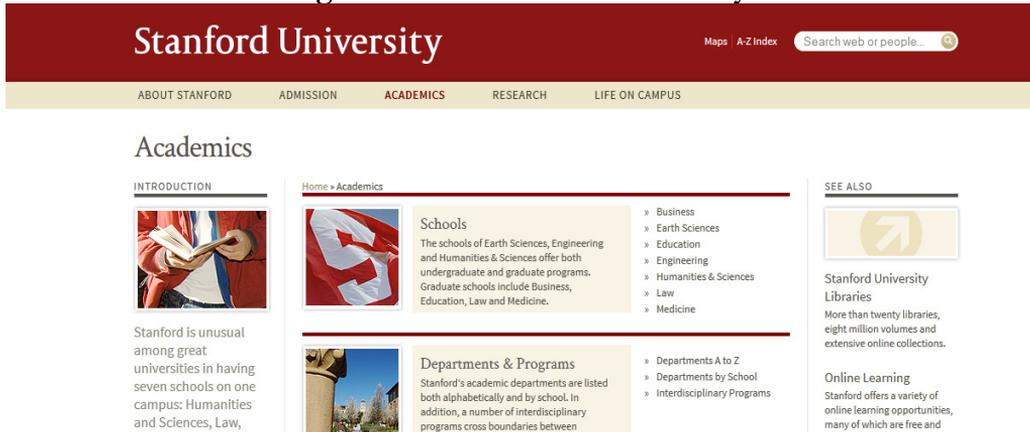
Figure no. 2 – Harvard University – USA



Source: <http://www.harvard.edu/>

Harvard University is one of the oldest higher education institutions in the United States, founded in 1636. (<http://www.timeshighereducation.co.uk/world-university-rankings/>) It offers extremely diversified study programs: business, engineering, education, design, law, medicine, public health, etc. Therefore, the university meets the education needs existent in the society through its varied offer. This provides the youth eager to become specialists a series of study programs such as: business, design, engineering, law, medical sciences, public health, etc.

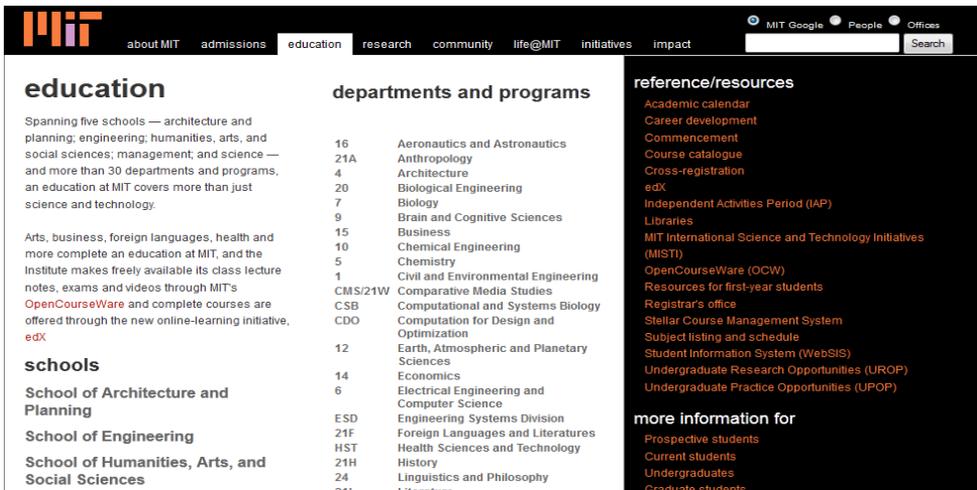
Figure no. 3 – Stanford University



Source: <http://www.stanford.edu/academics/>

Stanford University, located in San Francisco and San Jose, is one of the most prestigious research and education centers in the world, founded in 1891. (<http://www.stanford.edu/about/>) The study programs offered by this higher education and research institution are very diverse and include domains such as: business, earth sciences, education, engineering, human sciences, law and medicine.

Figure no. 4 – Massachusetts Institute of Technology University



Source: <http://web.mit.edu/education/>

Massachusetts Institute of Technology is an education and advanced research institution, which offers various study programs, preparing therefore specialists in: architecture, engineering, human sciences, art and social sciences, management, aeronautics, anthropology, biology, economy, chemistry, mathematics, music and theatre, political sciences, urban studies, etc.

The second element of the marketing mix is the **price**. In higher education, this refers to the amount of money which individuals pay for benefiting from academic activities and thus both students and their parents take into account the financial implications of higher education. (Soedijati, Pratminingsih, 2011, p. 2125) Tuition fees represent an income for the university, but at the same time, they indicate students' perception regarding quality. (Ivy, J., 2008, p. 289). **Harvard University**, one of the most prestigious higher education institutions in the USA, has established for the 2012-2013 academic year the following fees and expenses for academic studies – see table 2.1:

Table no. 1 – Tuition fees – Harvard University

Fees / academic year		
Full-time student	Fee / academic year	\$38.480.00
Part-time student	Fee / academic course	\$ 4.810.00
Doctoral studies advance fee	Fee / academic year	\$ 3.848.00
	Fee / semester	\$ 1.924.00
Health fee	Fee / academic year	\$ 3.098.00

Source: http://www.gse.harvard.edu/admissions/financial_aid/tuition/

As one can see in the table above, at Harvard University tuition fees are very high as compared to other European or Romanian universities, these varying between \$3.098 and \$38.480 for an academic year.

In table no. 2.2 below one can see the tuition fees from Stanford University for the 2012-2013 academic year.

Table no. 2 – Tuition fees – Stanford University

Student Budget		
2012–2013 Academic Year		
Budget Item		\$ Per Year
Tuition	?	41,250
Room and Board	?	12,721
Books and Supplies	?	1,500
Personal Expenses	?	2,400
Orientation Fee	?	438
Campus Health Service Fee	?	537
Travel	?	Varies
Total		\$58,846

Source: <http://www.stanford.edu/dept/finaid/undergrad/budget/index.html>

The level of the tuition fees in the 2012-2013 academic year is \$58.846 and represents the following: tuition (\$41.250), room and board, books, personal expenses, orientation fee, medical care and travel. As regards the tuition fees at Massachusetts Institute of Technology for the 2012-2013 academic year, these are divided on seasons: \$13.920 in summer and \$20.885 in autumn and spring. (<http://web.mit.edu/registrar/reg/costs/>)

For transmitting academic activity-related information, higher education institutions use **promotion** strategies which help them in publicizing themselves among the public and in attracting potential students by means of promoting the education offer, public relations, efforts to attract students and doors open day. (Ivy, J., 2008, p. 290) The student as a higher education consumer cannot address to an unknown institution. In fact, the promotion policy provides *introductive* information, which helps in making a first impression of a certain university and its advantages and that is why the youth must be encouraged to try. As regards *reminding*, this is necessary for determining students to act according to the institution's interest, especially when the offer is time-limited - for instance applying for a university's admission exam. (*Adaptation after* - Cetină I., Brandabur R., Constantinescu M., 2006, p. 206)

In higher education, **placement** refers to the way in which the academic offer must be distributed so as to exceed consumers' expectations, as well as to the virtual access to didactic materials, to the possibility of distance learning (Ivy, J., 2008, p. 290) and to the availability degree of study programs which must satisfy students.

Therefore, the 4Ps of the traditional marketing mix exert a powerful impact on the performance of the academic environment and that is why the potential consumers of education services pay a great deal of attention to these elements when making the decision of enrolling on the courses of a university. In what follows we shall present the 3Ps specific to the area of services.

2. The elements specific to the marketing mix in higher education services

The similarity of the academic activities to those in the field of services makes possible the consideration of another 3 elements specific to the marketing mix, such as: personnel, education processes and physical facilities.

In their activity, higher education institutions need a well prepared **personnel**, i.e. academic staff and related-academic staff, capable of doing their work at high quality standards. The academic success is associated with the personnel because consumers are constantly evaluating employees' quality based on the interaction with them. (Soedijati, Pratminingsih, 2011, p. 2126) At the same time, the academic success depends mostly on the personnel's quality and especially on its research performance, mirrored by the relevance of the published articles, books and different specialty studies, as well as by the participation in scientific conferences with the purpose of disseminating information.

The higher education process represents another element specific to the marketing mix in higher education services which enables the student to benefit from the chosen activities, contributing thus to the formation of his/her experience regarding what he/she is being offered. In these processes there is a direct, i.e. face-to-face, provider-beneficiary relationship. For education processes, especially for the teaching ones, to be at high quality standards, the university needs certain **physical facilities**, which in a higher education institution refer to the totality of tangible elements that contribute to the good development of the academic activities. (Soedijati, Pratminingsih, 2011, p. 2126) These are responsible for creating a first impression among students regarding the university when they enter for the first time the premises of the academic campus. In this context, the relevant elements are: the modern aspect of the building, modern equipment, various lecture and seminar rooms, a well-equipped library, different specialty laboratories, recreation areas, a gym and a cafeteria.

Conclusions and propositions

By elaborating the present paper we have tried to improve the knowledge referring to the marketing mix which can be implemented in higher education services as prerequisite to jointly develop competitive strategies for higher education institutions. The 7 elements of the marketing mix in higher education defined by Kotler and Fox (1995): *programs, tariffs, location, promotion, physical facilities, personnel and education processes* were transposed by Ivy J. (2008) in the 7Ps specific to the field of higher education: programs, price, promotion, placement, personnel, processes and prominences. As Gajić J. (2012) points out "the main purpose of marketing in higher education institutions is that of defining the quality of the education system, of providing a market-orientation and services with social advantages in order to satisfy the education needs" (Gajić, 2012, p.30) existent in society. For the achievement of this desideratum it is necessary to develop the elements of the academic marketing mix, because these will ensure the success on a competitive and globalized market.

"The increasing costs of education and the increasing competition among higher education institutions both nationally and internationally force universities to adopt market-oriented strategies in order to differentiate their services from those of the competition in order to attract as many students as possible." (Butt B. Z., Rehman K.U., 2010, p. 5447) Therefore, the marketing mix strategies developed by universities' „differ from public universities to private ones, having a special importance within the second field." (Mainardes E.W., Alves H., Raposo M., Carvalho de Souza Domingues M.J., 2012, p. 57) That is why the promotional strategies "have a central place that help higher education institutions to become prosperous in a open and competitive environment" (Frølich N., Stensaker B., 2010, p.359) In this context, developing marketing strategies to help increase student

satisfaction in college years is a precondition for their retention within the future study cycles as "student retention is considered an indicator of their satisfaction" (Butt B. Z., Rehman K.U.,2010, p. 5447) and in general of the academic success.

Given these reasons, we conclude that in a business environment where only the strong survive, by developing appropriate marketing strategies, higher education institutions will be able to conquer the market and to captivate students, and also fulfill their mission - to prepare specialists in all fields, thus providing a superior education. In the end, high-quality education is reflected in students' professionalism.

References:

Butt B. Z., Rehman K.U., 2010. "A study examining the students satisfaction in higher education," ELSEVIER, *Procedia Social and Behavioral Sciences*, vol. 2, pp. 5446–5450

Cetină I., Brandabur R., Constantinescu M., 2006. *Marketingul serviciilor*, Ed. Uranus, București, ISBN 973-7765-24-9

Dumitrescu L., Apostu C., 2009. *Marketingul și Calitatea Serviciilor*, Ed. Expert, București, ISBN 978- 973-618-201-3

El-Ansary A. I., 1974. "Societal marketing: A Strategic View of Marketing Mix in the 1970's", *Journal of the Academy of Marketing Science*, Fall 1974, Vol. 2, No 4, pp. 553, ISSN 0092-0703

Frølich N., Stensaker B., 2010. "Student recruitment strategies in higher education: promoting excellence and diversity?", *International Journal of Educational Management*, Vol. 24 Issue: 4 pp. 359 - 370

Gajić J. 2012. "Importance of marketing mix in higher education institutions", *Singidunum Journal* 2012, 9 (1), pp. 29-41, ISSN 2217-8090

Ivy J. 2008. "A new higher education marketing mix: the 7Ps for MBA marketing", *The International Journal of Educational Management*, vol. 22, no. 4, ISSN: 0951-354X, pp. 294.

Kotler, Ph., Fox, K., 1995. *Strategic Marketing for Educational Institutions*, New Jersey 07632, Prentice-Hall, Inc., Englewood Cliffs, ISBN 0-13-668989-2

Kotler Ph. 2004. *Marketing de la A la Z*, Ed. Codecs, București, ISBN: 973-8060-66-4, pp. 121.

Mainardes E.W., Alves H., Raposo M., Carvalho de Souza Domingues M.J., 2012. "Marketing in higher education: A comparative analysis of the Brazil and Portuguese cases", *International Review on Public and Nonprofit Marketing*, vol.9, pp. 43–63

Soedijati E. K., Pratminingsih S. A., 2011. "The impacts of marketing mix on students choice of university study case of private university in bandung", *Indonesia, 2nd International Conference on Business and Economic Research (2nd ICBER 2011) Proceeding*, pp. 2124-2131, ISBN 967-5705-02-1

<http://www.shanghairanking.com/ARWU2012.html#>
<http://www.harvard.edu/>
<http://www.timeshighereducation.co.uk/world-university-rankings/>
<http://www.stanford.edu/academics/>
<http://www.stanford.edu/about/>
<http://web.mit.edu/education/>
http://www.gse.harvard.edu/admissions/financial_aid/tuition/
<http://www.stanford.edu/dept/finaid/undergrad/budget/index.html>
<http://web.mit.edu/registrar/reg/costs/>

A DARK SCENARIO FOR ROMANIA'S PENSION SYSTEM FUTURE: FERTILITY, MORTALITY AND MIGRATION REMAIN THE SAME.

Răzvan Bărbulescu¹

Abstract

The paper tries to forecast some of the issues of the pension funds and sustainability considering a scenario of constant age specific fertility and mortality in Romania for the next 50 years. Considering the issues that population ageing brings, we show that if nothing happens in Romania with the demographic indicators, we're heading towards huge problems. The first problem we'll experience is the lack of sustainability of the Romanian pension fund. This will increase deficits and lead to a debt spiral that is hard to stop, especially when confronting with an old population, high taxes that don't attract migrants and the lack of capital.

Keywords: Population Ageing, Demographic Decline, Pension Fund

JEL Classification: E27, R23, J13, J14

1. Introduction

Romania has started the demographic transition during the 1960s'. Since then, with a small outlier due to the 1966 Decree, the fertility in Romania has been decreasing. After 1990, Romania's fertility dropped to very low levels. Today we're in a situation where, due to the decreasing base, the age specific fertility would need to grow exponentially in order to stop the population ageing and the population decline.

2. Research Status

Different studies try to compute the risks that Romania is facing in terms of deficits and public debt, for the next 50 years. The results can only scare us: Romania's population will be 16Million inhabitants in 2060 (Ghețău, 2004), same 16 Million according to the United Nations Fund for Population (Ghețău, 2007), 18 Million in 2050 according to Standard and Poors (Mrsnik, Beers, Morozov, 2010) and 13 Million according to some other more pessimistic studies. All these results are based on the data before the 2011 Census and back then the population in Romania was considered to be 22Million instead of just 19Million as the Census has confirmed.

¹ Lect.Univ.dr.

This population decrease happens due to the fact that fertility decreased and despite mortality has also decreased. Still, in this case, besides shrinking, the population also gets older. In these conditions, since working age population ratio in total population is shrinking and old age population ratio is increasing. This would move the median age of the population from 37 nowadays to 53 in 2060 (Ghețău, 2007), putting a lot of pressure on the working population to sustain the aged population causing lack of sustainability to the pension funds but also to other public systems (health, social security etc.).

From this perspective, the old age dependency ratio would increase from 21% now to 63% in 2060 (Buti, Deroose et al, 2009), a value considered impossible to handle, especially that the pension funds already have deficits ever since the ratio was below 18%. Thus in the official Population Ageing Report - Economic and budgetary projections for the EU-27 Member States (2008-2060) (H.Bogaert et al, 2009), we find out that Romania will have one of the highest costs of ageing. According to this study, Romania will need to double its expenditures on pension funds, health and social security, despite the assumption that it will raise the pension age over 70 years by 2060.

Furthermore, according to a European Commission study, in order to support the costs of population ageing, Romania will need to borrow from international markets, increasing the public debt from 22.7% in 2009, or 34% in 2012 to 633% in 2060 (Buti, Deroose et al, 2009).

Most other European countries are considered to have the same problems but many developed countries do already have different approaches to solve these issues. One of the solutions is immigration but Romania can't think of such thing as it is the second workforce exporter on the globe in 2010, right after China and before India according to OECD data. If we also add that Romania has lost more than 10% of its population in less than a decade and that the emigration from Romania has increased after our country has entered the European Union, we can imagine that this is not the solution.

3. Romania's future if we don't change anything

Considering the problems in modeling the fertility due to the demographic transition (Galor, 2005) that Romania is passing right now (Barbulescu, 2013), a scenario based approach was used. The scenario keeps the age specific fertility and age specific mortality constant to their 2011 levels allowing us to foresee where we are heading if nothing changes.

Whereas in 2010 the Romania approximately 278,000 people emigrated, up 72,000 from the previous year, migration is considered the most difficult to approximate. Moreover, if the number of migrants remains constant and birth rate would grow instantly to replacement level of 2.1 children per woman, it would still lead Romania to remain with under 3 million inhabitants in 2060.

Moreover, in Romania since 2004 left at least 200,000 immigrants annually. In these circumstances, this scenario does not take into account migration, trying to

see what would happen if the factors that determine the natural increase of population would remain constant to see how serious the situation is.

Born babies were considered to be 50% boys and 50% girls, both to simplify the calculation and because the decision to have a boy or girl is not taken by the parents but is rather a random variable despite "preference" for boys was noticed lately since the births of boys are about 10% more common than births of girls.

Mathematical calculations are based on a model containing:

$$Ent_t = \text{Sum} (Fert_{i,t} \times Fem_{i,t})$$

Ent_t where the number of births (entries population trends) Ferti represents birth and considered the same age group in 2012 until 2060 and Femi is the number of women in age group i, all cast for year t

$$Ex_t = \text{Sum} (Mor_{i,t} \times Inh_{i,t})$$

Where Ext is death (outputs to changes in the population) for year t, Mori is mortality age group and considered as the same from year 2012 to 2060, the number of inhabitants inhibitory and age in year t

$$Inh_t = \text{Sum} (Inh_t) + Ent_t + Ex_t$$

Where Inht represents the total population in year t calculations were performed separately for women and men in order to predict the evolution of each age group for each sex and population pyramid to build valid every year.

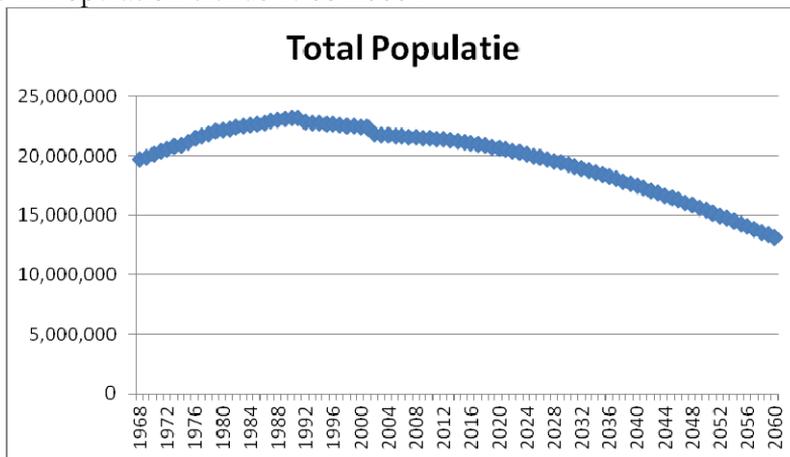
Also, in order to calculate the impact of population ageing over pension expenses ratio in GDP, the following decomposition formula will be used:

$$\begin{aligned} & \frac{\text{Cheltuielile cu Pensii}}{PIB} = \\ & = \frac{\text{Populatie } 65 +}{\text{Populatie } 15 - 65} \times \frac{1}{\frac{\text{Angajati } 15 - 65}{\text{Populatie } 15 - 65}} \times \frac{\text{Pensionari}}{\text{Populatie } 65 +} \times \frac{\text{Pensie medie}}{\frac{PIB}{\text{Angajati } 15 - 65}} \end{aligned}$$

From calculations based on the number of inhabitants of Romania reported by Eurostat in 2012 (number that is significantly different than 2011 Census), using the same birth and death rates for each age group to reach a population decrease from 21,355,849 people considered the population in 2011 to 13,186,595 persons in 2060 (see Figure 1).

Very interesting is also the fact that although age specific birth rates are kept constant, when decreasing the number of women in each group than of childbearing age, overall birth rate has a tendency to decrease from 1.25 children per woman in 2011 to about 0.47 children per woman in 2060.

Figure 1. Population trends 1968-2060 .

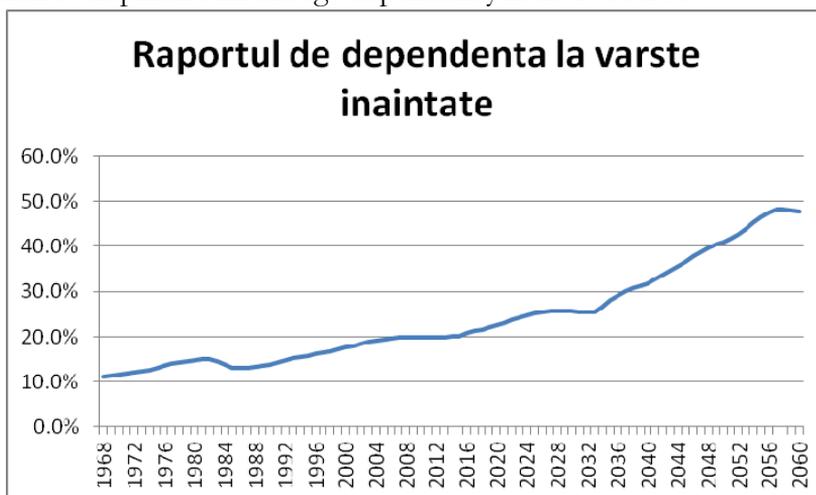


Source: Eurostat and own forecast based on own scenario.

The reason for this development is the emergence of small generation of people within the child-bearing age (i.e. women born after 1990) in the same time with the disappearance from fertile age range of a generation of people that was a lot higher (e.g. women born in 1967 who is close to twice the number of women born in 1990 and nearly three times the number of those born in 2011).

Even more interesting is the evolution of old age dependency ratio. It also had an upward trend before 1990 due to the appearance of normal medical discoveries that allowed the extension of the average lifespan, up from 11.2% in 1968 to 13.9% in 1990 and continuing from there to 17.6% in 2000 and 19.8% in 2010.

Figure 2. Developments in old age dependency ratio 1968-2060



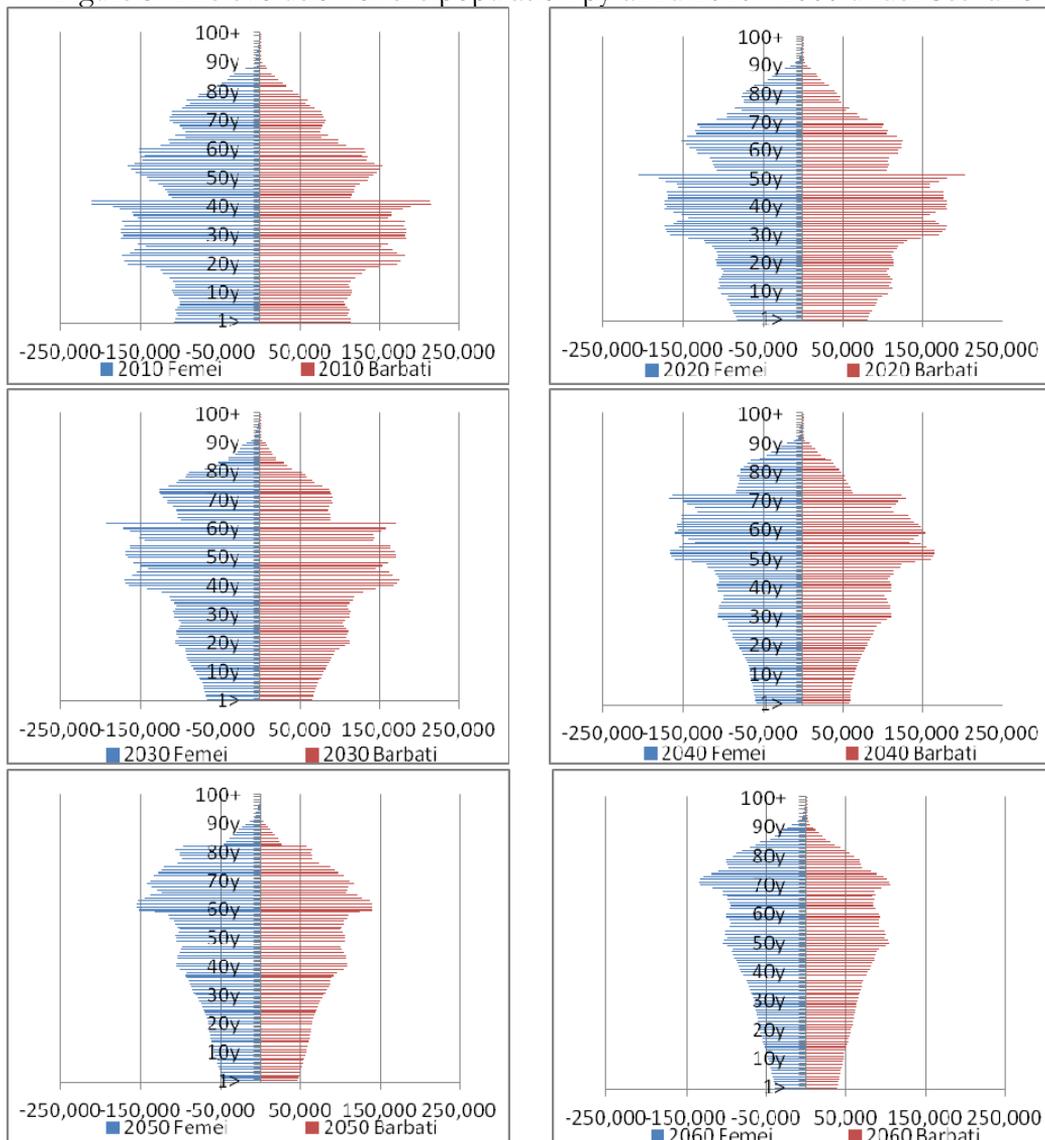
Source: Eurostat and own forecast

We already know that the public pension budget pose serious challenges to the general government, requiring loans to cover deficits. Also, it can be seen already in

Figure 2, that the old age dependency ratio places us somewhere on top of the European rankings, surpassing many other EU countries.

Under this Scenario, in the future we can expect an increase in the dependency ratio from the present value of 19.8% to 22.5% in 2020, 26% in 2030, 32.3% in 2040, 40.7% in 2050 and even 48.8% in 2060. This happens due to the dramatic changes in the demographic pyramid as the young generations are getting increasingly smaller number of people and while lowering mortality led and still leads to a greater number of surviving to old age.

Figure 3. The evolution of the population pyramid 2010 - 2060 under Scenario 1



Source: Eurostat and own forecast based on scenario 1

Using the decomposition formula given earlier, we see that an increase in the dependency ratio 65 + over 15-65 from 19.8% currently to 48.8% in 2060 will lead to an increase of public pension expenditure in total GDP by about 146% if the all other factors remain constant.

Being already under a budget deficit, Romania will need either to reduce other public services (defense, justice, public order, health, etc.) or change the pension system radically. Yet many of these costs are also increasing with the aging population while reducing public investment would also lead to lower GDP and thus again increasing pension expenditure ratio.

Furthermore, as these system deficits have become chronic we can expect over time, besides the unsustainability that comes from it, we can expect over time the accumulation of more public debt in order to maintain the status quo. Yet, since other debts also need to be rolled over, Romania is expected to soon reach a point of no return.

4. Romania's future if we don't change anything

The research shows that Romania needs to take action soon to increase fertility and stop migration as its future situation is severely unsustainable. As can be seen in Figure 2., the bad situation today will get even more alarming in 2031 when the highest age population in the history of Romania is going to pension.

Thus we have a very limited window of opportunity when we can act to increase fertility and to keep Romanians in Romania. Yet, despite this problem is known for several years, the politicians are thinking mainly short term on an election cycle that leaves the future problems unresolved.

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References

Bărbulescu Răzvan, 2010, "Risks and Consequences of Demographic Changes in Romania", *The Romanian Economic Journal*, nr. 6(36) June 2010, pp 99-110

Bărbulescu Răzvan, 2009, "Îmbătrânirea populației și dinamica așteptată a resurselor umane", *3-rd International Symposium - Globalization And Convergence In Economic Thought*, Bucharest, December 2009

Bărbulescu Răzvan, Dobre Mihaela, 2011, "Criza care va veni: O analiză pe termen mediu și lung a modificărilor demografice și a efectelor acestora asupra pieței muncii și a stabilității sistemelor de securitate socială", *Oeconomica*, nr. 4/2011

Buti Marco, Servaas Deroose si colectivul, "Sustainability Report 2009", Luxembourg: *Office for Official Publications of the European Communities*, 2009

Bogaert H. si colectivul, "2009 Population Ageing Report - Economic and budgetary projections for the EU-27 Member States (2008-2060)", Luxembourg: *Office for Official Publications of the European Communities*, 2009

Comisia Europeană (2009) "Ageing Report: Economic and budgetary projections for the EU-27 Member States (2008-2060)". *European Economy* 2|2009.

Dobre Mihaela Hrisanta, Barbulescu Razvan, 2011, "Changes In Males' And Females' Work Time During The Economic Crisis", *Revista Economica* Nr. 2(55)/2011 ULB Sibiu

Ghețau V., 2004, "Declinul demografic al României: ce perspective?", *Sociologie Românească*, Volumul II, Nr. 2,

Ghețau Vasile, 2007, "Declinul Demografic Și Viitorul Populației României - O perspectivă din anul 2007 asupra populației României în secolul 21", Editura ALPHA MDN

Mrsnik Marko, Beers David T, Morozov Ivan, *Global Aging 2010: An Irreversible Truth*, Standard&Poors Ratings Direct, Oct. 2010

Oded Galor, 2005, "The Demographic Transition and the Emergence of Sustained Economic Growth." *Journal of the European Economic Association*, 3/2005, pp. 494-504,

United Nations (1983). Manual X: Indirect Techniques for Demographic Estimation (United Nations publication) Available at:

http://www.un.org/esa/population/publications/Manual_X/Manual_X.htm Accessed date 03.10.2012.

OECD 2012, *International Migration Outlook 2012*, OECD Publishing , Publication date: 09 Jul 2012

OECD statistics available at <http://stats.oecd.org>

Eurostat databases available at:

http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database

CONSUMER BEHAVIOUR PATTERNS: IDENTIFYING BUYING MOTIVES FOR COOL DRINKS AMONGST SOUTH AFRICANS UNDER 35 YEARS OLD

Tudor Edu¹,
Iliuță Costel Negricea²,
Alexandru Ionescu³

Abstract

The consumer is in the centre of any marketing endeavour. Finding out what the consumers (individual or organization) need, desire and demand is the starting point of a marketing approach. Our research is focused on determining consumer behaviour coordinates pertaining to cool drinks amongst South Africans under the age of 35. The findings of this study provide significant information concerning the buying motives considered when purchasing cool drinks which can be extended to other categories of merchandise. The findings show that the consumer behaviour of cool drinks amongst the young South Africans is a complex one. The respondents displayed a tendency towards objective buying decisions but between a collection of brands for which a certain degree of loyalty was shown.

Key words: *consumer behaviour, buying behaviour, buying motives, exploratory research*

JEL classification: M31, D12

1 Introduction

The consumer is in the centre of any marketing endeavour. Finding out what the consumers (individual or organization) need, desire and demand is the starting point of a marketing approach in order to gather the necessary input to develop a tailored product or service for the respective consumers.

Buying behaviour is a process which enables an organisation to understand how consumers select, buy and dispose of goods, services, ideas or experiences in order to satisfy their needs and wants (Kotler and Keller 2006: 173). A provider should pay attention in grasping the activities and influences occurring before, during and after the purchase (Strydom 2004). An organisation should pursue detailed research of the elementary processes of the consumer behaviour (perceptions, learning, attitudes and motivations) in order to make the right marketing decisions. Perception is the

¹ Lecturer, Department of Management-Marketing, Romanian-American University, Bucharest, Romania, email address: tudoredu@yahoo.com

² Lecturer, Department of Management-Marketing, Romanian-American University, Bucharest, Romania, email address: negricea@yahoo.com

³ Senior Lecturer, Department of Commerce, Economic Integration and Business Administration, Romanian-American University, Bucharest, Romania, alex.ionescu78@gmail.com

process through which stimuli are chosen, organized and interpreted by the human five senses: sight, sound, smell, touch and taste (Cant, Brink and Brijball 2009: 115) while learning is the process through which a consumer, based on experience, learns how to buy and use a product or service (Catoiu and Teodorescu 2004: 69). Attitude is a favourable or unfavourable behaviour towards an object, an event or a situation (Botha et al. 1997: 94) and motivation is the process by which consumers are driven or moved to satisfy a particular need (Sheth, Mittal and Newman 1999).

Our research is focused on determining consumer behaviour coordinates pertaining to cool drinks amongst the young South Africans. The findings of this study provide significant information concerning the buying motives considered when purchasing cool drinks which can be extended to other categories of merchandise.

We consider this study to be a starting point of a comprehensive understanding of how people think, what they value and how they decide when acquiring a particular product or service.

As a research method, we used an exploratory research based on a questionnaire, including qualitative and quantitative questions. We surveyed 100 people (18-35 years old) in using direct, online and email questionnaires. In South Africa we collected data from students enrolled at UCT (University of Cape Town), CPUT (Cape Peninsula University of Technology) and the Cornerstone Institute through the assistance of several academics from these institutions.

2 Exploratory research

2.1 Research purpose

The purpose of this research is to identify consumer behaviour patterns for cool drinks amongst young South Africans (under 35 years old)

2.2 Research objectives

The objectives of this research focus on the determination of consumer behaviour patterns for South Africans, under 35 years old, related to:

1. consumption occasions
2. consumption frequency
3. consumption preferences
4. buying motives
5. buying venues
6. brand preference
7. impact of sales promotions
8. advertising effectiveness
9. ideal product perception

2.3 Research hypotheses

We presume the following aspects for each of the objectives pursued in this research:

1. The young South Africans drink cool drinks for physiological and social reasons.
2. The young South Africans drink cool drinks with a frequency ranging from every day to a few times a year.
3. The young South Africans drink more fizzy cool drinks than the still ones.
4. The young South Africans buy cool drinks for their ingredients (50% Yes/ 50% No), containers (50% Yes/ 50% No), prices (50% Yes/ 50% No) and brands (50% Yes/ 50% No).
5. The young South Africans buy cool drinks from large surface stores, convenience stores and vending machines.
6. More than 60% of the young South Africans are loyal to at least one cool drink brand.
7. 20% of the young South Africans buy very often another brand if this is on sale, 20% buy often another brand if it is on sale, 20% are not certain, 20% buy seldom another brand and 20% buy very seldom another brand if it is on sale
8. The cool drink advertisements are effective in pushing the young South Africans to buy.
9. The young South Africans desire a sweet, fruity, fizzy, cheap cool drink sold in a plastic container.

2.4 Research variables

Variable	Conceptual definition	Operational definition
Consumption occasion	Possible situations in which a particular merchandise is consumed or used	Desire to drink something sweet Thirst Bonding Socialise Other situation
Consumption frequency	Periodical consumption of a particular merchandise	Every day A few times a week A few times a month A few times a year Other situation
Product type	Type of merchandise sold in a particular market	Fizzy drinks Still drinks Both
Ingredients	Substances combined to make a product ⁴	Fruit content, colour, aroma Sugar/ Sweetener content

⁴ <http://oxforddictionaries.com>

		Caffeine/ no caffeine Ingredients as close as possible to the natural ones (less preservatives, less artificial flavours, less dye) Other situation
Container	Device in which a particular product is stored and sold	The importance of the container's material and size in the buying decision
Price	Sum of money which must be paid by the buyer to the seller in order to acquire the offer	The importance of the product's price in the buying decision
Brand	Name and/or symbol used by an organisation to differentiate its offer from the competitors' ones	The importance of the brand name in the buying decision and the preference towards a particular brand
Product sales	Occasions in which a particular merchandise is sold at a discounted price	The frequency at which a cool drink (brand or product type) is purchased if it is on sale
Information source	A place or person from which information originates or can be obtained ⁵	TV Internet Press Friends Store Family Other source
Advertisement	Message used to communicate about a particular merchandise with the purpose of informing and/or conveying a particular behaviour	The persuasion effectiveness of advertisements to purchase a particular cool drink
Purchase place	Place from which a merchandise can be purchased	Large surface stores (such as hypermarkets, supermarkets etc)

⁵ Adaptation from <http://oxforddictionaries.com>

		Convenience stores Vending machines Restaurants Other place
Ideal product	A projection of a product perceived by a prospect as meeting all of his or her desires	The description of the ideal cool drink (ingredients, container, name etc)

Descriptive variables

Variable	Conceptual definition	Operational definition
Age	The length of time a person has lived ⁶	Under 18 19-25 26-35
Place of residence	The place where someone resides	Urban Rural
Education	The highest level at which systematic instruction was received by an individual	High School University Master Other

2.5 Population

The researched population was represented by people under the age of 35 residing in South Africa

2.6 Research methodology

As a research method, due to the fact that prior studies in this matter are not recorded, we considered that an exploratory research based on a questionnaire, including qualitative and quantitative questions was the most appropriate at this stage.

Being an exploratory research, we pursued a non-random sampling method and aimed to survey 100 people residing in South Africa in order to obtain general consumer behaviour coordinates using direct, online and email questionnaires consisting of 18 questions.

As a surveyed unit, we considered the individual using only two restrictions for our sample, one related to the respondent's age and the other one to the consumption of purchased cool drinks.

The questionnaire was structured in such a way as to provide data about the: consumption of cool drinks, consumption occasions, consumption frequency, type

⁶ <http://oxforddictionaries.com>

of cool drinks consumed, selection criteria (ingredients, container, brand and price), brand preference, impact of sales promotions, information sources, effectiveness of advertisements, purchase venues, ideal products, non-alcoholic beverage consumption and descriptive variables: age, place of origin and level of education.

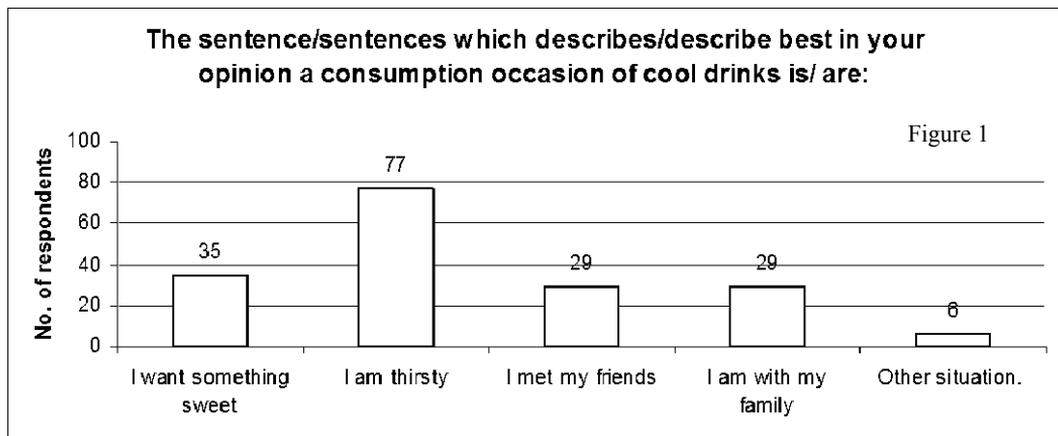
2.7 Data collection

We collected data from 100 people by applying direct and email questionnaires to students from U.C.T- University of Cape Town, C.P.U.T- Cape Peninsula University of Technology and C.I- Cornerstone Institute through the help of several academics from these educational institutions.

2.8 Data analysis and research conclusions

The analysis was performed for each question displaying charts and/or tables and comments.

With regards to the consumption occasions the situation is:



Other situations
with food
during hot days

As it can be seen, most of the respondents mentioned they would drink cool drinks because of thirst (77), followed at a significant distance by the need to drink something sweet (35) and the two options related to socialization (29 for “I met my friends” and 29 for “I am with my family”).

Furthermore, four respondents mentioned they would drink cool drinks with every meal, while 2 respondents would drink especially during hot days.

Regarding the consumption frequency of cool drinks, the collected data displayed the following situation:

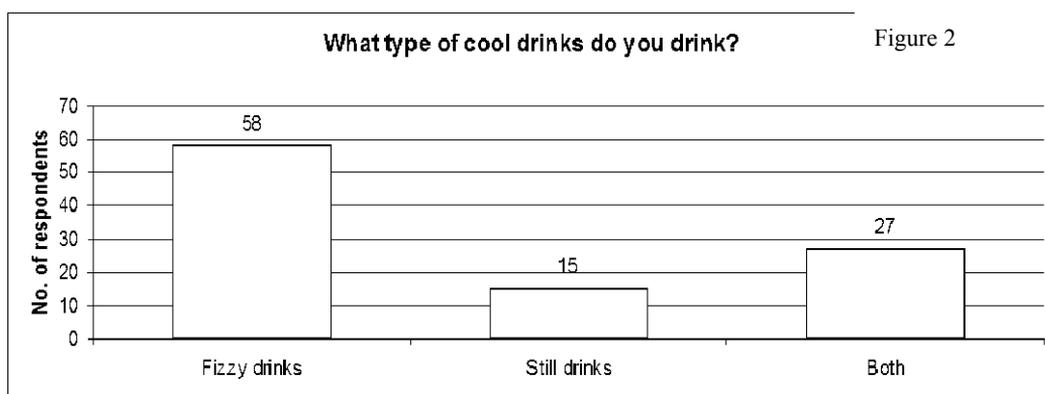
3. How often do you drink cool drinks?				
Every day	A few times a week	A few times a month	A few times a year	Other situation
17	35	41	7	0

Table 1

The collected data displayed that most of the respondents would drink cool drinks several times a month (41), followed by several times a week (35). Also, 17 respondents mentioned they would drink daily, while 7 respondents only a few times per year.

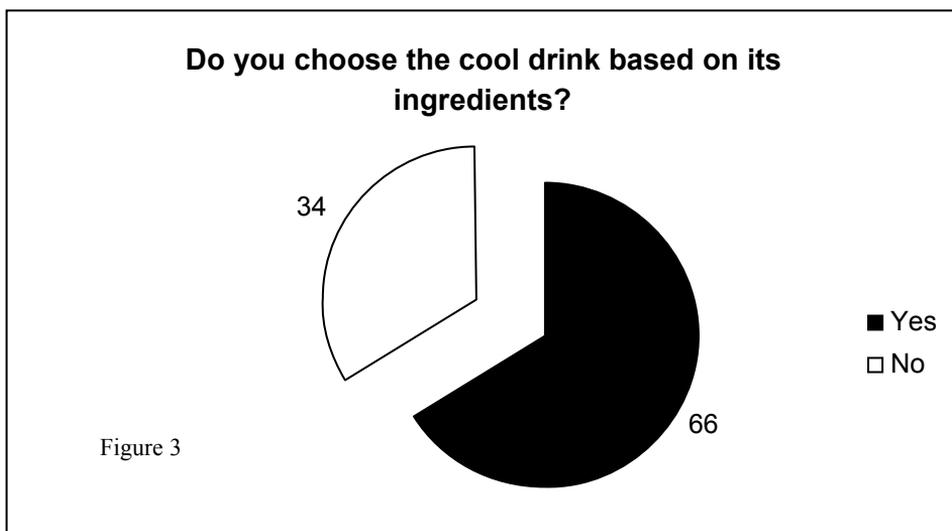
Regarding the type of cool drink consumed, the respondents were asked to select from fizzy drinks, still drinks or both.

The collected data displayed the following situation:



As it can be noticed, the respondents selected in great number the “Fizzy drinks” option (58), followed by “Both” (27) and “Still drinks” (15).

Regarding the importance of the cool drinks’ ingredients in the buying decision, the respondents were asked to mention if they selected cool drinks based on their ingredients and to select amongst: fruit content, colour, aroma; Sugar/ Sweetener content; Caffeine/ no caffeine; Ingredients as close as possible to the natural ones (less preservatives, less artificial flavours, less dye).



As it can be seen, around two thirds of the respondents mentioned they would make their decision based on the ingredients.

The respondents inclined to buy cool drinks based on their ingredients selected the following features:

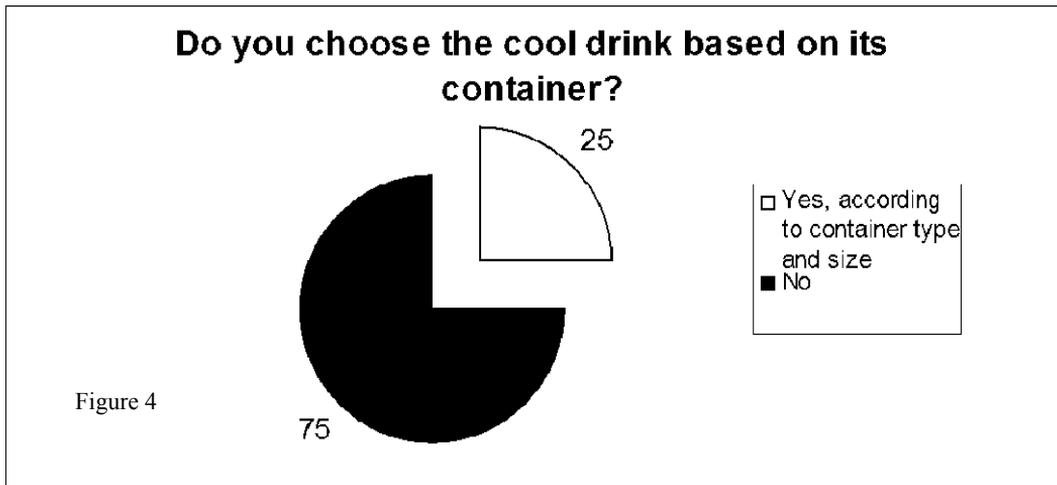
Respondents				
Fruit content, colour, aroma	Sugar/ Sweetener content	Caffeine/ no caffeine	Ingredients as close as possible to the natural ones (less preservatives, less artificial flavours, less dye)	Other situation
47	12	13	15	2

Other situation
Protein content

Table 2

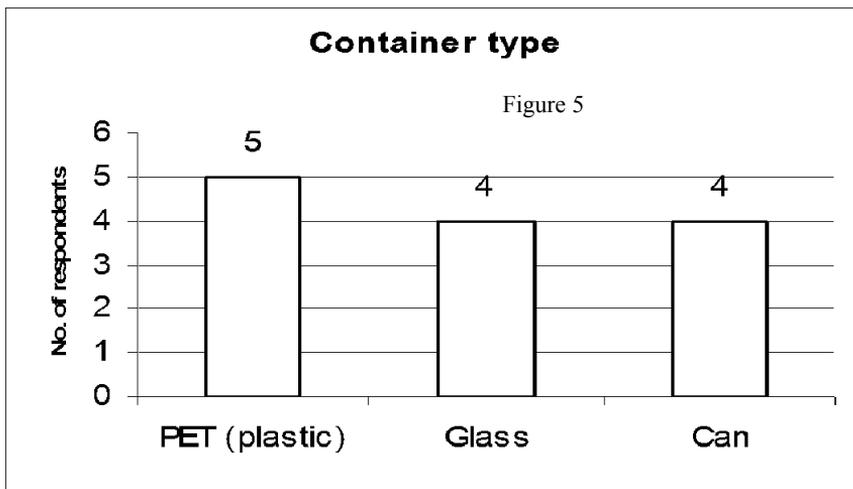
The “Fruit content, colour and aroma” option was selected by a significant number of respondents (47), meaning 71.2%. The “Sugar/ Sweetener content” option was selected by 12 respondents (18.2%). The “Caffeine/ no caffeine” option was selected by 13 respondents (19.7%). The “Ingredients as close as possible to the natural ones (less preservatives, less artificial flavours, less dye)” option was selected by 15 respondents (22.7%). Two respondents selected “Other situation”, as well, mentioning “Protein content” as the desired ingredient.

Regarding the importance of the cool drink’s container in the buying decision, the respondents were asked to mention if they purchased in accordance with the type and size of the container. If the answer was positive, the respondent was asked to select one or several options for the type: PET (plastic), Glass, Can and to mention the regular size of the container.

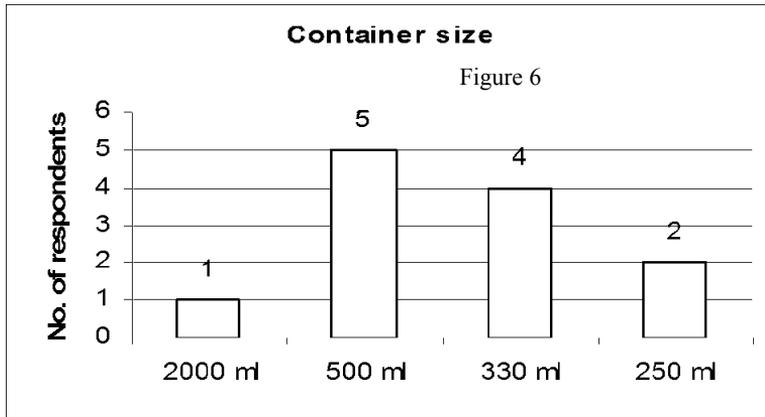


According to the collected data, 25% of the respondents mentioned they would purchase in accordance with the container type and size.

Amongst them, 13 respondents mentioned they would buy cool drinks based on the container type. Their options are displayed below.

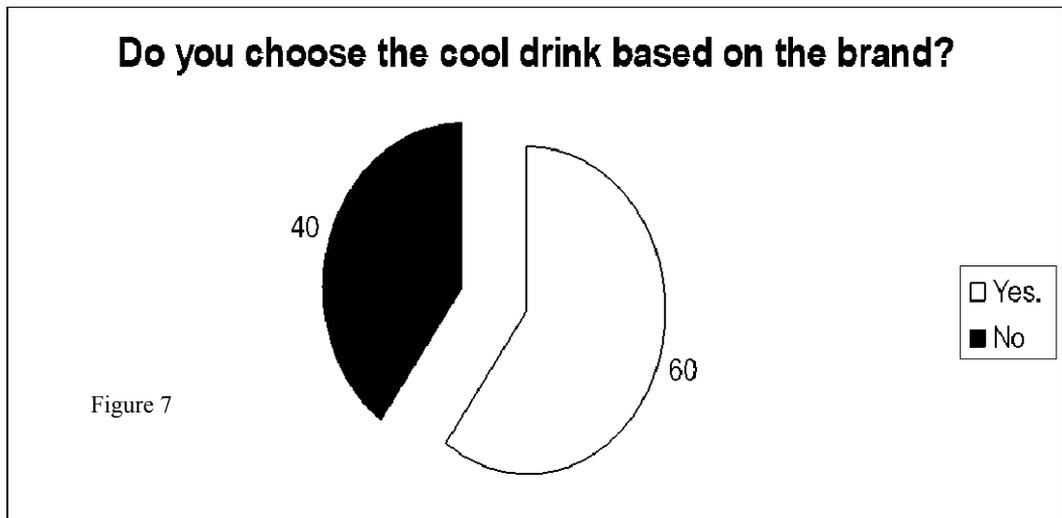


Moreover, 12 respondents mentioned they would buy cool drinks based on the container size. Their options are displayed below:



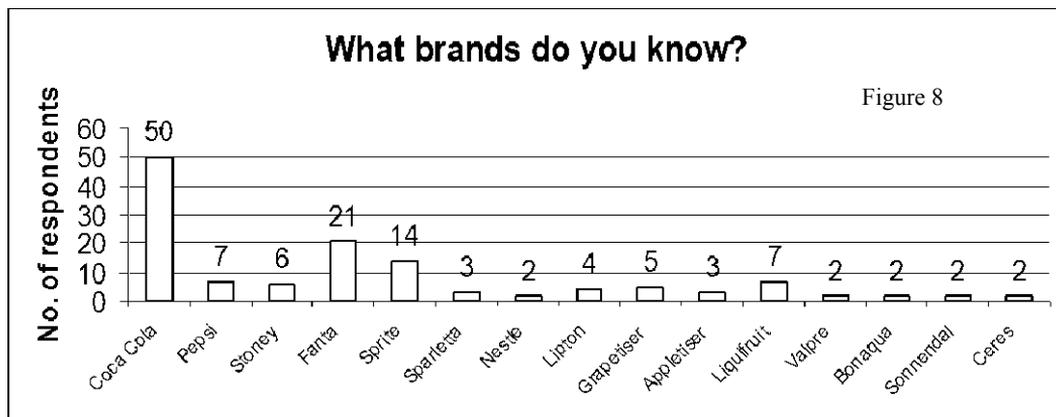
One respondent would mainly buy cool drinks in 2 litre containers, 5 respondents would mainly buy in 500 ml containers, 4 in 330 ml containers and 2 in 250 ml containers.

In relation to the buying decision based on the cool drink's brand, the respondents were asked to mention if they chose the cool drink based on its brand.



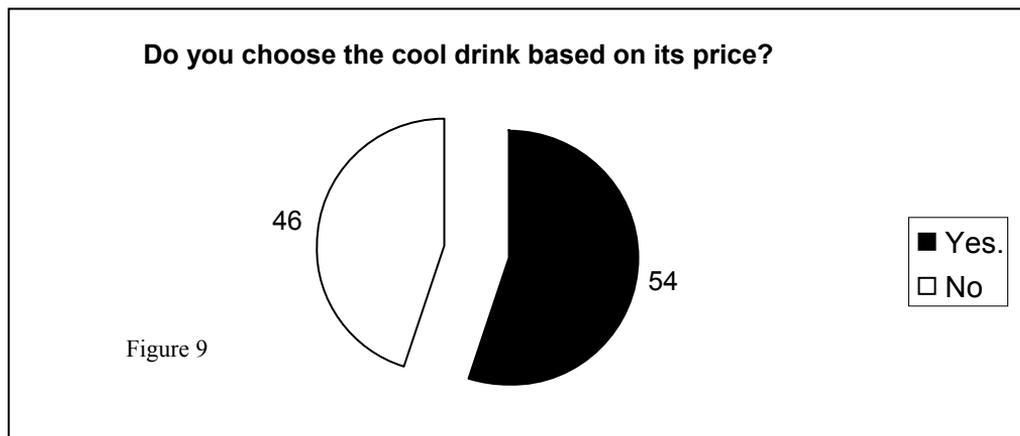
A significant part of the respondents (60%) mentioned they would buy based on the brand.

These respondents were asked to name at least one known brand. 130 options were generated. The brands and the frequencies are found in the chart below.



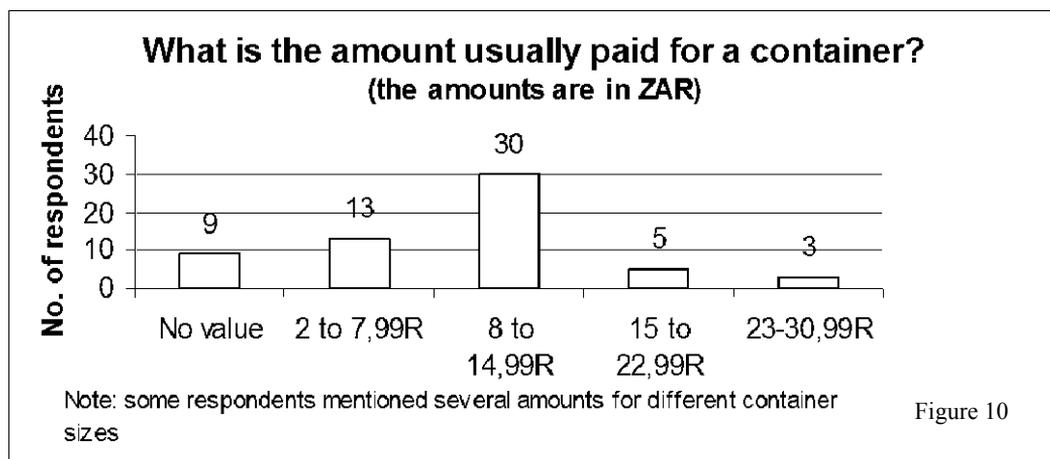
Coca Cola was mentioned by the greatest number of the respondents, followed by Fanta Sprite, Pepsi and Liquifruit.

Regarding the importance of the cool drink’s price in the buying decision, the respondents were asked to answer if they purchased based on the price and if they did so, to mention the amount usually paid for a cool drink.



More than half of the respondents (54%) mentioned they would make a decision based on price.

These respondents were asked to mention the usual amounts paid for a cool drink. For analysis purposes these amounts were displayed in intervals. The values are displayed in ZAR (South African Rand). The exchange rate to the EUR is approximately 1 EUR = 10ZAR.



The first column with “No value” refers to the respondents who did not mention an amount. Several respondents associated the usual amount with different container sizes. Anyway, the greatest amount mentioned by a respondent for one container was 30,99R, which is approximately 10EUR.

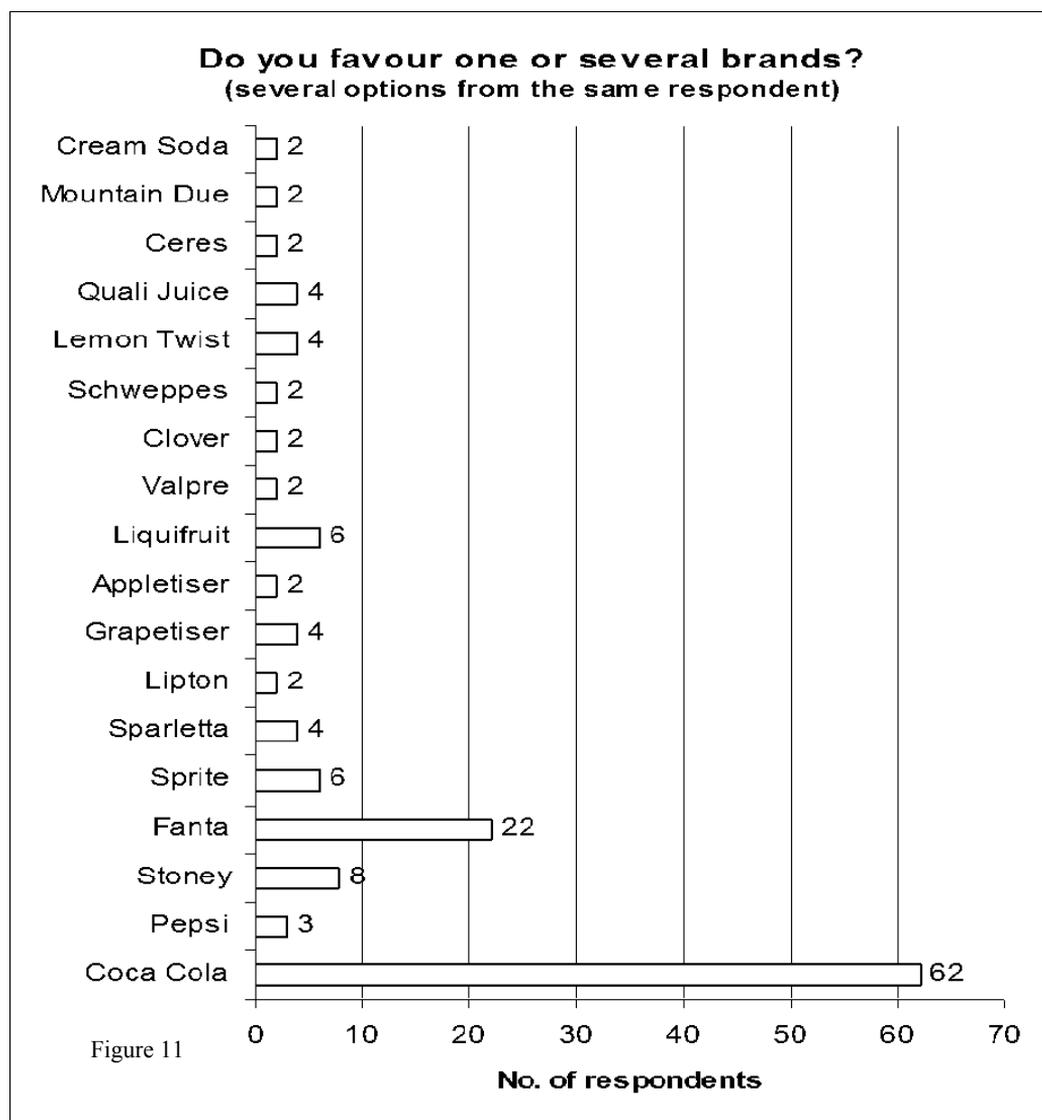
Regarding the brand preferences, the respondents were asked to mention if they favoured a/ several brand/s and to name it/them.

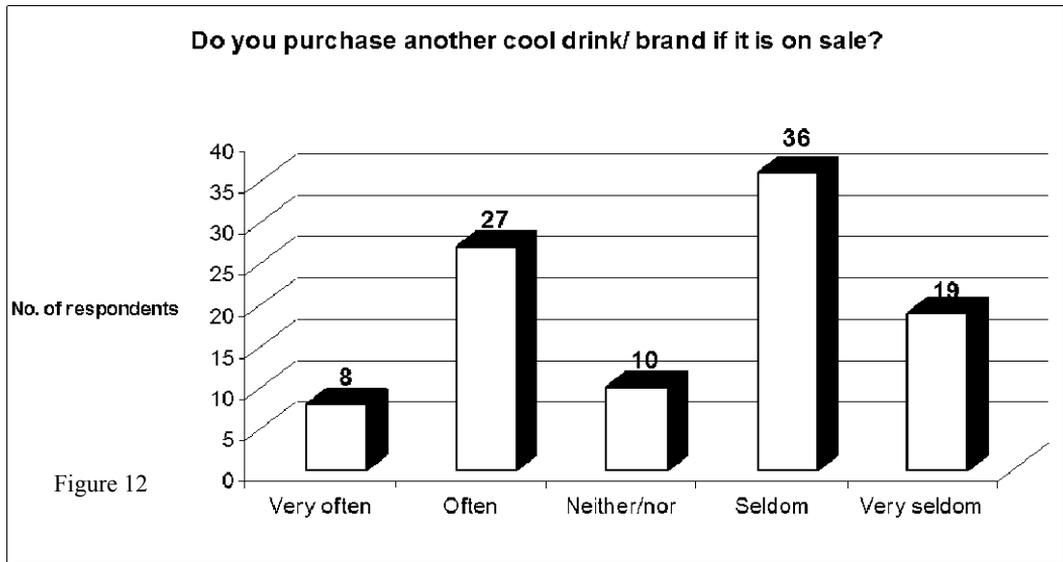
A significant percentage of the respondents (78%) mentioned they favoured at least one brand.

In the below chart are displayed all the brands mentioned by the respondents and their frequencies.

Coca Cola received the greatest number of references (62), followed by Fanta (22), Stoney (8), Sprite (6), Liquifruit (6) and Grapetiser, Sparletta, Lemon Twist and Quali Juice with 4 references.

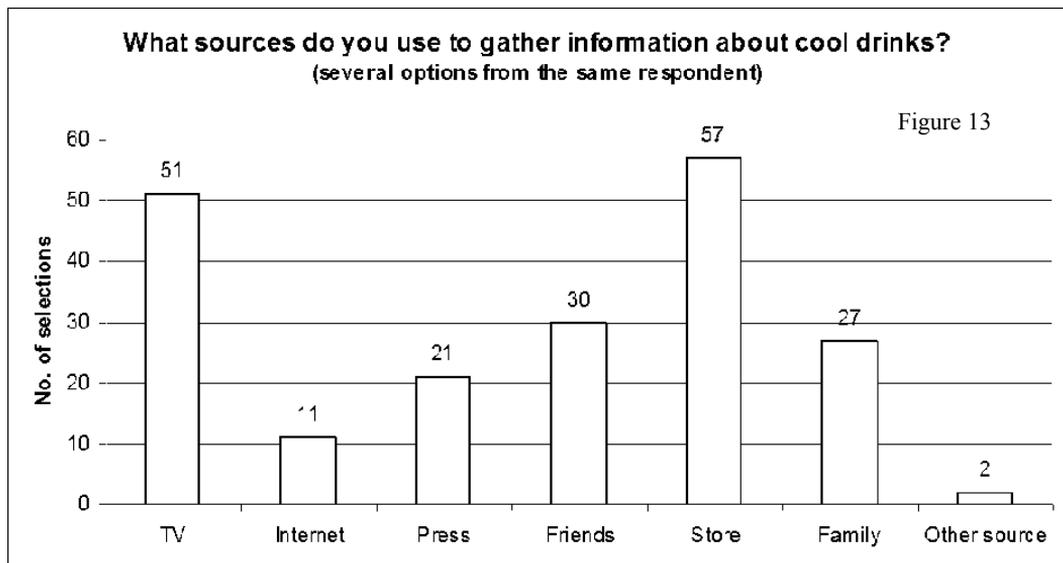
With regards to the effects of promotions on buying decisions, the respondents were asked to answer if they were inclined to purchase other cool drinks if those ones were on sale.





As it can be seen, 55% of the respondents mentioned they would seldom or very seldom switch to other brands based on temporary price reductions, while 35% acknowledged they would often and very often buy other brands and 10% were undecided.

Pertaining to the sources of information used by the respondents to gather data, a question was asked comprising the following sources: TV, Internet, Press, Friends, Store, Family and Other source.



More than half of the respondents gather information from stores and TV. The personal sources, such as friends and family, are used by a significant number as well (30 and 27). The Internet is used by a smaller number than the press, probably because of access and availability. Two respondents mentioned “Other source”, referring to catalogues.

Regarding the advertising impact on the buying decision, the respondents had to answer if they were influenced or not by the ads and in what ways or why not.



For the 30 respondents, who mentioned they were persuaded by the ads to buy, their answers are summarized as follows:

Table 3

Yes	Main conclusions
How?	They display benefits (ingredients, price, consumption occasions)
	I desire the same decent advertised experience
	Some advertisements are appealing
	I am open to new
	Some brands are endorsed by popular people

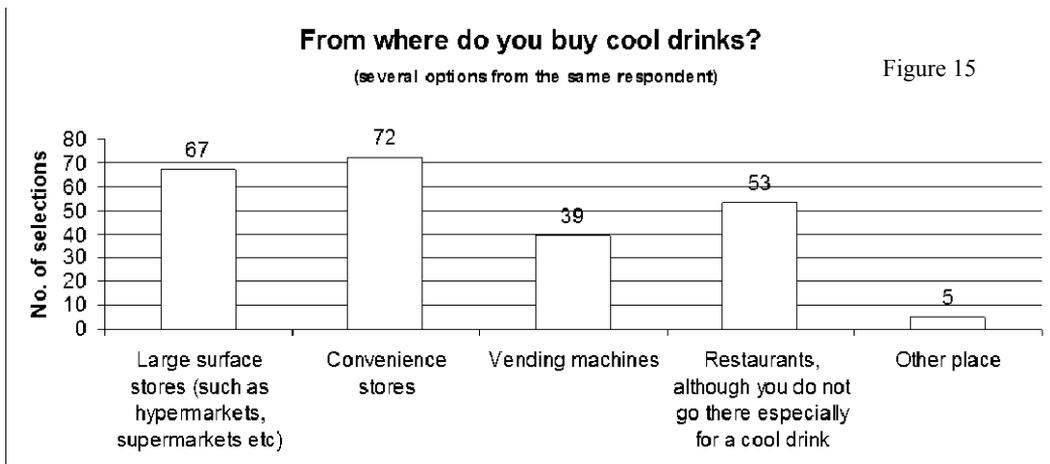
For the 70 respondents, who mentioned they were not influenced by ads, their answers are summarized as follows:

Table 4

No	Main conclusions
Why?	I do not pay attention to advertisements
	I always compare products and brands
	I trust those brands I know

I am loyal to certain brands
I am not easily influenced by advertisements
I do not trust advertisements
I do not like to be disappointed
I prefer to taste something first

Regarding the place of purchase, the respondents were asked to select the place or places from where they usually purchased cool drinks. The following options were displayed: Large surface stores (such as hypermarkets, supermarkets etc), Convenience stores, Vending machines, Restaurants, although you do not go there especially for a cool drink, Other place



The greatest number of the questioned respondents mentioned they would usually buy from convenience stores (72), followed by large surface stores (67) and restaurants (53). Only 39 mentioned they would use the vending machines and 5 respondents mentioned street markets and campus booths.

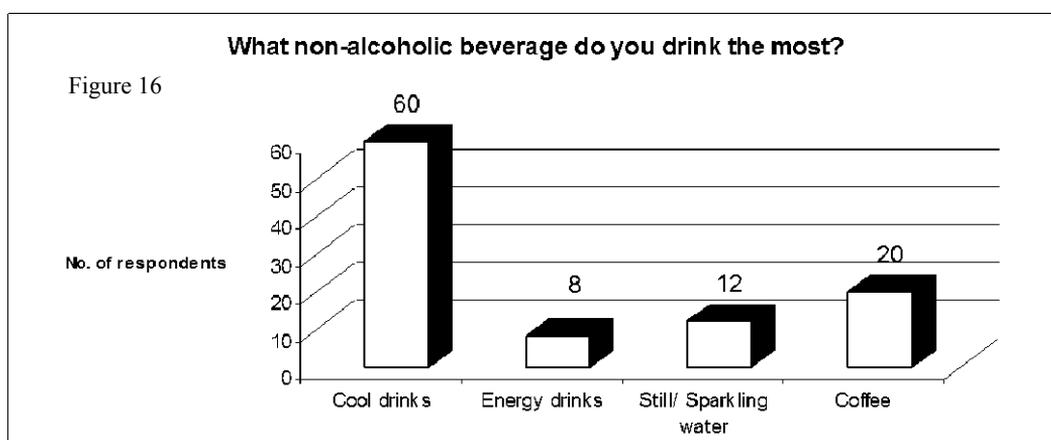
Regarding the perception of how a cool drink should actually be in order to satisfy in the best possible way the needs of the consumers, the respondents were asked to describe the ideal cool drink.

Their descriptions are summarized in the following table.

The ideal cool drink	Table 5
ingredients: lemon, prune, ginger, sugar (different levels), caffeine, fruity, natural	
type: mainly fizzy	
colour: bright	
container: type: plastic and can, size: 330ml and 500ml	
less calories, less preservatives	

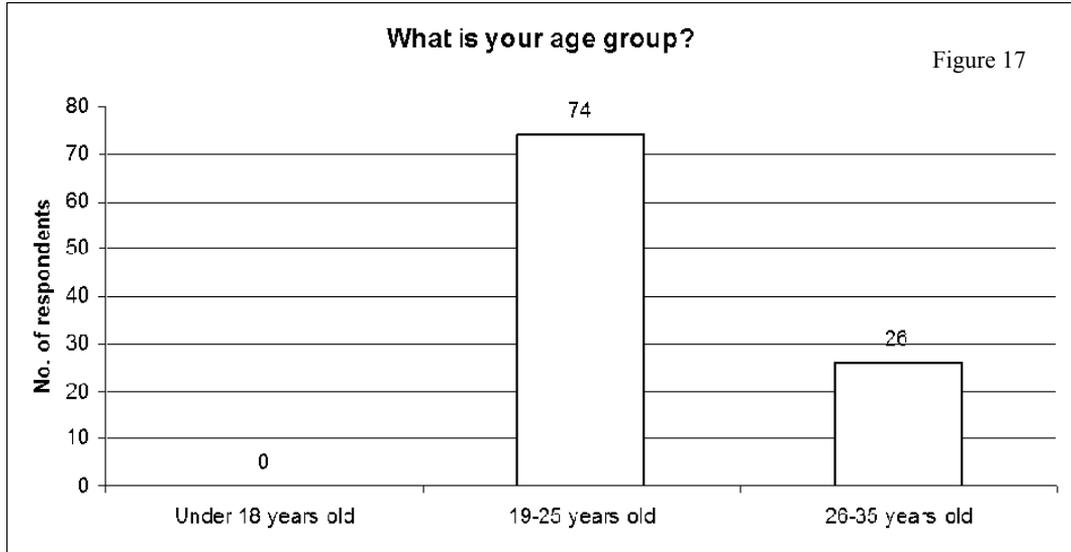
In order to determine the rank of the cool drink consumption within the non-alcoholic beverage group, the respondents were asked to select one option amongst: cool drinks, energy drinks, still/sparkling water and coffee.

The distribution of the answers provided by the respondents is displayed in the next chart.

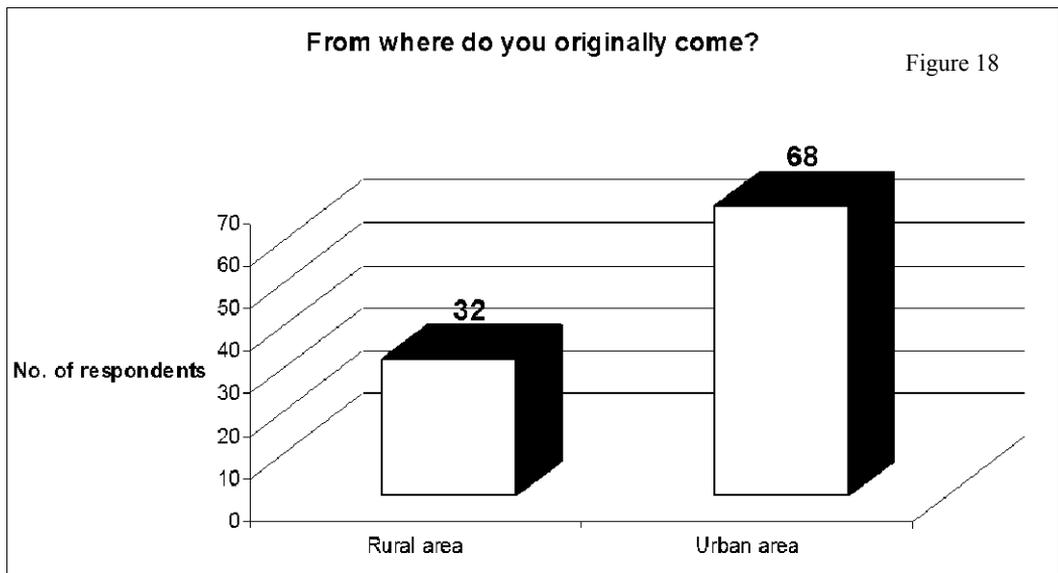


The biggest percentage of the respondents selected “cool drinks” as the most consumed beverage (60), followed by coffee (20), still or sparkling water (12) and energy drinks (8).

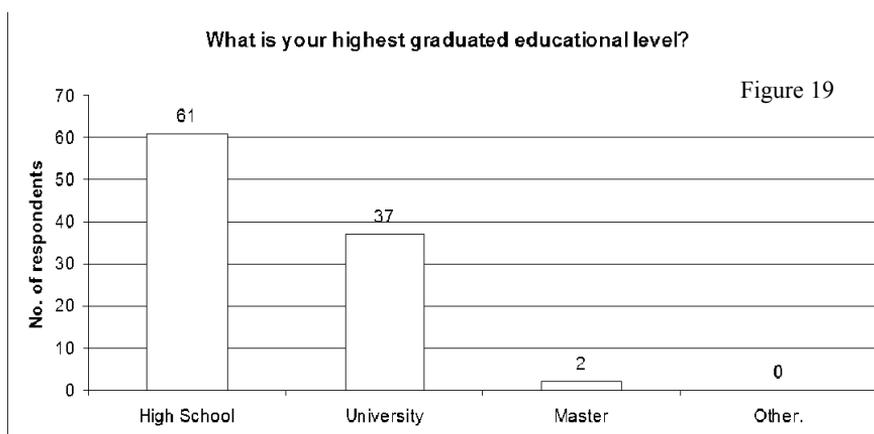
The last three questions were aimed at covering the following demographic variables: age, place of origin and education.



74 respondents were between 19 and 25 years old, while 26 were between 26 and 35 years old.



68 respondents grew up in urban areas, while 32 grew up in rural areas.



61 respondents had a high school diploma, 37 had a bachelor degree and 2 had a master degree.

3. Final remarks

The findings of our research display a complex consumer behaviour pertaining to cool drinks. The respondents showed a tendency towards objective buying decisions but amongst a collection of brands for which a certain degree of loyalty was displayed.

This study delivers insights about the criteria used by young South African people when making a buying decision and can be considered a suitable starting point for further research in consumer behaviour.

4. Acknowledgements

The data were gathered through the assistance of 5 academics to whom we would like to thank for their extremely valuable support: Mrs. Ileana Rogobete (PhD) – Corner Institute, Cape Town; Mr. Cristoffel Lombard- Cape Peninsula University of Technology, Cape Town; Assoc. Prof. AJ Nicol, Assoc. Prof. P Navsaria and Dr. S Edu- University of Cape Town, Cape Town

References:

- Botha, J.A.R., Brink, A., Machado, R. and Rudansky, S (1997) *Consumer-oriented Marketing Communication*. Unisa, Pretoria
- Cant, M.C., Brink, A., Brijball, S. (2009) *Consumer Behaviour*. Cape Town: Juta & Co.
- Catoiu, I. and Teodorescu, N. (2004) *Comportamentul Consumatorului*. Bucuresti: Ed. Uranus
- Kotler, Ph. and Keller, K. L. (2006) *Marketing Management 12th ed.*, NJ: Pearson ed.
- Sheth, J. N., Mittal, B. and Newman, B. I. (1999) *Customer Behavior: Consumer Behavior and Beyond*, Orlando: Dryden
- Strydom, J. (2004) *Introduction to Marketing 3rd ed.*, Cape Town: Juta & Co.
- www.oxfordictionaries.com

THE FUTURE OF EU COHESION POLICY REGARDING HUMAN CAPITAL IN ROMANIA¹

Elena – Mihaela Pavel*

Abstract

Europe is going through a period of economic crisis and we can consider that it could be too early to judge to what extent the crisis has affected spending on education but it will become possible to measure the true impact when we will have a wider time frame. At the end of 2011, the European Commission adopted a draft legislative package that will provide a policy framework regarding EU cohesion policy for the period 2014-2020.

For 2014-2020, ESF's outlines are based on strengthening thematic concentration, reinforcing partnership, social innovation and transnational cooperation, strengthening the focus on results, simplifying the delivery system and increased use of financial instruments. Regarding Romania's case, it will be a real challenge to improve significantly in terms of consolidating the professional competences of the labor force.

Keywords: *cohesion, european funds, Europe 2020 Strategy, human capital, sustainable development.*

JEL Classification: J24, O15, O19, Q01

1. Introduction

With this article, my goal is to evidence the importance of human capital for the next programming period (2014-2020) related to EU cohesion policy through European Social Fund and its Sectoral Operational Programme for Human Resources Development. A decisive argument and an essential document supporting the main idea of this article is represented by Europe 2020 Strategy's objectives. Its 5 headline targets (employment, innovation, education, poverty reduction and climate/energy) took into consideration the importance of growth that needs to be *smart*, through more effective investments in education, research and innovation, *sustainable*, thanks to a decisive move towards a low-carbon economy and *inclusive*, with a strong emphasis on job creation and poverty reduction.

¹ Presented article at the 6th Edition of "Implications of Globalization and Integration into the European Union on Financing and Development of Foreign Trade" Conference, November 23-24, 2012, Romanian-American University, Bucharest

* Author is Teaching Assistant of EU Cohesion Policy at the Romanian-American University Bucharest.

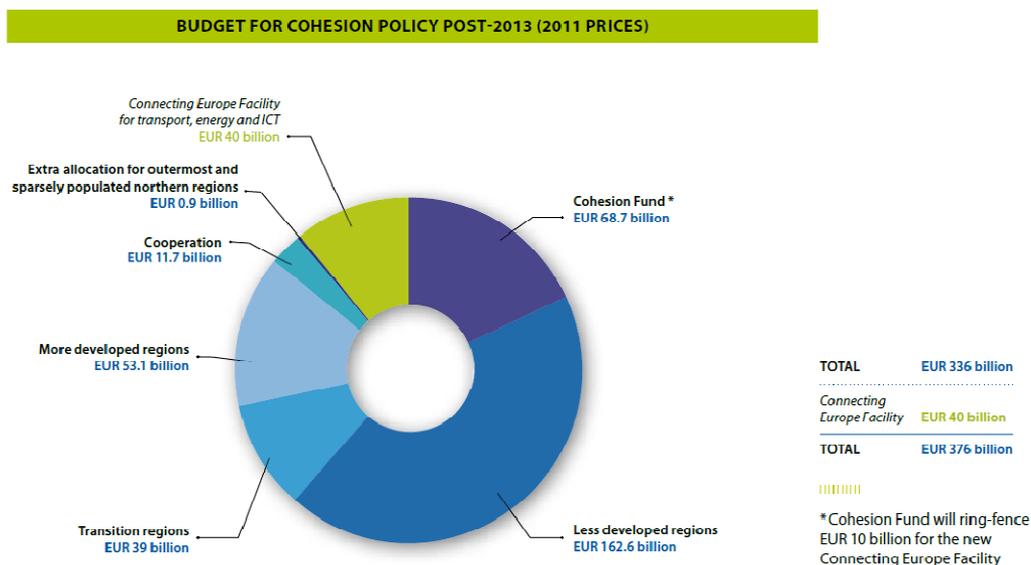
2. An overview regarding the future of EU Cohesion policy: 2014-2020

At the end of 2011, the European Commission adopted a draft legislative package that will provide a policy framework regarding EU cohesion policy for the period 2014-2020. Thus, the significant changes, proposed by the Commission in order to design and implement the cohesion policy for the future period, are²:

- concentrating on the Europe 2020 Strategy's priorities of smart, sustainable and inclusive growth;
- rewarding performance;
- supporting integrated programming;
- focusing on results – monitoring progress towards agreed objectives;
- reinforcing territorial cohesion and
- simplifying delivery.

These changes became more obvious and necessary after the adoption by the Commission in June 2011, of a proposal for the next multi-annual financial framework for the same period: a budget for delivering the Europe 2020 Strategy. In its proposal, the Commission decided that cohesion policy should remain an essential part of the next financial package and emphasized its essential role in delivering the Europe 2020 Strategy.

The total proposed budget for the period 2014-2020 will be EUR 376 billion, including funding for the new Connecting Europe Facility, which is designed to enhance cross-border projects in 3 key areas: energy, transport and information technology.



Source: Cohesion Policy 2014 – 2020, Investing in growth and jobs, page 14

² Cohesion Policy 2014 -2020, Investing in growth and jobs, page 1, http://ec.europa.eu/regional_policy/what/future/proposals_2014_2020_en.cfm

According to the European Commission vision, from the common rules applicable to the European Regional Development Fund (ERDF), European Social Fund (ESF), Cohesion Fund, European Agricultural Fund for Rural Development (EAFRD) and European Maritime and Fisheries Fund (EMFF), the most important ones include partnership and multi-level governance, compliance with applicable EU and national laws, promotion of equality between men and women, non-discrimination and sustainable development.

For Romania, the year 2013 is crucial regarding the absorption of European funds (EU funds) because it will be necessary and almost mandatory to submit projects for a total value of 5 billion Euros in order not to lose the money allocated, according to the declaration of the European commissioner for Regional Policy, Johannes Hahn.

Because of problems such as excessive bureaucracy, fraud regarding public procurement, conflict of interest from the authorities staff that administer the public funds, political issues and other controversies, Romania is, at present, ranked on the last position regarding attracting EU funds, with a real absorption rate up to 11%.

In order to focus on the main challenges in Romania, on 5 of November 2012 took place a conference for presenting the document elaborated by European Commission - "Position of the Commission Services on the development of Partnership Agreement and programmes in Romania for the period 2014-2020".

In this presentation is made an objective analysis which compares the current situation in Romania and the national 2020 target in the National Reform Programme (NRP):

Europe 2020 headline targets	Current situation in Romania	National 2020 target in the NRP
3% of expenditure on research and development	0,47%	2%
20% greenhouse gas (GHG) emissions reduction compared to 1990	+9% (2010 emissions compared to 2005) -7% (2020 emissions compared to 2005)	+19% (national binding target for non ETS sectors compared to 2005)
20% of energy from renewables	23,4	24%
20% increase in energy efficiency	Under revision	10 Mtoe
75% of population aged 20-64 should be employed	62,8 (2011)	70%
The share of early school leavers should be under 10%	17,5% (2011)	11,3%
At least 40% of 30-34 years old should have completed a tertiary or equivalent education	20,4% (2011)	26,7%
Reducing the number of people at risk of poverty or exclusion by 20 mill. In the EU	-788,000 (2011)	-580,000

Source: "Position of the Commission Services on the development of Partnership Agreement and programmes in Romania for the period 2014-2020", <http://www.politicaregionala.ro:8080/polreg/articol/196608/Prioritatile-de-finantare-pentru-Romania-in-perioada-2014-2020-in-viziunea-Comis>

Romania is underperforming for early school leaving, tertiary attainment and basic skills. Also, here exists a mismatch between labor market needs and labor skills and has been measured a low participation in lifelong learning and a low labor market participation through low employment levels combined with increasing youth unemployment. Therefore, it can be concluded that human capital, in every form in which can be developed, is considered by the European Commission one of the main concerns in Romania.

3. European Social Fund – financing source for human capital development still available for the next programming period 2014-2020. Case study: Romania

European Social Fund (ESF) has a major role in the implementation of economic, social and territorial cohesion policy and is considered one of the European Union's main financial instrument, being easily recognized, especially for its motto "investing in people". The main areas, through which brings out its contribution are focused to increase the employment opportunities of European citizens, to promote better education and to improve the situation of the most vulnerable people at risk of poverty.

For 2014-2020, ESF's outlines are based on strengthening thematic concentration, reinforcing partnership, social innovation and transnational cooperation, strengthening the focus on results, simplifying the delivery system and increased use of financial instruments.

In order to achieve all above, the Regulation proposes to target the ESF on four thematic objectives throughout the entire European Union³:

- promoting employment and supporting labor mobility;
- promoting social inclusion and combating poverty;
- investing in education, skills and lifelong learning and
- enhancing institutional capacity and an efficient public administration.

The proposed Regulation should enter into force in 2013 and should look for the following results⁴:

- greater focus on a limited number of objectives in line with the Europe 2020 Strategy – to increase funding impact;
- EU countries would have to ensure that, of the total EU cohesion policy funding they received, a certain minimum percentage came from the ESF.

³ Cohesion Policy 2014 -2020, Investing in growth and jobs, page 9, http://ec.europa.eu/regional_policy/what/future/proposals_2014_2020_en.cfm

⁴ European Social Fund (ESF) 2014-2020 – proposed Regulation, Citizens' summary, http://ec.europa.eu/regional_policy/what/future/proposals_2014_2020_en.cfm

This would help focus attention on employment promotion, education and training and poverty reduction;

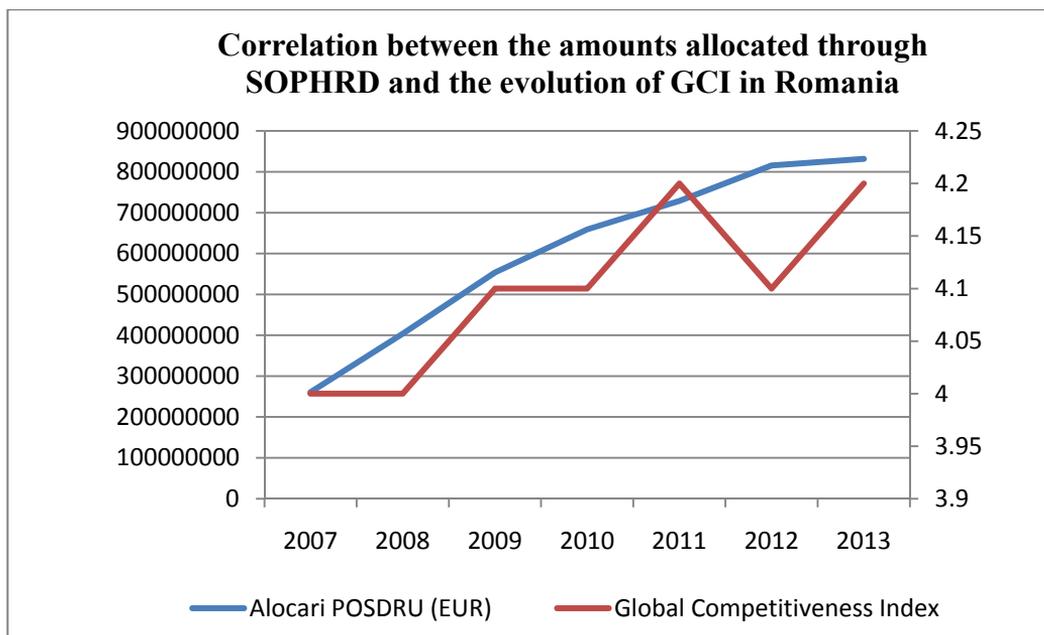
- greater emphasis on combating youth unemployment and supporting the most disadvantaged groups, such as migrants or marginalized communities – with at least 20% of ESF funding going to support social inclusion measures;
- greater involvement of social partners and NGOs in implementing the ESF – especially in less-developed regions;
- support for specific measures to promote equality between men and women and combat discrimination;
- a more active role for the Commission in facilitating transnational cooperation and promoting social innovation;
- a less complex ESF, with a special attention on simplification for small beneficiaries;
- a more result-driven approach to managing operational programmes through joint action plans.

As Androulla Vassiliou, European Commissioner for Education, Culture, Multilingualism and Youth, said “it is vital to unlock the potential of education as a key driver for growth and jobs”, especially now, when the European society is facing the negative consequences of the financial and economic crisis.

Therefore, education and training are part of the solution to face up these consequences, because they are related and can contribute to the growing of productivity, innovation and competitiveness.

When we are facing a situation such as tight public finance, investing in education and training represent an efficient and effective long-term strategy opposed to cut down investment in growth-enhancing policies, such as education. It became clear that education through human capital development can contribute to an exit from the crisis.

Taking into consideration that education and training are key points of Europe 2020 strategy for smart, sustainable and inclusive growth and ESF is financing all types of project related with this field through Sectoral Operational Programme for Human Resources Development (SOPHRD), I tried to see if there is a correlation between the amount of money allocated for this programme and the evolution of Global Competitiveness Index, in Romania, during a 7 years period: 2007-2013 (2013 GCI's value is estimated).



Source: data processed by the author

As it can be seen in the graphic, a correlation could be established because as the amount of money is increasing, also the GCI is increasing, except year 2012 due to fact that almost all the payments in SOPHRD were suspended based on all the irregularities mentioned at the beginning of this article in Romania's case.

For the next programming period 2014-2020, Romania should be able to improve human capital development through higher employment, better social inclusion and education policies.

However, for reaching these objectives, it should be implemented a strategy that combines the next priorities or defining lines: increase the employment rates of young people and vulnerable groups, improve access to participation in and quality of education and training, promote social inclusion, in particular by enhancing access to healthcare and social services and set the particular elements relevance for rural areas.

4. Conclusion

Overall, human capital have been always a key factor for the growth of economic competitiveness and thus, in the process of economic and social development.

Despite the challenges of the economic crisis, there is no doubt that education represents a solution for slowing down the effects of this period but depends also if the investment made in human capital development is an efficient one. The returns on investment in education and training are undeniable, both monetary and non-monetary, for the individual as well as for society at large.

It is possible that the effects of demographic ageing and budgetary constraints to increase but this means only that it become a necessity to prioritize efficiency of education expenditures and to improve the effectiveness of our education and training systems.

Regarding Romania's case, in order to meet the national targets assumed in the context of Europe 2020 Strategy, it will be a real challenge to improve significantly in terms of consolidating the professional competences of the labor force, as well as reducing the early school leaving in order to have a better response to the needs of the economy and dealing with the intellectual outflow of the labor force.

References

*** Buletin de Europa, nr. 35, february 2013, page 4,
<http://ec.europa.eu/romania>

*** Cohesion Policy 2014 -2020, Investing in growth and jobs, page 1 and 9,
http://ec.europa.eu/regional_policy/what/future/proposals_2014_2020_en.cfm

*** European Social Fund (ESF) 2014-2020 – proposed Regulation, Citizens' summary,
http://ec.europa.eu/regional_policy/what/future/proposals_2014_2020_en.cfm

*** Education and Training Monitor 2012,
http://ec.europa.eu/education/news/rethinking/sw373_en.pdf

*** “Position of the Commission Services on the development of Partnership Agreement and programmes in Romania for the period 2014-2020”,
<http://www.politicaregionala.ro:8080/polreg/articol/196608/Prioritatile-de-finantare-pentru-Romania-in-perioada-2014-2020-in-viziunea-Comis>

*** See the conclusions from the Economic and Financial Affairs Council meeting in 2010
(http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/117192.pdf).

EU'S COMPETITION'S POLICY REFORM

Vlad Cârstea¹

Abstract

A globalized space means a bigger challenge for European Union, especially in the field of fair competition. The Common Policy needs to be reformed in order to become a more efficient tool in a global world. The reform must focus on anti-competitive agreements, dominant market position abuse, reviewing of the Merger Regulation adopted in 1989 and the state aid control policy. The current economic crisis has influenced the reform especially in the state aid field.

Key words: *Competition, Competition Policy, reform, European Union*

JEL: F1, F13, F15.

1. The Competition Policy – Key - element of internal market

Most economists believe that a market functions better when left alone, with no intervention from the state. In theory, this philosophy, known as “Laissez-faire”, dating from the 18th century, was believed to be the key for economic growth. But, practice showed that it is not possible for market to function properly without any state intervention. Moreover, the specialists consider that a real free state intervention market never existed throughout the history.

A competition policy is the way the state can regulate the markets functioning in order to protect the consumers from the economic agents' restrictive practices in their natural tendency of cornering a market.

The main objective of a competition policy is “to promote and maintain an effective competitive process in order to keep a more efficient resource allocation” (Vickers & Hay, 1987). An efficient competition policy allows the national states to maintain a level fairness among all the economic agents. Of course, in a borderless space, like the European Union, where all the custom fees are abolished and the production factors can travel free from one country to another, fairness among competing economic agents is even harder to achieve.

Sometimes we often think that the simple annulment of the national barriers in the international trade flows circulation is enough for having a functional economic integrated space. This is the wrong approach, because, that moment represents only the beginning of the economic integration process. Why? Because, the Single Market has the tendency to behave abnormally just like the national markets do when they are not regulated. As a result the EU's institutions need to supervise the functioning of the Internal Market. One of the instruments used by EU is the Competition Policy that will ensure a fair competitive climate for all the players.

¹ Vlad Carstea is Assistant Professor at the Romanian American University in Bucharest

EU's Competition Policy main objectives stated by the Treaties are:

- **Consumers' welfare's growth** as a result of economic growth;
- **Consumers' protection** against the big companies that have the tendency to corner the markets and set the prices;
- **Income redistribution** by limiting the companies' capital accumulation;
- **Protecting the small and medium enterprises**, because the more competitors stay on the market the less likely one of them influences the market prices;
- **Market integration.** A functional and coherent competition policy helps markets integrate into the world economy.

Throughout the history the evolution of the European Competition Policy, was far from smooth. Since the introduction of the 65th and the 66th article The European Community for Steel and Coal Treaty – ECSC, in 1951, concerning the practices in the steel and coal areas and the economic concentrations, the European Competition Policy has been subjected to a lot of changes meant to be up to date with the European economic integration. The articles were later modified and became articles 85 (81) and 86 (82) in the Rome Treaty in 1957, although the provisions were still inadequate for the growing market.

This policy was based on the article 3 (g)² from the Maastricht Treaty (also known as the EU Treaty) that stipulated that all the interventions should be done without “biasing the competition on the Common Market”, principle used by the articles 85(81) – 94(89) of the EU Treaty. The fields of action where:

- ✓ Cartels and control of collusion and any other anti-competitive practices;
- ✓ The abuse dominant market positions;
- ✓ The control of state aid.

These components still represent key sectors in today's European Competition Policy.

When the Policy was introduced none of the 6 founding states had a similar legislation concerning competition. Except Germany. Belgium and Luxembourg had no legislation whatsoever, while Holland had very permissive regulations. In Italy monopolies and anti-competitive practices were regulated by the civil code. In France, although the legislation was quite detailed compared with the other Member States, it was really unrestrictive, therefore, quite ineffective.

As a result the member states had to make important progress in developing and adopting a new harmonized legislation that will ensure a competitive environment for the new market. That was the moment when the Competition Policy was firstly introduced.

2. Chronological evolution of EU's regulations concerning competition.

For the first period of its existence (1958-1972) the European Communities focused on developing the policy in order to better respond to an ever-changing market. So

² The original provision was in article 3 (f) of the Rome Treaty

the need for an institutional structure was addressed. The first body created was the Directorate General IV (DG IV or DG Competition).

For the first part of the 60's the Commission was very interested by the anti-competitive practices and the promotion of the big European companies as global representatives of the European competitiveness. This is the reason why the European Court of Justice had a small role in the policy's implementation process. But for the second half of the 60's this situation was about to change when the Commission filed a Memorandum concerning collusions in the Common Market. Moreover, DG IV elaborated a set of rules concerning vertical and horizontal agreements.

For the second period (1973-1981) the policy had to readjust in order to better respond to the market changes – the economic crisis from 1973-1974. Obviously, the European Communities reacted its representatives discussed about the necessity of financial assistance for the declining economic sectors. So the most important topic was managing the industrial sectors and the Commission had to watch the usage of state aid and the restriction of Community imports. Mergers and acquisitions were also among the most important topics, due to the fact that they can lead to dominant market position abuse.

Although the policy had been extensively modified throughout this time, it was considered that the response was quite inadequate and the common institutions created to guarantee and to apply the provisions were in over their head, especially in the crisis' years.

For the third period (1982-2000), the Competition Policy lost a lot of its supporters due to the fact that the institutions created for the compliance of the competition regulations hadn't reacted as they were supposed to. So, in the late 80's the policy was modified again, especially the mergers and acquisition provisions, while the state aid regulations were left untouched due to the fact that this field had a comprehensive set of measures.

For the fourth period (2000 – present) the reforming process continued even more intense. The most noticeable changes were made concerned the mergers' field (2001), state aid policies (2001) and anti-trust legislation (2003).

As a conclusion, it can be said that nowadays, EU's Competition Policy is a more effective tool for the Common Institutions involved in this field, than in the first years of its existence. All the components have been permanently revised and in order to get the most efficient result in the fastest time.

3. How does the globalization affect the Competition Policy?

Today, we live in a world, where we can travel across from one country to another, we can choose a job in foreign country, not to mention the fact that we can buy all sorts of products made all over the world and we can benefit from cross border services. This means that we live in a globalized world.

The European Union is just an example of globalization, where different countries from all over Europe, with different historical and cultural backgrounds, and levels of economic development decided to remove all the national barriers so all

their citizens could benefit from free movement of goods, persons, services and capital. So, these regions became more developed, more coherent in international negotiations and let's not forget a market with a huge potential. Today if you are global actor, Trans National Corporation with no operations in Europe you are not important enough. As a result EU's institutions must re-adapt the Common legislation in order to better respond to the global economy.

The Trans National Corporations in their battle for conquering new markets tend to break the competition rules and this can affect markets and finally the consumers. They tend to organize in cartels or use all sorts of anti-competitive practices so they can maximize the profits.

In these cases the most efficient way of enforcing the Competition Policy provisions is cooperation. This means that the European Commission with all the competition institutions throughout the world, in order to promote the policy's international convergence.

The cooperation is done at two different levels:

- ✓ At a bilateral level – EU has bilateral agreements with different countries for that consists of “coordination of enforcement actions, sharing of information on cases of mutual interest, dialogue on competition policy issues and, in some cases, also capacity building support”³
- ✓ At a multilateral level – EU cooperates with different international organizations such as International Competition Network (ICN), the Organization for Economic Cooperation and Development (OECD), UNCTAD, the World Trade Organization (WTO).

4. Reforming the Competition Policy.

The policy's reform began when the Commission adopted the White Paper with the sole purpose of modernizing the enforcing system for the competition provisions and reconnecting the policy with the more globalized world. This took shape in a series of important reform initiatives launched by the Commission in the past few years. These initiatives are the result of complex challenges that rose within the European Union and within the World Economy.

The main areas of the reform are:

1. Replacing regulation no. 17 from 1962 with a new Council regulation regarding the enforcement of Articles 81 and 82 of EU Treaty, referring to anti-competitive agreements, collusions and dominant market position abuse (the anti-trust legislation);

2. The review of the Merger Regulation adopted in 1989

3. Updating the State Aid Control policies

1. Updating the anti-trust legislation.

On December 16th 2002, the Council of Ministers adopted Regulation no. 1/2003 regarding the enforcement of Article 81 and 82 of the EU Treaty and it

³ Facing the challenges of globalization - <http://ec.europa.eu>

replaces Regulation no. 17/1962. The new instrument that came into force on May 1st 2004 creates conditions for applying the competition laws in a more efficient manner.

The Regulation provides the necessary measures to de-centralize the notification system regarding the anti-competitive agreements and their authorization from the Commission. This system was replaced by another one that allowed the competition authorities and the national courts from the Member States to apply these exceptions themselves.

According to Article 3 of this Regulation the national authorities must apply the Community's legislation in all the cases affecting the trade between the Member States.

Due to the fact the notification system was abolished, the Commission can now use its resources in a more efficient way by concentrating on discovering and investigating the more severe cases of competition's laws violations, such as cartels and anti-competitive behaviors. This field is highly important for the Commission and is reflected by the latest results on enforcing the anti-trust legislation from the past few years.

According to the Commission a de-centralized system for the anti-trust legislation will affect the market in a positive way as a result of better protection against this type of practices. But this requires:

- Creating a criteria that will provide optimal designation at the most suited level;
- Offering a guarantee for a coherent enforcement of EU's legislation;
- Cooperation between the authorities like the change of confidential information and joint inspections

All these evolutions lead to the development of the European Competition Network in 2002, which will ensure a more open attitude towards cooperation and coordination for the European institutions.

2. The review of the Merger Regulation.

In the year 2000, the European Commission decided to update the Merger Regulation after 10 years of activity.

The Green Paper adopted by the Commission on December 2001 offered the main objectives of this reform and after a period of consultations, a year later the Commission presented to the Council of Ministers its final proposals for reforming the unfair agreements system. The legislative proposal was adopted in 2003 and was included:

- a. A new regulation concerning the agreements
- b. The Commission's notification on the evaluation of horizontal mergers;
- c. The new Good Practice Directory lines and other administrative measures that will increase the transparency and the fairness in the DG Competition's investigations.

3. Updating the state aid policies.

The state aid policies were another component subjected to reforming. The aim was more transparent state aid legislation, simplifying the control system for the least important cases and improving the efficiency. Even further the reform began in three main areas:

- a. The procedural framework;
- b. Simplifying the control mechanisms for state aid and the elimination of possible conflicts between taxes;
- c. A more efficient usage of the economic instruments controlling the state aid.

a. The procedural framework. The most important step in updating the state aid control policy was the adoption of the Regulation no. 659/1999 which reunited less than one law the state aid control procedures as well as offering more powers to the Commission. In the same time, the introduction of standard forms and electronic notifications the notification process was improved.

b. Simplifying the control mechanisms for state aid and the elimination of possible conflicts between taxes. This objective referred to block exceptions that covered some horizontal state aids, which normally can be easily authorized. As a result in 2001 the first three regulations for block exception came into force which meant they could have been granted without notifying the Commission.

A year later, a new regulation for state aid exceptions was adopted. The Commission will not be notified regarding state aids offered for creating new jobs, for re-employing disadvantaged workers, or for covering the costs for hiring special needs workers.

c. A more efficient usage of the economic instrument controlling the state aid. In the past few years, the Commission modified its work methods in order to improve the economic analysis for the state aid cases. The Commission thinks that the introduction of a set of economic tests allows it to simplify the evaluation of limited effects state aids. This means that the Commission can use its resources in more efficient manner for investigating the important cases of state aid.

The financial crisis lead to new developments regarding the state aid policy. Due to increased risks of the markets the banks are less willing to offer loans for companies. As a result of this loan shortage, the Commission adopted in December 2008 a temporarily framework⁴ that will allow the Member States to adopt new measures in order to support their companies. This framework expired in December 2011.

On May 8th 2012, the latest reform on state aid began. According to the Commission⁵ the main objectives are:

- ✓ Foster growth in a strengthened, dynamic and competitive internal market;
- ✓ Focus enforcement on cases with the biggest impact on the internal market;
- ✓ Streamlined rules and faster decisions.

⁴ Tackling the economic crisis – The real economy - <http://ec.europa.eu>

⁵ State Aid Modernisation (SAM) - <http://ec.europa.eu>

The European Commission didn't focus only on updating the Competition Policy; the Common institutions were also envisaged. As such, the role of anti-competitive agreements control and the enforcement of anti-trust legislation were transferred to the operational directions of DG Competition. The reason was that these commissioners knew the market very well and this will have better results.

The Commission developed its working methods to reinforce the domestic control when examining the cases and to improve the economic analysis.

5. Conclusions.

The European Union's Competition Policy has been subjected to numerous changes through the functioning of the Single Market in order to offer a more adequate, faster and more efficient response to the new global challenges.

The Commission needs to realise that EU has become a global market and such is accessed by Trans National Companies from all over the world. This means that the legislation must be updated accordingly. Furthermore, this doesn't mean that in this period we should excessively protect the European companies more than we used to, because they need to face the hard global competitiveness. Just like President Almunia said at the Conference on Competition Policy, Law and Economics, at Cernobbio, Italy: "What we must avoid are attempts to shield Europe's companies from competition, in particular during this harsh period for the economy. In this game, only a few of them will benefit, and the majority will lose. I will firmly react against these temptations. Merger control is not the place for protectionist measures..."⁶

The EU's Competition Policy needed to be reformed in order to comply with the challenges of a global world. Of course, this updating process needs to continue as the global economy evolves every day and offers new challenges. For example, for the current economic crisis, the Commission had to readjust its Competition Policy to better protect the European economies against financial failure. In the same time, the competition regulations were applied as before due to the fact that we all learned from history that relaxing these regulations will lead to a prolonged crisis and of course a bigger negative impact on economies.

References:

Massimo Motta – „**Competition Policy – Theory and practice**”, Cambridge University Press, 2004

Petre Prisecaru (coordonator), „**Politici comune ale Uniunii Europene**”, Editura Economica, Bucuresti, 2004;

Low Philips, „**Les grands chartiers europeen de concurrence**”, Universite Libre de Bruxelles, Institut d'Etudes Europeennes, 7.10.2003;

Monti Mario, „**Contribution of competition policy to competitiveness of European economy**”, Institute for European Affairs, Dublin, May 2003;

⁶ Merger review: Past evolution and future prospects

Monti Mario, *The New Shape of European Competition Economy*, Tokyo, 20.11.2003;

European Commission, **“Competition Policy Newsletter”** Number 1/2003, Brussels;

European Commission, **“State aid scoreboard”** Spring 2003, update, Brussels;

European Commission, **“XXXIIInd Report on European Union competition policy-2002”**, Luxembourg, 2003;

Commission of the European Communities, **Proposal for a Council Regulation on the control of concentrations between undertakings**, Brussels, 11.12.2002;

Iordache Iulia, **“Noile orientari ale politicii in domeniul ajutorului de stat in țările Uniunii Europene”**, *Conjunctura Economiei Mondiale*, Anuarul IEM, 2002;

Institutul European din România – „**Politica in domeniul concurenței**”, Bucharest 2003;

Dumitru Miron (coordonator) – „**Economia Uniunii Europene**”, Luceafarul, Bucharest 2002;

Jacques Pelkmans – „**Integrare europeană – Metode și analiză economică**”, Institutul European din România, Bucharest 2003;

Donald Hay and John Vickers, Editors, **The Economics of Market Dominance**, Basil Blackwell, Cambridge, MA (1987), p.2ș

<http://europa.eu> – **“Facing the challenges of globalisation”**, 2012

http://ec.europa.eu/competition/international/overview/index_en.html

<http://europa.eu> – **“Tackling the economic crisis – The real economy”**, 2012

http://ec.europa.eu/competition/recovery/real_economy.html

<http://europa.eu> – **“What is competition policy?”** – 2012

http://ec.europa.eu/competition/consumers/what_en.html

Jose Almunia – **“Merger review: Past evolution and future prospects”**, *The Conference on Competition Policy, Law and Economics*, at Cernobbio, Italy 02.11.2012

http://ec.europa.eu/commission_2010-2014/almunia/index_en.htm

FINANCIAL CRISIS' PROPAGATION THROUGH INVESTORS¹

Ruxandra Dana Vilag
and George Horia Ionescu*

Abstract

Propagation of financial crises and limit their impact is a concern of many economists. Work studies about contagion occurred primarily through information correlation or liquidity. The information channel related to price changes in one market is perceived to have implications on other market asset value, and so prices on this market should be amended accordingly. The liquidity channel implies that some market participants may need cash for various reasons, such as losses in another market, thus passing the shock between the two markets.

To demonstrate the influence of investor behavior we chose to compare the development of the capital market in Romania with the European Union represented by Euronext. Comparing the results obtained in the two periods analyzed, extended period and the one that followed the outbreak of the crisis, we can say that there was a change in the Romanian market investors' behavior

Keywords: investorbehaviour,financialcrisis,information channel, liquidity channel, capital market

JEL Classification: G01, G11, E44

1. Introduction

Recent decades has been marked by several financial crises that appeared in advanced economies or developing countries. A common feature of these crises is that a crisis that initially appears to be specific to a country seems to be rapidly transmitted worldwide.

Despite extensive research in this field, changes recorded by asset prices remain difficult to explain. First, asset prices are following a downord trend and this is not to be made public in advance.

In the empirical literature, Karolyi and Stulz (1996) and Connolly and Wang (2003) find that macroeconomic indicators and other information of public interest, does not affect the "parallel movements" of the Japanese and American stock markets. King, Sentani and Wadhani (1994) find that the observable economic

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* Ruxandra Dana Vilag is Assistant Professor of Finance at the Romanian-American University, Bucharest. E-mail address: vilag.ruxandra.dana@profesor.rau.ro

George Horia Ionescu is Professor of Finance at the Romanian-American University, Bucharest. E-mail address: george.ionescu@profesor.rau.ro

variables explain only a small part of the "parallel movements" of international capital markets. In addition, correlations between market returns calculated by Longin and Solnik (2001), Connolly and Wang (1998) and Ang and Chen (2002) are high especially in times of crisis, suggesting that contagion could be "asymmetric", i.e. its stronger in times of crisis.

Because of lack of evidence that macroeconomic fundamentals can serve as determinants of contagion, researchers have found alternative explanations. Models have been developed according to arbitrage limits allow crises to spread through assets held by international investors. Kodres and Pritsker (2002) develop a theoretical model of financial contagion through rebalancing portfolio containing international assets. One implication of the model developed by them is that "parallel movements" of this indicators must be symmetrical in both upturns and downturns. Kyle and Xiong (2001), Calvo (1999) and Yuan (2005) argues that the effects of crisis spread between markets due to investors who are limited in terms of assets held, and that correlations between markets are higher during crisis periods. More Kyle and Xiong (2001) argue that when investors suffer a great loss because of investments held in the country in crisis, they may be forced to liquidate positions held in other countries and thereby bring stock prices to depreciate in these other countries. Moreover, Calvo (1999) and Yuan (2005) find that income effects persist even when only a small fraction of investors are limited in terms of wealth held as long as they are relatively better informed (they argue that rational uninformed investors are unable to distinguish between selling due to liquidity shocks and sales resulting from fundamental shocks). In the presence of informed investors, contagion is likely to result from uninformed investors becoming confused. Although theoretically these statements may convince us, there is little empirical evidence supporting the contagion induced by the investors.

Bae, Karolyi and Stulz (2003) analyze the common characteristics of extreme events using a multinomial logistic model.

There is literature showing a similar pattern of assets held by investors as being a mechanism of propagating shocks. Kaminsky, Lyons and Schmukler (2001) show that the crisis in Mexico, Asia and Russia triggered the withdrawals from mutual funds in other countries. Kaminsky, Lyons and Schmukler (2004) find that mutual funds are those that caused contagion in Latin America by the withdraw of money from other Latin American countries that followed the initial shock from Mexico 1994. Kaminsky and Reinhart (2000) provide evidence showing that countries with negligible representation in the portfolios of mutual funds are heavily affected by regional crises (Colombia and Venezuela during the Mexican crisis). Broner, Gelos and Reinhart (2003) find some evidence that stock markets are correlated through mutual funds assets, especially during crises.

Calvo and Mendoza (1999) argue that globalization can cause contagion through incentives such as the cost of collecting information and imitating arbitrary market portfolios. In the presence of short-selling boundaries, the yield of assembling information at a fixed cost may diminish with market increas. Moreover, if the

marginal cost of a portfolio manager in case of a decline in market return exceeds the marginal gain of achieving above market returns, there will be a variety of optimal portfolios in which all investors imitate arbitrary market portfolios and their number will increase with market widening. Numerical simulations suggest that these frictions can have significant implications over capital flows of emerging markets.

Their analysis shows that informational frictions itself can't produce contagion. The existence of contagion assumes that this friction can be combined with certain institutional and regulatory features of financial markets. For fixed information costs, the gain given by the acquisition of costly information drops as the market grows if investors face short sale constraints. For variable costs, an area of multiple optimal portfolios contagion exists only if the incentives are such that the marginal cost of loss exceeds market marginal gains. In this context, policies that otherwise may seem useful instruments to limit volatility of capital flows, may actually contribute to exacerbating the problem. Therefore the role of investors' decisions in determining contagion is very important.

LEKodres and M.Pritsker (2002) develops a model of rational expectations on prices in order to explain financial market contagion. Although the model reviews contagion occurred through multiple channels, they focus on that contagion occurred from rebalancing assets between markets. Through this channel investors transmit idiosyncratic shocks from one market to another by adjusting their portfolio exposure to common macroeconomic risks. The transmission and severity of financial contagion depends on macroeconomic common factors, risk sensitivity and the information asymmetry size of each market. This model can lead to contagion between markets without common news and macroeconomic risks.

Their work studies contagion occurred primarily through information correlation or liquidity. The information channel related to price changes in one market is perceived to have implications on other market asset value, and so prices on this market should be amended accordingly. The liquidity channel implies that some market participants may need cash for various reasons, such as losses in another market, thus passing the shock between the two markets.

The contagion general pattern presented is actually an extension of the static model with a single risky asset, developed by Grossman and Stiglitz (1980), to a model with multiple assets. The GS was first extended to a model with multiple assets by Admati (1985) and other authors. Admati (1985) considers a steady stream of investors who have different private information. Other authors have extended this model into a dynamic framework with a single risky asset and multiple risky assets. I Yuan (2005) introduces loan limits on informed investors in a static single risky asset. However LEKodres and M.Pritsker (2002) have not stepped so far away from the original GS, in order to keep it simple. The main novelty brought by them is the economic interpretation they give to GS model elements. In their model each risky asset is the index of a country's capital markets. The liquidation value of each market index is decomposed into a component that is private information held by some of the investors about the country and a residual component determined by

macroeconomic factors. This decomposition provides information about how risk factors interact with the macroeconomic structure of the economy and the extent of information's asymmetry in various countries in developing a model of market contagion.

Boyer, Kumagai and Yuan (2005) provide empirical evidence that stock market crises are spread globally through assets held by international investors. Separating the stocks of emerging markets into two categories those that are eligible for purchase by foreigners (accessible) and those that are not (inaccessible), they estimate and compare the degree to which the profitability indices of accessible and inaccessible stocks move in the same way as the index of profitability that reflects the country's capital market in general. Their results show that there is a correlation between indices' changes during periods of high volatility, especially for available shares, which suggests that crises rather propagates through assets held by international investors, than as effect of changes in fundamentals economic characteristics of the country. This study is actually a continuation of a similar work from 2002.²

Their work uses a distinctive capital markets' feature of emerging economies in order to assess whether dynamic correlations between markets is driven by international investors or by fundamental links between these markets. We must consider that in some emerging market economies, not all listed shares can be purchased by foreign investors. By differentiating between the two types of shares available to foreign investors and the unavailable, they can distinguish between contagion induced by investors and the one induced by fundamentals.

Their research is closely related to the literature on arbitrage limits (Shleifer and Vishny (1997)), which emphasizes that market frictions or investors break the link between changes in asset prices and economic fundamentals, which is contrary to asset pricing theory (APT), according to which "co-movement" in prices reflects changes in fundamentals in an economy with rational investors. To this respect, Barberis, Shleifer and Wurgler (2005) and Boyer (2004) find evidence regarding "co-movements" induced by the investors, showing that some of these movements can be attributed to asset reclassification.

2. Modeling the propagation of financial crises through investors

2.1. Description of used data

To demonstrate the influence of investor behavior we chose to compare the development of the capital market in Romania with the European Union represented by Euronext (a stock exchange which has subsidiaries in the Netherlands, Belgium, France, Portugal and England, all EU members).

² B.H.Boyer, T.Kumagai și K.Yuan (2002), „*Are Investors Responsible for Stock Market Contagion?*”

Since the Romanian economy is an open economy is likely to be influenced by changes in the external economic environment.

Moreover, this influence can make the Romanian economy to be contagied by external events that normally should not affect our country, due to the nature of trade or macro-economic policy links, because the country where the crisis is triggered can "send" directly effects to Romania. However the crisis that broke out in the United States in the fall of 2007 had powerful effects on the Romanian economy since it is fully integrated into the global economy.

However we expect that the effects of such crisis will be felt in Romania, after a period of 1-2 years. That happened to our country's real economy that experienced negative effects in early 2009. It should be noted that we commented that these effects were provided by the Member States of the European Union, and not by the United States directly. It is also true that due to trade links between the United States and most powerful countries of the European Union, the latter were directly affected by the crisis.

It is therefore interesting to see how the Romanian stock market reacted to the outbreak and then to the effects of the current crisis, which initially broke out as a pure financial crisis, but unsurprisingly turned in an even bigger economic crisis.

Bucharest Stock Exchange is a stock exchange where the trading is free, buyers and sellers may be resident or non-resident of Romania, and this makes it influenceable by external market developments, at the extent to which investors in that market are present on the Romanian market.

EURONEXT is the largest European stock exchange and in this case we used it as a market proxy representing the European Union, of which Romania is a member, and therefore has strong commercial, political and economic links.

The model used should determine whether in times of crisis, EURONEXT's market developments has been transmitted to BVB, if investors on the Romanian market were influenced by the European market.

$BET = \alpha + \beta * EUR + \varepsilon$, where:

BET – is the Romanian market volatility. We chose to calculate volatility based on the BET-C variations, so $BET = LN \left(\frac{BET-C_1}{BET-C_0} \right)$

EUR - is the European market volatility. We chose to calculate volatility based on the EURONEXT variations, so $EUR = LN \left(\frac{EURONEXT_1}{EURONEXT_0} \right)$

Normally Romanian market investors should follow the actions of investors in the European market and therefore BET should be influenced by EUR . Since there aren't large differences in time zones (1-2 hours), influences will be felt on the Romanian market probably the same day.

At this initial model, we added BET-C variation from the previous day, previous day market capitalization and trading volume of the previous day for the following reasons:

- BET-1 - BET-C variation from the previous day - in order to show that investors are influenced to some extent by previous variations of the internal market, ie that mimic the behavior of others and so are limited to familiar informations;

- Cap-1 - capitalization change from the previous day - in order to show how investors are influenced by the estimated value of assets sold on the market;

- Tranz-1 - the volume of transactions change - in order to show that investors who noticed that the previous day transaction volume was very high will mimic the behavior of those who traded or follow their own plan.

2.2. Descriptive statistics of used data

The data used are characteristic for 21.02.2007-19.02.2009, which includes the period before the outbreak of the crisis and a future one and the beginning of the economic crisis in Romania. Some data was removed from these specific data sets, on those days when on one of the market were not carried out transactions.

Tabel no.1 Descriptive statistics of the two markets' returns³

	EUR	BET
Mean	-0,00139	-0,00325
Median	-0,00063	-0,00113
Maximum	0,098643	0,109121
Minimum	-0,12352	-0,12342
Std. Dev.	0,020511	0,024413
Skewness	-0,65514	-0,58326
Kurtosis	6,894026	3,951915
Jarque-Bera	350,2657	47,03818
Observations	498	498

We can see from the above table that the two indicators returns have taken both positive and negative values. In addition values are quite close to the average value with a standard deviation of 0.02. The negative skewness for both indicators shows that we have more values to the left of the mean (ie lower values) and the kurtosis greater than 3 in both cases shows that we have a leptokurtic distribution with much more values concentrated around the average, so high probabilities of extreme values.

Checking time series' stationarity for the studied period was performed by applying the Augmented Dicky-Fuller. From an economic perspective, a series is stationary if a shock over the series is temporary (that is absorbed over time) and not permanently.

³ Own calculations

Table no.2 Stationarity of time series: EUR and BET⁴

Variable	With intercept	Constant, linear trend	Without
EUR	-25,89540	-25,97007	-25,78233
BET	-19,68259	-20,14196	-19,39845
Critical values			
1%	-3,600987	-4,198503	-2,622585
5%	-2,935001	-3,523623	-1,949097
10%	-2,605836	-3,192902	-1,611824

According to the table above we can see that all-time series investigated are stationary as ADF statistics show because all values obtained are higher than the tabulated critical values for a significance level of 1%, 5% and 10%, thus rejecting the null hypothesis of nonstationarity.

Table no.3 Co-integration of time series: BET and EUR⁵

Hypothesis			5%	1%
No.equations of co-integration	Eigen Value	Trace Statistics	Critical Value	Critical Value
Without	0,184125	178,4224	24,31	29,75
At least 1	0,146507	78,09998	12,53	16,31

We can see from the above table that there aren't any co-integration equations for the three time series, for a significance level of 5%, and for a level of 1% for the entire period.

Table no.4 Granger causality: BET and EUR⁶

Null hypothesis: X is not Granger caused by Y (X/Y)	Obs.	F-Statistic	Probability
BET / EUR	496	5,31250	0,00522
EUR / BET		20,2900	3,4E-09

We see from Table no.4 that there is a double causality between BET-C variation and EURONEXT variation, which means that we can apply the model.

⁴ Own calculations

⁵ Own calculations

⁶ Own calculations

2.3. Estimation of model variables for 21.02.2007-19.02.2009

Applying the regression over the studied model we obtain the following results:

Tabel no.5 The regression results⁷

Dependent Variable: BET

Method: Least Squares

Date: 09/04/12 Time: 23:33

Sample: 1 498

Included observations: 498

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EUR	0.695686	0.043366	16.04235	0.0000
C	-0.002279	0.000891		-2.559154
R-squared	0.341613	Mean dependent var		
Adjusted R-squared	0.340286	S.D. dependent var		
S.E. of regression	0.019829	Akaike info criterion		
Sum squared resid	0.195025	Schwarz criterion		

We can therefore say that the equation is:

$$BET = 0,002279 + 0,695686 * EUR$$

Given the obtained R² we can say that the European market variation explains about 34% of the variation in the Romanian market throughout the period studied, which supports in a certain extent our statement of mimicking the behavior of investors in the European market, although it may be evidence of trade links between the two markets.

We attempt to introduce into the model the influence of Romanian market results obtained in the previous day in order to study their influence.

Tabel no.6 The regression results⁸

Dependent Variable: BET

Method: Least Squares

Date: 09/04/12 Time: 23:39

Sample(adjusted): 2 498

Included observations: 497 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EUR	0.688773	0.043722	15.75335	0.0000
BET(-1)	0.046754	0.036840	1.269131	0.2050
C	-0.002139	0.000899	-2.378635	0.0178
R-squared	0.343763	Mean dependent var		-0.003253
Adjusted R-squared	0.341106	S.D. dependent var		0.024438

⁷ Own calculations

⁸ Own calculations

S.E. of regression	0.019837	Akaike info criterion	-4.996565
Sum squared resid	0.194383	Schwarz criterion	-4.971161
Log likelihood	1244.646	F-statistic	129.3885
Durbin-Watson stat	2.075889	Prob(F-statistic)	0.000000

We note that the explanatory value of the model increases, although not significantly, but we can say, as in the previous case that BET-C variation and EURONEXT variation are directly proportional and since economic characteristics have not changed we may assume that shows the influence of investment behavior.

The results of this regression will be:

$$BET = -0,002139 + 0,688773 * EUR_{-1} + 0,046754 * BET_{-1}$$

We introduce into the model the influence of results obtained on the European market the previous day in order to study their influence.

Tabel no.7 The regression results⁹

Dependent Variable: BET

Method: Least Squares

Date: 09/04/12 Time: 23:47

Sample(adjusted): 2 498

Included observations: 497 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EUR	0.709153	0.045447	15.60400	0.0000
BET(-1)	0.000306	0.046729	0.006549	0.9948
EUR(-1)	0.089698	0.055662	1.611465	0.1077
C	-0.002141	0.000898	-2.384320	0.0175
R-squared	0.347202	Mean dependent var		-0.003253
Adjusted R-squared	0.343229	S.D. dependent var		0.024438
S.E. of regression	0.019805	Akaike info criterion		-4.997794
Sum squared resid	0.193365	Schwarz criterion		-4.963922
Log likelihood	1245.952	F-statistic		87.40340
Durbin-Watson stat	1.985669	Prob(F-statistic)		0.000000

We note that the explanatory value of the model remains constant but we can say, as in the previous case that EURONEXT variation and BET-C variation are directly proportional, but with an increased proportionality coefficient. Note that the influence of BET₋₁ decreases rapidly.

The results of this regression will be:

⁹ Own calculations

$$BET = -0,002141 + 0,709153 * EUR_{-1} + 0,0000306 * BET_{-1} + 0,089698 * EUR_{-1}$$

Inorder to see the influence of domestic information we introduce into the model the transactions' volume and the market capitalization variance.

Tabel no.8 The regression results¹⁰

Dependent Variable: BET

Method: Least Squares

Date: 09/05/12 Time: 00:01

Sample(adjusted): 2 498

Included observations: 497 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EUR	0.711476	0.045463	15.64968	0.0000
BET(-1)	0.042748	0.057123	0.748358	0.4546
EUR(-1)	0.100986	0.056402	1.790457	0.0740
CAP(-1)	-0.044666	0.034928	-1.278809	0.2016
TRANZ(-1)	-0.001265	0.001609	-0.786030	0.4322
C	-0.002101	0.000898	-2.338510	0.0198
R-squared	0.350162	Mean dependent var	-0.003253	
Adjusted R-squared	0.343545	S.D. dependent var	0.024438	
S.E. of regression	0.019800	Akaike info criterion	-4.994292	
Sum squared resid	0.192488	Schwarz criterion	-4.943484	
Log likelihood	1247.081	F-statistic	52.91464	
Durbin-Watson stat	1.983380	Prob(F-statistic)	0.000000	

We note that the explanatory value of the model remains approximately constant, and market capitalization and trading volume variation have negative influences on BET-C variation. We also discover a very small influence of the trading value and market capitalization and we conclude that the Romanian market investors are influenced by external information much more than by domestic ones.

The results of this regression will be:

$$BET = -0,002101 + 0,711476 * EUR_{-1} + 0,042748 * BET_{-1} + 0,100986 * EUR_{-1} - 0,0044666 * Cap - 0,001265 * Tranz$$

Summarizing the above regression results, we can say that during the entire period analyzed:

- BET-C variation was influenced to a very small extent by Euronext variation, which means that external markets investors behaviour have influenced the decisions

¹⁰ Own calculations

of domestic investors to an important extent, the latter relying more on basic information about the Romanian economy;

- BET-C variation is not influenced by its variations of the day before;
- BET-C variation is not influenced by trading volume and market capitalization changes of the previous day.

Since the model used did not significantly explain Romanian market variations it means that there are factors that were not included in the model, factors related to the Romanian economy. We could thus say that Romanian capital market investors behave rationally, which is, not influenced by the emotional decisions.

2.4. Estimation of model variables for 1.08.2007 – 31.08.2007

However investors tend to become irrational in times of crisis outbreak, resulting the propagation of crisis that are not necessarily related to economic fundamentals of the affected country.

In order to determine whether our claim is correct we apply the above regressions, but for the period following the crisis, 01.08.2007-31.08.2007, a short period of time that should show whether investors react emotionally or rationally whenever the crisis breaks.

Applying the regression over the simple model we obtain the following results:

Tabel no.9 The regression results¹¹

Dependent Variable: BET

Method: Least Squares

Date: 09/05/12 Time: 00:47

Sample: 1 22

Included observations: 22

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EUR	0.762144	0.170116	4.480154	0.0002
C	-0.000345	0.003038	-0.113438	0.9108
R-squared	0.500896	Mean dependent var		-0.000199
Adjusted R-squared	0.475940	S.D. dependent var		0.019683
S.E. of regression	0.014249	Akaike info criterion		-5.577785
Sum squared resid	0.004061	Schwarz criterion		-5.478600
Log likelihood	63.35564	F-statistic		20.07178
Durbin-Watson stat	1.529566	Prob(F-statistic)		0.000229

$$BET = -0,000345 + 0,762144 * EUR_{-1}$$

¹¹ Own calculations

We note that although equation's coefficients remain approximately equal to those of the model applied for the extended period, the explanatory power of the model increases from 34% to 50%, ie almost 50%. In this case, since the explanatory power of EURONEXT over BET-C variation increases significantly, we can say that the Romanian market was contagiated, and the only channel that can transmit the contagion in so short time is the one of common investors. They preferred to withdraw investment from the Romanian market in order to try to protect the investment in the European market, making the Romanian market, with no cash left, to register dramatic declines in asset prices.

Tabel no.10 The regression results¹²

Dependent Variable: BET

Method: Least Squares

Date: 09/05/12 Time: 00:48

Sample(adjusted): 2 22

Included observations: 21 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EUR	0.760950	0.176163	4.319578	0.0004
BET(-1)	0.182505	0.161496	1.130096	0.2733
C	-0.000452	0.003167	-0.142613	0.8882
R-squared	0.524057	Mean dependent var		-0.000814
Adjusted R-squared	0.471175	S.D. dependent var		0.019951
S.E. of regression	0.014509	Akaike info criterion		-5.496581
Sum squared resid	0.003789	Schwarz criterion		-5.347364
Log likelihood	60.71410	F-statistic		9.909832
Durbin-Watson stat	1.953078	Prob(F-statistic)		0.001253

The results of this regression will be:

$$BET = -0,000452 + 0,760950 * EUR_{-1} + 0,182505 * BET_{-1}$$

The tendency to increase the explanatory power of the model is maintained when we introduce BET with lag 1. Note that the impact increases significantly (from 0.04 for the extended period, to 0.18), that means that investors have begun to closely monitor transactions history, especially those in the previous days.

¹² Own calculations

Tabel no.11 The regression results¹³

Dependent Variable: BET

Method: Least Squares

Date: 09/05/12 Time: 00:49

Sample(adjusted): 2 22

Included observations: 21 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EUR	0.751358	0.183268	4.099782	0.0007
BET(-1)	0.217889	0.239110	0.911249	0.3742
EUR(-1)	-0.053144	0.263530	-0.201661	0.8424
R-squared	0.524593	Mean dependent var		-0.000814
Adjusted R-squared	0.471770	S.D. dependent var		0.019951
S.E. of regression	0.014500	Akaike info criterion		-5.497709
Sum squared resid	0.003785	Schwarz criterion		-5.348491
Log likelihood	60.72594	Durbin-Watson stat		1.992735

The results of this regression will be:

$$BET = -0,053144 + 0,751358 * EUR_{-1} + 0,217889 * BET_{-1} - 0,053144 * EUR_{-1}$$

Compared with the extended period we can see that the factors inserted into the model explain in a higher proportion the endogenous variable, which reinforces the fact that in the early crises Romanian market investors were much more influenced by what happened on the European market. Note that in the period following the outbreak of the crisis, the previous day variation recorded by Euronext had an inverse effect compared to the extended period when it had a proportional influence. This could be explained by the existence of common investors on the two markets who liquidated the investment on one of the markets in order to be able to strengthen their position on the second market or simply to be able to cover losses recorded on the second market.

Tabel no.12 The regression results¹⁴

Dependent Variable: BET

Method: Least Squares

Date: 09/05/12 Time: 00:46

Sample(adjusted): 2 22

Included observations: 21 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EUR	0.776326	0.188046	4.128388	0.0009
BET(-1)	2.058481	1.211018	1.699793	0.1098

¹³ Own calculations¹⁴ Own calculations

EUR(-1)	-0.014904	0.288004	-0.051750	0.9594
TRANZ(-1)	0.001786	0.007510	0.237771	0.8153
CAP(-1)	-1.755006	1.128555	-1.555091	0.1408
C	-0.001196	0.003257	-0.367293	0.7185
R-squared	0.591399	Mean dependent var	-0.000814	
Adjusted R-squared	0.455199	S.D. dependent var	0.019951	
S.E. of regression	0.014726	Akaike info criterion	-5.363426	
Sum squared resid	0.003253	Schwarz criterion	-5.064991	
Log likelihood	62.31597	F-statistic	4.342126	
Durbin-Watson stat	2.167389	Prob(F-statistic)	0.012109	

The results of this regression will be:

$$BET = -0,001196 + 0,776326 * EUR_{-1} + 2,058481 * BET_{-1} - 0,014904 * EUR_{-1} - 1,755006 * Cap + 0,001786 * Tranz$$

The post crisis period model is characterized by a greater degree of explanation of the endogenous variable, i.e. about 60%. We observe that it kept the influence of the European market, though, as in the previous model, previous day changes becomes negative. Also preceding day's trading volume, this time, has a positive influence on BET variable, although very small. This could be explained by the fact that uninformed investors will mimic to some extent the behavior of investors who traded the day before and since the vast majority of transactions were of sell, their value was higher when the BET-C value was low.

Summarizing, regression' results for the period that followed the outbreak of the crisis in the U.S. market, are:

- In the immediate period that followed the crisis' outbreak, BET-C variation was much more influenced by EURONEXT variation, meaning that either Romanian market investors have mimicked the behavior of European market investors or the two markets investors were the same and they preferred to withdraw money from the Romanian market to cover losses from the European market, making returns of the two markets to decline and leading to a national market contagion;

- Influence of BET-C and EURONEXT variation of the previous day, after crisis, remains quite low;

- Influence of trading volume and market capitalization also remains extremely low.

3. Conclusions

Comparing the results obtained in the two periods analyzed, extended period and the one that followed the outbreak of the crisis, we can say that there was a change in the Romanian market investors' behavior.

When referring to the extended period we note that external factors, and the values recorded for the Romanian market the previous day had very little influence on the profitability of the market, which means that the greatest influence is that of

economic or political factors, as Romanian economy as a whole, fiscal policy, the profitability of certain productive sectors etc.

Period that followed the outbreak of the crisis is characterised (in terms of capital market) by maxim external influence and Romanian market development of the previous day, the fundamentals that characterize the Romanian economy having a much smaller influence. During the month that followed the outbreak of crisis, Romanian economy hasn't registered negative variations, but on the contrary, the decreased capital market in Romania to an extent which drew on the European capital market shows one thing, that Romanian market was contagiated by the financial crisis. In this case, the only available channel of contagion, are investors, both those common to both markets and those only trading on Romania market who have mimicked the behavior of investors on the European market.

References

A.R.Admati (1985), „*A noisy rational expectations equilibrium for multi-asset securities Markets*”, *Econometrica* 53, 629-657.

A.Ang and J.Chen (2002), „*Asymmetric correlations of equity portfolios*”, *Journal of Financial Economics* 63, 443–494.

K.H.Bae, A.Karolyi and R.Stulz (2003), „*A new approach to measuring financial market contagion*”, *Review of Financial Studies* 16, 717–764.

N.Barberis, A.Shleifer and J.Wurgler (2005), „*Comovement*”, *Journal of Financial Economics* 75, 283–317.

B.H.Boyer, T.Kumagai și K.Yuan (2002), „*Are Investors Responsible for Stock Market Contagion?*”

B.H.Boyer (2004), „*Style investing and comovement among stocks with similar book-to-market ratios*”, Working paper, University of Michigan.

B.H.Boyer, T.Kumagai and K.Yuan (2005), „*How Di Crisis Spread? Evidence form Accesible and Inaccesible Stock Indices*”.

F.A.Broner, R.G.Gelos and C.M.Reinhart (2003), „*When in peril, retrench: International investors and crises*”, Working paper, University of Maryland.

G.A.Calvo și E.G.Mendoza (1999), „*Rational Contagion and the Globalization of Securities Markets*”.

G.A.Calvo (1999), „*Contagion in emerging markets: When Wall Street is a carrier*”, Working paper, University of Maryland.

R.Connolly and A.Wang (1998), „*On stock market return co-movements: Macroeconomic news, dispersion of beliefs, and contagion*”, Working paper, University of North Carolina-Chapel Hill.

R.Connolly and A.Wang (2003), „*International equity market co-movements: Economic fundamentals or contagion?*”, „*Pacific-Basin Finance Journal* 11, 23–43.

S.J.Grossman & J.E.Stiglitz (1980), „*On the Impossibility of Informationally Efficient Markets*”. *The American Economic Review*, 70(3), pp. 393–408.

G.I.Kaminsky, C.M.Reinhart (2000), "On Crisis Contagion and Confusion", IMF Working Paper

G.Kaminsky, R.K.Lyons și S.Schmukler (2001), „*Mutual fund investment in emerging markets: An overview*”, World Bank Economic Review 15, 315–340.

G.Kaminsky, R.K.Lyons și S.Schmukler (2004), „*Managers, investors, and crises: Mutual fund strategies in emerging markets*”, Journal of International Economics 64, 113–134.

A.Karolyi and R.Stulz (1996), „*Why do markets move together? An investigation of U.S.-Japan stock return co-movements*”, Journal of Finance 51, 951–986.

M.King, E.Sentana, and S.Wadhvani (1994), „*Volatility and links between national stock markets*”, Econometrica 62, 901–933.

L.E.Kodres and M.Pritsker (2002), „*A rational expectations model of financial contagion*”, Journal of Finance 57, 769–799.

A.S.Kyle and W.Xiong (2001), „*Contagion as a wealth effect*”, Journal of Finance 56, 1410–1440.

F.Longin and B.Solnik (2001), „*Extreme correlation of international equity markets*”, Journal of Finance 56, 649–676.

A.Shleifer and R.W. Vishny (1997), „*The limit of arbitrage*”, Journal of Finance 52, 35–55.

K.Yuan (2005), „*Asymmetric price movements and borrowing constraints: A rational expectations equilibrium model of crisis, contagion, and confusion*”, Journal of Finance 60, 379–411.

K.Yuan (2005), „*Asymmetric price movements and borrowing constraints: A rational expectations equilibrium model of crisis, contagion, and confusion*”, Journal of Finance 60, 379–411.

THE SALE MANAGEMENT FROM A MARKETING PERSPECTIVE

Elisabeta Andreea BUDACIA¹

Abstract:

Sale management implies establishing a certain kind of products, which will be commercialized under the most appropriate form, at adequate prices, which facilitate sales by attracting the client. The purpose of sale management is the increase of sales, which can be realized through certain objectives such as the increase of the market share, modernization of the technical and material basis and the increase of the profit.

▫ The policy regarding the type of product refers to creating a commercial brand which targets a series of more important aspects such as type structure, type expansion, type differentiation, type selection.

▫ The process of implementing the policy concerning the sale should also take into account the sale forms of the goods.

▫ From the perspective of a commercial enterprise, the price is an instrument of getting back the money spent for providing the products for merchandising and of making a profit through the added commercial value. Supermarkets in general and especially retail shops take into account a series of psychological aspects when they establish the price level of the products that they merchandise.

Key words: sale management, type policy, sale forms, price strategies

JEL Classification: M19, M31

1. Introduction

By selling, an enterprise takes back the resources used in order to obtain the respective finite products and so, through the gained money, to which a profit is added, the production process is continued. The specialisation of economic agents leads nowadays to the fact that the selling activity is more and more realised by producers, who concentrate on production. Therefore, we should take into account the fact that the commercial units, either wholesale or retail shops, have to deal with sale management.

As in any other type of organisation, in commercial enterprises the increase of the economic efficiency of their activities depends on their management, on the way in which the processes develop and the management relations from within.

¹ Elisabeta Andreea Budacia is Associate Professor at the Romanian American University in Bucharest

In the category of commercial enterprises, the most frequent arrangement is the one made by the practiced type of commerce:

✓ *Supply commerce enterprises* – realise supply selling and buying operations only with other enterprises;

✓ *Retail commerce enterprises* – directly address the final consumer of the goods;

✓ *Mixt enterprises* – they develop supply commerce and retail commerce.

Sale management implies establishing a certain kind of products, which will be commercialized under the most appropriate form, at adequate prices, which facilitate sales by attracting the client.



Fig. no. 1 The elements of sale management

The purpose of sale management is the increase of sales, which can be realized through certain objectives such as the increase of the market share, modernization of the technical and material basis and the increase of the profit. The objectives in the sale area are established by taking into account the analysis of sales from previous periods, the structure of sales, predictions regarding sales, the new tendencies concerning the commercialization process, the clients' demands.

2. The components of sale management

2.1 The management of structure and of the type of products

The management of structure and of the type of products refers to administering the offered products' portfolio, regarding the new products that will be introduced for sale, but also old products which are hard to sell and which will be eliminated from the structure of the given type.

An important aspect is represented by the type update and the type variety²:

- the annual rate of type update (RTU) refers to the relation between the number of new products put for sale (NP) during a whole year and the stock products (SP), to which we add the new products (NP) and subtract the old products (OP), which are not for sale anymore;

² M. Papuc, in *Marketing*, I. Smedescu (coordinator), Ed. Universitară, București, 2004, pg. 685

$$RTU = \frac{NP}{SP + NP - OP} \times 100$$

- the annual rate of type variety (RTV) is represented by the relation between the difference of new products for sale (NP) and those which are old (OP) and withdrawn from the respective shop’s offer, within a year, and the number of stock products existent at the beginning of the period (SP).

$$RTV = \frac{NP - OP}{SP} \times 100$$

The policy regarding the type of product refers to creating a commercial brand which targets a series of more important aspects such as type structure, type expansion, type differentiation, type selection.

- Commercial type structure means determining which products will form the respective brand so that they will satisfy the demands of the targeted clients.
- Commercial type expansion refers to the addition of new products within the offer, in order to bring more satisfaction to the clients.
- Commercial type differentiation means offering certain products which are different from those of the competition, in order to attract the clients who are interested in the respective products.
- Commercial type selection refers to eliminating from the product portfolio those products which are hard to sell or which are not demanded by the clients.

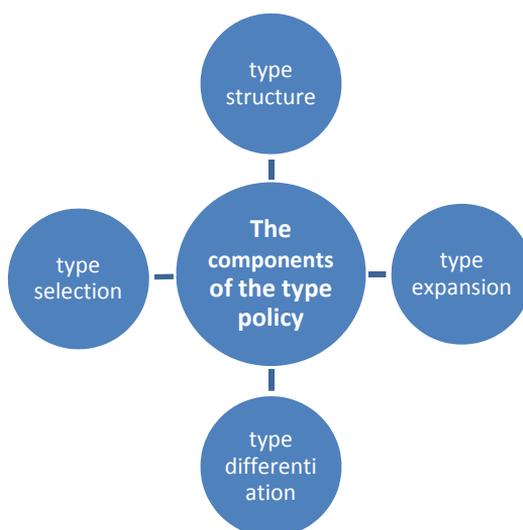


Fig. no. 2 The components of the type policy

2. 2 Sale forms

The establishment of the policy regarding sales should also take into account the sale forms of goods and the most representative are:

- General classic sales which are based on a non-programmed, but predictable request of products and services for the population;
- Sales realized on the basis of strong requests made by certain categories of consumers/users;
- Sales realized on the basis of economic contracts previously signed on the demand of different agents, present on the market;
- Complex sales of appliances, equipments and technologies which are also accompanied by services and know-how.

2.3 Price strategies

The development of a firm's activity, a firm which deals with commerce, should have in view the gain of profit and this equally refers to external and internal efficiency. The external efficiency means the efficient combination of elements which concern the marketing mix in relation to the consumers' exigencies. The internal efficiency should be integrated with the external efficiency's objectives and contribute to the perception of the quality of the service offered to consumers.

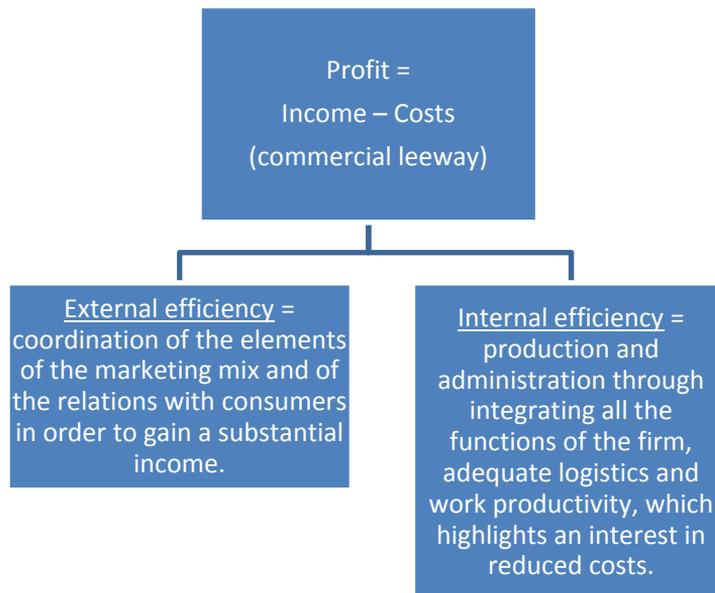


Fig. no. 3 Factors which determine the profit of a commercial enterprise

The price represents an exchange value for offered products and services and contains the production and sale costs, including an added value. Practically, it is the result of the confrontation between the economic interests of those who make the demand and the offer, under the influence of production and market³. From a commercial enterprise's perspective, the price is an instrument which helps recuperate the sums used for the procurement of the products made in order to be commercialised and which realises a profit through the obtained added value. In the activity of a shop, the establishment of the price level is influenced by a series of aspects such as: the cost of the merchandise, the practised added value, the level of the inland revenue, the clients' perception, the prices of similar products sold by the competition, the geographic location, etc.

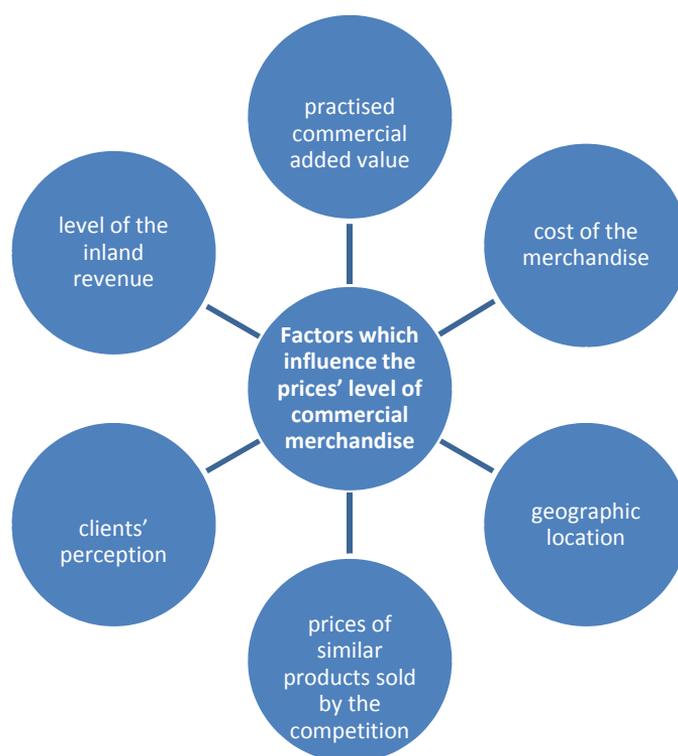


Fig. no. 4 Factors which influence the prices' level of commercial merchandise

Supermarkets in general and especially retail shops take into account a series of psychological aspects when they establish the price level of the products that they merchandise. These psychological aspects refer to the emotional reactions of buyers and trying to influence their perception of prices in order for them to seem more

³ I. Smedescu (coordinator), *Marketing*, Ed. Universitară, București, 2004, p. 119.

appealing. In this sense, there is a variety of psychological prices, among which we encounter: reference pricing, prices for grouped products, everyday low prices, “magical” prices, customary pricing, prestige pricing.

Tabel no. 1 The typology of psychological prices

Price type	Price characteristics
● <i>Reference pricing</i>	The establishment of a moderate price for a product and placing it next to a model or brand which is much more expensive and in this way the client's perception is that the first product is cheaper.
● <i>Prices for grouped products</i>	There are two variants: selling and packing together two or more than two complementary products (bundle pricing) or packing and selling at a low price two or more than two identical products (multiple-unit pricing).
● <i>Everyday low prices</i>	In order to reduce frequent price reductions, some firms prefer to maintain a relatively low price for its products.
● <i>The strategy of “magical” prices</i>	These are prices established on a numerological basis; they end with the digit 9, trying to influence the buyers.
● <i>Customary pricing</i>	The price of certain goods is established on the basis of traditions, with a preference in some cases for the modification of the quantity of the product unit than of the price, so that the sales are not reduced.
● <i>Prestige pricing</i>	In this case, the prices have a high level in an artificial way in order to gain prestige or to create an image of quality.

3. Conclusions

Sale management can be considered a component of commercial management, regarded as management of the commercial enterprise. So, sale management takes into account the identification of methods, systems and management techniques which ensure the efficiency of the selling of goods which belong to the commercial enterprise. Sale management also refers to the activities of the sale department and of

the personnel that deals with sales. Among the specific activities of sale management, the more important ones are:

- knowing the demand, the competition and the new products through an analysis of the market;
- the establishment of a plan regarding sales;
- the establishment of adequate strategies concerning sales;
- good and appealing conditions of merchandise presentation;
- the logical organisation of the space in which the merchandise is presented;
- the continuous advancement of the informational system of tracking stocks of goods.

Sale management ensures the motivational basis for the organisation and development of commerce and provides information that can be used by producers in order to establish fabrication programs, characteristics for products and their conditions of usage.

Referencies:

Bășanu, Gh., Pricop, M., „Managementul aprovizionării și desfacerii”, Ediția a treia, Editura Economică, București, 2004

Cicîrlan, D., *Managementul firmei*, Editura Universitară, București, 2007

Donaldson, B., *Managementul vânzărilor*, Ed. Codecs, București, 2001

Ph.Kotler, *Marketing de la A la Z: 80 de concepte pe care trebuie să le cunoască orice manager*, Editura Codecs, București, 2004.

Nicolescu, O., Plumb, I., Pricop, M., Vasilescu, I., Verboncu, I., *Abordări în managementul și economia organizației*, Volumul 2, „Managementul pe domenii de activitate”, Editura Economică, București, 2003

Patriche, D. (coordonator), *Tratat de management comercial*, Ed. Universitară, București, 2007

DO MUTUAL FUND PERFORMANCE AND THE ABILITIES OF FUND MANAGERS IN SLOVENIA DEVIATE FROM THOSE IN DEVELOPED MARKETS?

Markovic-Hribernik Tanja,
Vek Uros¹

Abstract

Up until the beginning of the financial crisis, Slovenia was marked by exceptionally high growth rates in the mutual fund industry. The reason for this were in the performance of the Slovenian stock market index, which was one of the best performing in 2007. In this paper we analyzed mutual funds performance in Slovenia to discover the quality of fund managers in the market. The focus was on funds with selected sectoral investment policy. We analyzed different risk-adjusted measures such as the M^2 , the Treynor ratio, the Sortino ratio and the Information ratio using monthly log returns. We also studied selection ability of fund managers with Jensens alpha and timing ability using the Treynor-Mazuy model. We found out that the risk and return performance of mutual funds in Slovenia does not deviate from those in the developed markets and that we can not confirm the selection and market timing ability of fund managers.

Keywords: investment policy, mutual fund performance, risk-adjusted measures, emerging markets

JEL Classification: G10, G11, G14

1. Introduction

Mutual funds are often the subject of research and analysis, which all share the aim of finding the best performing, or better performing, fund than the benchmark. Most research on the mutual funds industry were performed on mutual funds in developed markets. With the rapid development of mutual fund industry in transition economies the research interest became stronger also for this area. Our intention in this paper is therefore to analyze mutual fund performance in Slovenia in past years to discover the quality of fund managers in the market and find out if the mutual funds in Slovenia have the same risk and return characteristics of other mutual funds in developed markets that have been active for several years. The research of mutual fund performance is limited to the period 2005-2009 and to the sectoral investment policy ENERGY. We introduced different risk-adjusted return measures, usually used in the literature such as M^2 , the Treynor ratio, the Sortino ratio, the Information

¹ Tanja Markovic-Hribernik, Associate Professor of finance at the Faculty of Economics and Business, University of Maribor, Maribor. E-mail: tanja.markovic@uni-mb.si
Uros Vek, PhD candidate in economics and finance, Portfolio analyst at the KBM Infond d.o.o., Asset Management Company-Group Nova KBM, Maribor. E-mail: urosvek88@yahoo.com

ratio and examine selection ability with Jensens Alpha and market timing ability of fund managers with the Treynor-Mazuy model.

The paper is organized as follows. In section 2 the literature review is shortly presented. In section 3 we introduce the performance measures used in the evaluation of funds. In section 4 we briefly explain the data. In section 5 we calculate and discuss the performance measures of Slovenian mutual funds. Finally, the concluding remarks are given in section 6.

2. Review of the literature

The development of the Slovenian capital market has its roots in early 1990. Citizens received certificates through the process of privatization that allowed them to buy shares of different companies. In such a way they came into contact with capital investments. The next step in the development of capital market was the introduction of closed investment funds and mutual funds. From that point on, the mutual fund industry made rapid progress until the beginning of the global financial crisis. In 2003 for example, The Wall Street Journal Europe ranked one of the Slovenian mutual fund (Galileo) at the top of the 15 most successful open funds.

The issue of mutual funds performance has been present in the finance literature since the late 1960s. The theory appeared with the publication of an article by William Sharpe (1966) in which he first presented a measure of excess returns per unit of risk. Since then, the analysis of mutual fund performance has drawn considerable attention with the goal of finding outperforming and underperforming funds relative to a broad market. There are, for instance, studies that try to determine if mutual funds are able to achieve abnormal returns in a long term period. The term “abnormal returns” in this particular context refers to achieving abnormal results, which are better than the return on the defined benchmark, i.e. stock exchange index. According to financial literature, the phenomenon of beating the market, or achieving negative abnormal return, can influence performance persistence. Performance dependence in consecutive periods, in turn, can encourage predictability.

The majority of empirical studies discuss the U.S. market, where the financial market has achieved the highest level of development, while studies for emerging markets are limited in terms of number and coverage.

The issue of evaluation of mutual fund performance in Central and South-eastern European countries became popular after the early 2000s. The performance analysis of investment funds operating within the mentioned region include, among others, the one made in the Czech Republic by Faytova (2004), who examined the performance of investment funds from the perspective of market fluctuation and information on legislative changes. The findings reveal statistically significant reactions to the change of the institutional framework. As author pointed out, the results lend considerable support to the conclusion that the Czech fund market is efficient, at least in its ability to respond to new essential information. The issue of efficiency of the Czech capital market was analysed, for example, also by Hayek

(2007). His conclusion was, that relative efficiency of the Czech capital market still lags behind the efficiency of the developed markets. Frequently mentioned are also findings by Jindrichovska (2009). She analysed price reactions of investment trusts related to the legal conditions existing in the Czech Republic. As her findings show, the occurrence of abnormal returns was related to legislative and institutional changes. The efficiency of fund managers concerning Croatian and Slovenian mutual funds and Bosnian investment funds was examined in Jagric et al. (2007). The authors rejected the selection and market timing ability of fund managers. For Polish mutual funds, the same issue was examined by Swinkels and Rzezniczak (2009). The authors rejected the market timing ability of fund managers, while found some evidence for selection ability. The performance analysis for investment fund industry in Poland was also the one made by Bialkowski and Otten (2011). The overall results of the study suggest that Polish mutual funds on average are not able to add value. However, authors also found out, that domestic funds outperform internationally investing funds, which points at informational advantages of local over foreign investors. In addition, they found out that “winning” funds are able to significantly beat the market. Such result deviate from studies on developed markets that conclude that even past winners are not able to significantly beat the market.

After we reviewed shortly the selected studies for the mentioned region, let us now present the methodology and results of the analysis of mutual funds performance in Slovenia.

3. Methodology

Modern Portfolio Theory uses a Capital Asset Pricing Model (CAPM²) to estimate the expected return of mutual funds, which is a linear function of systematic risk (beta) and selection ability (α). The fund's return is equal to the return on a risk-free asset, market premium and the selection ability of the fund manager.

$$R_{i,t} = \alpha_i + R_{f,t} + \beta_i(R_{m,t} - R_{f,t}) + \varepsilon_{i,t} \quad (1)$$

$R_{i,t}$ is return of fund i , $R_{f,t}$ risk-free return, $R_{m,t}$ market return. β_i is a measure of systematic risk and shows the market exposure of fund and $\varepsilon_{i,t}$ is stochastic and fund-specific return. A risk-free asset is by definition not exposed to the market, so the systematic risk is 0. If the fund's actual return is higher than the expected return, calculated with CAPM, the fund manager shows selection ability. In the equation 1, the constant measures the manager's selection ability. $\alpha > 0$ states that the manager is superior to the market in stock picking and vice versa if $\alpha < 0$ (Jensen, 1968).

² The model was first introduced by Jack L. Treynor (1961-1962), William F. Sharpe (1966), John Lintner (1965) and John Mossin (1966) independently, but based on earlier work of Harry Markowitz on diversification and modern portfolio theory.

In 1966, Treynor-Mazuy presented a modification of CAPM to assess a manager’s ability to predict market fluctuations.

$$R_{i,t} = \alpha_i + R_{f,t} + \beta_i(R_{m,t} - R_{f,t}) + \gamma_i(R_{m,t} - R_{f,t})^2 + \varepsilon_{i,t} \quad (2)$$

α is a measure of selection ability and γ of market timing. If the Treynor-Mazuy coefficient is positive the fund manager is able to shift from high-beta stock to low-beta stock when the market falls. If the coefficient is negative the manager is not able to properly assess the market condition and shift from high-beta stock to low-beta stock when the market falls.

In this paper, we decided to value the funds’ performance with absolute risk-adjusted return measures (M^2 , Treynor ratio, Treynor-Mazuy), relative (Information ratio) and downside risk-adjusted returns.

Modigliani and Modigliani (1997) first introduced M^2 to compare returns that have been adjusted to risk. The coefficient is a modified Sharpe ratio (1994), which shows the return per unit of risk and puts the benchmark and fund on the same risk basis.

$$M^2 = \left[\left(\frac{\overline{RP}_i - \overline{RF}_i}{\sigma_i \times \sqrt{P}} \right) \times (\sigma_j \times \sqrt{P}) \right] + \overline{RF}_i \quad (3)$$

where: \overline{RP}_i is the average return of the fund i , \overline{RF}_i is the average return of a risk-free asset i , σ_i is the standard deviation of the fund i , σ_j is the standard deviation of the benchmark j , and P is the number of observations in a year.

Total risk is $\sigma^2 = \beta^2 \sigma_m^2 + \sigma_e^2$, which can be divided into systematic risk and unsystematic risk. With diversification, unsystematic risk can be reduced, but one can not avoid systematic risk when investing in the stock market.

The Treynor ratio (1966) is calculated by dividing excess returns with market or systematic risk (β). The fund lacks proper diversification if M^2 is low while the Treynor ratio is high.

$$T_p = \left(\frac{\overline{RP}_i - \overline{RF}_i}{\beta_i} \right) \quad (4)$$

where: \overline{RP}_i is the average return of fund i , \overline{RF}_i is the average return of risk free asset i and β_i is the measure of market or systematic risk i .

William F. Sharpe (1966) is the author of the Information ratio, whose average value added over the benchmark divides by its standard deviation.

$$IR = \frac{\left(\frac{\sum RP_i - RM_i}{N} \right) \times \sqrt{P}}{\sigma(RP_i - RM_i) \times \sqrt{P}} \quad (5)$$

where: RP_i is the return of fund i , RM_i is the return on benchmark i , $\sigma(RP_i - RM_i)$ is the standard deviation of value added i , N is the number of observations, and P is the number of observations in a year.

Feibel (2003) defines Sortino ratio as a measure of downside risk, where positive returns are not observed. In the denominator only returns that are smaller than the target return (T) are considered. The ratio measures excess return to downside risk taken.

$$S = \frac{(\overline{RP_i} - T) \times P}{\left(\sqrt{\frac{\sum (RP_i - T)^2; RP_i < T}{N}} \right) \times \sqrt{P}} \quad (6)$$

where: RP_i is the return of a fund i , $\overline{RP_i}$ is the average return on the fund i , T is the target rate of return, N is the number of observations, and P is the number of observations in a year.

4. The Data

The research includes comparable mutual funds that were present in the Slovenian market at the end of 2008. The funds were selected in accordance to sectoral investment policy ENERGY.

Funds with sectoral investment policy ENERGY had to satisfy certain criteria: the fund had to have at least 75% of assets in shares of companies which produce, distribute oil, gas and electricity; mining coal and uranium; produce equipment for energy companies; produce and invest in R&D of renewable energy sources.

Mutual funds have at least 33 observations and they all ended at the same point in time. In the research we used log monthly returns $R_{i,t} = \ln(S_{i,t}/S_{i,t-1})$, where $S_{i,t}$ is the monthly return of a fund i in month t . The risk-free asset was compounded by the 10-year German, Japanese and USA bonds and the benchmark was MSCI ENERGY in euros.

5. Results and discussion

In accordance with EFAMA (2008) Slovenia had the highest growth of mutual fund assets in 2007 with 45,9%. In that same year, the market of mutual funds reached a size of €2.97 billion. The reason was the Slovenian stock market and the high net inflows of money to mutual funds. The performance of the Slovenian stock market index was more than 70% and was one of the best performing indexes in the world in 2007. A particular characteristic of the Slovenian investor was his high risk profile. The structure of mutual funds assets was dominated by equity funds. At the peak of the market in 2007, equity funds represented 66% of all mutual fund assets. The share of equity funds to total assets in the European Union was 41%. Net

withdrawals and drops in equity prices, as a result of financial crisis, started to shift the structure of mutual funds assets in Slovenia toward EU standards.

The mutual fund market in Slovenia shrank to 1.75 billion euros in September 2009. However, this is still 91% higher than at the beginning of 2005. In addition to asset growth the number of investors in mutual funds jumped 200% to 393,000.

To analyse the mutual fund performance in Slovenia with the investment policy ENERGY in the period 2005-2009 we first started estimating CAPM (equation 1) with the standard method of linear regression: ordinary least square. In the Slovenian mutual fund market there were nine funds present with the investment policy ENERGY at the end of 2008 (Table 1).

Table 2 shows the results for nine funds with the investment policy ENERGY. The average monthly log return for the benchmark in the period from January 2005 until August 2009 was 0.3%. The majority of funds had negative average monthly log returns. The Slovenian mutual funds had higher negative average returns. This is due to the fact that they were introduced to the market after January 2005. Infond Energy and MP-Energy started in October 2005, while Ilirika-Modra energija began in November 2006. Slovenian fund managers were not able to compete during the time when markets were surging. This fact has to be considered when interpreting the results.

Table no. 1: General figures

Mutual Funds	N	Introduction of funds	2005	2006	2007	2008	2009*
ENERGY			%	%	%	%	%
Infond Energy	46	oct.05	-0.12	16.46	25.42	-47.80	24.52
KD-Surovine in energija	39	may.06	-	10.55	21.91	-46.98	22.48
EEF-Energy&Materials	56	jul.00	42.05	6.26	15.71	-41.81	17.12
Ilirika-Modra energija	33	nov.06	-	1.44	13.07	-45.40	18.37
MP-Energy	46	oct.05	18.47	9.72	7.93	-50.09	31.31
NLB-Naravni viri	43	jan.06	-	12.95	21.87	-43.38	25.23
PIA-Energy Stock	56	jun.01	53.04	13.41	24.31	-48.71	24.48
Raiffeisen Energie Aktien	56	feb.02	50.03	13.29	14.03	-48.58	26.36
SGAM-Global Energy	56	oct.98	12.73	-6.77	20.14	-40.19	10.35
MSCI WORLD ENERGY INDEX		dec.98	44.57	3.90	15.30	-36.61	7.96

*till the end of August 2009

Source: *KD Finančna točka* (2009) and *Bloomberg* (2009)

**Table no. 2: Monthly Log Returns of Mutual funds with Investment Policy
ENERGY**

Mutual Funds	μ	σD	β	R^2	β^*	γ
Infond Energy	-0.00036	0.07250	1.018 (11.648)	0.755	1.001 (9.84)	-0.365 (-0.322)
KD-Surovina in energija	-0.00348	0.06990	0.936 (9.807)	0.722	0.897 (7.773)	-0.78 (-0.625)
EEF-Energy&Materials	0.00311	0.06132	0.928 (23.964)	0.914	0.909 (21.752)	-0.587 (-1.178)
Ilirika-Modra energija	-0.00917	0.07156	0.871 (8.016)	0.675	0.841 (6.337)	-0.585 (-0.405)
MP-Energy	-0.00377	0.07202	0.937 (9.016)	0.649	0.892 (7.403)	-1.026 (-0.765)
NLB-Naravni viri	-0.00149	0.06177	0.867 (11.205)	0.754	0.86 (9.188)	-0.143 (-0.139)
PIA-Energy Stock	0.00572	0.07374	1.032 (13.891)	0.781	0.976 (12.399)	-1.743 (-1.857)
Raiffeisen Energie Aktien	0.00412	0.07221	1.044 (16.442)	0.834	1.003 (14.781)	-1.254 (-1.549)
SGAM- Global Energy	-0.00325	0.06711	0.928 (13.23)	0.764	0.842 (11.989)	-2.669 (-3.187)
MSCI WORLD ENERGY INDEX	0.00303	0.06319	1	1		

Notes: μ – average monthly log return; σD – total risk (standard deviation on fund); β –systematic risk; R^2 – statistics obtained from the equation 1; coefficients (β^* , γ) are estimated with the regression equation 2; benchmark used is MSCI Energy Index; average year return of a risk-free asset in the observed period is 3.09%; t-statistics is significant at a 5% level.

The best performing fund was PIA-Energy Stock, with an average monthly log return of 0.57%. In addition to the PIA-Energy Stock, two other funds outperformed the benchmark with an average return of 0.3%. Higher risk taking was profitable for only one third of the funds, which had higher average monthly log returns than the benchmark. Seven out of nine funds had a standard deviation higher than the benchmark. EEF-Energy&Materials was able to outperform the benchmark while having a lower standard deviation and therefore being less risky. The R^2 statistics range from 0.649 to 0.914, while the beta stretched from 0.867 to 1.044 - all significant at a level of 5%.

Table 3 shows the risk adjusted statistics of the M^2 , Treynor ratio, Sortino ratio, Information ratio and α -coefficient. Funds are sorted in accordance with M^2 , where a higher positive value represents a better relationship between risk and return. The average monthly log return for the majority of funds was negative - as well as M^2 . In this case, the fund with a lower negative value for M^2 represents a better relationship between risk and return. PIA-Energy Stock has the best relationship between risk

and return, followed by the Raiffeisen Energie Aktien. The two funds with the highest M^2 value also have higher Treynor ratios. They were rewarded for taking higher risks, which is reflected in other ratios as well. The beta of both funds is higher than 1 and the standard deviation is higher than the benchmark.

Table no. 3: Risk Adjusted Statistics of Mutual Funds with Investment Policy ENERGY

Mutual Funds	M^2	Th	α	S	IR
PIA-Energy Stock	0.06326	0.03656	0.003 (0.57)	0.18033	0.26953
Raiffeisen Energie Aktien	0.04711	0.01771	0.001 (0.266)	0.09083	0.12693
EEF-Energy&Materials	0.03750	0.00688	0.0001 (0.043)	0.03559	0.01409
Infond Energy	0.00017	-0.03467	0.003 (0.596)	-0.17307	0.30222
NLB-Naravni viri	-0.01905	-0.05633	0.004 (0.85)	-0.28746	0.58735
KD-Surovina in energija	-0.03475	-0.07754	0.002 (0.262)	-0.35489	0.19814
SGAM-Global Energy	-0.03496	-0.07536	-0.006 (-1.412)	-0.36084	-0.66251
MP-Energy	-0.03589	-0.08123	-0.001 (-0.102)	-0.37207	-0.02223
Ilirika-Modra energija	-0.09357	-0.16191	-0.003 (-0.39)	-0.64531	-0.13109
MSCI WORLD ENERGY INDEX	0.03640	0.00548	0	0.02998	0

Notes: T_h -Treynor ratio; α -coefficient; S-Sortino ratio; IR-Information ratio

When analyzing the market timing ability of funds with the Treynor-Mazuy model (equation 2) none of nine funds had a positive γ coefficient and none of them were significant at the 5% level. That means the managers increased their holdings of high beta stocks when the market performed poorly and vice versa. We can conclude that fund managers lack market timing ability when making investment decisions. This is also in accordance with the findings of Cumby and Glen (1990), Hendrics et al. (1993), Jagric et al. (2004, 2007), Swinkels and Rzezniczak (2009) or Bialkowski and Otten (2011).

Six out of nine funds had a positive coefficient α but with a low nominal value (third decimal). But none of them was statistically significant at a 5% level. These results are comparable to the results of before mentioned studies and Ippolito (1989), who, in researching 143 funds, found that 127 funds had α 0, 12 funds were positive and 4 funds were negative.

6. Conclusions

We analyzed mutual funds performance in Slovenia to discover the quality of fund managers in the market. Up until the beginning of the financial crisis, Slovenia was marked by exceptionally high growth rates in the mutual fund industry. The reasons for this were in the performance of the Slovenian stock market index, which was one of the best performing markets in 2007 with a growth of more than 70%.

Additionally, the number of investors and mutual funds increased. This was all supported by a good macroeconomic picture of low budget deficits and public debt, which deteriorated during the financial crisis. Slovenia in 2009 registered a budget deficit of around 5.5% and a public debt of around 36% (SURS, 2010).

During the period of economic success, investors did not pay much attention to the risk and return analysis. With the financial crisis, investors became more aware of the fact that risk goes hand in hand with return.

The success story for the mutual fund industry in Slovenia ended with the financial crisis that caused net outflows of assets of €304 million in 2008. This represented 10% of all assets in 2007. According to EFAMA (2009), in Europe the net outflow of assets in 2008 accounted for only 4.4% of all assets. Regarding this data one should have in mind, that the structure of Slovenian household financial assets consisted of 6.3% of assets in investment funds (mutual funds and investment companies), while in Europe it was 9.1% (Banka Slovenije, 2009; ATVP, 2009). When we compare investment fund assets to national GDP, we saw that in Slovenia investment fund assets represented 5.1% of GDP, while in Europe it was 45.9% of GDP.

In the analysis of the performance of mutual funds in Slovenia from 2005 to 2009, we used the monthly log returns of funds. The focus was on funds with the investment policy ENERGY. With the CAPM and Treynor-Mazuy model, we examined both selection and market timing ability. When analyzing selection ability the majority of fund managers had a positive coefficient but none significant at the 5% level. The results of the market timing analysis states that fund managers were not able to properly predict market fluctuations. However, none of the analyzed funds were statistically significant at a 5% level. Therefore, we can not confirm the selection and market timing ability of fund managers. This conclusion is in accordance with the findings of other research studies, mentioned previously.

On the other hand, the results also show that the mutual funds in Slovenia have the same risk and return characteristics of other mutual funds in developed markets that have been active for several years. The performance of fund managers in the Slovenian mutual fund market does not lag behind the performance of fund managers in more developed countries.

References

- ATVP-Agencija za trg vrednostnih papirjev. 2009. *Podatkovno ogledalo*, Available at: <http://www.a-tvp.si/Default.aspx?id=55>
- Banka Slovenije. 2009. *Poročilo o finančni stabilnosti*. Available at: <http://www.bsi.si/publikacije-in-raziskave.asp?MapaId=285>
- Bialkowski, Jędrzej and Otten, Roger. 2011. "Emerging market mutual fund performance: evidence for Poland". *The North American Journal of Economics and Finance* 22 (2): 118-130.
- Cumby, Robert E. and Glen, Jack D.. 1990. "Evaluating the performance of international mutual funds". *Journal of Finance* 45(2): 497-521.

- EFAMA-European Fund and Asset Management Association. 2008. *Efama Fact Book – Trends in European Investment Funds. 6th Edition*. EFAMA 2008.
- EFAMA-European Fund and Asset Management Association. 2009. *Efama Fact Book – Trends in European Investment Funds. 7th Edition*. EFAMA 2009.
- Fajtova, Jana. 2004. "Open-ending of closed-End Funds in the CR: price and Discount Reaction – empirical evidence". *Czech Journal of Economics and Finance* 54 (1-2): 22-49.
- Feibel, Bruce J.. 2003. *Investment performance measurement*. New Jersey: John Wiley & Sons, Inc.
- Hajek, Jan. 2007. "Czech capital market weak-form efficiency, Selected issues". *Prague Economic Papers* 4: 303-318.
- Hendrics, Darryll, Patel, Jayendu and Zeckhauser, Richard. 1993. "Hot hands in Mutual Funds: Short-run Persistence of Relative Performance, 1974-1988". *Journal of Finance* 48 (1): 93-130.
- Ippolito, Richard. 1989. "Efficiency with Costly Information: A study of Mutual Fund Performance. 1965-1984". *Quarterly Journal of Economics* 104 (1): 1-23.
- Jagric, Timotej, Strasek, Sebastjan, Kolanović, Marko and Podobnik, Boris. 2004. "The performance of Slovenian mutual funds". *Slovene Studies* 26(1/2): 81-92.
- Jagric, Timotej, Podobnik, Boris, Balen Vanco, Kalanović, Marko and Jagric, Vita. 2007. "Stock Market Performance Analysis for Three European Emerging Stock Markets". *The Business Review* 8(1): 67-74
- Jensen, C. Michael. 1968. "The performance of Mutual Fund in the period 1945-1964". *Journal of Finance* 23 (1): 389-416.
- Jindrichovska, Irena. 2009. "Open-ending Czech Closed-End Funds: Evidence from Transitional Market". *Academy of Taiwan Business Management review* 5 (2): 94-111.
- KD Finančna točka. 2009. Available at: <http://www.financa-tocka.si>
- Modigliani, Franco and Modigliani, Leah. 1997. "Risk-adjusted Performance". *Journal of Portfolio Management* 23(2): 45-54.
- Sharpe, F. William. 1966. "Mutual Fund Performance". *Journal of Business* 39 (1): 119-138.
- Sharpe F. William. 1994. "The Sharpe ratio". *Journal of Portfolio Management* 21 (1): 49-58.
- Swinkels, Laurena, Rzezniczak, Pawel. 2009. "Performance evaluation of Polish mutual fund managers". *International Journal of Emerging markets* 4 (1): 26-42.
- Treynor, Jack L. 1966. "How to rate management investment funds". *Harvard Business Review* 43 (January-February): 63-75.
- Treynor, Jack L. and Mazuy, Kay. 1966. "Can Mutual Funds Outguess the Market"? *Harvard Business Review* 43 (July-August): 131-136.
- SURS–Statistični Urad Republike Slovenije. 2010. *Primanjkljaj in dolg države*. Available at: <http://www.stat.si/indikatorji.asp?ID=28>.

MERGER AND ACQUISITIONS IN ROMANIA. ACCOUNTING AND FISCAL ISSUES¹

Ionut Cosmin Lungu*

Abstract

Nowadays the need for revenues for the state budget is one of the main issues and concerns of the Romanian authorities. The Romanian legislator positive surprise the public by issuing regulations to facilitate implementation of restructuring measures such as division, merger, liquidation and eliminate some of the "short circuits" that could affect these restructuring measures.

Key words: Division, Merger, Liquidation, Acquisitions

JEL Classification: G34, H7, H25, M41, M48

1. Introduction

Market value of mergers and acquisitions doubled last year to \$788 million, although the number of transactions decreased from 2011, according to Ernst & Young M&A Barometer, which estimates for this year market growth in the financial sector and renewable energy. Thus, the market grew by 106% compared to 2011. Although the number of transactions declined slightly in 2012 (114 transactions in 2012, compared to 120 in 2011), growth was ensured by doubling average transactions.

2. Merger and Acquisitions Market in Romania

Despite the macroeconomic situation and political uncertainty in 2012, the market for mergers and acquisitions had a good year outcome based on the few representative transactions in sectors such as agri-business, e-commerce, renewable energy and real estate. Investments in this period came from the U.S. (eight transactions), France (five transactions), Cyprus and the UK (four each transaction), Germany and Canada (three). Germany, traditionally the main investor was replaced by the U.S.

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* Author is PhD Lecturer of Accounting at the Romanian-American University, Bucharest. E-mail address: lungu.ionut.cosmin@profesor.rau.ro

Table no.1 - M&A in 2012. Largest transactions

Target company	Buyer company	Deal value (USDm)
Oil Factory (Lehliu Gară) owned by Prio Foods	Bunge	65.6
Rombat	Metair Investmens	52.0
Tractorul Industrial Area	Auchan	32.7
MKB Romexterra Bank	PineBridge Investments	32.7
Vulcan platform	Benevo	30.5
Pterom LPG SA	Crimbo Gas International	25.2
City Business Centre Timisoara	New Europe Property Investments lpc	21.7
Romaltyn Minning and Romaltyn Exploration	SAT & Company	20.0
Ejobs.ro	Ringier Group	16.3
Celrom	Alpha Construct Sistem	13.5

Source: Ernst & Young M&A Barometer 2012

There was no Romanian investment abroad (outbound), indicating that local players are more focused on strengthening business in the country. The most attractive sectors, depending on the value of transactions announced were the real estate, retail, manufacturing, food and energy and mining.

The year 2012 (till now) marked a rise in the number of transactions with strong companies, but continued the trend outlined in 2010 and 2011, when companies in insolvency or difficult situations dominated local transactions.

If in 2011 the Romanian market M & A (mergers and acquisitions) was divided equally between foreign investors and domestic, in 2012 foreign investors had 54% of the market, which indicates an increasing interest them in the Romanian market, they continue monitoring Romania in search of attractive targets. However, the percentage of private equity investments in the number of transactions fell from 35% in 2011 to 18% in 2012. This indicator emphasizes the difficulty investor to identify interesting targets to measure their portfolio in Romania, but their focus on the sale of portfolio companies held long. In 2012, we have seen a dynamic higher in market M & A to continue in the beginning of the year.

This development will be supported by the expected political stability and restart the privatization process and the transactions expected in the financial sector and renewable energy. Thus, one of the largest transactions in 2012, excluding transactions involving assets in several countries, were taking fertilizer manufacturer *Azomureş* of *Ameropa Holding of Switzerland* for 250-300 million and buying online retailer of electronic products *Emag* by Americans from *Naspers* for \$ 83 million (about 63 million euro). Third, that the transaction value is *Liberty Center* mall sale for 60 million, followed by taking oil factory *Lehliu Station* from *Prio*

Foods, the U.S. group **Bunge**, 65.6 million dollars transaction (see **Table no.1 - M&A in 2012). Largest transactions**).

3. Accounting and fiscal issues for Merger and Acquisitions

Romania has experienced a major decline in the number of acquisitions both in terms of size and volume, while the number of mergers increased. This was caused mainly by difficult conditions that make it more difficult to access funds with financial leverage. High expectations of sellers on final earnings are in contradiction with the fact that investors hope to conclude transactions as convenient financially, which lead to prolonged negotiations and the conclusion of a smaller number of transactions.

The legal framework for transactions relating to mergers and acquisitions is rather limited, including Company Law 31/1990 and Order 1376/2004 (on Recognition of major merger, division, liquidation of companies, and withdrawal or excluding associates of the companies and their tax treatment). Mergers and acquisitions involving at least one listed company must comply with the provisions of Law 297/2004 on the capital markets and the regulations issued by the National Securities Commission of Romania (NSC).

Divisions, mergers and liquidations still raises many questions for those who are interested to participate in such a process. Taxable period ending where divisions or mergers which have legal effect termination of legal entities by dissolution without liquidation of one of the following data:

- a) the date of registration in the commercial register kept by the competent courts the new company or the last of them, to the formation of one or more new companies;
- b) the date of registration decision last general meeting which approved the transaction or other date fixed by agreement where it states that the operation will take effect according to the law;
- c) The date of registration of the legal entity established under EU legislation, where Merger is also is legal;
- d) The date established by law, in cases other than those referred to in points a), b) and c). In case of dissolution followed by liquidation of taxpayer's taxable period ends on the date submitting financial statements to the register where it was registered, by law, establishing it.

The merger / division takes effect when:

- a) for the establishment of one or more new companies at date of registration in the register trade the new company or the last of them;
- b) in other cases, from the date when the decision last general meeting which approved operation except that, by agreement stipulates that the operation will take effect on another date, but cannot be further end of the current financial year acquiring company or the recipient company or the conclusion of the last financial ended the company or companies that transfer their heritage.

Border merger effect when:

- a) for setting up a company after its registration in the commercial register;
- b) if the merger by absorption of registration in the commercial register of the instrument modifying the articles of incorporation, except that, by agreement stipulates that operation take effect at a later date, but cannot be further closure of current financial companies receiving or acquiring company or the conclusion of the last financial year ended the company or companies who transfer their assets, and control delegated judge;

Thus, the legislature has already covered the fact that, legally, merging / division take effect on the date of registration decision last general meeting which approved operation or any other date agreed by the parties, for situations that do not require one or several new companies. New tax provisions come and set a date for the end of the period taxable date on which the merger / division takes effect.

Moreover, the legislature has introduced separate legal regulations where fusion it is a European company. Therefore, the new tax provisions governing separate this and set the date for the taxable period on registration of the European company - the date on which the merger takes effect.

Before the December 2009 legislative amendment, the Tax Code provides rules for that the taxable period ends, if a taxpayer liquidation once the date of cancellation of register which registered its establishment. The date of cancellation raises numerous issues related to tax liabilities of a taxpayer in the period between the date submitting financial statements to the registry and that cancellation date, for example:

- What is a taxpayer tax liabilities in liquidation between submission of statements financial record and the date of cancellation?
- The tax due in this period?
- What statements submitted during this period?

To clarify these questions, the new tax provisions establish that the period taxable legal persons in case of cessation of existence by dissolution followed by liquidation considers ending date of the financial statements in the commercial register.

4. Conclusions

Regarding the treatment of the merger and acquisition operations we observe major differences between the national and international regulations, the national ones being characterized by a higher degree of option, decision-making at the latitude of the participants in the merger, and international regulations having a more restrictive degree depending on certain given situations.

From the analysis of different merger operations developed on the Romanian market the greater level is of mergers achieved for administrative reasons, with the purpose of making the activities of the mergers more effective as a sequel of the

identification of the main objects of activity of the entities participating in the merger, subsequent to the existence of the same structures of the shareholders of the participating entities and their administration.

Thus, the purpose of the operations of merger is: to ensure the reduction of administrative expenses, the increase of the specific costs (personnel in various specialities, space maintenance, utilities); to ensure cash flow so that it should allow paying in time the fiscal bonds and company's debts, and an also simplifying bookkeeping. In the case of these specific typologies with mergers, evaluating the elements of assets and liabilities of the entities has been based on the utilizing of the accounting values, and the exchange report has been in many cases established on negotiations or an exchange report 1:1 has been chosen.

Another specific typology that has stood out in time was the merger – acquisition characterized by the fact that at first stage there take place mergers after which participating entities remain separated legally, and then takes place the last acquisition by which we can emphasize two situations: either the buying entity survives and the bought one disappears (absorption) or the buying entity holds 100% the bought entity, but neither disappears (acquisition). This typology of mergers has been used in the case of large entities with a more diversified structure of the shareholder board and the reason for them was obtaining control in the initial stage in order to facilitate the merger.

References:

- Douma, Sytse & Hein Schreuder. 2013. *Economic Approaches to Organizations*. Chapter 13. 5th edition. London: Pearson.
- DePamphilis, Donald .2008. *Mergers, Acquisitions, and Other Restructuring Activities*. New York: Elsevier, Academic Press. p. 740.
- Cartwright, Susan; Schoenberg, Richard.2006. *Thirty Years of Mergers and Acquisitions Research: Recent Advances and Future Opportunities*. *British Journal of Management* 17 (S1): S1–S5.
- Harwood, I. A. 2006. *Confidentiality constraints within mergers and acquisitions: gaining insights through a 'bubble' metaphor*. *British Journal of Management* 17 (4): 347–359.
- Rosenbaum, Joshua; Joshua Pearl. 2009. *Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions*. Hoboken, NJ: John Wiley & Sons.
- Ernst & Young M&A Barometer 2010, 2011, 2012
- Straub, Thomas. 2007. *Reasons for frequent failure in Mergers and Acquisitions: A comprehensive analysis*. Wiesbaden: Deutscher Universitäts-Verlag (DUV), Gabler Edition Wissenschaft.
- Scott, Andy (2008). *China Briefing: Mergers and Acquisitions in China* (2nd ed.).
- Aharon, D.Y., I. Gavious and R. Yosef, 2010. Stock market bubble effects on mergers and acquisitions. *The Quarterly Review of Economics and Finance*, 50(4): p. 456-470.
- Reifenberger, Sabine (28 December 2012). M&A Market: The New Normal. CFO Insight