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Contents

THE CONTRIBUTION OF „RUDA 12 APOSTOLI" MINING ASSOCIATION IN BRAD TO THE DEVELOPMENT OF TRANSYLVANIAN GOLD MINING BETWEEN 1884 – 1921

MIRCEA BARON *

ABSTRACT: *One of the major gold mining regions in Romania is part of the gold rectangle in the Apuseni Mountains and lies around the town of Brad. It is here that the"Ruda 12 Apostoli" Mining Association of cuxas was established at the end of the XVIIIth century. This association was to become the most important unit for the mining of precious metals in the entire Austrian – Hungarian Empire after 1884, when it was taken over by the German company "Harkortschen Bergwerke und Chemische Fabriken zu Schwelm und Harkorten A.G. zu Gotha", preserving its status in the interwar Romanian as a component of the "Mica" Mining company. This mining complex had a production of 27,919.520 kg of gold between 1884 – July 1, 1911.*

KEY WORDS: *Romania; Brad; the last quarter of the XIXth century – the beginning of the XXth century; gold mining; the"Ruda 12 Apostoli" Mining Association.*

JEL CLASIFICATION: *B10*

The continuity of gold mining in the Brad area (Hunedoara county), since ancient Rome up to the modern age is mainly attested by mining operations, as "no matter how many slaves and war prisoners the Romans would have used, they still would not have been able to drive so many galleries in 150 years, given the means available at the time, but they are the result of the work of local people, throughout the Middle Ages"[1].

Ion Rusu Abrudeanu states that "reliable notes date the resuming of newer mining operations in Ruda area in mid – XVIIIth century". Around 1760, except the mines in Valea Arsului, which belonged to the locals gathered in a mining association[2],

* *Prof., Ph.D., University of Petroşani, Romania, baron@upet.ro, baron_mircea@yahoo.com*

[1] Ilie Haiduc, *Industria aurului din România*, Editura „Adeverul", Bucureşti, 1940, p. 83

[2] Art. 138 of the Austrian Law of Mines in May 25, 1854, stipulated that "a mining association of *cuxas* is a union whose objective is to achieve a mining of resources in which each participant has a responsibility

the other mines, including the ones at Ruda, were the property of the Ribiczey Adam family, who exploited them most efficiently up to the locals uprising in 1784, when they were ravaged and their owner was killed in his mansion in Ribiţa village. It is considered that, in 1791, these mines become the property of count Toldalagy and baron Zeyk, who founded the mining associations ”Ruda 12 Apostoli” at Ruda and ”Sfântul Ioan Evanghelistul” at Zdraholţ.

The German company ”Harkortschen Bergwerke und Chemische Fabriken zu Schwelm und Harkorten A.G. zu Gotha” was to take over the 128 *cuxas* of the ”Ruda 12 Apostoli” Mining Association, together with Ruda and Barza mines, for 600,000 florins in 1884 and 1887. In 1889, the same company took over the 128 cuxas of the ”Sfântul Ioan Evanghelistul” Mining Association at Zdraholţ, together with the mines in Valea Morii and Valea Arsului[3]. It is worth mentioning that, on grounds of the decision of the General Assembly of the ”Sfântul Ioan Evanghelistul” Mining Association in October 18, 1908, the ownership right of the mining complexes bearing the name ”Sfântul Ioan Evanghelistul” is granted to the ”Ruda 12 Apostoli”[4].

In 1899, as a continuation of the extension process and for the establishing of a unique mining complex, under the name of ”Ruda 12 Apostoli”, the ”Harkortschen Bergwerke und Chemische Fabriken zu Schwelm und Harkorten A.G. zu Gotha” Company purchased the 124 *cuxas* of the ”Musariu Gold Mines”[5] Association, created in 1889 by”Industrie Gesellschaft Geislingen” Company in Würtemberg, as a result of purchasing Musariu and Dealu Fetii mines, as well as mines belonging to other surrounding companies[6]. On April 2, 1910, in separate general meetings, it was decided that the ”Musariu Gold Mines” Association should merge with the ”Ruda 12 Apostoli” Mining Association and that all the fixed assets should become property of the ”Ruda 12 Apostoli” Mining Association[7].

The ”Harkortschen Bergwerke und Chemische Fabriken zu Schwelm und Harkorten A.G. zu Gotha” Company was to become part of the ”Ruda 12 Apostoli” mining complex, the most important precious metals mining unit in the entire Austrian – Hungarian Empire and, actually, in Central and South – eastern Europe[8]. The first mine purchased by the Company had an outer surface of 0.5 km^2, the owned area being

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proportional to its participation to the common assets, both regarding the contribution to the business, and all the obligations assumed in the name of the association in front of third parts” (*Legea generală minieră din mai 1854*, în „Legea Minelor austriacă. Din 25 mai 1854”, Tipografia „Lupta” Nicolae Stroilă, Bucureşti, 1923, p. 39). The assets of a mining association could be divided into a maximum number of 128 *cuxas* (equal rights), and one cuxa into a maximum number of 100 parts

[3] Ion Rusu Abrudeanu, *Aurul românesc. Istoria lui din vechime şi până* azi, „Cartea Românească”, Bucureşti, 1933, p. 255

[4] Direcţia judeţeană Hunedoara a Arhivelor Naţionale (hereafter DJANH), *Fond Societatea „Mica”*, dos. 22/1927, f. 60

[5] Nicolae Maghiar, Ştefan Olteanu, *Din istoria mineritului în România*, Editura Ştiinţifică, Bucureşti, 1970, p. 215

[6] DJANH, *Fond Societatea „Mica”*, dos. 27/1927, f. 72, 89. Despre Asociaţia minieră „Minele de aur Musariu”, vezi: xxx, *Brad és vidékének aranybányászata. Erdély, Magyarszág,* 1899. év végével, p. 36-49

[7] DJANH, *Fond Societatea „Mica”*, dos. 10/1920, f. 256-258

[8] F. Schumacher, *Die Golderzlagerstätten und Goldbergbau der Rudaer Zwölf - Apostel - Gewerkschaft zu Brád in Siebenbürgen*, Max Krahmann, Bureau für praktische Geologie, Berlin, 1912, p. 3

expanded systematically to 16 km^2 in 1903[9], and to 1761.3769 ha around World War I. This surface covers the 254 mining concessions ”purchased by *Harkort'sche Bergwerke und Chemische Fabriken A.G in Gotha* Company”…These concessions refer to the exploitation of the gold mines in Brad area, situated on the territory of the following villages: Brad, Ruda, Criştior, Țerețel, Luncoiul de Sus and Ormindea”, as points out a document of ”Mica” Company, dated July 2, 1926, addressed to the President of the Regional Court Deva[10].

This complex yielded between 1884 – July 1, 1911, a production of 27,919.520 kg of gold[11]; 1912 was the year of the highest annual production, 2,002.350 kg of gold, of which 936.324 kg of native gold, and the rest was obtained from stamped ore; unfortunately, under the circumstances determined by World War I, production was to drop to 610. 934 kg of gold in1918, the mines tending to become inefficient[12].

Table 1. The Gold Production of "Ruda 12 Apostoli" Mining Association between 1884-1921[13]

Year	*Stamped Ores (to)*	*Gold production*			*Total extracted gold kg*	*Production gr/to*
		Stamping Ores /kg	*Ores containing free gold/kg*	*Metallic waste /kg*		
1884/85	5.855	54,340	5,824	-	*60,164*	34,45
1885/86	6.362	50,430	8,499	-	*58,929*	49,56
1886/87	13.360	84,115	30,269	-	*114,384*	23,30
1887/88	17.898	120,874	30,145	8,000	*209,019*	17,64
1888/89	28.659	205,728	254,509	6,798	*467,035*	19,94
1889/90	44.403	326,817	345,854	14,959	*687,630*	17,90
1890/91	57.751	420,352	331,004	19,134	*770,490*	18,21
1891/92	54.343	335,949	282,137	36,240	*654,326*	18,71
1892/93	53.686	352,679	251,462	15,584	*619,725*	18,14
1893/94	56.719	310,574	205,241	14,943	*530,758*	17,12
1894/95	53.236	341,911	190,595	17,065	*549,571*	17,64
1895/96	57.824	384,034	264,663	11,870	*660,567*	16,44
1896/97	71.807	477,585	326,898	28,860	*833,343*	14,77
1897/98	68.183	408,274	341,388	36,920	*786,582*	15,17
1898/99	136.170	776,187	414,190	94,735	*1285,344*	12,24
1899/1900	163.854	910,670	419,117	159,670	*1489,225*	11,64
1900/01	178.399	903,791	476,208	163,728	*1543,727*	11,76
1901/02	181.094	930,503	410,076	185,103	*1525,982*	12,16
1902/03	181.900	988,278	349,226	90,313	*1427,817*	10,96
1903/04	188.144	1123,896	436,806	93,993	*1654,695*	10,41
1904/05	183.290	1086,174	518,103	117,453	*1721,731*	10,80
1905/06	187.501	1172,865	582,974	124,467	*1880,306*	10,56
1906/07	168.994	1051,120	538,765	123,785	*1713,670*	11,94
1907/08	175.857	1139,646	574,607	110,333	*1824,586*	11,91
1908/09	173.146	1089,968	429,198	60,750	*1579,916*	12,33
1909/10	181.783	986,776	552,224	36,204	*1575,204*	11,87
1910/11	169.238	944,232	713,478	37,184	*1694,894*	12,10

[9] *Ibidem,* p. 105
[10] DJANH, *Fond Societatea „Mica"*, dos. 10/1920, f. 212
[11] F. Schumacher, *op. cit.*, p. 106
[12] Nicolae Maghiar, Ştefan Olteanu, *op. cit.*, p. 216
[13] F. Schumacher, *op. cit.*, p. 106; Societatea „Mica", *Darea de seamă a Consiliului de Administrație şi Raportul cenzorilor către Adunarea generală ordinară a acționarilor din 19 februarie 1922. Exercițiul 1921*, Tipografia Curții Regale, F. Göbl Fii, Bucureşti, 1922, p. 16

1911/12	175.087	1040,607	936,324	25,419	*2002,350*	11,43
1912/13	165.102	818,835	1029,953	28,103	*1876,891*	11,37
1913/14	186.835	1032,855	880,230	35,017	*1948,105*	10,43
1914/15	148.516	886,170	654,525	10,000	*1550,695*	10,44
1915/16	72.051	485,236	747,471	12,000	*1244,707*	17,27
1916/17	48.398	349,331	526,769	66,692	*942,792*	19,48
1917/18	63.049	397,326	586,184	43,144	*1025,654*	16,27
1918/19	45.701	257,454	413,530	-	*670,934*	14,68
1919/20	62.928	312,173	346,316	-	*658,489*	10,46
1920/21	53.414	305,752	380,299	-	*686,051*	12,84

There are three main periods[14] in the development of the ”Ruda 12 Apostoli” Mining Association:

1. 1884-1890, when less than 30,000 to of ore are processed annually by stamping, yielding a low gold content and involving high mining costs;
2. 1890-1898, when 45-70.000 to of ore are processed annually by stamping, at fairly high costs – 15 – 18 crowns/to – but with a production of up to 833 kg of gold in1896/1897 and an average of 12 gr of gold/to;
3. after 1898 when the Processing Plant at Gurabarza started operations, processing 170 – 190,000 to of ore annually. Gold concentration decreases with 2 – 3 gr/to in comparison with the previous periods, as the plant processes more stamping ore than ore containing visible gold. However, a massive processing of ore, even if with a lower content of precious metal, is more profitable on the long run than the exclusive exploitation of areas where ores contain visible gold, because the latter method leads, in time, to the exhaustion of resources and a low efficiency of mining. In this period there is a ratio of 0.46:1 between the production of free gold and the production of gold obtained by stamping; there were also moments when the production of free gold was equal to or exceeded that of stamping gold, but these could not change the ratio. This, among other things, explains both the longevity of the ”Ruda 12 Apostoli” mining complex, and its production.

This evolution was determined by a series of natural factors, mainly by the orographic and petrographic configuration of the deposit, and also by the capacity of the personnel to account the deposit at ”Ruda 12 Apostoli”.

The mines of the ”Ruda 12 Apostoli” mining complex were grouped around the Barza mountain as it follows: mines Ruda - Barza in the Barza massif; mines Musariu - Dealu Fetii, to the west, between Dealu Fetii hill and the Barza mountain; mines Valea Arsului - Valea Morii, to the east, between the Barza and the Măgura mountains.

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[14] F. Schumacher, *op. cit.,* p. 87-114, describes the evolution of the ”Ruda 12 Apostoli” mining complex, seen as a technical, economic and social entity, since it was taken over by ”Harkortschen Bergwerke…zu Gotha” and up to World War I. A synthesis of Fr. Schumacher's work belongs to dr. Tr. Suciu, *Băile de aur de la Brad*, în, *Anuarul XXXVIII al Gimnaziului român greco-oriental din Brad şi al Şcoalei primare anexate acestuia pe al 45-lea an şcolar 1913-1914*, Tiparul Tipografiei arhidiecezene, Nagyszeben (Sibiu), 1914, p. 1-19.

Dr. eng. Fr. Schumacher was an engineer at ”Ruda 12 Apostoli” Mining Association between 1910-1913, and then a Professor of Geology and deposits at the Mining Academy of Freiberg (Analele Minelor din România, XV, 1932, nr. 10, p. 382).

Mining operations were started at the surface, by adits that were connected with cross – cuts. The main galleries were connected in the underground, the extracted ore being taken to the surface by Victor gallery (346 m altitude), and the main gallery of the Barza group, begun in the Barza Valley after 1840. The Ruda – Barza group also included the following galleries: Anna (426 m altitude) – where the Roman Steps are to be found; Drei Königs (Three Kings, 466 m altitude) and Zwölf – Apostel (12 Apostles, 496 m altitude); in Valea Morii mine, the Ferdinand gallery (304 m altitude); in Valea Arsului mine, the Franziska gallery; in Musariu mine, the Ludwig (Ludovic) and Maria galleries. The sides of the galleries were reinforced with oak beams and pillars, but the rock was generally hard enough not to call for any additional support for the roof.

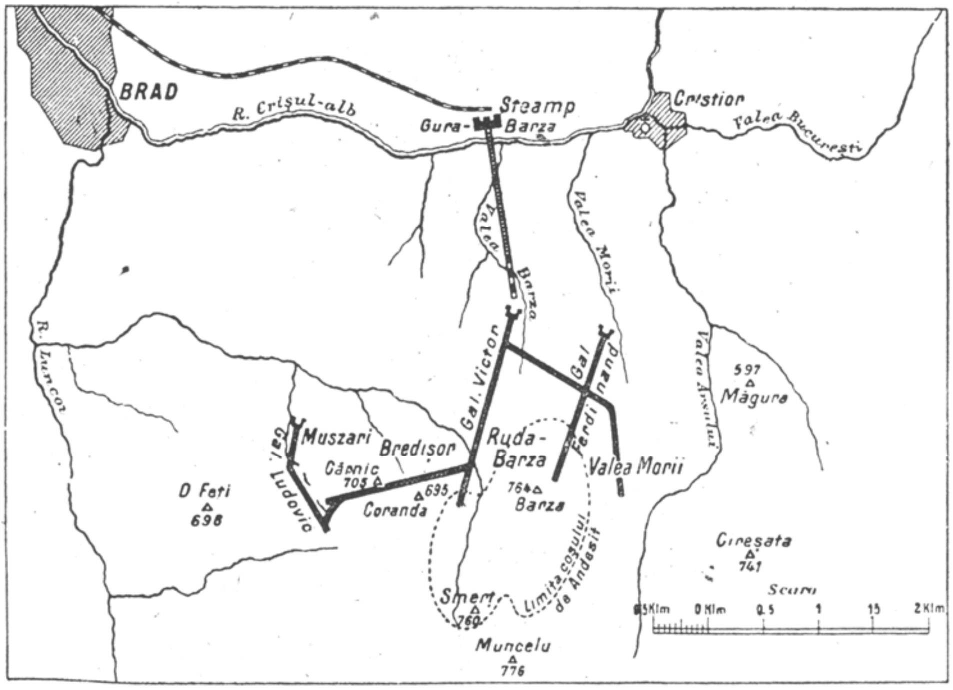

Figure 1. The Brad mines of the "Ruda 12 Apostoli" Mining Association[15]

For the mining of the levels below the main galleries there were shafts along which cages were circulating, driven by electric hoisting engines; the levels were open at their upper and lower ends, at heights and depths of 30 m each.

The ore was generally displaced from the vein by blasting with dynamite. The material resulting from the blast was crushed with a hammer, and the crushed boulders were loaded in horse – driven cars and taken to the electric locomotives; the waste that contained no gold was disposed of or used in the underground for stowing operations.

[15] V. Puşcaşiu, C.I. Motaş, *Minele de aur din Brad şi Săcărâmb*, A.M.R., II, 1919, nr. 4, p. 276.

There were also attempts at mechanizing certain underground operations and thus, at the beginning of the XXth century the electric – pneumatic drills were introduced mainly for driving galleries.

The ore extracted from the vein was transported, in cars, to the haulage ways. In the *Victor* gallery, with a length of 5.7 km, transport was ensured by two electric locomotives; the gallery had branchings to Valea Morii and Musariu mines; a double railway led to the branching to Valea Morii mine, ensuring the transport of cca. 600-660 to of ore in 24 hours.

At the exit of the Victor gallery, the ore was discharged into the grinders of the pre – crushing area and, after the grinding, it is transported to the stamps of Gurabarza by cableway, built in 1898, with a length of 1.2 km and a capacity of 500 to of ore within eight hours.

The ”Ruda 12 Apostoli” Mining Association also had an operating cableway in its own coal mine at Ţebea and Brad station, which transported the coal, mainly for the Electric Power Plant at Gurabarza, and between Brad station and Gurabarza there was an industrial railway with a length of 6.4 km and a track width of 760 mm, which was used both for the transport of materials necessary for mines, and for the transport of personnel.

The Processing pant at Gurabarza was built by the end of the XIXth century.

The ”Harkortschen Bergwerke und Chemische Fabriken zu Schwelm und Harkorten A.G. zu Gotha” Company initially built two stamping installations: the installation at Şteampurile Vechi (Old Stamps) in Brad (Tărăţel), equipped with 128 arms, which processed the ore extracted from different small mines in the area, as well as the one extracted by the Company through other galleries than Victor; the rustic installation at Crişcior, equipped with 66 arms, which processed the ore extracted through Victor gallery[16].

During the mid – ’90s of the XIXth century, the problem of building a new processing plant was raised, having in view that the old stamps were no longer efficient, the attempts at amalgamation by using potassium cyanide failed, and the gold production was increasing continuously. The stamps at Brad and Crişcior were to be closed down, and the ones of the ” Musariu Gold Mines” Association at Racova were abandoned in 1903.

The processing plant for the gold and silver ores at Gurabarza, considered the largest and most up – to – date plant of its kind not only in the Austrian – Hungarian Empire, by in all Europe, had a processing capacity of 150-190,000 to annually[17], covering the ores extracted from the whole ”Ruda 12 Apostoli” mining complex. Placed on the right bank of the Crişul Alb river, the plant was begun by the German Company ”Friedrich Krupp Grusonwerk Magdeburg - Buckau” on August 7, 1897, being ready for full operation only on May 27, 1899.

The 120 m long stamps installations consisted of 18 Californian iron stamps, namely:

a. 14 large stamps, each with two sets of 5 arms, each arm weighing 360 kg;

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[16] Kheil Ottmar, *Metale nobile: Tehnologii de preparare - Uzina Gurabarza*, Deva, 2003, p. 23-25.

[17] Further details about the technological flow and the installations at the Gurabarza Processing Plant see, Kheil Ottmar, *op. cit.*, p. 28-51.

b. 4 small stamps, each with three sets of five arms, each arm weighing 180 kg.

The stamps functioned like many other primitive stamps lying on river banks, where water drove the big wheel, which, in its turn, would raise and lower the wooden arms, whose rock or metal coated points were meant to crush the gold rich rocks. The arms of the Gurabarza stamps, which were iron coated, reached a frequency of 90 hits/min, and the height from which they dropped was adjusted in accordance with the type and hardness of the ore, the average being 20 cm; the average capacity per stamp was of 40 to/24 hours for the large stamps and of 20 to/24 hours for the small stamps, the whole installation being able to stamp 600 to of ore/day or 180,000 to/year between 1909-1910.

The stamping ore, crushed and ground, was discharged into the mill where clean water was flowing continuously; there, the material was turned into "pulp", from which the mercury would capture a significant amount of gold, on two silvered copper plates or electrolytically, the rest flowing over amalgamation platforms fitted with silvered copper plates, placed under the form of steps, at an inclination of 5^0, meant to amalgamate the ore; about 60% of the amalgam was extracted from the mill - possibly even more, if the water was warmer – the rest being removed from the plates. Twice a month, the gold was removed both from the arms and the copper plates; the amalgam, which contained cca. 30% gold, was poured into airtight retorts and placed in furnaces. Here, the mercury was turned into vapors and passed into a tank filled with cold water, where it was turned into metal again. In a matter of hours, the raw gold was obtained and sent to Zlatna or Körmöcbànya, where it was melted, its fineness was established and between 2,189-2,332 crowns/kg were paid, according to the source mine, as the whole process was developed separately for each of the five main mines: Barza, Ruda, Valea Morii, Valea Arsului, and Musariu. The finest gold came from Valea Morii mine, its fineness decreasing westward, the farther was its source from the main eruptions.

If the ore had a minimum gold content of 1 gr /kg of material, it was considered free gold and processed differently. Free gold was placed in bags right on the mining site, sealed and sent to a special section of the Processing plant. Up to a certain moment, this gold was processed at Gurabarza into 22 iron mortars in which mercury was poured; this was a tiresome and expensive operation being also exposed to the danger of theft. For these reasons, the Company built a new installation consisting of eight ratler steel cylinders, with a diameter of 75 cm, equipped with lids. Cca. 15 kg of crushed ore, together with 3.5 kg of mercury and warm water, were introduced in these cylinders which were rotated slowly -32 spins/min – by using a motor, so that the steel balls inside them should grind the ore and prepare the amalgam. After 9-10 hours, the amalgam was extracted, cleaned, washed, dried in pieces of cloth, gathered in balls and taken to the furnaces; from this stage on, the free gold shared the trajectory of the stamping gold. The free gold amalgam contained 40-45% gold, or even as much as 60% in the case of the rich ore from Musariu mine, and the kilogram of raw gold extracted from it was worth 2,232-2,470 crowns.

Beginning with 1903, the gravity concentration equipment of the stamps was transferred from Racova to Gurabarza in order to process the sulphurous ores from

Musariu and Dealu Fetii; on this occasion, experiments for the use of cyaniding were resumed, but with no satisfactory results.

The power necessary for driving the stamps – 74 H.P. – was provided by two condensation - based steam engines of Compound type, with a power of 390 HP, later upgraded to 650 HP.

To ensure the power necessary for the operation of the cableway, lighting, the operation of mine locomotives and different engines, the Electric Power Plant at Gurabarza was built, consisting of three separate installations: *a.* an A.E.G. alternating current generator, with an installed power of 520 kW; *b.* The backup plant containing: an alternating current generator with a power of 250 kW; two dynamos, one of 550/575 V for the driving of electric trains in Barza mine, and the other of 120 V for lighting; an alternating current generator, with a power of 180 HP; *c.* four large boilers, with a heating surface of 268 m^2, which produced steam at 300^0 C, and 12 atm.

In the stamps yard there were also in operation:

- the woodwork and ironwork shops, which ensure the maintenance of stamps and in the underground, and the sawmill;

- the laboratory for chemical analyses and the laboratory for the establishing of metal content after the processing of ore; the furnaces for the burning of gold, the storage areas, etc..

In order to cover the industrial and domestic wood necessities - cca. 12.000 m^3 annually – forests were bought in Luncoi, Ruda and Crişcior, with a total surface of 1,223.5 ha; the exploitation right for the state forest in Buceş and the forest in Mihăileni, which was property of the Romanian Gymnasium in Brad; wood was also bought from different suppliers.

All the activity carried on within the ”Ruda 12 Apostoli” mining complex is obviously focused on the extraction, at certain costs, of precious metals and coal. Owing mainly to the major amount of precious metal yielded by the mines, and to the way in which resources were managed, the activity was efficient. For instance, in 1909/1910 2,158.125 crowns were spent for the extraction of 1,575.204 kg of raw gold, which was sold for 3,618.074 crowns, at a profit of 1,459.949 cor. = 927 cor./kg of gold.

Table 2. The personnel of the”Ruda 12 Apostoli” mining complex - 1910

Employees	*Sector*								*Total*	*General total*
	Gold mine					*Stamps*	*Țebea coal mine*	*Forests*		
	Barza	*Ruda*	*Valea Morii*	*Valea Arsului*	*Musariu*					
Clerks	-	-	-	-	-	-	-	-	23	
Supervisors	25	10	20	7	11	21	1	2	97	*2.195*
Workers	569	249	411	176	250	316	95	9	2.076	

Most of the work force was mainly ensured by the locals in the Brad area. As the local workers, almost entirely Romanians were at the same time engaged in agricultural activities, to the detriment of efficiency, the Company brought workers and administrative personnel from other areas of Transylvania and of the Austrian –

Hungarian Empire: not only Romanians, but also Hungarians, Germans, Jews, Italians, etc., the latter in less significant number.

In the underground the work was organized in one 10 – hour shift, from 6 a.m. to 4 p.m., whereas at the stamps work was divided into two 12 – hour shifts.

The Company also had in view the insurance of work and living conditions for its personnel.

Thus, lower workers and clerks, with a monthly salary below 200 cor., were members of the *Support Association* (Bruderlade), whose aim was to pay medical assistance and treatment; to refund burial expenses; to support widows, orphans and the physically impaired. For the clerks there was also a Pension Association/ Fund (Beamten - Pensionsverein), meant to ensure an adequate pension for its members ad to support the widows and the orphans of former clerks.

In Brad, the Company had a hospital with 16 beds.

The Company financed two elementary schools at Gurabarza and Musariu, where five teachers taught the lessons in Hungarian.

The Company also created *Consumption*, with shops at Gurabarza and Musariu, where the employees could buy food and other necessary products.

The Company also provided free living spaces, mainly for its clerks, both in Brad and through its *colonies* at Gurabarza and Musariu. The workers mostly lived in the neighboring villages, often having to leave very early in the morning and walk to work; the workers at the stamps were transported from Brad to Gurabarza and back by the company train.

This was the ”Ruda 12 Apostoli” Mining Association whose shares ”were in the hands of a German financial group, and even Kaiser Wilhelm II was among the owners and *the whole Europe perceived this gold mining area as the gold fields in California”* („Arádi Közlöny”, December 23, 1933)[18].

And these are the circumstances under which, after World War I, this important economic and technical complex around Brad became attractive both for the newly founded Romanian state, and for the Romanian and foreign finances belonging to the victorious Alliance. ”Mica” Company was to buy this complex after May 1920, maintaining the position of the region as the most important gold producer in Romania in the interwar period[19].

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IDENTIFYING KEY TRENDS OF DIRECT SALES IN THE EUROPEAN UNION

MĂDĂLINA BRUTU, DANIELA MIHAI *

ABSTRACT: *Selling is the most representative marketing action; without customers there is no organization, and without sales there is no customer. Selling does not mean only to conclude a business (giving an economical good and receiving an amount of money), but also to obtain satisfied, loyal customers. An alternative to the traditional sale is the direct sale. The main objective of this paper is to present briefly the opinions of some renowned researchers regarding selling in general, and direct selling in particular; the righteous dimensioning of direct selling within the European Union and Romania, detecting Romania's deviations towards the European Union in relation with the characteristics of direct selling, achieving researches, through the SPSS program, which can detect the main trends of direct selling within the European Union.*

KEYWORDS: *sales; direct sales; the European Union.*

JEL CLASIFICATION: *M; M2.*

1. INTRODUCTION

Selling is an activity that completes the exchange of marketing in terms of transfer of ownership of goods or services (Hill & O 'Sullivan, 1997, pp. 243). The direct selling is an alternative to the traditional sale, developed on the "old continent" a few centuries ago.

The purpose of this paper is to present direct sales as viable alternatives to traditional sales and to identify their main trends in the European Union. From this point onwards, the main objectives of this work are: a short presentation of the some renowned authors' sale views generally and particularly, correct dimensioning of direct sales in the European Union and in Romania, Romania's surprising deviations in

* *Lecturer, Ph.D., University of Piteşti, Romania, madalinabrutu@yahoo.com*
Lecturer, Ph.D., University of Piteşti, Romania, dana_mihai2005@yahoo.com

relation to the characteristics of European Union's direct sales, achieving research through SPSS program, capturing the main trends of direct sales in the EU.

The main research future direction is to achieve a comparative study between direct sales and Internet sales, both seen as alternatives to traditional sales.

2. DIRECT SALES – AN EFFECTIVE ALTERNATIVE TO TRADITIONAL SALES

2.1. Direct sales in literature

P.R. Smith suggestively presents the level reached in sales, in his work "Marketing Communications" (Smith, 1993, p. 189): "*I used to have an area where I was a free agent... Nowadays, my computer recommends me what calls should I make... my assistant reminds me what to say... my manager knows where I am and I spend half my time in training... but I sell 30% more per year.*" This seems to be the level reached in sales. Leave nothing to chance ...

Bill Donaldson noted that - despite the crucial importance that selling activity has for an organization - the economic management and marketing courses only mention the subject of sales in passing, if not ignore it at all. In practice, the same author observes that the situation is different, the best rated companies are well aware of the importance of the sales, that they made the connection between the company and its customers (Donaldson, 1998, p. 3).

The persons dealing with sales are: sales agents, sales representatives, customer relations officials, marketing consultants, sales engineers, area representatives, agents, district managers and marketing representatives. Seller profession is by far one of the oldest known in the world.

Selling is the most representative marketing action; without customers there is no organization, and without sales there is no customer. Selling means not only to make a deal (giving an economic good and receive an amount of money), but to get satisfied and loyal customers. This means moving from a transactional to a relational attitude (Brutu, 2009, p. 12).

In the current economic conditions (Michael, 2008, pp.1), in a dynamic society as it is today, a successful presence on market is becoming increasingly difficult for an organization. A business is an open system, in constant interaction with the external environment (Necula & Baldan, 2007). In most areas the competition is so strong that, in order to survive and grow, a company constantly must communicate with itself. Kept up efforts are needed to establish and improve an effective communication system, and sales force is repositioned in this context from the distribution subsystem in the communicational mix.

An alternative to traditional sales is represented by direct sales. Selling by mail (Le Men & Bruzeanu, 2000, p. 10) developed in Europe centuries ago, along with the invention of printing presses and the first catalogues, which were nothing but extensively written list of papers that publishers used to send by mail to potential buyers (provincial figures, nobles isolated in their castles, booksellers and so on).

The musician Rameau was one of the first users of direct marketing, selling his scores by correspondence all over Europe. First French mail order sales catalogue, Vilmorin's, was published in 1771, a century before the first American catalog, Montgomery Ward Company's, which appeared only in 1872.

In 1917, appeared the U.S. Direct Mail Advertising Association which is currently called Direct Marketing Association - DMA, the most important international organization in the field.

In the U.S. the success of large companies that offer purchase through teleshopping system, QVC and Home Shopping Network highlights the huge potential of home care services.

Due to sophisticated information technologies that allow taking orders 24 hours out of 24, due to highly efficient logistical resources that ensure delivery within 24 hours anywhere in the country, thanks to a "point of sale" exhaustive catalog, the ways products are presented, the sale by mail has a number of advantages capable of attracting consumers.

The golden ratio 80/20 found in traditional sales, which is the fact that 80% of company sales come from 20% of customers – i.e. from loyal customers - is also true in direct sales branch.

Due to its technology and ingenuity, the mail order sales (Le Men & Bruzeanu, 2000, pp. 13-15) is, to some extent, the antechamber of direct marketing. However one can not restrict direct marketing to the small direct sales. The U.S.A launches in about 2,000 sales catalogs by mail, effectively completing the sale in stores.

Teleshopping is buying through television. Teleshopping U.S. market is dominated by two mammoth-companies: Home Shopping Network and QVC, addressed to 50 and respectively to 47 million subscribers to home cable television, 24 hours a day and 7 days a week.

It is impressive how program hostesses praise a product, staring at the monitor showing the exact number of existing products in stock, the number of products sold and turnover. 2,000 HSN telephonists receive telephone orders that are immediately processed and delivered in four centers located throughout the U.S. (approximately 4,500 packages per day). Stars like Omar Sharif turns to vendors to sell their own products.

In addition to the economic advantages (prices are usually 20-30% lower than in traditional commerce), this sale presents social benefits, 80% of HSN's buyers are women, here so that mail order sales is a viable alternative to traditional sale.

2.2. Direct marketing – a support for direct sales

Direct selling is closely related to direct marketing. In less than a century, direct marketing has grown considerably, far exceeding the limits of its roots in traditional mail trade, acquiring many new technologies, techniques for building customer relationships and performance evaluation, which have set benchmarks for future marketing communications. It has become a powerful tool that every company should consider as part of an overall integrated marketing strategy (Stone & Jacobs, 2004, p. 3).

DMA (The Direct Marketing Association) considered in the early 80's that direct marketing was "an interactive system of marketing that uses one or more medium to obtain a measurable response or, if possible, even buying" (www.the-dma.org). Today, **DMA** redefines direct marketing as *"an interactive marketing that uses one or more advertising media to achieve measurable results and / or to finance a transaction in any field."*

DRI – WEFA Group and The Direct Marketing Association defines direct marketing as (Vegheş, 2003, pp. 35-37): "*Direct communication with a consumer or institution designed to generate a response in the form of an order (a direct order), a request for information (sales training) and / or visit a store or other place to buy a certain product or service (create traffic)"*.

The definition is further explained in terms of each objective pursued:

- **Direct orders** include *"all communication with direct response actions, regardless of the medium used, which are designed specifically to facilitate or complete a transaction. All necessary information for the prospective client to take the decision to purchase and make the transaction will be properly completed in advertisement"*.
- **Preparation sale** includes: *"all communication actions with a direct response, regardless of the medium used, intended to generate interest in a product or service and providing potential clients the means to request and receive information about products or services."*
- **Creating traffic** concerns *"all communication actions with a direct response regardless of the medium used, which are designed to motivate potential customers to target a store, restaurant or other point of sale to buy the product or service promoted."*

Călin Vegeş gives a Romanian definition of direct marketing as *"a set of concepts, techniques and marketing tools, resulting in an directly targeted approach, personalized and interactive towards the consumer, following generalization of measurable reactions to it (embodied in buying a product or service request additional information from the organization, providing information about the characteristics and buying behavior and consumption, interaction with traditional points of marketing and / or sales organization) and create a long-term relational marketing platform"* (Vegheş, 2003, p. 37).

In the direct marketing, there are some elements of the marketing mix (Vegheş, 2003, pp. 115, 120, 160):

- **Database** - operational support of direct marketing campaigns carried out by the organizations. It is defined as a computerized data management system whose components are the data contained and structured, management equipment (hardware database components), management apps (software database components), users (intermediate or final) and specific operating procedures.
- **Offer** - seen as a synthesis of all the traditional marketing mix components, including elements both on the product and price but also distribution and communication.

- **Communication** - that includes conceptual and operational elements as in traditional communication.
- **Logistics** - activities similar to physical distribution conducted in the context of traditional marketing.

Graphically, the direct marketing mix could be presented as shown below:

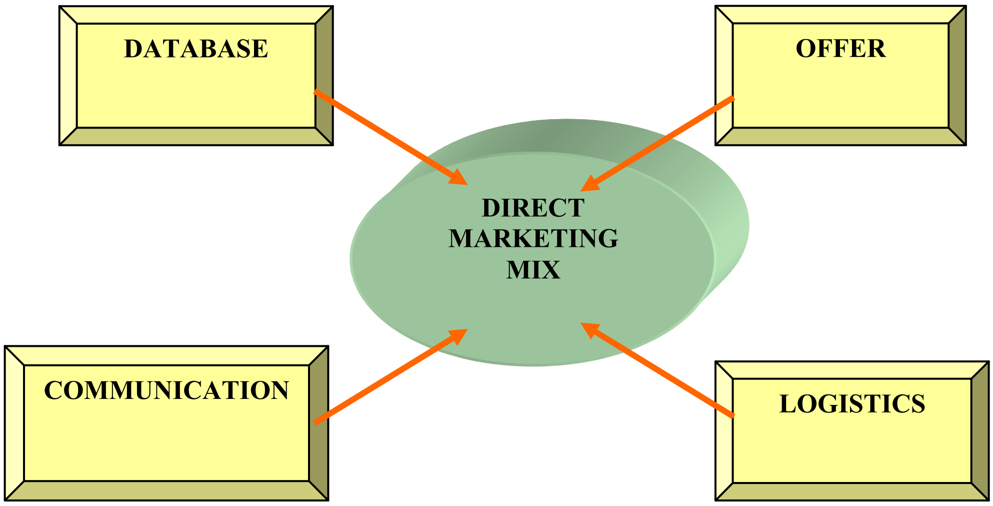


Figure 1. Direct marketing mix

Viral marketing can also help sales. Is a dynamic phenomenon as the message recipient triggers a reaction that will talk about it or send it on (Gîrboveanu & Puiu, 2008, pp. 223-230).

3. DIRECT SALES TRENDS IN THE EUROPEAN UNION

3.1. Brief analysis on the size of direct sales in the European Union

Direct sales are alternatives to traditional sales. Evolution of these sales in the EU and in Europe in general, is presented in table 1.

Table 1 shows that the EU direct sales have increased by over a quarter of the value, for the analyzed period (25.37% increase in 2011 compared to 2009). Also in the same period, the number of vendors has increased by about 600,000. Over 80% of the sellers are part-time employed women, and the most used selling method is from person to person.

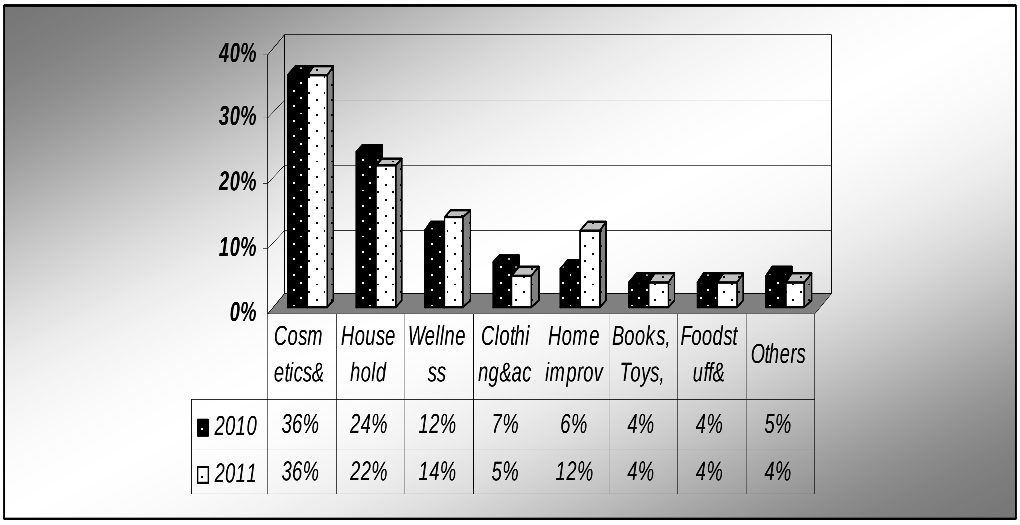
The main markets in direct sales are cosmetics and body care products, about 35% of the entire market (Figure 2).

Household goods and wellness products are the occupants of seats 2 and 3 with over 20%, respectively over 10% market share.

Table 1. Size of direct sales in the EU (2009-2011)

	Sales (billion euros)	No. of sellers	% women	% part-time	"Person to person" sales method	"Party Plan" sales method
2009						
Totals in Europe	14.230,41	11.204.898	81%	70%	67%	33%
U.E.	10.717,45	4.058.464	77%	81%	68%	32%
2010						
Totals in Europe	15.365,927	11.028.615	87%	73%	70%	30%
U.E.	11.583,757	4.493.256	82%	82%	70%	30%
2011						
Totals in Europe	17.842,92	11.374.219	81%	70%	70%	30%
U.E.	13.436,48	4.654.817	84%	82%	70%	30%

Source: Adapted from the European Direct Selling Association, Annual Report, 2009, 2010, 2011



Source: Adapted from the European Direct Selling Association, Annual Report, 2009, 2010, 2011

Figure 2. Direct sales market share

3.2. Direct sales in Romania

In Romania, the direct selling industry has a recent history. At the end of 1990 (www.rodsa.ro) network marketing systems have emerged by entering the local market through individual life insurance agents from Austria, collaborators of Sefe Invest Holding. Official start for such companies was hampered by economic conditions, lack of adequate legislation and reluctancy of people to start a business on their own. For 4 - 5 years the market has been bashfully tested by collaborators from Italy, the Netherlands, Austria, Hungary, Germany and the United States trying to build networks for various companies such as Herbalife, Amway etc. These activities are carried unto the breach, as none of supplier companies was registered in Romania.

1994 is the year of the first official record of MLM companies in Romania (Seif Invest România, Serveco Romania, GWC) and a few years later big Network Marketing companies appeared (Oriflame, California Fitness, Amway, Golden NeoLife Diamite, Carion, Forever Living Products, Avon, Eurolife etc). At the same time local MLM[*] companies emerge, but they not record the desired success due to lack of capital and experience in management. During 1999-2005, direct sales turnover exceeded EUR 553 million.

In 2009-2011, the situation of direct sales in Romania was the following:

Table 2. Direct sales in Romania between 2009 and 2011

Year	Sales (billion euros)	No. of sellers	% women	% part-time	Person to person	Party Plan
2009	147,21	245560	84%	31%	92%	8%
2010	177,127	272724	82%	11%	97%	3%
2011	209,47	289621	82%	11%	97%	3%

Source: adapted from SELDI Annual Report 2009, 2010 and 2011

From the above table it can be seen that direct sales are growing in Romania, as well as the number of sellers. The share of women among direct sellers is overwhelming, more than 80%. Surprisingly small percentage of people who practice this profession in part-time system (compared to the EU average, where the percentage is around 80%).

3.3. Direct sales trends in the European Union

To capture the main trends of the EU's direct sales the Pearson correlation coefficient has been used. The results obtained using SPSS programme are summarised below:

The p-value of 0,006 (value under the significance level of 0.01 and 0.05) shows the probability of getting the correlation's intensity and sense (0,535) only by chance, thus, due to this small value (0,006) we can conclude that there is a medium and pozitive correlation between the considered varaibles.

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[*] Multi Level Marketing

Table 3. Correlation between total direct sales and the number of sellers in UE countries

Correlations

		Total sales	No. of sellers
Total sales	Pearson Correlation	1	,535**
	Sig. (2-tailed)		,006
	N	25	25
No. of sellers	Pearson Correlation	,535**	1
	Sig. (2-tailed)	,006	
	N	25	25

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4. Correlation between total direct sales and "Person to person" sales method in EU countries

Correlations

		Total sales	Person to person
Total sales	Pearson Correlation	1	-,176
	Sig. (2-tailed)		,401
	N	25	25
Person to person	Pearson Correlation	-,176	1
	Sig. (2-tailed)	,401	
	N	25	25

There is a negative correlation between the sales volume and the percentage of "Person to person", and sales decrease as the method is used extensively. Significance level is 0.401 (value above the significance level of 0.01 and 0.05), and the degrees of freedom are 23.

Between sales volume and percentage of "Party Plan" sales method there is a positive correlation, i.e. sales increase as more intensive the method is used. Significance level is 0.280 (value above the significance level of 0.01 and 0.05), and the degrees of freedom are 23.

Therefore, the research led to the following conclusions:

- There is a direct relationship between the volume of direct sales and the number of sellers in the 25 EU countries;
- Although the "Party Plan" method is less used there is a direct relationship between increased use of it and increased sales.

Table 5. Correlation between total direct sales and "Party Plan" method

Correlations

		Total sales	Party Plan
Total sales	Pearson Correlation	1	,225
	Sig. (2-tailed)		,280
	N	25	25
Party Plan	Pearson Correlation	,225	1
	Sig. (2-tailed)	,280	
	N	25	25

4. CONCLUSIONS AND FUTURE RESEARCH DIRECTIONS

Direct selling is an alternative to traditional sales, being developed in Europe a few centuries ago. Direct selling is based on direct marketing, defined by DMA as *"an interactive direct marketing system that uses one or more advertising media to achieve measurable results and / or to finance a transaction in any field."*

In 2011, the European Union has recorded a sales volume of 11,583.757 million, of which EUR 209.47 million made in Romania. The number of direct sellers in the EU in the same year was 4,493,256 (out of which 289,621 in Romania). The main products are directly marketed cosmetics and personal care items.

An EU research has been conducted to observe the main trends of direct sales. The research led to the following conclusions:

- There is a direct relationship between the volume of direct sales and the number of sellers in the 25 EU countries;
- Although the "Party Plan" method is less used there is a direct relationship between increased use of it and increased sales.

Future research could be extended in several directions: Making direct research to detach the main features of the sales force in Romania. Direct research will be used as this research provides a more complete picture of the phenomena studied by direct collection (Nenciu, Rye, 2008). Expanding global research and observation of differences between EU direct sales and direct sales worldwide. Making a comparative study between direct sales and Internet sales, both seen as alternative to traditional sales methods.

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ENERGY INTENSITY - A KEY INDICATOR FOR THE ECONOMIC DEVELOPMENT

FELIX-CONSTANTIN BURCEA, EMILIA UNGUREANU, CRISTINA FLORENTINA BÂLDAN *

ABSTRACT: *Energy intensity represents one of the main indicators for economic development and is expressed as the ratio between the gross inland consumption of energy and gross domestic product (GDP). The least energy-intensive economies in the EU are Denmark, Ireland and the UK. Among the most energy-intensive economies are Bulgaria, Romania, Estonia, the Czech Republic and Slovakia. In socialist times, eastern European Member States had economies with high shares of energy-intensive industries as well as an energy-inefficient infrastructure serving these industries. In this paper we will perform an analyze at Romanian level by comparing the obtained results with the one's at Europe 27 level and we will determine the decouple degree between energy consumption and economic growth.*

KEY WORDS: *economic development; GDP; gross inland energy consumption; energy intensity.*

JEL CLASSIFICATION: *O10, O13.*

1. INTRODUCTION - MAIN TRENDS FOR THE ECONOMIC DEVELOPMENT INDICATORS

In order to establish the key role that energy intensity has among the others economic development indicators, we will brefly present bellow their evolution at EU 27 level.

Most of the long-term trends in the socioeconomic development are have been influenced, either positively or negatively, by the recent global economic and financial crisis (Rodrik, 2009). In this respect trends have deteriorated on a short term perspective in investment, employment and unemployment, as well as in real GDP per

* *Ph.D. Student, The Bucharest University of Economic Studies, Romania, felixburcea@yahoo.com*
Prof., Ph.D., University of Piteşti, Romania, emiliaungureanu@yahoo.com
Lecturer, Ph.D., University of Piteşti, Romania, baldan.cristina@gmail.com

capita and labor productivity. On the other hand, improvements can be noticed in R&D expenditure and energy intensity, and briefly in household saving.

Between 2000 and 2011, real GDP per capita for the EU as a whole grew on average by 0.9 % per year, but wide variations in the growth rate across the EU can be observed. During the good economic period from 2003 to 2007, growth rates rose to 2.7 %, although several eastern European countries grew much faster. However, as a reaction to the economic crisis, GDP per capita stalled in 2008 and fell sharply by -4.6 % in 2009.

Hardest hit by the crisis were the fastest-growing eastern European Member States, including Romania. Slow growth was experienced in the EU as a whole and in most Member States during 2010, although Ireland, Greece, Spain and Romania experienced negative growth.

Between 2000 and 2009, the share of investment in GDP followed the economic cycle, mostly because of business investment. After reaching an extraordinary peak of 21.7 % in 2007, it fell over 2008 and 2009 to a level of 19.4 % mainly due to big reduction in business investment, as a response to the economic crisis.

Regional disparities in GDP in the EU fell from 35.5 % to 32.7 % during the period 2000 to 2007. Together with the reduction of regional disparities in employment it suggests a growing convergence of EU regions. Within-country dispersion of regional GDP remained high, in particular in eastern European Member States, where the rapid transition into market economies has led to an increasingly uneven distribution of wealth.

For most of the period 2000 to 2010, household saving as a share of disposable income in the EU fell steadily; however, it rose slightly in 2008 and considerably in 2009 as a response to the financial crisis. In 2010 the level of household savings fell again, almost to 2004 levels. Differences across Member States still remain significant.

Labor productivity in the EU rose on average by 1.1 % per year between 2000 and 2010. Although it grew by up to 1.7 % or 1.8 % per year in several years, mostly due to eastern European Member States catching up, it started to fall in 2008 and in 2009 dropped by 1.2 %. In 2010 it grew by 1.6 %.

For most of the period between 2000 and 2009, the share of R&D expenditure in GDP remained fairly stable for the EU as a whole at between 1.8 and 1.9 %. In 2008 and 2009 R&D expenditure improved slightly. Romania is still performing bad on this indicator, and measures need to be taken in order to reach a sustained economic development. Between 2000 and 2009 the energy intensity of the EU decreased steadily, in some years by as much as 2.5 %, resulting in an absolute decoupling of gross inland energy consumption from GDP growth. Employment in the EU rose from 66.6 % in 2000 to 70.4 % in 2008, but had fallen back to 68.6 % by 2010. Men, young people and persons with lower education were particularly affected.

2. GDP EVOLUTION

Our first step on the analysis is to present the GDP evolution at Romanian and EU 27 level, and the most appropriate approach is to use the real GDP per capita indicator.

This indicator is a measure of economic activity, namely the value of an economy's total output of goods and services, less intermediate consumption, plus net taxes on products and imports, in a specified period. GDP can be split by output, expenditure or income components. (O'Sullivan & Sheffrin, 2003)

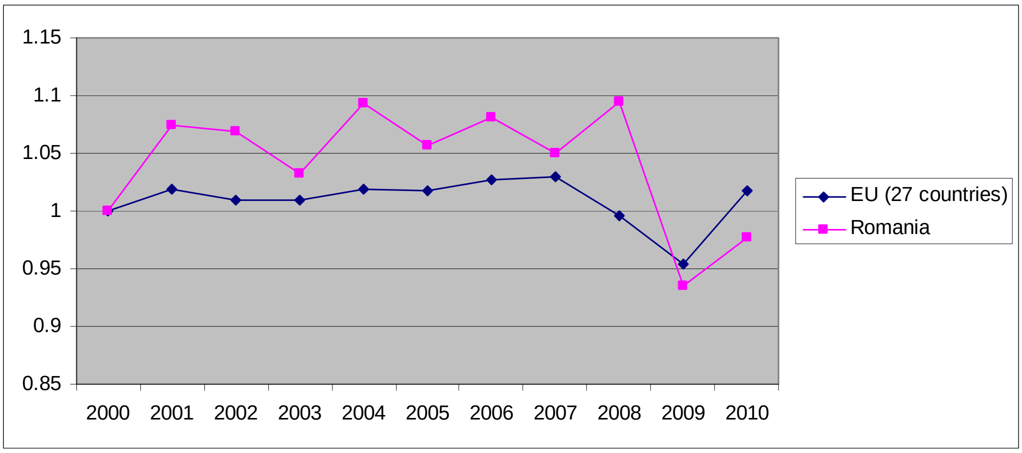
The main expenditure aggregates that make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and net exports, i.e. the difference between imports and exports of goods and services (including intra-EU trade).

Real GDP per capita reflects the amount of goods and services produced by an economy. It is often a proxy for economic prosperity, which is needed to enlarge people's freedoms and provide them with resources to lead satisfying lives. Despite the recent economic crisis, we can say that Europe is living in an age of unprecedented economic prosperity and material affluence. (Castro, 2005). Real gross domestic product (GDP) per capita grew in every year from 2000 to 2007 until the impact of the global economic and financial crisis began to be felt in 2008.

The growth of GDP per capita is a measure of the dynamism of an economy and its capacity to create new jobs. It reflects the phases of the economic cycle. After the economic peak of 2000, GDP per capita grew rather slowly during the economic downturn between 2000 and 2003.

This was followed by a period of higher growth rates until 2007. However, with the onset of the crisis, GDP per capita grew by only 0.1 % in 2008 and fell by -4.6 % in 2009 down to a level similar to that of 2005. GDP per capita grew by 1.6 % in 2010.

Some countries were hit harder by the economic crisis than others. A large slump in per capita GDP occurred especially in high-growth countries dependent on exports (mostly eastern European Member States whose economic output is expected to 'catch up' with that of the more developed Member States). GDP contraction in most western European Members States extended over four or five quarters before growth resumed. The picture has been more varied in eastern European Member States. Particularly affected by the crisis in terms of GDP per capita were Latvia (with the previous GDP per capita growth rate between 2000 and 2007 being 9.4 % on average), Estonia (8.8 %), Ireland (4.1 %), Lithuania (8.1 %) and Finland (3.2 %). However, some eastern European countries (in particular Poland, Bulgaria, Slovakia and Romania) were hit less severely, due in part to lower current account deficits and external debts at the start of the crisis, stricter banking policies, lower dependence on stock exchange performance and exports, more stable domestic demand and modest exchange rate depreciation (in Member States outside the Euro area). A moderate recovery began in 2010 for most EU countries, with the exception of Greece, Ireland, Latvia, Romania and Spain.



Source: Eurostat- Statistic database available at *http://epp.eurostat.ec.europa.eu/portal/page/page/portal/statistics/search_database*

Figure 1. Real GDP per Capita Growth rate in EU 27 and Romania (2000 = 1)

The figure is more than suggestive, we can see that staring with 2000 until 2008 Romania had a faster growth rate than EU 27, but because of the unsustainable growth and bad policies, Romania was affected more than the EU 27 by the economic crisis.

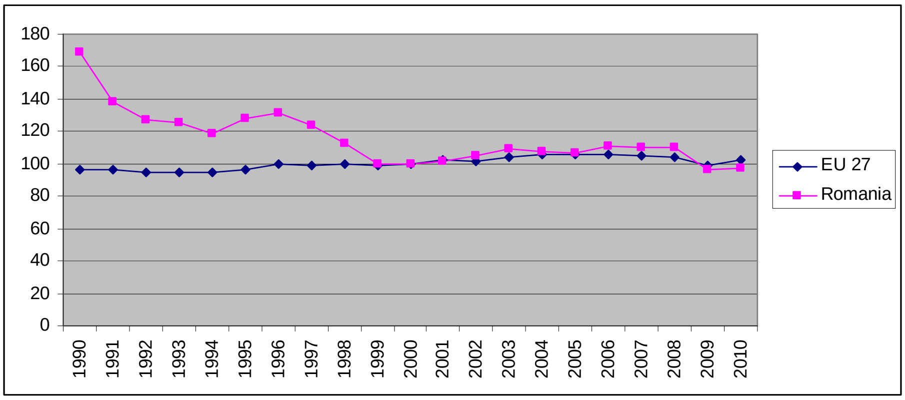
3. GROSS INLAND ENERGY CONSUMPTION

Gross Inland energy consuption is the second economic development indicator that needs to be taken into consideration in order to determine the energy intensity.

In this chapter we will perform an analysis at Romanian and EU 27 level, with the main scope to highlight the main trends of this development indicator and to see where our country is situated comparing with the European average. We will analyse for this indicator the period 1990-2010 in order to see how the transition period affected Romania and to highlight the recent trends, including the effect that the growth period and the economic crysis had on the gross inland energy consumption.

As you will notice in the bellow figure (refference year is 2000), Romania had a very intensive energy consumption, and in the first transition year, 1990, the gross inland energy consumption was almost 80% higher comparing with EU 27. In the period 1990-2000, we can obviously notice a decreasing trend for Romania, mainly influenced by the disparition of some industrial activities that consumed lots of resources, but also influenced by the new technologies implemented in order to reduce the energy consumption.

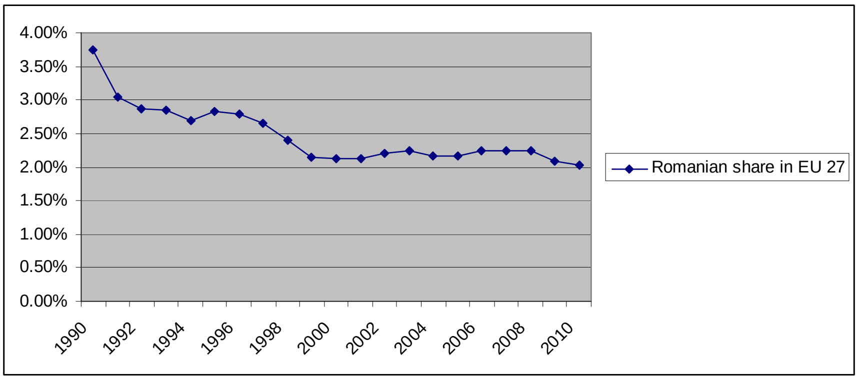
Already, in the period 1999-2000, we can start to see similar trends for both Romania and EU 27 countries.



Source: Eurostat - Statistic database available at *http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database*

Figure 2. Gross inland energy consumption evolution in EU 27 and Romania (2000 = 1)

The good results that Romania is experiencing on the gross inland energy consumption indicator can be also highlighted by presenting the share of Romanian consumption in the EU 27 total consumption.



Source: Eurostat- Statistic database available at *http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database*

Figure 3. Share of Romanian consumption in the EU 27 total consumption

4. ENERGY INTENSITY

After presenting in the previous 2 chapters the GDP and the Gross inland energy consumption, it is appropriate to cover the energy intensity topic, that is very close related withe the above mentioned indicators.

Total energy intensity is the ratio between the gross inland consumption of energy and the gross domestic product (GDP). Energy consumption comprises the consumption of solid fuels, liquid fuels, gas, nuclear energy, renewable energies, and other fuels.

By measuring how much energy is used to produce one unit of economic output, energy intensity addresses one aspect of eco-efficiency (Abdelgalil & Cohen, 2007). The indicator helps identify whether there is a decoupling between energy consumption and economic growth. Relative decoupling occurs when energy consumption grows at a slower pace than economic growth. Absolute decoupling occurs when energy consumption falls despite economic growth.

The energy intensity of the EU fell significantly between 2000 and 2010. Due to overall GDP growth and a drop in energy consumption over the same period an absolute decoupling has been achieved.

Absolute decoupling of energy consumption from economic growth has been achieved between 2000 and 2010.

Energy intensity is strongly linked to the economic cycle. Thus energy intensity decreased from 1996 to 2000, remained almost constant from 2000 to 2003 and fell again from 2003 to 2010. This is a result of GDP growth slowing faster than gross inland energy consumption during economic downturns.

The overall decline in energy intensity by almost 12 % has been enough to meet the 1 % average yearly reduction target despite only minor improvement during the downturns.

Viewed in more detail, between 1995 and 2000 energy intensity fell by 2.1 % per year on average (GDP grew by 2.9 % per year while gross inland energy consumption increased by 0.7 % per year on average).

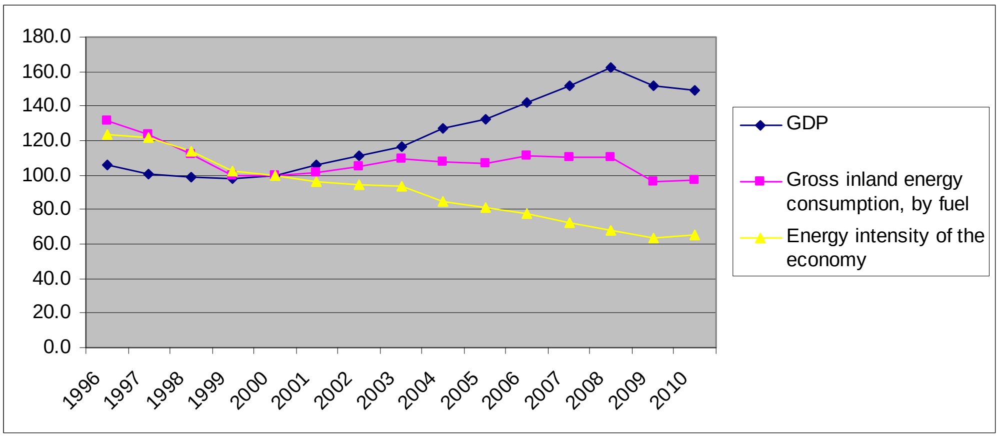
Between 2000 and 2010 energy intensity continued to fall, by 1.4 % per year on average (GDP rose by 1.3 % per year and gross inland energy consumption decreased by 0.1 % per year on average).

The least energy-intensive economies in the EU are Denmark, Ireland and the UK. Among the most energy-intensive economies are Bulgaria, Romania, Estonia, the Czech Republic and Slovakia.

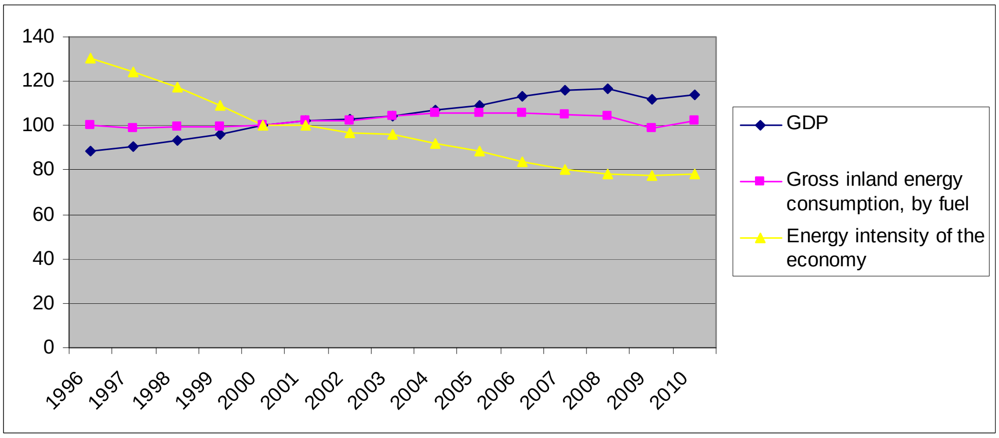
In socialist times, eastern European Member States had economies with high shares of energy-intensive industries as well as an energy-inefficient infrastructure serving these industries. They have been undergoing the transition to economies based more on services or higher value-added production as well as the process of industrial modernization.

Bellow we can find 2 figures that are illustrating the evolution of economic intensity and his 2 drivers. From an EU 27 perspective, we can notice good results, and, as stated also above, the level of decouple between the energy intensity evolution and the economic growth is very high, mostly due to idustry modernization and policies applied at european level.

Romania



EU 27



Source: Eurostat- Statistic database available at *http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database*

Figure 4. Energy Intensity- Romania and EU 27 (1996-2010)

In the Romanian case, we can notice also an absolute decouple starting with year 2000, and also we need to highlight the very good achievement of this indicator in the transition period.

5. CONCLUSION

As presented in the precedent chapters, one of the best improvements that Romania had considering the main indicators of economic development was in the area of Energy intensity.

To sumaryze our findings, we can stated that:

- in 1990, the first transition year, the gross inland energy consumption was 80% higher comparing with year base 2000, and the Romanian share in total Europe 27 consumption was almost 4%.

- Between 1990-2000, because of the negative economic growth periods and the diminuation of industry role, we can notice a sharp decrease on inland energy consumption and consequently a decrease considering energy intensity indicator. Comparing with EU 27, we can see a catch-up process and in year 2000 the Romanian share in total Europe 27 consumption was about 2.15%, 1.6% better comparing with year 1990.
- Starting with 2000 until the end of the analyzed period, an absolute decouple is beeing noticed and the Romanian share in total Europe 27 consumption was constantly staying at a level of around 2-2.2%.

To obtain the desired performances and to accelerate the catch-up process, among this indicator, we need to improve also the other main indicators that are detemining the degree of economic development.

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METHODS USED IN DETERMINING THE VALUE ADDED USED IN THE ASSESMENT OF THE COMPANY'S REAL ECONOMIC POWER

CONSTANTIN CĂRUNTU, MIHAELA LOREDANA LĂPĂDUŞI *

ABSTRACT: *When analyzing the value of a product or service, our goal is to obtain a product or service value that exceeds the cost of producing the good or service provision. Their cost includes the value of all resources used in its production, so it is necessary to examine each activity or resources involved in making a product or providing a service. Value added is the indicator that measures the economic performance of an economic entity which has a fairly long history of application at both micro and macro level.*

The purpose of this article is to set out the determination of the value added of a company through the synthetic and analytical method considered to be methods of determining the increasing level of the wealth of a business and of measuring the income.

The research methodology used consists in the application of the two methods for determining the value added, the synthetic and analytical method, and also the use of the factorial method to reveal the factors of influence on value added.

KEY WORDS: *value added; synthetic method; analytical method; economic performance.*

JEL CLASSIFICATION: *D24*

1. LITERATURE REVIEW ON VALUE ADDED

Value added is one of the most important indicators that result from the economic activity of a company, reflecting its economic power. From previous studies concerning the analysis of value added it can be noticed that the respective authors have considered value added not as a simple indicator which finds its applicability in

* *Prof., Ph.D., Constantin Brâncuşi University of Târgu-Jiu, Romania,* caruntu_ctin@yahoo.com
Assist. Prof., Ph.D., Constantin Brâncuşi University of Târgu-Jiu, Romania, lapadusi.mihaela@yahoo.com

the company's results, but also as a complex indicator which has a multitude of meanings and implications over the economic and financial results of the company.

When it first appeared, the use of value added was put forward as an alternative to profitability or return on investment supported by accountants who were seeking an alternative measure of company's performance (Wood, 1978). So, purchasing performance on providing value added to the company was measured and evaluated on changes in the purchasing price of materials and the cost of the departmental operation.

A series of previous studies highlight a many complex meanings regarding the value added, the authors of these studies emphasize the role and importance of value added in different areas of activity, either on the methods of determination of it. We present a few studies as example:

➢In the article "*Analysis of the value added by the additive method*" published in the University of Oradea Annals, the Economic Sciences series from 2010, by Popa Ana Maria, Csegedi Sándor and Tiplea Augustin Livie the value added is presented through the use of the additive method, highlighting the importance of it through the following aspects: value added is the main source of self-financing the economic activity, the source of remuneration of staff, the source for financing the budget, the source to increase reserves for the entity.

➢In the article „*Comparative analysis of value-added and traditional measures of performance", presented at* Southern Agricultural Economics Association Annual Meeting, Lexington, KY January, 2000, Acheampong J.B.&Wetzstein M.E. (2001), are highlighted a series of meanings:

- value added measures are useful information for managers in that with this information managers have a guide to help them in decisions that lead to value creation;

- value added means value creation to a business. So more companies are now looking at performance measures that depart from traditional ones.

- value added measures of performance are based on economic theory rather than on accounting profits.

In the article "*Economic value added as a modern performance indicator", published in the* International Cross-Industry Journal, Perspectives of Innovations, Economics & Business, Volume 6, Issue 3, 2010, Maja Ilic presents the value added as a modern indicator which reflects the company's performance. The main aspects concerning the value added presented by Maja Ilic in the article are:

- the economic value added as an innovative approach to the measurement of business performance gives us a more realistic overview about the current state of the company.

- the economic value added gives a central role to the drop or increase in value of own capital. Economic value added positive amount in a given period means that the management increased the value for owners, and EVA negative amount means that there is a decrease of the value for owners.

- the application of the concept of economic value added could lead to significant improvements and developments in companies. Through additional reports, shareholders would be better informed, which would contribute to attracting new investors and the reduction of additional debt.

And the examples may continue.

Many authors discuss about the concept of value added, but there exist many differences in the way the concept is approached and discussed. So, further we present some definitions of value added given by different authors from our specialty literature:

- Value added, the resulting combination of production factors, consists the source of remuneration and determination of their behaviour, ensuring the company's maintenance on the market'. (Petcu, 2003, p. 332)
- Value added is a fundamental synthetic indicator that expresses a new value created, representing a wealth of a business and results of its overall activity, minus materials costs. (Popa & Miculeac, 2009, p. 235)
- Value added is an extremely important index allowing the precise determination of the company's own contribution. It accurately expresses the efficiency of the management acting starting with the phase of products conceiving up to the phase of their turning to good account as commodities; it also more accurately shows the company's contribution to its productive processes. The rate of value added represents the share of the newly created value of the company within the company's total activity. (Răscolean et al., 2008, p.140)
- Value added measures are an application of economic profit, a concept developed by Marshall (1890).
- Value added expresses the surplus of value which results through the use of production factors: labour and capital (technical and financial), in the context of a general infrastructure ensured by the state. Value added represents the source of the accumulations which allow the remuneration of the direct and indirect participants in the economic activity of the company. (Petcu et al., 2005, p.75)
- Value added is a fundamental synthetic indicator which expresses a new created value, representing the wealth of a company and it results from the activity of it from which are deducted the material expenses. (Popa et al., 2012, p.243)

Value added is a synthetic indicator of results which expresses the volume of activity of the company and presents the advantage that it reflects the volume of what really has been produced in the company, not taking into account the entries from outside of it.

Through realizing this article we have tried to fill in the development of the specialty literature which treats the concept of value added, contribution that has been materialized through the approach and analysis of the value added seen by as an indicator of maximum importance through which is reflected the economic power of the company. Also, on the basis of this research we have developed a series of opinions and conclusions that have resulted from the approach of the methods of determination of value added and which implicitly has needed also a general approach of it. The article itself argues in a certain measure the role and importance of value added in the economic environment of the company.

2. INTRODUCTION

The value added is important not only as a performance indicator, but also as it measures the contribution to the GDP of the company. This indicator is suitable for comparisons between companies, without introducing distortions between companies in different stages of transformation and distribution as the value added neutralizes the incidence of intermediate consumption. Value added is the intermediate balance management that expresses a value creation or an increase of value that the company brings to goods and services from third parties and allows to measure the economic strength of the company.

The main performance indicator measuring the income and the economic activity of companies is the value added created by its own work and is one of the most important indicators used in the evaluation of the company's activity. The value added expresses the increasing value resulting from using the production factors, especially labour and capital over the value of goods and services from third parties during the current activity of the company. It represents the source of accumulations that allow remuneration for direct and indirect participants to the economic activity of the company.

We can discuss the role of value added in establishing the company's tax burden, given the indirect contribution to the calculation of value added tax. The computation methods for the value added that the literature presents are the synthetic and the additive methods.

Value added take two forms: gross value added and net value added. These are defined as: ➢ Gross value added is the value indicator expressing the value size made during the company's activity, respectively the ability of firms to create wealth. (Spătaru, 2010, p. 199); ➢ Net value added is the value indicator that expresses the size of the new value created in a certain period (Spătaru, 2010, p. 199).

The value added is one of the most important indicators reflecting the economic and financial performance of a company. Unlike turnover, which includes the amount of purchases of raw materials and services found in the turnover of the providing companies, the value added includes only the equivalent of the company's activity. Therefore, value added is more important than turnover, that cannot give a true image of the enterprise, in the sense that there are companies with the same turnover, very particular as to the business, but that realize different value added, the only that can measure them.

Value added is the results synthetic indicator that expresses the volume of the activity of an enterprise and has the advantage that it reflects only the volume of what actually occurred within the company, ignoring entries beyond it.

3. ANALYSIS OF THE METHODS OF DETERMINING THE VALUE ADDED

3.1. Analysis of the subtractive or synthetic method

By this method, the value added of enterprises carrying out complex activities (production and trade) is the difference between production year (and commercial margin) and intermediate consumption of goods and services purchased from third parties (Petrescu, 2004, p.55). Calculation of value added using the subtractive method shows also the company's policy that may be taken regarding the increase of value added, taking into account different variants.

According to the subtractive method, value added is determined as follows:

VALUE ADDED	Represents creating value or increasing the value that the company brings to goods and services from third parties and allows measurement of economic strength of the company.
=	
COMMERCIAL MARGIN	Is the intermediate balance management that is determined as the difference between the total turnover and cost of goods sold.
+	
PRODUCTION YEAR	It is composed of all goods and services produced by a company during a year. Is determined as follows: ± production sold ± variation of stocks (short credit / debit balance) + capitalized production.
-	
INTERMEDIATE CONSUMPTIONS FROM THIRD PARTIES	It is determined as follows: raw materials and consumables expenses + other material expenses + other external expenses (energy and water expenses) + expenditure on external services.

Considering the relationship: $VA = Mc + Qe - Ci$ (1)

where:

$Mc = CAt - Cbv$ (2)

$Qe = Qv \pm Qs + Qi$ (3)

$Cit = Chmpmc + AChm + AChex + Chpex$ (4)

Factorial system for value added is as follows:

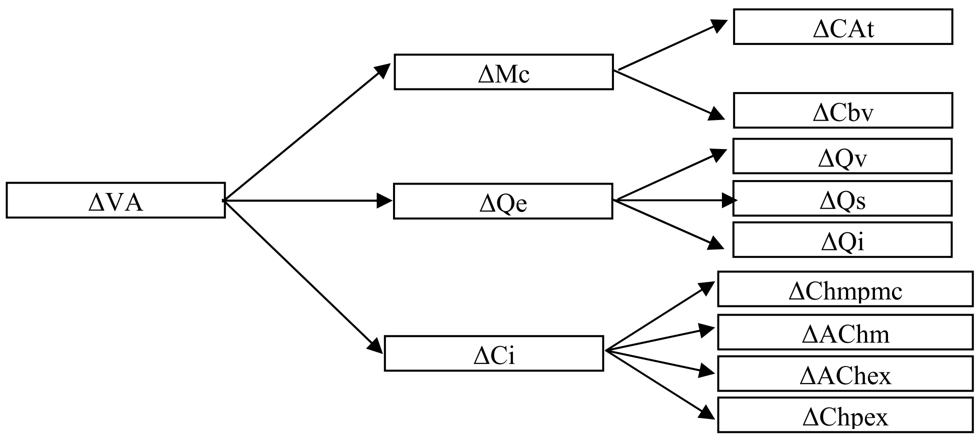


Figure 1. The factorial of the value added calculation relationship after subtractive or synthetic method

Based on this factorial analysis we can realize the factorial analysis of the value added:

I. Value added deviation:

$$\Delta VA = (Mc_1 + Qe_1 - Ci_1) - (Mc_0 + Qe_0 - Ci_0) = \pm W \text{ lei} \tag{5}$$

II. Influence of component elements:

1.Influence of commercial margin:

$$\Delta_{Mc}^{VA} = Mc_1 - Mc_0 = \pm x \text{ lei} \tag{6}$$

2. Influence of production year:

$$\Delta_{Qe}^{VA} = Qe_1 - Qe_0 = \pm y \text{ lei} \tag{7}$$

3. Influence of intermediate consumption from third parties:

$$\Delta_{Cit}^{VA} = -(Cit_1 - Cit_0) = \pm z \text{ lei} \tag{8}$$

III. Verify:

$$\Delta VA = \Delta_{Mc}^{VA} + \Delta_{Qe}^{VA} + \Delta_{Cit}^{VA} \tag{9}$$

Based on this analysis we can draw many conclusions on the two factors influential of first degree on the value added, production year and intermediate consumption from third parties. It also should not be overlooked factors of second degree, components of the production exercise and intermediate consumption from third parties.

Value added indicator fulfils very important functions in the system of qualitative performance indicators used in the analysis. Thus it is used to calculate labour productivity, in the calculation of economic efficiency indicators and in the determination of VAT. In this respect, value added must be linked to other indicators of operating performance, with production year and turnover from which it can result in issues relating to factors and growth correlations to value added and also the impact of these increases. The higher the share of value added in production year, the faster is demonstrated the rapid growth of effort creating the labour and the relative reduction of consumption from outside. (Petrescu, 2010, p. 73)

3.2. Analysis of additive or analytical method

Additive method involves a reverse approach, targeting elements that make up value added distribution that actually includes the cost of inputs to be paid. (Petrescu, 2004, p.55)

Additive method involves determining the value added by adding elements: personnel expenses, taxes and fees, excluding VAT, financial expenses, depreciation of tangible assets and profits from the production. From this model it results that value added serves at: (Păvăloaia & Păvăloaia, 2009, p.100)

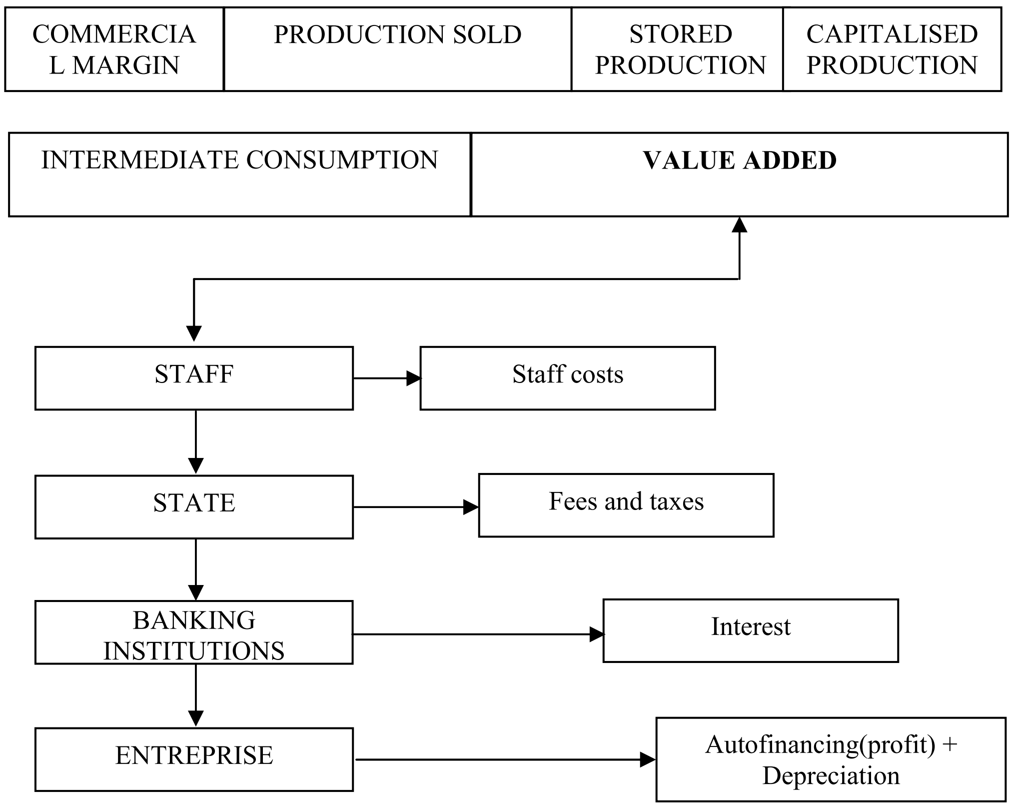
- Labour remuneration (Chp);
- State remuneration as a participant to the social production (It);
- Banking institution remuneration (Cf);
- Equipment remuneration (Az);
- Owner remuneration (P).

The additive model provides an opportunity for a structural analysis of value added by determining the share of each element of value added in the total value added: (Păvăloaia & Păvăloaia, 2009, p.100)

$$gi = \frac{Ei}{Va} \cdot 100 \qquad (10)$$

where: gi – share of each element in total value; Ei - „i” element of value added

After the additive method the distribution of value added between the participants at production is presented as follows:



Source: Păvăloaia Willi, Păvăloaia Daniel, Analiza economico-financiară, Editura Tehnopress, Iaşi, 2009, p. 100

Figure 2. Value added distribution

The value added by the enterprise as a consequence of performing a gainful activity is distributed, generally, between five participant parts:

1. Staff remuneration:

1.1. expenses with staff remuneration;

1.2. employees participation to profit.

2. Fees and taxes for the state:

2.1. insurance and social protection;
2.2. fees, taxes and similar payments;
2.3. income tax;
2.4. dividends tax.

3. Creditors:

3.1. financial costs regarding interest.

4. Shareholders:

4.1. net dividends.

5. Auto financing for the company:

5.1. depreciation expenses;
5.2. reinvested net profit;
5.3. other elements of financing.

Analysis of the distribution of value added is important to highlight the evolution of the part of each participant and thus determine its level of payment compared to the effort. Based on previous statements, according to the additive method the value added is calculated as: (Popa & Miculeac, 2009, p. 237)

VA = (staff costs + employees participation to profit) + (Fees, taxes and contributions – including the income tax) + Interest expenses + Dividends + (Reinvested income + Depreciation)

We also mention that value added through the additive method can be determined taking into account the net result of the exercise, as follows:

VA = Staff costs + Value adjustments on tangible and intangible assets + Value adjustments on assets + Adjustments for provisions + Fees, taxes and contributions costs + Financial expenses + Financial revenues + Extraordinary expenses + Net result – Other operating revenues – Other operating expenses

Or

VA = Staff costs + other operating expenses + Value adjustments regarding tangible and intangible assets + Value adjustments regarding assets + Adjustments for provisions + Operating result

Basically, the additive method emphasizes the value added as an indicator that aggregates the extent to which the participant factors to the activity development are paid: labour, banking, fixed capital, the state shareholders.

Used in comparisons between sectors, the value added can reflect structural differences on similar companies, through the light of the ratio between the factors of production incorporated in the economic activity.

For a profound approach, we shall realize also the structural analysis of the value added which highlights the percentage ratios of the distribution elements that reflect the remuneration of the production factors. Therefore we must take into consideration the following ratios:

1. labor remuneration:

$$Rm = \frac{\text{Expenditure on staff}}{\text{Added Value}} \cdot 100 \qquad (11)$$

2. state remuneration:

$$Rs = \frac{\text{Taxes and fees}}{\text{Added Value}} \cdot 100 \tag{12}$$

3. creditors remuneration:

$$Rc = \frac{\text{Financial expenses}}{\text{Added Value}} \cdot 100 \tag{13}$$

4. investments remuneration:

$$Ri = \frac{\text{Depreciation and provisions}}{\text{Added Value}} \cdot 100 \tag{14}$$

5. company remuneration:

$$R\hat{i} = \frac{\text{Net result}}{\text{Added Value}} \cdot 100 \tag{15}$$

The remuneration of value added inputs reveals that each factor incorporates two parts: one that corresponds to an added cost to the company and one that corresponds to samples of results. The added cost to the business is added to goods and services purchased from outside. The samples of the results are components of the net income that are distributed to inputs in various forms (interests, dividends, income tax, self-financing). Analyzed as a sum of costs and shares of the result, value added offers an insight into the evolution of these costs, resulting in useful information for management.

The structure of value added by capital contributions are made according to the following scheme: (Petrescu, 2010, p. 57)

Value Added ↓	=	Added costs ↓	+	Shares of the result ↓
I. Labour	→	Expenses with personnel	+	Profit participants
II. Capital	→	Financial expenses	+	Profit dividends
III. State	→	Duties and taxes	+	Income tax
IV. Company	→	Calculated expenses (Depreciation)	+	Result in reserve (Self-financing)

Source: Petrescu Silvia, Analiză financiară aprofundată. Concepte-Metode-Studii de caz. , PH. Sedcom Libris, Iaşi, 2010, page 58

Figure 3. Value added structure

The value added structured in this way is, on the one hand, a performance indicator, since it allows to assess the effectiveness of the company for a given activity (taking into account the material resources put into practice) and, on the other hand, an indicator of economic integration if we consider the external input of material and energy consumption. The external input dependence risk is even greater as the vertical integration of the company is lower. (Petrescu, 2010, p. 58)

4. STUDY CASE ON DETERMINING THE VALUE ADDED

Application of the two methods for determining the value added helps to highlight the complex issues relating to business management. For the methodological exemplification of both methods we use data extracted from the financial statements of a company.

Table 1. Determination of value added using the subtractive method (RON)

Nr. crt.	Indicators	Financial year		Deviations
		Previous	Current	
1.	**Commercial margin**	**816**	**1.257**	**+441**
2.	**Production exercise, from which:**	**412.803**	**487.665**	**+74.862**
2.1.	Production sold			
2.2.	Production stored: -credit balance -balance due			
2.3.	Capitalized production	0	0	0
3.	**Intermediate consumption from third parties out of which:**	**218.325**	**218.355**	**+30**
3.1.	Raw materials and consumables materials expenses	164.277	146.601	-17.676
3.2.	Other material expenses	1.890	2.529	+213
3.3.	Other external expenses (with energy and water)	25.032	24.594	+17.505
3.4.	Expenses regarding external dues	27.126	44.877	+17.505
4.	**VALUE ADDED (1 + 2 - 3)**	**195.294**	**270.567**	**+75.273**

Table 2. Determination of value added using the additive method (RON)

Nr. crt.	Indicators	Symbol	Financial year		Deviations
			Previous	Current	
1.	Staff costs	Chp	94.935	112.989	+18.054
2.	Value adjustments on tangible and intangible assets	AVIcIn	21.135	45.084	+23.949
3.	Value adjustments on assets	AVAc	2.223	1.980	-243
4.	Adjustments for provisions	AP	3.600	7.203	+3.603
5.	Expenses with fees, taxes and other similar payments	ChIT	17.592	14.523	-3.069
6.	Financial expenses	Chf	8.556	12.819	+4.263
7.	Other operating expenses	AChex	23.034	25.149	+2.115
8.	Extraordinary expenses	Chext	0	0	0
9.	***Net result***	***Rn***	***37.275***	***59.034***	***+21.759***
10.	Other operating revenues	AVexp	2.448	3.255	+807
11.	Financial revenues	Vf	10.608	4.959	-5.649
12.	**GROSS VALUE ADDED (1+2+3+4+5+6+7+8+9)-(10+11)**	**VAB**	**195.294**	**270.567**	**+75.273**
13.	**NET VALUE ADDED (12-2)**	**VAN**	**174.159**	**225.483**	**+51.324**

Based on the above data from the table we realize the factorial analysis of value added in order to analyze the influential factors.

I. Value added deviation:

$$\Delta VA = VA_1 - VA_0 = 270.567 - 195.294 = +75.273 \text{ lei} \quad (16)$$

$$I_{VA} = \frac{VA_1}{VA_0} \cdot 100 = \frac{270.567}{195.294} \cdot 100 = 138,54\% \quad (17)$$

$$\Delta_r VA = I_{VA} - 100 = 138,54 - 100 = +38,54\% \quad (18)$$

II. Influence of the composing elements:

1. Influence of staff costs:

$$\Delta_{Chp}^{VA} = Chp_1 - Chp_0 = 112.989 - 94.935 = +18.054 \text{ lei} \quad (19)$$

2. Influence of value adjustments on tangible and intangible assets:

$$\Delta_{AVIcIn}^{VA} = AVIcIn_1 - AVIcIn_0 = 45.084 - 21.135 = +23.949 \text{ lei} \quad (20)$$

3. Influence of value adjustments on assets:

$$\Delta_{AVAc}^{VA} = AVAc_1 - AVAc_0 = 1.980 - 2.223 = -243 \text{ lei} \quad (21)$$

4. Influence of adjustments for provisions:

$$\Delta_{AP}^{VA} = AP_1 - AP_0 = 7.203 - 3.600 = +3.603 \text{ lei} \quad (22)$$

5. Influence of expenses with fees, taxes and other similar payments:

$$\Delta_{ChIT}^{VA} = ChIT_1 - ChIT_0 = 14.523 - 17.592 = -3.069 \text{ lei} \quad (23)$$

6. Influence of financial expenses:

$$\Delta_{Chf}^{VA} = Chf_1 - Chf_0 = 12.819 - 8.556 = +4.263 \text{ lei} \quad (24)$$

7. Influence of other operating expenses:

$$\Delta_{ACh\exp}^{VA} = ACh\exp_1 - ACh\exp_0 = 25.149 - 23.034 = +2.115 \text{ lei} \quad (25)$$

8. Influence of extraordinary expenses:

$$\Delta_{Chext}^{VA} = Chext_1 - Chexr_0 = 0 - 0 = 0 \text{ lei} \quad (26)$$

9. Influence of net result:

$$\Delta_{Rn}^{VA} = Rn_1 - Rn_0 = 59.034 - 37.275 = +21.759 \text{ lei} \quad (27)$$

10. Influence of operating revenues:

$$\Delta_{AV\exp}^{VA} = -\left(AV\exp_1 - AV\exp_0\right) = -\left(3.255 - 2.448\right) = -807 \text{ lei} \quad (28)$$

11. Influence of financial revenues:

$$\Delta_{Vf}^{VA} = -\left(Vf_1 - Vf_0\right) = -\left(4.959 - 10.608\right) = +5.649 \text{ lei} \quad (29)$$

III. To verify we use the relationship:

$$\begin{aligned}\Delta VA = {} & \Delta_{Chp}^{VA} + \Delta_{AVIcIn}^{VA} + \Delta_{AVAc}^{VA} + \Delta_{AP}^{VA} + \Delta_{ChIT}^{VA} + \Delta_{Chf}^{VA} + \\ & + \Delta_{ACh\exp}^{VA} + \Delta_{Chext}^{VA} + \Delta_{Rn}^{VA} + \Delta_{AV\exp}^{VA} + \Delta_{Vf}^{VA}\end{aligned} \quad (30)$$

Respectively:

$$\begin{aligned}75.273 = {} & 18.054 + 23.949 + \left(-243\right) + 3.603 + \left(-3.069\right) + \\ & + 4.263 + 2.115 + 0 + 21.759 + \left(-807\right) + 5.649\end{aligned} \quad (31)$$

After analyzing the influence of the 11 factors that compose the determination model of value added through the additive method we draw the following conclusions:

- the elements that had a negative influence on value added were the value adjustments on assets, expenses with fees, taxes and similar payments and other operating revenues;
- the value added increase was due to the increase of the distribution values with the exception of fees, taxes and adjustments on assets;
- factors that had the biggest contribution to the increase in value added were: staff costs, depreciation and provisions regarding impairment of assets and net profit;
- analyzing the influence of the above factors we observe that the elements with positive influence on value added are: staff costs, value adjustments on tangible and intangible assets, financial expenses, other operating expenses, net result and financial revenues.

Measuring the economic performance of the firm studied through the structure rates of value added will allow us the transposition of the effects and results obtained through the financial efforts made. To complete the case study we perform also the structural analysis of value added. By calculating the structure rates of value added we obtain the following values:

1. labor remuneration:

$$Rm_N = \frac{\text{Expenditure on staff}}{\text{Added Value}} \cdot 100 = \frac{94.935}{195.294} \cdot 100 = 48,61\% \tag{32}$$

$$Rm_{N+1} = \frac{\text{Expenditure on staff}}{\text{Added Value}} \cdot 100 = \frac{112.989}{225.483} \cdot 100 = 50,11\% \tag{33}$$

2. state remuneration:

$$Rs_N = \frac{\text{Taxes and fees}}{\text{Added Value}} \cdot 100 = \frac{17.592}{195.294} \cdot 100 = 9,01\% \tag{34}$$

$$Rs_{N+1} = \frac{\text{Taxes and fees}}{\text{Added Value}} \cdot 100 = \frac{14.523}{270.567} \cdot 100 = 5,37\% \tag{35}$$

3. creditors remuneration:

$$Rc_N = \frac{\text{Financial expenses}}{\text{Added Value}} \cdot 100 = \frac{8.556}{195.294} \cdot 100 = 4,38\% \tag{36}$$

$$Rc_{N+1} = \frac{\text{Financial expenses}}{\text{Added Value}} \cdot 100 = \frac{12.819}{270.567} \cdot 100 = 4,74\% \tag{37}$$

4. investments remuneration:

$$Ri_N = \frac{\text{Depreciation and provisions}}{\text{Added Value}} \cdot 100 = \frac{26.958}{195.294} \cdot 100 = 13,80\% \tag{38}$$

$$Ri_{N+1} = \frac{\text{Depreciation and provisions}}{\text{Added Value}} \cdot 100 = \frac{54.267}{270.567} \cdot 100 = 20,06\% \tag{39}$$

5. company remuneration:

$$R\hat{\imath}_N = \frac{\text{Net result}}{\text{Added Value}} \cdot 100 = \frac{37.275}{195.294} \cdot 100 = 19,09\% \tag{40}$$

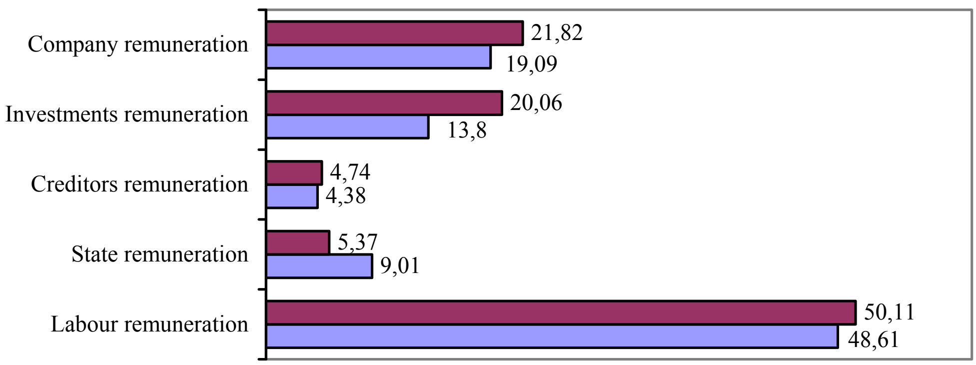
$$Rî_{N+1} = \frac{\text{Net result}}{\text{Added Value}} \cdot 100 = \frac{59.034}{270.567} \cdot 100 = 21,82\% \quad (41)$$

In summary, the data obtained can be represented as follows:

Table 3. The structure rated of value added (%)

Nr. crt.	Indicators	Symbol	Financial year		Deviation
			N (0)	N+1 (1)	
1.	Labour remuneration	Rm	48,61	50,11	+1,5
2.	State remuneration	Rs	9,01	5,37	-3,64
3.	Creditors remuneration	Rc	4,38	4,74	+0,36
4.	Investments remuneration	Ri	13,80	20,06	+6,26
5.	Company remuneration	Rî	19,09	21,82	+2,73

Graphically, the results regarding the rates of return look as follows:



	Labour remuneration	State remuneration	Creditors remuneration	Investments remuneration	Company remuneration
N+1	50,11	5,37	4,74	20,06	21,82
N	48,61	9,01	4,38	13,8	19,09

Figure 4. Rates of added value structure

The level of these rates helps to track progress over time and the changes that occur between the five categories. A normal situation for the company would be that when an upward trend appears in the share of dividends and self-financing in value added and a decreasing trend in the share of interest expense and taxes due to the state. It can be seen that the highest value is registered by labour remuneration, followed by the company remuneration and the investments remuneration.

From the above it can be seen that these results are reflected in the participation rates of capital contributions to achieving the newly created value added, given the fact that the increase in value added is important to the participants of the company's life.

5. CONCLUSIONS

Both computation methods for the value added, but especially the additive method, allow a value added analysis on its components with the view of observing each element generally. The main structural elements that have to be analyzed are: (Spătaru, 2010, p. 200)

a) staff costs, having a significant proportion in the total value added (between 30% and 45%, depending on the specifics of the unity and on the economic policy of the state, their amount could be even higher); within them the following are highlighted separately:

-salaries expenses
-social security contributions
-social protection expenses

b) depreciation, representing the gradual cost of the investment, its share depending on the investment policy of the company's, time since putting into operation the main fix assets etc.

c) financial expenses, mainly the bank interest for loans being employed or to be returned, representing the cost of the financial capital attracted: their weight, varies over time, depends on various factors (average interest rate, inflation rate, country and bank rating, company's credibility, its creditworthiness etc.)

d) operating result (without financial expenses), that can be positive or negative, depending on the weight of other elements, as it underlies the profit calculation.

e) other elements similar to value added resulted from the situation of the market, the economy in general, the legislative changes etc.

Based on the presented facts we can state that the importance of value added analysis results from the following considerations:

- represents the main auto financing source for the economic agents activity;
- represents the main auto financing source for the net result of the exercise;
- represents the main auto financing source for the operating results;
- represents the new created value by a company from its whole activity;
- by comparing with turnover, value added expresses the economic contribution of the company, the surplus value that it generates as a consequence of the effort in the production process;
- expresses the degree of economic integration of the company;
- the distribution of value added reflects the evolution of each participant part, thus setting the level of his remuneration in relation to the effort;
- represents the source of remuneration of staff;
- represents the source of financing the budgetary obligations;
- represents the source of increasing the reserves of the company;
- measures the company's contribution to achieving the country's GDP and represents the main component of GDP.

As a position, value added is situated between purchases (upstream market) and sales (downstream market) being the instrument of undertaking independent actions of the company that accurately characterize its performance. The sum of all economic agents' value added represents the gross domestic product (GDP). In practice, value added represents both an analysis instruments and a means of management.

As an analysis tool, value added allows assessing the economic and financial performances of the company: its real economic power, the production factors contribution to creating its wealth, company's contribution to GDP, its ability to secure itself a number of production phases (depending on the level of economic integration). Used in comparisons between sectors, value added can reflect structural differences between similar companies, through the relationship between inputs incorporated in the economic activity. (Petrescu, 2010, p. 66)

As a means of management, value added characterizes the running of the company, being used in forecasting management, in management control and taxation, to determine the value added tax. (Petrescu, 2010, p. 66)

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ACCOUNTING POLICIES AND ESTIMATES IN MUNICIPALITIES BETWEEN NORMS AND REALITY

IULIANA CENAR *

ABSTRACT: *The conformity of the Romanian accounting system to the European and international accounting rules also implies the accounting policies as a crucial element in the development and presentation of financial statements, which must include relevant and reliable information in condition to meet the needs of various user groups in decision making. Accounting policies are circumscribed to the primary objective of accounting, that of providing a fair image of financial position and performance of reporting entities.*

This paper intends to approach accounting policies in relation to national and international regulatory framework, the desirable way in which they should be present in public institutions in our country, the reality regarding the incorporation in the financial statements of accounting policies applied to local territorial administrative units, the identification of convergences and differences in the perception and practical implementation of normative theoretical framework regarding "principles, conventions, rules and practices applied by an entity in preparing and presenting financial statements".

KEY WORDS: *accounting policies; accounting estimates; true and fair view; accounting options; financial statements.*

JEL CLASSIFICATION: *M41*

1. INTRODUCTION

Dual accounting systems operate with accounting results, which situate in their center summary accounting and financial reporting documents used as information tools for third parties and to develop financial analysis needed for management.

In accordance with Romanian norms, the annexes (as pointed out by the regulatory framework for public institutions) to the financial statements are an integral part thereof and are represented by accounting policies and explanatory notes.

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* *Assoc. Prof., Ph.D.,"1 Decembrie 1918" University of Alba Iulia, Romania,* cenar_iuliana@uab.ro

The presence of these annexes/accounting policies is claimed by the accounting principles, the true and fair view and the level of materiality, by the necessity to amplify information regarding how economic and financial statements relate to socio-economic objectives pursued by each public institution.

Accounting policies find concrete forms of expression in the content of accounting norms and regulations, in the context in which they are applied in order to solve problems encountered in the economic and financial reality. They may present the same events and transactions in different ways, and thus explain why different specific accounting policies are compiled in public institutions.

The accounting policies acquire a particular importance in the context of international accounting standards. Among other things, they must include a review of the effects in the application of the professional judgment in case of major events and to be prevalent in "the third annual account" - annex.

The previously mentioned contextual background led to a "dual" approach of accounting policies. On one hand, duality implies the regulatory framework (national and international), and on the other hand, the theoretical - practical framework. As an activity segment to which accounting policies are circumscribed in the public sector, I have opted for public local government units represented by municipalities. Their organization and activity is regulated by the Law of local government no. 215/2001, republished. Municipalities are responsible for local administrative issues, that is management of public services through the authorities and agents, which thus contribute to solving public current needs, and investing with effective responsibility enables an efficient administration closer to citizens.

2. EVOLUTIONARY AND NORMATIVE HIGHLIGHTS REGARDING ACCOUNTING POLICIES IN PUBLIC INSTITUTIONS

Conceptually speaking, politics is "the science and practice of running state affairs", "tactics, behavior (cleverly) used by someone to attain purpose" (DEX).

Accounting is "the science and art of governing business", "a specialized activity of measurement, evaluation, knowledge, management and control of assets, liabilities and shareholders' equity, and the results obtained from individuals and legal business" (The accounting law no 82/1991).

Corroborating we can state that the accounting policies represent the science, practice and art of leading an entity in order to attain a goal (fair presentation) and respectively the tactics, the ability used (by technical and economic specialists) to quantify, know, manage and control the assets, liabilities and equity as well as the results of that entity.

The term of accounting policy has been recently introduced in Romanian accounting, respectively with the publication of accounting regulations harmonized with Directive IV of EEC and International Accounting Standards, approved by the Order of the Minister of Public Finance no. 403/1999.

In public institutions accounting, another "late bloomer of the normalization of the Romanian accounting" (Feleaga, 2006) or "the Cinderella of the Romanian accounting science" (Boloş, 2004) this happened (generalized) five years later, when they opened the accruals basis of accounting by OMPF 1917/2005, which regulates the organization and management of accounting in public institutions, established on the accruals basis of accounting principles.

International accounting policy issues are addressed in IPSAS 3 "Accounting Policies, Changes in Accounting Estimates and Errors".

Accounting policies specify how the effects of transactions and other events are reflected by recognition, selecting measurement basis, of recognition and presentation of elements in financial statements.

To estimate means to examine qualitatively and quantitatively, determining the price or value, to assess, roughly evaluate (Romanian Explanatory Dictionary - DEX). Estimation techniques are not explicitly defined by the regulatory framework, but they have to determine, in a credible manner, the monetary amount assigned to an evaluation basis. Accurate expression of the monetary amount also involves higher costs, so that the selection of the estimate technique requires compliance constraints imposed by the cost-benefit ratio (Bunea, 2011).

The references found in the national accounting norms specific to public institutions regarding accounting policies are highly synthetic, compared with the regulations of the IPSAS 3, or, why not, with those found in the regulatory document approving the accounting regulations harmonized with European directives for other entities (OMPF 3055/2009).

Synthetically, the regulatory framework mentions the necessity to develop legal procedures by specialists in the economic and technical field, people that know the specific activity and the strategy adopted by each public institution. These procedures should include all operations conducted in a public institution from supporting paperwork to quarterly and annual financial statements. It is mentioned the need to respect the fundamental principles of the accrual basis of accounting in order to secure the financial statements information that meets the attributes of relevance and credibility (in the sense of faithful representation of the patrimonial earnings and financial position, neutrality, prudence and completeness in all major respects).

The regulatory framework or the result transposed into more relevant or reliable information with reference to the operations of public institutions constitute the circumstances in which accounting policies changes are allowed.

And that's about it...

It has been ascertained that, when it comes to policies and accounting estimates, the lack of definitions, conceptualizations have been identified and reported by Professor N. Feleagă and mentioned by R. Neag to be among the Romanian accounting inconsistencies: "the absence of a clear presentation of the used terminology, so that, both the accounts assistants and account users understand more clearly the meaning of the elements occurring in financial statements" (Neag, 2000).

According to the Accounting Law no. 82/991, republished, with subsequent amendments, the loan authorizing officers as responsible for annual financial statements should confirm that the accounting policies used for this purpose are in accordance with the applicable accounting regulations. It therefore follows that, there is an obligatory character for the development of accounting policies as well as working procedures, as a distinct segment within this framework.

Since at the basis of the accounting reform in public institutions lay the provisions of the European System of Accounts (ESA 95), and the need for a uniform accounting treatment of public accounting information requires a recourse to the International Public Sector Accounting Standard (IPSAS), we consider it appropriate to emphasize certain complementary aspects of national accounting standards.

At international level, the accounting policies applicable to public entities issue is addressed by the IPSAS 3 "Accounting Policies, Changes in Accounting Estimates and Errors" which is part of IAS 8 with the same name and which relates to the viability of the accruals basis of accounting.

The IPSAS 3 provides two situations regarding the application of accounting policies, namely:

- the existence of an IPSAS that specifically applies to a transaction, event or condition, when the accounting policies are determined by applying the respective standard and considering all relevant Implementation Guidance issued by the IPSASB for the standard that is related to it;

- in the absence of an IPSAS, a case in which developing and applying accounting policies fall into the management's responsibility (we specify that the effect of applying the accounting policies must result in obtaining information with qualitative attributes specified also in the national legislation).

In making the judgment, management should refer to the following (Girbina & Bunea, 2008):

- the requirements and guidance in standards dealing with similar issues;

- the definitions, recognition and measurement criteria elements generating financial position and performance described in other standards;

- the most recent pronouncements of standard-setting bodies and accepted public or private sector practices, but only to the extent that these do not conflict with the above mentioned sources.

Accounting estimates are the result of uncertainties inherent in delivering public services and other activities, lack of accuracy, precision in monetary quantification of the elements in financial statements.

In public institutions, estimates may be required estimate, of: various income taxes of contributions or other revenues; bad debts arising from uncollected taxes; inventory obsolescence; the fair value of financial assets or financial liabilities; the useful lives of, or expected pattern of consumption of future economic benefits or service potential embodied in depreciable assets; re-estimation of residual value, warranty obligations.

Presentation of budget debts (doubtful clients) and not only, where there is a probability not to collect the total debts, the realizable value is achieved by adjusting the input value with the loss of value determined by estimating the degree of non-recovery debts.

The evaluation of stocks is done at the moment when the balance sheet is at the lowest of their cost and the net realizable value (the estimated selling price could be obtained in the ordinary course of business, except the estimated costs of completion and the costs of sale).

The reference accounting treatment required by IPSAS 11 "Construction Contracts" is the method of accounting for their advance work, and for its application the entity either uses the estimation of the degree of advancement of construction works or depending on the percentage of expenses incurred in relation to the total cost, either by physical measurement of work done in reality.

In order to determine the input cost of an asset, in some situations, one resorts to the initial estimated costs of dismantling, removing and restoring the property, according to IPSAS 17 "Property, plant, and equipment".

To determine the accumulated amortization, several accounting estimates are used: the useful life (this estimate is a matter of professional judgment, being determined according to the period over which an asset is expected to be available for use), the residual value (is the net amount that a public entity, financed on account of their resources, expects to obtain from the disposal of an asset at the end of its useful life, after deducting the estimated costs of disposal).

In the case of financial leasing (IPSAS 13 "Leases"), the lessee and therefore his lease should be recorded in the lessee's liability at the lowest between the fair value and the present value of the minimum lease payments. In applying these policies, several estimates are used and they relate to: the purchase option, residual value, quarterly fees, default interest rate, useful life, etc..

Applying an impairment test may result in the carrying amount of an asset exceeding its recoverable amount, a case in which it is ascertained that there is an economic depreciation of the resource from which it is expected future economic benefits or service potential.

The recoverable amount is the higher of the net fair value/net realizable value and its utility value (the discounting value obtained by estimating the future expected value of treasury cash flows from continuing use of an asset and its cession at the end of its useful life).

The net fair value results in an irrevocable sale agreement, or it is given either by the market price of the asset or by the most recent transaction price. The estimation of the utility value is achieved by estimating future treasury cash inflows and outflows arising from the continued use of the asset and its final output and from applying the appropriate discount rate to these future treasury cash flows.

The provision that is presented in the financial statements must be given by the best estimate of the necessary costs to extinguish the present obligation at the date of the balance. When the value-time effect of the money is significant, the provision constitutes the present value of the estimated expenditures required to extinguish the obligation (IPSAS 19 "Provisions, Contingent Liabilities and Contingent Assets"). To estimate these costs, the experience of similar transactions and, in some cases, the views of independent experts are to be taken into consideration.

A change in debt can arise as a result of: the change in value of the resources required to settle the debt or the time of settlement, the discount rate change and the passage of time.

Estimates may require revisions when the circumstances they were based on change, they have no connection with previous periods.

The effect of the change is recognized by inclusion in surplus or deficit in the respective period if future periods are not affected, in this situation being necessary a prospective recognition by the inclusion in the surplus or deficit in future periods. The hypothesis of the absence of the effect on future periods due to the inability to estimate should be noted in the explanatory notes.

Effects arising from changes in accounting policies are subject to the presentation given the nature of changes in accounting policy, the reasons why applying the new policy improves the relevance and reliability of information, value adjustments for the elements of current and subsequent financial statements. The failure of retroactive application entails a necessary presentation of the circumstances leading to this situation, describing the manner and date of change when the accounting policy was applied.

A feature of accounting information is comparability, which "subordinates" the users' informing regarding the accounting policies used in preparing financial statements, any amendments thereto and the effects of the changes (Feleaga & Feleaga, 2007). Attaining comparability (not uniformity) means to identify the discrepancy between the accounting policies for transactions and other similar events used by the same public entity from one period to another, as well as by other various public entities.

The adopted policy should maintain the qualitative characteristics of relevance and credibility, so the need for comparability should not mean uniformity or reluctance to introduce improved accounting policies.

In the event that for solving a problem there are several accounting policies (as they are conceptualized - bases, conventions, principles etc. or estimation techniques), it creates the possibility to choose - accounting options. Among the options allowed by the legislation, one must choose those that best fit their branch of industry and generate the best report in order to obtain a true and fair view and fundament decisions. Therefore, accounting policies are the result of the accounting choices in useful decisions in order to achieve the objectives of public entities.

In selecting accounting policies, long-term vision becomes necessary, respectively long-term effects of accounting options. The situation regarding the financial position, respectively the financial performance, constitute support documents for the materialization of accounting policies.

We may conclude that the accounting policies rest on an option, and the presentation of the financial position and performance depends on the choice of accounting treatments that are to be applied by the public institution.

3. HOW TO DEVELOP ACCOUNTING POLICIES

A pragmatic approach to accounting policies could begin with their structuring into general accounting policies and specific accounting policies (Duțescu, 2003).

General accounting policies relate to basic issues of financial reporting organization (policies on organizing, analyzing, and processing explanatory documents, recognition, classification, evaluation, the level of materiality, internal audit policies etc.)

Within these, specifications are brought regarding the following aspects:

- financial statements in accordance with the active legal provisions (OMPF 1917/2005) as well as other provisions relating to a particular field of activity (eg. at local government level - local government law, norms of closing budget at year-end, the local council decisions etc.);

- considering all significant transactions;

- the monetary unit in which financial statements are prepared and how to convert debts, liabilities and liquid assets denominated in foreign currencies;

- the principles, conventions and rules that were imposed in order to the recognize elements of financial statements, including criteria for assessing the quality of accounting information;

- the level of materiality represented in financial statements (in the sense that for the elements of great importance it should be "assigned a separate position" (Duțescu, 2003), as well as the level of materiality for the assets impairment, are subject to the accounting findings.

Specific accounting policies regard financial reporting and refer to the particularities of the attributable categories assigned to specific accounting structures (assets, liabilities, equity, revenues, expenses, results), as follows:

1. Assets: recognition criteria (probability of generating future economic benefits and reliable evaluation); determine the usefulness by decision makers including in special situations such as donations, exchange of assets, transfer, etc...; classification in the financial statements (in relation to the degree of liquidity), evaluation (at each of the four evaluation moments, including the capitalization or not of the costs of borrowed capital for the realization of assets with a long manufacturing cycle).

Capitalization may start when: the expenses for that particular asset are made, when the borrowing costs are generated; the activities necessary to prepare the asset for its intended use or for sale unfold (Hagiu, 2010).

Capitalization is suspended during long periods of delay in construction work (as an example due to unforeseen administrative bottlenecks) or during long periods of interruption in the productive activity (caused by strikes).

Also related to assets, accounting policies regard: (i) their depreciation (irreversible or following significant changes to internal and external conditions associated with the operation of the asset), (ii) re-evaluation of fixed assets and a presentation of the generated effects (through re-evaluation the balance sheet items are affected (total assets and total equity) with influence on the decisions taken by users of financial statements) as well as (iii) contingent assets (possible, probable assets);

2. Liabilities: recognition (the probability of an output of resources embodying future economic benefits and reliable measuring) classification (in relation to the degree of chargeability: current and non-current), evaluation, including the updating of debt when the difference between the input and the updated output of future cash or the necessary resources to settle the debt exceeds a certain level of materiality, considered to be significant, contingent liabilities (possible obligations that need to be confirmed or current liabilities that do not comply cumulatively with the conditions for recognizing liabilities);

3. Equity: details of structural components, including sources of retained earnings;

4. Expenditure and revenue in advance, as adjustment structures, required by the principle of independence of financial years;

5. Expenses and income - criteria against which their recognition is done (for expenses - reducing economic benefits and reliable measuring, assumed by the increasing income together with the economic benefits determined by reference to the transfer of risks and rewards associated with ownership of the assets, by the fact that there is no longer in full control and the sold asset cannot be effectively managed, the accounting recognition method (the percentage of completion or completion of work), establishing the risk of failure in debt collection and setting up the impairment adjustments, with a corrective role;

6. How to proceed when the entity conducts operations for which there has not been scheduled accounting treatments in accounting policies (e.g. recognition of transactions and events under the applicable accounting regulations, as well as the completion, subsequent approval of the accounting policies applied in these cases, but no later than the annual financial statements);

7. Mentioning that the regulations and accounting treatment contained in the accounting policies must comply with the national legislation as a whole.

The structuring of accounting policies can be presented as follows (Adapted from Manolescu & Roman, 2009):

Table 1. Structuring accounting policies, according to accounting regulations

<table>
<tr><td rowspan="6">Accounting policies regarding</td><td>Tangible and intangible assets</td><td>- evaluation bases on initial recognition
- residual value
- depreciation/amortisation value
- payback period
- retrospective recognition
- evaluation and recognition of borrowing costs, impairment losses, leasing transactions, etc.</td></tr>
<tr><td>Financial assets</td><td>- the evaluation of financial instruments,
- the structure, evaluation and recognition of the financial investment cost</td></tr>
<tr><td>Stocks</td><td>- recognition and measurement
- determining the cost of inventories,
- depreciation
- methods of accounting and inventory</td></tr>
<tr><td>Cash flows</td><td>- breakdown by activities
- method of determining the situation
- registration of foreign currency cash flows etc.</td></tr>
<tr><td>Revenue recognition</td><td>- considering the source, respectively the goods sale, provision of services, dependent on determining the stage of completion, use of assets by third parties, the gain or loss of the currency exchange,etc.</td></tr>
<tr><td>Other operations</td><td>- recognition and measurement of short-term employee benefits
- recognition and measurement of investment properties
- recognition and measurement of events after the balance sheet, the biological assets</td></tr>
</table>

Flexibility is manifested in one accounting treatment or another, and its selection a particularly important factor in presenting the financial position and performance.

As regards from the presentation of the accounting policies we note the following: there is no unified presentation in the specialized literature, but rather a complementary presentation with multiple overlap pings;

- there is a slight tendency towards confusion between policies and estimates in accounting;

- accounting regulations have taken a series of accounting policies found in international standards, especially those concerning the application for intangible assets revaluation model, considering residual value, of the two methods of recognizing revenues and expenditures for construction contracts (stage completion of the contract or percentage of completion), a distinct highlighting of investment property as well as assets for long-term growth of capital value, abandoning the LIFO method for the evaluation of short-term investments and current material assets out of the commissioning entity or to the consumer etc.

With all the freedom offered by the accounting treatments and alternatives, in applying accounting policies, aggression should be avoided since it can result in a number of circumstances such as (Manea, 2006): capitalization of development costs even where there is no evident feasibility, the "omission" in the accounting record of the decreased fair values of re-evaluated assets, failure to re-evaluate the entire class of assets, capitalization of interest costs even though capitalization criteria are not met (IPSAS 5 "Borrowing Costs, paragraph 31), respectively:

- interest expenses do not refer to a qualifying asset (asset that necessarily takes a substantial period of time to be prepared for its intended use);

- continuous capitalization of the interest even in the periods when work is interrupted;

- in determining the value of expenses with capitalized interest costs, the income earned from temporary placement of unused amounts was not taken into account;

- the recoverable amount of the asset was exceeded.

Naturally, in such cases, further analysis is needed in order to avoid an unfair image of the position and financial performance of the public institution.

4. WHAT IS THE REALITY?

To answer this question we appealed to the accounting policies developed in local government units. Thus, compared with the theoretical and regulatory framework previously presented, a number of differences have arisen and we them present below.

In most cases accounting policies issued by municipalities aimed at specifying the official document presenting the assets under their management - financial statements, followed by the synthetic mentioning of:

- components of financial statements;

- accounting principles that have been considered for evaluating the elements of the financial statements;

- the currency in which accounting was done;
- without mentioning which are the accounting policies, users are informed that they take into consideration "providing relevant information in decision making, a fair presentation of heritage results and the financial position held";
- the general rule applied to monetary resources management and respectively "the pay of current obligations to employees within the law, the public debt following ongoing contractual obligations";
- the management of tangible and intangible fixed assets;
- the method of depreciation/amortization of tangible and intangible assets (although the regulatory framework provides a single applicable method - the linear method) and inventory evaluation method of stocks out of the entity;
- frequency of inventory performance for assets and liabilities, their evaluation (in a very generalized presentation).

Taking into consideration the centralized accounting in public institutions, the accounting policies also contain references regarding the preparation of financial statements by superior budget managers. Assurances are given that all statements have been prepared and tested on synthetic and analytical balances which constitute into annexes to "reports of public institutions" (although current accounting rules use the term of "financial statements" to describe the official document presenting the situation of the patrimony under the administration of public institutions, the practitioners still use old terminology, that of accounting reports).

We have identified circumstances in which accounting policies are reduced to the mere mention of accounting regulations and general accounting principles that have been taken into consideration while preparing financial statements.

Other municipalities present the fact that the institution has developed accounting principles, and that they comply with the accruals basis of accounting principles, ensure the provision of relevant information for economic decision making and determining financial position. Thus, the account assistants state that, they offer information regarding past transactions that resulted in proceeds and payments, but also about future resources and future payment obligations respectively. We receive insurances for the existence of supporting documents, the existence of a document route approved by the authorizing officer, the accounting form used, general terms regarding property evaluation, re-evaluation and depreciation/amortization method used, how to recognize the debts and liabilities in foreign currency.

The factual documentation also revealed the contents of accounting policies under the form of an excerpt from the accounting law, without any customizations made for the concerned institution.

5. CONCLUSIONS

Regardless of the greater or lesser impact on the position and financial performance, accounting policies must be selected and applied in a manner leading to the achievement of the fundamental objective of accounting, respectively financial statements that reflect the true and fair view of the reporting public institution.

Accounting policies cannot be standardized as these should be prepared according to the specific activity of each public institution. Thus if we consider the multitude of public institutions and the diversity of activities undertaken we would need to find justification for the differences encountered in the preparation and presentation of accounting policies. The outlook of decision makers is different, the structure of the elements comprising the position of the financial statement and the financial performance is different and therefore the accounting policies cannot be the same.

From analyzing the manner of regulation and application of accounting policies and estimates, we have found that the national regulations are quite stingy in offering conceptualizations for the two factors of influence on the ultimate goal of accounting; staying behind with the regulations regarding accounting policies applicable to public institution entities compared to those concerning the entities where performance is measured in profit or with international accounting standards in terms of legitimacy, their justification within the annexes to the financial statements (a problematic aspect to justify a specific accounting option) and why not providing examples of good practice; lack of accounting estimates in public institutions including municipalities with everything they imply, etc.

In terms of relevance we note that above the accounting profession, provider of public services, still looms the profound mismatch risk that the changes which public institutions accounting encountered (amongst other things) in recent years. Although present in financial reporting, the mission of the policies and accounting estimates can hardly be perceived among the multitude of changes that attract a certain fear of change, in the exercise of professional judgment and which generates an unnecessary approach under the risk of being regarded as unlawful.

Applying accounting policies causes a high degree of relevance of financial information, which induces an improved foundation of decisions by policy makers. We are yet to overcome the anxiety of transition from strict legal rules to flexibility which promotes professional reasoning in accounting.

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OBTAINING FOOD SAFETY BY APPLYING HACCP SYSTEM

ION CRIVEANU, NATALIȚA MARIA SPERDEA, RADU CATALIN CRIVEANU *

ABSTRACT: *In order to increase the confidence of the trading partners and consumers in the products which are sold on the market, enterprises producing food are required to implement the food safety system HACCP,a particularly useful system because the manufacturer is not able to fully control finished products . SR EN ISO 22000:2005 establishes requirements for a food safety management system where an organization in the food chain needs to proove its ability to control food safety hazards in order to ensure that food is safe at the time of human consumption. This paper presents the main steps which ensure food safety using the HACCP system, and SR EN ISO 20000:2005 requirements for food safety.*

KEY WORDS: *food safety; health; critical control points; risks; market.*

JEL CLASSIFICATION: *D18, I12, L66, Q18.*

1. NEED TO IMPLEMENT HACCP IN MANUFACTURING FIRMS

HACCP (Hazard Analysis Critical Control Points) is a systematic approach used to identify, assess and control the risks associated with food. The implementation of this system in enterprises is extremely useful because the manufacturer cannot afford and cannot fully control the finished products.

Hygienic production involves the manufacture of food in conditions of maximum security, represented by the achievement of the health parameters of the resulting product falling within the limits to avoid or reduce the risk of physical damage caused by the consumption of these products (Sperdea, 2010).

* *Prof., Ph.D., University of Craiova, Romania,* ion_criveanu@yahoo.com
Lecturer, Ph.D., University of Craiova, Romania, nataliasperdea@yahoo.com
Lecturer, Ph.D., University of Craiova, Romania, radu_criveanu@yahoo.com

Successful implementation of HACCP system requires work and commitment of all employees, including managers of food production units, requiring a team approach as well.

The application of HACCP involves food, safely produced and consumed by taking control in all processes: from farm to table.

This system enjoys international recognition, being effective in keeping food safe as well as obtaining proper food for human consumption.

Besides the pursuit of food security, other benefits of this system include the effective use of resources and equipment used in producing safe food. In addition, the HACCP system can promote international trade and confidence of consumers in buying safe food.

2. HACCP PRINCIPLES

Hazard Analysis Critical Control Points is a systematic approach to food safety and its main goal is to apply the seven basic principles (Figure 1.). The general principles are the foundation that may ensure food hygiene. This follows the food chain from primary production to the consumer, recommending the use of HACCP system to improve the safety level of the product.

Risk assessment should be carried out during the product design and manufacturing process technology to define critical control points before starting manufacturing. Risk assessment is performed in two stages: evaluating the type of product depending on its risks and the second one is the evaluation of its risks considering the degree of the risk.

Determination of critical control points can be made at any stage of the manufacturing process when necessary and possible to control the identified risks. A critical control point is any point or stage in a production system where the loss of control may therefore endanger consumer health (eg heat treatment, refrigeration, freezing, cleaning machinery, production facilities, etc.).

Critical limits are established for selected parameters in each critical control point. The most used critical limits are: temperature, acidity, time, humidity, pH, nitrite content, salt content etc.

The monitoring and monitoring results must be documented and interpreted as monitoring errors may cause critical food defects.

Establishing corrective actions means considering deviations from the critical limits, deviations revealed after monitoring, and aimed at eliminating risks and at the same time, insurance products harmlessness. All occurred deviations and corrective measures must be recorded as they represent the HACCP plan documentation. These records shall be kept until the expiry date of the batch.

When establishing which procedures will be chosen to check wheather the HACCP system is working properly or not, the use of already known methods, procedures and tests should be taken into consideration. Verification is to confirm if the HACCP system identified all risks and check if they are kept under control.

HACCP PRINCIPLES

Principle no. 1
Identifying any hazard that must be prevented, eliminated or reduced to an accepted level throughout the entire technico-economic circuit of the product

Principle no. 2
Determining the critical control points when control is essential to prevent the risk or reduce it to an acceptable level

Principle no. 3
Establishing critical limits at critical control points which separate acceptability from unacceptability in terms of prevention, elimination and reduction of identified risks

Principle no. 4
Establishing and implementing effective monitoring procedures at critical control points

Principle no. 5
Establishing corrective actions when, in the process of monitoring critical control point, a deviation from the critical limits is detected

Principle no. 6
Establishing documents and records regarding the nature and size of the food business to demonstrate the effective application of the measures already mentioned

Principle no. 7
Establishing procedures that are periodically used in order to check the effective functioning of the measures presented

Source: Scheme designed by SR EN ISO 22000/2007

Figure 1. HACCP Principles

3. THE STEPS FOR IMPLEMENTING HACCP SYSTEM

The seven principles of HACCP method can be applied BY FOLLOWING A logical sequence that includes 14 steps presented in table 1.

Table 1. Stages of the HACCP system

1.	Define terms of reference;
2.	HACCP team selection;
3.	Product description;
4.	Intention to use ;
5.	Construction of flow diagram;
6.	Flow diagrame verification;
7.	Listing risks associated wich each step and listing the measures that will keep risks under control;
8.	Critical control points identification by using a decision tree in each stage;
9.	Establish critical limits for each control point;
10	Establish a monitoring system for each critical control point;
11	Establish a corrective action plan;
12	Establish a system for storing records and documents;
13	Checking the operation of the HACCP system;
14	Review of the HACCP plan

Source: Synopting processing by SR EN ISO 22000/2007

4. FOOD SAFETY EN ISO 22000:2007 STANDARD

Security management system and food safety is found in standard SR EN ISO 22000:2007 specifying system requirements in a food chain. In Romania, the implementation of this standard is found in Law 150/2004, regarding food safety, being the legal basis for ensuring a high level of public health protection and consumer interests, taking into account the diversity of food correlated with the effective functioning of the internal market.

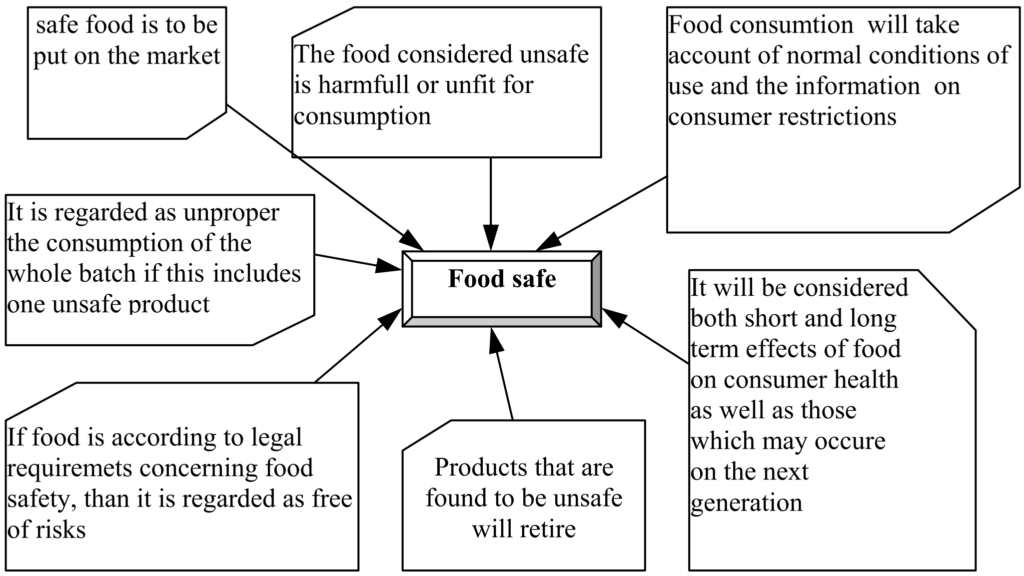
The law establishes general principles that apply to food in order to achieve food safety in the food chain.

According to this law, food safety is assured, taking into consideration following requirements (Figure 2.).

SR EN ISO 22000:2007 establishes requirements for a food safety management system where an organization in the food chain needs to demonstrate its ability to control risks threatening food safety in order to ensure that food is safe at the time of human consumption.

Communication along the food chain is essential to ensure that all significant threats to food safety are identified and adequately controlled at each stage in the food chain. This implies communication among both upstream and downstream organisations in the food chain.

Communication with customers and suppliers about identified risks and control measures will help in clarifying customers and supplier's requirements.



Source: Scheme designed by Law 150/2004 Art. 14

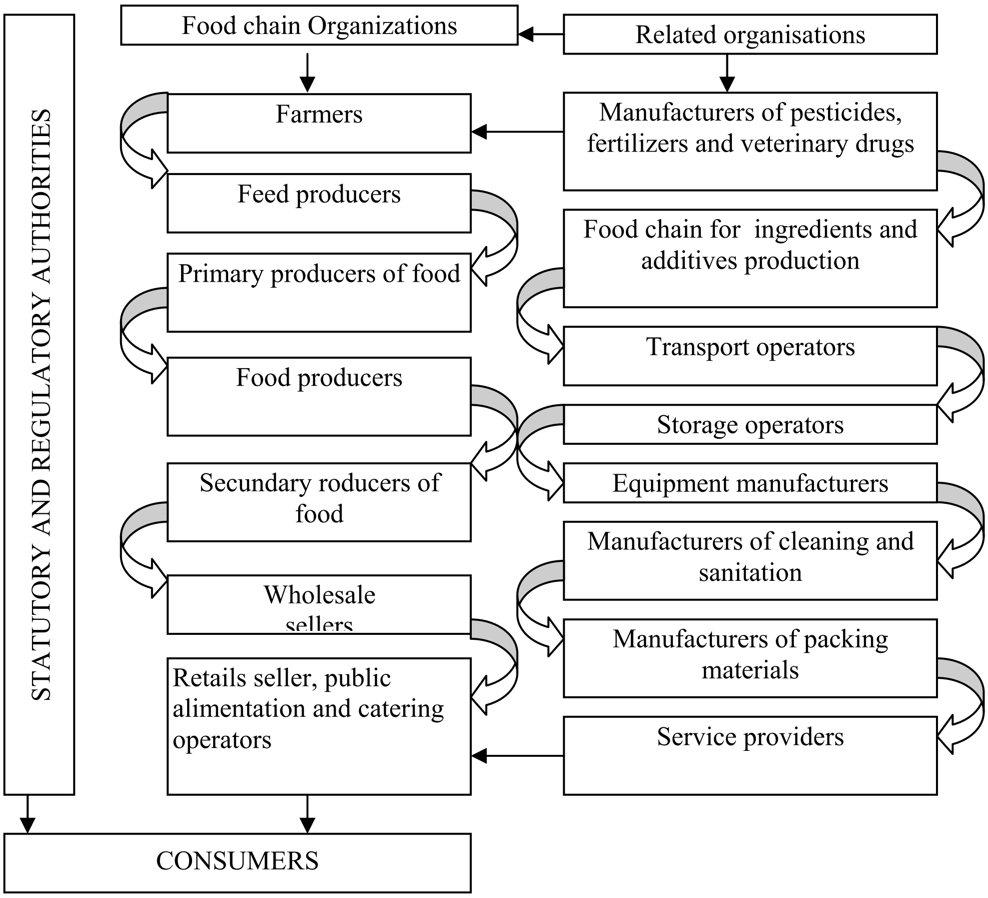
Figure 2. Requirements to ensure food safety

It is essential to recognize the role of the organization and its position in the food chain so that it can ensure effective interactive communication throughout the chain in order to provide safe food to the final consumer. An example of communication between stakeholders within the food chain is shown in Figure 3.

The standard also incorporates HACCP principles and the application stages developed by the Codex Alimentarius Commission. By means of auditable requirements, it combines the HACCP plan with standard preliminary programs (PRP). Risk analysis is the key to an effective food safety management as risk analysis assists in organizing the required knowledge to establish an effective combination of control measures. All risks and dangers should be identified and evaluated.

According to this standard, any organization which aims at producing and / or marketing safe food should:

- Ensure that potential threats to food safety are identified, assessed and controlled so that products do not affect the health of the consumer;
- Communicate appropriate information alongside the food chain on the potential problems regarding the safety of the products;
- Provide information on the development and implementation of a food safety management system by all levels of the organization;
- Periodically assess and update, its own system of food safety management.



Source: Figure realized by SR EN ISO 22000/2007

Figure 3. Communication channels in food chain

It is also suggested the implementation of a food safety management system, system which must combinine the basic principles of risk analysis by critical control points (HACCP) with those of so- called preliminary programs (PRP) for food safety.

In both cases, an effective analysis of food safety risks must consider issues such as:

- Product name or similar identification;
- Origin of the product;
- Biological, chemical and physical characteristics relevant for food safety;
- The ingredients in the recipe, including additives and processing aids;
- Labeling on food safety and handling, processing, use,instructions
- Storage conditions and shelf life;
- Preparation and handling before processing or use;
- Method and manufacturing processes;
- Packaging;

- Distribution methods.

Preliminary programs help maintain a hygienic environment throughout the food chain and finally provide safe food for human consumption. These programs include (SR EN ISO 22000:2007): buildings, utilities, ancillary services, equipment, materials and supplies purchased, cleanliness, hygiene, staff etc. ..

Each preliminary program includes (Law no.150/2004):

- Food safety risks which are about to be controlled;
- Control measures;
- Monitoring procedures;
- Corrections and corrective actions when necessary;
- Inspection staff, applying the necessary corrections and responsibilities;
- Monitoring specific documentation.

Applying this standard by all organizations in the food chain aims at harmonizing the interests of consumers, with the acquisition of food, which is safe for consumption, with the help of the economic agents, whose main aim is that of maximizing profits. Consumers have the right to eat safe food, and traders are required to provide these foods.

CONCLUSIONS

Food safety is related to the presence of hazards in food consumption. Because these dangers can occur at any stage of the food chain, adequate control throughout product's circuit is required impetuously.

Organizations taking part in the food chain are varied, ranging from feed producers and primary producers to food manufacturers, transport and storage operators, wholesale stores and retail food stores, service providers, and and related organizations (producers of equipment, packaging material, cleaning agents, additives, ingredients and so on). Because many of these "actors" are present on stage nutrition, food safety for human consumption is an essential requirement. Food safety has become an impetuous necessity of current society, which is why food has become the center of the universe. If until now, the main concern of producers was only consumer needs, we are now in a position to say that, more important than this, the concern is to satisfy their needs safely.

In order to achieve food security, the European Union claims for implementing food safety management systems, systems that on the one hand help manufactures achieve safe products, and on the other hand, give traders and consumers the confidence that the products they buy do not endanger their health. Through implementing the HACCP system, firms succed in getting safe food.

European consumers want safe and healthy food. Concern of the EU is to ensure that the foods we eat are all on the same level of standards for all its citizens, whether food is produced within the EU or imported. Food safety is a top priority for the EU. The regulations were strengthened and tightened since 2000 and to date in order to ensure that food consumed by European citizens are very safe. This kind of safe it is not in detriment of food quality. Conversely, we can say that it is an element that enhances the quality, is virtually a new property of the food, or another dimension of food quality.

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CONSIDERATION REGARDING THE TAXATION IN FINLAND AND ROMANIA

ELENA LUCIA CROITORU, MIHAI DRAGOȘ UNGUREANU *

ABSTRACT: *The paper shows through comparison, in the first phase, the main features of the tax system focusing on direct and indirect taxes, in Finland and Romania, and then presents an analysis of the evolution of the structure and level of taxes in both countries. Last but not least, is presented an analysis of the level of tax burden and also the factors that influenced the pressure in these two countries. The diversity of the fiscality in Finland and Romania reflecting the political choice of a given moment and is the result of the economic and social structure of each country.*

KEY WORDS: *tax burden; tax; duties; social contributions; fiscality.*

JEL CALSSIFICATION: *H24, H25, H27.*

1. MAIN FEATURES OF THE TAX SYSTEM IN FINLAND AND ROMANIA

Nowadays it is becoming increasingly obvious that the world develops gradually as a result of interdependent connections, in a single system. The tax system in each country is changing not only locally but also internationally, because of the globalization process. As can be seen from Table no. 1, the tax system in Finland is different from the one in Romania, both in terms of how this system can be found, and the level of rates applied.

Finland corporate tax is levied at a 24.5 % rate on all corporate income, while in Romania corporate income tax follows the classical system, with a standard flat-tax rate of 16%, which applies for all the corporate profits at the company level and for the distributed profits which are taxed again at the level of both corporate and individual shareholders. In Romania the capital gains are generally treated as ordinary business

* *Assist. Prof., Ph.D. Candidate, Romanian-American University, Bucharest, Romania,* lucia.croitoru@profesor.rau.ro
Lecturer, Ph.D., Spiru Haret University, Bucharest, Romania, dragos.ungureanu@yahoo.com

income and subject to the same rate, while in Finland, both the capital gains and dividends are not included in taxable corporate income.

Table 1. Main features of the tax system in Finland and Romania

	Finland			**Romania**
Fiscal system	Classic and progressive taxation			Classic
Corporate tax rate	24.5%			16%
Personal income rate	Taxable earned income, EUR	Tax at lower limit, EUR	Rate within brackets, %	16%
	16 100-23 900	8	6.5	
	23 900-39 100	515	17.5	
	39 100-70 300	3 175	21.5	
	70 300 -	9 833	29.75	
Employer contribution	19.47%			26.5%
Employee contribution	9.14% if it's over 65 years old and 7.79% if it's under 65 years old			16.5%
VAT	General tax rate: 23% Reduced tax rate: 13% and 9%			General tax rate: 24% Reduced tax rate: 9% and 5%

Source: www.vm.fi and www.mfinante.ro

In Finland, since 1993 the taxation of personal income has been based on a dual system, into two separate components, earned income and capital income, taxed according to different rates. So, as we can see in table no.1, central government taxation of earned income is progressive, with for tax brackets, marginal rates ranges from 6.5 % to 29.75 %. The capital income is taxed at a rate of 30 % on income up to € 50 000 and at 32 % on income exceeding € 50 000 and applies on dividends, interest income, rental income, capital gains, income from the sale of timber and a share of business income. Finland, unlike Romania, applies a municipal income tax which is levied at flat rates on earned income and the estates of deceased persons and a church tax rate that varies between 1 % and 2 %.

In Romania, there is a classic system since 2005 (before that, there was four-bracket system, with tax rates ranging from 18 % to 40 %), with a flat tax rate has been set at 16 %, which generally applies to income from independent work activity, royalties, income from movable and immovable property (such as rents), but also to interest income, short-term capital gains on listed shares.

Social security contributions are paid both by employers and employees, in Finland and Romania. Employer contributions in Finland are paid for social security (2.12%), for pension insurance (17.35% on average), for unemployment insurance (0.80% if total salaries are at a maximum €1,936,500 and 3.20% on salaries exceeding €1,936,500), for accident insurance (1 percent on average) and group life insurance (0.07 percent on average). In Romania, the employers pay contributions for Social

Security fund (20.8%; 25.8%; 30.8% depending on working conditions), Health fund (5.2%), Medical leave: (0.85%), Guarantee fund (0.25% of the salary fund), Unemployment fund (0.5%), Work accidents, risk insurance and occupational disease fund (0.15% to 0.85%).

The employee pay contributions for pension (5.15 percent if an employee is under 53 years old and 6.50 percent if an employee is 53 years old or older in Finland and 10.5% in Romania), health (2.04% in Finland and 5.5% in Romania) and for unemployment (0.60% in Finland and 0.5% in Romania). All social contributions are deductible for income tax purposes.

Both in Finland and Romania, there is a standard VAT rate: 23% in Finland and 24% in Romania since 2010. Beside the general rate, in both countries there are reduced rates of 9% that applies to books, newspapers, admission to cultural services and hotel accommodation, pharmaceutical products, medical equipment for disabled persons. In Finland, another reduced rate of 13 % is applied on selected goods and services, including food and restaurants and in Romania from 2009, a 5 % reduced rate applies to the supply of social and some private dwellings.

2. THE ANALYZE OF THE TAXATION LEVEL EVOLUTION IN FINLAND AND ROMANIA

Fiscal policy measures promoted by the tax authorities has influenced the level and structure of tax revenue, both in Finland and Romania. In recent years, the level of taxes, in both countries, suffered modifications because of the action taken by the authorities and because the economic situation which faced it. This situation is especially visible in Romania, in 2008, when the financial crisis hit and there was a decline in terms of revenue from corporate income and consumption taxes.

Regarding the structure of income, indirect taxes shows no differences in both countries, both in terms of value and time variation (one explanation is revealed to be done here in the case of Romania, the share of indirect taxes in total revenue is higher than the direct taxes). VAT in Finland has not recorded changes in the analyzed period, but in Romania is an increase of 1.3 percentage points in 2010 compared to 2000 and an increase of 1.2 percentage points compared to 2009. This increase compared to 2009 is due to the change in the VAT rate from 19% to 24% in 2010. On excise duties and consumption taxes can be seen, as in Finland during 2000-2010 they declined by 0.8 percentage points, while in Romania, their share in GDP increased. Increase was not significant (0.4 percentage points), but is due to growth period that Romania has until 2007 and that encouraged consumption. An interesting thing to note here is 2008, the year when the crisis hit Romania, which was felt regarding the consumption, tax rate on consumption in GDP was only 2.7%. About other taxes on products and production the analyzed countries didn't suffer modification, the exception in made by Romania, which recorded a decrease of other taxes on product in GDP from 2.2% to 0.4% in the analyzed period.

Table 2. Structure of revenues in Finland

	Finland											
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
A.Structure of revenues												% of GDP
Indirect taxes	13.9	13.4	13.7	14.2	14.0	14.1	13.9	13.3	13.1	13.6	13.5	14.1
VAT	8.2	8.0	8.1	8.6	8.5	8.7	8.7	8.4	8.4	8.6	8.5	
Excise duties and consumption taxes	4.3	4.1	4.2	4.3	3.9	3.8	3.7	3.3	3.3	3.4	3.5	
Other taxes on products	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.3	1.3	
Other taxes on production	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	
Direct taxes	21.4	19.3	19.1	18.1	17.8	17.8	17.6	17.8	17.8	16.3	16.1	15.5
Personal income	14.5	14.1	14.0	13.7	13.3	13.5	13.3	13.0	13.2	13.3	12.5	
Corporate income	5.9	4.2	4.2	3.4	3.5	3.3	3.4	3.9	3.5	2.0	2.5	
Social contributions	11.9	12.0	11.9	11.8	11.7	12.0	12.2	11.9	12.0	12.7	12.5	12.5
Employers	8.8	9.0	8.9	8.9	8.8	9.0	8.9	8.7	9.0	9.4	8.9	
Employees	2.2	2.2	2.1	2.1	2.1	2.2	2.4	2.3	2.2	2.4	2.6	
Total	47.2	44.8	44.7	44.1	43.5	43.9	43.8	43.0	42.9	42.6	42.1	43.4
B.Structure by level of government												% of total taxation
Central government	52.2	50.1	51.4	51.6	51.9	51.4	50.5	50.4	49.4	45.8	45.4	
Local government	21.6	22.1	21.5	21.1	20.8	20.7	21.1	21.3	22.0	23.8	24.4	
Social security funds	25.2	26.9	26.5	26.7	26.8	27.3	27.9	27.7	28.0	29.8	29.7	

Source: Eurostat and www.vm.fi

Direct taxes shows differences, their share in GDP for Finland is much higher than in Romania. Interesting to note is that in Finland share of direct taxes declined from 2000 to 2011 from 21.4% to 15.5%, for Romania percentage remained about the same. Another aspect is that, in case of Romania, both personal and corporate income have the same share, but in case of Finland the personal income has a share higher than the corporate one (the explanation it probably the progressive system). Another difference is that in case of Finland the share of corporate income decreased significant from 5.9% to 2.5% in analyzed period. In Romania it is interesting to note that since 2008, the year when the crisis hit our country the share of corporate income in GDP decrease constantly. Social contributions do not show significant differences, can be noted that in the case of Romania percentage decreased in 2011 compared to 2000 with 1.9 percentage points, while in Finland has increased less than 1%.

Table 3. Structure of revenues in Romania

	Romania											
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
A.Structure of revenues												% of GDP
Indirect taxes	12.2	11.3	11.6	12.3	11.7	12.9	12.8	12.6	12.0	11.0	12.3	12.7
VAT	6.5	6.2	7.1	7.2	6.7	8.1	7.9	8.1	7.9	6.6	7.8	
Excise duties and consumption taxes	3.0	2.8	2.6	3.5	3.6	3.3	3.2	3.0	2.7	3.2	3.4	
Other taxes on products	2.2	1.6	1.3	1.0	1.0	1.0	1.2	0.7	0.6	0.4	0.4	
Other taxes on production	0.5	0.6	0.6	0.6	0.5	0.5	0.6	0.8	0.8	0.7	0.7	
Direct taxes	7.0	6.4	5.8	6.0	6.4	5.3	6.0	6.7	6.7	6.5	6.2	5.5
Personal income	3.5	3.3	2.7	2.8	2.9	2.3	2.8	3.3	3.4	3.5	3.3	
Corporate income	3.0	2.5	2.6	2.8	3.2	2.7	2.8	3.1	3.0	2.7	2.3	
Social contributions	11.1	10.9	10.7	9.4	9.1	9.6	9.7	9.7	9.3	9.4	8.8	9.2
Employers	8.1	7.1	6.5	6.2	5.9	6.4	6.3	6.2	6.0	5.9	5.6	
Employees	3.0	3.8	4.2	3.1	3.0	3.0	3.3	3.3	3.2	3.3	3.0	
Total	30.2	28.6	28.1	27.7	27.2	27.	28.5	29.0	28.0	26.9	27.2	27.4
B.Structure by level of government												% of total taxation
Central government	59.5	59.7	60.1	62.8	63.4	63.0	63.0	62.2	62.9	61.1	63.4	
Local government	3.9	3.8	3.1	3.5	3.4	3.1	3.4	4.0	3.2	3.5	4.0	
Social security funds	36.6	36.5	36.8	33.7	33.2	33.9	33.6	33.0	32.9	34.5	31.9	

Source: Eurostat and www.mfinante.ro

Regarding the structure by level of government, there is a major difference that can be observed. In Romania the share of central government revenue forms more than half of the total (63.4 %), while local government revenues are marginal, consisting of only 4 %. In case of Finland the share of local government revenues it's higher 24.4% and the share of central government revenues is above 50%. The revenues of the social security funds, in per cent of GDP, in both cases, have a share of 30%.

3. TAX PRESSURE IN FINLAND AND ROMANIA

Both in terms of economic, financial and social, is generally paid a special attention the issue of taxation, because as we know the rate of taxation shows what percentage of GDP is concentrated at the disposal of the state with taxes, fees and contributions.

Level of taxation known significant differences from one country to another and from one period to another and in this context it is important to identify several factors that explain these differences. Thus it can be (Goode, 1981) identifies both internal factors of the tax system, and its external factors.

Internal factors are: the progressivity of tax rates (taxes have a higher share of GDP in countries where progressivity tax rates is more pronounced), how to determine the taxable matter (is particularly important to know whether the gross income is granted certain discounts to achieve net income or taxable) and tax relief for taxpayers.

In terms of external factors can mention: the gross domestic product per capita (usually tax limit is higher when per capita income is higher; for exemplification in 2011 the GDP per capita in Finland was 49.391 euro and in Romania 8.400 euro), the level of taxation in other countries (an effect of globalization is that capitals tend to migrate, so regarding this factor capitals tend to migrate to countries with lower taxation), state priorities regarding public revenue (tax limit is higher if the costs of education and health have a higher share in total public spending; In Romania, for example, the percentage of health expenditure in GDP is between 3-3.5 percentage points, three times lower than most EU Member States), the nature of public institutions (tax limit is lower in countries with governing bodies democratically elected compared to that ones with totalitarian regimes), the level of development of the countries (in developed countries taxation rate is generally high; a developed economy leads to a tax burden that leaves room for savings, in contrast to this situation, the low level of economic development and low income available to taxpayers lead to overwhelming taxation, a high tax burden).

In Romania, in 2010, the pressure has been compulsory levies a 27.9% level, by 15.4 percentage points less than Finland. Despite this reality, the Romanian taxpayers feel aggressive taxation, because taxation in Romania, although comparable with other member states can not be assessed without taking into account the fact that GDP per capita in Romania is in a ratio much lower than in Finland. Also, in our country there are a large number of taxes, mandatory contributions, special tax, which emphasizes the perception of a high tax burden.

Table representation of indicators: tax burden related to direct taxes, indirect taxes related to fiscal pressure and the pressure caused by social contributions emphasize the suggestive structure of compulsory levies on the countries level examined. As we can see (table no. 2 and table no.3) the structure of compulsory levies shows us that share of direct taxes in Finland it's higher than in Romania. The share of indirect taxes and contribution is about the same.

Table 4. GDP compulsory levies pressure in EU, during 2000-2010 (%)

	2000	2002	2004	2005	2006	2007	2008	2009	2010	2010/2000
Finland	47.2	44.6	43.5	44	43.5	43	42.7	42.7	43.3	-3.9
Romania	30.4	28.1	27.3	27.9	28.6	29.4	28.5	28	27.9	-2.5

Source: Eurostat

This table shows us that both countries recorded a pressure drop in GDP compulsory levies, in case of Finland the drop was higher. In Romania there is a reduction in the level of tax burden by 2,5 percent over 2000, but this should be read considering a number of issues: economic and financial crisis, reducing the size of the

GDP and the collection of revenues, maintaining the trend of direct tax revenue exceeded the revenue from taxes on consumption.

Finland even if has a higher fiscal pressure, presents a favorable business climate, unlike our country, which, although having a much lower level of taxation, is situated on the back of this top. If we try to find answers to this situation, maybe we should shift to multiple legislative changes, errors in law, excessive bureaucracy, the large number of tax and extra tax obligations. Beside the advantages, globalization has negative effects that were felt in Romania, at, for example, the level of multiple legislative changes that were made by Romania after joined UE.

CONCLUSIONS

Level of taxation known significant differences from one country to another and from one period to another. In developed countries, the state takes over at its disposal, through taxes, a larger share of GDP than in the developing countries. Noted, however, that differences occur, sometimes quite large, also between developed countries as between developing. It is noteworthy lower level of taxation rate in developing countries compared to developed countries, a phenomenon that can not be appreciated, however, that the net favorable developing countries, as reflected by the fact that a lower rate taxation in developing countries, approximately 20% corresponds to a standard of living lower than in the developed countries, where taxation rate is about 50%. These countries, with high levels of taxation follow a social balance from a developed economy level, the effect is the existence of the middle strata which cover needs taking into account a certain standard of education and civilization and the ability of saving.

A developed economy leads to a tax burden that leaves room for savings, in contrast to this situation, the low level of economic development and also a low income at the disposal of taxpayers lead to overwhelming taxation, a high tax burden, moreover, the relative level of taxation reflected by a low rate of taxation veils the real socio-economic situation of the developing countries, a lower level of GDP provides lower coverage of public needs.

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DECISIONS IN ECONOMIC-ORGANISATIONAL ENTITIES OPERATING IN A HOSTILE ENVIRONMENT

IOAN CONSTANTIN DIMA, MARIANA MAN *

ABSTRACT: *The complete operating cycle of the organisational economic entity provides a connection between its actions and those actions that take place in the environment where it operates, which are deemed to be natural reactions of the environment to the operation of the organisational economic entity. The way in which the environment reacts to its operation must be understood as being the nature of the relations between events, factors and structures of the environment and not as an answer to what the organisational economic entity does. The same action of the organisational economic entity could therefore determine different environmental reactions to various moments and various actions. This is because organisational economic entities act under the conditions of the restrictions imposed by the environment. There are few cases where these restrictions are not observed and the environment reacts unambiguously. But, most of the time, the operating range is relatively tight, and inside of it only a very low part of it can be assigned to the actions taken by the organisation.*

KEY WORDS: *ambiguous environment; preferences; division.*

JEL Classification: *D21, J50.*

1. AMBIGOUS ENVIRONMENT AND ITS INFLUENCE THE DECISIONAL PROCESS

The connections between the ambiguity of information and adopting the decision are frequent in the researches of the behaviour organisational economic entities and establish the existence of some influences that take into account both the features of the individuals and those of organisational economic entities.

One may speak of the existence of some consequences and namely:

- **Consequences of the environment ambiguity on the decision makers' activity.** When approaching the consequences concerning the decision makers'

* *Prof., Ph.D.,University "Valahia" of Târgovişte, Romania, dima.ioan_constantin@yahoo.com*
Prof., Ph.D., University of Petroşani, Romania, man_mariana2006@yahoo.com

activity, three ways are distinguished and namely: ***The first consists in adapting the system to the observed features of human beings.*** Instead of a supporting system in decision making, disconnected from the world, as decision makers want it and however they do not use, the system may be designed to provide them with the information in a familiar and useful form. The main difficulty of this system consists in understanding the users' demands and in adapting the system to these demands; ***the second approach consists in modifying how decision makers adopt the decisions and their attitude in relation to information.*** During its evolution, management and operational research theory operated significant changes in the field of adopting decisions in modern organisational economic entities. Recent researches regarding the decision behaviour have been related to the strategies of improving the capacities of information processing by the human brain. Decades of efforts for determining the decision makers to adopt a behaviour closer to the decision theory precepts have proven that this is not an easy duty because the prejudices, ***a priori*** reasoning and decision makers' wisdom are resistant to decision theory influences and modern statistics; ***the third approach consists in replacing human beings with machines, mainly computers accompanied by logicians in expert systems.*** Replacing the information electronic and mechanic processing by human processing is frequent nowadays, as phrases like **artificial intelligence, knowledge engineering and expert systems are too.** Even if the speed at which this process occurs was all the time exaggerated enough, progresses have been achieved for situations where the problems can be decomposed into **hierarchical structures** or into **situations where the amount of available pertinent information exceeds the human memory operation capacities.** The perspectives of improving man's decision adoption through a form of computer software are promising in the case where a decision involves the storage and operation of a large number of data or in the case of modelling the complex organisational processes if the structure of the organisational economic entity allows this. We should also emphasise the problem of capacities of storage and data processing which the modern computer-based information systems have available. Contemporary researches in the field of data processing show that the exploratory analysis of the data collected, without reference to a precise use, clearly progresses to prior formulation of the needs for information. This verifies the arguments according to which future information systems give up the idea of a close connection between the collection of information and anticipation of its use;

- **Consequences of the environment ambiguity on the decision theory.** Theoretic researches on adopting the decision have shown that individuals and organisational economic entities make decisions, which are in contradiction most of the time with the ethical principles, partly putting this contradiction on the account of theory limits and not on the limits of human behaviour. For example, a rigid connection between the information and decision is not useful in ambiguous situations where preferences, causal structures and meanings are vague and changeable. In practice, this type of situation is frequent, determining that numerous decision problems of contemporary **organisational** economic entities would enter without difficulty within the decision theory, being suitable to its laws. However, the most interesting of the practical decision problems, most of them do not fall within this framework. The difficulties arose from the ambiguity of decision environment, preferences, pertinence, intelligence can be illustrated by a reflection on some aphorisms suggested by decision theory applied in an ambiguous organisational environment and namely:

. **Never start an action unknowingly.** To the extent where it is operated inside the anticipative and consequential framework of rationality, it is important to know what is desired before acting. However, it is obvious that intelligent decision makers often behaved as if they would not believe in this need. They see in action a way to discover and elaborate preferences, rather than a modality to operate based on them;

. **Refrain yourself under ignorance.** One of the axioms of the theory of decision rational choices is that actions are justified by understanding and anticipating their consequences. Even if it is admitted that this understanding of consequences cannot be total, however the optimal amplitude of ignorance is determined by its expected consequences;

. **Do not ask a question if its answer cannot change your decision.** In the decision theory optics, the value of certain information is related to the capacity of reducing the uncertainties which surround choice, although the essence regarding the information collected, purchased or communicated does not emphasise a direct pertinence for decisions. It is possible to create a background of knowledge and meanings, usable for possible actions or to explain the experience. The participants understand the collection of information as an investment into a collection of knowledge and as an aid to define and choose preferences and options;

. **Do not speak before knowing what you want to say.** Certain communication theoreticians say that a message must be fully understood by its issuer before being sent, as accurately as possible, to its addressee. But a large part of the effective communication in organisational economic entities as in daily life overcomes ambiguous formulations and leads to answers representing the message and seeks its possible meanings. In this context, an information system must be designed based on a static and precise decision structure that would allow the resolution of some elementary problems in organisational economic entities. Under conditions of ambiguity however, it is necessary to design a system for imprecise decision structures and which would be of a dynamic character.

2. ADOPTING THE DECISIONS IN ECONOMIC-ORGANISATIONAL ENTITIES OPERATING IN AN AMBIGOUS ENVIRONMENT

2.1. Ambiguous Preferences

The preferences of the organisational economic entities and their members are often less clear than those deemed by the theory of rational choice. They are, most of the time, vague and contradictory, developing over time and according to the experience and nature of decision processes. The choice conception pleading the contemporary decision theory and microeconomics postulates the optimisation of decision options based on two circumstances: **The first one has as objective the uncertain future consequences of the actions that could be engaged; the second**

one takes into account the decision maker's uncertain future preferences faced with these consequences once they shall be materialised.

The first conjuncture got decision adopting specialists' attention to a larger extent than the second one. Thus, a large part of the science of management, microeconomics and operational research is dedicated to improving either the optimisation calculations used for complex choices, or the assessment of probability distribution of the future consequences of an action. No effort has however been made to understand or improve either the formulation of **decision alternatives**, or the circumstance of future preferences.

The alternatives and preferences are generally considered as given. Of course, in practice, the methods of management science and decision theory techniques are often used by decision makers authorised to discover the alternatives and clarify their objectives. But the decision theory participates itself to great extent to this effort considering that preferences control the decision choices. It is however impossible to say the same, for the organisational preference processing procedures. This because in this case, preferences are mostly not known from the very beginning, there actually existing a certain ambiguity about them.

2.2. Ambiguous Pertinence

Practically adopting the decision in economic organisational entities is often less coherent than the decision theory implies it. Most of the time, the problems, solutions and actions have a fairly weak connection between them, rather of simultaneity than of casualty. Information strategies are relatively independent of specific decisions.

According to the decision theory, information strategies are deliberately developed to solve the uncertainties concerning certain pertinent future situations for selection. In reality, the behaviour of organisational economic entities does not fully correspond to this theoretical vision, because the information is collected and processed without particularly considering the pertinence in the process of making the stated decision. Empirical studies on adopting the decisions of economic organisational entities shows that most of decision theories underestimate the coherence of the decision process. Organisational economic entities are systems where there is to a little extent the coordination, compared to that existing between solutions and problems, between, between purposes and means, between the orientations of one day and those of the next day or between the various elements composing them. The individuals, solutions and problems are randomly combined, which hardly leads to the possibility to of ambiguity appearance on knowing the conditions in which decisions shall be made.

Some specialists concluded from these remarks that decision processes in the organisational economic entities are completely disorganised. On the contrary, others tried to define other concepts of the order that would enable understanding the decision processes from organisational economic entities. It is what has been tried with the pattern of organisational choice through **mise au panier**, which replaces the temporal order, logical order for solutions, etc. It describes a process where the participants' explicit intentions and logical coherences of the choices are often removed by a contextual flow of problems, solutions, people and choices. The solutions are connected to problems and decision makers, to choices, essentially only by their simultaneity. Such a pattern is however less applicable, because the pertinence structure in an organisational economic entity is more complicated and less related to the decision process. Thus, an information system designed to correlate the information with a series of well defined decisions is not necessarily useful when the decisions are made in a context where attention and logical connections between solutions and problems are ambiguous.

2.3. Complex Systems Intelligence Ambiguity

Although the individual participants often try to act intelligently inside the organisational economic entity, calculating the consequences of the actions they undertake, their behaviour is many times modified as a consequence of the need to be subject to the rules that change the lessons learnt from their experience as members of a complex system of partially overlapped organisations.

Modern theories of adopting decision and interactive competition are theories of intelligence calculated for its own interest or organisational economic entities. Let us imagine an economy where decision makers concerned with their personal interest are **niches** in the organisational economic entities, themselves being **niches** within markets, crowds, political institutions, etc. Every participant tries to make decisions (or reflect on decisions) in such way as to promote his/her personal interest as he/she determines it by comparing the expected consequences from various options. These considerations extend to all decision processes and on getting the information necessary for these decisions.

In this case, the evolution of intelligent processes includes three stages: **collectiveness is divided into the innocent (naïve) and intellectuals.** Those in the second category are intelligent but those in the first category are not. Intelligence acts towards promoting personal interest with all subtlety and possible imagination. The information is a tool in the service of the intelligent ones and competition rewards people according to their relative intelligence in using this tool. If we grant credibility to a few recent specialised studies, modern management and finances are based on the belief that the administration of an organisation's profits is often easier and better paid than the activities and processes which it implies; **gradually, competition eliminates naivety.** People less intelligent are eliminated by competition and lose either their naivety, or the means of livelihood. Once the naives are suppressed, the intelligence margins are decreased and they have no more effect on the distribution of positive results. All participants are intelligent or services can be provided to some who are intelligent. This is what is affirmed by numerous theories of competition applied in politics, ecology or economy. The hypotheses according to which adaptation is relatively rapid do not exist. A new exogenous aspect of naives lacking intelligence and existence available, some sufficient intelligence reserves available at any moment are questionable, but they can however be accepted for simplicity. We are to conclude that competitors' intelligence makes the intelligence, although necessary, not to have any meaning for the distribution of incomes to be distributed; **finally, intelligence**

loses both its victims and competitive advantage. The elimination of those lacking intelligence reduces the competitive value of the intelligence forms that lead to this elimination.

It is however in the interest of every surviving competitor to continue to behave intelligently as long as the others also behave so, even if this has no effect on its relative competitive power, due to the generalisation of this behaviour. The energy consumed in intelligence does not come from the outside, which makes all participants to be intelligent and vulnerable to the new forms of penetration resulted from the outer environment. This approach only applies to information engineering and draws the attention on the problems raised by the dynamics of competition systems. When competition occurs over long periods of time, the style of the dominant behaviour does not consist in the confidence grated to intelligence, *meaning* to consciously elaborate subtle strategies by individuals concerned by their own interest. The problems of determinant personal interest and intelligence are not immoral, in the regular meaning of the word, but they represent a form of incompetence. From this point of view, recent efforts for **improving** organisational intelligence are instructive. It is not a hazard that competition **theoreticians** have recently discovered the importance of trust, reputation, understanding relations in order to also extend them to repetitive and extended games within the decision process.

3. DELEGATION OF ADOPTING DECISIONS

A consequence of increasing the size and complexity of the organisational economic entity is also that there appears the need to delegate some responsibilities from managers to subordinates, meaning certain responsibilities are appropriately transmitted to certain subordinates.

Centralisation allows: Concentration of responsibility in the hand of a relatively low number of people, who should understand the strategy of organisational economic entity, which facilitates the coordination of its activities; reduction of managerial expenses along with the existence of a powerful management.

The advantages of delegation are that by freeing the enterpriser and top management of duties, more freedom of action and permanent control over their work is given to the subordinates. This could have important motivating implications, by increasing the satisfaction of the work done. The delegation also offers the possibility for a person that is directly involved in solving a problem to do it in the most suitable manner. A greater flexibility of the organisational economic entity is also possible, as long as the possibility is created for a person that is **on the matter** and has the appropriate knowledge to solve it without waiting the approval of other leaders, thus also improving the control on the fields where such responsibilities have been assigned.

Delegating some responsibilities by the manager to their subordinates in the organisational economic entity is determined by a series of factors and namely: **the size of the organisational economic entity.** Thus, as the organisational economic entity develops, more problems develop, that are to be solved by the manager. It is impossible for him/her to continue to be involved in all of the activities of the organisational economic entity. Although some managers can resist before the need to delegate part of their attributions, however developing the organisational economic entity urges the delegation of competences from managers to their subordinates, in order to avoid the danger of overloading; **the geographical dispersion of the organisational economic entity.** If an organisational economic entity develops its activity, it can also increase under the aspect of the geographical area, which determines an increase of pressure on the manager, as long as there is no possibility to be in many places at the same time. Under these conditions, if delegation is not done, considerable delays can occur in making the decisions, concomitantly with overloading manager's capacity. There is also the risk that inappropriate people would make decisions in relation to issues which they do not fully understand or maybe they understand them much too late. Therefore, the larger the geographical area is, the more necessary it is to delegate competences; **the technological complexity of the organisational economic entity.** The difficulties created by developing and geographically dispersing the organisational economic entity that influences even more managers' capacity to make decisions increase along with the technological complexity of the organisational economic entity. Generally, increasing the technological complexity of the organisational economic entity determines the increase in the demand for specialised personnel. The lack of knowledge among the personnel determines managers to delegate part of their responsibilities to those subordinates which indeed have the knowledge and necessary abilities; **the stability of the organisational economic environment.** The action of the previously presented factors increases when the organisation performs the activity in an unstable environment. Where the environment is stable, it is possible to predict which the conditions shall be at a later date, acting as such consequently, which allows the centralisation of adapting the decision at manager level. If however the environment is or becomes unstable, it is possible to predict with certainty how things will be in future. This means that the organisation must be flexible regarding the rapid change and adaptability to the unpredictable environment conditions. In large and complex organisational economic entities, the ability to cope with such environmental changes is favoured by delegation, which offers the possibility to those who have access to relevant information to do the most appropriate adaptations, without needing to be addressed to an extended hierarchy to get the permission and ratification of own decisions. In contrast, in small and simple organisational economic entities, such an instability can be manoeuvred better by concentrating the decision power at the top of the organisational economic entity, which allows the adaptation to external changes; **the division of labour into the organisational economic entities horizontally.** When the organisational economic entities become increasingly larger, more complex technologically and more geographically dispersed, they are based more and more on the division of labour horizontally, each of the departments having duties that differ in many points of view from the duties of other departments. The result is that different individuals from every department deal with just to a small extent with the activities of the organisational economic entity as a whole. From the manager's point of view, such a division can provide important benefits, such as efficiency improvement, productivity increase, etc.; **the vertical division of labour in organisational economic entities.** The horizontal division causes certain problems to the coordination of dispersed activities and, therefore, the need of vertical division appears, to avoid **overcrowding** and to ensure the distribution of power and authority in an organisational economic entity. The vertical division leads to some responsibilities for various employees and departments which different power and authority is given to, in order to act in various departments of the organisational economic entity, created by the vertical division of the labour.

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WEB CONTENT MINING

CLAUDIA ELENA DINUCĂ, DUMITRU CIOBANU *

ABSTRACT: *The World Wide Web, or simply the web, is the most dynamic environment.The web has grown steadly in recent years and his content is changing every day. Today, they are several billions of HTML documents, pictures and another multimedia files available on the Internet. There is a need of methods to help us extract information from the content of web pages. One answer to this problem is using the data mining techniques that is known as web content mining, which is defined as "the process of extracting useful information from the text, images and other forms of content that make up the pages".*

KEY WORDS: *internet; web mining; web content mining; data mining.*

JEL CLASSIFICATION: *L86*

1. INTRODUCTION

The advent of the World Wide Web (WWW) has overwhelmed home computer users with an enormous flood of information. To almost any topic one can think of, one can find pieces of information that are made available by other internet citizens, ranging from individual users that post an inventory of their record collection, to major companies that do business over the Web.

To be able to cope with the abundance of available information, users of the Web need assistance of intelligent software agents (often called *softbots*) for finding, sorting, and filtering the available information (Etzioni, 1996). Beyond search engines, which are already commonly used, research concentrates on the development of agents that are general, high-level interfaces to the Web (Furnkranz et al., 2002), programs for filtering and sorting e-mail messages (Payne & Edwards, 1997) or Usenet net news articles (Mock, 1996), recommender systems for suggesting Web sites (Pazzani et al., 1996) or products (Doorenbos et al., 1997), automated answering systems (Burke et al., 1997, Scheffer, 2004) and many more.

* *Ph.D. Student, University of Craiova, Romania, clauely4u@yahoo.com.*
Ph.D. Student, University of Craiova, Romania, ciobanubebedumitru@yahoo.com.

Many of these systems are based on machine learning and Data Mining techniques. Just as Data Mining aims at discovering valuable information that is hidden in conventional databases, the emerging field of *web mining* aims at finding and extracting relevant information that is hidden in Web-related data, in particular in (hyper-)text documents published on the Web. Like Data Mining, web mining is a multi-disciplinary effort that draws techniques from fields like information retrieval, statistics, machine learning, natural language processing, and others. Web mining is commonly divided into the following three sub-areas:

- Web Content Mining: application of Data Mining techniques to unstructured or semi-structured text, typically HTML-documents;
- Web Structure Mining: use of the hyperlink structure of the Web as an (additional) information source;
- Web Usage Mining: analysis of user interactions with a Web server.

An excellent textbook for the field is (Chakrabarti, 2002) and an earlier effort was done by (Chang et al., 2001). Brief surveys can be found in (Chakrabarti, 2000, Kosala & Blockeel, 2000). For surveys of content mining, we refer to (Sebastiani, 2002), while a survey of usage mining can be found in (Srivastava et al., 2000).

2. WEB OVERVIEW

The characteristics of Web applications are the existence of hypertext links and of some procedures that allow real-time dialogue between client and server. Hypertext links are indicated by marking different from the rest of the document of words, images or icons that, when selected, cause browser to bring the respective document, regardless of where it is located on the Internet. Assembly of electronic documents that refer to each other led to the name Web.

The process of bringing documents on the system using browsers is named browsing or surfing the web. Note that currently most web applications are electronic publications due to the possibilities the Web offers: a fast information and at a reduced price (actually, only the cost of subscription to the Internet connection), the information is structured, interactive, quickly updated and made available to users.

With several billion Web pages created by millions of authors and organizations, World Wide Web is a great source of knowledge. Knowledge comes not only from the content itself, but also from the unique features of the Web, hyperlinks and the diversity of content, language.

Web size and dynamic unstructured content, makes extracting useful knowledge a challenge for research. Web sites generates a large amount of data in various formats that contain valuable information. For example, Web server logs contain information about user access patterns that can be used to customize information to improve website design.

World Wide Web is certainly the largest data resource in the world. Using global Web network, increasing the role and implications in the daily life of society, has led to a rapid and unprecedented development of many fields such as finance and banking, commercial, educational, social, etc. Because the existing data volume on

Web is huge the application of new techniques for extracting information and knowledge has become a necessity for future evolution.

Web mining is the area that has gained much interest lately. This is due to the exponential growth of World Wide Web and anarchic architecture and the growing importance of Internet in people's lives.

3. WEB MINING

Web mining is the use of data mining techniques for automatic discovery and knowledge extraction from documents and Web services. This new area of research was defined as an interdisciplinary field (or multidisciplinary) that uses techniques borrowed from: data mining, text mining, databases, statistics, machine learning, multimedia, etc.

Web mining has three operations of interests - clustering (finding natural groupings of users, pages etc.), associations (which URLs tend to be requested together), and sequential analysis (the order in which URLs tend to be accessed). As in most real-world problems, the clusters and associations in Web mining do not have crisp boundaries and often overlap considerably. In addition, bad exemplars (outliers) and incomplete data can easily occur in the data set, due to a wide variety of reasons inherent to web browsing and logging. Thus, Web Mining and Personalization requires modelling of an unknown number of overlapping sets in the presence of significant noise and outliers, (i.e. bad exemplars). Moreover, the data sets in Web Mining are extremely large.

The Internet offers unprecedented opportunities and challenges of data mining field due to the diversity and lack of data structures. Thus:

- There are almost all type of data on the web - text, tables, multimedia data, etc. Typically, a Web page contains a mixture of information, such as navigation panels, main content, advertising or copyright notes.
- The amount of existing information is enormous and easily accessible.
- Coverage of the information is very high.

We can find information about almost anything. The information provided can be divided into two broad categories: documents and services.

- Most data are in semi-structured form due to the structure of HTML code.
- There are links between information in the pages of a site and between pages from different sites.
- More information are redundant - meaning that the same information or similar versions of it can appear in multiple pages.
- Information can be found on the surface (in pages that are accessed via browsers) or deep (in the database that are queried through different interfaces).
- The dynamic nature of information is obvious. Monitoring the constant changes in the information is an important issue.
- Above all, the Internet has become a virtual company. In addition to information and services contained, the Internet offers the possibility of

interaction between people, thus contributing to the creation and development of new communities.

The Web is a critical channel of communication and promoting a company image. E-commerce sites are important sales channels. It is important to use data mining methods to analyze data from the activities performed by visitors on websites. Web mining methods are divided into three categories:

- **Web content mining** - extraction of predictive models and knowledge from the contents of Web pages;
- **Web structure mining** - discovering useful knowledge from the structure of links between Web pages;
- **Web usage mining** - analyze the use of Web resources using log files.

Web content mining is the process of extracting useful information from Web documents content. Web content consists of several types of data such as text data, images, audio or video data, records such as lists or tables and structured hyperlinks. Web content mining is closely related to data mining and text mining because many of the techniques are applied for mining the Web, where most data are in text form. Differences resulting from data structure that are analyzed. Thus, if data mining techniques can be applied to structured data sets, text mining focuses on unstructured texts, web data mining operating on semi-structured. Web content mining requires creative applications so both data mining and / or text mining have own unique approach.

In recent years there has been an expansion of mining activities in the field of Web content, this is a natural result of the great benefits arising from such mining activities. However there are still many issues that require further research, such as:

- Extracting data and information;
- Information integration;
- Extracting opinions from online sources (forums, chat, surveys, etc.)
- Knowledge synthesis;
- Web pages segmentation and detection of redundant information.

Web structure mining involves analyzing the links between Web pages and determine the most accessed pages. Such pages can be classified into:

- „authorities" - pages that are accessed many times by links from other websites,
- „hubs" - pages containing a large number of links that access other pages.

Such an analysis in conjunction with the search for certain keywords can be greatly improved results to a search that takes into account only the desired content.

Web usage mining is the most relevant part in terms of marketing, because it explores ways of navigation and behavior during a visit to the website of a company. With the continued growth of e-commerce, Web services and Web-based information systems, the volume of clickstream data collected by Web-based organization in its daily operations has reached astronomical proportions (Mobasher et al., 2006). Methods for extracting association rules are useful for obtaining correlations between different pages visited during a session. Association rules or sequential time series models can be used to analyze data from a website taking into account the temporal dynamics of the site usage. Web usage mining is mainly based on sequence analysis of pages visited in a session data, analyzing web clicks. Information on buying behavior of visitors can be obtained in the e-commerce web site by analyzing web clicks. Web usage mining aims at extracting the knowledge from user sessions that can be restored using log files.

Log files of Web servers can be in the CLF form (Common Log Format) or ELF form (Extended Log Format). If for the ELF format can be configured the log file, in the case of CLF format, the file will contain information about:

- Remotehost: browser hostname or IP #;
- rfc931: log the user name (always „-” means „unknown”);
- AUTHUSER: name of the authenticated user HTTP;
- Date: date and time of application;
- „request”: the exact line accessed by the user;
- Status: returned HTTP code (200 is OK, 2xx - successful response, etc.);
- Bytes: size of response content.

Benefits offered by the analysis of log files are related to classification of users, improving site design, prediction and detection of fraud actions among users. Benefits of clickstream can be seen in the way content is viewed by site users. Clickstream provides information about: the number of site visitors, the site showing the most interest, the region from where the visitors come, pages or parts of pages that are more or less populated, sites that offer the highest advertising to their current site.

One problem is to identify users taking into account that they can use different addresses when access the web from different places. Also, log files do not contain actual information accessed by users, and effective reconstruction of a session is often impossible due to the dynamic structure of the sites

Preprocessing data from log files to apply data mining techniques requires very different methods of reconstruction of the sessions and user identification.

Data mining applications that best fit to log files are the association rules, clustering and classification algorithms, and a number of other statistical analysis. Thus, it can be determined by statistical analysis the number of visits in a given period, the average visit of a page, the countries from which are the users of site, together with the percentage of users for every country, the most used search engines, most frequently used browsers etc.

4. WEB CONTENT MINING

Web-mining is an umbrella term used to describe three quite different types of data mining, namely content mining, usage mining and structure mining (Chakrabarti, 2003). In this section, we are concerned with Web content mining, which Linoff and Berry (2001) define as *“the process of extracting useful information from the text, images and other forms of content that make up the pages”.*

In the last years the growing of the WWW has overlap any expectations. Today they are several billions of HTML documents, pictures and other multimedia files available on the Internet, and their number is continuous increasing. Taking into consideration the huge variety of the web, extracting interesting contents has become a necessity.

There is a continously expanding amount of information "out there". Moreover, the evolution of the Internet into the Global Information Infrastructure, coupled with the immense popularity of the Web, has also enabled the ordinary citizen to become not just a consumer of information, but also its disseminator. The Web, then, is becoming the apocryphal "*Vox Populi*". Given that there is this vast and ever growing amount of information, how does the average user quickly find what s/he is looking for - a task in which the present day search engines don't seem to help much!

One possible approach is to personalize the web space - create a system which responds to user queries by potentially aggregating information from several sources in a manner which is dependent on who the user is. As a trivial example - a European querying on casinos is probably better served by URLs pointing to Monaco, whereas someone in North America should get URLs pointing to Las Vegas. A biologist querying on cricket in all likelihood wants something other than a sports enthusiast would.

Thus, Web Content Mining is mining data from the content of web pages (Xu et al., 2011). Web pages consist of text, graphics, tables, data blocks and data records. Web Content Mining uses the ideas and principles of data mining and knowledge discovery process. Using the Web for providing information is more complex than when working with static databases, due to Web dynamics and the large number of documents.

Many researches have been made to cover web content mining problems to improve the way that pages are presented to end users, improving the quality of search results and extract interesting content pages. Thus, in (Lin & Ho, 2002) a system InfoDiscoverer is proposed which extract content information from a set of web pages of a site according to type HTML tags <table> from Web page.

This system partition the web page blocks in redundant and informative. Informative content blocks are distinct parts of pages, whereas redundant content blocks are common parts. This approach helps to improve the accuracy of information retrieval and extraction and reduce the size and complexity index extraction.

In (Morinaga et al., 2002) is presented a system for finding the reputation of products from the Internet. It automatically collects persons' opinions about certain target product of web pages and uses four different techniques for text mining to get the reputation of those products. Research work presented in (Davison, 2001) examine the accuracy of predicting a user's next action based on the content of the pages recently accessed by the user.

Predictions are made using a similarity model of user interests in the text from the content of hypertext anchors and around them of recently requested Web pages. In (Liu, et al., 2003) the authors proposed an algorithm MDR (Mining Data Records) to extract records of contiguous data or not. So, it find all records consist of tags for tables or forms, such as <table>, <form>, <td>, <tr>, these records are important because they contain essential information of host page.

Web Content Mining is related but different from data mining and text mining. Is related to data mining because data mining techniques can be applied in Web Content Mining, but is different from data mining because Web data are semi-structured or unstructured, while data mining deals with the structured data. Web

Content Mining is different from text mining through the structure of semi-structured web, while text mining is focused on unstructured text. Web content can be unstructured (eg text), semi-structured (HTML documents) or structured (data extracted from databases in dynamic Web pages). The dynamic data cannot be classified, forming the so-called „hidden web”.

5. CONCLUSIONS

Web content mining uses the ideas and principles of data mining and knowledge discovery to screen more specific data. Another important aspect of Web content mining is the usage of the Web as a data source for knowledge discovery. This offers interesting new opportunities since more and more information regarding various topics is available on the Web. But the use of the Web as a provider of information is unfortunately more complex than working with static databases. Because of its very dynamic nature and its vast number of documents, there is a need for new solutions that do not depend on accessing complete data on the outset.

Research in web mining tries to address this problem by applying techniques from data mining and machine learning to Web data and documents.

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ECONOMIC ANALYSIS OF THE MARKETING CHANNELS IN CITRUS INDUSTRY IN BRAZIL

ANDREA CRISTINA DORR, JAQUELINE CARLA GUSE, RUBIA STRASSBURGER, ALINE ZULIAN, MARIVANE VESTENA ROSSATO *

ABSTRACT: *The objective of this article is to analyse the marketing channels adopted and the contractual relations present among certified and uncertified producers of citrus production chain in the region of Vale do Cai, RS, Brazil. 49 producers of this region were selected randomly and semi-structured forms were applied to them. The producers had the biggest success in this market with certified fruits starting from the moment when they became members of a cooperative or an association, preserving a higher governing structure through certification. Although uncertified producers are not marginalized in the chain, they are more vulnerable to market fluctuations and access less sophisticated marketing channels.*

KEY WORDS: *certification; marketing channels; contractual relations.*

JEL CLASSIFICATION: *Q13; L10.*

1. INTRODUCTION

The growing trend in fruit industry is a challenge in producing healthy and qualitative fruit. Due to the new consumer trends the international market requires safe food free from anything that can aggravate human health. Adoption of specific programs which ensure control and traceability of all the fresh fruit production chain in particular has been highlighted in recent years in the perishable goods market.

* *Ph.D. in Economics at the University of Honnover, Germany,* andreadoerr@yahoo.com.br*;*
Academic of Accounting at the Federal University of Santa Maria, Brazil drjaquelinecarla@yahoo.com.br
Academic of Economics at the Federal University of Santa Maria, Brazil, rubiast@hotmail.com
Academic of Economic at the University of Santa Maria, Brazil, alinezulian@hotmail.com
Ph.D. in Economic at the Federal University of Viçosa, Brazil, marivavest@gmail.com

The fruit sector is one of the most important segments of Brazilian agribusiness. It permeates all Brazilian states as an economic activity which involves directly and indirectly around 5 million people (Anuário Gazeta, 2010). Therefore, according to the same source, Brazil is the third largest producer of fruit after China and India, having a harvest approximately of 40 million tons per year. However, the Brazilian production presents only 2% of the global fruit trade, what demonstrates a high domestic consumption of fruits, which places the country at the 15th place in the world ranking of exporters. More specifically the citrus fruits production is also relevant for Brazil, mainly regarding the orange production, both for the juice production and for its consumption *in natura*. Brazil is considered to be the biggest orange producer and exporter of orange juice, making the commercial citrus industry responsible for creation of about 500 thousands direct and indirect jobs. According to the *Food and Agriculture Organization of United Nations* (FAO, 2007), Brazil had an average of 29% of world production of oranges, with a total of 18,5 million tons per year, and it is responsible for 21% of the world planted area, equivalent to 821 thousands hectares. The export of concentrated frozen orange juice and of its sub products generates an average annual income of 1.5 billions of dollars to Brazil (Oliveira, Scibittaro, Borges et al., 2005).

Based on the data by Brazilian Institute of Geography and Statistics (IBGE, 2008), Rio Grande do Sul had a production of 343.042 tons of orange, occupying the 5th place among the Brazilian states producing fruits. Of this amount, 22.400 kg of orange were exported. Rio Grande do Sul is the fourth biggest exporter of orange in Brazil, after Sao Paulo, Santa Catarina and Rio de Janeiro and it concentrates its production of citrus mainly in the region of Vale do Cai, in the north of the State.

The adoption of certification as market differential can be understood under two perspectives. The first refers to the fact of small producers to be marginalized due to the requirements from the buyers in terms of quality standards regulated by certification programs. Thus, small producers would not have financial conditions and infrastructure to suit the required methods. In this case certification plays the role of increasing production costs (FAO, 2007; Jaffee, Meer & Henson, 2005; Henson & Loader, 2001). The second is not only about the higher price received by the producers by the certified fruit (Basu, Chau & Grote, 2004), but the positive effects that certification would cause on the organization of property, on management control, on the qualification of the enterprise, on traceability and on the manual register of all the production stages throughout the chain in field notebooks (Dorr, 2008; Henson & Jaffee, 2007; Henson & Jaffee, 2004).

However, it is being discussed if these products can access more sophisticated marketing channels and receive higher prices for the certified production. Dorr (2009) affirms that in case of grapes and mango products of Vale do Sao Francisco, Brazil, small producers are not marginalized since they have the same conditions to access and to fill requirements of certification and traceability. These producers also market using the same forms of contract as average producers.

In this context it becomes essential to identify how the small producers of citrus react to the filling in the requirements of certification and verifying if they are marginalized due to the adoption of any certification program. As a theoretical basis the Transaction Cost Theory and the Global Value Chain are used for classifying the governing structure present in the citrus chain in the region of Vale do Cai. Thus, the main objective of this research is to make an economic analysis of the marketing channels and to verify the contractual relations existing among producers with or without certification who make up the production chain of citrus in the region of Vale do Cai, RS, Brazil.

2. CONCEPT OF GLOBAL VALUE CHAIN

An analysis of the market channels and market strategies for fresh fruit shows how the development of niche markets for the products with higher added value creates new opportunities for producers and exporters of developing countries who manage to meet the required standards. New marketing channels were opened as a result of a combination of the change in consumer tastes and the growing field of large retailers in the markets of industrialized countries. The identification of opportunities by adding value and developing strategies to take advantage of them are based on an analysis of changes in governance structures of food value chains (UNCTAD, 2000).

According to Dorr & Grote (2010), certified producers are more willing to have access to the international markets and uncertified ones are more willing to sell the fruit products in the domestic market. The producers can market with groups, associations and cooperatives, or with individual customers who sell the fruit products in the domestic market. Entering new export markets could be considered a big challenge for many producers of the developing countries. New competencies and knowledge are required, mainly related to bureaucratic procedures, national standards and procedures, marketing channels and consumer tastes. The improvement could facilitate and promote competitiveness to access these markets.

The literature on Global Value Chain (GVC) focuses on the role of global buyers and of the governance to define the opportunities for improvement. Humphrey & Schmitz (2000) use the concept *upgrading* in its different forms for referring to three different actions which the companies could realize. First, the process upgrade: the companies can upgrade both by transforming inputs into outputs in a more efficient way by re-organizing the production system and by introducing superior technology; second, product upgrade: the companies can upgrade by moving into more sophisticated product lines; and third, functional upgrade: the companies can upgrade by a higher added value. Kaplinsky & Morris (2002) added a fourth case, intersectional upgrade: where the companies can upgrade by leaving one chain and going to another chain.

2.1 Governance in the Global Value Chain

The concept of governance "[...] is central for the approach to global value chain [...] the concept is used to refer to the inter-relations of the company and institutional mechanisms through which the coordination of non-market activities of the chain occurs. This coordination is achieved through definition and application of product parameters and process to be fulfilled by the agents where the products of the developing countries usually operate" (Humphrey & Schmitz, 2001: 03).

The same authors use the concept of governance "to express that some companies in the whole chain and/or adapt to the parameters in which the others operate in the chain. A chain without governance would be a tangle of market relations" (2001: 04). The determinants of the governance presented by Humphrey & Schmitz (2000: 06) are: independent market relations (buyer and supplier do not define the product, without long-term relation, and the risks of the buyers and of the products are low); networks (the buyer and supplier define the product specifications together; the risk of the buyers is minimized due to the high level of competence of suppliers); quasi-hierarchy (high level of control of the buyers on the suppliers, the first defines the product) and hierarchy (buyers control the production process of the supplier). The authors suggest that the quasi-hierarchy is more probable to occur where the global value chains frequently unite the products of developing countries and retailers of developed countries.

Similarly Keesing & Lall (1992) argue that producers from developing countries must meet the requirements which frequently do not apply to their domestic markets. It creates a gap between the required capacities for the domestic market and the needs for the international one, for example. This gap is expanded when the buyers require consistent quality and supply, creating two reasons for the quasi-hierarchical governance. The first reason refers to the monitoring and control which can be necessary for ensuring that the products and processes fulfil the required standards. The second, in case where the gap needs to be filled rapidly, is that the buyers would have to invest in small suppliers chosen and help them to make updates.

Gereffi, Humphrey & Sturgeon (2005: 83) propose a more complete typology of governance in value chain, divided in five types: (i) markets: market links can persist over time with repeated operations – the cost of changing the partner is low for both, (ii) modular value chains: suppliers make the products according to the specifics of the clients more or less detailed by the previous one, (iii) relational value chains: complex interactions between buyer and sellers, often creating mutual dependence and a higher level of specificity of resources, (iv) captive value chains: small suppliers are dependent in transactions on bigger buyers, characterized by a high level of surveillance and control by business leaders, and, finally, (v) the hierarchy: characterized by a vertical integration.

In the same study the authors develop a governance theory in value chain based on three factors: (i) complexity of information and knowledge necessary for sustaining a special operation regarding the specificities of product and process, (ii) the extension in which the knowledge and the information are codified and transmitted in an efficient form, and (iii) the capacity of the current and potential suppliers regarding the requirements of the transaction.

3. METHODOLOGY

3.1. Sample definition

The total population of citrus farmers of the Vale do Cai region is 4,000, according to a listing provided by the Technical Assistance and Rural Extension Company (EMATER) of Montenegro-RS, and with the help of Ecocitrus Cooperative and Montengro Association which comprise the region of Vale do Cai. The sample is composed by certified citrus producers of the cooperative Ecocitrus situated in Montenegro-RS, formed by producers of different locations which comprise the region of Vale do Cai-RS. They produce in organic form and adopt the following certification seals: Organic, Fair trade and Ecovida. Along with these, the analysis includes the group of citrus farmers of the region which do not adopt any type of certification, where some belong to an association of fruit farmers, and others do not have any link with any type of organization, i.e., act as individuals on the market. Thus, a comparative analysis will be realized among these groups of citrus producers.

The variable used for the calculation of the sample is the time, in years, that the interviewee sells to his main buyer (association, cooperative or an individual client). The mean and the standard deviation of the key variable vary among the three groups. The calculation of the size of the sample is given according to Schneider (2004), through the following formula:

$$n = \frac{(t_{\delta,\frac{a}{2}})^2 \times s^2 \times N}{e_0^2 (N-1) + (t_{\delta,\frac{a}{2}})^2 \times s^2}$$

Where:

n = minimum size of the calculated sample;

$t_{\delta,\frac{a}{2}}$ = value obtained through the pilot sample;

N = population size;

s = standard deviation of the mean (variable: years selling to the main buyer)

e_0^2 = square of the sampling error obtained with the data of the pilot sample;

3.2. Proportions of the groups and proportional sample

The methodology adopted in this research was based on the method proposed by Levy & Lemeshow (1999) where the target population was stratified into groups. In other words, the sampling is probabilistic and randomly stratified. The first group was composed by certified producers of citrus who belong to a cooperative of the region. The second group was formed by citrus farmers of the region who do not adopt certification; some of them belong to an association and others without any participation in organizations.

In total, 49 producers were selected randomly in the region of Vale do Cai where 24 are certified and participate in a cooperative and the other 25 do not have certification. Among 25 producers without certification 7 producers are members of an association while the rest 18 do not take part in any organization.

The group which comprises certified producers whose population (N) equals to 96 follows the sample calculation:

$$n = \frac{4{,}169764 \times 5{,}5 \times 96}{4(95) + 4{,}169764 \times 5{,}5} = 24{,}67877$$

The sample for the groups of certified producers is 24 individuals.

For the group of uncertified producers who belong to an association whose population is 20, the sample is 7 individuals, as shown in the calculation below:

$$n = \frac{4{,}169764 \times 3{,}0 \times 20}{4(19) + 4{,}169764 \times 3{,}0} = 6{,}796455$$

And, lastly, for the producers who do not have certification and who do not belong to organizations, whose population is 4,000 citrus farmers in the whole region, the sample is 18 individuals as it is shown in the following calculation:

$$n = \frac{4{,}169764 \times 4.1 \times 4000}{4(3999) + 4{,}169764 \times 4{,}1} = 18{,}30907$$

3.3. Data collection and analysis

The collection of primary data consisted in applying a semi-structured form for the citrus farmers through field research (or survey). The form of approach was based on personal home interview and on flow points (such as: opening party of the citrus crops in 2011). The form was applied to 49 producers and was divided in the following axes:

- Socio-economic characteristics: age, gender, education, duration of activity, duration of property residency, family labour, family size, gross income;
- Property characteristics: total size of property, area devoted to citrus, owned or rented area, permanent preservation areas;
- Marketing: the target market, since when, negotiations, why this client is the target, storage, prices definition, transportation inside and outside of the property.

After the collection, the data was tabulated and analysed statistically and qualitatively. The averages and frequencies of variables were calculated, as well as the respective levels of significance. The analyses divided the producers in three categories, namely: certified producers (members of a cooperative), producers associated and uncertified (belonging to an association of fruit farmers) and individual uncertified producers.

4. RESULTS AND DISCUSSION

4.1. Characterization of Citrus Farmers

The Table 1 shows the results of the descriptive socio-economic analysis and of the property characteristics of the certified and uncertified producers (individual and members of associations). The citrus farmers of the region have an average age of 48 years old and approximately 8 years of education (equivalent to the complete basic education).

Table 1. Descriptive analyses of socio-economic conditions and property characteristics

Variables		Certified producers N=24	Non-certified Producers members N=7	Non-certified Producers N=18	Total N=49	Chi^2, t test
Age in years	Average s.d.	50,13 12,63	50,86 10,24	45,56 14,32	48,55 12,94	0,472
Schooling (years)	Average s.d.	8,83 3,57	8,57 4,16	7,00 2,70	8,12 3,41	0,123
Time in activity (years)	Average s.d.	33,92 15,25	41,00 15,61	27,83 14,98	32,69 15,52	0,141
Time living on land (years)	Average s.d.	36,54 17,88	31,14 17,27	31,33 16,91	33,86 17,29	0,577
Annual Gross Income of citrus (R$/ha)	Average s.d.	6015,27 9262,22	4540,17 2190,91	3874,28 2292,43	4930,41 6280,07	0,650
Kids living on land (%)	Average s.d.	65,26	75,00	78,79	71,02	0,657
Total area (ha)	Average s.d.	16,74 13,26	33,00 16,38	16,78 9,87	19,08 13,61	0,011**
Area of citrus (ha)	Average s.d.	8,51 7,29	19,00 6,73	8,38 5,27	10,09 7,40	0,001***
PPA area (ha)	Average s.d.	2,79 3,26	3,71 3,20	2,68 2,55	2,88 2,96	0,728
Own area in ha (%)	Average s.d.	94,29	64,57	91,99	89,20	0,019**
Arrended area in ha (%)	Average s.d.	2,43	15,43	8,01	6,42	0,267

Source: Research data.
*Note: *significant to 1%, ** significant to 5% and *** significant to 10%.*

Out of the total of the interviewed, the majority are married men and have citrus production as the main activity where they have been working for an average of 33 years. In other words, 54% of the interviewees are assumed as citrus growers, 16% as citrus growers and farmers, 12% as fruit growers (along with working with citrus, they grow other fruits), and 18%, apart from citrus and/or fruit growing, perform other activities (employees and/or self-employed).

Many of the interviewed (92%) reside on the property where they work with citrus. The interviewees work on the activity together with their wives and kids. In 71% of the cases the children live in the property and help in the citrus growing activity. This result indicates that the activity is mainly based on family labour. Among the three groups of producers uncertified producers have higher percentage of children (78.79%) compared to certified producers (65,26%) who are associated to the cooperative. Many family members of the certified producers work in the same cooperative.

The average gross income obtained annually in the rural property with the citrus, for the uncertified producers is approximately R$5,000.00 per hectare planted by citrus. This result shows a very high standard deviation of R$6,280.00. Many producers also have extra incomes as retirement, services provision to third parties, wage labour of the husband of wife. Among the groups of producers the certified producers are shown as having a higher annual gross income of approximately R$6,015.00 per hectare of citrus. The next topic will discuss and show details of this result.

The total area of the property is an average of 19 hectares where 89% of the interviewees are the owners of the land or of some part of it, and the remaining use lease or partnership. An average of 10 hectares is devoted to the citrus cultivation. Moreover, 77% of the interviewees have an area of environmental preservation (APP) corresponding to an average of 3 hectares. It is noteworthy that certified and uncertified producers have both total area property and the part devoted to citrus very similar in size. However, the results related to the gross income are completely distinct. It is observed that the total area and the owned area in hectares are significant to 5% while the variable of the area devoted to citrus is significant to 1%.

4.2. Analysis of the marketing channels and contractual relations

The Table 2 shows the results of the descriptive analyses of the marketing channels used by the certified and uncertified producers (members of associations and individuals). The next topics are focused on variables which characterize the marketing channels and explain how the negotiating process occurs between producers and buyers, as well as the details of the contractual relations.

Table 2. Descriptive analyses of the marketing channels and of the contractual relations

Variables	Cert. prod. N=24	Non-certif. Prod (members) N=7	Nom-certif. Prod. N=18	Total N=49	Chi^2, t test
Since when sells (average in years and standard deviation.)	10,54 (5,64)	8,14 (3,05)	15,29 (4,20)	11,87 (7,30)	0,083*
Distance until buyer (average in	16,95	181,57	273,41	142,22	0,074*

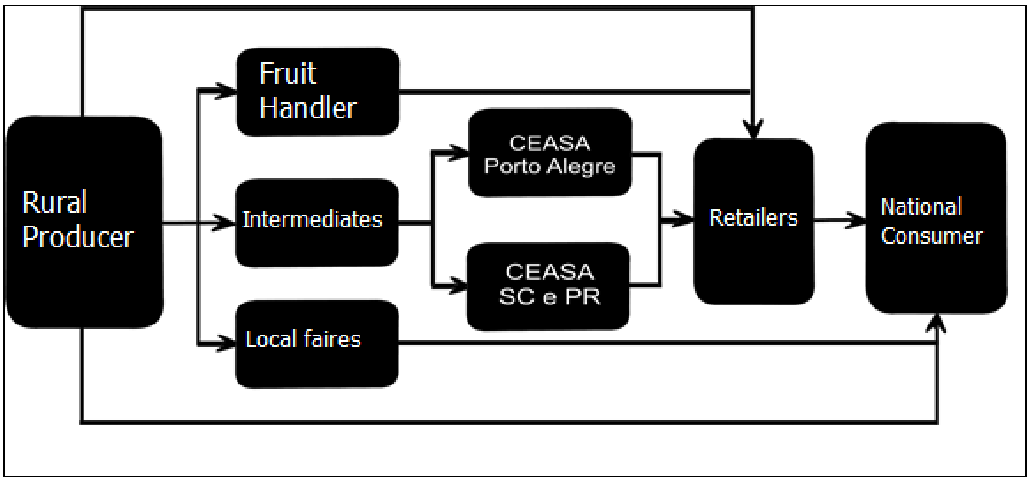
km and standard deviation)	(11,76)	(449,33)	(457,16)	(346,92)	
Number of talking until deal (average and standard deviation)	0,30 (0,47)	0,14 (0,37)	0,29 (0,68)	0,27 (0,54)	0,796
Buyers					0,000***
Co-op (%)	95,80	0,00	0,00	46,90	
Association and intermediates (%)	0,00	100,00	0,00	14,30	
Price Definition					0,000***
Co-op/association (%)	91,70	24,30	0,00	46,90	
Buyer (%)	4,20	71,40	94,40	46,90	
Form of payment					0,023**
Installments (%)	100,00	100,00	61,10	85,40	
Why selling to these buyers					0,000***
Member (%)	65,20	14,30	0,00	33,33	
Better Price (%)	4,30	28,60	5,60	8,30	
Lack of option (%)	0,00	0,00	38,90	14,60	
Safer option (%)	4,30	42,90	16,70	14,60	
Problems of payments					0,278
No, cae sells to co-cop or association (%)	100,00	100,00	-	100,00	
Contracts of selling					0,958
No contracts (%)	82,60	57,10	88,90	81,30	
Only verbal contract (%)	13,00	28,60	11,10	14,60	
Formo f storage					0,064*
No storage (%)	83,30	33,30	61,10	68,80	
On shelter (%)	8,30	50,00	33,30	22,90	
Transport in the farm					0,292
Tractor and truck (%)	0,00	28,60	5,60	6,30	
Only tractor (%)	82,60	71,40	83,30	81,30	
Transport out the farm					0,000***
Co-op takes with truck (%)	95,70	0,00	0,00	45,80	
Producer takes with truck and buyer comes with truck to the farm (%)	0,00	92,90	16,70	12,50	
Buyer takes with own truck (%)	0,00	0,00	72,20	27,10	
Satisfied with marketing Chanel					0,000***
Yes (%)	79,20	50,00	33,30	58,30	
No (%)	0,00	16,70	33,30	14,60	
Reasonable (%)	0,00	33,33	27,80	14,60	

Source: Research data.
*Note: *significant to 1%, ** significant to 5% and *** significant to 10%.*

4.2.1. Individual uncertified producers

The producers who market their fruits in individual form, in other words, do not belong to any association or cooperative, face diverse challenges. They do not have certification or any other quality program or traceability procedure. The main means of marketing are intermediate (which channel the production to states like: Rio Grande do Sul, Santa Catarina and Sao Paulo) and municipal and state fairs (Figure 1). The most adopted marketing channel for 87.5% of producers has been through intermediaries, since about 15 years. The distance travelled to reach the customer is 273 km in average.

Among the challenges, for example, the lack of fruit sale assurance or of payment receipt is cited. The sales occur in 72.20% of these cases through the buyer (middleman) who leads directly to the property to load the track. The negotiations of purchase and sale are realized, in the majority of cases, on the day of purchasing, but the payment is not always immediate. In 95% of the cases the producer does not have the right to bargain for negotiating the price per fruit box. In average the producers talked only 0.3 times with the responsible for these marketing means, to start a trade relation between the parties. It is worth noting that there is no formal contract but only a verbal agreement. The data of the research shows that there were a few records (12%) of problems of payment receipt and of ordering and delivery of the products from the consumers side (intermediaries and fairs).



Source: Elaborated by the authors.

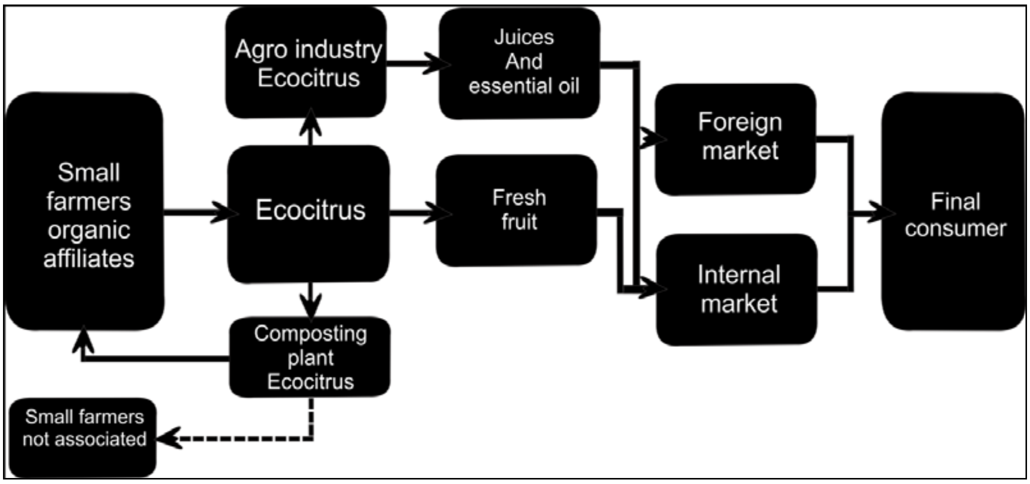
Figure 1. Marketing channel adopted by the individual uncertified producers

The buyer defines the rules of the game, including the payment form, which is usually time-bound (61%). Along with the price the producer still faces instability in relation to the crop flow programming. He does not have assurance of purchase and, thus, expects a buyer to get interested in the fruit on the time of harvesting. As the fruits are perishable, the losses can be high when there is no buyer – because the producer does not have cold storage. These products can earn higher profits in the beginning of harvest due to the scarcity of fruits in the market. But, this margin decreases gradually as supply increases.

Despite the prevailing governance structure being the market one, it is shown that many producers have trust relations with the buyers. In this case, the fact of knowing the origin of the buyer contributes to minimize problems like lack of payment. These producers are not marginalized, but only access less sophisticated marketing channels, subject to the laws of supply and demand on the market. These producers also do not have technical assistance and do not have bargaining power in the purchase of production inputs.

4.2.2. Certified producers

The producers who are members of the cooperative Ecocitrus have Organic, Fair trade and Ecovida certification. As they are members of this entity, they do not need to establish any type of contract with the cooperative on the supply chain – raw materials and on downstream – marketing. The cooperative has control over supply of inputs, agribusiness operation where the fruits are selected, processes and packaged, and over the access to marketing channels. The producers deliver 96% of the total citrus production to the cooperative who is responsible for the rest. The price is paid per kilo and based on the quality and size of the fruit (the price is established by the cooperative based on the market prices). Although the producer does not know the final value to be paid for the amount of fruit, he is very satisfied in 79% of the cases, since the cooperative gives assurance of purchase of the total production of the producer, and pays a better price for the fruit (Figure 2).



Source: Elaborated by the authors.

Figure 2. Marketing channel adopted by the Ecocitrus Cooperative

The cooperative provides the producer with a report on the classification of the fruits based on the quality, size, colour and price paid per kilo. The payment is made within the time frame, maximum of 30 days. Till the present time, there were no cases of delay in payment. The cooperative is responsible for the collecting of fruit on the property as well as for the supply and application of inputs, technical assistance and transfer of information. The average distance between the properties and the agribusiness where the fruits are processes and packaged is 17 km. According to the interviewees, the prices paid by the cooperative are higher than the prices paid on the market. In other words, the certified fruit is valued, not only for the differential price received by the producers but also for the fact that the cooperative accesses specific market niches.

The cooperative markets to the customers through formal contract oin the domestic and international market. The client of the General Warehouses Company of Sao Paulo (CEAGESP) is a specific client who only buys organic food. This client pays a differential price for both orange juice and the fruit *in natura*, what does not happen with other two clients of supermarkets. Regarding the contracts it is worth emphasizing that there are contracts between the cooperative and the supermarkets for the fruit *in natura* on the domestic market. As far as the external buyers are concerned, there are also contracts with the *traders* who have carried requirements. Among them there are the size and colour of the fruit. The prevailing governance structure between the cooperative and its members is characterized as the relational value chain (complex interactions between the buyers and sellers, many times creating mutual dependence and a higher level of resource specificities).

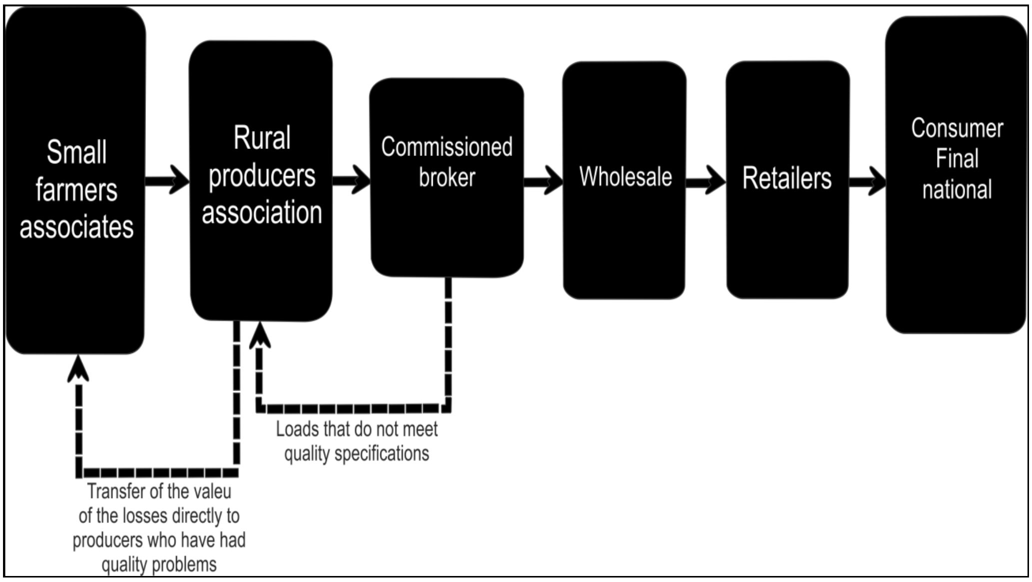
The results show that these products achieved a higher level within the productive chain (*upgrade*) since they became members of the cooperative, as before they used to market as individual producers. Thus, the certification enabled them to access more sophisticated marketing channels through the cooperative and pass from the governance structure of market purchase to the relational value chain.

4.2.3. Associated uncertified producers

The producers who are members of the Montenegro Association do not have certificate but plan to adopt the Integrated Fruit Production (PIF) as market differential. On the average the producers have been marketing with the association for 8 years and as members they do not need to have a contract between them. The association is responsible for the processing and packaging of only a part of production of the members, considering its limited capacity of processing and marketing.

The marketing channels of the association are shown in the Figure 3. The interviewees send part of the production to the association for the reasons such as: security and trust among the members (42.90%); receipt of higher prices (28.60%); preference to work together and access bigger markets (production scale of the association allows sales to new markets).

The prices paid for the fruits are defined according to the market prices, which are discussed in meetings among the associates and buyers. The payment for the fruits to the producers is made within a time frame according to the payment schedule of the buyers. It is noteworthy that at the present moment there was no evidence of lack of payment from the association to the associates.



Source: Elaborated by the authors.

Figure 3. Channel of Citrus marketing – Montenegro Association of Fruit farmers

Unlike Ecocitrus, these producers need to find means to deliver the production into the cold storage of the association. Based on a productive planning, the association receives an average of 30% of the total production of the associates. The remaining production, 70%, stays under the responsibility of each producer to sell on the local or regional market. Producers travel approximately 181 km to reach the final buyer. In these cases the data shows that the producers receive lower prices and are vulnerable to market forces (such as individual uncertified producers). 25% of the producers have already faced problems with payment receipt from particular intermediaries with whom they used to realize marketing, but they have never had problems of ordering and delivery of the products.

The association delivers the production mainly to a middleman in Sao Paulo who markets the production in the big wholesale networks. These agents do not have formal contracts but they have a strong trust relationship between them. According to the interviewee responsible for the marketing, both the middleman and the clients of the wholesalers visit the association and the producers-members in various opportunities. The interviewee has also been in Sao Paulo to accompany the production and to meet the buyers. The interviewee highlights that when the parties know each other, the (informal) contractual relations of trust are stronger and more important than a (formal) written contract. Thus, it is evident that trust relationships among the agents perform a fundamental and prime role for the continuation of negotiations.

The prevailing governance structure between the association and the buyers is the modular value chain (suppliers make the products according to the clients' specifications, more or less detailed before). And between the association and the middleman it is the captive value chain (small suppliers are dependent in transactions on bigger buyers, characterized by a high degree of vigilance and control from the leading companies' side). Thus it is observed that even though the members of the association have not yet adopted certification, these producers also had an *upgrade* in the governance structure – considering the production marketed through the association. In this case the relations of trust between the associates and the middleman dictate the negotiation rules.

5. CONCLUSIONS

The certification shows to the consumer an assurance of purchasing quality goods. For the producer, it shows a market differential enabling to expand sales contracts and achieve other public, such as, for example, the international market. Thus, this study was aimed at realizing an economic analysis of the marketing channels and of the contractual relations which enable small citrus producers to participate in this market and fulfil the requirements.

The associations and the cooperative are the main agents concerned to get the certification, being able to provide benefit in diverse forms to a series of producers they are linked to. The organic producers already have the seals which attribute the stated characteristics to their products. In the organic market the certificate is extremely important as it serves as assurance to the consumer that he is purchasing a product free from additional chemicals, of what he would not be sure without the presence of the certificate. Thus, the producers had an *upgrade* since they became members of the cooperative, enabled by the certification, passing from the governance structure of market purchasing to the relational value chains.

The marketing channels of the certified producers are more organized and efficient compared to the other two groups. The chain is coordinated by the cooperative which had control from the inputs supply, processing to the marketing to the final buyer. Many links along this chain were eliminated by the fact that the cooperative markets the production via formal contract.

The association, although marketing via formal contract to its buyers, has intense relations of trust. Thus, the trust substitutes and is considered for these producers as more efficient than the formal contract. The individual producers are the most vulnerable ones as they need to realize their marketing on their own, using only verbal (informal) contractual relations.

While the cooperative and the association define the prices of citrus according to the classification of the certified and uncertified producers, respectively, the fruit prices for the individual uncertified producers are defined by the buyers. Uncertified producers market longer to the same clients, travel longer distances and, although talk more before setting a deal, had default problems. In other words, producers organized in cooperatives or associations are more secure regarding the payment assurance. However, these organizations apart from performing fundamental role in the processing and delivering the production provide higher financial security to their members. Regarding the main factors which make the producers market to their respective buyers, it is evident that for the individual uncertified producers it is the lack of options; for the certified producers it is the fact of being members; and, lastly, for the member uncertified producers it is the better price paid by the association and security in marketing.

The fruit certification is not yet required by the domestic market. However, the producers believe that in the future the requirements in the food sector will be stricter and that the certification seals will be more valued and required. The search for the certification can add the fruit brand – well accepted by the consumers – as being the quality differential. Thus, it can be concluded that the individual uncertified producers are not marginalized but are subject to market fluctuations, prices instability and negotiation conditions, along with the difficulty to access the differentiated and more sophisticated marketing channels.

6. ACKNOWLEDGEMENT

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RUSSIAN MULTINATIONALS IN ROMANIA AND THEIR IMPACT UPON THE ROMANIAN ECONOMY

CODRUȚA DURA, IMOLA DRIGĂ *

ABSTRACT: *Our paper provides an insight into the universe of Russian multinationals and their influence upon the Romanian economy. Even if statistical data on foreign direct investment stock by country of origin do not prove the existence of Russian capital in Romania, it is a fact that the high values of foreign direct investment stock from the Netherlands, Austria, Germany or Switzerland are largely due to the investment projects undertaken in Romania by Russian multinationals. Despite the lack of relevant statistical data, we can say that the impact of Russian MNC's on the Romanian economy is huge. Among positive influences we can mention: global employment opportunities for highly qualified workforce in the region; the transfer of advanced technologies to Romanian enterprises and the local markets; the awareness of business partners and public opinion on social responsibility; the insert of higher performance standards, competitiveness and managerial ethics.*

KEY WORDS: *Russian MNC's; Lukoil; Mechel; TMK; Vimetco; Luxoft; Gazprom.*

JEL CLASSIFICATION: *F20; F23.*

1. INTODUCTION

In the early 2000s, numerous voices stated that the emergence of Russian multinationals was a threatening process, as they were envisioned as tools of regaining political hegemony rather than pure economic entities. However, many studies revealed that Russian multinationals are, in fact triggered by economic motivations, when they make the decision whether to expand overseas or not. This paper focuses on the presence of Russian multinationals in Romania and their impact upon the local economy.

* *Assoc. Prof., Ph.D., University of Petrosani, Romania, codrutadura@yahoo.com*
Lecturer, Ph.D., University of Petrosani, Romania, imola.driga@gmail.com

The influence of Russian multinationals upon the Romanian economy is extremely important, though very difficult to illustrate with the help of available statistical data at the national level. According to the latest reports, Russian investments in Romania amount to only two billion dollars. However, Russian multinationals are extremely well represented on Romanian territory, where they operate through their subsidiaries within the Netherlands, Germany or Switzerland, which means that although direct foreign investment flows enter Romania from the East, they reach destination through intermediaries.

2. RUSSIAN GIANTS IN ROMANIA

Alongside other multinationals from BRIC countries, corporate giants from Russia started to emerge in the international rankings of global companies. For instance, in the Forbes List of 2000 Global Companies, in 2011 there were 136 Chinese (including Hong Kong), 61 Indian, 33 Brazilian, 20 South African and 16 Mexican corporations. Russia was represented by 28 companies, with the aggregate capitalization of 762.6 billion USD, returns of 100.8 billion USD and total assets valued at 1,403.8 billion USD (Annex 1).

The geography of multinationals expansion reflects that Europe is the by far the destination of choice for Russian foreign direct investments. Moreover, CIS countries and Eastern Europe are preferred by the giant corporations from Russia when they conceive their strategies of expanding abroad. This trend is caused by the linkages already in place in the former Soviet Union area, common business practices and cultural values, low competition from other MNCs from elsewhere etc.

Statistical data in table 1 'hide' the existence of Russian capital in Romania, but it has to be underlined that the high values of foreign direct investment stock in the Netherlands, Austria, Germany or Switzerland are largely due to the investment projects undertaken in Romania by Russian multinationals.

For example, natural gas - one of the products for which Romania registers the most important volumes of imports in recent years - is provided to consumers by the Russian-German company Wintershall.

The main coordinates of Russian multinationals activities in Romania are presented as follows.

By far the most important in Romania is the Russian LUKOIL Romania. Lukoil is a multinational vertically-integrated oil & gas company which accounts for 2.2% of the global output of crude oil. The main activities of the company are the exploration and production of oil & gas, the production of petroleum goods and petrochemicals, as well as the marketing of these outputs.

The company has grown over the last 20 years from a few production assets in Russia into a multinational energy company with operations in 37 countries and on 4 continents. The financial performance of Lukoil company has reached awesome values, despite the adverse effects of the global crisis: the net income raised by 28.5% in 2010 to $ 9,006 million while the return on average capital employed was 14.0%. With a level of $ 11 net income per boe in 2010, Lukoil stood one of the most financially efficient oil companies in Russia (www.lukoil.ro).

Table 1. Foreign Direct Investment Stock by Country of Origin as of 31 December 2010

	€ million	**% of total FDI**
TOTAL, of which	**52,585**	**100.0**
The Netherlands	*10,903*	*20.7*
Austria	*9,346*	*17.8*
Germany	*6,398*	*12.2*
France	4,384	8.3
Greece	3,016	5.7
Italy	2,808	5.3
Cyprus	2,550	4.9
Switzerland	*2,021*	*3.8*
USA	1,349	2.6
Spain	1,064	2.0
Other*	8,746	16.7

*Source: National Bank of Romania & National Institute of Statistics, Foreign Direct Investments in Romania in 2010); Note: * Countries which invested less than EUR 1 000 million*

Oil and gas giant Lukoil entered the Romanian market in 1998. Nowadays, Lukoil sells fuel through a network of 300 stations and 9 petroleum deposits. The Group also controls Russia and Petrotel-Lukoil refinery. The net turnover of Lukoil Romania in 2010 topped $ 4500 lei (which means an increase of almost 40% as compared to the previous year), and the contribution to the state budget financing is impressive. Investing and business activity of Lukoil Romania has a great an impact on the Romanian economy: over 400 million dollars invested over the past 13 years (out of this total sum, 7.7 million dollars were spent in the field of environmental protection only) and 3800 new jobs were created in the company (www.lukoil.ro).

In the steel industry, the most important multinational of Russia that operates on the territory of Romania is the holding company MECHEL. Mechel's fully integrated business lies in four distinct segments: mining, steel, ferroalloys and power. The corporation holds production establishments in 13 of Russia's regions as well as the United States, Kazakhstan, Romania, Lithuania, Bulgaria, United Kingdom and Ukraine.

According to its' official website, Mechel is the first and still the only coal mining and metals company from the region of Eastern and central Europe and Russia having its shares placed on the New York Stock Exchange. The company has about 93,000 employees worldwide, from which 7000 are working in Romania. Mechel Multinational Company entered the Romanian market in 2002 and it currently holds the plants Mechel Câmpia Turzii (INSI), Mechel Targoviste (COS), Ductile Steel Oțelu Roşu, Ductile Steel Buzău, Laminorul Brăila and Mechel Targoviste Repairs.

The Russian Group is currently the second player on the Romanian iron and steel market, after Arcelor Mittal.

Another important presence in Romania is OAO TMK operating in the same field. TMK is Russia's largest manufacturer and exporter of steel pipes which ranks among the global top three pipe producers. TMK is a public company which is listed on London Stock Exchange and Moscow Stock Exchange. These products are used in the oil & gas sector, chemical and petrochemical industry, energy, engineering and ship building machinery, aircraft, space and rocket engineering, as well as in construction industry, utilities and agriculture.

TMK has even more potential to expand its business overseas. For a period of time, the foreign production facilities of TMK were restricted to only two enterprises in Romania. Therefore, TMK's internalization strategy began in this neighbouring country. In 2006, TMK acquired controlling shares of SC ARTROM SA pipe plant (now TMK-ARTROM) and SC C.S.R. SA smelter (now TMK-Resita). These investments represented a bridgehead from the perspective of shaping TMK's production networking and from that of strengthening its position in the European market of pipe producers.

Moreover, the incorporation of the Romanian smelter that provided steel for pipe products within the Russian business Group supported further vertical integration of the company. In March 2008, TMK has made an adventurous move by getting an agreement to purchase pipe facilities of North American metallurgical group IPSCO. This deal which was made jointly with another giant Russian multinational - Evraz, was by far the greatest foreign acquisition in TMK's history and also the richest, bringing a total expense of approximately $ 1.7 billion. Billionaire Dmitry Pumpianski, owner of TMK, announced recently that the Group wants to invest an annual $ 300 million by 2020 in countries where it is present, in order to maintain the assets and to develop new products.

Vimetco holding is another Russian multinational which operates in Romania. Vimetco is a globally integrated aluminum Group, with bauxite mines in Sierra Leone, coal mines, aluminum production facilities and electricity plants in located in China and an alumina refinery and aluminum smelter in Romania. With 17,122 employees worldwide, Vimetco's sales amounted to $ 2,717 million in 2011 while the gross profit reached the level of $ 358 million.

In Romania, the company holds the aluminum manufacturer Alro Slatina and the alumina factory Alum from Tulcea. The two companies practically form the entire chain of aluminum producers in Romania. With a production of 288.000 metric tons of raw aluminum, Alro SA is the largest aluminum producer in Central and Eastern Europe (excluding Russia) in 2008. Alro company reported for the year 2011, a preliminary turnover of 2.24 billion lei, as compared to 1.81 billion lei in 2010. The 2011 preliminary net profit increased by about 44%, reaching 230 million lei, as compared to 159.78 million lei in 2010.

Alro SA customers are end-users and traders of metals from both Romania and around the world. Over 80% of the production of Alro is sold on the international market through the London Metal Stock Exchange and under long-term direct contracts with clients from 25 countries of the world. States of the European Union

(Italy, Greece, Austria, Hungary etc.), as well as Turkey, the Balkan countries and the United States of America are the main markets for the products of Alro factory.

Luxoft is a multinational company from Russia operating in the field of (outsourcing) IT services. The company, established in 2000, is headquartered in Moscow with development centres in St. Petersburg, Omsk, Krakow, Kiev, Odessa, Dnepropetrovsk, Ho Chi Minh City, Welwyn Garden City (United Kingdom) and Bucharest. Offices are in New York, London, Frankfurt, Singapore and Seattle.

Luxoft is the company which assumes the role of the emerging global leader in the development of high quality software. Among the areas which it covers there are aerospace, automotive, energy industry, financial-banking sector, telecommunications and electronic commerce. The list of clients of the company include Boeing, Deutsche Bank, Dell, HP, IBM, Alstom, Bosch, New York Media (who edited New York Magazine), as well as the U.S. Department of Energy, the latter providing vocational retraining programmes for former nuclear engineers wishing to work in the development and testing of software products.

In Romania, Luxoft is present since 2008, when the company completed the acquisition of local ICT Networks. According to Luxoft official website, Luxoft Romania continues ITC Networks's tradition of quality telecommunications industry service, as well as delivering product engineering and application development services to clients in other business domains. Additionally, Luxoft Romania offers the advantages of nearshore delivery to European organizations.

There are other multinationals from Russia who have expressed an interest to enter the Romanian market. The most recent and relevant example is the company GAZPROM, which already delivers on the Romanian market, annually about five billion cubic meters of natural gas, and the collaboration with partners from Romania already has a tradition of 30 years. The Romanian media announces at the end of 2011 that Petrom, the largest local company in the oil field is in negotiations with the Serbian company NIS, controlled by GAZPROM, in order to sell 130 gas stations, which would represent almost a quarter of its entire gas distribution network.

The transaction has not been completed yet, but the interest of the Russian corporation in the Romanian market is still high, according to the media. Internationally, Gazprom is a true Empire: it owns one-third of the world gas production, it controls active companies in the field of banking, insurance, media, agricultural production etc. The company owns a monopoly on gas pipeline system, connecting Central Asia, Russia and Europe.

The gas from Turkmenistan or Uzbekistan, Kazakhstan intended for the European market must transit the pipelines belonging to Gazprom, which gives it a huge geopolitical weight. The company Gazprom has subsidiaries in most European countries and it implements an aggressive policy to increase market share. The construction of the two new and important North Stream pipeline (inaugurated in November) and South Stream (on which work will begin this year), will open the doors to a more liberal and energy consuming European market.

3. THE IMPACT OF RUSSIAN MULTINATIONAL ON THE ROMANIAN ECONOMY

A brief review of the business conducted by the Russian multinationals in Romania leads us to the conclusion that these economic giants started, at the beginning of 2012, to control the aluminum industry, much of the metal and iron and steel industry, two refineries and a quarter of the fuel market. Therefore, despite the lack of relevant statistical data that reflect precisely this phenomenon, the impact of Russian multinationals on the Romanian economy is huge. We can assume a number of positive aspects that derive from this reality, as well as some negative consequences.

Among the positive influences it is worth mentioning the following (Voinea, 2007):

- offering global employment opportunities for highly qualified workforce in the region; carrying out greenfield investment projects;
- transferring advanced technologies to Romanian enterprises and the local markets;
- reinvigoration of industries and of human communities and existing villages in the neighbourhood of new industrial centres;
- increasing the volume of exports, with a direct impact on economic growth;
- awareness of business partners and public opinion on the social responsibility issue;
- introducing higher performance standards, competitiveness and managerial ethics and practices which can be spread throughout the region etc.

Probably the most important positive effect is the contribution of Russian investments to the domestic capital which motivates, in its turn, the processes of economic growth through investment multiplication and driving effects (Voinea, 2007).

Thus, the foreign capital has the advantage that it brings with it higher advanced technologies and managerial and marketing skills that, once transferred to subsidiaries in Romania, are able to confer substantial competitive advantages to multinationals. The existence of a competitive market forces other competitors that operate in the same industry as well to adopt new technologies, in an attempt to enhance productivity and efficiency.

Therefore, beyond the undeniable impact exercised over the national economy as a whole or multinationals generate positive effects when stimulating the performances of domestic firms that are obliged to implement the latest technology, as compared with the earlier situation in which there would be no foreign investors competing on the market. These transfers of technology, the management know-how and marketing skills were frequently mentioned in literature as positive external factors related to productivity which plays a very important role in the elaboration of policies for attracting foreign investors and, in time, it could lead to improving the competitive advantage of the Romanian economy as a whole.

Spillover effects are not limited only to implementing advanced technology and increasing productivity. In the literature, there are a series of studies that reveal the fact that subsidiaries of multinational companies which carry on export activities stimulate the development of the export ability of local firms, through ready access to foreign markets.

The negative consequences of Russian multinationals entering the Romanian market are linked mainly to the characteristics of the competitive environment of the industry in which they operate. Considering that Russian multinationals were implanted in the key sectors of the Romanian industry (metal and iron and steel industry, oil and gas industry) where the competition of Romanian firms is very modest, it is obvious that the subsidiaries of Russian multinationals control the market (holding monopolistic or oligopolistic positions).

Therefore, there are cases when the competition mechanism cannot function efficiently; this brings supra normal profits for that certain subsidiary. However, this situation can occur to the detriment of consumers and of the possibility to ensure normal development opportunities for that field of activity.

The negative impact on the functioning of the local market is greater since the body supervising the competition in Romania – the Competition Committee – is not always vigilant enough to detect and sanction on time any agreements between competitors regarding prices and other anti-competitive practices which affect both the quality of the competitive environment as a whole and the chances of local firms to compete on equitable principles on such a market. In the Romanian literature, there are several approaches of the behaviour adopted by domestic firms which were put in the situation to face an extremely tough competition with subsidiaries of foreign multinationals; this reaction could be classified as *defensive strategy*.

Since Romanian firms did not have sufficient financial resources available in order to be able to compete on equal positions with foreign giants, they gave up this approach, focusing on a niche market opportunity and seeking to minimize losses. On the other hand, multinationals invested significant financial resources which enabled technological transfer, and the impressive growth of operational profits of foreign companies in Romania was due to this advanced technology. Here is why the technological transfer – beneficial for the national economy – may have adverse reactions, since Romanian companies which operate on a market with reduced competition can go bankrupt.

3. CONCLUSION

Although they emerged relatively recent on the world economy scene, on overview of the magnitude and the outstanding growing trend of Russian multinationals proved that they are becoming redoubtable competitors within the global business environment.

The overwhelming economic force of these top companies allows them even to shape the growth pattern of their home country. The list of the largest multinationals from Russia showed that corporations from oil & gas and metallurgical sector are prevailing, as a consequence of the resource – based character of the Russian economy. The high level of profits reported by Russian multinationals can be explained through the peak values reached by oil prices prior the global economic crisis.

Multinationals from Russia have a strong impact not only on their own economic system, but on the host countries' economies too. In the Romanian case, these economic giants control the aluminium industry, much of the metal, iron and steel industry, two refineries and a quarter of the fuel market. Nevertheless, macroeconomic data on FDI by Russian multinationals in Romania is very scarce and this fact brought many limitations regarding the results of our analysis. In this respect, we intend to undertake several qualitative studies in order to bring to light the activities and the strategies adopted by the affiliates of Russian multinationals in Romania. A deeper analysis on the policy implications for Romania as a host country is also recommended.

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Annex 1. Russian Companies in the Forbes Global 2000 list. Year 2011

- Billion USD -

No.	Rank	Company	Sales	Profits	Assets	Market Value
1	15	Gazprom	117.6	31.7	302.6	159.8
2	68	Lukoil	114.4	10.4	90.6	55.3
3	71	Rosneft	59.2	11.3	106	79.6
4	90	Sberbank	31.8	6.0	282.4	74.0
5	149	TNK-BP Holding	60.2	9.0	37.1	51.6
6	200	Surgutneftgas	20.3	4.3	46.6	39.9
7	255	VTB Bank	12.6	1.9	139.3	26.4
8	339	Norlisk Nickel	12.7	3.3	23.9	37.9
9	429	Sistema JSFC	28.0	0.9	43.9	9.7
10	482	UC Rusal	10.9	2.9	26.5	11.1
11	529	Tatneft	10.7	1.5	18.5	15.1
12	587	Transneft	14.6	3.9	54.1	3.0
13	604	Novatek	5.4	3.7	11.9	43.2
14	649	Rostelecom	9.1	1.0	14	15.2
15	661	Novolipetsk Steel	8.3	1.3	13.9	14.0
16	712	IDGC Holding	18.3	0.7	25.1	5.4
17	767	RusHydro	13.7	0.3	21.3	11.4
18	831	Federal Grid	3.7	0.6	35.1	14.6
19	860	Severstal	13.5	0.6	19.3	14.6
20	988	Mechel	9.7	0.7	15.8	4.5
21	1034	Magnit	11.4	0.4	4.8	11.7
22	1234	Uralkali	1.7	0.5	2.4	23.9
23	1335	Magnitogorsk Iron & Steel	7.7	0.3	16.7	5.4
24	1354	X5 Retail Grup	11.2	0.3	8.6	6.7
25	1540	Bank of Moscow	2.9	2.2	27.4	6.0
26	1574	Inter Rao	2.6	0.4	5.1	11.2
27	1810	Polyus Gold	1.7	0.3	4	8.4
28	1810	TMK	6.8	0.4	6.9	3.0
Total	-	-	620.7	100.8	1,403.8	762.6

Annex 2. Skolvovo Ranking of Russian multinationals in terms of foreign assets, foreign sales and foreign employment

Company Name	Industry	Total Assets	Foreign Assets	Total Employ-ment	Foreign Employ-ment	Total Sales	Foreign Sales
Lukoil	Oil&Gas	59632	20805	150	22	81891	68577
Gazprom	Oil&Gas	276485	17236	445	9	97302	58415
Norilsk Nickel	Minerals	35696	12843	88	4	15909	14582
Evraz	Steel	16380	6221	127	13	12808	6856
Severstal	Steel	16717	5730	96	11	15245	8501
Sovcomflot	Transport	5300	4874	5,2	0,2	1243	1200
Rusal	Minerals	15631	4533	100	15	14300	10500
MTS	Telecom	10967	3812	24,7	5,3	8252	2071
Vimpel Com	Telecom	10569	3572	23,2	8,6	7171	1081
Novolipetsk Steel	Steel	13076	1594	60	2,8	7719	4816
PriSCo	Transport	1252	1208	1	0	164	137
TNK-BP	Oil&Gas	29128	1150	63	5,5	38665	29906
FESCO	Transport	2331	1055	3,2	0,6	872	n.a.
IMH/OAO Koks	Minerals	2901	978	23	3,4	1888	1142
Eurochem	Agri-chemicals	2646	901	24	1,0	3005	2373
InterRAO	Electricity	1188	799	16	14,0	1472	598
TMK	Steel	4676	606	48	3,1	4179	1185
Mirax	Develop-ment	n.a.	470	n.a.	n.a.	1300	55
GAZ	Automotive	2969	384	115	0,9	6224	1353
ChTPZ	Minerals	2708	262	25	1,7	3481	693
Acron	Agri-chemicals	1692	261	12	4	1266	938
Alrosa	Minerals	9274	231	35	0	3693	2133
Sitronics	Hi-Tech	1887	226	11	5,1	1620	1020
OMZ	Engineering	398	207	11,4	1,9	863	419
Ritzio Entertain-ment	Entertain-ment	397	200	19	6,9	1598	274

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* *Assoc. Prof., Ph.D., Romanian American University, Romania,* mgruiescu@yahoo.com
Prof., Ph.D., Romanian American University, Romania, amihai.ungureanu@yahoo.com
Prof., Ph.D., Academy of Economic Studies Bucharest, Romania, corina_ioanas@yahoo.com

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THE HERD BEHAVIOR AND THE FINANCIAL INSTABILITY

CRISTIAN IONESCU *

ABSTRACT: *Given the international financial situation of the last 50 years, and considering the complexity and severity of the financial crises, it is important to study the episodes of financial instability, and especially to understand both operating mechanisms and propagation mechanisms. One endogenous mechanism of financial instability is the herd behavior, which may increase the volatility and the amplitude of any sub-part of the financial system. This paper aims to analyze this phenomenon, considering the behavior of the financial market participants, the role of information in the making decisions process, banking responsibility regarding the herd behavior. The paper also illustrates two examples of herd behavior (run bank and the "too many to fail" problem), and presents three herding measures, in an attempt to achieve a quantitative analysis of the phenomenon, besides the qualitative analysis exposed above.*

KEY WORDS: *financial instability; herd behavior; financial markets; information; signals.*

JEL CLASSIFICATION: *E44; G12; G21; G23.*

1. MARKET PARTICIPANT BEHAVIOR, HERD BEHAVIOR AND FINANCIAL INSTABILITY

In the last years there has been a great interest in herd behavior in financial markets.

The behavior of participants may lead to mispricing assets and to the accumulation of risk in the financial system, which may lead to financial instability. Participants are influenced by different macroeconomic factors, such as a long period of low nominal interest rates and low risk premiums, which may lead to excessive leverage and risk taking. During long periods of prosperity, market participants

* *Assist. Prof., Ph.D. Candidate, Academy of Economic Studies, Romania,*
cristian.ionescu@economie.ase.ro

become complacent about the risk of loss – either through systematic under-estimation of the risks, or a reduction of the risk aversion due to increasing wealth.

Herding takes place when individuals or firms simultaneously act in a similar manner. Herding has different sources and can be associated with asset bubbles and irrational panic that leads to a market gridlock or to a quick reduction of prices in one or more markets. The increasingly rapid feedback contributes to the development of herding behavior. Therefore, in markets that do not have a system that collects information about the financial market activity, identifying the herding situation can be difficult.

2. HERD BEHAVIOR AND THE ROLE OF SIGNALS AND INFORMATION ON TRADING IN THE FINANCIAL MARKETS

In the financial markets, there are informed traders and uninformed traders sequentially trade an asset of unknown value. The price of the asset is set by a market maker. The presence of a price mechanism makes it more difficult for herding to arise, although there are cases in which it occurs (when there is uncertainty not only regarding the value of the asset but also regarding the occurrence of an information event).

Testing informational herd behavior is difficult. A trader herds if he trades against his own private information. The problem is that there are no data regarding the private information available to traders and, it is hard to know when traders decide not to follow it.

Herding can arise in financial markets. Through sequential trading, if the only source of uncertainty is the asset's fundamental value, traders will always find it optimal to trade on the difference between their own information (the history of trades and the private signal) and the commonly available information (the history only). Therefore, it will never be the case that agents neglect their information to imitate previous traders' decisions (i.e., they herd). In contrast, when there are multiple sources of asymmetric information between the traders and the market maker (e.g., asymmetric information on the asset's volatility) herd behavior may arise (Dasgupta et al., 2010).

An asset is traded over many days; at the beginning of each day, an informational event may occur, which causes the fundamental asset value to change. In this case, some traders receive private information on the new asset value. These traders trade the asset to benefit from their informational advantage over the market maker. If no event has occurred, all traders in the market are noise traders (they trade for non-information reasons only: liquidity or hedging motives). Whereas the informed traders know that they are in a market with private information (since they themselves are informed), the market maker does not. This asymmetry of information between traders and the market maker implies that the market maker moves the price too "slowly" in order to take into account the possibility that the asset value may have not changed (in which case all trading activity is due to non-informational motives). As a result, a trader, even with a bad signal, may value the asset more than the market maker does. Therefore, he will trade against his own private information and herd-buy (Dasgupta et al., 2010).

The precision of private information is an important parameter, which opens the possibility that informed traders may receive noisy signals, and that they may find it optimal to ignore them and engage in herd behavior. Therefore, the sequence by which trades arrive in the market is also important. Thus, it is impossible an estimation using only the number of buy orders or sell orders in a specific day and it is necessary to consider the entire history of trading activity of each day of trading.

Herd behavior arises in equilibrium and there is information content in the sequence of trades. Thus, informed may receive incorrect information. This has some consequences for estimates of trading informativeness.

Herd behavior generates serial dependence in trading patterns. Herding also causes informational inefficiencies in the market, like the price misalignment. If these fluctuations are severe, they may lead to financial instability.

If it is taken into consideration the parameter τ that measures the informativeness of the signals, when $\tau \to 0$, the densities are uniform and the signals are completely uninformative. As τ increases, the signals become more and more informative. For $\tau \in [0,1)$, the beliefs are bounded (no signal realizations, even the most extreme ones, reveal the asset value with probability one). For $\tau \geq 1$, the beliefs are unbounded (some high /low signal realizations are possible when the asset value is high /low and the signal is perfectly informative. As τ tends to infinity, the measure of perfectly informative signals tends to one.

An informed trader knows that an information event has occurred, and that the asset value has changed. His signal is informative on whether the event is good or bad. According to the received signal realization and to the precision τ, he is not completely sure of the effect of the event on the asset value. For example, he may know that there has been a change in the investment strategy of a financial unit, but he can't be sure of whether this change will affect the asset value in a positive way or a negative way. The parameter τ is a measure of the precision of the information that the trader receives, or the ability of the trader to process such private information. Given the signal structure, informed traders are heterogeneous, because they receive signal realizations with different degrees of informativeness about the fundamental value of the asset.

There are two aspects worth mentioning. First, an informed trader engages in herd-buying at time t of day d when he buys upon receiving a bad signal. An informed trader engages in herd-selling at time t of day d when he sells upon receiving a good signal. Thus, a trader herds when he trades against his own private information. Since traders receive different signals, at a given point in time, traders with less informative signals will herd, and traders with more informative signals will not herd. At any given time t, it is possible to detect if an informed trader herds for a positive measure of signals. If a trader is engaged in a herd-buying behavior, he buys despite a bad signal. Second, there is herd behavior at time t of day d when there is a positive measure of signal realizations for which an informed trader either herd-buys or herd-sells. Herd behavior arises because prices move "too slowly" as buy and sell orders arrive in the market.

At the beginning of an information-event day, there is a sequence of buy orders. Informed traders, knowing that there has been an information event, attach a certain probability to the fact that these orders come from informed traders with good signals. The market maker attaches a lower probability to this event, because he considers a great possibility that there is no information event, and that all the buys came from noise traders. Thus, after a sequence of buys, he will update the prices upwards, but by less than the movement in traders' expectations. Because traders and the market maker have different interpretations regarding the history of trades, the expectation of a trader with a bad signal may be higher than the ask price, in which case it herd-buys. Therefore, for any finite τ, herd behavior arises with positive probability. Herd behavior can be misdirected if an informed trader can engage in herd-buy (sell) in a day of bad (good) information event.

Herding can arise because of uncertainty on whether an information event has occurred. When $\tau > 1$, extreme signals indicate the true value of the asset, and traders will not herd. In the case of τ tending to infinity, all signal realizations are perfectly informative, and no informed trader herds. Even if there is a possibility of herd behavior, there is also allows a possibility that some traders (when $\tau > 1$) or all traders (when $\tau \to \infty$) will rely on their private information and will not herd.

The probability of herding also depends on others parameters. For example, when α (the probability of an information event) is close to zero, the market maker believes that there is no information event. He barely updates the prices as trades arrive in the market, and herding arises as soon as there is an imbalance in the order flow. But if α is close to 1, the market maker and the informed traders similarly update their beliefs, and herding will not occur.

Herding is also important for the informational efficiency of the market. During periods of herd behavior, private information is aggregated less efficiently by the price, as informed traders with good and bad signals take the same action. When traders herd for all signal realizations, the market maker is unable to make any inference on the signal realization from the trades, but he updates his belief on the asset value, since the action remains informative on whether an information event has occurred. Since the market maker never stops learning, he gradually starts to interpret the history of past trades more and more similarly to the traders and, as a result, the measure of herders shrinks.

During an information-event day, the measure of herders change with the sequence of trades, and it may become positive more than once at different times of the day. Given that information always flows to the market, the bid and ask prices converge to the asset value. In the end, the market maker learns whether a good event, a bad event, or no event occurred. The nature and severity of an event may lead or may not lead to financial instability (exogenous financial instability).

3. HERD BEHAVIOR, STOCK RETURNS AND FINANCIAL INSTABILITY

The trading behavior of institutional money managers implies that a tendency to herd (to imitate each other trades). Given the great number of these investors in financial markets, the price impact of institutional herding is very important.

Persistent institutional trading associated with the return reversals has economic implications on the price impact of institutional herding: a) institutions are affected by the behavioral bias that leads them; b) there are consequences of the reputational concerns of delegated portfolio managers: the need to impress investors' opinion creates endogenous herding: because better informed managers receive more correlated information, fund managers will trade in a correlated way, which leads to a excessively keen to buy /sell assets that have been persistently bought /sold in the past, which determines mispricing and return reversals; c) the negative association between institutional trading and stock returns is a result of the institutions' trade against the insiders that have superior information regarding the future cash flows; d) retail flows determine the relationship between institutional trading and return reversals: retail flows are negatively correlated with future returns, which, if are severe, will lead to financial instability.

Regarding the impact of institutional herding on the asset prices, it is characterized by a dichotomy. The short-term impact of institutional trade underlines that herding has a stabilizing effect on prices. The long-term impact of institutional trade underlines that herding predicts reversals in returns.

Regarding the short-term return, the magnitude of the positive short-term return that follows an institutional buy herd is higher when there are more institutional traders and, and smaller when herding becomes more persistent. Thus, positive short-term return following an institutional buy sequence is higher for stocks characterized by higher institutional trading. As institutional buying is persistent over time, the magnitude of the expected short-term return diminishes, which is totally different of what happens with long-term reversals.

The long-term return is related with two crucial quantities: the weight of the institutional traders' reputation and the measure of the market's level of optimism regarding the liquidation value of the asset conditional on the trade at t . Because of the longer sequence of consecutive institutional purchases, the market increases the level of optimism of the expected payoff. Thus, the magnitude of the negative long-term return that follows an institutional buy herd is higher when institutions take into consideration the reputation and when herding is more persistent. This means that the degree of reversal in long-term returns that follows an institutional buy sequence is higher for stocks that are traded by institutional managers with higher career concerns. The degree of reversal is higher when institutional herding behavior is more persistent over time.

Institutional investors (pension funds, mutual funds) tend to herd: they trade in the direction of recent institutional trades, while non-institutional traders (individuals) tend to trade as contrarians: individuals buy assets after prices decrease and sell assets after prices increase.

The link between market activity, mispricing, and return continuation is important in order to explain the interrelationships in the financial markets. High trading volume characterizes episodes of increasing mispricing, while reductions in mispricing are associated with less active markets. Thus, in the asset markets dominated by institutional traders, high trading volume is associated with increasing mispricing, which, measured by the expected long-term return obtained from purchasing the stock, will increase the market's belief about the liquidation value. In the situation of an optimistic market, trades can arise from optimistic fund managers (when the manager has positive information, making future managers keener to buy, which leads to the exacerbation of mispricing) or can arise from pessimistic proprietary traders (when proprietary trader has negative information, making fund managers less keen to buy, which leads to an amelioration of mispricing). These considerations may affect the stability of the financial sector, leading to endogenous financial instability episodes (Dasgupta et al., 2010).

4. HERD BEHAVIOR, THE RESPONSIBILITY OF BANKS AND INSTITUTIONAL ARRANGEMENTS

The risk position depends on what is happening to other banks or financial units and to the entire sector, the so called "aggregation problem" or "the problem of interconnectedness", related to "pecuniary externalities" aspect. There may be a correlated contagion between banks and other financial units. Considering the existing interdependencies, financial markets are not always efficient in providing correct price signals. If the value of the assets is reduced, a bank or other financial units must raise additional equity or sell assets in order to maintain its risk position. Therefore, the bank or the other financial units have a constrained behavior. De-leveraging of one bank or important financial unit affects the others and the whole sector. Therefore, the bank's (financial units') risk management must anticipate how the environment is going to change. In addition, when in a financial bubble the herd is running, those in charge must stay outside the bubble in order to remind everyone of the sustainable long-run equilibrium, i.e. the inter-temporal fix point. Such an inter-temporal fix point would have prevented some of the previous bubbles and it would avoid other financial exuberance episodes or financial instability episodes. Even if we take into account a better institutional infrastructure to manage the issue of interconnectedness of risks, it's the bank's (financial unit's) responsibility to be informed regarding the changing environment.

The necessity to include long-run aspects in a bank's (financial unit's) risk management reduces the possibility to increase profits through financial innovation. But if the bank (or other financial units) does not want to have a liquidity shortage (therefore to need to raise the capital or to sell its assets, it has to include long-run risks in its calculus.

In the same time, it's the interest of the banking sector / financial sector to propose international institutional arrangements that prevent failures. If the behavior incentives are false, if moral hazard prevails and if price signals are misleading, the risk of the banking sector / financial sector is endogenous.

However, voluntary instability-preventing institutional arrangements are difficult to acquire. One reason is that banks (or other financial units) have a strong interest in financial innovation. Therefore, by developing new financial products, banks (or other financial units) can make a profit relative to their competitors. Thus, they try to outbid themselves in new products, and the banking sector is exhibiting a herding behavior. Therefore, there is a need for regulation. However it is unknown how an efficient institutional design of the financial sector (comprising rules laws and regulatory mechanisms) should look like.

5. HERD BEHAVIOR - DEPOSIT BANK RUN AS A MANIFESTATION OF HERDING: EFFECTS ON FINANCIAL STABILITY

Some financial units receive information regarding the payoffs to the risky long-term assets, while the uninformed financial units coordinate on the number of early withdrawals observed (Lai, 2002). Information spillovers, together with payoff externalities, lead to a panic bank run. Depositors receive preference shocks and impatient depositors withdraw early. The ratio of impatient depositors is uncertain and there is aggregate liquidity risk in the economy.

Banks offer deposit contracts that promise depositors, who deposit 1 unit of endowment at date 0, a return 1 at date 1 or an equal share of bank profits at date 2. Each impatient depositor withdraws at date 1. Patient depositors may withdraw some or all of their deposits at date 1. Suppose that a patient depositor leaves the amount $k \in [0,1]$ in the bank (withdraw $1-k$); the amount k is reinvested and yields Rk, where R is a random variable, which takes on a high value, $H > 1$, with probability p, and 0 with probability $1-p$. There is an externality in consumption; therefore, the available amount for consumption at date 1 depends on the aggregate level of consumption desired at that date, or,

$$c_1 = \begin{cases} 1-k & \text{if } K \le Km \\ (1-a)(1-k) & \text{if } K > Km \end{cases}$$

where K is aggregate reinvestment at date 1.

Consumers do not know if they are patient or impatient until date 1. However, some of them t are impatient, where t is a random fraction. At date 1, the t can have one of the three values: $t \in \{0, t_1, t_2\}$, with probabilities r_0, r_1, r_2. In addition, a random fraction of patient depositors α receive perfect information about prospective date 2 returns. α is realized at date 1 and can have one of two values, $\alpha \in \{0, \alpha m\}$, with probability $1-q$ and q. The informed depositors will decide how much to leave in the bank based on their information $k^i(R)$. They will withdraw based on the poor fundamentals ($k^i(R)$=0). The uninformed depositors will notice the aggregate reinvestment level and will recognize that the aggregate level of date 1 investment contains information about the informed depositors' signal. The uninformed depositors will try to extract the information, and will try to condition their withdrawals on aggregate investment, $k(K)$. When uninformed depositors notice a low level of aggregate investment, they cannot say whether it is because of the high proportion of impatient depositors $t = t_2$, or whether informed depositors had received bad news, $R = 0$. Aggregate investment at date 1 is given by the equation:

$$K = \alpha (1 - t)k^I(R) + (1 - \alpha)(1 - t)k(K)$$

Thus, the uninformed individuals observe the alignment at the bank but are unable to say whether depositors in the alignment are impatient depositors or informed depositors who have received bad news.

There are conditions under which a panic equilibrium exists where all depositors withdraw ($K = 0$) upon observing a high level of withdrawals even if no informed agents have received bad news about asset returns. Therefore, bank runs can occur when fundamentals are poor or when liquidity needs are high.

Thus, bank runs imply a herd situation where agents observe private but noisy signals and take action based on the private signals and publicly observable actions of agents that preceded them.

Agents have to make similar decisions. They face a discrete action space in which the number of actions is limited. Information is private and imperfect, but actions can be publicly observed, leading to "social learning" in which agents who have not taken action try to infer other agents' information from their actions. Therefore, the herding appears where the agents disregard their private information and rely only on public information. In addition, it is possible that agents "herd" on a wrong choice. An information cascade takes place when no new information is revealed by the agents' actions. In any herding situation, the information structure implies that an information cascade occurs when agents herd. Once a cascade appears, with agents herding on a particular action, the cascade persists. The continuity of signals leads to the fragility of cascades and even to financial instability; but a contrary action or small amounts of new information can reverse an existing cascade. Therefore, the herding behavior may be rational.

6. TOO MANY TO FAIL AND BANK HERDING

If it is considered a situation of two banks with asymmetric sizes, a big bank and a small bank, it is possible to emphasize the effects of "too-many-to-fail" problem. The big bank has incentives to differentiate itself (because the big bank can acquire the small bank when it fails and because the bailout subsidy of the large bank does not increase when the small bank fails), while the small bank has incentives to herd with the big bank (because the small bank has no opportunity, or limited opportunity and because the bailout subsidy for the small bank increases when the big bank fails).

There can be supposed two not-equal-sized banks: bank A is the large bank and bank B is the small bank.

Figure 1 shows four situations: a) SS (both banks survive); b) SF (bank A survives, bank B fails); c) FS (bank A fails, bank B survives); d) FF (both banks fail).

In the state SF, the large bank has sufficient funds to purchase the small bank. Thus, the regulator sells the small bank to the large bank; it is assumed that the size of bank A is sufficiently large, so that the available funds of the small bank are not sufficient to acquire the big bank. Therefore, in state FS, assets of the big bank are purchased only by outside investors. If the cost of bailout is smaller than the misallocation cost, the regulator bails out the big bank, otherwise it is liquidated to outsiders. Therefore, the closure/bailout policy for the regulator is as follows: a) in state SF, the big bank acquires the small bank; b) in state FS, the big bank is bailed out; otherwise it is liquidated to outsiders; c) in state FF: either both banks' assets are sold to outsiders, either the regulator bails out both banks; d) the regulator does not intervene in state SS (Acharya & Yorulmazer, 2007).

Regarding the banks' choice of correlation, in the state FS, the small bank cannot acquire the big bank. Therefore, there is no additional gain for the small bank to be the only survivor, while in the state FF, the small bank may benefit from the bailout. The small bank does not have any incentive to differentiate itself from the big bank: it is indifferent between the low and the high correlation or prefers to be correlated with the big bank.

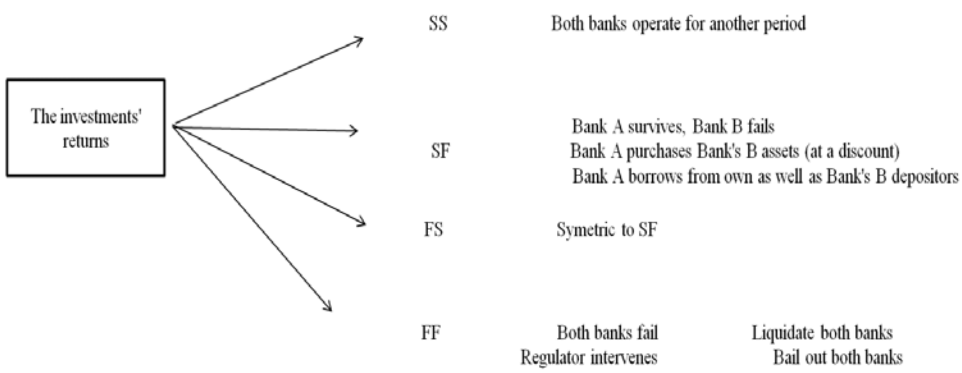

Figure 1. Bank failing – bank surviving

The case of the big bank is different: when the big bank is the only survivor, it can acquire the small bank's assets at a discount, which creates incentives to differentiate. Regardless of the situation of the small bank (in both states FS and FF), the big bank will be bailed out, and it will not have any incentive to herd or to differentiate. Therefore, the two banks have different and conflicting incentives.

If we take into consideration a more realistic situation, the one that includes n banks, where each bank invests either in a common asset or in a bank-specific asset, the resources of surviving banks may not enough to purchase all the failed banks when the number of bank failures is large. Therefore, the "too-many-to-fail" problem also arises as an n-bank situation, in which a severe contagion and spillover externalities may lead to financial instability.

When the number of bank failures is high, the regulator believes that ex-post is optimal to bail out the failed banks in order to avoid losses resulting from the closure and liquidation of banks, while when the number of bank failures is small, failed banks can be saved by acquiring them by other surviving banks; thus, during financial crises that affect a significant portion of the banking industry (systemic crises), the market solution involves the private sector participation in the form of acquisition of failed banks. Thus, the regulator bails out banks during systemic banking crises, but during minor crises it resorts the resolution to the private sector. This is an incentive to banks to herd and to increases the risk of a large number of banks failures. While the "too-big-to-fail" problem affects the large banks, the "too-many-to-fail" problem affects small banks, giving them incentives to herd. Thus, the regulator loses credibility by not being able to implement a consistent over time resolution policy. The policy of bailing out banks during systemic crises creates herding incentives for banks (in order to increase the likelihood of being bailed out), resulting in too many systemic banking crises (by lending to similar industries or by betting on common risks, such as interest and mortgage rates). Therefore, to prevent this kind of situation, the regulator must implement a policy that does not involve the rescue of banks (although this kind of policy is not credible when systemic crises or financial instability episodes occur).

The central banks are seen as crisis managers, which can rescue banks in times of financial instability. The central banks also have the role of crisis prevention, using prudential regulation to mitigate the systemic risk (the risk that many banks fail together). But the crisis-prevention role of a central bank is in conflict with the crisis-management role, because of the lack of commitment in optimal policies, which induces bank behavior to increases the probability of systemic banking crises and financial instability episodes.

It is important to underline that there may be other sources of bank herding and that the "too-many-to-fail" channel of bank herding may be complementary to the other channels (like bank herding based on reputational considerations and herding by banks to exploit their limited-liability options).

The "too-many-to-fail" problem is prevalent in those banking systems (a) where the governance of banks is poor (where agency problems, like fraud by bank owners, are severe, and therefore banks are required to hold a high equity stake for incentive reasons; (b) where the fiscal costs of bailing out banks are high (Acharya & Yorulmazer, 2007).

7. HERDING MEASURES

There are three mainly used herding measures.

The first measure takes into consideration the number of buyers of asset i in quarter t as a fraction of the total number of active traders in the stock:

$$p_i^t = \frac{number\ of\ buyers}{number\ of\ buyers + number\ of\ sellers}$$

This represents a measure of trade imbalance. Each quarter p_i^t is ranked into two groups and the values of p_i^t are considered above the median as an imbalance of buys and values of p_i^t below the median as an imbalance of sells.

The second herding measure includes a buy herding measure and a sell herding measure. The measure of buy herding is:

$$BHM_{i,t} = (|p_i^t - E[p_i^t]|) - AF_{i,t}(|p_i^t > E[p_i^t]|)$$

The measure of sell herding is:

$$SHM_{i,t} = (|p_i^t - E[p_i^t]|) - AF_{i,t}(|p_i^t < E[p_i^t]|)$$

where p_i^t is the proportion of buyers among all institutions trading asset i in quarter t ; $E[p_i^t]$ is the expected proportion of buys for stock i during quarter t , estimated as the fraction of all trades across all assets that are buys during quarter t ; $AF_{i,t}$ is the adjustment factor that allows for random variation around the expected proportion of buys and sells under the hypothesis that institutions trade randomly and independently. The factor is calculated separately for the buy and sell herding measures, conditional on $p_i^t > E[p_i^t]$ or $p_i^t > E[p_i^t]$ (Dasgupta et al., 2010).

The herding persistence is measured by counting the number of consecutive quarters during which a stock exhibits buy or sell herding, using both the herding measure p_i^t and the signed herding measures $BHM_{i,t}$ and $SHM_{i,t}$. The herding persistence is considered to have values between $-n$ and n , where a value of $-n$ indicates that a stock exhibits persistent sell herding (low p_i^t) for n or more consecutive quarters, and a value of n indicates that a stock exhibits buy herding (high p_i^t) for n or more consecutive quarters. For trading persistence based on the signed herding measures, a value of $-n$ indicates low buy or sell herding (low $BHM_{i,t}$ or low $SHM_{i,t}$.) for n or more consecutive quarters, while a value of n indicates intense buy or sell herding (high $BHM_{i,t}$ or high $SHM_{i,t}$.) for n or more consecutive quarters.

The persistence measure based on herding indicates a negative relation between herding persistence and stock returns. For the signed herding measures, the persistence of intense buy herding predicts negative future returns, while the persistence of intense sell herding predicts positive future returns.

The third herding measure makes a distinction between the theoretical studies that have tried to identify the mechanisms through which herd behavior arises and the empirical literature that followed a different path. The empirical literature does not test the theoretical herding models directly, but analyzes the presence of herding in financial markets through statistical measures of clustering. In some markets, fund managers cluster their investment decisions more than would be expected if they acted independently. This is important, as it reveals the behavior of financial market participants. But the decision clustering may or may not be due to herding (for example, it may be a result of a common reaction to public announcements). Therefore, it is very difficult to distinguish between spurious herding and true herd behavior.

CONCLUSIONS

Although most of the literature speaks about various factors affecting financial stability, such as information, asset bubbles, weak balance sheets of banks or other financial units, inadequate monetary policies and so on, however there are few studies addressing the topic of herd behavior, which has important theoretical and empirical implications, given the links and interconnections between financial market participants.

To sum up, herd behavior can be both irrational and rational. An irrational herd behavior is based on psychological factors that determine the course of the action of the financial actors (therefore, there are no objective factors of action). A rational herd behavior (profit-seeker) may result in an economic and financial boom, but in time leads to (endogenous) financial instability.

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INCOMPLETE MARKETS AND FINANCIAL INSTABILITY. THE ROLE OF INFORMATION

CRISTIAN IONESCU *

ABSTRACT: *Considering the way that the world economy has evolved over the last 30-40 years, there was a transition from a predominant real economy to a predominant financial economy. Once, there were prevalent economic crises (when the real economy was important); today, the economies all around the world face prevalent financial crises; therefore, it is extremely important to study the role of financial markets, especially the incomplete markets feature (given by the imperfect information). The paper aims to analyze the relationship between imperfect information and incomplete financial markets and the way they are affecting the financial stability.*

KEY WORDS: *financial instability; imperfect markets; incomplete markets; imperfect information; monetary policy; financial markets.*

JEL CLASSIFICATION: *E44, G12, G14, G21, G23.*

1. INFORMATIONAL CHANGES, TRADE, WELFARE AND FINANCIAL INSTABILITY

The value of information in a competitive economy in which agents trade in the asset markets in order to reallocate risk is very important, because information allows a welfare improvement when portfolios can be freely reallocated. If markets are sufficiently incomplete, the welfare effects are arbitrary: there are changes in information that may improve or worsen the situation of all financial units.

Information can reduce or improve the welfare in a market setting decision-making context. Thus, the negative effect on welfare of an increase in the available information to the market participants is due to changes in prices, induced by a change in information, that alter the budget sets of financial units.

* *Assist. Prof., Ph.D. Candidate, Academy of Economic Studies, Romania,* cristian.ionescu@economie.ase.ro

If the markets are incomplete, there is a second welfare effect. Additional information allows the agents to achieve a larger set of state-contingent payoffs by conditioning their portfolios on this information. Thus, the value of information in a financial market economy has a negative component and a positive component.

Regarding the welfare changes, the financial units' welfare before a change in information is different from the agents' welfare after a change in information. If markets are sufficiently incomplete, equilibrium welfare effects are arbitrary: there are informational changes that improve or worsen the situation of all agents or of any subset of agents. Therefore, the pecuniary externalities created by the price changes can outweigh the value that a change in information might otherwise have for any individual agent. Thus, when both the positive and negative effects are present, the net effect can go in any direction. The welfare effects involve changes in real asset payoffs (through changes in the price level), in asset prices, and in relative spot commodity prices (Gottardi & Rahi, 2010). These asset fluctuations may lead to financial instability episodes.

2. IMPERFECT MARKETS, IMPERFECT INFORMATION, BILATERAL TRANSACTIONS AND FINANCIAL INSTABILITY

In many bilateral transactions, the seller takes into account the possibility of being underpaid. There are many types of contracts seen as solutions to the "smart buyer problem" (the buyer has superior information about the valuation of the good and about the common value component), which involve the grant the seller upside participation. In contrast, the lemons problem calls for offering the buyer downside protection. Therefore, the contracts associated with the lemons problem can also be the case of the smart buyer problem.

There are plenty examples of buyers with private information, where the less informed seller faces unfavorable terms of trade, which creates a trade friction (the inverse of the lemons problem, where the seller knows more about the value of the asset, so the buyer hesitates because the seller may overestimate the value to raise the price). In the smart buyer problem, the buyer knows more about the value of the asset, so the seller hesitates because the buyer may underestimate the value to reduce the price. This difference implies different signaling incentives.

There are three important aspects of the smart buyer problem: a) the problem is important in practice; there are trade situations that suffer from the smart buyer problem (royalties, cash-equity bids, earn-outs, debt-equity swaps, gross points and concessions); b) although the lemons problem (which gives the uninformed party downside protection) and the smart buyer problem (which gives the uninformed party upside participation) require opposite theoretical solutions, the resulting contracts are similar; c) although the two information asymmetries determine identical contracts shape, they can lead to an opposite relationship between contract shape and underlying value (Burkart & Lee, 2012).

In the smart buyer problem, the buyer has informational edge over the seller; in the lemons problem, the seller has informational edge over the buyer. These two types of situations have different signaling incentives: an informed buyer wants to induce a low value, while an informed seller wants to induce a high value.

This difference is also reflected in the solutions of these problems. Signaling a high value involves downside protection, where the uninformed party is recompensed if expectations are not met. Signaling a low value involves upside participation, where the uninformed party is recompensed if expectations are surpassed (Burkart & Lee, 2012). These claims (figure 1) represent standard securities, debt for the buyer and equity for the seller.

Therefore, the solutions to the lemons problems and to the smart buyer problems result in equivalent contracts. For example, debt issuance is linked to private information of the issuer, where debt protects less informed investors from buying overvalued securities. But debt is also optimal when the issuer deals with better informed investors. Thus, debt protects the issuer from selling undervalued securities.

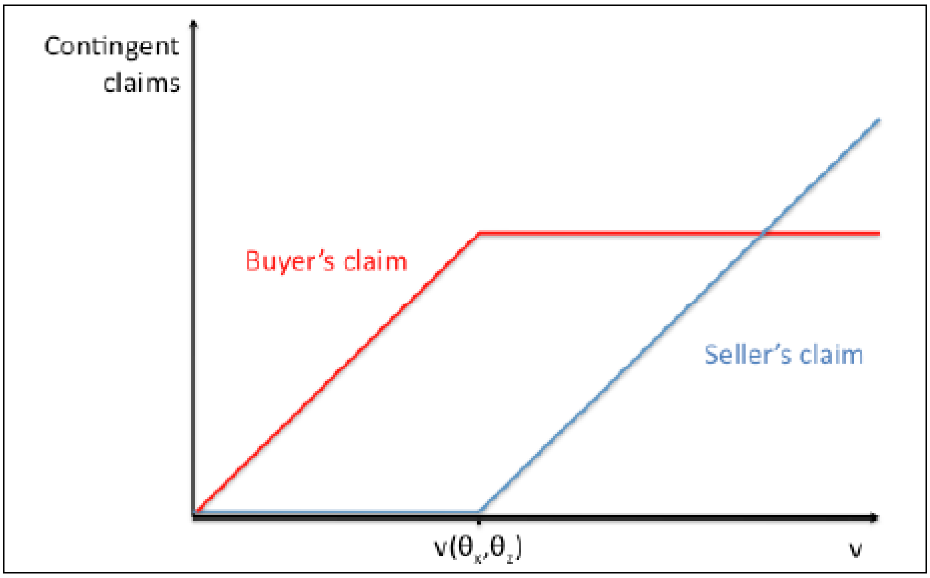

Figure 1: The graph illustrates the security design solution under limited liability. It plots the value of contingent claims granted to the buyer and the seller as functions of total realized value (v). The seller receives equity (blue line), and the buyer receives debt (red line)

There are many other examples. If we take into consideration the cash-equity payments in mergers and acquisitions on the financial markets, the reason for the use of equity involves the assumption that target shareholders have private information about the target. The use of equity is rational when the acquirer has private information about the target. Similarly, royalties can convey information from licensors to licensees, but from licensees to licensors also. Analogous arguments are available to other contractual provisions, such as earn-outs.

The solution equivalence is due to the fact that the claim structure is identical, and due to the fact that the lemons problem and the smart buyer problem involve asymmetric information about a common value component.

Because the contractual solutions are identical, real-world contracts are not sufficient in identifying the underlying information problem. For example, signaling costs are tolerated by the seller in the lemons problem, while they are tolerated by the buyer in the smart buyer problem. Thus, the identification of the party that is willing to pay the third-party verification helps discriminate between the two information problems. But in real life it is not easy to attribute these expenses to any of the party.

It is possible to study the way the contracts relate to the common value, which denotes the distribution of rents across common value types. This relation changes with the identity of the informed party.

Figure 2a illustrates the relation between trade quantity x (the signaling instrument) and common value θ_x. If the informed party wants to buy, the relation is positive (green line); if the informed party wants to sell, the relation is negative (grey line).

Figure 2b illustrates the linear sharing rules, where the seller's equity stake α is the signaling instrument. In smart buyer problems, α and θ_x are inversely related (green line), so the sellers receive more equity when common values are lower. In lemons problems, they are positively related (grey line), so the sellers keeps more equity when common values are higher.

If we take into consideration a financial unit that issues equity, we may suppose that:

- the issuer is better informed than the investors (who are unwilling to pay a high price if the issuer faces smaller risks);
- the investors are better informed than the issuer (who wants a high price if the investors faces larger risks).

Thus, uninformed investors buy less for more, and uninformed issuers sell less for less, the relations between quantity and price being opposite.

If we take into consideration a cash-equity offer in mergers and acquisitions on the financial markets, the less informed acquirer is not willing to pay a high if the owners are not willing to accept a large part of the consideration in equity. In the contrary, a more informed acquirer has either to pay a high price either to offer a large part of the consideration in equity, the relations between equity considerations and price being opposite.

In some markets, information frictions are mitigated by expert intermediaries, who buy and resell the assets. The intermediary contracts imply an information problem. If it is taken into consideration an entity that wants to sell but it has no expertise in assessing its value (θ_x), the seller contracts a specialized dealer, that buys the asset for θ_x and pays a supplementary amount if the asset is resold for more than $\theta_x + \varepsilon$, where ε is the dealer commission. Because the dealer is experienced, the last buyer is unable to buy the asset for less than θ_x.

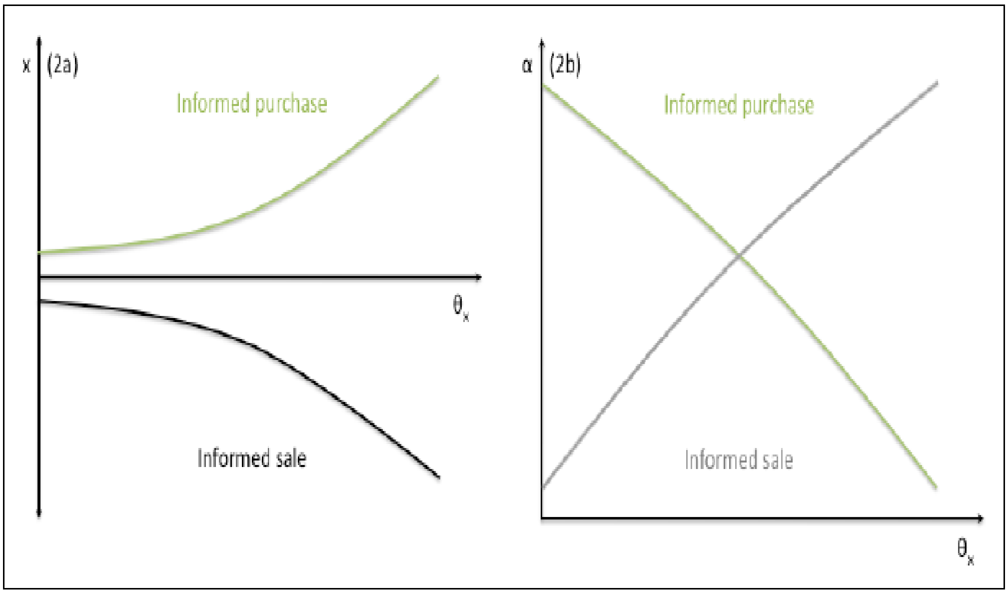

Figure 2: The two graphs illustrate that the smart buyer problem (informed purchase) and the lemons problem (informed sale) can imply opposite predictions about the relationship between the underlying common value and the signaling instrument. The left graph shows this for trade rationing; the right graph shows it for linear sharing rules

Therefore, informed intermediation has two advantages: a) the intermediary does not buy the asset for its own use, case in which the seller is back to the original problem; b) the resale generates information regarding θ_x, highlighting the inefficient signaling through trade failures. In the real life, such informed intermediation is provided by market-makers (the case of stock exchanges) or underwriters (the case of capital markets).

Regarding the information problem, it is important to emphasize that the intermediary has different contracts with the informed parties and with the uninformed parties. In the case of the smart buyer problem, the intermediary has a contingent contract with the seller and a cash transaction with the buyer. In the case of the lemons problem, the intermediary has a contingent contract with the buyer and a cash transaction with the seller. This asymmetry regarding the way that the intermediary interacts with the seller and the buyer implies an information problem.

3. COMPLETE / INCOMPLETE MARKETS AND FINANCIAL INSTABILITY

Credit risk associated with interbank lending may lead to domino effects (the failure of a bank leads to the failure of other banks even if they are not directly affected by the initial shock), leading to financial crises, which are the most severe form of financial instability. The risk of contagion depends on the pattern of interbank linkages. In a complete market structure, banks hold deposits with banks of other regions in order to ensure the necessary liquidity against liquidity shocks in their region, which may have two meanings: a) a geographical region; b) any grouping of banks. If one bank faces a shock, it has to acquire the necessary liquidity by withdrawing on its deposits at other banks before liquidating long-term assets (premature liquidation of the long-dated asset is very costly; for example, abandoning the real investment projects or interrupting the long-term lending relationships).

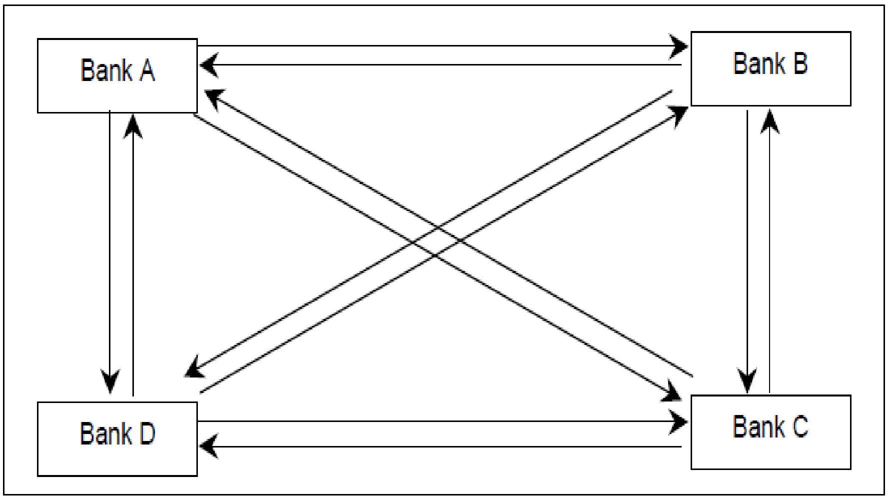

Figure 3. "Complete market structure"

The interbank market can redistribute liquidity, but cannot create liquidity, which may lead to a contagion if the aggregate liquidity need is higher than the aggregate holdings of liquid assets. In order not to liquidate the long term assets, banks withdraw their deposits at other banks, spreading their illiquidity throughout the financial system. The possibility of contagion depends on the structure of interbank claims. Therefore, there is a small probability to occur in a complete structure of claims, where every bank has symmetric linkages with all other banks in the economy (figure 3). Incomplete market structures, where banks have links only to the neighboring institutions (figure 4) are more fragile.

Interbank lending arises from consumers' uncertainty about *when* and *where* to consume. Interbank credit lines diminish the overall amount of liquid (but costly) reserves. Thus, contagion can appear even if all banks are solvent. If a high proportion of depositors from a great number of banks believe that they will not obtain payment, it is beneficial to them to withdraw their deposits, meaning that the banks will liquidate their investments, and will determine a bank run where all the depositors will withdraw their deposits and the banking instability transforms into financial instability. With the exception of the contagion resulted from the behavior of the non-banks, the interbank connections enhance the resiliency (the ability to resist shocks) of the financial system; the weaker the resiliency, the higher chances of endogenous financial instability episodes. Thus, the interbank credit lines offer a subsidy to the insolvent bank, which will spread part of its losses to other banks (Upper & Worms, 2001).

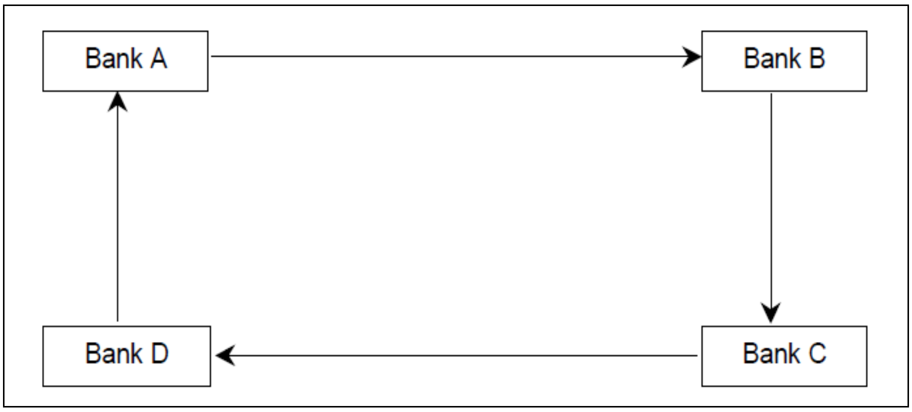

Figure 4. "Incomplete market structure"

Therefore, interbank lending contributes to loosening market discipline. A complete structure of claims diminishes the risk of contagion, while incomplete structures increase the fragility of the financial system, leading to financial instability.

4. INTER-DEALER TRADING, MARKET MECHANISM AND FINANCIAL INSTABILITY

Regarding the determinants of agents' choice of market mechanism in the context of inter-dealer trading, in some dealership markets (the foreign exchange market, the government bond market, the stock exchange equity market), inter-dealer trading has a great percentage from the total trading. In addition, these markets offer dealers two choices of trading mechanisms: a) dealers can trade directly with each other; b) dealers can place an order through one of the inter-dealer brokers (Saporta, 1997).

The inter-dealer trading has important effects on the price formation mechanism. In the foreign exchange market, the inter-dealer trading has an important role in disseminating the information.

To study the dealers' choice of inter-dealer trading and to analyze the implications of the choices for the outside investors, it can be used a three-stage model: 1) dealers decide if they enter the market-making of the asset; 2) one of the dealers trades with an informed outside client; 3) the dealer, who has executed the outside investor's order, decides whether it wishes to unwind the inventory trading directly with another dealer or whether to submit an order to the inter-dealer broker (Saporta, 1997).

The direct inter-dealer market is a standard competitive quote-driven market, where price competition between dealers leads to price schedules that in equilibrium reduces to nullity the expectations of the dealers of making a positive surplus. The inter-dealer broking system is a typical order-driven trading mechanism, where dealers pay a fixed brokerage fee in order to submit their orders to the broker. The broker clears the market and determines the price. In equilibrium, dealers expect a positive surplus.

Trading motivation in the inter-dealer market is a result of the second stage dealer-client, where the client have private information about the value of the asset and wants to trade a fixed amount for liquidity reasons. The market is opaque (for example, the foreign exchange market, the government bond market, the stock exchange equity market), where the transaction details about the trade between the client and the dealer remain confidential until the end of the inter-dealer trading session.

The dealer's third stage choice of inter-dealer trading is related with the number of dealers who enter the market-making industry, because there are differences between the institutional structures of the two inter-dealer market mechanisms. In the direct market dealers compete in prices; in the brokered market dealers compete in demand schedules.

If there are two or more dealers that compete for the incoming inter-dealer order flow, the risk-sharing opportunities from the direct market are not dependent of the number of dealers. But the risk-sharing opportunities from the brokered inter-dealer market increase the number of dealers who enter the market-making industry. Thus, there are some dealers that outweigh the competitive benefits of the bilateral market if the number of dealers exceeds the number the risk-sharing benefits of the brokered market; in this situation, the brokered market predominates; in an opposite, the direct market predominates.

Regarding the transparency and information asymmetry on dealers' choice of inter-dealer trading venue, the increase in information asymmetry or financial market transparency diminishes the liquidity of the brokered order-driven market much more than in the situation of the direct quote-driven market. Therefore, the increase in information asymmetry or market transparency determines an increase in the required number of market participants needed for the order-driven system to prevail.

But, in the absence of information asymmetry, a raise of the risk-aversion, a raise of the volatility of the asset and a raise of the liquidity trading shifts the inter-dealer trading from the direct market to the broker (this is applicable for those markets where trading on private information is not significant, such as the government bond market), which finally leads to financial instability.

5. IMPERFECT INFORMATION, MONETARY POLICY AND FINANCIAL INSTABILITY

Regarding the effects of imperfect information on the monetary policy rules, there are three important aspects: a) setting a self-oriented monetary policy rule which responds to unexpected shocks in a predictable manner leads to welfare gains, even if central banks do not have perfect information about the financial sector; b) better information about the state of the world economy has ambiguous welfare implications (on the one hand, better information allows policymakers to respond appropriately to common shocks; on the other hand, because the better information allows policymakers to respond to a wider set of shocks, this can generate spillover effects which are not necessarily internalized); c) gains from international monetary co-ordination under perfect information are greatest when productivity shocks are negatively correlated between countries (Tan & Tanaka, 2008).

The gains from international monetary policy co-ordination are sensitive to the economic frictions, like financial market structure, nominal rigidity and exchange rate pass-through. International monetary co-ordination is irrelevant in a world of complete financial markets, because the availability of state-contingent assets eliminates the need for international risk-sharing through monetary policy. The gains from international monetary co-ordination are higher in the situation of the incomplete financial markets than under the situation of financial autarky. In addition, the gains from international monetary co-ordination are higher when financial markets are incomplete and the initial holdings of foreign assets are asymmetric across countries.

In addition, the activist policies (Nash policies or coordinated policies) induce high levels of welfare gains in comparison to passive policies if central banks learn about the 'true' monetary transmission mechanism and if central banks update their beliefs regarding the foreign productivity shocks after observing domestic shocks.

Therefore, the presence of nominal rigidities and credit frictions leads to a inflation variability - output variability trade-off. Since an output reduction leads to a reallocation of resources toward less productive agents, it will result in large future deviations of output from its efficient level. Therefore, there is a trade-off between the rise in inflation after the shock and the reduction of the future output relative to its efficient level. A large reduction in output variability can be achieved by allowing only a small amount of inflation variability. Thus, the financial instability reflects itself in economic instability, affecting the real economy as well.

CONCLUSIONS

To sum up, information plays an extremely important role in the financial markets. Thus, given that financial market participants interact between them depending on the available information and depending on the risk aversion, there are processes in the markets that can be destabilizing, both for financial markets and for other markets (through spillover effects), but also for entire national economy, regional economy or world economy.

Thus, the behavioral patterns caused by information and / or the type of information have either wave-type effects (which erodes the resistance of the financial system over time in a slowly manner) or mass-type effect (which sharply erodes the resistance of the financial system). Understanding the information and understanding the lack of information and the behavior induced by the lack of information are essential in approaching the action strategies of the financial market participants, which may trigger the mechanism of propagation of financial instability.

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REFORM, ORGANISATION AND CONSOLIDATION OF THE ROMANIAN BANKING SYSTEM

ION Gr. IONESCU *

ABSTRACT: *Banking system, making the economic environment and the resources it provides, the subsystem consists of macro economic and social. He is in continuous interaction with the economic environment, which takes "input" in various forms - human, financial, information they process into "outputs" - products and banking services, financial derivatives used in banking, financial and banking information, etc. In other words, and the banking system is now an open system. What is specific to open systems, and hence the banking system is that it regulates activity by reverse connection (feed back), so they are capable of self.*

KEY WORDS: *banking system; input; output; National Bank; banking reform; money.*

JEL CLASSIFICATION: *E58; O52; P11.*

1. BANKING SYSTEM IN THE ECONOMY AREA

Market economy implies a banking system able to ensure the mobilization of economic and monetary cash orientation for conducting efficient business. In a market economy, the banking system serves as the attraction and concentration of company savings and channeling them through an objective and impartial allocation of credit, the most effective investment. In carrying out this first function, the banks, that link the base system, watch how borrowers use borrowed resources. Banks provide and facilitate payments, provide risk management services and are the main channel of monetary policy transmission.

Through the collection of financial resources, while placing on the market, through loans, discount operations and other financial market operations, banks serve as intermediaries between owners and users of capital.

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* *Lecturer, Ph.D., "Dimitrie Cantemir" Christian University, Romania,* iionescu_levant@yahoo.ca

In exercising its diversity of operations, banks acting on their behalf, on their own account, depositors and borrowers have no legal ties between them. In fact, bank deposits and managing means of payment in the economy. Thus, collecting deposits, banks are responsible for their efficient management, with maximum efficiency, for their own benefit and depositors. In order to achieve the final objectives, the Central Bank aims to establish internal and external value of domestic currency, while making available the national economy of optimal quantity of money, need growth.

2. INTEGRATION OF THE ROMANIAN BANKING SYSTEM IN COORDINATES, STRUCTURE AND FEATURES EUROPEAN BANKIHG SYSTEM

Due to the history and the peculiarities of the transition to a market economy, the Romanian banking system has some issues and common problems with state banking systems of other countries. In Romania was created a banking system on two levels: National Bank of Romania, the central bank and commercial banks (Cernea, 1994, p. 6). The evolution and transformation, the Romanian banking system has gone through many stages of evolution.

3. THE FIRST PHASE OF BANKING REFORM

The first phase of banking reform was the specialization and division, conducted between 1991-1996. Specialization - in terms of savers, is limiting production of certain products or in other words, producing a limited range of products. In this context, specialized bank may be regarded as the policy of the various banks, only to certain services, operations, bank products.

The notion of sector can be defined as a special type of specialization that is the policy of the bank to certain areas of the economy - sectors of the economy. Romania has a higher potential growth and development of banking, both in customers, corporate and long term in individuals. Thus, since 1990, the Romanian banking have produced a series of key changes, outlined the main stages of development banking.

Restructuring and development of the Romanian banking system is a vast and complex process, conducted mainly on two aspects: institutional and functional. Thus, institutional restructuring of the banking system included, on the one hand, the reorganization of the National Bank and transform it into a true central bank, on the other hand, developing a network of commercial banks. This was done both through the modernization of existing banks and by establishing new state-owned banks, private or mixed, but also with foreign capital participation.

According to Law 33/1991, banking in Romania is organized and conducted by:

- National Bank - the role of central bank; (Pîrvu, 2005, p. 173)
- The banks - up as companies. (Monitorul Oficial, nr. 70, 1991)

Currently, the National Bank Act nr.101/1998 operating under the Statute entered into force on July 1, 1998.

The new banking legislation, the National Bank was relieved of all the functions of commercial banks, which are taken at the time mentioned, a newly established bank, Romanian Commercial Bank.

Functions of the National Bank, currently consisting of "control of issuing money and interest rates, preventing bank failures, authorization and supervision of operator duties as banking and credit, banking, foreign exchange policy and administration of international monetary reserves". (Pîrvu, 2004, p. 32)

Banks such as "Romanian Foreign Trade Bank, Agricultural Bank, Investment Bank, based on government decisions, have been transformed into commercial banks, state-owned and domestic private, approving them the statutes and the new organization and operation.

“Banks were established domestic and foreign private capital and branches of foreign banks". (Constantinescu, 1997, p. 83) Banks were obliged to open up correspondent accounts at National Bank and other accounts and to refinance at this, in such conditions.

Creation of private banks contributed both to a better coverage of capital needs and to develop competitive process, with benefits for economic, national economy as a whole.

“The main objective of the Romanian banking system reform was to create a network of banks, modern and functional systemic appropriate international standards, which directly contribute to development and stability of Romania”. (Caprio Jr. & Ross, 1992, p. 32) This objective could be achieved through concentrated activity NBR and commercial banks. The banking sector has identified a number of objectives on short, medium and long term that would strengthen and develop the financial infrastructure.

National Bank of Romania established by regulation, the minimum level of liquidity of commercial banks and the calculation of the degree of liquidation of a commercial bank.

“In a market economy, the banking system serves as the attraction and concentration of company savings and channeling them through an objective and impartial allocation of credit, the most effective investment”. (Pîrvu, 2005, p. 174)
Banks provide and facilitate payments, provide risk management services and are the main channel of transmission and monetary policy implementation.

As the market economy synthetic indicator reflecting economic efficiency in banking business is profit, banks in the former period of transition and have organized activities so they can attract a large number of customers to ensure their achievement proposed. For the customers, banks must take account of the competitive market is buyer.

4. THE SECOND STAGE OH BANKING REFORM

Between 1997-2000, ran the second stage of banking reform was to:

- Improving and completing the banking law by approving laws: bank privatization law (Law no. 83/1997) Banking Law (Law no. 83/1998) Statute Law (Law no. 101/1998);

- Creating new legal operation of credit cooperatives: Emergency Government Ordinance no. 97/2000, as amended by GEO. 272/2000, amended and approved by Law no. 200/2002;
- "Defining the fundamental objective of the NBR national currency stability is to contribute to price stability". (Pîrvu, 2005, p. 174).

"Intervention tooling was upgraded by removing old directed credit lines and the introduction of open market operations". (BNR, 2003)

Since the banking system requires effective decentralization and competition, the National Bank sought to stimulate the formation of a system of commercial banks, universal type, which were authorized to perform the full range of banking operations and operate in the country, in compliance framework banking Supervision imposed by the central bank.

Thus, the Romanian banks, with the legal basis for a government decision, were transformed into state-owned commercial banks and domestic private and structure of foreign banks. When the first date in January 2007, when Romania joined the EU in economic structures, the Romanian banking system is composed of several banks.

At this stage, the banking sector consists of state-owned agents, cooperatives, private foreign capital and population, which will develop further, which require a wide range of banking products and services of good quality, in accordance with requirements and characteristics of each group of clients.

Creating new banking system to pursue a modern network of banks, cash balancing solutions for operators and population, existing banks with the necessary credits, required the banking market. Over the years, banking in Romania has improved continuously since 1990. Banks, with some exceptions, still serve customers in these sectors, as before 1989. Just have acted, and then to meet the requirements and demands of the transition to market economy.

Traditional specialization (division) on political and economic was lost, in the current legal basis. Banks are not entitled now, by law, to carry only certain types of operations, the wide range of banking operations. This does not mean that banks can not choose certain operations specializing in certain areas. What should be considered is that, in this case, the choice is bank based on its operational status, shall establish the types of operations that will take place, according to banking and financial market developments and the strategy adopted.

Although legislation has opened the competition for the financial system and established a banking-oriented market requirements, the position of traditional banks, continues to be dominant.

"Development operations and services and specifically to allowed appliance, while the diversification of banking" (BNR, 2003, p. 20).

This resulted in increased competition, division old being replaced by a real banking expertise will depend on the nature and extent of operations performed, the category of clients that each bank is addressed, not least, the quality of customer service.

Following the legal framework created in a short time, with existing banks, banks appeared in November. Whatever the origin of funds, banks engaged in the same range of services for both businesses State, as well as private ones. Notice that private banks supports privatization process priority. State banks still tend to focus on areas that have monopoly in banking.

Banks carrying us have the opportunity, since the beginning of modern banking, computer and attract the most profitable start-up companies as customers. Finally had a chance to decide, based on established legal framework, the specific conditions existing in the economy and marketing studies, such as banking operations that wish to pay particular attention in the overall activity the bank.

5. THE THIRD STAGE OF BANKING REFORM

Between 2001 and 2004, held the third stage of banking reform was to:

- Complete alignment with the regulatory framework in credit institutions in the EU directives and basic principles of the Basel Committee on Effective Banking Supervision (between 2001 and 2002);
- It occurred amending Law no. 101/1998, Law no. 58/1998 and Law no. 83/1998;
- The higher the authorization of the directors and major shareholders of a bank;
- Investing NBR with some powers which gives more powers in pursuing transfer ownership of banks;
- NBR's ability to identify groups acting together, to a bank;
- Increased legal protection for those involved in banking supervision and establishing the legal framework enabling collaboration with other central bank supervisory authorities in the country and abroad;
- Application of L. no. 83/1998, when bankruptcy and credit cooperative FGDSB invested with power to act as a liquidator for banks and credit co-operative networks, went bankrupt;
- Adopt the principles of regulation, licensing and prudential supervision of credit cooperatives.

Also in this stage have been developed regulations for: licensing, minimum capital, own funds, solvency, large exposures, loans to persons in special relations, classification of loans. These regulations refer specifically to: improve access rules for banks in the banking, prudential rules and accounting rules on derivatives, rules on customer due diligence standards.

During 2003-2004, resolved issues related to the final form of the Banking Law and Law on the Statute, as commitments in the EU negotiation chapters **(**Cap. 3 & Cap. 11). (Monitorul Oficial, Partea I, nr. 78, 2005)

Regarding "the Statute, the content is found to define the fundamental objective of the NBR" (Monitorul Oficial, nr. 528, 2004) - pricing, consolidation institutional independence of central bank financing of the public sector, eliminating privileged access of public sector financial institutions.

Also during this period, the Banking Act contained specific elements relating to:

- Harmonization of the legislation on credit institutions with EU directives related to the regulation, authorization and supervision of credit institutions, the central bank and remove all restrictions on establishment in credit institutions;
- Setting tasks BNR supervision on a consolidated basis of credit institutions;
- Establishing mandatory that all credit institutions, which have been operating license withdrawn, to be liquidated.

Until 2006, Romania concluded negotiations to take over the community accession in all 31 chapters. In this process, the central bank was directly involved in the negotiation and completion of three chapters: Chapter 3 - Freedom to provide services, Chapter 4 - Free movement of capital, Chapter 11 - Economic and Monetary Union.

6. FREE MOVEMENT OF CAPITAL

With regard to Chapter 4 "Free movement of capital" can be appreciated that while a few decades ago the international movement of capital was relatively unimportant in relation to trade in goods and services and often served only to finance imbalances current account balance, capital movements is today known type of cross-border transaction, still the fastest growing. In addition, the interaction was modified progressive and international distribution of capital causes increasingly more international exchange and interest rates which, in turn, influence the evolution and structure of international trade.

“European Union liberalized capital movements in several stages. First, a first directive, adopted in 1960, which liberate most of the long-term capital movements, was completed in 1962, a second directive for operations with securities. (Pîrvu, 2005, p. 96)

“During the 70's and early 1980, when Member States react differently to the oil shock and other economic issues with complex problem, important cross-border capital movements have proved increasingly more able to threaten the internal balance of savings. However, attempts to control cross-border capital flows have proven not only inefficient, but also increasingly counterproductive”. (Pîrvu, 2005, p. 96)

Once these imbalances corrected, liberalizing all capital movements, medium and long term, ended in 1986 and then, in 1988, there is liberalization of capital movements of short-term, which ended, of course, with positive results. Not only that it has not generated any serious imbalance in the countries concerned, but after liberalization, countries have taken measures that have been generally a net entry of capital, international capital markets unhesitating commitments to enter these markets and distribution of capital has increased overall efficiency in the EU.

This experience led to the confidence in the Union to liberalize capital movements in relation to third countries under the Treaty establishing the European Union and Article G-14, amending the Treaty Commission.

Community unlegislative action in this matter based on some general principles:

- The effective abolition of capital movements and payments control refers not only to those restrictions, in exchange, and administrative regulations of any kind, which generates an effective discrimination based on origin or destination of capital;
- The right to freely make transactions of this nature was given with priority to residents and not citizens;
- Establishment of this freedom has resulted in the exclusion of all general prohibitions and any express or implied authorization procedures;
- There were some general exceptions to this freedom, they refer, in particular national security policies and public order, but were extended to more general aspects of economic policy and national monetary policy or the rate interest.

However, the European Union's experience should be viewed in light of changes that have occurred and appear on the international financial scene. In the last 20-25 years has grown to capital movements unprecedented transaction costs fell, and attracting capital is subject to international competition, becoming more intense. Since then, measures have become more indispensable to attract foreign capital, to ensure integration into the international economy and to promote the development of a competitive financial sector. This is demonstrated clearly has the experience of a number of countries outside the EU, which have liberalized, in turn, capital movements in the late '80s and early '90s.

Romania opened this chapter in spring 2001 and closed in April 2003 during the Greek EU presidency and pledged to implement the accession by 2007.

In the accession negotiations of Romania occurred second transitional period:

- Seven years for the purchase of farmland, forests and forestry land by EU citizens and those of the European Economic Area;
- Five years for the acquisition of land for secondary residences by EU citizens.

Romania has imposed restrictions affecting capital movements, but a program of liberalization and appropriate implementation Money Laundering Directive was monitored.

When its policy in the free movement of capital, was developed, it was applied to the following institutions, while they supported some changes to adapt to market conditions and integration in European Union: Ministry of Finance, National Bank, Ministry of Development and Prognosis, Department for Relations with Foreign Investors, the Authority for Privatization and Management's participation in State, National Securities Commission, the Office for Supervision of Insurance and Reinsurance, National Office for Prevention and combating Money Laundering, the Bucharest Stock Exchange, the National Securities Clearing, Settlement and Depository - TRANSFOND.

7. CONSOLIDATION ROMANIAN BANKING SYSTEM

Romanian banking system consolidation continued in 2004, achieving important steps, especially in the banking privatization and alignment requirements of European legislation.

The main events that marked the banking sector were: (Rotaru, 2002, p. 22)

- Shift in category banks with private capital, Romanian Commercial Bank (BCR), the largest commercial bank in Romania; - Purchase the entire share RoBank by OTP important Hungarian banking market operator;
- Establishing a new financial institution, specialized in housing, Raiffeisen Housing Bank, the result of association with a specialized bank group Raiffeisen in Germany:
- Entry of new banks - Porsche Bank Romania, which is a subsidiary of the importer Porsche Romania;
- Merging banks Frankfurt-Chennai Bank, Banque Franco Roumaine and Anglo-Romanian Bank Limited, resulting Anglo-Romanian Bank Limited Branch Bucharest.

In early 2007, the Romanian banking system includes 40 banks, of which 38 were fully, or majority private and two state-owned. Developments in the year led to an increasing share of foreign capital by 21% to 95.2%.

Table no. 1 Calculated based on the "Financial Yearbook 2006"

Types of banks	*Number of banks*
State-owned banks increased	**2**
Banks with majority private capital (including foreign bank branches Credit Coop	**38**
Total (1 + 2)	**40**
Banks with Romanian majority capital	**6**
Banks with foreign capital	**34**
Ofwhich Branches of foreign banks	**8**

Source: Mediafax, Bucharest, 2007, p. 89

The capitalization of the banking system in 2005 and 2006 recorded a positive development.

8. HARMONIZATION OF THE ROMANIAN BANKING SYSTEM AND FUNCTIONALITY AS INTEGRATED AND INTERNATIONALIZED

According to opinions expressed in the literature, *elements of the banking system are:*

- *Entries in the banking system*, accounting for this factor that determines the existence and operation of other system components, but that is a close inter-relationship of mutual.

In turn, the entries are the following:

- Human resources;
- The economic environment;

- Financial resources - deposits, interbank resources, other resources attracted;
  - Information
- *Structure transformation*, which is the bank with its organizational structure;

Outputs-banking products and services, ie the result of the first two, the quality of this action depends on the final set of output value.

Outputs are bank interface are:

Banking services: exchange transactions, money market arbitrage operations on behalf of the bank or customer support services for financial, legal and patrimonial;
- *Banking products:* instruments of payment and settlement, transfer checks with and without limit of amount, to raise cash checks, security checks issued, the loan contract, bank statements - on operations made in accounts of clients;
- "*The governance structure* of the bank - which aims to organize, plan and control the above elements, in furtherance of the bank". (Alexandru & Berea, 2003, p. 18)

Overall evolution of the banking system can not be detached from the overall situation of national economy has experienced major disruptions at both micro and macro.

Since 2000 when the first achievements in the Romanian banking system:

- Further restructuring and privatization;
- Increase quality services and public education;
- Stimulate economies attract businesses and people in the banking system;
- Modernization of payment systems by developing an electronic payment system;
- Increasing capital market operations;
- Development of specialized financial institutions for leasing activities, brokerage, insurance, investment banking, investment funds, pension funds.

Evolution of the European banking system contribution factor highlights the integration of banking legislation. In these actions groups of factors regulators, competent (European Commission and Council of Ministers), in five stages:

- Deregulation of domestic markets, between 1957 and 1973, during which "the fixed charges was provided by a European monetary fund that coordinated monetary policies of the banks";
- Various attempts to harmonize banking regulations between 1973 and 1983.

Directive on a single authorization, internal control, mutual recognition and liberalization of banking services - 1992, when he marched on "essential parallelism between economic, social and monetary irrevocable link between the last phase in currencies, joint management of certain policies and abandoning sovereignty that result of these ... " (Dellors, 1992)

- Creating a single currency - in 1999;
- Financial Services Action Plan - (2001-2005). (www.primet.ro, 2012)

The first stage began in 1957 and corresponded to the objective of the Treaty of Rome which aimed at transforming national markets into a single common market, during which "the fixed charges was provided by a European monetary fund that coordinated monetary policies banks". (Coşea, 2004, p. 301)

- *The next step* for the harmonization of banking regulations more specifically began in 1977 with the adoption of the First Banking Directive (Directive 77/780/EEC) on the coordination of laws, regulations and legislative provisions of credit institutions.

- *The third stage* corresponds to the process of finalizing the Internal Market (1983-1992).

- *The fourth* stage corresponds to creating a single currency.

By 1980 the banking system is the image of a fragmented system, although in 1973, by Directive 73/183/EEC, were abolished restrictions on the organization and delivery of services and banking activities. In fact, the banking systems of most countries were restricted to a broad set of constraints, especially those aimed at controlling capital flows.

Jean Dermine's study highlighted the most important restrictions induced as follows:

- Control of interest rates;
- Capital control
- Regulations regarding the participation of banks in securities brokerage activities through stock exchanges;
- Restrictions on opening branches abroad;
- Restrictions on new banks entering the market;
- Capping credit mandatory investment requirements;
- Restrictions on the insurance.

The restriction applied was aimed at controlling the interest rate applied in all countries surveyed except the Netherlands and Great Britain. Control of capital flows was practiced by most European countries (among which the most significant such as France, Italy, Spain, Ireland) liberalization of capital is effective only in Germany, Luxembourg, Netherlands and United Kingdom.

Banks also had limitations in conducting brokerage activities in securities in Denmark, Spain, France, Italy, Britain and Portugal and insurance activities were restricted in Germany, Denmark, Spain, France, Italy, Netherlands and Portugal.

Limit the credit was used in Denmark, Spain, France, Italy and Portugal and the market entry of new banks was discouraged in Spain, Greece and Italy. We observe that countries acting most restrictions were Denmark, Spain, France, Italy and Portugal, and most liberal were Belgium, Luxembourg, Germany, United Kingdom and the Netherlands, which dominates the banking industry and today.

9. CONCLUSIONS

Given the trends and international standards and the need to improve the structure and functioning of the international banking system, integrated in the continental bank has imposed and Romanian banks as national banking structure to include the following: (Berea, 1999)

- Competitive large banks with national networks well developed and supported by strategic partners who will carry out operations in our country in the EU as well as abroad. It will reach these major players have ended the repair of the Romanian banking system, when there will be acquisitions, mergers and exits from the market of commercial banks The big banks can be called community banks;

- - Medium-sized banks (national banks) working with priority banking market in Romania, they can be universal or specialized;
  - Small regional banks, which are mainly universal banks, as the name implies they will work on smaller markets in the country;
  - Local banks, very small, mainly with the universal bank and will act in a village and its surrounding areas at most.

This possible pyramidal structure of the Romanian banking system has disadvantages, but advantages. The main disadvantage is the fact that slowing down transfers and benefits of regulatory activity and control concerning the financial and banking organizations will be much easier to perform. The possible configuration of the Romanian banking system structure is the same as in European countries, which in its turn is quite similar to the U.S. banking system.

Banks are an important component of the Romanian economy capitalist, it takes into account the turnover and that the outcome of their application, the main financier of its economy and circulatory system. They can not operate independently of their customers.

A direction of development of a bank depends on the quality financial and economic power and its customers and also the economic characteristics of the area. The bank can be seen as an economic, financial dependency in relationship with other traders who are clients. The efficiency and the stability of a bank is determined by the quality customers. Of their income they attract resources and then placed in the area, making real income to the extent that clients' financial results lend support repayment and interest payment.

With the integration of Romanian banks in the European banking system, in the context of participation in the European single market, and other operational changes be made to promote development and diversification of modern banking products and services at European standards. “Moreover, even in the medium term development strategy of the banking system, developed under the National Strategy for Romania's economic development over the medium term, one of the objectives pursued diversification and increase quality banking and financial services”. (Iordache & Şeitan, 2001). Mainly aims at “integrating [banking], to those of [financial] market operators and also creating conditions for development of products and services, according to market requirements and to implement modern products and services” (Nenciu, 2009) such as hybrid financing instruments, tools and derivatives such as e-banking services).

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CATEGORIES AND TYPES OF BANKING INSTITUTIONS

ION Gr. IONESCU *

ABSTRACT: *"The market economy is a modern monetary economy (a money). Most trade is done by means money, money. All economic transactions are influenced in one way or another, money. Monetary Economics organic blends with real economy, affecting it in a positive or negative way, depending on the nature of prices and monetary measures" (Heyne, 1991, p. 8). Thus, customers choose based on their needs and will choose a particular bank, depending on the services and benefits. This criterion takes you a while, the banking industry developed according to demand. (Ionescu, 2009, Cap. I)*

KEY WORDS: *bank type; banking account; central bank; commercial bank.*

JEL CLASIFICATION: *G21*

1. INTRODUCTION

"Customer orientation", occurred the so-called, which meant focusing on requirements. Main concern was directed to identify customer needs and desires, such as companies come to meet them at the highest level of satisfaction of their needs. This change of perspective belongs to the famous economist Philip Kotler, considered the father of modern marketing, which says that the new marketing must be "human activity directed towards meeting the needs and wants through exchange process in relation to market". (Kotler, 1986, pp. 4-5)

The concept argues that the key achievement by an organization, its objectives, is to determine the needs and desires clienţs, targeted and expected satisfaction in providing a better and more quickly than the competition. The year 1950 is when introducing this concept in banking, with the tertiary sector development - sector of the Service. The marketing has come to learn many things about the client.

Client - a possible definition Customers are those who turn to bank services, but first you need to be known more closely. A customer is a person or entity receiving

* *Lecturer, Ph.D., "Dimitrie Cantemir" Christian University, Romania,* iionescu_levant@yahoo.ca

or benefiting from the bank, and who uses a company or banking institution to change currency. The customer is one who has a bank account. "Customers are bank depositors, who entrust their money, banking facilities, for storage and fruiting, for which they receive interest and applicants or those who need temporary, some additional money for paying interest or commission" (Pîrvu, 2004, p. 31). There is no established definition of "client", but can be but few details about customers to draft a definition of customer, in terms of banks, as is the bi-univocal relationship, client-bank relationship.

2. CUSTOMER – BANK RELATION

"At the most general relationship as defined in dictionaries is nothing but a link, a connection, a relationship between things, facts, ideas, processes, features, people, institutions, entities, whatever they may be. Extrapolating the definition of the bank plan, typically client-bank relationship is a more special relationship than meets the eye, precisely because it is very sensitive". (Ionescu & Dimitriu, 2008, passim) In this dualism, almost inseparable, the customer can be defined by the following features: Is a person or legal entity that has a business relationship with the bank; Turn to one of the units a bank to ask for operations; Use one, some or all services offered by banks.

The relationship between customer and bank is defined by law. This refers to the duty of the bank to take care of the customer and the banks responsibility to ensure that the system protects the technology used, the bank itself and its customers.

In essence, the relationship between bank and client is that relationship established between debtor and creditor. Customer may be creditor and debtor bank. Reverse this situation is recorded for the customer borrows money from the bank. Bank is not just a keeper of money, since it could use the funds for the purpose of business, but assumes the obligation to repay, on request, amount of deposits.

Business potential offered by bank customers there for a viable business, banks need customers. Different types and categories customers have different requirements, in accordance with their business or personal needs, offering great potential for development banking. Requirements and customer needs may change after a period of time, according to the new conditions existing in the economy and society. For a bank it is advantageous to have different types of clients because, as will receive deposits and provide loans for both business and individuals.

The difference between the interest charged by banks and they are paid gross banking profit, following recovery, by the bank, business development potential offered by customers, resulting in advantages for both bank and customer. Customer benefits can be considered: the safety of deposits held at banks; interest received for them; that the money held in bank accounts can be returned at any time upon request; transfers of money to them, instead of wearing them large sums of cash.

The customer needs and offer advanced services, banks will keep their customers and will be able to offer new services. In a market economy is a long established fact that specialized banking products are more easily developed and used by existing customers than new ones. It is, shoulder important to identify different types of customers and their specific requirements. Companies will have different needs depending on the nature and volume of business. A small company, for example, may need a short term loan to cover the needs for services and manufacturing. Great investors may want to borrow money for investment so as to expand and diversify its business. Needs of individuals who open their personal accounts may differ, depending on income level and lifestyle. Currently, these types of customers have a small share in Romania, but in perspective, the number of those who open their personal accounts should increase considerably.

"The market economy is modern monetary economy (money). Most trade is done by means money, money. All economic transactions are influenced in one way or another, money. Monetary Economics organic blends real economy, affecting in a positive or negative way, depending on the nature of prices and monetary measures ". Thus, customers choose based on their needs and will choose a particular bank, depending on the services and benefits. This criterion takes you a while, the banking industry developed according to demand. Pressure from customers with different needs, the existence of services and by other financial institutions, will lead to changes and improvements in the banking system. While, due to the fact that banks are beginning to improve strategies, will be introduced new banking products and services in accordance with international banking practice.

3. STRUCTURE BANKING INSTITUTIONS

“Banks are banking structure "units operating in the banking service on a commercial basis, are traders, specialists, who concentrate supply and demand for money derived from primary businesses" (Pârvu, 2002, passim). "Bank is a financial and economic unit, yet simple, very complex" (Crețoiu et al., 2003, pp. 263-265), an important component of any modern economy (it takes into account the turnover and result of their application that is the main financier economy and circulatory system of it). They can not operate independently of their customers. Development directions depend on the quality of a bank, financial and economic power and also its customers, its management, the characteristics of economic, social, psychological, etc. area.

“The theory's overall labor and money, author JM Keynes says that the market economy is good, in principle, but its progress is actually determined by action of law or basic human psychological tendencies, so allowing them to act for themselves, are a negative influence to the economic balance, leading to crisis inflation and unemployment". (Keynes, 1970, passim)

Thus, systemic vision, the bank can be regarded as an economic actor in the relationship of financial dependence, and the balance with other traders who are clients. The efficiency and the stability and reliability of a bank is determined by the quality customers. Of their income, resources that attract bank then placed in the area, making real income to the extent that clients' financial results lend support repayment and interest payment.

“In the context of the European single market, and other operational changes should be made to promote development and diversification of modern banking products and services at European standards”. (Iordache & Şeitan, 2001, passim). Moreover, even in the medium term development strategy of the banking system, developed under the National Strategy for Romania's economic development over the medium term, one of the objectives pursued diversification and increased quality-banking financial services (mainly the integration of banking provided by financial market operators and also creating conditions for development of products and services, in line with market requirements and to implement modern products and services such as hybrid financing instruments, derivative instruments, such as e-banking services).

Presentation banks may be taking into account several criteria, but in terms of management, are important ones that affect the organization, information system, decision making and how to appoint the managers. The coordinates outlining the four criteria, it must take into account: ownership; the nationality; the role that we have the national banking system. Diversity of banks operating in a modern and efficient banking system may be known as classification criteria and types are divided banks. Should be emphasized that each classification criterion indicates a certain degree.

Although apparently the classification and criteria seem to be the same in different countries the banking systems there have different forms in the approach to this problem and also defining features of a particular type of bank.

4. CATEGORIES AND TYPES (FORMS) OF BANKS

Categories and types (forms) of banks in the literature and meet international banking practice, the following main types of banks:

After ownership Depending ownership can define the following types of banks:

a. Characteristic feature of *private banks* that have capital belonging to a person or group of people. The first forms of banks that operated fully have begun as moneychangers and loan sharks. The main form that takes the private banks is limited company (corporation), whose capital is divided into a number of parts, with a particular denomination, called actions. "The main advantage of the corporate form of business organization is limiting responsibility for the owners. All you can lose is the initial investment. Reducing risk to investors subscribed share capital, the corporation - as a form of business organization, makes possible the realization of large investment corporation that is most adaptable form of business, rapid growth by attracting capital" (Pîrvu, 2005, p. 133). Influence on bank management is manifested in terms of shareholders' meeting and depends on the number and amount of shares owned. Profit distribution is based on the number of shares that each shareholder possesses.

Decisions concerning the election of the directors and auditors, approval or balances, dividends are the size of capital, merger, and capital increase shall be taken by ordinary and extraordinary general meetings of shareholders.

b. *State banks* "have the defining feature of the entire equity held by the State in whose territory. In most cases this takes the form of specialized banks. Although it enjoys a certain autonomy, their profitability is lower compared to that of private banks, the state was forced to intervene when sufficient not prove viable.

State banks may increase political pressure from the authorities in the maintenance their life with bank loans. This idea is presented and argued by some authors have argued, inter alia, that the bank privatization process is an economically important if one takes into account that "privatized banks have come under political control and become efficient and market-oriented institutions" . “In Romania, for example, was a "strong fragmentation / specialization of the Romanian banking system in that state banks have preferred to credit enterprises. Meanwhile, private banks Romanian capital was turning to the private sector and the foreign subsidiaries of multinational companies in the Romanian market". (Bălteanu, 2001, p. 242)

c. “*Banks operating as joint stock* companies, the state is one of the shareholders' share of its properties depend on the shares held by it”. (Bălteanu, 2001, p. 242)

After Depending on the nationality criterion can define several types of banks: (Bălteanu, 2001, pp. 29-30)

a. *local banks* - whose characteristic is that the entire capital belongs to individuals or legal entities in the state where they operate. These banks are part of the national banking system, operating under the supervision of the State Bank of respective.

b. *multinational banks* - this category includes monetary and international financial bodies which have the following common features: capital is constituted by subscribing central banks in member countries; management is of Governors member countries; assist member countries and credits; oversee the running of international financial and banking markets

c. *banks are mixed* up with the capital contribution of two or more partners from different countries, under the laws of the country where they are located. Bank revenues are divided among the partners according to the share of the capital contribution of each bank. Assets and liabilities of the bank's options are mixed, the result that the agreement between the partners.

Bank activity is supervised by the Central Bank of the country where it is located, operates as a corporation (company stock).

After the role is played by the national banking system By this criterion, the literature in banking practice, including international, meet these types of banks: a central banks - are government institutions which provide banking operations and supervision at national level, the powers and responsibilities acquired by their act of creation.

a. *Central banks* have developed in two ways: either that commercial banks have been acquired along the powers and responsibilities they have transformed the central bank (Bank of England, Bank of France), is that "central banks have played a role, setting-up document, if the National Bank, founded in 1880, (Slăvescu,1925, p. 64; *** 2003, p. 79; Jinga, 1981, pp. 52-54)" U.S. Federal Reserve System - 1913 etc.

The functions vested in the central banks operate with public institutions of the state, regardless of their capital - state, local private or mixed. Mainly central banks meet in the banking system at national level, a number of functions: (Băbeanu & Băbeanu, 1998, passim):

- Is the only institution issuing currency and cash so issued must be accepted by all people's obligations or private;
- The bank of banks, acts as lender of last role, intervening when a bank facing temporary difficulties - the role of credit;

- Lead the country's monetary and foreign exchange - role as manager of international reserves;
- Run Treasury operations. Because between public expenditure and collection of taxes and disagreements, the borrowing from the central bank to support its expenditure rhythmic;
- Make rules for the authorization, operation and banking supervisors in order to protect depositors and ensure the unhindered functioning of the banking system.

In the explicit version, should know that "central banks, as legitimate representatives of the state, exercising an important role in international relations interstate interchange and international monetary institutions participating, as a member, apply rules of conduct agreed by the institutions in monetary your credit, to support mechanisms that operate nationally and internationally". (Stoica, 1999, p. 30)

In Romania, for example, the National Bank is governed by a Board which is responsible for safe and clear: to decide on monetary policy measures, currency, credit and payment, decide on internal organization, sets the guidelines for managing the operations and responsibilities of NBR device, prepare balance sheets and reports, etc.

Board of Directors is composed of the governor - as President, Senior Deputy Governor - as vice president, two vice-governors, and five other members. Board members are appointed by parliament, the prime minister's proposal, and daily management is entrusted to the governor. He called the staff of the bank and directors control branches, subsidiaries and agencies. National Bank governor is in relations with third parties, signing treaties and conventions.

Audit Committee, comprising five members, is appointed by the Board which is responsible for controlling the management of the National Bank shall report annually on the balance sheet and profit and loss.

National Bank is subject to review by the Court. By analogy, internationally, if we take for example the United States of America, should know that until 1913 the Central Bank was established - the Federal Reserve System (FED). The founding document, instead of a single central bank, has legislated the establishment of 12 Federal Reserve banks located in different parts of the country, with a Council of the Federal Reserve in Washington, to supervise and coordinate their work. Subsequently, power has been decentralized and divided between the Federal Reserve Bank and Federal Reserve Board.

The Banking Act of 1935, the Governing Council has centralized power by reducing power of the Federal Reserve Banks. Also become more independent Fed chairman, Treasury Secretary Appointment and removing exchange control, the Federal Reserve Board, who are now appointed by the Governing Council.

All banks must create reserves, to be members of the EDF and secure deposits the Federal Deposit Insurance Corporation (FDIC). More than half of EDF assets are held by three banks: Bank of New York has 30% of EDF assets, the bank representing the focal point of EDF with foreign central banks and international institutions. “Each of these banks the Federal Reserve is controlled by a board consisting of nine directors - directors of the class - is elected by members of the bank and bankers”. (Stoica, 1999, p. 32)

b. *Commercial banks* are diversified and can be differentiated by the type of operations or territorial scope of coverage.

"Commercial banks can be classified in commercial bank deposit and mortgage banks. The first raises its funds they need the money market through term deposits of their customers. In turn, this may be the actual bank deposit, receiving sight and term deposits, granting short-term credit business and banks that have significant equity and obtain necessary resources and by issuing bonds or actions and can provide long-term loans "**.** (Pîrvu, 2004, p. 33)

After performing operations the way, commercial banks can be categorized into: (Stoica, 1999, p. 30): a. *Universal banks* - those are called commercial banks perform all banking operations and not limit their activity to certain sectors (here, the banks are, by law, universal bank); b. *Specialized banks* - this is the generic name to designate such banks or banking institutions, usually with basic banking, banking mainly develops a particular type or in a particular field. Types of specialized commercial banks: *Agricultural Bank* - provides loans and other financial and payment facilities, agricultural facilities, purchase of land and agricultural machinery, fertilizers, etc.; *Investment bank* - give credit, medium and long term, industrial enterprises (sometimes also in other industries), the investment rule, procuring funds based on savings forms of longer duration than usual; *Mortgage bank* - long-term lending, with mortgage on properties owned by borrowers; *Export-Import Bank* - credit on different terms, producers / exporters to support local activities to promote country's products on foreign markets, guarantee external credits; made Cashier for importers and exporters etc.; *International Bank* (private) - commercial bank with many branches in other countries and foreign operations play an important role, but not predominant. The term international bank is used for inter-bank financial institutions whose capital comes from two or more countries and whose specific activity is taking place internationally and worldwide, exceeds the boundaries of countries, eg the International Regulations Bank for Reconstruction and Development, World Bank etc.; *Deposit banks* - make most of the activities internally by attracting deposits and granting of financial loans and private individuals.

In France, banks are called banks of deposit. In the U.S. and Germany the banks will deal with the issue and placing securities and loans with securities as collateral. "Trends, international standards need to improve the structure and functioning of the Romanian banking system, as integrated in the continental banking system, already established, the Romanian banks imposed a structure compatible with the European banking system, to include as wide a range, between cities and surrounding areas. (Iordache & Şeitan, 2001, passim)

- "Very small local banks, mainly with the universal bank and will act in a village and its surrounding areas at most". (Berea, 1999, p. 176).

5. CONCLUSIONS

The pyramid structure of continental and Romanian banking system has disadvantages, but advantages. The main disadvantage is the fact that slowing down transfers and benefits of regulatory activity and control concerning the financial and banking organizations, which will be much easier to perform. The possible configuration of the Romanian banking system structure is the same as in European countries, in its turn, is relatively similar to the U.S. banking system. Competitive market economy, "in addition to banks, money market works and other institutions such as credit unions, pension funds, insurance companies, investment companies". (Ciucur et al., 2001, pp. 307-318).

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USING SOCIAL MEDIA BY MICRO ENTERPRISES – CASE STUDY FOR UNDERSTANDING MOTIVATION, PRACTICE AND EXPECTATIONS

MELINDA MAJLÁTH *

ABSTRACT: *This paper examines whether microenterprises can use facilities given by the internet successfully in their marketing communication or not. Tinta Publisher has been chosen as a case study, a Hungarian microenterprise specializing in publishing books on linguistics and dictionaries. The publishing company uses Facebook, Twitter and Youtube for popularizing their publications. The paper summarizes the expectations, techniques, experiences and disadvantages of using social media.*

KEY WORDS: *social media; online marketing; Hungary; microenterprise.*

JEL CLASSIFICATION: *M31*

1. MICROENTERPRISES AND ONLINE MARKETING

According to statistics, in 2011 approximately 430.000 non-employer firms and 190.000 microenterprises[1] existed in Hungary. They were responsible for 30% of employment and 22 % of the added value. (Szöllősi, 2011)

The general stereotype is that these firms have to handle economy scale problems, they are not conscious enough, their operation is not determined and formalize enough (e.g. lack of systematic methods), and finally, their activity may be – to some extent - the part of the black or grey economy. However, they have positive features as well: they can react to the change of their microenvironment easier; they are flexible and ready to satisfy special, unique needs.

* *Assist. Prof., Ph.D., Óbuda University, Hungary,* majlath.melinda@kgk.uni-obuda.hu

[1] In the EU microenterprises are companies that meet two of the following three criteria and have not failed to do so at least for 10 years: has fewer than 10 employees; balance sheet total and/or turnover below EUR 2 million. Source:http://www.nfu.hu/tajekoztato_a_kkv_minosites _megallapitasahoz [Accessed 23 Sept 2012]

Unfortunately, business trends are not the most positive ones nowadays and as recession threatens profit, a typical firm tries to cut costs – first of all the ones related to marketing communication. However, it is not the most successful reaction to the challenges of the business environment.

Based on the data of IAB Hungary, which is the competent authority of online media market, in 2011 online media spending was 30,4 billion HUF, which is 18,8% of the whole advertising spending.[2] Taking into account that Eastern-European countries are heavily affected by the economic crisis, online marketing managers can be especially optimistic. Therefore, it is really worthwhile to examine their potential ways to keep up with successful competitors.

2. SOCIAL MEDIA AS MARKETING COMMUNICATION TOOL

Among online marketing tools, display segment (including social media) is still the biggest one with its 15 billion HUF spending, however search marketing shows the highest increase rate (+31%, 9,8 billion HUF).[3] The success of these marketing communication tools is not surprising as they have at least two advantages over conventional communication channels: first, they are new, so people are not yet used to them. The special importance of it is that the typical ways of neglecting information does not work, people still find these sources entertaining, interesting and they remain still curious. In general, the wider the audience of a channel, the less effective the message can be, as waste coverage is increasing. However, these online tools can be extremely cost-effective, because targeting can be more precise than ever before, and responses can be measured efficiently as well.

Moreover, these tools have unusual features that have to be understood and handled by marketing managers: interactivity and lack of control. Mangold and Faulds emphasise that "The content, timing, and frequency of the social media-based conversations occurring between consumers are outside managers' direct control. This stands in contrast to the traditional integrated marketing communications paradigm whereby a high degree of control is present." (Mangold & Faulds, 2009, p. 357)

The typical social-media channels used by businesses are Facebook, Twitter and Youtube. The capabilities and features of these media are different to some extent. The common feature is that they can address people in an active, motivated situation when they search information, open-minded, highly motivated. But on the other hand, social media solutions are different based on how high the social presence is and how deep self-presentation is possible. Therefore blogs and virtual game worlds are at the edges of this continuum.

Especially new horizons have opened by tracking word-of-mouth marketing at social networking sites. „WOM referrals have substantially longer carryover effects than traditional marketing actions and produce substantially higher response elasticity. Based on revenue from advertising impressions served to a new member, the monetary value of a WOM referral can be calculated; this yields an upper-bound estimate for the

[2] http://iab.hu/IAB_HU_Adex_2011_v2.pdf, p.4 [Accessed 20 Sept 2012]
[3] http://iab.hu/IAB_HU_Adex_2011_v2.pdf, p.8 [Accessed 20 Sept 2012]

financial incentives the firm might offer to stimulate WOM." (Trusov et al., 2009, p. 90)

Table 1. Social Media Categorization

		Social presence/ Media richness: Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

Source: Kaplan & Haenlein (2010)

In Hungary, Facebook has 4.132.300 registered users which means a 41% penetration to the whole population, but this is a raw data, as Internet penetration itself has reached only 62 %. [4] On this basis, Facebook penetration is 67%, but marketing managers have to keep it in mind that this community therefore is not representative for the whole nation.

Cost measurements of Facebook ads are very promising: the cost-per-click rate is 0,31 $, the CPM is 0,15$.[5] This difference can refer to the efficiency and the attractiveness of Facebook adverts.

Comparing general Facebook users to average internet users[6], we can find that there are more women among them, they browse it more likely at home or in school, their age is rather under 34, having children is slightly less typical among them and they are slightly higher educated than internet users in average.

The Facebook page of a company can be created simply (and only officially). The typical business Facebook pages are free to visit by all registered Facebook users, joining these pages needs no approval. Of course it is a basic business intention to offer the chance of joining the page for as many visitors as it is possible, therefore not only Facebook users can find and use these pages but those who use search engines as well.

The page administrator can decide whether fans are allowed to add comments, photos, videos or other contents to the page or not. To evaluate the results of our social-media presence, easily understandable statistics about visitors are also available as part of the service.

The most important part of the Facebook page is the wall. The more interactive the content the more visitors can be activated. Starting chat forums is also possible. Applications can offer real benefit for page visitors: there are some Facebook

[4] http://www.socialbakers.com/facebook-statistics/hungary [Accessed 16 Sept 2012]
[5] http://www.socialbakers.com/facebook-statistics/hungary [Accessed 16 Sept 2012]
[6] http://www.alexa.com/siteinfo/facebook.com# [Accessed 21 Sept 2012]

applications provided by it, helping to create webstores, games, newsletter or RSS feeds of favourite blogs.

However, the most important question behind the facilities given by Facebook is: why do people follow brands on Facebook? To access special offers can be the first reason. Above this, the page can give them a chance to know more about the brand, they can be up-dated on news quickly this way. And from a social perspective: being a fan of a product can tell something about their own lifestyle, their own image and therefore creates a more detailed picture of him or her, so this is a form of self-presentation. [7]

3. SOCIAL MEDIA USED BY TINTA PUBLISHER[8]

To analyze the social media activity of Tinta Publisher, semi-structured interviews have been conducted with Mr Gyula Kiss, Sales Manager of the publishing company and the content of its Facebook, Youtube and Twitter pages have been analyzed. What makes this case study more valuable is that it gives longitudinal perspective as the first interview was made in 2010; the second one was carried out in September 2012 so we could analyze the dynamics and change of practice and attitude towards social media.

3.1. Introduction of Tinta Publisher in a nutshell

Tinta Publisher is a Hungarian publisher and wholesaler specializing in publishing books on linguistics and dictionaries. The company is the market leader in monolingual dictionaries and in the Hungarian linguistic book market. The few other publications fit well into the image of the company: they feel real social responsibility for preserving Hungarian language. They use the expression ‘cultural mission’ to describe the main motivation of their activity; they are determined to help to spread over the results of new linguistic studies.

The company operates in Budapest, the capital of Hungary. Recently they have 260 publications and they publish an average of 30-35 books every year. They have six employees; the net turnover is below 2 million Euros. Their main competitors are Akadémia and Osiris publishers, which are definitely more significant participants on the market with their wider product range.

Tinta Publisher operates both on B2C and B2B markets. Their main target groups are educational institutions and libraries but they also intend to serve those private customers who prefer dictionaries in printed forms and who are interested in linguistics. However, they see clearly that in the future digitalized content services and net-dictionaries will be more and more widely spread and successful, so they try to meet these potential customers in the online world.

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[7] http://www.marketingmorzsak.com/kozossegi-media/miert-kovet-valaki-egy-markat/online-marketing

[8] Fieldwork was partly made by Gábor Konrád, BSc student of Obuda University, Course in Engineering Management. He agreed to publish parts of his research in this article.

So, why Tinta Publisher has been chosen for this case study? Firstly, books are still one of the most successful product categories in web stores. Secondly, Tinta Publisher works on a niche market, which makes it easier for them to perceive their competitors and to define their target group. Thirdly, they use three different types of social media, so there is a chance to compare their advantages and disadvantages and the potential outcomes and synergy of using different channels.

3.2. Marketing communication tools used by the publishing company

The analysis of the marketing communication of the firm has to be started from a wider perspective - especially because synergy between offline and online (and through-the-line) channels is inevitable.

Because of the limited financial capabilities of the publisher and the very narrow target group, the company primarily focuses on exhibitions, events (such as bookfairs) and professional forums. These channels enable the publisher to reach both institutional partners and private customers.

Apart from the above mentioned, the publisher uses print ads in dailies and periodicals. Print ads are generally placed in national newspapers (Népszabadság, Magyar Nemzet), in regional periodicals (e.g. Újbudai Polgár) and in specialized periodicals (Print and Publishing, Új Könyvpiac).

Direct marketing plays an important role as well. Previously the publisher carried out direct and telemarketing campaigns, however they experienced that higher and higher proportion of respondents refused to answer to the questions and the lower response rates have worsened the efficiency of these communication methods (and probably increased reliability problems of data as well). Therefore, they rather concentrate on newsletters. Tinta Publisher sends a newsletter every month to those who registered to their database. In order to motivate visitors to sign up for the newsletter, they give a chance for winning a voucher of a generous 10.000 HUF for their books every month. Nowadays they have an approximately 13.000 names in the database.

PR activity is of great importance for the publishing company as well. When publishing a new dictionary, they give away 30-40 complimentary copies to journalists and it helps to have recommendations, reviews and comments on the new adition in selected papers and magazines. Tinta Publisher supports Zsigmond Simonyi National Grammar Competition and Lajos Kossuth Orator Competition on a regular basis with book awards. Other linguistic competitions are supported by providing great discounts on books. Above this, the publisher sponsors Ferenc Kiss Memorial Chess Competition every October each year.

In the online world Tinta Publisher really tries to be visible. First, they have a homepage at www.tintakiado.hu, which is a very rational and functional webpage, ignoring real image-building or mood elements. The only exception is the quotation of the day; however one can read it only by clicking on it. The webpage can be characterized by simple design (white background, the main menu is emphasised only with bold red characters and so on), focusing on product features and fresh news on the first page. There is also a book top list at the bottom part of the page and the page gives chance to the visitors to get to the Facebook, Twitter or Youtube pages of the publisher by clicking on their icons.

From the main menu the visitor can reach the webshop of the firm as well at www.tintakonyvek.hu. The publisher places banners on most visited sites when a new dictionary has been published or when they organize a special event or sales promotion.

3.3. Facebook, Youtube and Twitter

As the publishing company visualized a significant boom in using Facebook at the end of the previous decade, they started their page in mid 2010. Tinta Publisher's expectations towards their Facebook page were, based on personal interview:

- to provide a cost-effective way of advertising,
- to build a community of loyal customers,
- to get an up-dated database of customers,
- to motivate indirect and two-sided communication with customers – and by doing that, to deepen customer loyalty,
- to ease organizing events,
- to reach younger generation.

Negative motivation was that if all the other competitors have Facebook appearance, they must keep up with them or they will lose market share.

The owners of Tinta Publisher emphasize that their Facebook page doesn't follow the traditional classical style. Their Facebook appearances are more similar to journalism. That means they write a little bit longer comments, kind of mixture of expertise and popularization. The content is mainly determined by comments on books, telling stories that can generate further interest and raise attention towards promotions and sales. A great variety of topics and style is given by the rotation method: each employee is responsible for placing comments at least one time per month. Altogether they spend approximately 5 hours per week with editing their Facebook page. As a consequence, there is a high frequency of new posts supported by pictures and/or longer comments with external references.

There are different methods to motivate people to visit our page and „like" it. The more widely known opportunities are to inform potential visitors by e-mail (at signature part we can add our Facebook page to our usual data), second is to let people know on our Facebook page by sharing this information by the administrator or by the sites of the employees. There is also an opportunity to create a „Like Box" on our homepage to navigate our visitors easily to our Facebook page letting them like us immediately.

Girboveanu and Puiu (2008) emphasised that „While it is hard to predict which content will ultimately be passed most from one consumer to the next, there are some basic principles that can dramatically improve the chances of success. Viral efficacy rests primarily on the quality of the content. Things that are interesting, entertaining or informative (ideally all three) tend to get passed on." (Girboveanu & Puiu, 2008, p. 226)

Source: http://www.socialbakers.com/facebook-pages/112300158787554-tinta-konyvkiado

Figure 1. Number of Tinta Publisher fans between April-August, 2012

Thanks to their activity, the publisher's Facebook page attracts an average of 8-10 new fans weekly. Adopting the appropriate communication patterns, Tinta communicates with lots of photos, and tries to share information both on products and on the firm itself – to let people be the part of the firm, the virtual community.

The publishing company has an official meeting every week and Facebook activity is always a topic on it. How can they measure the results of their social-media activity? The most visible achievement is the growing number of fans. It is easy to follow the number of fans and visitors on the page but the publisher doesn't draw long-term consequences from it.

During the last two years, sales promotions advertised on Facebook have shown the lowest return, although the offered 50% discount for the books was really generous. The information on promotion could reach approx. 3000 fans. It is most probable that coupon pages are better-known among promotion-chasers, so it would be good idea to try to organize sales promotion on "Kuponvilág" or on pages of other Hungarian coupon-communities.

Unfortunately, communication on Facebook page was nor successful in mobilization for professional programs.

Another challenge that can occur in practice is how to handle negative comments on Facebook pages. In the last two years of their Facebook operation they faced a negative comment only once. The comment criticized the definition of an entry in a dictionary, but as it was a criticism to (toward) the writer and not really to the publisher, the publisher didn't respond to this comment. We can state that there is no real protocol how to respond to negative criticism as they have no real experience(s on it) in handling such cases.

Switching over to the other social-media elements, Tinta has been starting a page on Youtube in March, 2011 (at http://www.youtube.com/user/tintakiado). Until now it has been viewed by 8.505 visitors. The firm has uploaded 33 videos. These are videos of appearances in Hungarian TV programs. Short titles of these videos concentrate on facts about the content rather than generating motivation to view them: such as "Etimológiák riport a Duna Tv-ben" (Report on Etimologies on Duna TV channel) or "Czuczor-Fogarasi szótár riport a Duna Tv-ben" (Report on Czuczor-Fogarasi Dictionary on Duna TV channel).

In order to increase the visits of Youtube videos of the publisher, they organized a quiz on their Facebook page related to TV programs, in which dictionaries published by Tinta Publisher were shown: players had to answer at which minute of the video had the actual book appeared at first. The player, who gave the first right answer, got a new book. A few minutes later after sharing this information on Facebook, the correct answer was given.

Twitter activity was launched in May 2011. (https://twitter.com/tintakiado) Twitter refers back to the homepage. Until now they have only 14 followers. The Twitter page is not edited by the employees but edited automatically: the program sends tweets from Facebook webpage and from the homepage to Twitter. The content therefore is very schematic: rational, just informal tweets on new publications.

4. CONCLUSIONS AND SUGGESTIONS

Above all, it must be admitted that Tinta Publisher commendably uses the possibilities offered by social media. Quality, reliability and expertise are the centre elements of the image of the company and it has to be emphasised and communicated on social media sites as well. However, this message has to be adapted to the style of these social media sites.

Firstly, unified elements of corporate identity cannot really be detected. Only the logo appears on each social medium, but types of letters, background or other features look really different. Unfortunately, the logo itself is not a telling one. On the Twitter page, in the background of the screen we can see the picture of old-fashioned book-shelves full of precious, leather-bound books. Although this reflects to traditions and gets on well with the image of the company, it doesn't fit to the modern feature of Twitter itself. Moreover, this picture isn't communicated on other media: neither on the homepage nor on Facebook.

Another problem is that the style of tweets is not eye-catching: most typically the publisher announces new publications here, such as: "Új könyv: Tájszavak. ..." (New book: Words in dialects..." and there is a short description of the book. Even in a very short format which is a typical feature of Twitter, the publisher has to change for a style which is more attractive. For example: asking questions that can raise attention or quoting interesting sentences from a book are probably more motivating for the visitors to click on. For example when a new dictionary is available they should ask whether someone was familiar with the meaning of a funny or surprising word from that very edition. Perhaps visitors will try to find the answer to this question and this activity will entertain them while trying to chase the right answer. More mood-elements enable to express more feelings instead of giving the clear facts, so it would be a better practice. It also helps being more enthusiastic about the news and motivates people to express their feelings as well, and also to react and comment on our posts.

In general it can be recommended to use more pictures and photos – all in all, more visual elements instead of words. Short comments fit to the style of Facebook and especially to Twitter; those who want to get more info on products should be navigated to the homepage where it is possible to write longer description on products.

Table 2. Advantages and Disadvantages of Tinta Publisher's Facebook Page

Advantages	Disadvantages
▪ efficient reach of target group	▪ low share of voice
▪ cost-efficiency (low cost level in general)	▪ cannot reach those who have no internet access
▪ conversation is possible with visitors	▪ majority of fans are not active
▪ potential of reaching a wider audience	▪ it is difficult to make an outstanding site
▪ potential for building a community	▪ managing Facebook page is very time-consuming
▪ precise targeting of subgroups with information relevant for them	
▪ possibility to share information easily and quickly	

Source: personal interviews with Mr Gyula Kiss, Sales Manager of Tinta Publisher (2010, 2012)

Comparing the effectiveness of social-media with traditional direct-marketing, the most successful way of promotion is still sending the message via newsletter. The firm has created a data-base of more than 10.000 registered members and this way they receive a lot of enquiries and purchase orders. Neither sale promotion on Facebook, nor the coupon promotion organized by the firm for the largest book fair held every year on Vörösmarty Square has got high attention.

Marketing managers have to keep in mind that via internet-related communication channels it is still not possible to reach everyone. Not only the elderly or people with low income cannot be reached, but also those potential customers who are less active, less extrovert and are less interested in social contacts in general.

Another aspect which is more and more argued among social scientists is the socially harmful effect of Facebook addiction, which has become a more and more serious problem all over the world. Sociologist Béla Bauer mentions the negative effects of Facebook addiction: decrease of real connections, no need for higher level communication, decrease of active lexis, non-verbal communication skills decreasing and having no presence on Facebook may mean reason for becoming outcast. (Lippai, 2010)

In time, this "new" feature of social media will disappear – such is its nature. Therefore, more professional solutions, more conscious planning and helpful comments of social-media agencies would be the key for a successful marketing communication campaign. Efficient social media campaigns need new capabilities, new competencies and resources from the companies. Social media culture is something we can get to know only by using it but as we have become part of it, we can also form it to some extent. What makes it a real challenge is that marketing managers have to speak and listen carefully at the same time.

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THE FINANCE PERSPECTIVE OF THE HEALTH SYSTEMS IN THE E.U. COUNTRIES

MARIANA MAN, MARIA MĂCRIȘ *

ABSTRACT: *Health represents a factor having direct implications upon the normal carrying out of life and of economic and social activities, being perceived according to a triple perspective: political and demographic, social, and economic. Health financing is a complex process that systemically integrates the making up, collecting, allocating, and efficient use of the funds that are going to be employed by the health system. At a world wide level, after 1960, the amount of health expenditures increased so that it has doubled in most developed countries.*

KEY WORDS: *financing sources; incomes; expenditures; foundation; allocation.*

JEL CLASIFICATION: *I 15; M 41; H 75.*

1. INTRODUCTION

Health, considered from a wider perspective and representing more than a state of wellness, is a complex phenomenon with multiple implications that target both the individual and society as a whole. If, from an individual point of view, health represents a component of the system of needs, from the point of view of society it defines a much larger concept with multiple implications: economic, social, and psychological.

The goal of the hereby paper is the identification of financing opportunities as well as the analysis of resource employment so that an increase of the performance of the health care system is attained together with a proper use of the funds.

The hypotheses that represent the starting of this research have been the following ones: does the performance of the system of health care depend on the level of the incomes allocated to the system involved? Do efficient allocation and

* *Prof., Ph.D., University of Petroşani, Romania,* man_mariana2011@yahoo.com
Lecturer, Ph.D., University of Petroşani, Romania, macrismaria@yahoo.com

use of the resources determine the increase of the system's performance and, implicitly, of population's health?

In order to get familiar with the financing and resources allocation we have employed as a **research method** the statistic analysis of data, using as data sources the official reports of the national and international institutions with responsibilities in the field (The National Health Insurances Bureau, in case of Romania case study; Health World Organization, in case of international comparisons).

Epistemologically, we consider that our position related to the analyzed object of reality is positivist and grounded both upon the empiric research of the Romanian health system as a whole and upon the analysis of the place Romania detains within the European Union (EU) and world wide.

2. ECONOMIC PERSPECTIVE OF HEALTH

Health is not only a fundamental right of a human being. During the years, economists have shown through numberless studies that health is a pre-condition of economic development. The findings of its impact upon economic growth and the analysis of the various features of its connections determine the understanding of the benefits of health investments that are involved in economic policies and human development.

Researches at a micro and macro-economic level have emphasized both the relation between health and labor productivity and health's impact upon incomes and welfare.

The idea that health investments play an important part in economic growth has become evident. Theodore W. Schultz (1979) underlines the positive character of health investments, mentioning that a healthy population is a decisive production factor.

Health investments determine the development of human capital. Michael Grossman (1972) has had an important contribution owing to his inclusion of health within the field of human capital. He has drawn out a model of health demand through employing the theory of human capital and has shown that higher incomes do not always determine the improvement of health.

Fogel (1994), Barro (1996) and Sala-i-Martin (2004) have studied the relation between health and economic growth as well as between health and wealth**.** Accordingly, a high level of health of the human capital has a positive effect upon labor productivity and the rate of economic growth. Employees without health problems determine, at the level of a group or of an organization, the decrease of the number of days of physical or psychical incapacity, of absenteeism due to illnesses and the increase of the opportunity of improving their level of education and their performance.

Pan American Health Organization and Inter - American Development Bank have undergone a research about health impact upon long term economic growth as well as upon households productivity. The research included less developed countries and has outlined the following conclusions: there is a relation between poverty and inequality and human capital accumulation as well as between the variations of economic growth and social development. Although life expectancy has increased, the different degrees of implementing health policies, sometimes in different areas of the same country, determine inequalities between poor and rich people (Lopez-Casasnovs et al., 2005).

High rates of life expectancy and low levels of illnesses tend to stimulate economic increase through accelerating demographic transition, promoting human capital investments, growing households' savings, augmenting foreign and population's investments which all determine the increase of social and macroeconomic stability. Investors avoid a labor market susceptible of illness and which has a limited access to health care (Alsan et al., 2004, 2006).

Muhammad Jami Husain (2009) states that in case labor productivity and income are positively correlated and in case health determines productivity increase then they should determine incomes increase.

Health and economic growth are not simple determiners of human welfare. Their interaction shows that it is not possible to provide economic growth in a world under development without settling the essential health issues; at the same time, population's health is difficultly preserved and improved without providing economic growth.

In case illnesses occur, the structure of the use of individual and public resources might change as they would be directed towards treatment and recovery; they might be totally or partly available and allocations out of the health area towards nourishing, education, and entertainment would decrease determining long term serious consequences.

Within the whole structure of the health system, it is essential to find out the best manner of efficiently employing resources, to properly re-direct the incomes taking into account their limited character, the competition among health care providers under the circumstances of ascendant trending needs.

Although health services market is a typical sample of "market failure" (Arrow, 2004), a conceptual parallelism may be drawn out between the health system, with its entire universe, and economic theory, as a result of the multiple existing resemblances, such as: resources allocation, needs, demand and offer, price, services cost, benefits, etc.

Famous economists such as David Hume (1711-1776), Lionel Robbins (1898-1984) and Paul Samuelson (1915-2009), focused upon resources scarcity, their limitation and the implications that accordingly occur. The rhythm according to which the structure, quality, and amount of economic resources change is much below the rhythm according to which the intensity, size, and structure of humankind's needs grow.

It is obvious that progress as well as maximum potential is the result of a healthy nation. In case one considers that meeting the health care needs represents a determining factor of welfare then allocated resources should provide the proper carrying out of sanitary activity. Nevertheless, health care needs that exhibit an ascendant trend are allocated a limited amount of resources irrespective of the country's level of economic development.

The evolution tendency of sanitary field expenditures is given by the evolution of the expenditures made by hospitals and the money spent for pharmaceutical products, specific sanitary stuff, and medical equipment.

Another economic aspect which should not be neglected is the health impact upon employment due to the fact that the system of health care creates new jobs. Accordingly, in Romania, during 2009, health system employees represented 2.91% of the employed population. In case one adds to this percent the employees having different specializations but working in the health field then the health care system obviously creates a significant number of jobs.

3. HEALTH FINANCING SYSTEMS

Health financing is a complex process that systemically integrates the foundation, gathering, allocation, and efficient use of the funds meant to be employed by the health system. This is the reason why the financing of health systems is considered a system and not a simple activity.

The specific character of the financing manner comes from the fact that health represents a need and not a wish, and the right to health care is a fundamental right of the individual. Besides, health can be assimilated to an intangible product which cannot be substituted.

Depending on the State's part in organizing sanitary system, Vlădescu (2004) displays three types of systems, namely:

- *Liberal systems* characterized by a voluntary adhesion to health insurances, a decentralization of sanitary policies, and a pluralist organization of medicine, governed, as far as the ambulatory field is concerned, by liberal medicine (private practice remunerated per act). A part of the hospital beds belong to the public system, the share differing from state to state;
- *National systems* that give medical assistance to the whole population and are mainly financed out of State taxes. A private system also operates at the level of insurances and medical services;
- *Intermediary systems* that combine the characteristics of the other two systems as regards the universal access, the pluralist organizing and financing (mainly owing to special dues**)** of the medical system, and the liberal medical practice. The public and private systems detain different shares within the functioning of the sanitary system.

Irrespective of the adopted financing system and of the organizing manner of the providers of medical services, health care is still State's responsibility.

The functioning principles of a sanitary system to which most OECD countries have adhered, irrespective of the type of financing they have decided upon, are the following ones: universal and equitable access to a minimum package of health services; macro-economic efficiency: the costs of health assistance should not overpass a decent percent of the country's resources (7-9 % out of GDP); micro-economic efficiency: the range of services provided should guarantee, in exchange of a minimal cost, good results at the level of patients' health and satisfaction; patients' right to choose; autonomy of health services providers; incomes' protection: patients should not pay medical services that are too expensive as compared with their incomes; the prices of such services should be connected to their payment capacity which implies the preventing of those circumstances when the cost of a treatment could threaten the normal existence of an individual or of a family; State's involvement on medical services market and its responsibility for its own citizens' sanitary assistance. (Vlădescu, 2004)

Sanitary policies are founded upon the above principles; what differs is the manner they are implemented from one country to another.

During the last century four main conceptual systems of organizing and financing health care have been outlined: Semasko type system – centralized; American system – based upon private health insurances; Beveridge type English system; Bismark type German system.

Semasko system (soviet) takes its name from a doctor who never practiced but who conceived a system of health care in former USSR. The system implied the existence of public property institutions or State property institutions as well as a single network of medical services. It is a centralized system with a single type of financing (the public one) which entirely comes out of the State budget. Accordingly, all sanitary needs as well as all categories of expenditures - current and capital ones - are covered.

The system proved to be viable in former USSR; it was perfectly adapted to war conditions through directing money resources towards certain objectives (objective sanitary management). It determined the eradication of several illnesses in the former soviet area and the settling of certain concepts of sanitary hygiene among population. After World War II the system perfectly operated mainly implying the reconstruction and revitalizing of the entire medical system.

The American system is based, to a large extent, upon private health insurances. Such sums are not considered compulsory contributions as social insurances are. The health system provides an inequitable access of people to this extremely important population service, especially due to the extremely high cost of health care.

The American State finances only two health programs: MEDICARE Program, for those who are over 65 year old and have terminal illnesses and MEDICAID Program, for those persons whose incomes are below poverty margin.

Besides the above categories of persons and those who contract private health insurances, a large number of persons in the USA do not have any health insurances (unemployed persons, temporary workers, small incomes persons). Such circumstances have determined the initiation of certain measures concerning health care reform that targets the foundation of national organisms capable of identifying various sources of constituting a health budget; for instance, companies may provide health insurances for their employees.

The English system is a combination between the American system based upon private insurances and the Russian one relying upon the State's intervening in economic and sanitary environment.

All individuals are offered free medical care; the State entirely finances health care owing to the National Health Service. It is a system that relies upon financial resources coming out of taxes. The patients do not pay anything but are obliged to enlist to a doctor who is remunerated by NHS according to the contract drawn out with this organism. The budget financing of the health system represents 85% while the rest comes from other funds or from patients (for instance, medication is partly paid by the patients).

The German system introduced the contributive system based upon compulsory contributions equally made by employees and companies. The money is not given to the State budget but is administered by the health bureaus of the lands whose primary obligation is to provide a high standard of population health.

The patients do not pay anything for being seen by doctors and for treatments due to the fact that the insurance bureaus have contracts with the health providers – doctors, specialists, pharmacies – and pay those expenditures.

When compared, budget financing represents 25% while contributions financing represents 75%.

The above system relies upon a large autonomy, is specialized, and allows competition. Such a system, with certain specific features, is encountered in Germany, Belgium, Luxembourg, The Netherlands, France etc. In Germany, during 1987, 93% of the country's population compulsorily contributed to illnesses insurances bureaus (the rest had private insurances).

Irrespective of the adopted financing system, we consider that providing the funds to be used for health care has always been and still is an important issue of governmental policies.

4. MEANS OF FINANCING HEALTH IN E.U. COUNTRIES

Concern for structuring and modernizing the systems of health insurances with a view to improve them at the level of their amount and of the quality of the health services provided for the population as well as at the level of costs can be encountered in most developed countries and in less developed ones.

Reforms of the health care systems have been also made by the states where the manner of organizing health insurances represented a referential for the other health systems (the German system, the English system).

In **Germany**, the Bismark type system of medical insurance founded in 1883 has witnessed several changes; at present it is financed through the system of social security whose budget relies upon the compulsory contributions of employees (50%) and of employers (50%).

The principles that represent the foundation of organizing and financing the German health system regard social solidarity, decentralization, and self-management. According to this system the whole population benefits from insurances: Compulsory public insurances 85%; Private insurances 10%; Central public financing 5%. The funds to be employed by the health system come from: compulsory and voluntary contributions (co-payments were introduced after 1980 in order to prevent the excessive use of public medical services); taxes and fees; insurance bonuses. Insurances are made by the Funds of Medical Insurances which have to finance the activities in the field.

Although the German system of health insurances represents a standard in health care insurances, its reformation has been required in order to better use resources. After 1986 they have shifted to the global financing of hospitals with a view to properly administer costs; accordingly, primary assistance has been separated from ambulatory treatment and from hospital care. Such facts have determined a decrease of the number of hospital beds and a more efficient use of hospital beds. Hospitals are administered by municipalities (50%), by non-profit organizations (30%), and the rest are private.

The financing of the system of health insurances in **Great Britain** is done out of public sources (taxes and fees), and the whole population benefits from the services. The foundation of the system was established by Beveridge in 1942 and during the years it has become one of the reference systems as regards the manner it provides health care to the population.

Financing is provided by public funds (83%) and other sources, ranging among the states that provide a small percent of private medical services. Nevertheless, after the 90s, in order to determine competition among the providers of sanitary assistance and to decrease the costs, the Sanitary National Service (SNS) has reformed the management of the system defining three types of sanitary authorities: Regional Sanitary Authorities, District Sanitary Authorities, and Medical and Sanitary Services Authorities. Accordingly, they also stimulate the liberalization of the patient's option to choose the provider of medical services.

The British SNS has witnessed numberless reforms. Let's notice the 1999 SNS reform which stated the following functioning principles (Dobson, 1999): existence of a national service, similar services across the country with national standards of quality and performance; local responsibility that regard the implementation of national standards; partnerships both among the SNS units and between these units and other institutions with a view to better meet patients' needs; increased efficiency through focusing upon performance and decreasing bureaucracy; quality as a supreme argument in the process of decision taking at all levels of the system; increase of the population's confidence in SNS as a public, open system conceived so that to reflect the needs of the population.

The principles formulated by NHS Constitution in 2008 are the following ones: SNS gives a comprehensive service, available for all persons, irrespective of sex, race, disabilities or social orientation; access to the services of the national health system is based upon clinical needs and not upon the individual's capacity to pay; SNS targets the maintaining of high standards of excellence and professionalism; the services given by SNS show the needs and preferences of the patients and of their families; SNS is not confined to organizational barriers and functions according to partnership grounds with other organizations that serve the interests of the patients, of the local communities, and of the whole population; SNS pledges itself to give the highest value in exchange of the money paid by the contributors and the most efficient use of resources; SNS is responsible before the public, communities, and the patients it serves.

In **France** the health system combines the public field with the private one. Initially, the system was founded upon compulsory health insurances; later they have introduced voluntary insurances too. The French sanitary system is administered by the Regional Health Agency which equally coordinates, at a regional level, all the institutions and parties on the health services market. There is a powerful competition environment among public sanitary units, between the private ones and the non-profit ones, administered by associations and religious congregations.

Table 1. Share of financing funds within GDP – 2008

	GDP /capita	% Health expense within GDP	% Public funds	% Private funds	% Health expenditures within public budget	Health expenditures /capita ($ exchange course)	Health expenditures /capita ($ PPT)
Austria	36680	10.5	73.7	20.9	15.8	5201	4150
Belgium	34760	11.1	66.8	25.3	14.8	5243	4096
Bulgaria	11950	7.1	57.8	37.7	11.2	482	974
Czech Republic	22790	7.1	80.1	17.5	13.3	1469	1830
Cyprus	…	6	41	56.3	5.8	1909	18838
Denmark	37280	9.9	80.1	15.5	15.3	6133	3814
Estonia	19280	6.1	77.8	20.6	11.9	1074	1325
Finland	35660	8.8	70.7	24.5	12.6	4481	3299
France	34400	11.2	75.9	21.4	16	4966	3851
Germany	35900	10.5	74.6	22	18	4720	3922
Greece	28470	10.1	60.9	39.1	13	3110	3010
Ireland	37350	8.7	76.9	23.1	16	5253	3796
Italy	30250	8.7	76.3	23.7	13.6	3343	2836
Lithonia	16740	6.6	60	40	10.2	979	1206
Lithuania	18210	6.6	68.3	27.4	12.8	931	1318
Luxembourg	64320	6.8	74.8	15.9	13.7	7998	5996
Malta	…	7.3	75.2	24.8	12.3	1374	4197
The Netherlands	41670	9.9	75.3	16.5	16.2	5243	4233
Poland	17310	7	67.4	26	10.9	971	1271
Portugal	22080	10.6	67.4	28.5	15.4	2434	2578
United Kingdom	36130	8.7	82.6	17.4	15.1	3771	3222
Romania	**13500**	**5.4**	**78.9**	**18**	**11.8**	**517**	**840**
Slovakia	21300	8	67.1	28.1	15.4	1395	1849
Slovenia	26910	8.3	68.6	26.2	12.9	2238	2420
Spain	31130	9	69.7	26.9	15.2	3132	2941
Sweden	38180	9.4	78.1	16.8	13.8	4858	3622
Hungary	17790	7.2	68.9	28.5	10.2	1119	1506

Source: World Health Statistics 2011, WHO 2011

As in most states, sanitary system has been adjusted over the years, witnessing several stages (MEDAS Project): the period of Global Endowment (1983-1991) when

DRG (diagnosis regular groups) were introduced; the period of Administration (1991-2005) when Regional Hospitalization Agencies (1996) and Responsibility Centers were founded; the period after 2005, Strategic and Performance Management, "Hospital 2007 and the new hospital management"; the system of quantifying hospitals' activity was also founded.

Within all the states of the European Union, except Cyprus, financing out of public funds represents the majority (57.8% Bulgaria and 82.6% Great Britain).

The financing of the sanitary system mostly comes from taxes paid by employers and employees, the insurances system covering 74% of the population (Eurostat, 2009).

Irrespective of the financing system adopted, the health system is allocated a certain percent of GDP which depends on the governmental policy at a precise moment, on the degree of development of the country, and on the development and complexity of the existent system of health care (Table 1.).

At a first analysis, one may notice that within the European Union, Romania detains the last place as regards the share of the incomes allocated to health within its Gross Domestic Product: only 5.4% when compared to developed countries that allocate over 10% of their GDP to health (Austria 10.5%, Belgium 11.1%, France 11.2%, Germany 10.1 %, Greece 10.1% and Portugal 10.6%). In case one also analyzes GDP's level per capita expressed in US Dollars according to the prices of the buying power ($ PPT), disparities increase due to the fact that at a high level of GDP/capita the allocated percent is much higher. Due to such circumstances the incomes allocated per capita in Romania are over 4 times lower than those allocated by the developed countries and 1.5 – 2 times lower than those of the countries that entered the European Union during the last period.

The small share within GDP of health allocated incomes together with the decreased level of GDP/capita obviously determines the under-financing of the system of health care; such facts determine on a medium and long term a degradation of the health condition of the individuals and implicitly an increase of the expenditures of the sanitary field.

One may state that worldwide, during the period 1960-1990, the amount of health expenditures doubled in most developed countries. According to UNCTAD Report of Human Development in 1998, the share of total health expenditures within GDP in the countries members of OCDE increased from 4.5% in 1960 to 9.7% in 1991; in North America from 5.3% to 13.0%; in the European Union from 4.1% to 8.2%. Under development countries also registered, on the whole, a doubling of the share of health public expenditures within total GDP (from 1% in 1960 to 2% in 1990), but with important differences among countries.

As regards the Index of Human Development, Romania ranks 50 among 187 countries (HDI values and rank changes in the 2011 Human Development Report), witnessing an ascending trend during the period 1990-2011 (Table 2.).

During the last decades, Romania has undergone various sanitary reforms, abandoning the centralized, monopolist, and rigid system, and adopting an intermediary system relying on pluralist financing sources.

Most researches that deal with the financing of Romanian medical system (Tănăsescu, 2001; Vlădescu, 2004; Vulcu, 2002) identify the following aspects: foundation of incomes, allocation of resources and spending health funds. One cannot speak about the manner of distributing funds without approaching the ways they are collected.

Table 2. Evolution of basic pointers of Human Development Index

Years	Life hope at birth	Probable school years	Average duration of school period	National income per capita (2005 PPP$)	HDI
1980	69.6	12.3	7.9	0	0
1985	69.6	12.3	8.6	0	0
1990	69.4	12.4	9.0	7.803	0.700
1995	69.4	10.9	9.5	7.150	0.687
2000	70.5	12.0	9.9	6.759	0.704
2005	72.4	13.5	10.1	9.270	0.748
2010	73.8	14.9	10.4	10.863	0.779
2011	74.0	14.9	10.4	11.046	0.781

Source: HDI values and rank changes in the 2011 Human Development Report

5. CONCLUSION

One may notice that the countries with a developed sanitary system which allocate an important percent of their GDP to this field (England, Germany, France, Sweden) have also implemented the permanent reformation of the financing system or of the manner of organizing this field; all these have had as an objective the shift from "covering the whole population with health services" to the "providing of cost efficient health care" without affecting the quality of medical services or the principles that represent the foundation of the health insurances system.

It is obvious that progress as well as maximum potential is the result of a healthy nation. In case one considers that meeting the health care needs represents a determining factor of welfare then allocated resources should provide the proper carrying out of sanitary activity. Nevertheless, health care needs that exhibit an ascendant trend are allocated a limited amount of resources irrespective of the country's level of economic development.

A variant of increasing the incomes meant for health is given by "co-payment", namely the additional payment made by the consumer of medical services; yet, this type of financing sanitary system should not be seen as a salutary element as it only represents a small percent of the cost of medical services which is not covered by the basic insurance.

Taking into account the high costs afferent to the treatment and recovery segments, it is necessary to pay a special attention to prevention in order to support the sanitary system on a long term.

The small share within GDP of health allocated incomes together with the decreased level of GDP/capita obviously determines the under-financing of the system of health care; such facts determine on a medium and long term a degradation of the health condition of the individuals and implicitly an increase of the expenditures of the sanitary field.

As to the second hypothesis, according to which the efficient distribution and use of resources determines the increase of the system's performance and implicitly of the population's health, it requires, in order to become valid, an analysis of health costs of each type of medical assistance due to the fact that the administration of health costs has become a global issue. The rhythm of expenditures has over-passed the rhythm of economic growth as an effect of demographic increase and structural changes that involve population's aging (especially in developed countries where they speak about the "fourth age", namely the persons over 80), of the increase of the individuals' expectations from medical and social assistance, of the coming forth of highly technological medical services, of epidemiological changes (from the typology of illnesses dominated by infections towards a typology dominated by non-transmissible illnesses, such as cancer, heart illnesses), of the increase of the segment of population overexposed to risks (smoking, alcohol, pollution, sedentary life, improper foods).

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ANALYSE OF LABOR FORCE MOBILITY PHENOMENOM ON ROMANIAN INTERNAL MARKET

LUCIAN-ION MEDAR, IRINA- ELENA CHIRTOC *

ABSTRACT: *Labor force mobility is an increasingly important component of contemporary society and equally adjustment tool imbalances in labor markets. The phenomenon of labor mobility is nowadays the most dynamic form of movement of potentially active population. Using cluster analysis this paper aims to highlight the relationship between economic and regional development of counties and the phenomenon of internal labor mobility. Labor mobility is both an explanatory factor of economic development and its effect or result, based on the natural desire of individuals to increase income and improve quality of life by changing jobs, which could contribute to GDP growth and economic growth.*

KEY WORDS: *inter-region mobility; region development; clusters; labour market; dendrogram.*

JEL CLASSIFICATION: *J24; O18.*

1. LABOR FORCE MOBILITY THEORIES

To labor mobility theory there are many approaches to influencing factors of this phenomenon.

Thus, neoclassical macroeconomic theory argues that neoclassical differences between demand and supply of labor, between origin and destination zones determines the mobility flows and also, the reducing or removing of these differences will lead to reduced mobility until it reaches to nothingness. According to this theoretical approach, only the labor market represents the mechanism through is induced mobility.

Micro theory of neoclassical economics focuses on potential individual actors who decide to migrate, taking into account cost-benefit calculations which show a net benefit generated by mobility. According to this theoretical approach, increasing

* *Prof., Ph.D., Constantin Brâncuşi University of Tg- Jiu, Romania,* lucian_iunie@yahoo.com
Assist. Prof., Ph.D., Constantin Brâncuşi University of Tg- Jiu, Romania, irynavoica@yahoo.com

mobility is generated, on the one hand, by human capital characteristics that increase the potential benefits of mobility, and on the other, by individual social and technological factors, which reduce costs. Mobility key explanatory variables are determined by differences in incomes and labor force employment rates.

To the new economic theories mobility are group or family strategies whose major objectives aimed at diversifying sources of income, minimize risk households, overcoming some difficulties to loan repayments and capital maintenance.

Differences of wages and incomes, according to this theory, is not a necessary condition for mobility and economic development in the area of origin or reducing disparities are not factors of driving migration flows.

According to dual labor market model, the volume, the structure and dynamics of migration flows are determined by the demand for low skilled labor in industrialized areas.

Global structural theory assumes that intensification of relations between developed areas and developing channels of globalization (trade, communications, infrastructure, science, culture, internet, environmental) is a contributing mobility factor, which leaves its mark on differences in income, unemployment, working conditions and the nature of the business area.

2. ISSUES OF REGION LABOR MARKET

We believe that the relationship between labor mobility and economic growth of each region should be analyzed taking into account the dynamic complexity of interdependencies factor between the two processes.

Labor mobility is a complex phenomenon involving the movement between employees, between occupations and in different career levels, between different types of contracts, as well as inside or outside labor market.

Analysis of the scale and nature of labor mobility between regions of the country emphasizes that the phenomenon vary significantly between the country counties.

Mobility phenomenon considered an important factor in stimulating productivity and regional economic growth, is not only eased by regulations on the labor market, but the ability of the economy to generate jobs.

Form of voluntary labor mobility, which seems to be more beneficial than involuntary, both from socially and economically point of view is closely linked to the employment and unemployment level.

In the case of internal mobility, the higher incomes and benefits realized by those involved in this phenomenon remain at home country and there is no doubt about the positive effect of the phenomenon on indicators of economic growth (GDP) of that country.

Because labor markets are located in different spatial locations it is possible to resolve discrepancies between demand and supply of labor by its mobility (permanent or temporary mobility)

Study the regions is a starting point in analyzing of inside-region mobility. Thus, in this study we tried to show through cluster analysis tends labor mobility depending on the characteristic of Romanian regions in terms of economic and regional development

Regional development is a concept that aims to stimulating and diversifying economic activities, encouraging private sector investment, helping to reduce unemployment and ultimately improve living standards. Policy could be applied to regional development in Romania was established eight regions, each comprising several counties.

Socio-economic changes that have occurred nationally in the evolution and population dynamics, occupational mobility, social exclusion and active integration in the new economy have manifested itself in the regions of Romania. From national studies can draw the conclusion that demographic decline is irreversible and occupational mobility is higher in urban areas.

Along to direct and other factors whichinfluence the mobility of labor force, this is influenced by the region development of Romania which is presented as a intricately structure to under region structure (all the regions are made by develloped areas, weak or even weak develloped).

For an real analysis from Romanian Statistical Yearbook we took from Figure no.1 the balance of mobility on regions.

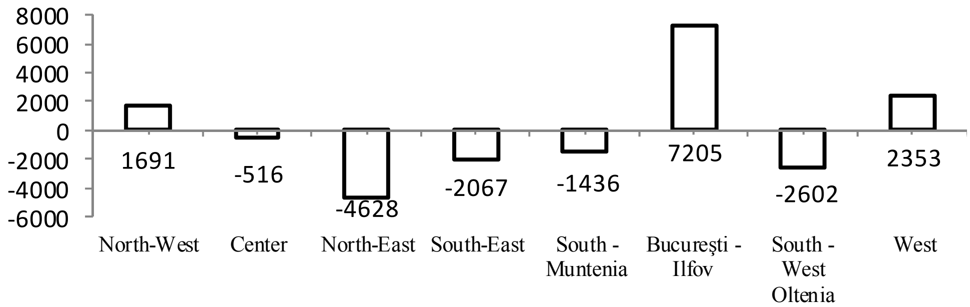

Figure 1. The balance of region mobility 2009

Source: Romanian Statistical Yearbook

From balance mobility analysis by region it shows that areas that attract labor are Bucharest-Ilfov (balance 7205), West (balance 2353), North - West (balance 1691). At the opposite pole is North - East where the number of people leaving the region is quite high and the balance in 2009 mobility is - 4628. If we follow the statistics that mobility is observed in terms of urban and rural environments in the regions recorded a positive balance at rural and urban level negative balance except Bucharest-Ilfov region. Positive balance in rural areas compared to urban population can be explained by the option to travel in rural areas for the conduct of low level agriculture.

Labor mobility to areas Bucharest-Ilfov, West, North-West respectively can be explained by the development of the regions concerned. Thus in 2009 the unemployment rate is the lowest in the region Bucharest - Ilfov (4%), followed by the North - East (5.6%) and Western region (6%). Also growth indicator GDP / capita also has the highest values in the same regions described above (Bucharest-Ilfov: 58060.6 millions lei; West: 25979.6 millions lei; Northwest: 21284.3 millions lei).

Area that attracts most foreign direct investment according to the report "Foreign direct investments in Romania in 2009" issued by NBR is Bucharest-Ilfov region they reach a value of 31.699 million euros. To a considerable difference on this indicator is the North - East region with only 975 million euros.

Indicators of transport infrastructure have the highest values in the region Bucharest-Ilfov, this being the most important country national and international transport road - rail – air hub.

Although this region has not the largest number of schools in the country, is the most important educational center of Romania. Here are the most important academic environment in Romania and concentrate the largest number of students enrolled in higher education.

3. CLUSTER ANALYSIS AND MOBILITY PHENOMENOM

Through cluster analysis seeks grouping Romanian counties through a series of attributes in a limited number of homogeneous classes. Counties of the same class should be as similar to each other by the values of variables while classes are formed as different.

It aims in this way minimizing residual variance within classes and maximize variance obtained between the classes.

The method uses two types of classification techniques, namely hierarchical and un-hierarchical. In this paper work we used a hierarchical method which is based on the variance method (Ward's method), which generates groups by minimizing the variance within each group.

Hierarchical clustering is a way to investigate groups (clusters) by creating a "cluster tree" with several hierarchical levels, where clusters at one level are organized as clusters at the next level.

Groups need to be defined similarity and dissimilarity measures between counties studied. Similarity or difference between them is expressed by Squared Euclidean Distance.

In order to determine the number of groups we used the classification threshold. This is the grouping level from which groups created can be considered very heterogeneous, and below this threshold is considered to be homogeneous groups. The choice of this threshold is much easier to dendrogram, the graphical representation of the groups obtained.

Following is a grouping (classification) of counties and indicators using SPPS software package. In order to group counties was used simple Euclidean distance through a complete connection.

Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	24	39	,497	0	0	16
2	7	30	1,582	0	0	12
3	13	20	2,965	0	0	23
4	5	29	4,353	0	0	9
5	33	42	5,781	0	0	19
6	11	17	7,261	0	0	19
7	2	35	9,054	0	0	18
8	31	37	10,933	0	0	23
9	5	27	12,872	4	0	18
10	3	32	14,857	0	0	15
11	18	19	17,106	0	0	25
12	7	36	19,830	2	0	24
13	1	23	22,836	0	0	22
14	21	28	25,860	0	0	28
15	3	4	28,954	10	0	25
16	16	24	32,108	0	1	17
17	9	16	35,677	0	16	27
18	2	5	39,415	7	9	31
19	11	33	43,197	6	5	24
20	6	34	47,054	0	0	29
21	14	38	50,916	0	0	26
22	1	12	54,929	13	0	28
23	13	31	59,548	3	8	32
24	7	11	64,248	12	19	29
25	3	18	70,295	15	11	31
26	8	14	76,695	0	21	34
27	9	22	83,534	17	0	33
28	1	21	93,188	22	14	35
29	6	7	103,424	20	24	32
30	25	41	115,860	0	0	39
31	2	3	129,216	18	25	35
32	6	13	143,259	29	23	33
33	6	9	158,122	32	27	38
34	8	15	173,559	26	0	37
35	1	2	192,889	28	31	36
36	1	40	219,876	35	0	38
37	8	26	250,094	34	0	40
38	1	6	292,252	36	33	39
39	1	25	336,356	38	30	40
40	1	8	413,284	39	37	41
41	1	10	755,939	40	0	0

Figure 2. Clusters forming

Hierarchical clustering of the counties we performed through the following steps:
- finding similarities or disimilarităților between any pair of counties in the data set by calculating the Euclidean distance;
- grouping of counties in a cluster binary hierarchical relations involving pairs of counties that are in the lowest proximity coefficient defined in Table Agglomeration Schedule.

The data from which start analysis includes 18 indicators and they are: total population, urban population (relative size), rural population (relative size), the number of people left the county, the number of people arriving in the county, the total employed population, unemployment rate, GDP / capita, the share of unemployed not registered unemployed, modernized public roads in total public roads, villages with water supply network in all cities, towns with sewerage network in all locations, number of schools, number of hospitals, accommodation number, net average monthly earnings, payments to foster labor mobility, higher education school population.

Once standards have been obtained values in the range [-2, 2], processed in SPSS that show proximity matrix. Each element of the matrix represents Euclidean distance between counties, distance calculated based on all 18 indicators.

Euclidean distance the most distant were recorded between Bucharest and other counties, reflecting thus the unique characteristics of the city as indicators examined.

In Figure 2. is way of formation of clusters based on cluster schedule SPSS displayed.

Cluster grouping counties begin by finding the closest pair of objects. The algorithm continues step by step, uniting object pairs, pairs of clusters, or an object with a cluster until all the data is in a cluster. Once two objects are joined in a cluster, they remain together until the last step. A cluster formed in a later stage of analysis contains clusters from an earlier stage that it contains the clusters from one state and above.

To each cluster it is computed the averaged variables, then, for each object is calculated square Euclidean distance until the cluster center. These distances are summed for all objects. In each stage, the two clusters with the smallest growth distance are combined.

From the Figure 2 we can see how they grouped the cases in each group phase. In the second column Combined Cluster are grouped cases. In the third column Coefficients are distances coefficients between grouped elements. In the fourth column, Stage Cluster First Appears, is phase number that appeared in each of the two elements. The last column, Next Stage, shows which phase will occur first element in the group and in which stage will change it.

It follows that the shortest distance of 0,497 is between Tulcea and Ialomita counties and joining them in a group first. In step 16 to Ialomita county will join Covasna county. Further joins these counties (stage 17) Braila to the Euclidean distance of 35,677.

The next cluster is formed between Botosani and Neamt counties, the distances being of 1.582. In stages 12, 24 appear again Botosani county which joins Buzau and

Suceava counties. In this group enters in the stage 29 Bistrița county In stage 32 and 33 form the group Bistrita Calarasi and Braila counties, but in step 27 Braila county formed group with the county. In step 38 Bistrita joins Alb county, the latter forming a group with Iasi county (stage 39) respectively Brasov county (stage 40).

Next in step 3, the cluster is formed between Calarasi and Giurgiu county, with a distance of 2,965, Calarasi appears in stage 23 where it forms group with Olt county.

In step 4 cluster is formed between Bihor and Mures counties, and in step 9 it joins Maramures county and will be joined Arad county in stage 18. This latter form group with Arges county in stage 31 which joins Alba county to step 35.

Next stage 5 is characterized by cluster consists of Satu Mare and Vrancea joined by stage 19 Buzau that formed a cluster in step 6 with Dâmbovița county. In step 11 of this cluster joins also Buzau county, and to stage 29 Botoşani and Bistrita counties with clusters they belong.

A new cluster is formed in step 7 between Arad and Sibiu, which joins Bihor county in18 stage.

Cluster formed in step 9 is composed of Olt county and Teleorman that joins to the one made by Calarasi and Giurgiu.

In step 10 is formed cluster Arges - Prahova, which joins Bacau in step 15.

Stage 11 is characterized by cluster formed from Dolj and Galati, which Arges added in step 25, in step 31 Arad, Alba stage 35, stage 36 Vâlcea, Bistrita stage 38 and stage 39 Iaşi.

Cluster consists of Alba and Hunedoara counties belong to stage 13. If we analyze further the cluster 22 phase joins Caras-Severin county.

Next 25,860 distance is found between Gorj and Hunedoara counties resulting in the formation of a new cluster, which joins the stage 28 cluster consists of Alba, Hunedoara, Caras-Severin.

Along with the cluster formed in step 16, joins Brăila county (stage 17), and Harghita (stage 27).

In step 20 is formed cluster composed of Bistrita and Salaj counties, which joins Botosani stage 29, which is part of the same cluster Neamt and Suceava. In this cluster in step 32 enters the county of Braila in stage 33 and stage 38 Bistrita county.

A new cluster is formed in step 21, in this part being Cluj and Timişoara. This cluster joins Brasov in stage 26 and in stage 34 Salaj.

Table displays by the SPSS application in the formation of three clusters resulting is:

- first cluster consists of Alba, Arad Arges Bacau Bihor Bistrita, Botosani Braila, Buzau Caras-Severin, Calarasi, Covasna, Dâmbovița , Galati Giurgiu, Gorj, Harghita Hunedoara Ialomita, Iasi , Maramures, Mehedinti, Mures, Neamt, Olt, Prahova, Satu-Mare, Salaj, Sibiu, Tulcea, Valcea, Vaslui, Vrancea.

- the II cluster consists of the following counties: Brasov, Cluj, Constanta, Ilfov, Timis.

- the third cluster has a special feature in which are integrated Bucharest. Further, by application of SPSS was acquired the graphical representation of the hierarchical structure dendrogram.

From Figure 3 we can see clusters presented above and how their training. Bucharest is found that, through the light indicators considered, differs from the structure considered, it fits in one of the homogeneous classes of only in the last step of the algorithm

```
                     Rescaled Distance Cluster Combine

    C A S E      0         5        10        15        20        25
  Label     Num  +---------+---------+---------+---------+---------+

  Ialomiţa   24   -+
  Tulcea     39   -+
  Covasna    16   -+
  Brăila      9   -+-+
  Harghita   22   -+ |
  Călăraşi   13   -+ +----+
  Giurgiu    20   -+ |    |
  Olt        31   -+ |    |
  Teleorman  37   -+-+    |
  Bistriţa    6   -+      |
  Sălaj      34   -+      |
  Botoşani    7   -+      |
  Neamţ      30   -+      |
  Suceava    36   -+      |
  Satu-Mare  33   -+      |
  Vrancea    42   -+      |
  Buzău      11   -+      |
  Dâmboviţa  17   -+      |
  Gorj       21   -+      |
  Mehedinţi  28   -+-+    |
  Alba        1   -+ |    |
  Hunedoara  23   -+ |    |
  Caraş_Sev. 12   -+ |    |
  Arad        2   -+ |    |
  Sibiu      35   -+ |    |
  Bihor       5   -+ |    +----+
  Mureş      29   -+-+    |    |
  Maramureş  27   -+ +----+    |
  Dolj       18   -+ |    |    |
  Galaţi     19   -+ |    |    |
  Argeş       3   -+ |    |    |
  Prahova    32   -+ |    |    |
  Bacău       4   -+ |    |    +-----------------------------------+
  Vâlcea     40   ---+    |    |                                   |
  Iaşi       25   -+------+    |                                   |
  Vaslui     41   -+           |                                   |
  Cluj       14   -+           |                                   |
  Timiş      38   -+-+         |                                   |
  Braşov      8   -+ +-+       |                                   |
  Constanţa  15   ---+ +-------+                                   |
  Ilfov      26   -----+                                           |
  Bucureşti  10   -------------------------------------------------+
```

Figure 3. Dendrogram using Ward method

The three clusters were formed by counties after the 18 indicators analysis, we conclude that Bucharest which forming one cluster (3) is the most economically and socially developed, followed by counties in cluster 2. In cluster 1 are developing or under developed counties

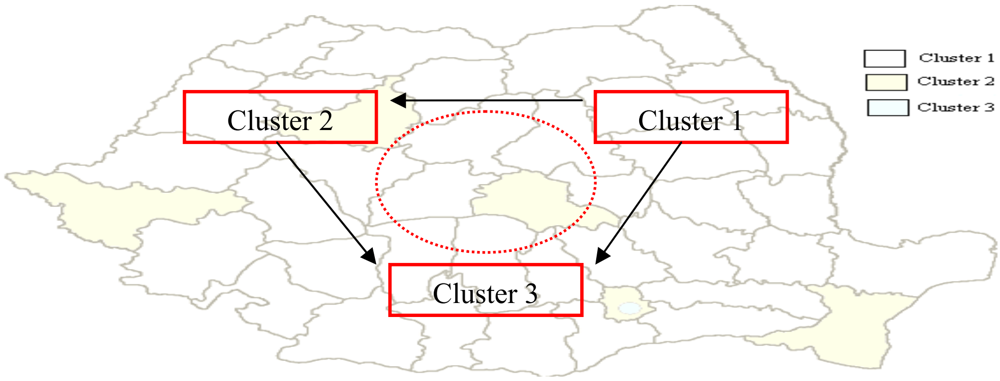

Figure 4. Cluster groups and trend of labor mobility in Romania

If we analyze labor mobility in Romania, according to the clusters shown in Figure 4 a possible variant of this phenomenon is the population displacement from cluster 1 to cluster 2 and counties that form the Municipality of Bucharest (cluster 3), while the population of cluster 2 travel tends to cluster 3.

A person's decision to move to work in another area than home is determined by a number of factors that can go from economic issues, to personal and political issues. For most people participating in mobility phenomenon whatever its form the main motivation is the desire to improve their wealth or standard of living. Usually that type of people plan their departure and invest in getting information and knowledge they need for a successful market labor integration.

Also, a central role to the decision to participate in labor mobility plays the preparedness level of the individual. Experts have shown that there is a direct correlation between the level of training of labor resources and labor mobility. This may be due in part to the fact that more prepared people are more efficient in finding alternatives in the labor market, thereby reducing mobility costs. Also alternatives for these people are more numerous and varied. Economic incentives are also higher for employment with further/deeper training.

In the series of factors can be identified in the decision mobility (Figure 5) include: economic and political causes, establishing mobility networks, previous experience of mobility, the need for professional development through continuing education in a county that provides higher education opportunities the county of origin and family reunification.

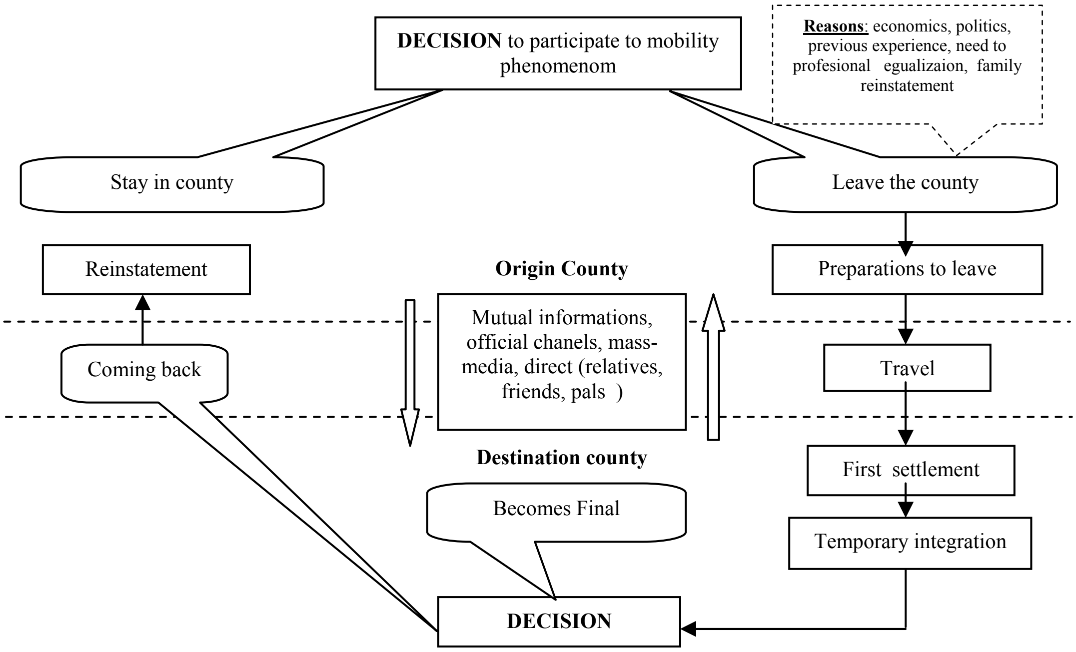

Figure 5. Decision and mobility reasons

Source: Blaga, E.; Moştenescu, R., Movement of labor force, Bucharest University Publishing House, 2008

Travel decision can be determined strictly by the difference resulting from the gains and costs involved in mobility. While earnings are generally easy to calculate, contain costs difficult to quantify with a high element of subjectivity. A person in front of such a decision should take into account the following elements: direct costs (eg transport costs and bringing their goods at destination), lost earnings (entries that you lose during the Looking landing area) and psychological costs (associated, for example, removing from the family and friends).

In order to calculate the first types of costs, individuals will take into account economic and social factors in both areas the departure and the destination. The difficulty often comes to selection to going (worker knows exactly what conditions await the new location), which can have a direct influence on the permanence of the phenomenon. Permanent mobility was prevalent in past centuries, distance-related barriers but tilting the balance towards a greater share of temporary streams. To get a realistic picture about on all these costs, the person who intends to travel in interest of work must have information as accurate and complete to the realities of the two countries. They are essential, because it is the most measurable.

An important point is made but the psychological costs, whose quantification is quite difficult to perform. Factors involved in this calculation could be age (age as the older they are, the more opportunities to recover costs involved in mobility are lower because the remaining time available, also flexibility is not the same, nor of a professional or psychologically point of view), family (decision to leave family is often an issue of considerable weight). Should not be neglected other more specific reasons that generate flows, such as those that end with political asylum applications, for example. Beyond the primary motivation, political, and feature length changed mobility, moving from predominantly permanent form, to a mainly temporary one.

Labor movement internally takes place based on market economy, the law of supply and demand is fundamental.

Overall mobility is a dynamic and complex phenomenon that can play an important role in the economic development of destination areas and reducing poverty in migrant origin areas.

4. CONCLUSIONS

Mobility phenomenon has existed since the beginning of mankind. Phenomenon has not stopped in time, but has changed and acquired new forms. Mobility is an increasingly important component of now day society, same time adjusting tool imbalances in labor markets. In society, mobility may be a phenomenon of rebalancing the number and age structure between regions and localities, competition and regulation mechanism. The balance between population and resource changes by the emergence of a surplus population, representing a "emigration zone" or the occurrence of surplus resources, representing a "immigration zone".

Internal mobility of labor (regional mobility) plays a role in redistributing labor supply. Internal mobility of workers and their families between localities and regions with different labor market conditions is an important component of regional population growth and labor market flexibility. This phenomenon is an adaptive response of labor supply to changes in demand territorial location. Mobility is one of the ways in which regions can adjust to economic change and a way that ensures growth. Mobility flows can act as an "automatic stabilizer" for the region, giving people the opportunity to improve their standard of living by moving to areas with conditions of employment and better living.

The spatial balance of supply and labor demand often involves relocation, being involved the other family members (some inactive), in this case, the labor mobility being with implications not only by economical nature, but also by social and demographic nature.

Is not to be neglected the role of migrants in increasing urbanization ratio of a region, and economic growth, the increase mobility is the main cause of population growth to each city and urban population in general.

In Romania, the development of economic life, changes occurred in the economic development process restructuring operated in the national economy caused population mobility from one region to another, mainly from economic reasons.

The mobility phenomenon is a phenomenon generating growth and economic development, on the one hand, with regional agglomeration effects on the other hand.

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ANALYSIS AND ACCOUNTING OF TOTAL CASH FLOW

MELANIA ELENA MICULEAC [*]

ABSTRACT: *In order to reach the objective of supplying some relevant information regarding the liquidity inflows and outflows during a financial exercise, the total cash flow analysis must include the analysis of result cashable from operation, of payments and receipts related to the investment and of financing decisions of the last exercise, as well as the analysis of treasury variation (of cash items).*

The management of total cash flows ensures the correlation of current liquidness flows as consequence of receipts with the payments 'flows, in order to provide payment continuity of mature obligations.

KEY WORDS: *total cash flow; financing function; adequacy rate; reinvestment rate; cash flow rate.*

JEL CLASSIFICATION: *M 41*

1. INTRODUCTION

Cash flows are defined as the increase or decrease, during a financial exercise, of cash (available funds and sight deposits) and cash equivalents (highly liquid short-term financial investments).

The analysis and accounting of total cash flows aim **the following procedures and objectives:**

- To examine the cash flows from the present operating activities in order to decide if they are positive and to establish the difference between the operating result and the net operating flows.
- To compare the cash flows from the present operating activities to the payments of dividends from the sections of financing activities in order to establish if these important outflows of money are covered and they do not represent a special effort for the company.

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[*] *Lecturer, Ph.D., "Drăgan" European University of Lugoj, Romania,*
miculeacmelly@yahoo.com

- To examine the investment activity, which has an important informational value, in order to see if the company enlarges or not its activity and what parts are aimed at enlargement or contraction.
- On the basis of the investment activity analysis, it is examined the section regarding the financing in order to analyse the way in which the company finances its enlargement or if it does not enlarge, the way in which it reduces the debts related to financing.
- Finally, it is important to establish the consequences of the nonmonetary investment and financing operations on the cash flows. This kind of operations do not involve effective inflows or outflows of financial means, but they refer to fixed assets, long-term debts or equity capitals and may consist in replacing a fixed asset with a long-term debt or the payment of a debt by capitalization issue (Lala – Popa & Miculeac, 2012).

2. ANALYSIS OF CASH FLOWS RELATIVE TO THE OPERATING ACTIVITY

Total cash flows are made on the basis of the company's three main activities: operation, investment and financing.

In order to build the net cash flow generated by the operating activities, the international practice has defined two methods: **the indirect method and the direct method**, the difference between the two methods consisting in the way the flows related to the operating activity are defined (Palepu et al., 2010).

The indirect method which operates, theoretically, with information of engagement accounting, consists in adjusting the exercise's gross result:

- with the expenditure and non-monetary revenues (amortizations, provisions, exchange rate differences, postponed taxes, un allotted profits of associate companies and minority interests);

- with the variation of stocks and operating debts, respectively with the variation of the need of net circulating funds (asset and liability items involving the postponing of cashing and payments);

- with items of revenues and expenditure which are taken into consideration when determining the cash flows from the investment and financing activities (not to double the effects).

Through the indirect method, the cash flow related to the operating activity is defined as it follows:

Exercise's gross result
\+ Depreciation expenses (amortizations and provisions)
\- Depreciation revenues (amortizations and provisions)
\+ Expenses regarding postponed taxes
\- Expenses and revenues from exchange rate conversion and differences
\- Result from the sale of fixed assets
\- Result from the transfer of investment securities

- Revenues from subsidies for investments (calculated)
+ Cashed interests and dividends
- Paid interests and dividends
- Extraordinary expenses and revenues not related to operation
- Variation of stocks
- Variation of debts
+ Variation of suppliers and other non financial short-term debts
- Payments regarding the tax on profit
= **Net cash flow resulted from operating activities**

Because **the direct method** operates only with receipts and payments-like information, the net cash flow generated by operating activities will be calculated as difference between receipts and payments registered during the period, reflected into the available funds account.

According to direct method, the cash flows related to operating activities include:

- receipts from clients coming from the sale of goods, execution of works and supply of services;
- payments to suppliers of goods and services;
- payments as wages and other operating activities to and in the name of employees;
- receipts from royalties, commissions, fees and other revenues;
- payments regarding taxes, duties and other needs operation-related;
- paid or cashed interests and dividends;
- payments or refunding of tax on profit, if they cannot be identified specifically with the investment or financing activities;
- payments and receipts regarding expenses, respectively extraordinary revenues operation-related.

International Financial Reporting Standards treats differently the financial flows resulted from interests and dividends and their classification into one or another activity category. (Greuning et al., 2011)

The net operating cash flow (FNE) can be met in one of the following two situations:

a) FNE > 0, a positive operating cash flow means that the receipts exceed the payments related to the operating activity and there will be an excess of liquidity, which represents the source of value creation from the main object of activity.

b) FNE < 0, a negative operating cash flow means that the receipts are exceeded by the payments related to the operating activity and there will be a lack of liquidity.

A series of operating cash flow rates can be built a in order to see if it fits the company's needs.

1. The operating cash flow adequacy rate (RA_{FNE}) shows its capacity to cover the cash needs resulted from the financing and investment activity (N_{FI}).

There are two possibilities of calculation:

a) For one financial exercise:

$$RA_{FNE} = \frac{FNE}{N_{FI}} \qquad (1)$$

- If $RA_{FNE} > 1$, then during that period the cash flows cover all the cash needs from the financing and investment activity, (including the repartition of dividends), at the end of that period the company registering an excess of cash above its needs. In this case new opportunities must be found to invest or place the money. The optimum level of the indicator would be exactly 1, a deviation of +10% being considered still normal. Above it appears the problem of using the cash in excess.
- If $RA_{FNE} < 1$, then during that period the cash flows do not cover all the cash needs from the financing and investment activity. In this case it must find new sources of mobilization. It is a normal situation to launch on a market. From this reason it is monitored for several years.

b) For 5 consecutive years:

$$RA_{FNE} = \frac{\sum_{t=1}^{n} FNE_t}{\sum_{t=1}^{n} N_{FI_t}} \qquad (2)$$

This rate must be necessarily bigger or equal to 1. The previous condition is necessary but not sufficient, because the elements' dynamics must be monitored:

- If individual rates improve in time, then the indicator is considered to reflect a favorable situation for the company.
- If rates worsen in time, then the indicator is considered to reflect an unfavorable situation for the company.

2. The operating cash flow reinvestment rate (RR_{FNE}) shows how much of the operating cash flow is reinvested (INVT) during a financial exercise.

$$RR_{FNE} = \frac{FNEc_t}{INVT_t} \qquad (3)$$

where:

$FNEc_t$ - operating cash flow for period t, corrected with the tax on profit and dividends (sums which are deducted);

$INVT_t$ - investments done in period t, consisting in fixed assets and equipment with additional stocks related to them.

3. The operating cash flow rate (R_{FNE}), shows its position in total cash flows. If all cash flows are positive, then it shows the weight in total, having a meaning only when the total cash flow and the operation cash flow are positive.

$$R_{FNE} = \frac{FNE}{\mathrm{FN}} = \frac{FNE}{FNE + FNI + FNF} \qquad (4)$$

and if FNE > 0, FNI > 0, FNF > 0 then:

$$\mathrm{FNE}\ \% = \frac{FNE}{FN} \qquad (5)$$

- If $R_{FNE} > 1$, then it means that the operating activity is consumed by the other activities, the activity with the highest consumption having to be identified.
- If $R_{FNE} < 1$ there are two situations:

- if all flows are positive, then the indicator shows the weight of operation in total, being advisable to be bigger then 75%;

- if all total flows are positive, but there are negative flows (from financing or investment), there must be considered again what generates each flow.

In order to avoid distortions and sometimes the impossibility of calculation, respectively to catch all the situations, it is advisable to analyze them in absolute values on activities:

$$\mathrm{FN}=\mathrm{FNE}+\mathrm{FNI}+\mathrm{FNF} \qquad (6)$$

3. CASH FLOW ANALYSIS RELATED TO THE INVESTMENT ACTIVITY

The investment function measures the company's investment effort, at the level of internal growth (buy or sale of corporeal and non-corporeal fixed assets), as well as at the level of external growth (financial fixed assets) (Brealey et al., 2006).

Cash flows generated from investment activities (FNI) include:

- payments regarding the acquisition of fixed assets;
- receipts coming from the sale of fixed assets;
- cashed interests, as well as cashed dividends;
- debts variations related to investment operations;
- extraordinary revenues and expenses related to the investment activity.

The net cash flow from investment activities (FNI) can be found in the following situations:

a) FNI > 0, case in which cash is generated from the investment activities, cash which can be used to finance the other activities. The situation is abnormal if their size is considerable and it is not compensated by investments.

b) FNI < 0, case valid especially in the periods when there are made massive investments.

In this case we can build the **cash flow rate from the investment activity** (R_{FNI}) which shows its position in total cash flows. If all cash flows are positive, then it shows the weight in total. It has a meaning only when the total cash flow as well as the investment cash flow are positive.

$$R_{FNI} = \frac{FNI}{FN} = \frac{FNI}{FNE + FNI + FNF} \quad (7)$$

and if FNE > 0, FNI > 0, FNF > 0, then:

$$\text{FNI }\% = \frac{FNI}{FN} \quad (8)$$

- If $R_{FNI} > 1$, then it means that the investment supplies cash which is consumed by the other activities, the activity with the highest consumption having to be identified, the situation being abnormal.
- If $R_{FNI} < 1$, there are two situations:

 - if all flows are positive, then the indicator shows the weight of the investment activity in total, being advisable not to be bigger then 25%;

 - if all total flows are positive, but there are negative flows (from operation or financing), there must be considered again what effect generates each flow.

In order to catch all the possible situations, it is advisable to analyze them in absolute values on activities.

4. CASH FLOW ANALYSIS RELATED TO THE FINANCING ACTIVITY

The financing function emphasizes the financing sources to which the company applied in order to cover the fund needs (capital growth through contribution in cash or loan contracting), as well as the cash outflows related to getting these sources (payment of interests and dividends).

The cash flows generated by the financing activities (FNF) refer to:

- receipts from the issue of shares and other instruments of equity capital;
- payments to shareholders for buying or redemption of company's shares, that is payments regarding the reduction of issued capital;
- receipts coming from loans from the issue of bonds, credit, mortgage loan and other short or long-term loans;
- payments regarding the reimbursement of loans and bonds regarding to operations of financial leasing;
- paid dividends and interests;
- variation of debts referring to financing operations;
- extraordinary revenues and expenses related to financing.

The net cash flow from financing activities (FNF) can be met in the following situations:

a) FNF > 0, case in which cash is generated from the financing activities, cash which can be used to finance the other activities. The situation is normal if it is done when there is an increase of equity capital items. Taking medium or long-term loans is not abnormal, when they connect with the needs of cash from the investment activity, respectively they benefit of the leverage effect.

b) FNF < 0, case valid especially in the periods when credits are reimbursed, interests and taxes are paid massively, dividends are distributed. The situation is not necessarily negative.

A series of cash flow rates from the financing activity can be built in order to see if it fits the company's needs.

1. The financing cash flow adequacy rate (RA_{FNF}) shows its capacity to cover the needs resulted from the other activities (N_{AC}).

There are two possibilities of calculation:

a) For one financial exercise:

$$RA_{FNF} = \frac{FNF}{N_{AC}} \quad (9)$$

- If $RA_{FNF} > 1$, then during that period the cash flows cover all the cash needs, including the repartition of dividends, at the end of the period the company registering an excess of cash coming from this activity above its needs. In this case new opportunities must be found to invest or place the money. The optimum level of the indicator would be exactly 1, a deviation of +5% being considered still normal. Above it appears the problem of sizing accordingly the resources compared to the needs.
- If $RA_{FNF} < 1$, then during that period the cash flows do not cover all the cash needs from the financing and investment activity. In this case it must find new sources of mobilization. It is a normal situation to launch on a market. From this reason it is monitored for several years.

b) It is calculated for 5 consecutive years too. This rate must necessarily be bigger or equal to the unit.

2. The financing cash flow reinvestment rate (RR_{FNF}) shows how much of the financing cash flow is reinvested (INVT) during a financial exercise.

$$RR_{FNF} = \frac{FNFc_t}{INVT_t} \quad (10)$$

where:

$FNFc_t$ - financing cash flow for period t, corrected with the tax on profit and dividends (sums which are deducted);

$INVT_t$ - investments done in period t, consisting in fixed assets and equipment with additional stocks related to them.

3. The financing cash flow rate (R_{FNF}), shows its position in total cash flows. If all cash flows are positive, then it shows the weight in total. It has a meaning only when the total cash flow and the financing cash flow are positive

$$R_{FNF} = \frac{FNF}{FN} = \frac{FNF}{FNE + FNI + FNF} \qquad (11)$$

and if FNE > 0, FNF > 0, FNI > 0, then:

$$\mathrm{FNF\%} = \frac{FNF}{FN} \qquad (12)$$

- If $R_{FNF} > 1$, then it means that the financing activity is consumed by the other activities, the activity with the highest consumption having to be identified.
- If $R_{FNF} < 1$, there are two situations:

- if all flows are positive, then the indicator shows the weight of financing activity in total, being advisable not to be bigger then 25%;

- if all total flows are positive, but there are negative flows (from operation or investment), there must be considered again what generates each flow.

In order to avoid distortions and sometimes the impossibility of calculation, respectively to catch all the situations, it is advisable to analyze them in absolute values on activities.

5. ANALYSIS END ACCOUNTING OF TOTAL CASH FLOWS

We have previously mentioned that total cash flows are formed on the basis of the three activities: operation, investment and financing. In some situations, there can be flows with extraordinary feature, which also must be taken into consideration. They are not normal flows. They should not exist, but because of some aleatory activities they can interfere and distort the cash flows. (Emery et al., 2004).

Total cash flows are formed on activities according to the following table:

Table 1. Constitution of total cash flows according to direct method – simplified scheme

SPECIFICATION	Symbol and Formula
Receipts related to the operating activity	Ie
Payments related to the operating activity	Ee
CASH FLOW FROM THE OPERATING ACTIVITY	FNE = Ie - Ee
Cash inflows related to the investment activity	Ii
Cash outflows related to the investment activity	Ei
CASH FLOW FROM THE INVESTMENT ACTIVITY	FNI = Ii - Ei
Cash inflows related to the financing activity	If

Cash outflows related to the financing activity	Ef
CASH FLOW FROM THE FINANCING ACTIVITY	FNF = If - Ef
Cash inflows related to extraordinary activities	Ix
Cash outflows related to extraordinary activities	Ex
CASH FLOW FROM EXTRAORDINARY ACTIVITIES	FNX = Ix - Ex
Total cash inflows	FI = Ie + Ii+ If + Ix
Total cash outflows	FE = Ee + Ei+ Ef + Ex
TOTAL CASH FLOW	FN = FNE + FNI + FNF + FNX

On the basis of cash flows the company's available funds are formed. There are two situations:

a) The company does not have treasury credits, and in this case the available funds at the end of the period (DBf) are given by the available funds from the beginning (DBi) to which the cash flow (FN) is added:

$$DBf = DBi + FI - FE = Dbi + FN \qquad (13)$$

therefore

$$FN = DBf - DBi = \Delta DB \qquad (14)$$

b) The company starts with a treasury deficit, that is it has treasury credits (passive treasury TP). In this case, the available funds at the end of the period are given by the available funds from the beginning to which the cash flow is added:

$$DBf = DBi - TP + FI - FE = DBi + FN - TP \qquad (15)$$

therefore

$$FN - TP = DBf - DBi = \Delta DB \qquad (16)$$

Available funds and treasury operations are formed according to the following table:

Table 2. Constitution of available funds and treasury operations

SPECIFICATION	SYMBOL and FORMULA
Available funds at the beginning of the period	DBi
Short-term bank credits at the beginning of the period	CBTSi
Cash flow	FN = FNE + FNI + FNF + FNX
Current bank credits at the end of the period	CBTSf
Available funds at the end of the period	DBf = DBi + FN + Δ CBTS

The cash flows are considered to be sufficient if they generate available funds at the end of the period so that the net treasury is positive.

In my opinion, in order to make the analysis of total cash flow, the following aspects must be taken into consideration:

1. The analysis of total cash flow level;
2. The analysis of total cash flow dynamics;
3. The analysis of total cash flow structure.

1. The analysis of total cash flow level can be done on the basis of several criteria of comparison:

- The level of total cash flow is adequate as long as:
  - it is positive, the receipts being bigger than the payments (FN > 0; FI > FE);
  - it generates more available funds at the end of the management period than at its beginning (DBf > DBi ; ΔDb > 0);
  - it ensures a net positive treasury (TN > 0) and in growth (ΔTN > 0) ;
  - it covers the possible deficits of initial treasury.
- The size of the cash flow may be a sign for the company's future needs.

2. The analysis of total cash flow dynamics

The conditions that must be obeyed in order to ensure a maximum efficiency are:

a) $\Delta FN > 0;\ \Delta FI > 0;\ \Delta FE < 0$

b) $I_{FN} > 1; I_{FI} > I_{FE}$

3. The analysis of total cash flow structure is done on constitutive items, there being two possibilities:

- If all cash flows are positive, by reporting each item to the total cash flow we get its composition:

$$\frac{FNE + FNI + FNF + FNX}{FN} = \frac{FNE}{FN} + \frac{FNI}{FN} + \frac{FNF}{FN} + \frac{FNX}{FN} = \\ = FNE\% + FNI\% + FNF\% + FNX\% = 100\% \qquad (17)$$

Operating cash flows should have the majority, and the extraordinary ones should not exist.

- If not all cash flows are positive, then the structure can be calculated on constitutive items:

  a) On types of inflows:

$$\frac{Ie + Ii + If + Ix}{FI} = \frac{Ie}{FI} + \frac{Ii}{FI} + \frac{If}{FI} + \frac{Ix}{FI} = \\ = Ie\% + Ii\% + If\% + Ix\% = 100\% \quad (18)$$

The flows from operating and financing receipts should have the majority, while the investment and extraordinary ones should not exist.

b) On types of outflows:

$$\frac{Ee + Ei + Ef + Ex}{EI} = \frac{Ee}{EI} + \frac{Ei}{EI} + \frac{Ef}{EI} + \frac{Ex}{EI} = \\ = Ee\% + Ei\% + Ef\% + Ex\% = 100\% \quad (19)$$

I consider that the flows from operating and investment payments should have the majority, those from financing should be as little as possible, while the extraordinary ones should not exist.

6. CONCLUSIONS

The analysis of cash flows offers the possibility to establish and ensure the level of cash flows and current credits necessary to develop the operating activity, while ensuring a durable and dynamic financial equilibrium, with financing costs as reduced as possible.

For this purpose, it anticipates the value and periodicity of receipt and payment flows, their concordance with the level of owned resources, attracted or borrowed, compared to the estimated operating demands.

The management of total cash flows has the task to offer useful information about the change in commercial company's financial situation, allowing the evaluation of their capacity to generate future cash flows within the operating, investment and financing activities, as well as the adequate use of these flows.

We conclude that the advantages of cash flows analysis are major:

- Information is necessary to establish a company's capacity to generate cash and cash equivalents on the three categories of activities: operation, investment, financing (Lala-Popa & Miculeac, 2010)
- It increases the comparison degree of reporting the operation results between different companies because it eliminates the effects of using different accounting treatments for the same transactions and events.
- It gives the possibility to develop some valuation and comparison models of the updated value of future cash flows of different companies.

Possible future researches on this topic:

- analysis of cash flows from management operations;
- analysis of cash flows from capital operations;
- global analysis of cash flows using the profilograph method.

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CORRELATED ANALYSIS OF CLIENT-CREDIT COST WITH THE ONE OF SUPPLIER - CREDIT COST

MIRELA MONEA, MELANIA ELENA MICULEAC *

ABSTRACT: *The given client-credit has associated several types of costs. If a company gives client-credit for a certain period of time, then it will have to finance its activity from other sources. Another aspect is the one related to the size of allotted sum. The sum that must be covered does not equal the turnover. The impact on financing the operating cycle is found usually only under the form of expenses which are made up of variable costs (because amortization must not be paid, the profit is included in the price). Thus, the sum which must be covered is not related to the non-cashed turnover from the client-credit, but only to variable costs. This will be the sum that must be covered from the financing sources. Supplier-credit is a source attracted, usually it has no cost.*

KEY WORDS: *total commercial claims; total commercial debts; cost of client-credit; cost of supplier-credit; absolute gap of financing.*

JEL CLASSIFICATION: *M 41*

1. GLOBAL ANALYSIS OF THE LEVEL AND DYNAMICS OF COMMERCIAL CLAIMS AND DEBTS

The global analysis of the level and dynamics of commercial claims and debts refers to comparing the level, dynamics, structure and efficiency of seller and buyer commercial credit management.

* *Lecturer, Ph.D., University of Petroșani, Romania, moneamirela@gmail.com*
Lecturer, Ph.D., "Drăgan" European University of Lugoj, Romania, miculeacmelly@yahoo.com

1.1. Global analysis of commercial credits' level

The goal is to identify the company's position and the impact in absolute values on the financial resources management.

Total commercial claims (Cr_{com}) are made up of:

- claims to clients (Cl), for the exchange value of sold goods (given seller credit);
- claims to suppliers (Afz), for advance money paid (given buyer credit).

Total commercial debts (D_{com}) are made up of:

- debts to suppliers (Fz), for the delivered goods (received seller credit);
- debts to clients (Acl), for the received advance money (received buyer credit).

The difference between the level of commercial claims and commercial debts represents a surplus of financial resources or an additional necessary to be financed of the operational cycle, named absolute gap of financing:

$$FE_{com} = Cr_{com} - D_{com} = (Cl + Afz) - (Fz + Acl) = (Cl - Fz) + (Afz - Acl) =$$

$$= FE_{cv} + FE_{cc} = FE_{Cl} + FE_{Fz} \quad (1)$$

where:

FE_{com} – additional necessary to be financed or surplus of financial resources
FE_{cv} – from seller commercial credits (received and given)
FE_{cc} - from buyer commercial credits (received and given)
FE_{Cl} - from relations of commercial credit with clients
FE_{Fz} - from relations of commercial credit with suppliers

If:

a) $Cr_{com} > D_{com}$, that is FEcom > 0, a surplus of necessary to be financed results from the management of commercial credits, which requires financial resources to cover them;
b) $Cr_{com} < D_{com}$, that is FEcom < 0, a surplus of financial resources results from the management of commercial credits, which can be used to finance other activities;
c) $Cr_{com} = D_{com}$, that is FEcom = 0, the additional necessary to be financed is null.

1.2. Global analysis of commercial credits' dynamics

The change in the value of absolute financing gap from commercial credits can be explained on the basis of the change in all implied categories. The evolution of constitutive elements in one way or another will determine the indicator's evolution.

$$\Delta FE_{com} = \Delta\, Cr_{com} - \Delta\, D_{com} = (\Delta Cl + \Delta Afz) - (\Delta Fz + \Delta Acl) =$$

$$= (\Delta Cl - \Delta Fz) + (\Delta Afz - \Delta Acl) = \Delta FE_{cv} + \Delta FE_{cc} \quad (2)$$

2. GLOBAL ANALYSIS OF COMMERCIAL CREDIT STRUCTURE

Three structures can be observed:

a) two different:
- structure of commercial claims on components (client-credit and advance money to suppliers)
- structure of commercial debts on components (supplier-credit and advance money received from clients).

b) a correlated structure, of surplus or additional necessary of financial resources on components:
- on the type of commercial credits (buyer and seller);
- on stakeholders (clients and suppliers).

The evolution in one way or another of the value and dynamics of constitutive elements determines the change in the structure of the analyzed phenomenon, which is compared depending on the company's commercial policies. (Kyerboach & Coleman, 2007)

3. CORRELATED ANALYSIS OF COMMERCIAL CREDITS' DURATION

It can be observed on several ways:

a) on types of credits:
- seller credit (client-credit duration with supplier-credit duration);
- buyer credit (average duration of advance money received from clients with advance money given to suppliers).

b) on stakeholders:
- on clients;
- on suppliers.

A special importance has the comparison in days of client-credit (dz_{Cl}) with the duration in days of supplier-credit (dz_{Fz}), having an important impact on the company's liquidity.

a) if $dz_{Cl}>dz_{Fz}$, that is the duration in days of client-credit is longer than the duration in days of supplier-credit, then at the company's level a deficit of financial resources is created, shown in the increase of the necessary in working assets of the operation, with unfavorable impact on the operation treasury;
b) if $dz_{Cl}<dz_{Fz}$, that is the duration in days of client-credit is shorter than the duration in days of supplier-credit, then at the company's level a surplus of financial resources is created, shown in the decrease of the necessary of working assets of the operation, with favorable impact on the operation treasury. (Miculeac & Monea, 2011, p. 185)

In the second case, it is possible not to register an absolute surplus of liquidity, because:

- the duration of client-credit is:

$$dz_{CI} = \frac{CI_t}{Ca_t} T \qquad (3),$$

- and the duration of supplier–credit is:

$$dz_{Fz} = \frac{Fz_t}{Cfz_t} T \qquad (4)$$

In order not to register an absolute deficit of liquidity, at least the following relation must take place:

$$\frac{CI_t}{Ca_t} T \le \frac{Fz_t}{Cfz_t} T \quad (5)$$

If there is equality, the liquidity is null.

$$\frac{CI_t}{Ca_t} T = \frac{Fz_t}{Ca_t} T \Leftrightarrow \frac{CI_t}{Ca_t} T = \frac{Cfz_t}{Ca_t} . \frac{Fz_t}{Cfz_t} T \Leftrightarrow \frac{CI_t}{Ca_t} T =$$

$$= \frac{Che_t}{Ca_t} . \frac{Cfz_t}{Che_t} . \frac{Fz_t}{Cfz_t} T \Leftrightarrow dz_{CI} = S_e . g_{fe} . dz_{Fz} \qquad (6)$$

$$dz_{CI} \le S_e . g_{fe} . dz_{Fz} \quad (7)$$

that is

$$\frac{dzCI}{dzFz} \le \frac{Cfz}{Ca} \Leftrightarrow \frac{Ca}{Cfz} \le \frac{dzFz}{dzCI} \quad (8)$$

that is

$$dzFz \ge dzCI . \frac{Ca}{Cfz} \quad (9)$$

where:

(Fzt/Cat)T – average duration to cover the debts to suppliers from the turnover;

Se – surety indicator for operation, expenses from operation made to get 1 lei of turnover;

gfe – quantity of expenses with acquisitions from suppliers in the operation ones;

Cfz/Ca – may be interpreted as a surety ratio (liquidity threshold), although it represents the quantity of expenses with acquisitions from suppliers in the turnover.

This means that if $dz_{CI} < dz_{Fz}$, there does not necessarily appear an absolute surplus of liquidity, as long as the duration in days of suppliers does not exceed the equality.

Thus, when evaluating the liquidity evolution as a result of gaps between commercial credits, there appear other factors of influence like the efficiency of the operation activity (measured through the level of operating expenses necessary to get 1 lei of turnover) and its specific measured as quantity of expenses with acquisitions from suppliers in the total of operating expenses. (Emery et al., 2004)

The main impact of the change in the duration of seller credit rotations has as a direct effect on the change in the necessary of working assets of the operation, having a favorable or unfavorable impact on the company's treasury. (Wood`s & Sangster, 2008)

The change of the two average durations is reflected as it follows:

1) The change in the necessary of working assets of the operation, on the basis of the change in the average duration of receipts from clients and on the basis of the change in the average duration of payments to suppliers:

$$\Delta NFRE_{(\Delta dzCI,\ \Delta dzFz)} = [Ca_1(dz_{CI1}-dz_{CI0})/T]-[Cfz_1(dz_{Fz1}-dz_{Fz0})/T] \quad (10)$$

a) The change in the necessary to be financed of the operating cycle, on the basis of the change in the average duration of receipts from clients:

$$\Delta NFCE_{(\Delta dzCI)}=[Ca_1(dz_{CI1}-dz_{CI0})/T] \quad (11)$$

b) The change in the financing resources of the operating cycle, on the basis of the change in average duration of payments to suppliers:

$$\Delta SFCE_{(\Delta dzFz)}=[Cfz_1(dz_{Fz1}-dz_{Fz0})/T] \quad (12)$$

2) The change in the net treasury, on the basis of change in the average duration of receipts from clients and on the basis of the change in the average duration of payments to suppliers:

$$\Delta TN_{(\Delta dzCI,\ \Delta dzFz)}= [Cfz_1(dz_{Fz1}-dz_{Fz0})/T] - [Ca_1(dz_{CI1}-dz_{CI0})/T] \quad (13)$$

4. CORRELATED ANALYSIS OF COMPARATIVE COSTS

4.1. Cost of client-credit

The cost sources for the client-credit depend on the financing source used to cover this deficit:

a) If the necessary to be financed related to the client-credit is covered from the working assets, then:

- if the working assets are made up of own capitals, the average cost of own capitals is used;

- if the working assets are made up of own capitals and medium and long-term debts, the average cost of permanent capitals is used;

b) If the necessary to be financed related to the client-credit is covered from debts to suppliers, then:

- if the company does not benefit of reductions to pay its debts in a shorter time, the source has no cost;
- if the company benefits of reductions to pay its debts in a shorter time, the source has a cost;

c) If the necessary to be financed related to the client-credit is covered by short-term bank credits, then their real cost is used (different of interest).

d) If the necessary to be financed related to the client-credit is covered by all sources, then depending on their contribution, the weighted average cost of resources is used.

Another aspect is the one related to the size of allotted sum. The sum that must be covered does not equal the turnover. (Van Horne & Wachowicz, 2005)

The impact on financing the operating cycle is found usually only under the form of expenses which are made up of variable costs (because amortization must not be paid, the profit is included in the price). Thus, the sum which must be covered is not related to the non-cashed turnover from the client-credit, but only to variable costs. This will be the sum that must be covered from the financing sources.

Thus, the total cost of the monetary unit of client-credit can be evaluated as it follows:

$$K_{CI} = dz_{CI}.\overline{Ca_z}.rcv.\overline{k_K} = \frac{CI}{Ca}T.\frac{Ca}{T}.\frac{Cv}{Ca}.\frac{C_{Sf}}{Cv_{Sf}} \quad (14)$$

where :

$\overline{Ca_z} = \frac{Ca}{T}$ - average daily turnover;

$rcv = \frac{Cv}{Ca}$ - variable expenses ratio

$\overline{k_K} = \frac{C_{Sf}}{Cv_{Sf}}$ - cost of financing source

The cost of client-credit is obtained by reporting the absolute value of the cost at the absolute level of the balance from clients:

$$\overline{k_{CI}} = \frac{k_{CI}}{CI} \quad (15)$$

There is also a cost related to the change in the commercial credit policy, even if this fact result of lack of liquidness:

$$K_{op} = \frac{Ca_0}{T}.(\Delta dz_{CI}).(1-rcv).\overline{k_K} \qquad (16)$$

4.2. Cost of supplier-credit

Supplier-credit is a source attracted, usually it has no cost. This thing is valid only if the company does not benefit of reductions to pay its debts to suppliers in a shorter time.

But if the supplier gives reduction for the payment of the acquired goods in a shorter time, the source bears a cost, and this average cost is given by:

$$\overline{k_{dzFz}} = \left(\frac{d_{Cfz\%}}{100\% - d_{Cfz\%}}\right).\left(\frac{T}{dz_{Fz} - d_{Fzd}}\right) = \quad = \frac{Cfz - Cfzd}{Cfzd}.\left(\frac{T}{\Delta dz_{Fz}}\right) \qquad (17)$$

where:

dCfz% - percentage discount, relative reduction of expenses with the supplier, as result of the fact that the debt will be paid sooner;

dzFz - average duration of payment within which it does not benefit of discount;

dzFzd - average duration of payment within which it benefits of discount;

dzFz>dzFzd

5. CONCLUSIONS

In the last part of the article we have compared the cost of client - credit to the cost of possible financing sources and we have reached the following conclusions:

If the average cost of the working assets and of bank credits is higher than the one of the supplier-credit, there are the following situations:

a) if $k_{dzCI} > k_{dzFz}$, then the coverage of the client-credit from the supplier-credit is efficient, because a reduction of financial resources cost would be created;

b) if $k_{dzCI} = k_{dzFz}$, then the financing of supplier-credit from the client-credit is indifferent;

c) if $k_{dzCI} < k_{dzFz}$, then the coverage of the client-credit from the supplier-credit is not efficient, because an increase of financial resource cost would be created.

If the average cost of the working assets is lower than the one of bank credits and lower than the one of the supplier-credit, there are the following situations:

a) if $k_{dzCI} > k_{FR}$, then the coverage of the client-credit from the working assets is efficient, because a reduction of financial resources cost would be created;

b) if $k_{dzCI} = k_{FR}$, then the financing of supplier-credit from the working assets is indifferent;

c) if $k_{dzCI} < k_{FR}$, then the coverage of the client-credit from the working assets is not efficient, because an increase of financial resources cost would be created;

If the average cost of bank credit is lower than the one of the working assets and lower than the one of supplier-credit, there are the following situations:

a) if $k_{dzCI} > k_{Cr}$, then the coverage of the client-credit from the credit is efficient, because a reduction of financial resources cost would be created;

b) if $k_{dzCI} = k_{Cr}$, then the financing of supplier-credit from the credit is indifferent;

c) if $k_{dzCI} < k_{Cr}$, then the coverage of the client-credit from the credit is not efficient, because an increase of financial resources cost would be created.

Possible future researches on this topic:

- analysis of the efficiency of resources alloted in claims towards clients;
- correlated analysis of commercial credits'duration.

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BETWEEN PARCIMONY AND COMPLEXITY: COMPARING PERFORMANCE MEASURES FOR ROMANIAN BANKING INSTITUTIONS

ANCA MUNTEANU, PETRE BREZEANU *

ABSTRACT: *The main objective of this study is to establish the relationship between traditional measures of performance (ROE, ROA and NIM) and EVA in order to gain some insight about the relevance of using more sophisticated performance measurements tools. Towards this end the study uses two acknowledged statistical measures: Kendall's Tau and Spearman rank correlation Index. Using data from 12 Romanian banking institutions that report under IFRS for the period 2006-2010 the results suggest that generally EVA is highly correlated with Residual Income in the years that present positive operational profits whereas for the years with negative outcome the correlation is low. ROA and ROE are the measure that best correlates with EVA for the entire period and thus -applying Occam's razor- could be used as a substitute for more complex shareholder earnings measures.*

KEY WORDS: *performance measures; banking sector; Economic Value Added; Residual Income.*

JEL CLASSIFICATION: *G21; L25.*

1. INTRODUCTION AND LITERATURE REVIEW

The topic of bank performance assessment is the research agenda for much of the recent empirical studies. A great deal of studies use performance measures like return on equity (ROE), return on assets (ROA), net interest margin (NIM) but also economic measurements of profit like economic value added (EVA) gained increasing popularity in the field of performance assessment for financial institutions.

EVA – a trademark introduced by Stern Stewart in 1992 – assumes that the generated revenues must cover for operating expenses and the interest charges on debt

* *Ph.D. Student, Academy of Economic Studies, Bucharest, Romania*
Prof., Ph.D., Academy of Economic Studies, Bucharest, Romania, brezeanupetre@yahoo.com

and also it must compensate shareholder for the risks undertaken by investing equity. The key principle of EVA is to subtract from the Net Operating Profits after Tax (NOPAT) all debt and equity charge, thus providing shareholders with a threshold for a minimum level of operating profits. Unlike traditional measures, EVA raises attention to the issue highlighted by Modigliani and Miller (1958): not only debt holders expect a certain return but also shareholders of the bank expect a specific rate of return for assuming the risk of investing in the bank.

Uyemura et al. (1996) introduced the first comprehensive literature for EVA. The study was the first one to provide guidance on the accounting adjustments needed for customizing EVA for banks. Also, the study presented EVA's superiority over traditional performance measurements as it exhibits stronger correlation with bank market values than traditional accounting measures like ROA and ROE.

Fiordelisi (2007) develops a new measure of banking performance – shareholder value efficiency – based on the maximum possible EVA given particular inputs and outputs. Using financial information from banks operating in advanced European economies in the period 1997-2002, shareholder value efficiency is found to be the most important factor that explains value creation in European banking, cost and profit efficiency having only a marginal influence.

Fiordelisi and Molyneux (2010) investigate the value creation process in banking for 12 countries from EU-15 area, period 1998-2005. The study uses as bank performance measure EVA and implies that shareholder value creation is a linear function of various bank-specific, industry-specific and macroeconomic factors. The conclusions show that shareholder value has a positive relationship with cost efficiency changes while economic profits are linked to revenue efficiency changes.

Most EVA literature is written and tested for developed Anglo-Saxon economies. Therefore, implementing EVA in emerging economies brings into light problems regarding computing a reasonable cost of equity capital, establishing a convergence between the GAAP accounting basis which underlines the specific adjustments proposed by Stern Stewart and the national decisions regarding accounting standards adoption, determining the relevance of accounting adjustments.

Recent studies regarding the performance of banks in emerging markets discuss some of the details of EVA computation in banking institutions.

The study of Bhattacharyya and Phani (2004) explains the concept of EVA in the context of Indian banking institutions. The study strengthens that in the case of Indian banking system the computation of EVA can involve significant subjectivity and thus reduces its informative value. Nevertheless the adoption of EVA as a corporate philosophy improves productivity and shareholder value creation.

Teker et al. (2011) compute EVA for 11 quoted Turkish banks. A ranking of the performance of banks is provided by using different proxies such as net income, total equity, ROE, EVA and EVA/Total Equity profiles. The results indicate that although banks report high values in traditional performance measurement, some institutions fail to generate sufficient amounts of economic profit.

Costa (2012) establishes a framework for implementing EVA in Brazilian Banks. The research provides an alternative way to calculate EVA for banking institution by covering issues regarding the inputs used to calculate EVA (deciding upon significant accounting biases over NOPAT and capital, estimating a credible cost of equity, considering the stylized facts of Brazilian economy and of the regulatory environment.

2. METHODOLOGY

The main objective of this study is to establish the relationship between traditional measures of performance (ROE, ROA and NIM) and EVA in order to gain some insight about the relevance of using more sophisticated performance measurements tools. In other words we try to answer a simple question: does the effort of computing a complex measure like EVA payoff?

Towards this end the study elaborates on the accounting adjustments that general theoretical literature debates upon. Although much literature exists in the field of EVA computation for non-financial companies, studies that are customized for banking institutions characteristics are scarce. Also, the complex nature of the banking industry makes it difficult for implementing EVA successfully.

From an accounting perspective, EVA is simply the adjusted net operating profit after taxes less the cost of capital:

1. $EVA_t = adjustedNOPAT_t - (Ke_t * adjustedRisk\ Capital_t)$.

In the absence of accounting adjustments we can compute the Residual Income measure which is simply a non-adjusted EVA:

2. $Resiual\ Income_t = NOPAT_t - (Ke_t * Risk\ Capital_t)$

From the finance perspective EVA is used for determining firm value as it is directly related with value creation through NPV.

3. $Bank\ value = Capital + NPV_{EVA}$,

where NPV_{EVA} represents the net present value of expected EVA.

K_e reflects the cost of equity and Risk Capital reflects the capital needed in order to account for the riskiness of the specific banking operation. Main stream financial literature suggests the estimation of the cost of equity by using a Capital Asset Pricing Model (CAPM), there remains a lot of controversy regarding the application of this method for emerging markets considering the high volatility of this particular type of financial market. In the particular case of Romania because of the fact that from a maximum of 42 banking institutions only 4 banks are listed the computation of CAPM seems to have little relevance for the entire banking sector. In order to have reliable estimation on the cost of equity this study used as a proxy a yearly average of the interbank market rate (ROBOR) starting with the values from 2006. This choice is supported by a similar study for EVA in emerging markets (Costa, 2012) that suggests the using of the interbank market rate as a good cost of equity benchmark.

In the case of banking institutions there is a fundamental difference between cash capital (shareholder equity) and risk capital. Risk capital is specific to the risk profile of the bank and is determined by the structure of the assets portfolio. Basel II Accord established the minimum 8% ratio coefficient between equity capital and risk weight assets. In order to arrive to the value of risk capital this study uses bank specific Tier1 ratio to compute the value of risk-weight assets:

4. $$Tier1_t = \frac{Cash\ Capital_t}{\alpha_t\ Total\ Assets_t}$$

5. $$Risk\ Capital_t = \frac{Cash\ Capital_t}{\alpha_t}$$

where α_t represents the bank specific risk-weigh that accounts for the structure of the asset portfolio.

In practical terms the first step in calculating EVA is to make some adjustments to NOPAT. The inventor of EVA, Stewart (1992), based the logic of the measurement starting from generally accepted accounting principles (GAAP). They advocated that adjustments to net income are to be made because of the conservative bias that characterizes GAAP which distorts the current economic reality. Stewart (1992) al has identified more than 160 potential adjustments that a company can make to its net income. However, most companies require no more than about ten adjustments to produce a sufficiently accurate EVA figure. The present study integrates the adjustments proposed by Uyemura (1996), Fiordelisi (2008) and Costa (2012):

Table 1. Accounting adjustments made to move book values closer to economic values

$NOPAT_t$	
Loan loss provisions	+Value of charge-offs from t
Deferred tax balances	+(-)Δ deferred tax liabilities/assets t/t-1
R&D expenses and Training expenses	+R&D, training expenses in t
Non-recurring events	case-by-case decision
Security accounting	+- amortization of gain/losses over the remaining live
INVESTED CAPITAL	
Loan loss provisions	+ value of loan loss reserve t-1
Deferred tax balances	+ - deferred tax liabilities/assets t-1
R&D expenses and Training expenses	+ capitalized R&D, training expenses over 5 year period -amortization of R&D, training expenses for year t
Non-recurring events	case-by-case decision

Source: integration of Stewart (1992), Uyemura (1996), Fiordelisi (2007), Costa (2012)

3. DATA

The present study uses financial data from balance sheet and income and loss statement from 12 banking institutions that operate on the Romanian territory. The criteria for selections were straightforward: only banks that offered financial disclosure under IFRS rules for the entire period 2006-2010 were taken in consideration. Also, in order to have a good representativeness of the sample the 12 selected banks accumulate almost 80% of the net banking assets.

Important variables that were taken into account are: Impairment of loans and advances to customers, net loans, gross loans, operating profit/loss, deferred taxes, shareholder equity, interest income/expenses, operational expenses like advertising and promotion, administrative expenses like training of staff. In this respect it was important that all this variables to be estimated on the same accounting principles and to be publicly available.

All the data were obtained from the financial statements (annual reports) posted on the official site of the banks.

4. RESULTS

As recent literature regarding national accounting characteristics suggest, the most important adjustments were made for loan loss and for deferred taxes. Also, adjustments for the cost of advertising and for training expenses were made, but the value of these categories may remain insignificant compared to total expenses. An important methodological issue regarding the latter categories is reflected by the fact that not all banking institutions declare a distinct position of the cost of advertising and especially costs of staff training. In order to have a good representation of these costs in our EVA measure, the adjustments were made only if the financial statement recognized such costs as distinct administrative and other operational costs.

The important aspect that must be observed is the similar trend described both by EVA and by the Residual Income Indicator (RI). This situation could suggest that in the light of similar trend behavior RI could be a good substitute for EVA.

Table 2. The evolution of value creation by Romanian banking institutions

Indicator	Category	2006	2007	2008	2009	2010
EVA	Value creators	8	8	6	7	9
	Value destroyers	4	4	6	5	3
TOTAL		*12*	*12*	*12*	*12*	*12*
RI	Value creators	7	5	5	5	6
	Value destroyers	5	7	7	7	6
TOTAL		*12*	*12*	*12*	*12*	*12*

Source: Own calculations

At a closer view the mean values presented by EVA seem to be higher than the values of the economic profit obtained by computation of R.I. This is a straightforward result as the value of adjusted NOPAT under EVA is significantly higher than unadjusted NOPAT. Nevertheless, as numbers point out the minimum and maximum value of EVA is higher than the minimum and maximum value of RI suggesting a greater polarization banking institution when computing shareholder value by using EVA.

Table 3. Descriptive statistics on Economic Value Added and Residual Income

		2006	2007	2008	2009	2010
Mean	EVA	119,126.10	155,431.80	311,783.60	359,727.40	401,034.90
	RI	92,019.14	114,175.40	168,327.20	9,550.98	9,910.97
Maximum	EVA	780,288.00	1,114,393.00	2,141,961.00	1,710,780.00	1,620,332.00
	RI	700,310.00	1,015,076.00	1,561,080.00	1,132,109.00	992,125.30
Minimum	EVA	-60,192.22	-66,060.11	-182,847.70	-56,697.81	-67,183.13
	RI	-65,790.63	-117,643.00	-224,225.60	-368,010.40	-255,185.20

Source: Own calculations. Values are expressed in thousand RON

One of the most interesting aspects regarding the measures of performance is to establish how they relate to each other. In order to find the correlation between the rankings that result by using different approaches to measurement we evaluated the association in time between EVA and other performance measures like: ROA, ROE and NIM.

Table 4 and 5 reports two measures of rank correlation: Spearman's rank correlation and Kendall's Tau. Both measures are nonparametric (distribution-free) rank statistics that measure of the strength of the associations between two variables by taking values in the interval [-1; +1]. The value of -1 denotes completely negative association while the value +1 denotes completely positive association. The value 0 indicates the absence of correlation.

Table 4. Spearman Rank Correlation Coefficient

	EVA_2006	EVA_2007	EVA_2008	EVA_2009	EVA_2010
RI	0.9790	0.8322	0.9091	0.3007	0.1818
ROE	0.7483	0.6154	0.6713	0.8601	0.5664
ROA	0.7203	0.8252	0.7832	0.8462	0.5734
NIM	0.1189	0.7203	0.2308	0.0070	0.4825

Source: Own calculations.

At the first glance the numbers suggest that EVA best correlates with R.I for the years that both indicators have most of the positive values and the correlation seems to become weaker in the case of the years when losses are observed. Also, EVA values from 2006-20010 best correlates with the RI value from 2006 suggesting that the values recorded in 2006 are the most representative for the entire period considering the evolution of shareholder value creation. The relationship of EVA with traditional measures of performance presents contextual correlations. For the year 2006-2010 EVA best correlates with ROE and ROA even in the case of the negative outcomes. The Spearman rank coefficient can be interpreted as follows: in the year 2007 the ranking of the banking institution in the sample provided by both EVA and ROE displays similar outcomes in 86.01% of the cases. The relationship between EVA and NIM is also of interest since more and more studies consider NIM as a performance measure. The results show that correlation is random: for the year 2007 in almost 72.03% of similar ranked cases when we obtain positive value of EVA the value of NIM has to be a high one as for the year 2009 in just 72.03% of similar ranked cases when we obtain positive value of EVA the value of NIM has to be a high one

Kendall's Tau rank correlation coefficient suggests a similar pattern. Though Kendall's Tau is viewed as a superior rank correlation measure, statistical literature suggests as valid the lowest value of the two indicators.

Table 5. Kendall's Tau Rank Correlation Coefficient

	EVA_2006	EVA_2007	EVA_2008	EVA_2009	EVA_2010
RI	0.939394	0.69697	0.818182	0.272727	0.212121
ROE	0.666667	0.515152	0.484848	0.666667	0.424242
ROA	0.606061	0.666667	0.575758	0.636364	0.424242
NIM	0.090909	0.515152	0.181818	-0.0303	0.333333

Source: Own calculations.

5. CONCLUSION

By comparing the rank correlation obtained by using EVA versus traditional performance indicators the objective of this study was to gain some insight about the relevance of using more sophisticated performance measurements tools like. Towards this end we used two acknowledged statistical measures: Kendall's Tau and Spearman rank correlation Index. The results suggest that generally EVA results are higher that RI results but the rank correlation is higher when the value of NOPAT is positive. Because EVA boosts NOPAT values when adjusting the book values in the years of negative outcome the two performance indicators exhibit lower correlation. ROA and ROE is the measure that best correlates with EVA for the entire period. Nevertheless, ROE should be viewed cautious as banks are highly leveraged institutions and all other things being equal, higher financial leverage will pump up ROE, and will mask a deterioration of the capital base and the (re)consolidation of off-balance sheet commitments.

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BEST PRACTICES REGARDING THE ORGANIZATION AND FUNCTIONING OF AUDIT COMMITTEES

ADRIAN POPA, DRAGOȘ LAURENȚIU ZAHARIA, ANI DUMITRACHE *

ABSTRACT: *The article intends to identify best practices regarding the organization and functioning of audit committees in the corporate governance codes, listing requirements of stock exchanges and views of practitioners. The first section is dedicated to the establishment of audit committees, covering the size and composition of the committee and the content of its charter. The second section explains the main attributes of efficient audit committee members (independence, financial literacy and expertise) and the procedures for the nomination and induction of audit committee members. The conduct of meetings is presented in the third section. It also approaches issues such as meeting frequency and self-assessment of the committee's performances. The fourth section details the role and content of the reporting documents prepared by the committee. The last section summarizes the best practices expressed in previous sections.*

KEY WORDS: *audit committee; charter; corporate governance codes; financial reporting.*

JEL CLASSIFICATION: *M42*

1. ESTABLISHMENT OF AUDIT COMMITTEES

Romanian legislation regulating the organization and functioning of audit committees is rather heterogeneous.

Company law no. 31/1990 provides that boards of directors can create consulting committees comprised of at least two members charged with performing investigations and elaborating recommendations for the board in areas such as audit, remuneration of directors, censors and staff or nominating persons for the board (art.

* *Ph.D. Student, Valahia University of Târgoviște, Romania*
Ph.D. Student, Valahia University of Târgoviște, Romania
Ph.D. Student, Valahia University of Târgoviște, Romania

140^1). Hence, in case of company law the establishment of audit committees appears as a recommendation not an imposition.

Law no. 672/2002 on internal public audit stipulates the obligation of establishing audit committees for central public institutions that carry out during a financial year a budget higher than RON 2 billion (art. 9).

Government Emergency Ordinance no. 90/2008 on statutory audit of annual financial statements and the consolidated annual financial statements and oversight of the accounting profession in the public interest provides that every entity of public interest must establish an audit committee (art. 47). The definitions section shows that entities of public interest are legal persons defined according to the accounting regulations.

According to *Government Emergency Ordinance no. 119/2011 regarding corporate governance of public enterprises*, audit committees are also required for autonomous companies (art. 10) and for state-owned companies (art. 34).

1.1. The resolution to establish the audit committee

The audit committee is constituted formally as a subcommittee of the board of directors. Therefore, it reports regularly and is responsible to the board. Most frequently, boards establish audit committees by board resolution.

According to Futter et al. (2002, p. 139), the board resolution should refer issues such as:

- the creation of the audit committee;
- the number of persons to serve on the audit committee;
- required qualifications for audit committee members;
- the procedure for appointing and replacing audit committee members;
- the duties and responsibilities of the audit committee;
- voting requirements and other requirements for actions by the audit committee;
- the power of the audit committee to retain counsel;
- the reports to be made to the board.

1.2. Size and composition of the audit committee

The corporate governance codes and reports[1] plead that the audit committees comprise a minimum of three members that should be non-executive independents, without setting an upper limit.

Following these recommendations, U.S. stock exchanges[2] have adopted as a listing condition the requirement that the audit committees of adherent companies be comprised of a minimum of three members.

[1] Treadway Commission (1987, pp. 182–183), Cadbury Report (1992, 4.35 (b)), Smith Guidance (2010, 2.3), King III (2009, Rec. 10), Financial Reporting Council (2010, C.3.1), Business Roundtable (2010, p. 19)

[2] NYSE (2009, §303A.07(a)); NASDAQ (2009, §5605(c)(2)(A)); AMEX (2008, §803(B)(2)(a))

The corporate governance code of Bucharest Stock Exchange (BSE) does not specify a certain value for the size of the audit committee, mentioning that 'it will be composed exclusively of non-executive directors and it should contain a sufficient number of independent directors' (BSE, 2008, Rec. 29).

Both Law no. 31/1990 (art. 140^2(2)) and GEO no. 90/2008 (art. 47(1)) require that all audit committee members be non-executives and at least one must be independent.

The committee should be big enough in order for an equilibrium of opinions and expertise to be assured and small enough as to function efficiently.

Some authors, for example Bragg (2011, p. 121) or Ruppel (2006, p. 18), as well as the guidelines prepared by PricewaterhouseCoopers (2003, p. 20) and American Bar Association (2007, p. 61), consider that the optimal size for the audit committee is 3–5 members. Others, such as Burke et al. (2007, p. 7.01), indicate that, generally, audit committees are composed of 3–6 members.

Ruppel (2006, pp. 17–18) advocates for a number of three to five members, arguing that any figure greater that 5 will probably determine a decrease of the efficiency of the audit committee because the influence of every member would become too diluted and less than three members is not practical since this would generate voting problems.

The size of the audit committee, Burke et al. (2007, p. 7.01) show, is dependent upon the company and its culture, the responsibilities delegated to the committee by the board, board size and its members qualifications.

Regarding the number of members, 69% of the European companies surveyed by KPMG in 2010 answered that their audit committees have 3-4 members while 23% of them reported having 5-6 members. Small audit committees with 'up to 2 members' were found in Russia (18% of companies) and northern countries (16% in Netherlands and 13% in Denmark). Largest audit committees were identified in Austria, 13% of Austrian companies stating their audit committees have more than 8 members (KPMG, 2010, p. 9).

The Korn Ferry Institute found in a study conducted in 2007 that the audit committees of over 800 companies analyzed, scattered through Asia, Pacific, Europe and North America, were comprised, on average, of 4 members, all outside directors (Korn Ferry, 2008, p. 19).

1.3. Audit committee charter

Most corporate governance codes recommend that audit committees should function according to a charter[3] and U.S. stock exchanges[4] require listed companies to adopt a written charter that provides a clear understanding of the committee's role, structure, processes and membership requirements. In order to be made public, it should be posted on the company's website or attached to its annual report.

[3] Cadbury Report (1992, 4.35(a)), Blue Ribbon Committee on Improving the Efectiveness of Corporate Audit Committees (1999, Rec. 4 și 5), Codul King III (2009, 3.1.3), Financial Reporting Council (2010, C.3.2)

[4] NYSE (2009, §303A.07 (b)); NASDAQ (2009, §5605(c)(1)); AMEX (2008, §803(B)(1))

The audit committee charter will generally contain the following elements (Ghiță, 2008, p. 323; Lowy, 2003, pp. 51-53; OAGNZ, 2008, pp. 25-26):

- the audit committee scope, the governance framework in which it activates, how it interacts with other governance mechanisms/ committees;
- authority (the power and authority the committee has in order to fulfill its objectives);
- composition (size, member attributes, how are they elected or reelected);
- duties and responsibilities;
- administrative issues (committee meetings, participation, decision making and voting mechanisms, provisions regarding conflict of interests, induction of new members);
- arrangements for self-assessment;
- periodic review of the charter.

Apart from satisfying the listing requirements, there is a series of practical reasons for using a charter (Ruppel, 2006, p. 15; Burke et al., 2007, p. 7.03):

- The board will know what functions the audit committee is assuming, which prevents any misunderstandings regarding the committee's role;
- It confirms the duties and responsibilities delegated to the committee by the board;
- Audit committee members will have a clear understanding of their responsibilities and what is expected from them;
- It allows the committee to compare its effective performances with its duties and responsibilities;
- It helps new audit committee members to better understand their role and responsibilities.

2. AUDIT COMMITTEE MEMBERS

2.1. Attributes of efficient audit committee members

Independence, expertise and financial knowledge represent essential attributes for audit committee members acknowledged by the corporate governance codes and required by listing provisions. All of these conditions will be detailed in the following subsections.

In addition, other attributes considered characteristics of efficient audit committee members, include (PwC, 2011a; PwC, 2011b, p. 19):

- extremely high level of integrity;
- an attitude of mind independent of the company's management;
- healthy skepticism;
- inquisitiveness and independent judgment – asking the right questions and appropriately interpreting the answers;
- an ability to give direct and honest opinions;
- courage to challenge the answers that don't appear right;

- an understanding of the business and its products;
- knowledge of the company's risks and controls;
- ability to offer new perspectives and constructive suggestions.

Burke et al. (2007, p. 8.01) summarize: 'To be an effective audit committee member, an individual should have certain characteristics. First, the individual should have a general understanding of the company's major economic, operating and financial risks. In addition, the individual should have a broad awareness of the interrelationship of the company's operations and its financial reporting, including risks and controls related to financial reporting. An inquiring attitude, independence, a high level of integrity, and sound judgment are essential for a person serving in this important capacity. Further, […], an audit committee member should understand the difference between the oversight function of the audit committee and the decision-making function of management'.

2.1.1.1. Independence

Futter et al. (2002, p. 140) consider the requirement of independence extremely important in assuring the public that the audit committee can and will objectively review the management's performance. Further, they argue that assurance regarding the independence of the organization's auditors from management is greater if the audit committee is independent and the auditors are responsible to the audit committee.

The criteria recommended by listing requirements to determine whether a director (and implicitly an audit committee member) is independent varies slightly from one stock exchange to another[5] but, as Futter et al. (2002, p. 141) note, incompatibilities impairing the independence of audit committee's members can be grouped in four major categories:

- employment by the organization;
- employment of a close relative;
- prior employment by the organization;
- substantial business relationships.

Law no. 31/1990 (art. 140^2(2)) and GEO no. 90/2008 (art. 47(1)) require that at least one member of the audit committee must be independent.

From the 829 European companies that participated in the KPMG survey, only half of them declared that all their members can be considered independent, while 2% stated that their audit committees comprise of no independent member. Greatest occurrences of all-independent committees were identified in Netherlands (68%) and UK (58%) and the lowest in France, where only 10% of companies have fully independent audit committees (KPMG, 2010, p. 9).

Also, from a sample of 676 companies, 94% consider their financial experts to be independent (KPMG, 2010, p. 9).

[5] See NYSE (2009, §303A.02); NASDAQ (2009, Rule 5605(c)(2)(A)); BSE (2009, Rec. 16)

2.1.2. Financial knowledge and expertise

NYSE Rule 303A.07 ‘Audit committee additional requirements’ states that audit committees must consist of at least three individuals, all of whom must be financially literate (NYSE, 2009).

Similarly, NASDAQ Rule 5605 provides that audit committee members must ‘be able to read and understand fundamental financial statements, including a Company's balance sheet, income statement, and cash flow statement. Additionally, each Company must certify that it has, and will continue to have, at least one member of the audit committee who has past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the individual's financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities’ (NASDAQ, 2009).

Law no. 31/1990 (art. 140^2(2)) and GEO no. 90/2008 (art. 47(1)) require that at least one member of the audit committee must have experience in applying accounting principles or in financial auditing.

2.1.3. Nominating a ‘financial expert’

In addition to the requirement that all audit committee members be financially literate, the SEC requires companies that are USA registrants to disclose whether or not, and if not the reasons why, at least one audit committee member is a ‘financial expert’.

It defines the financial expert as a person who has the following attributes:

- an understanding of generally accepted accounting principles and financial statements;
- the ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves;
- experience preparing, auditing, analyzing, or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the registrant’s financial statements, or experience actively supervising one or more persons engaged in such activities;
- an understanding of internal controls and procedures for financial reporting;
- an understanding of audit committee functions.

The Commission suggests that companies should use the following guidelines in order to determine whether a person qualifies as a ‘financial expert’ (SEC, 2003):

- The level of the person’s accounting or financial education, including whether the person has earned an advanced degree in finance or accounting;

- Whether the person is a certified public accountant, or the equivalent, in good standing, and the length of time that the person actively has practiced as a certified public accountant, or the equivalent;
- Whether the person is certified or otherwise identified as having accounting or financial experience by a recognized private body that establishes and administers standards in respect of such expertise, whether that person is in good standing with the recognized private body, and the length of time that the person has been actively certified or identified as having this expertise;
- The person’s specific duties while serving as a public accountant, auditor, principal financial officer, controller, principal accounting officer or position involving the performance of similar functions;
- The level and amount of the person’s direct experience reviewing, preparing, auditing or analyzing financial statements that must be included in reports filed under Section 13(a) or 15(d) of the SEA;
- The person’s past or current membership on one or more audit committees of companies that, at the time the person held such membership, were required to file reports pursuant to Section 13(a) or 15(d) of the SEA;
- The person's level of familiarity and experience with the use and analysis of financial statements of public companies; and
- Whether the person has any other relevant qualifications or experience that would assist him or her in understanding and evaluating the registrant's financial statements and other financial information and to make knowledgeable and thorough inquiries whether:
  - The financial statements fairly present the financial condition, results of operations and cash flows of the company in accordance with generally accepted accounting principles; and
  - The financial statements and other financial information, taken together, fairly present the financial condition, results of operations and cash flows of the company.

Analyzing the aggregated answers of 710 European companies regarding the background of their financial experts, KPMG concluded that most of them come from positions of qualified accountant or auditor (55%), while 47% of them held positions such as CFO or Finance Director. Only 19% of them were CEOs (KPMG, 2010, p. 9).

2.2. Appointment of audit committee members

Smith Guidance (2010, 2.4) suggests that the appointments to the audit committee should be made by the board on the recommendation of the nomination committee (where there is one), in consultation with the audit committee chairman.

PwC (2011a, p. 85) highlights that the CEO should have limited involvement in selecting the committee members or its chairman, given the committee’s key role in overseeing management judgments.

2.3. Tenure

The audit committee charter must provide fixed periods for members' mandate to assure their rotation over time. Periodic rotation of audit committee members strengthens independence and brings fresh perspectives.

Smith Guidance (2010, Rec. 2.5) considers that appointments should be for a period of up to three years, extendable by no more than two additional three-year periods, so long as members continue to be independent.

2.4. Induction of new members

Once their appointment is confirmed, it is important to provide new audit committee members with relevant background information regarding (PwC, 2011b, p. 33; Burke et al., 2007, p. 8.13; OAGNZ, 2008, pp. 22-23):

- *The company*: Products and services; Foreign and domestic operations; Key areas of risk and how they are managed; Statutory reporting and exchange listing requirements to which the company is subject; Financial and operational controls; Types of budget and management reports; Company's code of conduct and business behavior.
- *The audit committee*: The audit committee's charter; Nature and timing of reports prepared by management for the audit committee; Company staff available to support the audit committee; External advisers available to support the audit committee.
- *Management*: The background and qualifications of senior executives and financial management; Organization chart of reporting lines and responsibilities; The basis on which senior management is remunerated.
- *External auditors*: A copy of the current year's external audit engagement letter; The scope of the external audit, including the current year audit plan; The audit committee's relationship with the external auditor; The types and timing of reports issued by the external auditor; Company policy on engaging the auditor to provide audit and non-audit services.
- *Internal audit*: The responsibilities of the internal audit function; The number of internal auditors and their qualifications and experience; The audit committee's relationship with the internal audit department; The types of reports the audit committee receives from the internal audit department; The current year's internal audit plan.

2.5. The audit committee chairman

One of the audit committee members should be elected as chairman of the committee. Best practice calls for the audit committee chair to be an independent director and should not also be chairman of the board.

Ruppel (2006, pp. 27-28) identifies and discusses two situations: the audit committee members elect the chairman or the board designates the individual that can serve as board chairman. He opts in favor of the latter considering that, given the rather small number of audit committee members, there are not enough voters to make the process meaningful, especially if more individuals are interested in the position. On the other hand, the board is more suitable to designate the chairman, since he will have an important role in coordinating and motivating the audit committee to execute its responsibilities given the board.

3. AUDIT COMMITTEE MEETINGS

3.1. Meeting frequency

The audit committee charter should mention the number of the meetings that the committee anticipates it will have during the year.

The Smith Guidance (2010, Rec. 2.6) recommends there should not be fewer than three meetings during the year, held to coincide with key dates within the financial reporting and audit cycle.

Recommendation 30 of the Corporate Governance of the BSE suggests audit committees should meet whenever necessary, but not fewer than two times, when it will deal with the half-yearly and yearly results (BSE, 2008).

The audit committees of the 1.146 European companies surveyed by KPMG organized, on average, a number of 6,8 meetings per year; the average length of those meetings was 3,1 hours. The greatest number of meetings was found in Russia (7,7) and the smallest in Austria (3,8).

The survey also shows that the average number of hours spent on board and audit committee matters is 51,8 hours. This includes travel time, the actual meeting and preparation for the meeting. According to the findings of this study, the longest periods of time dedicated to meeting preparation were allocated in the UK (98,2 hours on average) and Russia (79,1 hours on average) while the shortest were in France (only 14 hours on average) (KPMG, 2010, p. 10).

As for the audit committees of U.S. companies, they met 8,7 times on average in 2011, according to study conducted by Spencer Stuart (2011, p. 29).

3.2. Conduct of meetings

Only audit committee members are allowed to participate on the committee's meetings. They will determine whether other persons should attend a meeting or part of a meeting.

Provision 2.7 of the Smith Guidance (2010) explains that: 'No one other than the audit committee's chairman and members is entitled to be present at a meeting of the audit committee. It is for the audit committee to decide if non-members should attend for a particular meeting or a particular agenda item. It is to be expected that the external audit lead partner will be invited regularly to attend meetings as well as the finance director. Others may be invited to attend'.

The committee will conduct its meetings according to a *meeting agenda.* The agenda should be customized considering the committee's activities and the company's specific.

At the moment of their establishment, it is recommended that audit committees should design a less loaded agenda; as time passes and the committees become more experienced, their agendas can be supplemented by assuming new responsibilities.

To document the process followed in discharging their responsibilities and to capture highlights of important discussions and conclusions, audit committees should maintain a record of its activities conducted at its meetings. This is usually accomplished by keeping *minutes of meetings*.

Ruppel (2006, p. 26) notices that there is no unique style for preparing minutes. These vary among two extremes: ‘some committees and organizations prefer minutes that summarize their activities at a very high level and may focus on formal resolutions or actions taken by the committee, rather than the discussions that preceded those actions or resolutions. At the other extreme, some audit committees’ minutes provide an almost verbatim transcript of the discussions of the committee members, along with the committee’s actions and resolutions’.

Regarding the content of the minutes, Burke et al. (2007, p. 15.05) advocate that an equilibrium has to be pursued: ‘Minutes should be detailed enough to indicate the matters covered and decision reached, but should not contain exhaustive discussion of all the points that were considered at the meeting. That is, minutes should focus on documenting processes and conclusions and should not be transcripts of the discussions that took place’.

A practice used more often recently in audit committees’ activity is starting the meeting *in camera* (i.e. in secret), attended only by committee members. Meetings can take other forms, during which the members meet only with certain persons. For example, the committee can have private sessions with the external auditor. Usually, these take place at the end of the meeting; the executives are asked to leave and the committee begins its dialogue with the external auditor. In some situations, the committee can also meet in camera with the chief of internal audit.

3.3. Assessment of audit committee’s performance

Smith Guidance (2010, 3.3 & 3.4) acknowledges two forms of audit committee evaluations: a self-assessment performed within the audit committee and an evaluation performed by the board.

Usually, the assessments are accomplished by using questionnaires or interviews but they can be executed with the aid of an external evaluator.

4. AUDIT COMMITTEE REPORTING

Audit committees prepare three types of reporting documents:

- Reports on their current activities (meeting minutes) – covered in sec. 3.2;
- Annual report to the board;
- Annual report to shareholders.

4.1. Reporting to the board

Because the audit committee is a subcommittee of the board and is responsible to it, there are recommendations of corporate governance codes and listing requirements according to which the audit committee should report annually to the board about its activity.

According to a guideline prepared by Deloitte, the audit committee's report to the board should include the following (Deloitte, 2009):

- Assessment of whether external reporting is consistent with committee members' information and knowledge and is adequate for shareholder needs;
- Assessment of the management process supporting external reporting;
- Procedures for the selection and appointment of the external auditor and the rotation of external audit engagement partners;
- Recommendations for the appointment or removal of an auditor/ internal auditor;
- Assessment of the performance and independence of the external auditors and whether the audit committee is satisfied that independence of this function has been maintained with regard to the provision of non-audit services;
- Assessment of the performance and objectivity of the internal audit function;
- The results of its review of risk management, compliance and control systems.

The audit committee's report is important to the board for these reasons (Braiotta et al., 2010, p. 347):

- It communicates to the board financial, accounting, and auditing matters of particular interest that were noted in the audit directors' reviews and discussions with the internal and external auditing executives and the senior representatives of management, such as the chief financial officer.
- Their report not only contains an independent and objective appraisal of the audit functions but also provides assurance to the board that management is fulfilling its stewardship accountability to its outside constituencies, particularly the stockholders.
- The report calls the board's attention to nonfinancial accounting matters of significance, such as conflicts of interest and other general business practices

4.2. Reporting to shareholders

Rezaee (2007, p. 157) considers that a typical audit committee report should contain five sections with the following content:

- Section 1 – Describes the formation and composition of the audit committee.

- Section 2 – Describes the responsibilities of the company's management, the independent auditor, and the audit committee pertaining to internal control over financial reporting and the preparation of financial statements.
- Section 3 – States that the audit committee has met with both the company's management and the independent auditor to discuss the preparation of financial statements in conformity with GAAP and the performance of a financial audit in accordance with PCAOB auditing standards. This paragraph also explains the committee's communication about accounting, auditing, and internal control issues with both management and the independent auditor.
- Section 4 – Addresses auditor independence, and states that the company's independent auditor has provided to the audit committee the written disclosures required by the Independent Standard Board Standard No. 1 and has discussed auditor independence with the external auditor. This paragraph also describes provisions of non-audit services that are compatible with maintaining auditor independence.
- Section 5 – States that, based on the audit committee's discussion with the company's management and the independent auditor, the committee recommended that the board of directors include audited financial statements in its filings with the SEC on Form 10-K.

The Implementation Guidelines for the Corporate Governance Code of the Bucharest Stock Exchange recommends that companies should disseminate all important issues of their corporate governance policies (BSE, 2010, Rec. 3). In respect with their specialty commissions and committees they should circulate:

- Operating regulation/essential aspects of the Operating regulation of each commission/committee;
- A list containing the members of each commission/committee, indicating which is a member of the board;
- An activity report regarding the meetings of the commission/committee.

5. SUMMARY

- The optimal number of audit committee members, which grants the best results, is between 3 and 5;
- Audit committee members must be non-executive independents.
- At least one member of the audit committee must meet the criteria to be considered 'financial expert';
- The committee should meet at least four times a year, or whenever required by unexpected situations;
- Audit committee members should attend all meetings in person; participation via telephone should represent an exception, used only when members are constrained;

- Minutes should be prepared after each meeting of the audit committee. These have to be analyzed and approved by all members of the committee.
- The board should designate a member of the audit committee that will serve as chairman;
- Audit committee members should be appointed for fixed terms, generally of three years, with opportunity for reappointment;
- The audit committee should prepare an annual report of its activities and use the report to perform a review and evaluation of its activities for the preceding year;
- The audit committee should be authorized to hire outside counsel and other advisors to assist it in discharging its responsibilities.

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STAKES AND CHALLENGES OF BUSINESS WOMEN ON THE ROMANIAN LABOUR MARKET

ADINA POPOVICI BĂRBULESCU *

ABSTRACT: *In the market economy, especially in the former communist countries that joined the European Union, including Romania, the concepts of competition, skill and vision to work seem to raise from the anonymity a new category of human resources of the globalized Romania: business women.*

The research questions are the following:

- What are the stakes for business women in Romania?

- What are the challenges for business women in Romania?

To answer these research questions, we used as research methods the analysis and synthesis and conducted a reflection type study.

For more than 20 years since the adoption by the European Union of the legislation promoting equal opportunities, the European management and the Romanian management have still remained male enclaves.

KEY WORDS: *stakes; challenges; business women; women managers; labour market.*

JEL CLASSIFICATION: *I21; I23; I25; J60.*

1. INTRODUCTION AND ISSUE OF THE PAPER

It is said that, throughout history, behind every great man, there has been a woman. However, hundreds of years passed until the acceptance of the idea that a woman can get into the business, can be a doctor, priest, architect, or even Prime Minister.

Just a few decades ago, it was inconceivable for women to work and contribute to the revenues of the family. Things began to change around the Second World War, when the male workforce was mobilized on the front. But at that time either, the work of the woman has not been accepted as something natural. It represented only a temporary solution. The young women who came from traditional families - and they were quite numerous - were educated to accept their role as mother and wife, being convinced that it is the husband who must deal exclusively with the revenues of the family.

* *Assoc. Prof., Ph.D., West University of Timişoara, Romania,* adinap_12@yahoo.com

But once accepted in various institutions and firms, women have realized that they are doing very well and they are not at all inferior to men. With the talents and skills they possess, business women show not only moral and physical strength, but also the ingenuity to cope with life's challenges on the competitive, extremely tough economic market.

The issue of this paper thus focuses on the comprehension and analysis of the stakes and challenges that business women in the European Union and especially in Romania are subject to.

2. RESEARCH QUESTIONS AND METHODOLOGY

The research questions are:

- *What are the stakes for business women in Romania?*
- *What are the challenges for business women in Romania?*

To answer these research questions, we used as research methods the analysis and synthesis and conducted a reflection type study.

3. STAKES AND CHALLENGES OF BUSINESS WOMEN ON THE EUROPEAN UNION LABOUR MARKET

Although women represent 41% of the European labour work, yet, they occupy only 10% of the managerial positions and barely represent about 1% of the board of administration. The higher the level of management, the bigger the difference between the sexes is. Even when women arrive in top positions, they almost always earn less than men.

A research conducted by Grant Thornton International Business Strategies Ltd. (European Business Survey, 1996) on 5,000 small and medium-sized enterprises in the European Union member states notes that very few women have managerial positions and that in 50% of the firms women are completely absent from management functions. In Great Britain and Spain, the percentage of companies that have no women managers is 37% and 38%, respectively, while in the Netherlands and Sweden, the latter classified, the percentage of companies that do not have women in managerial positions raises at 70%, 64% respectively. The data resulting from the research are very different from what one might suppose. The countries with a very high participation of women on the labour market, with a strong legislation have, surprisingly, the lowest number of women in administration and management. There are two explanations for this situation. The first is the number of women in the management staff, compared to the dimension of the staff - the larger the staff is, the bigger the probability is to find women in its structure. The second explanation is that the high costs associated with the long maternity or childcare leaves can discourage companies from hiring women in managerial positions.

In general, we consider that women managers have the greatest chances of success in the Scandinavian countries, where there was the greatest number of women in the workforce and where family policies and equal opportunities programs are strongly supported by law. However, the number of women managers in the Scandinavian countries is not so big compared to other European countries. For instance, it is estimated that, in

Denmark, only 10% of women who are working in the private sector and in the public sector have management functions. Only 4% of companies have a woman as manager. In Finland, the figures are slightly larger. According to research conducted by Hanninen - Salmelin & Petajaniemi, 2004, 21% of management forces are women. However, even here, the women managers are concentrated manager in the banking sector and the public one and continue to be poorly represented in the private sector.

In Southern Europe, the situation of women managers is much more complicated. While, traditionally, women were less oriented towards a career in many countries of Southern Europe, at present, there are signs of significant growth in the volume of the female labour force and the number of women managers. In Italy and Spain, especially young women seem to have a different attitude towards labour and engage in managerial careers. However, their number remains low. In Italy, women represent 3% of the top managerial positions, and in Spain, 5% of the managerial positions in the private sector are occupied by women. As in other European countries, the Southern Europe women managers tend to concentrate in the public sector and services jobs.

Women's equal participation in the decision-making process is a matter of social justice, a condition for democracy and an essential component in the maximum use of human resources. This is the reason for which the European legislation provides a set of guidelines on equality, as well as many interpretations of the Court of Justice. The Council Directive no. 76/207/EEC of the 9th of February 1976 fits into the same direction. With respect to the application of the principle of equal treatment for women and men, with regard to the access to employment, the qualification and professional advancement and the working conditions, it provides for equal treatment for women and men, referring to access to employment, professional advancement, qualification and working conditions. It introduces the concepts of indirect discrimination and positive action in favour of women (Official Journal No. L 039).

In the order of the Community law, on which all the acts and the policy of the European Union are based on, the principle of equality between women and men is of fundamental importance.

4. STAKES AND CHALLENGES OF BUSINESS WOMEN ON THE ROMANIAN LABOUR MARKET

In the market economy, especially in the former communist countries that joined the European Union, including Romania, the concepts of competition, competence and vision to work seem to raise from the anonymity a new category of human resources of the globalized Romania: business women.

Romania is engaged in a historic transition of an enormous complexity. The central axis of this transition is the shift from a centrally planned economy of socialist type, which, until 1989, took forms of an aberrant bureaucracy and political arbitrary, to an economy based on the free market. Before 1999, the role of the free market was completely marginal in the Romanian economy, which could not but adversely affect the economic changes. In this transition process, the management plays a crucial role. And it is probably here that there is a need for the most profound change: from the highly centralized management which is specific to a socialist type economy, to the management specific to a market economy.

The economic success of the transition mainly depends on the speed of development of a new management culture that would facilitate the transition and development of a functional economy.

In the former communist system, the equality between women and men has played an important role in setting political objectives. The mechanism of the transition to the market economy seems to have a negative impact on the representation of women on the labour market and the possibilities of obtaining their rights. The existence of independent trade unions and non-governmental organizations, engaged in the support of the equality of rights for women and men is very useful. Their development should be supported by the Phare Democracy and Lien programs.

For this purpose, in 1991, the Association of Women Manager from Romania (AWMR) was created. This is a non-governmental, apolitical, of employer type organisation, with a legal personality, which is headquartered in Bucharest, and has 10 branches in the country, with more than 500 members. In the Western region, a subsidiary was created in March 1998 in Timişoara, with more than 62 members working in areas of the sphere of production and trade, as well as of the sphere of financial, medical or advertising services (http://www.anasaf.ro).

Internationally, since 1999, the AWMR has been a member with full rights in the World Federation of Women Entrepreneurs, called "Les Femmes Chefs D'Entreprises Mondiales" – F.C.E.M. (http://www.anasaf.ro).

The European Union helps AWMR and provided, in the MARR program, the financing of women from the Gorj and Hunedoara departments who want to get into the business.

Traditionally, the first aspect studied to identify the differences between men and women in society is the place occupied in the economy. It can be seen regularly that, in this respect, women are not like men (Pasti, 2003).

Only a quarter of those with management functions in NGOs are women, and they are distributed primarily to managerial positions of secondary level, as only 11.8% of the presidents of these organizations were women in 1998 (Pasti, 2003).

What is the cause of this huge numerical difference over the years, in the economic, but also political fields? According to the first report on entrepreneurial activities in Romania of the Centre for Entrepreneurial Studies and Business for Romania, published in May 2007, although women are more involved than men in activities before starting a business, most of the owners of small and medium firms are men (Lafuente González & Driga, 2007).

Compared to the Eurostat criteria, the small enterprises include a number of 10-49 employees and the medium enterprises a number of 50-249 employees. Micro-enterprises have less than 9 employees (Eurostat, 2012).

The CEBR study made by Lafuente González & Driga, 2007 was conducted on the basis of a representative sample of 1,449 Romanians, 812 (56%) men and 637 (44%) women, only 8% of them saying that their mothers were the ones who started a business, while fathers who have started a business have a percentage of 23%.

And yet, for what is there a difference in numbers so great? The answers are varied, as well as the causes. According to the statistical data in the period following the democratization of the country, workers in the secondary sector (industry), where the majority were men, were dismissed primarily. These, being aware of their position of household heads, but without a job which could ensure the financial stability of the family, began a series of activities prior to the establishment of their businesses or their family associations (where the woman would get involved, but not as the owner).

But in this way of trying to explain the phenomenon, conflicting data are involved. Those who have tried to interpret the data collected by the CEBR say that the difference between the number of Romanian women and Romanian men entrepreneurs is due to the economic studies of those who are involved in activities prior to the creation of a business (EurActiv Romania, 2007).

First, the number of females with higher economic studies, since the 1998-1999 academic year was greater than the number of males with the same education. And, in the previous period, the situation was balanced continuously (National Statistics Institute of Romania, 1999-2012), the differences being very small and without relevance. And, from the business point of view, being competent in a business depends more on the talent and competitive spirit than on the training, as the current capitalist market demand, and as the most recent studies and analyses reveal.

It is interesting that in Romania 9.58% of women are involved in starting a new business, compared to only 6.53% of men. But it seems that on the difficult path to climb of the business world, many of these women lose themselves in relation to the number of men. Promoting a business and continuously driving it to profit supposes competitiveness, winning the trust of partners, customers or employees, a limited time spent in the family, family support and the list can continue. So, according to the data, those who received more of these benefits were the men, fathers or sons, not women, mothers or daughters (Lafuente González & Driga, 2007).

The highest number of women owners is in the Southeast, West and Bucharest - Ilfov Romanian development regions. But the biggest difference between the number of male owners and the number of women owners can be found in the Bucharest - Ilfov development region, and the smallest difference is in the West development region. Thus, the equality of chances seems to present the biggest problems exactly in the area where it has been addressed in the legislation, but more present in the real competitive economic world in the closest region to the Western world (National Statistics Institute of Romania, 1999-2012).

According to another study of the Centre for Entrepreneurial Studies and Business for Romania, published in December 2009, on women's entrepreneurship in Romania, focussing on personal characteristics and the effect of entrepreneurial examples, personal savings is the main form of business financing by new entrepreneurs, 78% of women and 72% of men in the sample group using this form of financing. More women than men use bank loans to finance their business. 14% of women surveyed have used a mortgage compared with only 4% of men. The results of the main sources of funding used by new entrepreneurs are presented in Fig. 1. The CEBR study was conducted on the basis of a representative sample of 1,626 Romanians, among which 378 (60%) men and 248 (40%) women (Driga & Lafuente González, 2009).

Also, while approximately 24% of women have used other types of bank loans only 14% of men have used such sources to finance their business. At the same time, it is observed that more men than women were based on amounts borrowed from other family members to start business: 17% of men compared to 15% of women. Interesting to note is the fact that very few entrepreneurs (3%) rely on sources from public institutions, for example grants or subsidies and those who benefited from such public aids are exclusively male (Driga & Lafuente González, 2009).

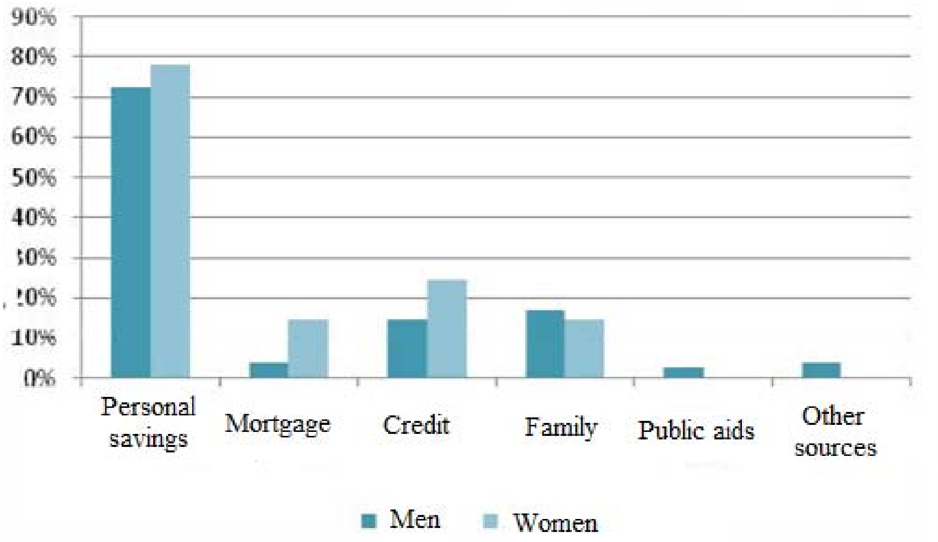

Figure 1. Sources of funding

Source: Driga & Lafuente González, 2009

To get a clearer picture of the situation of the Romanian women managers, making use of the interview technique, a pilot survey was conducted on women managers from Timişoara. Many young people who finish a faculty nowadays do not have a job, situation which requires a professional reorientation. This theme of retraining was also used in the study. From the total number of people surveyed, only 30% used retraining. This is remarkable, but do not forget that the current managers, either men or women, were, in their majority, educated in the communist period, and received a place of work in accordance with their studies, or at least closer to what they have studied in their field. So, if, after the fall of communism, some aspects have changed, they were also able to make a change on a professional level, but those surveyed remained in the field. This aspect could be seen from the fact that only 30% of those surveyed used the retraining, but also from the question: "What is your basic education?" correlated with the profile of the company where they work.

To the question: "Before having occupied this position, have you worked in another field?" 30% of those surveyed responded affirmatively, for 30% of those surveyed that field being very different from that in which they currently work. The reasons that led to the change of the field are very different: a higher level of prestige, a bigger wage, opportunities to better develop the skills, vocation, a more attractive career, facilities to advance, the company image. But a trend was observed for those concerning "the vocation", "a career that promises more" and " the image of the company". After 1989, the Romanians had access to a greater amount of information, trying to develop their skills by collateral activities, which eventually led to the discovery of a new vocation, and if they were young, they framed a new professional direction.

To the question: "What major challenges have you encountered in your career advancement?” women managers reported: age - too young for a managerial position, education, children, starting from scratch in a new culture and mentality. The most frequently mentioned problem, by more than 50% of women, has been fighting with the old mentality, respectively the stereotype that women should take care of the children and not occupy prestigious positions. Some of the surveyed women reported that they have been called many times to the interview, and at the end, they learned that they were appropriate for the respective position, but they were not going to be hired because they were women.

To the question: "During your career, have you ever been treated in a discriminatory manner by men?” 80% of those surveyed responded affirmatively. The situations in which these women felt discriminated against were, first, in making certain decisions and accepting certain opinions. Business partners who are men can hardly accept that women can have a very good solution for a problem or that women can also make decisions. Another discriminatory situation, given as an example by women managers is the maternity period. They felt some resistance from their leader, because he did not like the fact that his employee was pregnant. Although those women performed their respective tasks each day, their leader was unhappy, especially when they were pregnant with their second child.

5. CONCLUSIONS

More than 20 years since the adoption by the European Union of the legislation promoting equal opportunities, the European management and Romanian management still remain male enclaves.

Even though nowadays you can find many women in middle level managerial positions, and quite as many non-executive directors, the number of women in women in top managerial positions has not significantly increased in the recent decades, neither in the European Union, nor in the Romanian economic space.

They must exceed too many "barriers" to climb the corporate ladder in a multinational company, while the "barriers" of their male colleagues are mobile, flexible and no harmful - if they exist.

And this situation seems illogical, if you look at the current trends in the organizational life. Organizations which are moving now to the top places are multicultural and services-oriented, and women are considered more suitable than men for jobs that require interpersonal and intercultural skills.

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THE OLD AGE PENSION SYSTEM IN A TAX HAVEN: THE CASE OF THE BAHAMAS

JAROSŁAW POTERAJ *

ABSTRACT: *The article presents an insight into the old age pension system in The Bahamas. There are four topic paragraphs: 1. the general information about country, 2. the evolution of its pension system, 3. the present situation, and 4. challenges and foreseen changes. There, the author's goal was to present both past and present solutions employed by The Bahamas' pension system, in search for ideas worth consideration in international comparisons. In the summary, the author highlights as a particular Bahamian approach, on the background of other countries, the typical for a tax haven attitude that the providing for the old age should be left to the prudence of each individual. The reader will learn that in the perspective of a few decades, the Bahamian pension system is endangered with insolvency. The actuarial considerations in the country seek solution to the problem in rising the compulsory rate of social insurance contribution.*

KEY WORDS: *old age pension system; Bahamas; retirement; pension reforms.*

JEL CLASSIFICATION: *G23; H55; J32.*

1. INTRODUCTION

The article is a new part of the author's series of articles on old age pension systems in selected American[1] countries.

Globalization, the developments in information technology and telecommunications, and the freedom of movement in the global space result in many people taking interest in earning money in countries other than their homeland. This may implicate participation in foreign pension systems. These systems evolve constantly, primarily due to demographic, but also economic, reasons. The expectation of undisturbed consumption of resources that were accumulated during one's life

* *Assist. Prof., Ph.D., State College of Computer Science and Business Administration in Łomża, Institute of Business Administration, Łomża, Poland, poteraj@gmail.com*

[1] This paper is the second in the series. The previous one discussed the pension system in Argentina (Poteraj, 2011)

motivates many people to look for places for their old age where the tax burden is the lowest. The so called tax havens, which include The Bahamas, seem to be the answer. In the American states, which were the first to follow the example of Chile in reforming their pension systems, the applied solutions show a significant level of variety. Therefore the large diversity of these systems, and the erratic knowledge thereof, even among experts. The intention of the author's publications is to enhance this knowledge and contribute to a discussion necessary for the selection of the best systemic solutions.

The pension solution that was applied in The Bahamas is regarded in the literature to be the most convenient system for those who are interested in receiving pensions in a short period of time, as less than three years (150 weeks) of contribution to the *National Insurance Scheme* are sufficient to obtain old age pension payments with the replacement rate of 15% of the average past earnings of the insured, and those who did not fulfill the requirement concerning the minimum number of contribution years are entitled to the minimum non-contributory benefit (Paddison, 2006, p.15). Over the recent years only small changes to the system took place. One of the specific features of the Bahamian economy is a generally low level of taxation, characteristic to the so called tax havens[2], what is reflected in the functioning of the pension system of the country.

The author's research goal is to present historic and current solutions in the pension system in The Bahamas and to find among them those solutions that would be worthwhile of using in international comparisons.

The research was based on literature study, and on publications of the Bahamas' government and the country's old age pension management institution. In the paper the descriptive method with elements of the deductive method is applied.

The article is constructed as follows: 1. general information about the country, 2. the historical development of the pension system, 3. the system's present state, 4. challenges and anticipated changes to the system.

2. GENERAL INFORMATION ABOUT THE COUNTRY

The Commonwealth of The Bahamas (Wielka Encyklopedia PWN, 2001, pp. 98-99) is a country in Latin America, in the Bahamas Archipelago on the Atlantic Ocean. It consists of 32 districts. The currency of The Bahamas is the Bahamian dollar, BSD[3] also expressed as BS $. The official language is English. In June 2012 The Bahamas was inhabited by 316,182 people (https://www.cia.gov/library/publications/the-world-factbook/geos/bf.html) with the following age structure: 0-14 years of age – 24.4%, 15-64 years – 69.2%, 65 and more – 6.3%. The average length of life at birth was 71.44 years, where the men's average was 69.04 years and the women's average reached 73.91 years. The largest ethnic group were the blacks, descendants of African slaves brought there to work, amounting to 82% of the population; the whites made up

[2] More on the specific taxation in The Bahamas and other tax havens in a statement (Rabushka, 1997)

[3] The denomination according to the ISO 4217 standard. On 15 June 2012 1 Euro cost BS $1.2641 (http://www.bloomberg.com/markets/currencies/)

12% of the country's population. The largest religious group were Protestants (67.6%) and significantly less numerous Catholics (13.5%). According to the country's constitution of 1973, the British monarch is the head of the state and is represented by the Governor (since 14 April 2010 Sir Arthur A. Foulkes), while the government is lead by the Prime Minister (since 8 May 2011 Perry Christie). The largest political parties are the Free National Movement (FNM) and Progressive Liberal Party (PLP). The Bahamas' Gross Domestic Product (GDP) per capita (PPP) in 2011 was estimated at US $30,900[4], and the GDP growth rate at 2%. The unemployment rate was 13.95% (http://www.indexmundi.com/the_bahamas/unemployment_rate.html). The public debt equalled 50.7% of GDP (http://www.gfmag.com/gdp-data-country-reports/323-the-bahamas-gdp-country-report.html#axzz1hv08R9VR). The country's current account balance at the end of 2011 showed a negative balance of US $1.146 billion.

The islands of the present-day The Bahamas (Wielka Encyklopedia PWN, 2001, p. 99); (https://www.cia.gov/library/publications/the-world-factbook/ geos/ bf. html) had been inhabited by the Arawak Indians when the expansion of the Europeans started following the Christopher Columbus's landing on one of the islands in the Bahamas Archipelago[5] in 1492. At first, the Spanish did not colonize the newly discovered island; instead, they drove away its inhabitants to the relatively closely located Hispaniola (present Haiti). The first attempt at permanent colonization of the Bahamas is regarded to have started in 1649, where a group of 70 English puritans set up a colony on the Eleuthera Island. In 1670, the Bahamas had become part of the British colony of Carolina. The Bahamas became a Crown Colony in 1718 when the British clamped down on piracy. Following the American War of Independence, thousands of pro-British loyalists and enslaved Africans moved to the Bahamas and set up a plantation economy (Malpass, 2011). Spain questioned British rights to the islands up to the year of 1783. The slave trade was abolished in the British Empire in 1807 and many Africans liberated from slave ships by the Royal Navy were settled in the Bahamas during the 19th century. Slavery itself was abolished in 1834 and the descendants of enslaved and liberated Africans form the bulk of The Bahamas's population today (Malpass, 2011). During the American Civil War (1861-1865) and during the prohibition period in the USA (1920-1933), the Bahamas islands were an important trading centre. During the World War II, American military basis were created in the Bahamas. In 1964, the islands gained autonomy, and in 1973 – independence, becoming a constitutional monarchy with the personal union with the British monarch, represented by a governor, and remained a member of the Commonwealth of Nations. At present, The Bahamas is an important touristic and financial centre. The Bahamas is a well-established, progressive and welcoming financial centre. Rooted in its long tenure as a trust and private banking centre, a full range of services is available to clients from a broad base of quality financial services

[4] By the terms of GDP per capita, the Bahamas is the third richest country in the Americas (following the United States and Canada), the richest one that lies south of the Mexico – US border, as well as the richest one in the world whose population is predominantly of African origin

[5] Up to the year 1986, San Salvador was considered to be the Christopher Columbus landing place. Presently, researchers are prone to think that it was rather the island of Samana Cay

firms equipped with modern legislation. The Bahamas advantage - including its location, expertise, experience and lifestyle - ideally positions this country as an ideal wealth and asset management gateway of The Americas[6].

3. THE HISTORICAL DEVELOPMENT OF THE BAHAMAS PENSION SYSTEM

The first old age security regulations in The Bahamas date back to 1972, when the National Insurance Act 1972 gave form to, among others, the pension system. Basing on this act, The Bahamas National Insurance Board (NIB) and the National Insurance Fund (NIF) were established; they started to operate in October 1974 (Mitchell & Osborne, 2005, p. 368). The act came in force on 7 October 1974 for the employees and on 5 April 1976 for the self-employed. In the Act it is provided for cyclical preparation of actuarial reports that should underlie periodical verification of the principles of the pension system (The National Insurance Act …)[7]. Independently from the public system, there were pension funds operating in the country, organized by insurance businesses.

At the end of 1992, the assets of private pension funds equalled BS $300m (Results of Private Pension …, 2006). In 2000, the relation of the accumulated reserves to the current expenditure of the public pension system was 9.2 (Mitchell & Osborne, 2005, p. 368). In 2001, the old age pension contribution was 8.8% of the remuneration (Mitchell & Osborne, 2005, p. 373), and the assets in management of the NIF equaled BS $991.5m (Survey of Private Pension …, 2006). At the end of 2002 the reserves of NIF already exceeded BS $1.1bln (8th Actuarial Review …, 2009, p. 60). In 2004, the maximum premium-deductible income in The Bahamas was BS $20,800, what meant that the premium coverage of revenues, which denotes the ratio of the maximum remuneration that is still subject to premium calculation to the average remuneration, was 1.36 (Paddison, 2006, pp. 35-36). At the same time, the replacement rate was set up as follows: after 10 years in the system – at the level of 30%, after 30 years in the system – about 55%, and maximally it could reach 60%. The relation of the average and the lowest pension benefits to the average remuneration were 25.4% and 16%, respectively. At the end of 2004, the assets of private pension funds equalled to BS $833m (Results of Private Pension ..., 2006). In April 2005, a special commission appointed in order to reform the social security system (Better Social Security …, 2005, p. vi) presented the following recommendations:

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[6] Bahamas Financial Services Board (BFSB) is a private sector body, and its member firms enjoy a strong partnership with the Bahamian Government. This partnership is focused on ensuring that the country's regulatory and business environment continues to meet emerging client requirements. BFSB represents all sectors of the industry including: banking, private banking and estate planning services, broker-dealers and asset managers, investment funds administrators, insurance, corporate and shipping registry, accounting and legal services, and related services such as real estate. More see at: (http://www.bfsb-bahamas.com)

[7] In the 21st century, the seventh report was published in 2002, and the last one, the eight, in 2009

- To increase the eligibility age by 50 weeks each year until the generally accepted in the region period of 500 weeks in the system is reached;
- To increase premium-deductible income to BS $500 a week;
- To valorize the existing pensions with the average inflation rate for the last three years;
- To change the benefit calculation method from the one that was in use at the time that was based on three best years from the period of 10 years directly preceding the retirement to the method based on the indexed incomes from all years in the whole career;
- To transfer to the government the cost of pension payments to those formerly self-employed who, basing on the paid in contribution, did not manage to qualify for regular pension;
- When evaluating the qualification for the minimum or non-premium based pension, to evaluate the real estate that the applicants possess;
- To obviate the difference in the premium-deductible income between civil servants and those working in the private sector.

Also, a solution was analysed whereby the formula of calculation of the pension benefit based on the three best years would be replaced by another one based on all premium years indexed by 1.5% increase factor for each year (Paddison, 2006, p. 14). In 2005, the number of people who received pension benefits was 15,820, of which 3,144 persons received non-contributory benefits (Can Pension Reform ..., 2005). At the end of 2005, the assets of private pension funds equalled BS $945m (Results of Private Pension ..., 2007), and the resources of NIF – BS $1.295bln (Deveaux, 2008). At the end of 2006, reserves of NIF exceeded BS $1.4bln (8th Actuarial Review …, 2009, p. 60). In December 2008 the Government of The Bahamas formed a committee to look into the possibility of establishing Pension Legislation in The Bahamas within the next four years (Pension Legislation …, 2009). In 2009 less than 30% of businesses in The Bahamas had a pension plan; the Central Bank of The Bahamas released statistics that showed the average bank account had less than a $1,000 balance (Pension Legislation …, 2009). In the same year, the pension contribution rate for an employee equalled 1.7% when the person's weekly wage was less than or equal to BS $60, and 3.4% if the wage exceeded that amount. At the same time, the employer paid 7.1% premium if the wage was not above BS $60, otherwise his contribution was 5.4% of the employee's wage. The employer's contribution also covered the accident insurance (the fraction of the contribution that was dedicated to this purpose was 0.75%), and the illness and maternity cash benefits. The self-employed paid 8.8% of their income in pension contributions, which besides the old-age pension contribution included accident insurance (6.8%). The maximum pension taxable income was set at BS $20,800 per year or BS $400 per week (Deveaux, 2008). For those persons who participated in the old-age pension system voluntarily, the contribution equalled 5% of the average weekly wage or income, determined for the year preceding the year of registration in the pension system (Social Security Programs …, 2010, p. 38).

In 2012 a comprehensive computerization of the pension system was started – Vitech Systems Group announced that The National Insurance Board of the

Commonwealth of The Bahamas (NIB) has selected Vitech's software as its new Social Security Administration Solution. The new system will process pension, insurance and other benefits for the Bahamas' 350,000 citizens (Bahamas Selects Vitech's …, 2012).

4. THE PRESENT STATE OF THE PENSION SYSTEM IN THE BAHAMAS – AS FOR 1 JUNE 2012

The Bahamas' pension system[8] consists of three pillars (Deveaux, 2008): 1) the public scheme, providing the "basic pension", 2) private pension funds[9] created by employers, and 3) private pension plans[10] for private individuals.

Besides the contributory pension, in The Bahamas all those who had not qualified for the old-age pension receive a social benefit financed by the state, which is paid out as an old-age non-contributory pension. This benefit is income tested and equals BS $56.58 per week (Social Security Programs …, 2012, p. 38).

Moreover, the Bahamian government provides a non-contributory gratuity scheme, similar to a pension plan, to its tenured civil servants. The plan provides a pre-determined monthly retirement benefit to employees based in their earnings history, years of service and age. The plan is unfunded, not having set aside assets to cover accrued benefit liabilities. Currently, benefits are budgeted for and paid out of the Government's Consolidated Fund (Deveaux, 2008, p. 6).

The public scheme functions in a way typical to capital insurance funds, meaning that premiums are collected and invested in capital markets, although the pay-as-you-go method is also used, which is characteristic to schemes based on Ponzi model (Lowe, 2003). The collected funds can be invested exquisitely in the territory of The Bahamas (Paddison, 2006, p.17). The scheme is compulsory for all employees of private businesses and the self-employed (Social Security Programs …, 2012, p. 38). Other persons may join the pension system and voluntarily pay their contributions. The benefits are paid out monthly (Bahamas Pension, 2011).

The social security contribution of employees (Social Security Programs …, 2012, p. 38), which is calculated weekly, equals 9.8% of the weekly income. Out of this amount, the insured employee contributes 3.9%, and the employer the remaining 5.9%. The part that is paid by the employee covers not only the old-age pension contribution, but also cash payments from illness and maternity insurance, the benefits related to unemployment and job accidents, and the employer's part also provided for the accident insurance (0.75% out of the 5.9%), and cash benefits related to illness and maternity. The self-employed pays in 8.8% of their income in social insurance contributions, which besides the old-age insurance also includes the accident insurance. The top limit in premium calculation is set at BS $26,000. For those, who voluntarily

[8] The term "pension systems" is used to collectively refer to pension plans as well as pension funds

[9] **Pension funds** refer to the pool of assets that are bought with the contributions to a pension plan for the exclusive purpose of financing plan benefits

[10] **Pension plans** are arrangements or schemes that are legally binding contracts with an explicit retirement objective

participate in the old-age pension system, the rate equals 5% of the average amount of weekly income in the year preceding the year of registration in the system. Their contribution covers old-age pension, but also disability pension, family benefits, funeral benefits, and maternity benefits.

The old-age pension eligibility age is 65 years for both sexes, provided that contributions were paid for at least 150 weeks. The persons who in 1974 were over 35 years of age (and the self-employed who met the same condition in 1976) obtain a 25-week credit for each year over the age of 35, up to the limit of 600 weeks, providing that 150 weeks of paying contributions took place in the years 1974-1977 (for the self-employed: 1976-1979). Early retirement is possible, between 60 and 64 years of age, as well as it is possible to postpone retirement until the age of 69. The basic pension is set at 30% of the remuneration of the employee, with at least 500 weeks of paid contributions. For those that had between 150 and 499 weeks of paid contributions, the pension will be equal to between 15% and 28% of their former remuneration. If you do not have the 500 weekly paid contributions needed to qualify for early retirement at age 60 you may at the age of 65, apply for the one-time payment of a retirement grant, should you meet the qualifying conditions at the time (currently 150 contributions min.).

The grant will be paid at a rate of 6 times the average weekly insurable wage for each set of 50 contributions paid. To qualify for the grant one must also be retired from gainful employment (Bahamas Pension, 2011). The retirement grows by 1% for each 50 weeks after you have exceeded 500 weeks of paid or credited contributions, up to the level of 60% of the former income of the insured. For the calculation of the income benefit, the best five years are taken out of the period of 10 years before reaching the age of 65. In the case of early retirement, the benefit is reduced by 0.58% for each month missing to the age of 65. In the case the retirement takes place after 65, the benefit is calculated in the standard way. The system provides for a minimum pension benefit of BS $61.50 a week.

Occupational plans are offered by larger companies, particularly in the tourism, financial services, and communications & utilities sectors. In most cases, these private pension supplement contributory retirement benefits are offered by the NIB. According to the Central Bank's latest survey of private pensions, approximately one fourth of the Bahamian workforce participates in occupational pension plans. Although many of the earlier established plans are defined benefit schemes, more employers are moving toward defined contribution plans (Deveaux, 2008, p. 6).

Private pension plans for individual persons are run in accordance with regulations set for insurance institutions. One specific feature of the Bahamian pension system is being embedded in an economy that has neither personal nor corporate income tax. In effect, The Bahamas does not offer the characteristic for the third pillar tax incentives to save for the old age, as well as there is no specific legal regulation tackling voluntary pension plans. The lack of tax incentives limits the growth dynamics of voluntary pension plans, although it is still higher than in other countries in the region that also do not have taxes, such as Antigua and Barbuda or St. Kitts and Nevis. The pension plans in The Bahamas, that are run in accordance with regulations prepared for insurers, are in their majority constructed according to defined-contribution model (Rudden, 2005, p. 111).

Another important influence is the proximity of the United States of America, for which The Bahamas is still one of the largest offshore financial centres. This enforces the financial institutions operating in the country to adopt operation standards known to, and expected by, American investors. Therefore investment funds, independent auditors and actuarial evaluation are a common feature of the Bahamian financial market. With such competitive market for capital investment, despite the creation of a special legal framework for creating voluntary pension funds on the rules for insurance companies, these funds play only a marginal role in The Bahamas. Similar to the National Insurance Fund, the private pension funds reported investing primarily in domestic securities. Governed by no domestic legislation, pension or investment fund managers of private pensions are required to adhere to the investment policy agreement with their clients (Deveaux, 2008, p. 6). Personal pension plans, as defined by the OECD (Private Pensions: OECD …, 2005), either take the form of savings in bank deposits or in pension-type products offered by banks, domestic credit unions and insurance companies.

5. CHALLENGES AND EXPECTED CHANGES TO THE PENSION SYSTEM IN THE BAHAMAS

The largest challenge that The Bahamas' pension system has to face is the impending insolvency of NIF after the year 2029. Since its creation in 1974, the NIF constantly reported and still reports a surplus of revenues over expenditures, which is invested in capital markets. However, the long-term analyses made in 2002 showed that the first year of deficit in the Bahamian pension system will be 2019, the accumulated reserve will be exhausted by 2029, and the level of pension premium necessary to balance the system was calculated to be 15.5% (The Seventh Actuarial Review …, 2002, pp. v-vi). Ultimately, in the year 2061 the level of pension premium should equal 25% of remuneration. In the prognosis made in 2009, the premium level necessary for the balancing of the system was estimated at 17.0% (8th Actuarial Review …, 2009, p. 19). The present-day demographic situation, which looks rather favourably in comparison with that of other countries, will change radically in the coming years. It is expected that the number of persons aged 60 and over will rise from 24.7 thousand in 2011 to over 96.6 thousand in 2066 (8th Actuarial Review …, 2009, p. 58). The relation of those contributing to those benefitting will decrease from the level of 4.9 in 2011 to 1.7 in 2066 (8th Actuarial Review …, 2009, p. 59). The character of the so called island economy, so characteristic to The Bahamas, means accepting high cost of the pension system which cannot be offset by a scale effect (Paddison, 2006, p. 16). The need for a reform to the pension system, very visible in experts' reports, with the introduction of obligatory three-pillar setup, has as yet not passed the discussion stage. Surely legislation would need to be in place to support this system. Essential components of this legislation are the establishment of a regulatory body with relevant authority for licensing and registration of persons and entities, full disclosure of information to contributors and the regulator, accountability of trustees, managers, and administrators, investment limits, self-employed and persons in non-pensionable employment, and mandatory preservation and portability of pension rights (Deveaux, 2008, p. 10).

6. SUMMARY

The pension system in The Bahamas generally comprises three pillars: public, occupational and personal pensions. Additionally, at the so called 'Pillar 0' for those who have not achieved the qualification for the public contribution-based pension, there is a noncontributory pension that is financed by the state budget. The public pillar started operation in 1974 and currently encompasses all employees of the private sector and the self-employed. From the very beginning, the public pillar accumulated significant reserves which enabled it unhampered pension payments. The operation of the remaining two pillars does not have a dedicated formal legal grounding; instead, it is based on general regulations for the insurance, investment and banking sectors. The fact that The Bahamas is a tax haven deprives the country's government of the incentive tools that are used by other governments, meaning the tax allowances. In such a situation, the operation of private pension pillars depends solely on the forethought of individual persons. Another big problem that the Bahamian pension system will be facing is the demographic situation that is changing unfavourably and may cause the system to be insolvent after the year 2029. To contradict this, the government is planning to increase the pension contribution rather than, as it has been recently widely practiced in Europe, to increase the retirement age.

In international perspective, the striking feature of the Bahamian pension system is that no special legal regulations are imposed on voluntary private pensions. It is characteristic for countries that strongly value personal freedom of man and his responsibility for his own future. In this respect, the belonging of The Bahamas to the Anglo-Saxon intellectual culture reveals at its fullest.

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EVOLUTION OF INTANGIBLE ASSETS – CASE STUDY KNOWLEDGE – BASED COMPANIES VS. ORGANIZATIONS TOP 100 ISSUERS AFTER CAPITALIZATION

NICOLETA RĂDNEANȚU *

ABSTRACT: *Development of knowledge-based companies and implicitly of knowledge-based economy led to the occurrence of a new type of innovative, computerized, flexible trading companies focused on human resource, with a high level of intangible assets, etc. – knowledge-based organizations. With the occurrence of knowledge-based economy, the role of intangible assets in knowledge-based organizations is emphasized. The paper also presents the conclusions of a comparative study performed using two samples of companies listed on the Bucharest Stock Exchange – companies included in "knowledge-based" category and companies in Top 100 issuers after capitalization. In order to increase the relevance of obtained results, we used χ^2 Test and Fisher's exact test (in case χ^2 test was not stable).*

KEY WORDS: *intangible assets; knowledge-based organizations/companies; Top 100 organizations/companies; χ^2 test and Fisher's test.*

JEL CLASSIFICATION: *M21; M41.*

1. INTRODUCTION

Development of knowledge-based companies and implicitly of knowledge-based economy led to the occurrence of a new type of innovative, computerized, flexible trading companies focused on human resource, with a high level of intangible assets, etc. – *knowledge-based organizations*.

Specific issues of knowledge-based companies and afferent organizations (knowledge-based organizations) are of topical interest and importance given that they leave a mark on all scopes of business (economic, social, political, etc.). Accounting is not left outside this phenomenon, all the more as **knowledge** – central element of the

* *Assist. Prof., Ph.D., Romanian-American University, Romania,*
nicoleta.radneantu@yahoo.com

new type of company/economy/organization – is an intangible asset whose importance can no longer be ignored.

Reffering to role reversal of the two categories of assets, tangible and intagible assets produced and amplified in modern economics, A. Toffler (1995) states: "what matters are not buildings or devices of a company, but the contracts and marketing and sale strenght force, administration's organizational capacity and the ideas yeasting in employees' heads". In these circumstances, companies management directed its efforts for creating and developing intangible assets supporting this innovation process by: achievement of research-development expenses, allocation of resources for employees' training, etc. As a result, the company's market value becomes more and more influenced by intangible assets and implicitly by the intellectual capital it holds (Radneanțu et. al., 2010).

In this context, we intend to capture the essence of intangible assets with the help of a comparative study (with the help of answers received as a result of sending a question: In your opinion, which will be the evolution of the importance of intangible elements below, in the next 3-5 years?) regarding the perceptions of managers of knowledge-based organizations and companies in Top 100, listed on Bucharest Stock Exchange.

2. DEFINITION, PURPOSE, METHODOLOGY OF RESEARCH AND ANALYSIS OF RESULTS

2.1. Research purpose

In this research, we intended to emphasize comparatively the perception of managers of knowledge-based organizations and Top 100 companies about the evolution in the next 3-5 years of the importance of certain intangible elements. In addition, we intended to determine if there is a connection between the type of company and the managers' perception regarding the evolution of their importance, in the next 3-5 years.

2.2. Definition of analyzed samples

For the achievement of proposed goal we used two samples: (1) Top 100 most active companies listed on Bucharest Stock Exchange (BVB, 2010) – which we shall name, abbreviated, Top 100 companies/organizations and (2) knowledge-based organizations listed on Bucharest Stock Exchange.

a) Knowledge-based organizations

For the identification of knowledge-based organizations listed on Bucharest Stock Exchange, I used the definition given by Sveiby (1989)*: **a knowledge-based company is a creative organization selling know-how, with non-standardized productivity, with high capacity of solving arising issues, dependant on the personnel***.

Twenty-six knowledge-based organizations were identified on Bucharest Stock Exchange.

b) Top 100 companies of issuers after capitalization

"Top 100 issuers after capitalization in the last 3 months on Bucharest Stock Exchange" (abbreviated Top 100) is a list containing the most active companies listed on Bucharest Stock Exchange. Top 100 contained 68 companies.

Populations are independent, meaning no knowledge-based organization is part of Top 100 and no company in Top 100 can be included in the category of knowledge-based organizations.

2.3. Research variables

Study's variables are represented by marks given by managers of knowledge-based organizations to main intangible assets not registered in current financial situations in Romania for the generation of added value (evolution – shall increase, shall decrease, shall remain constant).

Main intangible assets generating added value used in analysis are: Knowledge and skills of human capital, Supplier relationships, Customer relationship, Company image, Customer loyalty, Alliances, partnerships, Organizational culture, Employees' professional skills, Professional experience, Employees' loyalty, Employees' satisfaction, Employees' education, Employees' creativity, Organization's reputation.

2.4. Research methodology and results analysis

For this purpose, we used the χ^2 test (Pearson) which allows the comparison of proportions in two or more independent samples (in our case the samples are represented by the two types of organizations (Niculescu-Aron & Mazurencu-Marinescu, 2007).

As there are three possible answers (future importance of intangible element decreases, future importance of intangible element remains constant, future importance of intangible element increases), for each of the 14 intangible elements we designed a contingency table of 3x2 (3 lines corresponding to the three variants of answers – values of analyzed characteristics – and 2 columns corresponding to the two types of companies – number of samples/groups). The contingency table does not contain "I don't know" type of answers. Each such contingency table contains:

- The proportions of the ones who answered "i" (i=1,3) in each of the two categories of companies (populations) (% within knowledge-based company) and on total analyzed companies (% of total);
- Expected count automatically calculated in the hypothesis that the type of company has no influence on the "i" answer (the proportion of the ones who answered "i" in the sample – type of company – is the same as the proportion of the ones who answered "i" in total analyzed companies).

The results obtained in the 14 contingency tables are synthesized in Table 1.

Table 1. Results obtained in contingency tables

Intangible assets	Answers to the question	Top 100 companies (%)	Knowledge-based companies (%)
Importance of knowledge and skills of human capital	decreases	29,8	9,5
	remains constant	38,3	28,6
	increases	31,9	61,9
	total	100	100
Importance of supplier relationships	decreases	33,3	4,8
	remains constant	33,3	33,3
	increases	33,4	61,9
	total	100	100
Importance of customer relationships	decreases	13	14,2
	remains constant	39,2	4,8
	increases	47,8	81
	total	100	100
Importance of company image	decreases	26,1	4,8
	remains constant	43,5	28,6
	increases	30,4	66,6
	total	100	100
Importance of employees' professional skills	decreases	18,4	4,8
	remains constant	36,7	19
	increases	44,9	76,2
	total	100	100
Importance of professional experience	decreases	29,2	4,7
	remains constant	31,3	28,6
	increases	39,5	66,7
	total	100	100
Importance of employees' education	decreases	28,6	9,5
	remains constant	61,2	42,9
	increases	10,2	47,6
	total	100	100
Importance of organizational culture	decreases	7,8	30
	remains constant	70,6	25
	increases	21,6	45
	total	100	100
Importance of employees' loyalty	decreases	20,4	28,6
	remains constant	57,2	52,4
	increases	22,4	19
	total	100	100

Importance of customer loyalty	decreases	36,4	9,5
	remains constant	34,1	33,3
	increases	29,5	57,2
	total	100	100
Importance of employees' creativity	decreases	10	14,3
	remains constant	76	33,3
	increases	14	52,4
	total	100	100
Importance of employees' satisfaction	decreases	14,5	28,6
	remains constant	66,7	28,5
	increases	18,8	42,9
	total	100	100
Importance of alliances, partnerships, etc.	decreases	0	4,8
	remains constant	39,2	38,1
	increases	60,8	57,1
	total	100	100
Importance of organizations' reputation	decreases	2,7	0
	remains constant	73	42,1
	increases	24,3	57,9
	total	100	100

From Table 1. it results that most managers of Top 100 organizations (percentage between 31,3% and 76%) consider that the importance of all intangible elements remains constant. In exchange, most managers of knowledge-based organizations (percentage between 57,1% and 81%) consider that the importance of 10 intangible elements increases; exceptions are the opinions regarding: customer loyalty, organizational culture, employees' education and employees' satisfaction.

χ^2 test was designed to compare the proportions of the ones who answered "i" (i=1,3) in the two independent samples and to verify if the type of company (group) influences the proportions of the ones who answered "i".

SPSS programme calculated the values of χ^2 test starting from the square of differences between observed counts (number of knowledge-based companies/Top 100 companies who answered "i") and the expected counts (determined in the contingency table).

The value of calculated χ^2 (χ^2_{calc}) was compared to a theoretical value (χ^2_{critic}= 5,9915 (Niculescu-Aron & Mazurencu-Marinescu, 2007) corresponding to the level of chosen significance (95%, meaning $\alpha = 0,05$) and a number of two degrees of freedom ($df = (l-1)(k-1) = (3-1)(2-1) = 2$).

In using χ^2 test, we considered that:

- For each of the analyzed intangible elements, the total population (total number of companies that supplied valid answers) has different values;
- The volume of each sample is reduced considering that 21 knowledge-based companies and 52 companies of Top 100 were analyzed (total

population is maximum 73, the sample of knowledge-based companies is of maximum 21, and the sample of Top 100 companies is of maximum 52);

In these circumstances, the interpretation of results of χ^2 test was made depending on the "number of expected count with values smaller than 5" (x cells (y%) have expected count less than 5), respectively:

- We have considered that the calculated value of χ^2 test, is stable when there are "0" expected count less than 5;
- We have considered that the calculated values of χ^2 test are not stable if there is at least one expected count less than 5. In this case, we completed the analysis of Fisher's exact test (p).

Working hypotheses tested within χ^2 test have been:

H_0: there are no significant differences between the proportions of the ones who answered '"i" of the two samples (the type of company does not affect the answer to the question),

H_1: there are significant differences in the proportion of the ones who answered "i" of the two samples.

The following algorithm was used for the interpretation of the answer obtained in χ^2 test:

1. if there is no expected count less than 5 (0 cells (0%) have expected count less than 5) then:
   - if $\chi^2_{calc} > \chi^2_{critic}$ => H_1 hypothesis is accepted;
   - if $\chi^2_{calc} < \chi^2_{critic}$ => H_0 hypothesis is accepted;
2. if there is at least one expected count less than 5 (x cells (0%) have expected count less than 5) then "p" values are analyzed for Fisher's exact test:
   - if $p < 0.05$ => H_1 hypothesis is accepted with a probability of (1-p);
   - if $p > 0.05$ => H_0 hypothesis is accepted.

In Table 2. are presented the results obtained based on χ^2 test.

Table 2. Results obtained based on χ^2 test

Intangible elements	Expected count < 5	X^2_{CALC} value	X^2_{CRITIC} value	test is applicable (yes/no)	P value (FISHER's exact test)	Significance level	Accepted hypothesis	Interpretation
Importance of knowledge and human capital skills	1	-	-	yes	0,064	0,05	H_0	No connection
Importance of supplier relationships	0	7,577	5,9915	no	-	-	H_1	Connection

Importance of customer relationships	1	-	-	yes	0,006	0,05	H_1	No connection
Importance of company image	1	-	-	yes	0,014	0,05		Connection
Importance of employees' professional skills	1	-	-	yes	0,06	0,05	H_0	No connection
Importance of professional experience	2	-	-	yes	0,044	0,05		Connection
Importance of employees' education	2	-	-	yes	0,002	0,05	H_1	Connection
Importance of organizational culture	1	-	-	yes	0,001	0,05	H_1	Connection
Importance of employees' loyalty	2	-	-	yes	0,775	0,05	H_0	No connection
Importance of customer loyalty	0	6,515	5,9915	no	-	-	H_1	Connection
Importance of employees' creativity	2	-	-	yes	0,002	0,05	H_1	Connection
Importance of employees' satisfaction	1	-	-	yes	0,011	0,05	H_1	Connection
Importance of alliances, partnerships, etc.	2	-	-	yes	0,424	0,05	H_0	No connection
Importance of organization's reputation	2	-	-	yes	0,028	0,05	H_1	Connection

Note: No connection = H_0: there are no significant differences between the proportions of the ones who answered"i" of the two samples (the type of company does not affect the answer to the question)

Connection = H_1: there are significant differences in the proportion of the ones who answered "i" of the two samples (the type of company affects the answer to the question).

From Table 2. it results that the value of $\chi 2$ test was stable only for two characteristics (relations with suppliers and customer loyalty), for the other characteristics being necessary to apply Fisher's exact test. The interpretation is the following: managers' perception regarding the evolution of the importance of analyzed intangible elements is not related to the type of company, only for the following assets: knowledge and skills of human capital, professional skills, employees' loyalty, alliances and partnerships. For the other 10 intangible elements was shown that there is a relation between the type of company and the managers' perception regarding the evolution of their importance, in the next 3-5 years. Therefore, the type of company influences the perception of most managers, regarding the future evolution of the importance of analyzed intangible elements.

3. CONCLUSIONS

From the performed research results that the transfer to knowledge-based economy determined essential changes in the hierarchy of elements generating added value within a trading company. Thus, if until recently main elements, generating future benefits were considered tangible assets; currently the managers emphasize intangible elements such as knowledge and skills of human capital, company's image and reputation, professional skills, customer relations and relations with suppliers, employees' creativity, etc.

The main limit of the research was the reduced dimension of the sample of knowledge-based companies. It had the following causes:

- Reduced number of knowledge-based companies listed on Bucharest Stock Market, which is, in fact, an indicator of the reduced level of development of the knowledge-based companies in Romania;
- Managers' reluctance to supply information about intangible elements within the companies they lead;
- The sometimes hostile attitude of managers towards change (impact of knoweldge-based companies);
- Inssuficient information of managers regarding knowledge-based companies/knowledge-based economoy/knowledge-based organizations, which are often considered purely theoretical.

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PROFITABILITY OF THE CEE BANKING SYSTEMS DURING THE CRISIS PERIOD

MAGDALENA RADULESCU, MARINELA TANASCOVICI *

ABSTRACT: *The increase of the foreign property in the CEE countries took place at the same time with the increase of the concentration on the banking market. The foreign countries contributed to the highest concentration level of the banking market through two channels: the acquisition by the foreign banks of some local institutions and the consolidation of the local (autochthonous) institutions. Plus, the capital markets have developed considerably in the CEE countries, offering the firms alternative financing sources.*

KEY WORDS: *foreign banks; profitability; banking sectors; CEE countries; financial crisis.*

JEL CLASSIFICATION: *G01; G24; G34.*

1. INTRODUCTION

In the past decades, most countries in Central and Eastern Europe have adopted structural reforms in view of increasing the size, stability and efficiency of financial systems. The opening towards the outside and the internal structural reforms of the financial sector are supporting the development of a competitive and efficient financial system. Some authors such as Berger and Humphrey (1997), Kumbhakar et al. (2001), Isik and Hassan (2003), and Brisimis et al. (2008), show that the financial deregulation has a positive impact on the performance of banks, while other authors consider that deregulation has a negative impact, determining a decrease of allocative efficiency (Wheelock & Wilson, 1999) or considering that financial liberalization most often leads to financial crises (Betty & Jones, 2007).

In view of reducing systemic risks, at the level of these states bank, supervision was more strictly regulated with the purpose of restoring the faith into the bank sector (Berglof & Bolton, 2002). The financial liberalization process had as

* *Assoc. Prof., Ph.D., University of Pitesti, Romania,* youmagdar@yahoo.com
Assist. Prof., Ph.D., University of Pitesti, Romania, marinela.tanascovici@yahoo.com

purpose the increase of the competition level, the effectiveness of the financial intermediation process and the increase of financial stability (Bonin & Wachtel, 2003; De Haas & Van Lelyveld, 2006).

In the case of developing countries, studies focus on the investigation of the impact of deregulation, of the privatizations of the state banks, of entering foreign banks and their effects on banks performance (Asaftei & Kumbhakar, 2008; Koutsomanoli Filippaki et al., 2009; Yildirim & Philippatos, 2007; Pasiouras et al., 2009).

The studies in the field performed at the level of the countries in Central and Eastern Europe have showed that the structural reforms at the level of banking systems have determined the improvement of the efficiency of financial intermediation. Fries et al. (2005) have showed, based on an analysis of the performance of a group of 289 banks from 15 states in transition during 1995 to 2004, that financial liberalization, seen in the form of the privatization of banks and of the entry of foreign banks, has as result, the decrease of bank costs and the increase of the financial services' market.

Fang et al. (2011) find that the progress in banking regulatory reforms, privatization and enterprise corporate governance restructuring has a positive impact on bank efficiency. The presence of foreign banks can be beneficial for consumers by offering superior products and services, for the financial industry by increasing the quality of services and for economy by increasing efficiency (Yildirim & Philippatos, 2007). Nevertheless, the entry of foreign banks is not without its risks, especially in the case where this entry is performed without a previous consolidation of the institutional frame. Claessens et al. (1998) have shown that the presence of foreign banks can facilitate the increase of competition, the improvement of the allocation of loans and access to international capital markets. But there are, also, the costs associated to the entry of foreign banks, costs that can consist of the increase of the systemic risk caused by the increase of competition and the inclination towards risk of the banks in order to maintain or to increase their market share (Hellmann et al., 2000).

Claessens et al. (1998) examine the effects of the entry of foreign banks on the national bank sectors. The authors show that in the developing countries, there are registered higher profitableness rates and interest margins compared to the local banks, and in the developed countries, the situation is opposite. Another conclusion is the fact that the profitableness and general administration expenses of the local banks decrease after the entry of foreign banks.

Demirguc-Kunt & Huizinga (1999) present similar results. They show that foreign banks generally have higher profit margins than the local banks in the developing countries. Other studies show that the entry of foreign banks reduces operational costs and the profitableness of local banks, reduces the risk of the occurrence of a bank crisis and leads to a higher economic growth by improving the efficiency of local banks.

Andries & Asandului (2010) analyze the impact of financial liberalization on banking performances, highlighting the determination of the impact of the presence of foreign banks on the performance of the Romanian banking system. The analysis reveals the fact that the liberalization and internationalization of the banking system had as effect the increase of competition which determined domestic banks: to reduce their operational costs concomitantly with investing some important amounts into new technologies; to increase their credit portfolio in relative terms by reducing other assets and increasing the client base, which led to the increase of the credit risk and to the increase of the bank provisions; to diminish their net interest margin by decreasing the interest rate for loans, concomitantly with increasing the interest rate for deposits.

Agenor (2001) highlights the fact that because foreign investors are not familiarized with the problems specific to the countries they invest in, they tend to withdraw immediately and massively when encountering the first difficulty. This can lead to a profound crisis on the internal financial markets. Studies such as Claessens & Glaessner (1998) show that the restrictions imposed in Asia have led to a slower institutional development and costlier services. The level of liberalization of the capital account can affect the internationalization benefits and costs. Also, they highlight the fact that a certain level of mobility of the capital is necessary for the efficient internationalization of banks.

Johnston (1998) has investigated the relationship between the financial sector's reform and the liberalization of the capital account. The author shows that, before the liberalization of the capital accounts, the financial intermediaries must reach a level of development that guaranteed the efficient use of the capital. The countries with poorly developed financial systems need time in order to develop their financial institutions and markets, especially the bank sector, before the liberalization of the capital account.

Andries & Cocris (2010) analyze the efficiency of the main banks in Romania, Czech Republic and Hungary for the period 2000 to 2006 by using the frontier analysis and the results of the analysis show that the banks from Eastern European countries register low levels of technical efficiency and cost efficiency, especially the ones in Romania, and that the main factors influencing the level of efficiency of banks in these state are: quality of assets; bank size, annual inflation rate; banking reform and interest rate liberalization level and ownership form.

2. ARE THE FOREIGN BANKS MORE PROFITABLE THAN THE AUTOCHTHONOUS BANKS?

Most of the studies referring to the profitability of the bank focus on the markets with a low presence of the foreign banks. Plus, these studies ignore the fact that the foreign banks can be differently affected by certain factors in comparison to the autochthonous banks, and also other supplemental factors, such as the conditions in the origin country and the strategies of the mother/institutions. The unique study which deals with this problem is that of Williams (2003a, 2003b), which elaborate an empirical model of the determinant factors of the profit of the foreign banks and test a series of hypotheses linked to the profitability of the foreign banks in Australia. The results show that the internal factors do not bring a plus of descriptive force top the model, even if they offer important information on the decisions of politics and strategy of the foreign banks. From the theoretical point of view, the profits of the foreign banks can be influenced by the business environment from the origin countries, and also by the solidity and the strategy of the mother-institutions. These can involve both costs, and also earnings for the banking sectors form the Central and East Europe countries.

The most important advantage of the foreign property is the lower sensitivity of the foreign banks to the conditions from the host-country and the much better access on the international markets. The experience internationally indicates the fact that the mother-banks become last resort creditor of the branches at difficulty. For instance, the Belgian bank KBC recapitalized its Polish branch Kredyt Bank and the Hungarian one K&H, when the latter had problems. As for the Kredyt Bank the problems were generated by the rapid increase of the volume of credits, which had as consequence the increase of the non-performing credits, while the problems for the K&H were caused by the fraud administration (Opritescu & Manta, 2008).

At the same time, the activity of the foreign banks can be influenced negatively by the weak results of by the modification of the strategy of the mother-banks. There are two main channels that must be taken into consideration. The first, a foreign bank can be liquidated if the mother-bank has difficulties and decides to close some of its branches. An example of the impact of the problems of the mother-bank on the foreign banks which operate in the CEE countries is the withdrawal of Dresdner Bank from Romania and Czech Republic. The second channel, the management of the international banks approves the allocation of capital with the highest expected profit (de Haas & Naaborg, 2005a & 2005b). Thus, even the profitable foreign branches can be closed in order to reallocate capital to a project even more profitable in another country.

The impact of the conditions from the origin country on the foreign countries is more ambiguous and cannot be easily predicted. For instance, if the economical evolution presents an ascendant tendency in the origin country, the mother-banks can have many profitable opportunities in the country and can thus decide to allocate less capital to the branches. At the same time, a powerful economical increase in the origin country makes the mother-banks more profitable and more capable to develop the network of branches abroad.

Taking into consideration the fact that the foreign banks are often accused of offering services only to the great firms, we should assume that the profits of the foreign banks decrease at the same time with the development of the capital markets.

A study made by National Bank of Finland analyses determinant factors of the profitability of the banks, using a set of data containing 265 banks from 10 CEE countries (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia). There are analyzed determinant factors of the profitability of the banks with different property regime, estimating the regressions for the entire sample and separately for autochthonous banks, foreign property, branches of banks created by undertaking and newly created branches of the foreign banks.

The results of a study (Opritescu & Manta, 2008) show that there are differences in the reaction of the foreign and the autochthonous banks. The autochthonous banks register greater profits on markets with higher concentration degree. As for the influence of the evolution of the capital market on the profits of the foreign and the autochthonous banks, we can say that the capital markets have a complementary function or of substitution for the banking sector. On the other hand, as the capital markets develop themselves, the banks can obtain more information about the clients, which facilitates the selection and monitoring of the latter.

As a conclusion, the profits of the foreign banks are not affected by the concentration level on the banking market while the autochthonous banks make greater profits by operating on such markets. This is due to the low rates practiced in order to attract new clients and to obtain the desired market quota.

3. PROFITABILITY OF SOME CEE BANKING SYSTEMS DURING THE CRISIS PERIOD

The efficiency and profitableness of banks constitutes a very important element in the analysis of financial systems, especially of the developing countries, at the level of which the banking system represents the main component of the financial system and which has known in the past years, major mutations at the level of the structure of shareholding as a result of privatization, of the entry of foreign banks and of the increase of competition determined by the liberalization of the market and legislative changes (Opritescu & Manta, 2008).

The results of the performed analysis in CEE countries show us that, for the analyzed period, both the financial reform index, and the index regarding bank reform have a positive impact on the bank performance indexes (cost of intermediation, operational performance and return on assets). This means that an increase at the level of the indexes regarding financial reform and bank reform determines an increase of the performance of banks in Central and Eastern Europe.

Analysis results achieved are very important in terms of banks management and governmental authority's perspectives. Thus, banks need to improve the performance and quality of assets owned by improving the lending process and reducing the share of nonperforming loans. Also, banks need to reduce its financial costs. A topic of interest in the current context of international economic and financial crisis is the optimal size of banks.

The analysis results in an increase in bank size, gauged by the total assets held, and a decrease in banking performance, but an increase of the equity level and an improvement of capital adequacy will foster the banking performance. To facilitate increase in the level of banking performance, governmental authorities must accelerate the process of liberalization and reform of the banking system and make every effort to ensure a low inflation rate.

The Romanian banking system's accession to the European Union on January 1st, 2007, was a significant moment in the banking history and it emphasized the significant progress in the legal, structural and operational fields that reduced the gaps between Romania and the EU Member States.

The changes made in the Romanian banking system may be highlighted using a composite index calculated by the European Bank for Reconstruction and Development (EBRD) for the assessment of bank reforms and of interest rate relaxation. The following are taken into consideration when determining this index: the quality of regulation and monitoring activities, the type of property and the access of private sector to funding.

The values of this index range between 1 and 4+ with the following meaning: 1 represents low progress of the transitional process and 4+ reflects full compliance with the standards and performances of developed economies.

This transition of the Romanian banking system emphasized by the EBRD index is facilitated by the data presented in Table 1. With regard to the Romanian banking system, the values of the transition index calculated by BERD show that there is still room for improvements, despite the progress of reforms. The low score of Romania (3.3% in 2008 compared to 3.67% of Bulgaria and Poland) is due to its slower reforms.

Table 1. Assessment of the banking system's reform based on the EBRD index, in some countries in Central and Eastern Europe in the period 1990 – 2008

Countries	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008
Bulgaria	1,0	2,0	3,0	3,0	3,3	3,3	3,67	3,67	3,67	3,67	3,67
Czech Republic	1,0	3,0	3,3	3,67	3,67	3,67	3,67	4,0	4,0	4,0	4,0
Hungary	1,0	3,0	4,0	4,0	4,0	4,0	4,0	4,0	4,0	4,0	4,0
Poland	2,0	3,0	3,3	3,3	3,3	3,3	3,3	3,67	3,67	3,67	3,67
Romania	1,0	3,0	2,67	2,67	2,67	2,67	3,0	3,0	3,0	3,3	3,3

Source: www.ebrd.com/country/sector/econo/stats/tic.xls

The accumulation of the economic disequilibria, the deterioration of the flexibility of the banks as a consequence of the limited volume of drawn deposits and the high dependence degree in report to the capital of the mother-banks are the factors that the analysts of the rating agency see as dangerous for the autochthonous banking system.

Still, the rating agency appreciates that the regulations of the National Bank of Romania offered a better mechanism of administration of some eventual major risks for the banking system.

The financial crisis at the end of the past decade clearly disclosed the vulnerability of highly interconnected financial systems in times of recession. Financial problems and failures on the US financial market in the fall 2008 almost immediately contaminated financial systems and institutions worldwide.

Studies were made between banks in different regions in the EU as well as between different types of banks in order to explore whether there are differences in the financial performance and risk-taking of the banks with respect to their geographical operations area (nationality) and association form.

According to the new model of financial risk realized by The Banker magazine, banking systems in countries like Moldova, Chile, Peru and Bolivia are less susceptible to be affected by the current financial crisis than countries like United States, United Kingdom or Japan. The most developed countries, but also the most dependent on credit, have suddenly become the most exposed to the crisis. The poorer countries are less dependent on credit, they have just a fraction of the leverage on the developed markets and they are more financially isolated than other countries (Turkes, 2010).

There are numerous of studies aiming at exploring, examining and explaining the profitability of banks. Bank profitability and performance is then mainly related to: i) whether or not there are economies of scale and scope in banking, ii) whether mergers and acquisitions create or destroy value on the whole as well as partially, iii) the efficacy of management (X-efficiency), and iv) the impact of market structure (Berger & Humphrey, 1994). Particular interest is then paid to the financial performance of European banks (Molyneux & Thornton, 1992; Altunbas et al., 2003; Bos & Schmiedel, 2007). However, over the past decades there is also a growing interest in the profitability and risk-taking of banks in emerging markets (Said & Tumin, 2011 for a recent focused study and Olson & Zoubi, 2011 for a broader survey). Along with the globalisation of financial markets more and more interest is being put on understanding the impact and importance of international divergences (Berger, 2007) and interactions (Claessens, Demirgüç-Kunt & Huizinga, 2001; Carbó et al., 2009; Hannan & Prager, 2009). For instance, Hannan & Prager (2009) observe that the profitability of banks in less competitive local markets is positively affected when more diversified banks enter into the market. One explanation may be that the geographically diversified bank does not adopt the prices on the local market.

The banks‘ return on equity (ROE) may be regarded as the core measure of the overall bank profitability in accounting based studies (Frazer & Zhang, 2009). Generally the bank‘s ROE is first broken down into return on assets (ROA) and an equity multiplier.

The recent study by Lindblom et al (2011) of Swedish banks' returns and risk-taking during the financial crisis demonstrates both advantages and short-comings of this kind of analysis. As expected the analysis shows that the overall profitability of EU banks, in terms of return on equity (ROE), was clearly affected by the financial crisis. The crisis did also affect banks in different regions, but the regional effects seem to differ both with respect to timing and strength. Already in 2008 many banks seem to have suffered severely, particularly in the West European region. Banks in Eastern Europe appear to be better off on average, but these banks were facing a significant decrease in their overall profitability in 2009. Still these banks were on average displaying a higher return in nominal terms than the average EU bank (Lindblom, Olsson & Willesson, 2011).

According to the analysis with respect to association form, in general savings banks appear to have managed the crisis better than commercial banks. These banks seem not to have been as exposed to interest rate risk and credit risk as commercial banks. This was particularly clear in West Europe, where the average commercial bank suffered from losses in 2008. An unexpected finding, when comparing risk exposures of savings banks and commercial banks, is that savings banks seem to be as exposed to capital risk as commercial banks - at least in terms of leverage. This is unexpected as savings banks are supposed to be more conservative and less risk-taking than commercial banks. In addition to these general conclusions, the analysis lends support to the following preliminary conclusions (Lindblom, Olsson & Willesson, 2011):

- The reason for the banks’ decreasing overall profitability in 2008 is not only due to credit losses. Even before loan loss provisions, the average returns on the asset side fell on the EU level and, particularly, in West Europe.

- At the beginning of the crisis the average bank experienced losses from a too high exposure to liquidity risk. Following the increase in market rates, the banks‘ average interest cost rose considerably in 2008. However, in 2009 both market rates and the average interest cost of the banks declined, which is most likely explained by the intervening actions of governments and central banks.
- The analysis implies that the average bank was exposed to high interest rate risk before the crisis. To some extent these losses are caused by credit risk exposure, but the sharp decrease of the banks‘ average leverage spread also before credit losses suggests that the banks did not suffer from credit losses only.
- The capital risk exposure of the average bank seems to have been affected only marginally by the financial crisis and was in that respect not a major source for their changing profitability.
- The banks' decreasing return on financial leverage is to a certain extent an indirect effect caused by their exposures to operational risks. The analysis discloses a considerable decrease in the average bank‘s contribution from non-interest bearing business activities, like trading and other financial services, in 2008. However, the income from these activities was improved already in 2009.

In the Romanian banking system, the assessments for the end of the year 2007 indicate a revival of the growth rate of the aggregate profit compared to that recorded in recent years, due to some higher performances achieved especially by the important credit institutions. In this situation, some credit institutions were forced to reorganize their activities, while others had to continue the process of rapid expansion of the regional networks. The rates of profit (ROA and ROE) continued their slightly downward trend, although the evolution of the operational efficiency was positive in 2007, against the background of increased attention from the credit institutions concerning the judicious management of the operational costs. Therefore, one cannot exclude the hypothesis of a stronger negative impact on the profitability of the credit institutions, most likely caused by the increased related interbank funding costs, against the background of the ongoing international financial turmoil.

The improved presence in the territory and the banks' new rules for lending have boosted the mediation development of banks, the credit institutions continuing their counterbalance strategy to decrease the interest margins by diversifying the income sources and by larger takings from increased volume of loans, especially from the currency component. However, the banks' profit distribution was heterogeneous, the high values, both in absolute and relative terms, being recorded mainly at the level of large credit institutions. At the same time, some medium and small banks have ended the year 2007 with a loss.

The return on equity (ROE) has recorded a level slightly below than that of 2006, under the conditions of a net profit dynamics comparable to that of the equity. The ROE analysis based on decisive factors reveals a slight deterioration of bank capital remuneration as a result of the diminished capacity of assets to generate profit, when the increased leverage effect has partially counterbalanced the reduction recorded at the rate of return on assets (ROA).

The massive investments, targeted especially towards the expansion of banking network and increased competition resulted in a decrease of the profit share in operating income in 2007. However, this process did not affect the ability of assets to generate income. The value of the asset utilization ratio has slightly increased. Under these conditions, the rate of return on assets (ROA) has continued in 2007 its decreasing dynamics, but at a slower pace than the previous years, therefore its size remains comparable to the values reported in other European countries (Table 2.).

The structural analysis of the operating income highlights the diversification of the banks' earnings sources. The net income derived from foreign exchange transactions has represented the most dynamic component of the operating income, due to highly volatile currency market. At the same time, the income derived from the commissions maintained its value, increasing at a rate similar to that of the operating income. The net interest income decreased its share in operating income. The substantial increase of interest expenses, compared to the same period last year, is mainly caused by the rises in interest rates paid for deposits. However, the impact on net interest income was different from one bank to another, the most affected credit institutions being those that lacked a proper basis for deposits derived from non-bank customers compared to the granted loans portfolio. The recent turbulence in international financial markets has further accrued the increasing amount of interest expenses by enhancing the interest rates associated to interbank resources.

In the structure of operating expenses, the staff costs continue to be the main component, against the background of the increasing number of bank officials. The provision expenses increased in 2007 primarily as a result of non-governmental credit expansion, but also due to legislative changes. By maintaining the strict levels of profitability targets set by shareholders, the more intense competition on the Romanian banking market represents the pressure factors on credit institutions in finding the appropriate solutions to further continue the positive dynamics of banking efficiency.

The profitability of the Romanian banking system has turned negative since May 2010. Thus, for the first time since 1999 the banking system ended the year with a loss, mainly under the influence of the high provisioning costs, and of the deterioration of the exploitation result. However, the loss was not a generalized characteristic. In the case of the main indicators of profitability (ROE and ROA), descending tendency continued in 2010 for the second consecutive year. In mid-2011, the ROE and ROA levels had already slightly improved compared to the same period last year, becoming thus positive (Table 2.).

Also in 2011, the loss was not a generalized feature, being mainly characteristic for the medium and small banks. In mid-2011 the banking system has recorded positive results, the operating profit, although reduced compared to the same period last year, covering the expenses with the decreasing provisions. It is estimated that the profitability of the banking system will remain low in the short term, given the time gag between the resumption of the economic growth and the manifestation of its favorable effects on the financial results of banks.

The net expenses with the derived provisions of loans granted to non-banks customers have increased in 2010, reflecting the deterioration of the loan portfolio’s quality, but the provisions’ rate of formation has dropped by the end of the year. Since January 2011, the net provision expenses were below the level recorded in the same period of 2010. The net interest income has kept its growing trend manifested in late

2009, the dynamics turning negative in early 2011. The explanation is that banks have offset the decline in granted loans for private sector by increasing the investment and securities holdings, having a lower yield. In addition, the net interest margin applicable for the non-financial private sector was restrained, mainly due to a lower average interest rate on loans against the background of the intensifying competition and reduced demand for credit. The interests on customer deposits and on those related to funds raised from credit institutions have remained the main components of the interest expense, similarly to previous years.

In 2010, compared to the same period last year, the net commission income has reduced its share in total operating income, due to its more pronounced contraction in the context of disintermediation. Since 2011, the annual dynamics of the two types of income reversed, the decrease rate for net commission income being slower than that of the operating income.

The concern expressed by banks during the year 2010 to limit the operating costs reflected in the dynamics' contraction of the costs related to staff, materials, works and services, provided by third parties and to amortizations, compared to 2009. The downward tendency was preserved in late 2011, although the group related to amortization expenses resumed its upward tendency.

Table 2. Evolution of ROA and ROE for CEE banking systems (percent)

Countries	2003		2004		2005		2006		2007	
	ROE	ROA	ROE	ROA	ROE	ROA	ROE	ROA	ROE	ROA
Bulgaria	22,7	2,4	20,6	2,1	22,1	2,1	24,4	2,2	25,4	2,5
Czech Republic	23,8	1,2	23,3	1,3	25,2	1,4	22,5	1,2	23,1	1,3
Poland	5,4	0,5	17,1	1,4	21,9	1,6	21,0	1,7	25,6	1,8
Romania	15,6	2,2	18,5	2,4	15,2	1,9	11,7	1,5	11,4	1,3
Hungary	19,3	1,5	25,3	2,0	24,7	2,0	24,0	1,8	22,9	1,8
Countries	**2008**		**2009**		**2010**		**2011**			
	ROE	**ROA**	**ROE**	**ROA**	**ROE**	**ROA**	**ROE**	**ROA**		
Bulgaria	21,0	2,3	9,3	1,1	6,7	0,9	6,1	0,8		
Czech Republic	22,0	1,2	26,0	1,5	20,7	1,4	18,6	1,2		
Poland	20,0	1,5	10,5	0,8	12,4	1,1	15,1	1,3		
Romania	17,5	2,0	4,0	0,5	-2,0	0,1	0,7	0,1		
Hungary	13,0	0,2	12,0	0,1	3,0	0,05	-8,0	-0,1		

Source: IMF, Global Financial Stability Report, 2008 and national central banks sites

Poland and Romania started the last decade with lower ROE rates (Table 2.). Poland has closed the gap after a few years, while Romania has registered lowest ROE rates in the following years, reaching a negative level in 2010. Bulgaria lost its position and Hungary has reached negative ROE ratio in the last analyzed year, just like Romania, Greece, Slovenia, Latvia and even Ireland (Figure 1.).

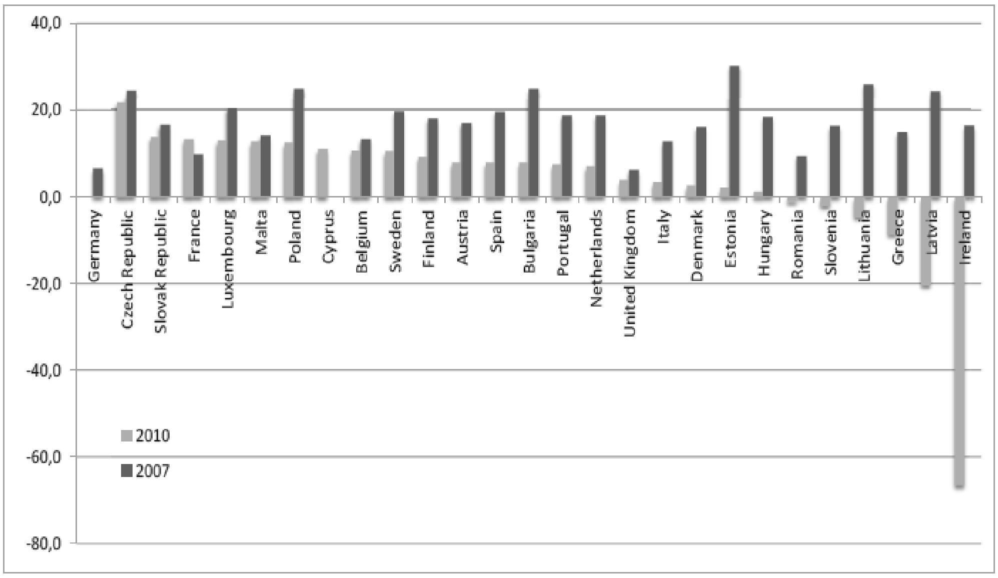

Figure 1. Development of ROE in EU 2010 vs. 2007

Source: IMF, Global Financial Stability Report, 2010

The number of Polish banks reporting negative profitability ratios remained close to the beginning of 2011 level, but the share of these banks in the banking sector's assets considerably decreased until the end of 2011. This resulted from a shift in the composition of the group of banks with negative profitability ratios. In terms of return on assets, discrepancy among commercial banks and branches of credit institutions has narrowed. However, large banks still exhibit higher ROA than the sector's average.

The improvement in the banking sector's earnings and profitability ratios was mainly driven by the stabilization of loan portfolio quality expressed in decreasing value of charges to provisions for impaired loans. The decomposition of changes in ROE of the domestic banking sector shows that in the period under analysis the improvement in ROE was also supported by a slight increase in financial leverage by banks.

In Czech Republic, return on equity in 2011 faced a slight decrease from the level of 2010. The slight annual decline in the net profit of the banking sector in 2011 was due mainly to recognition of the impairment of Greek bonds in some banks. By contrast, profit from fees and commissions, and especially interest profit, increased year on year.

However, the breakdown of the key components of profit from financial activities was broadly unchanged from 2010. Gains and losses from financial market operations are one of the areas that can affect banks' operating profit. Although banks in the Czech Republic tend to focus on the conservative banking model of accepting deposits, providing client loans and investing in domestic government bonds, they are relatively active in the area of currency and interest rate derivatives held for trading.

Insofar as banks use derivative transactions to hedge market risks and recognize them as hedging derivatives in their books, the volatility of their profits decreases. However, hedging derivatives account for only 14% of the notional value of all derivatives, while the rest is recognized as derivatives held for trading, which are revalued to fair value against profit and loss.

In Czech Republic, high operating profits allow banks to create sufficient buffers to cover losses from credit exposures. The operating profit of banks in 2010 continued to offset loan impairment losses sufficiently, thereby ensuring a stable level of net profit. The decline of the net profit in 2010 was due mostly to base effects resulting from extraordinary revenues in 2009, augmented by a modest increase in administrative expenses in 2010. Return on Tier 1 fell by more than 4 percentage points in 2010 compared to 2009.

The conservative banking business model in the Czech Republic brings banks benefits in the form of relatively stable income on financial activities. Banks are able to generate sufficient income in the long run primarily through their portfolio of claims and to make net profits even in years when income on other financial activities declines or risk costs increase. The year 2009 was no exception in this regard. Despite an almost twofold increase in risk costs due to provisioning, profitability did not decline since operating profit gross of losses from impairment of loans and other assets recorded a sizeable increase.

The banking sector ended 2009 with a net profit by around 30% on 2008. However, the increase in profits was affected by numerous one-off operations which influenced the results in both 2008 and 2009. The profit less these one-off transactions recorded in 2009 would be slightly below the 2008 level.

Since leverage (assets expressed as a multiple of equity) in the Czech banking sector has been generally declining over the past decade, the sector's profitability has been driven not by the use of a larger volume of external funds compared to equity, but by a higher profit margin. The value of leverage 12,5% for 2009 is lower than in the banking sectors of some countries where parent banks of the largest Czech banking institutions are active. By contrast, Central European countries (Slovakia, Poland and Hungary) record very similar values of this indicator as the Czech Republic.

In 2009, banks benefited mainly from an increase in the interest margin, even in conditions of declining interbank rates. Despite the reduced economic output, stagnant credit portfolios and declining market interest rates, the main components of profit from financial activities increased in 2009. A more detailed analysis reveals that the increase in net interest income was due mainly to a higher interest margin in the retail segment of client deposits and loans, as net interest income from the administration of securities and other financial operations (repo operations with the CNB) declined.

In Hungary, the banking system has booked losses, mostly due to one-off effects; adjusting for those, the sector is profitable. At the end of 2011, the banking sector reported a pre-tax loss, a significant deterioration from the pre-tax profit in the previous year. After adjusting the 2011 loss for the bank levy and the loss attributable to the early repayment scheme, the banking sector profit in 2010 was similar to that of 2009. The banking sector pre-tax profit dropped significantly in 2010 compared to

2009, and its ROE (return on equity) decreased from 12.5 per cent to 2.8 per cent, indicating an extremely low internal capital accumulation capacity. However, in evaluating these data, consideration should be given to the pivotal role of the bank levy, and the tighter provisioning policy of a bank, which resulted in a loss. Excluding these items, the banking sector pre-tax profit would be nearly identical to the corresponding 2009 data. The banking sector's favorable profitability resulted from increase in net interest income. Interest income increased in conjunction with a decline in business activity, thus actually increasing bank profitability.

With the exception of the Baltic countries, profitability is lower in the domestic banking sector than in the countries of the parent banks and other countries of the region. A comparison of profitability within the region reveals that the Czech Republic, Slovakia and Poland are the leaders in Central Eastern Europe. In contrast, the Baltic countries and Hungary are among the countries with the lowest profitability. If this low profitability remains for a longer period, in addition to banks' weakening ability to accumulate internal capital, Hungarian banks may suffer a competitive disadvantage in the allocation of parent banks' funds and capital. This, in turn, may have an adverse impact on lending capacity, and consequently, on economic growth.

This risk is considerably increased by the upholding of the current level of the bank levy in both 2011 and 2012. Meanwhile, in respect of the fundamental developments, it is a favorable that the Hungarian banking sector's earning capacity on its core business activity is high. Without the bank levy Hungary would be in the leader's group of Europe instead of in its current poor placing.

The number of unprofitable banks, however, is on the rise. The banking sector's annual rolling average of return on assets (ROA) was 0.9 per cent in 2009, while return on equity (ROE) reached 12.7 per cent (based on profit after tax, ROA and ROE stood at 0.8 per cent and 10.9 per cent, respectively). This represents a slight decline compared to 2008. The profitability of the Hungarian banking sector is considered favorable in international comparison. Profit performance has exceeded expectations, which significantly enhances the banking sector's shock-absorbing capacity. At the same time it should be noted that this profit has been generated by a few large banks.

Although the profitability of financial enterprises is still positive, they are expected to face losses in future, which may significantly worsen the consolidated results of the affected banking groups. In 2009, loan loss provisioning increased considerably for financial enterprises as well. At the sector level, this is three times as high in the same period of 2008; moreover, it exceeds the provisions for the entire year of 2008. In addition, profitability was weakened by the fact that the profit on financial transactions fell far short of previous levels. Profit-reducing factors were partly offset by the interest income, which continued to grow at a similar pace as in previous periods, but the weaker exchange rate also played an important role in this achievement. As a result, the profit of financial enterprises shrank to one-third of the value recorded in 2008.

Meanwhile, pre-provisioning profit increased only slightly. As a result of a further rise in credit risk costs, loan loss rate and a substantial contraction in the loan portfolio, the sector's profit may turn negative by the end of the year, deteriorating banks' domestic group-level consolidated results. The profitability of the domestic banking sector is declining, but it continues to exceed the levels of parent banks' countries. In the two years preceding 2006, the domestic banking sector had a remarkable competitive advantage over the profitability of the banking sectors of some major parent countries. Compared to parent banks' markets, this competitive advantage became narrower in 2006 and 2007, but still remained in place.

In 2008, the ROE indicator of the domestic banking sector moderated further, but the Hungarian banks' advantage in profitability probably continued to exist compared to parent banks' markets. The decline in profitability indicators was caused by increased provisioning, the rise in operating costs exceeding inflation, the stagnation of interest income, fall in income from financial transactions and one-off effects. For the majority of banks the ROE (17 per cent) and the ROA (1.3 per cent) calculated with the pre-tax profit is declining or stagnating.

The state of earnings may be defined as acceptable: the Bulgarian banking system as a whole and most of banks and bank branches managed to generate positive financial results. In other circumstances, these values would be assessed as an indicator of a very good state of the banking system. However, the trends suggest a decreasing capacity for generating additional resources necessary for counteracting the expected negative processes.

Bulgarian banking system profitability in 2011 was determined by factors inherent to the previous reporting periods: • lower interest income on newly extended loans; • limited ability to expand income via alternative financial services. As a result, ROA came to 0.85 per cent against 0.96 per cent a year earlier. ROE also declined to 6.47 per cent, from 7.49 per cent as of 2010).

4. CONCLUSIONS

In CEE region, Czech Republic, Poland, Latvia, Estonia, Bulgaria and Ukraine had the highest ROE ratio before the crisis has erupted. Regarding ROA development, Bulgaria has the highest ratio almost the entire analyzed period, but lost its top position in 2010-2011. Poland started with the lowest ROA rate, but it ended the period with the highest ROA ratio, together the Czech Republic. The most stable developments are met in Czech Republic that proves it has the strongest banking system in the region, followed by Poland, while Hungary has faced the largest difficulties during the crisis period. Hungary has reached negative levels both for ROA and ROE in 2011. Romanian banking system has also faced losses during the crisis, but in 2008 it has better ROE and ROA levels than Hungary. Romanian banking system weaker performance can also be explained by the low ERBD index score due to its slower reforms, compared to Bulgaria, Poland or, moreover, Czech Republic.

Moody's, the credit rating agency, estimates that the profitability of the Romanian banks will continue to be under pressure, in a context where the level of the cost related to credits is expected to be high, in a still challenging macroeconomic environment. Moody's anticipates that the provisions will continue to significantly cut the operating profits of Romanian banks also and in the future, although many bankers believe that the peak regarding the credit risk cost was achieved last year. The

Romania's banking sector has been under pressure since mid-2008 due to higher funding costs and rising provisions in the context of deteriorating economic conditions.

The performances of the Romanian banking system will be further affected by the difficult macroeconomic outlook. The Romanian banking system has so far proved resistant to the economic shocks, although ratings were down due to diminishing gains and increased credit costs.

According to Moody's, the future will be difficult for the Romanian banks, leading to a high level of provisions for bad loans and to a lower profitability, although concerns about liquidity and capital needs have diminished. However, the systemic risks are reduced by the commitment made by the international banking groups with subsidiaries in Romania to the International Monetary Fund, to further support their subsidiaries and to maintain exposure on the Romanian market.

For the rating agency to change the stable perspective of the Romanian banking system it is required to record a sustained economy, combined with a decrease in unemployment. The negative outlook reflects the difficult economic conditions, and estimates that the nonperforming loans and costs remain high, affecting the banks' profitability.

Also, the tendency of deterioration of the credit quality must be reduced and the banks' profitability straightened, and the earnings should be less affected by the credit costs. Moody's claims that, the level of capitalization of the Romanian banks continues to be good due to the support given by the parent banks.

Lately, Moody's has maintained a negative outlook on all banking systems of the Commonwealth of Independent States (CIS), of the Baltics and of Eastern Europe, reflecting the impact of the financial crisis on the assets quality on revenues, on capitalization and on financing conditions.

Thus, according to the report, that analyzes the evolution of ratings and prospects in 12 countries, Moody's may maintain a negative outlook on the banking systems in Romania, Bulgaria, Ukraine, Hungary, Kazakhstan and the Baltic States, due to the negative pressure on the financial foundation and to the ongoing difficult economic environment in the region. Some countries have shown signs of stabilization. Therefore, the agency claims that the prospect on the banking systems in Poland, Russia, Slovakia and the Czech Republic could be increased from negative to stable in 2012.

Moody's notes that any increased prospects will depend on the sustained improvement of the factors affecting the lending, including the macroeconomic environment, quality of assets, income generation and funding conditions. Given the uncertainties surrounding the macroeconomic environment, the negative credit trends could persist this year in most of the banking systems in emerging European countries.

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RELATIONSHIPS AMONG COMPONENTS OF ENGAGEMENT RISK

EVREN DILEK SENGUR *

ABSTRACT: *Accounting scandals exploded at the beginning of 2000s and the collapse of Arthur Andersen highlighted the importance of implementing engagement risk management strategies in audit firms. Engagement risk refers the overall risk associated with an audit engagement and it consists of three components: client's business risk, auditor's business risk, and audit risk. The main purpose of this study is to describe each components of engagement risk and explain relations among them. Additionally, the paper points out the importance of engagement risk management throughout the audit and demonstrates engagement risk management strategies at client acceptance/continuance, planning and completion of audit.*

KEY WORDS: *Engagement Risk; Audit Risk; Client's Business Risk; Auditor's Business Risk; Risk Management.*

JEL CLASSIFICATION: *M40; M42.*

1. INTRODUCTION

Auditing is a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the results to interested users (Messier et al., 2008). Auditing process begins with the client acceptance and continuance, proceeds with the proper planning, gathering evidence and ends with reporting. Each audit engagement brings its unique risks to either auditor or audit firm. Once an auditor agrees to accept a client, the auditor inevitably exposes to an engagement risk. Engagement risk represents the overall risk associated with an audit engagement. The concept of engagement risk serves to formalize the auditor's consideration of the factors and risks affecting an engagement (Colbert et al., 1996). Engagement risk consists of three components:

* *Ph.D., Istanbul University, Turkey, sengur@istanbul.edu.tr*

client's business risk, auditor's business risk, and audit risk. (Colbert et al., 1996; Walo, 1995; Ethridge et al., 2007a; Johnstone, 2001; Davutyan & Kavut, 1997)

Palmrose (1997) examined more than 1.000 instances of litigation against 20 audit firms. Research based on the large sample of lawsuits against auditors found that between 30% and 40% of suits were filed on clients about to be or already in bankruptcy. Additionally, the study revealed that modified audit reports provide the auditor with some defense against litigation. Consider the audit report on the last financial statement issued before the bankruptcy or litigation (whichever came first): of bankrupt public companies with no auditor litigation, 58% had modified reports, while only 36% of bankrupt public companies with auditor litigation had modified reports. Furthermore, the outcomes of lawsuits on bankrupt public companies reinforced the defensive role of modified reports. In suits with only modified reports, auditors either paid the lowest settlements or won the highest dismissal rates. The highest auditor payments occurred when no modified reports were issued by auditors.

In conjunction with the increasing litigation against auditors and audit firms after accounting scandals exploded at the beginning of 2000s, the importance of implementing risk management practices in audit firms became much more vital (Davutyan & Kavut, 1997). Ethridge et al. (2007a, 2007b) explored whether audit firms have strengthened their client acceptance/retention procedures in the post-Enron era. They investigated whether the attitudes and procedures for evaluating engagement risk have changed substantially in the post-Enron era. The results of the survey revealed that an overwhelming majority of audit partners indicated their views regarding engagement risk have changed; however, the level of change was not overly significant.

Palmrose (1997) pointed out the outcomes of an ineffective risk management strategies and Ethridge et al. (2007a, 2007b) demonstrated that audit partners’ views regarding engagement risk didn’t change significantly in the post-Enron era. Therefore, it is crucial to highlight the importance of engagement risk management strategy for audit firms. An effective risk management strategy helps auditors and audit firms to mitigate risk of litigation, financial loss and impaired reputation. Additionally, risk management process decreases the likelihood of accepting or retaining client which creates an unacceptable engagement risk for auditor or audit firm. Furthermore, risk management assists auditor to plan the audit engagement properly to obtain sufficient evidence for assertions that requires special consideration.

Engagement risk should be addressed throughout the audit, from the initial decision to accept a new client or continue serving an existing client to planning the engagement through to the ultimate issuance of the audit report (Colbert et al., 1996). The purpose of this paper is to explain the relationships among three components of engagement risk and express the importance of engagement risk management throughout the audit.

2. CLIENT ACCEPTANCE OR CONTINUANCE

Auditing standards entails auditors to execute some pre-engagement activities prior to client acceptance decision. Most of the public accounting firms establish policies and procedures that are used as a guideline throughout the client acceptance process. An effective implementation of such policies and procedures enable audit firms to obtain sufficient information regarding prospective client, analyze risks indigenous to prospective client and evaluation of probability of risks that an audit firm may encounter as a consequence of its relationship with a prospective client. Furthermore, application of client acceptance policies and procedures lessen the risk of executing to a client which burdens an unacceptable level of engagement risk to an audit firm.

Obtaining an understanding of client and its environment is one of the most important aspects of client acceptance process. Characteristics of an industry, company's position in the industry, organizational structure of an entity, operational practices in an organization, features of manufactured product, among others, are some of the areas that an auditor should understand in the course of obtaining information about a prospective client. Companies accused of fraud, companies under Capital Market Board of Turkey or other regulatory investigation, companies that have changed auditors frequently, and companies showing recent losses (Louwers et al., 2011) should be considered as red flags of engagement risk. Additionally, auditing standards require auditors to confer with predecessor auditor with the aim of gaining information with respect to integrity of management, reasons for auditor change and the existence of any disagreement between client and predecessor auditor.

During the course of implementing client acceptance policies and procedures, an auditor should assess the possibility of risks that an auditor or audit firm may bear associated with an audit of financial statements. Engagement risk represents the overall risk associated with an audit engagement (Colbert et al., 1996) and it consists of three interrelated components: client's business risk, auditor's business risk and audit risk.

2.1. Client's Business Risk

Business risk is a risk resulting from significant conditions, events, circumstances, actions or inactions that could adversely affect an entity's abilities to achieve its objectives and execute its strategies, or from the setting of inappropriate objectives and strategies (ISA 315, Paragraph 4). Risk is a natural part of business activity. However, risks that are not controlled and addressed can jeopardize the operation of companies (Rittenberg et al., 2010).

Numerous external or internal factors may result in a higher assessment of client's business risk. The overall economic climate can have a tremendous effect on the organization's ability to operate effectively and profitably. Additionally, rapid technological change in an industry also might be an indicator of business risk for many companies. For example, Apple's new communication products affected the business of Nokia. Moreover, competitor actions, such as discounting prices or adding new product lines, also considerably affect client's business risk. In addition to external factors, there are also several internal factors that affect the client's business risk. Consider items on a company's balance sheet that are subjective and based on judgment. Because of the estimates regarding such accounts, fairness of financial reporting is affected by the competence and integrity of management and potential incentives to misstate the financial statements. Finally, the effectiveness of entity's internal controls can affect client's business risk by either preventing or detecting errors or intentional misstatements (Rittenberg et al., 2010).

Some examples of conditions and events that may indicate the existence of business risks are: significant changes in the entity such as large acquisitions, reorganizations; significant changes in the industry in which the entity operates, significant new products or services, significant new lines of business, new locations, significant changes in the IT environment, operations in areas with unstable economies and high degree of complex regulation. (Messier et al., 2008):

2.2. Auditor's Business Risk

Auditor's business risk is the risk that the auditor is exposed to loss or injury to professional practice from litigation, adverse publicity or other events arising in connection with financial statements audited and reported on (Messier et al., 2008). In other words, auditor's business risk is the risk that the auditor or audit firm will suffer harm because of a client relationship (Arens & Loebbecke, 1997) Even though the auditor performs the audit in accordance with generally accepted auditing standards (GAAS) and reports appropriately on the financial statements, an auditor still be sued by the client or a third party. Although the auditor may ultimately win the lawsuit, his or her professional reputation may be damaged (Messier et al., 2008). Elements of auditor's business risk are litigation, sanctions and impaired professional reputation. Each of these elements may cause injury or loss to a professional auditing practice in a variety of ways. Litigation can involve a number of injurious costs such as attorneys' fees, court awards of damages or expensive settlements. Sanctions can curtail the practice or increase costs (e.g., a requirement for additional peer reviews). An impaired reputation can result in lost clients and injured morale of firm personnel (Brumfield et al., 1983).

Auditor's business risk is controllable, to some degree, by the auditor. The auditor can influence auditor's business risk, and thus engagement risk, through the selection of clients. Other factors bearing on auditor's business risks, such as the client being involved in lawsuits, cannot be managed by the auditor (Colbert et al., 1996). Regardless of the quality of work performed, involvement in future litigation may be inevitable when an auditor accepts or retains a client (Hall & Renner, 1991).

There are several factors that have impact on auditor's business risk. For instance, auditors should consider the likelihood of a client's filing for bankruptcy after the audit. If a client declares bankruptcy after an audit is completed, the likelihood of a lawsuit against the audit firm is reasonably high even if the quality of the audit was good (Arens & Loebbecke, 1997). Palmrose (1988) notes that litigation against an audit firm can impair its reputation by providing a negative signal about the quality of the firm's audit services. Previous accounting research has addressed the issue of audit litigation by identifying problem areas that should be considered when accepting a client and performing audits (Schultz & Gustason, 1978; St. Pierre & Anderson, 1984; Kellog, 1984; Palmrose, 1988). Stice (1991) developed and tested a model to predict litigation against auditors and concluded that client characteristics are empirically related to litigation. Taken together, previous research implies that auditors should consider client characteristics when assessing litigation risk, as well as auditor's business risk. The summary of factors which influence the level of auditor's business risk is shown in Table 1. Additionally, in their study Pratt & Stice (1994) identified client characteristics that influence auditor's litigation risk judgment. Their findings showed that financial condition of a client is the most important factor of assessing the litigation risk.

Table 1. Auditor's Business Risk Factors

	Level of Auditor's Business Risk	
Factor	**Lower**	**Higher**
The economy in which the company operates	Healthy	Depresses; stagnant
The industry in which the company operates	Established; stable; relatively uninfluenced by external conditions	Relatively new; unstable; greatly influenced by external conditions.
The company's management philosophy with regard to both operational and accounting matters	Conservative	Aggressive
The company's control environment, including the possibility of management override	Strong administrative controls; control-conscious management	Weak administrative controls; management isn't control conscious;
The company's previous audit history	Unqualified opinions for previous audits; no prior disagreements with auditors; few adjustments.	Qualified or adverse opinions for previous audits; prior disagreements with auditors; numerous adjustments
Rate of turnover for top management and the board of directors	Low	High
The company's financial position and operating performance	Strong	Weak
The company's existing or potential litigation	Insignificant	Significant
The business reputation of the company's management and principal owners	Good	Poor
The relevant experience of the company's management and principal owners	High	Low
Ownership of the company	Nonpublic	Public
Client understanding of the auditor's responsibilities	Clear	Unclear
Conflicts of interest, regulatory problems or auditor independence problems	Insignificant	Significant

Source: Brumfield, C.A.; Elliott, R.K.; Jacobson, P.D. (1983) Business Risk and the Audit Process, Journal of Accountancy, No.155, pp.60-68

2.3. Audit Risk

Because of the nature of audit evidence and the characteristics of management fraud, an auditor can only provide reasonable assurance, as opposed to absolute assurance, that the financial statement are free of material misstatements. This risk is referred to as audit risk. Audit risk is the risk that the auditor expresses an inappropriate audit opinion when the financial statements are materially misstated (Messier et al., 2008).

When the auditor decides on a lower level acceptable audit risk, it means that the auditor wants to be more certain that the financial statements are not materially misstated (Arens & Loebbecke, 1997). Conversely, a high level of audit risk means that the audit firm is willing to take a higher risk of issuing an unqualified opinion on materially misstated financial statements (Rittenberg et al., 2010).

The auditor must recognize that once a client is accepted, audit risk cannot be eliminated. However, audit risk is determined and managed by the auditor and it can be reduced by doing more work targeted to specific areas where financial reporting risk is high. The auditor should perform the audit to reduce audit risk to a sufficiently low level. By establishing a relatively low level of audit risk, the auditor minimizes the possibility that the financial statements may contain a material misstatement (Messier et al., 2008).

2.4. Risk Management at Client Acceptance or Continuance

Audit firms try to reduce their own business risks by carefully managing their audit engagements. To do so, audit firms undertake several activities before beginning any audit engagement. In general, these activities can be called risk management activities (Louwers et al., 2011). During the application of client acceptance processes, auditors should assess each components of engagement risk and a risk arises from their interaction which referred as engagement risk. Therefore, client acceptance process activities focus on understanding and managing risks taken by the audit firm (Louwers et al., 2011).

Once a client is accepted, audit firm is inevitably exposed to an engagement risk. However a low level of engagement risk is desirable and acceptable from the perspective of auditor or audit firm. In the assessment of engagement risk, auditor assesses the client’s and the auditor's business risks, and then he or she sets planned level of audit risk. While audit risk is managed by adjusting the nature, timing, and extent of audit procedures performed; auditor's business risk is controlled primarily through the client acceptance/continuance decision process. Because audit risk and auditor's business risk are controllable by the auditor (at least to some extent), while entity's business risk is not, the auditor's focus on managing engagement risk centers on audit risk and auditor's business risk (Colbert et al.,1996).

The auditor assesses auditor’s business risk and then sets audit risk (Rittenberg et al., 2010). Audit risk is established at a level so that the planned level of engagement risk will be achieved. The level of audit risk is adjusted in response to the risk factors noted during the acceptance/continuance decision process (Colbert et al., 1996).

There is a inverse relation between auditor’s business risk and audit risk (Güredin, 2007). If auditor assesses auditor’s business risk as high, auditor do not accept the client in order to avoid high level of engagement risk. If auditor’s assessment highlights a moderate auditor's business risk, auditor sets audit risk very low to decrease an engagement risk to an acceptable low level. Finally, if auditor determines that auditor's business risk is low, auditor can set audit risk higher than companies with higher auditor's business risk. However, even if the auditor assesses the auditor's business risk as low, the auditor is not permitted to perform less extensive procedures than otherwise would be appropriate under GAAS (Rittenberg et al., 2010). In other words, an audit performed in accordance with GAAS would always have to provide at least the minimum level of assurance implicit in GAAS. (Brumfield et al., 1983). Relationship between auditor's business risk and audit risk is summarized in Table 2.

Table 2. Relationship Between Auditor's Business Risk and Audit Risk

	Auditor's Business Risk		
	High	**Moderate**	**Low**
Audit Risk	Don't accept client	Set very low	Set within professional standards, but can be higher than companies with higher auditor's business risk
Numerical Example of Audit Risk	None - (0,00)	0,01	0,05

Source: Rittenberg, L.E.; Johnstone, K.; Grambling, A., Auditing: A Business Risk Approach, 7 Ed. South Western Cengage Learning, OH, USA

Assessment of engagement risk assists auditor in making a decision with respect to acceptance of a client. If auditor assesses engagement risk as an acceptable low level, auditor determines to accept a client. Conversely, if auditor's assessment points out an unacceptable level of engagement risk, audit firm might be reluctant to bear such a high risk and determine not to accept a prospective client (Colbert et al., 1996; Güredin, 2007)

Johnstone (2000) developed and tested a client acceptance model. Findings of the study demonstrated that audit partners use their evaluations of client related risks and their own firm's risk of loss to screen out undesirable clients.

3. PLANNING

Planning an audit involves establishing the overall audit strategy for the engagement and developing an audit plan. Adequate planning helps the auditor to devote appropriate attention to important areas of the audit, identify and resolve potential problems on a timely basis and properly organize and manage the audit engagement so that it is performed in an effective and efficient manner. Additionally, adequate planning assists in the selection of engagement team members with appropriate levels of capabilities and competence to respond to anticipated risks, and the proper assignment of work to them (ISA 300, Paragraph 2).

3.1. Audit Risk Model

Audit risk model provides a framework for auditors to follow in planning audit procedures and evaluating audit results (Messier, Glover and Prawitt, 2008). The audit risk model is used primarily for planning purposes in deciding how much evidence to accumulate. A thorough understanding of the model is essential to effective audit planning (Arens & Loebbecke, 1997). This model expresses the general relationship of audit risk and the risks associated with the auditor's assessments of risk of material misstatement (inherent risk and control risk) and the risks that substantive tests will fail to detect a material misstatement (detection risk) (Messier et al., 2008).

$$Audit\ Risk\ (AR) = Inherent\ Risk\ (IR) \times Control\ Risk\ (CR) \times Detection\ Risk\ (DR)$$

3.1.1. Components of Audit Risk Model

Audit risk is the risk that the auditor may give an unqualified opinion on materially misstated financial statements. Audit risk is influenced by inherent risk, control risk and detection risk.

Inherent Risk: Inherent risk (IR) is the likelihood that a material misstatement exists in the financial statements without the consideration of internal control (Messier et al., 2008).

Control Risk: Control risk (CR) is the risk that a material misstatement that could occur in a relevant assertion will not be prevented or detected by the entity's internal control. That risk is a function of the effectiveness of internal control. Thus, some control risk always exists because of the inherent limitations of internal control (Messier et al., 2008).

Auditing standards refer to the combination of inherent risk and control risk as the risk of material misstatement (RMM). Inherent risk and control risk exist independently of the audit. In other words, the levels of inherent risk and control risk are functions of the entity and its environment. The auditor has little or no control over these risks (Messier et al., 2008).

Detection Risk: Detection risk (DR) is the risk that the auditor will not detect a misstatement that exists in a relevant assertion. Detection risk is determined by the effectiveness of the audit procedure and how well the audit procedure is applied by the auditor. Thus, detection risk cannot be reduced to zero because the auditor seldom examines 100 per cent of the account balance or class of transactions. (Messier et al., 2008). Detection risk is controlled by the auditor. The auditor's determination of detection risk influences the nature, amount, and timing of audit procedures to ensure that the audit achieves no more than the desired audit risk (Rittenberg et al., 2010).

Three steps are involved in the auditor's use of the audit risk model (Messier, et al., 2008):

1. Setting a planned level of audit risk
2. Assessing the risk of material misstatement.
3. Solving the audit risk equation for the appropriate level of detection risk.

3.1.2. Relationship Among Components of Audit Risk Model

Inherent risk and control risk are functions of a client and they cannot be controlled by auditor. On the other hand, audit risk and detection risk are risks that the auditor faces, and that the auditor can manage (Rittenberg et al., 2010). Detection risk has an inverse relationship to inherent risk and control risk. A high level of inherent or control risk means that the company is more likely to have misstatements. If the client's internal controls are inadequate, or management is motivated to misstate the account balance, or if the natures of the transactions are inherently difficult, then the risk of material misstatement is quite high. Consequently, the auditor will do more work in testing the account balances. Audit risk is held constant, but the high levels of inherent and control risk demand that the auditor's detection risk be small in order to control audit risk at the predetermined level (Rittenberg et al., 2010).

3.2. Risk Management at Planning

After deciding to accept a client, the auditor plans the engagement by continuing to consider engagement risk and its three components. The auditor should be alert throughout the engagement for the existence of factors that may indicate that one of the three component risks, and thus engagement risk is at a higher level than originally believed. The auditor may be able to adjust the nature, timing, and extent of audit procedures such that audit risk is lowered and the achieved engagement risk is acceptable (Colbert et al., 1996).

Once a client has been accepted, in addition to audit risk, an auditor also subjects to business risk in his or her professional practice. Therefore, the auditor also exposed to risks that are not embraced in the audit risk model. The audit risk model primarily addresses the risks associated with issuing unqualified audit opinions on financial statements that contain material misstatements. Auditor's business risk, on the other hand, is present even when auditors comply with GAAS and render appropriate audit opinions. For example, a client with a weak internal control system experiencing financial difficulty introduces two kinds of risks; the risk of a material misstatement and the risk of financial failure. The audit risk model reflects only the first; business risk encompasses both (Houston et al., 1999).

In previous research Walo (1995) concluded that public versus private ownership resulted in a significant effect on audit scope. This finding supports to the fact that auditors do impound auditor's business risk assessments into their scope judgments. The results imply that the risk considered in planning decisions may be broader than audit risk and involve overall engagement risk (Walo, 1995).

As noted before, auditor's assessment of auditor's business risk impacts the level of planned audit risk and there is an inverse relation between auditor's business risk and audit risk (Güredin, 2007). If an auditor assesses auditor's business risk relatively high, to maintain engagement risk at a constant low level, the auditor should decrease audit risk through increasing audit scope (Walo, 1995). A company with high auditor's business risk, and thus low audit risk, requires a more experienced audit staff and direct tests of account balances performed at year end. In contrast, a company with low auditor's business risk, and thus higher acceptable levels of audit risk, requires less direct tests of account balances at year end and could rely more on substantive analytical procedures (Rittenberg et al., 2010).

Houston et al (1999) conducted a research to identify conditions under which the audit risk model does, and does not describe audit planning (investment and pricing) decisions. They concluded that when the likelihood of an error is high, the audit risk model dominates business risk in the explanation of the audit investment, conversely when the likelihood of an irregularity is high, auditor's business risk dominates audit risk model in the explanation of the audit investment. They claimed that the ability of the audit risk model to describe auditor behavior depend upon the nature of the risks present in the audit. In the presence of errors; the audit risk model adequately describes audit planning decisions, however in the presence of irregularities it does not.

4. RELATIONSHIPS AMONG COMPONENTS OF ENGAGEMENT RISK

Client's business risk is a broader concept than the risk of material misstatement. However, most business risks have the potential to affect the financial statements either immediately or in the long run (Messier et al., 2008). Auditor should assess client's business risk. Although client's business risk is not controllable by auditor, the auditor considers its assessment in controlling the engagement risk (Colbert et al., 1996).

Client's business risk affects the auditor's business risk. With an increase in client's business risk, auditor's business risk increases (Rittenberg et al., 2010). Assume the auditor determines that the client's industry is undergoing significant technological changes which affect both the client and the client's customers. This change may affect the obsolescence of the client's inventory, collectability of accounts receivable, and perhaps even the ability of the client's business to continue (Arens & Loebbecke, 1997). If client declares bankruptcy or suffers extremely large losses, it is more likely that an audit firm will be sued (Rittenberg et al., 2010). According to Johnstone (2000), audit partners' evaluations of client related risks affect their evaluations of their firm's risk of loss on the engagement.

Client's business risk also affects the audit risk. A high level of risk of material misstatement increases the likelihood of error of fraud in transactions or financial statements. In order to provide reasonable assurance regarding the fairness of financial statements, auditors set audit risk lower for companies with a high level of client's business risk.

Auditor's business risk influences the audit risk. The auditor sets the desired audit risk based on the assessment of auditor's business risk (Rittenberg et al., 2010). For companies with a high level of auditor's business risk, the auditor should decrease audit risk through increasing audit scope to maintain engagement risk at a constant level (Walo, 1995).

Audit risk can influence auditor's business risk because an inappropriate opinion can be a significant factor in the events that lead to loss or injury to an auditor's professional practice (Brumfield et al., 1983). Thus, decreasing the level of audit risk enables to lessen the auditor's business risk (Güredin, 2007). As the level of audit risk decreases, auditor's business risk also diminishes (Arens & Loebbecke, 1997; Bozkurt, 1999). Relationships among components of engagement risk are depicted in Figure 1.

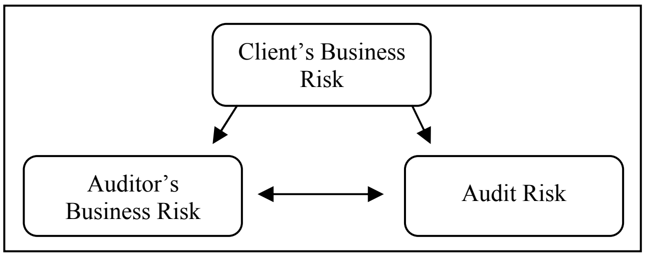

Figure 1. Relationships Among Components of Engagement Risk

At the completion of the audit, if auditor assesses the actual or achieved level of audit risk as being less than or equal to the planned level of audit risk, an unmodified opinion can be issued. If the assessment of the achieved level of audit risk is greater than the planned level, the auditor should either conduct additional audit work or modify the audit opinion (Messier et al., 2008). More importantly, at the completion of the engagement, the auditor again considers engagement risk and its component risks. The achieved levels of entity's business risk, audit risk, and auditor's business risk are combined to yield achieved engagement risk. The auditor ascertains if the achieved engagement risk is at an acceptable level (Colbert et al., 1996).

5. CONCLUSION

Previous accounting scandals and the collapse of Arthur Andersen denote the fact that implementing risk management strategies during the course of audit engagement is crucial for auditors or audit firms. An effective risk management processes can be achieved by assessing and managing each components of engagement risk throughout the audit engagement.

At the stage of the client acceptance and continuance, an auditor should assess the client's business risk and auditor's business with the aim of identifying potential risks that an audit firm may encounter. Based on the assessment of those risks, an auditor should set audit risk at a low level which in turn produces an acceptable low engagement risk for audit firm. If an auditor assesses engagement risk at an unacceptable high level, audit firms does not accept the client because high engagement risk elevates the risk of litigation, sanction or financial loss.

At the planning stage auditors utilize audit risk model to determine the nature, timing, and extent of the audit procedures. However, once a client is accepted, in addition to audit risk an auditor is also subject to auditor's business risk which is not incorporated in audit risk model. During the process of applying audit risk model, auditor's consideration of auditor's business risk facilitates setting an acceptable low level of audit risk, in turn achieving acceptable low level of engagement risk. In order to conserve low level of engagement risk, it is appropriate for auditors to assign lower audit risk and perform more extensive audit procedures for clients with relatively higher level of auditor's business risk.

At the completion of audit engagement, in order to ascertain the achieved level of engagement risk it is essential to assess each components of engagement risk. Risk management at the completion stage, ensures to express an appropriate audit opinion and prevents to burden an unacceptable engagement risk to auditor or audit firm.

In conclusion, establishing, implementing and developing risk management strategy in audit firm is vital for survival of a company. Auditors should have knowledge about each components of engagement risk, understand the relation among them and have sufficient competence to manage each of the risks. Effective engagement risk management can be accomplished by assessing the engagement risk from the beginning to the termination of the audit engagement with the aim of retaining engagement risk at an acceptable low level. Otherwise, exposing to a high level of engagement risk may cause litigation, sanction, financial loss, impairment of reputation and even bankruptcy of audit firms.

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IMPACT OF FINANCIAL CRISIS ON BLACK SEA TOURISM

ADINA TRANDAFIR *

ABSTRACT: *This paper aims to highlight, using a linear regression model, how the antisocial measures (reducing wages, taxation of pensions, increased VAT rate), adopted by the government amid the global financial crisis, affect various aspects of life in Romania. In this respect, using a simple linear correlation, we analyzed the impact of the average wage in Romania on the number of days of accommodation and on the number of tourists staying in southern Black Sea coast hotel during 2004-2011. Analysis revealed a strong correlation (as detected by the correlation matrix) between the variables mentioned above and also a strong impact of the independent variable (average salary) on the two dependent variables (number of days of stay and the number of Romanian tourists staying in unit from 2004-2011).*

KEY WORDS: *Romanian tourism; global downturn; fiscal measures.*

JEL CLASSIFICATION: *I3; I38.*

1. INTRODUCTION

Throughout the process of understanding tourism development, the main attention has been usually focused on the more advanced and stable societies of Central Europe - all of which are very closely related to major Western European states, such as: Hungary, Czech Republic, Poland and Slovenia. Outside of the former Soviet Union is post-socialist Europe's least developed South Eastern Europe (SEE) with countries like Romania, Bulgaria, Albania and Croatia that have a considerable tourism potential, but are still being relatively neglected in the literature (Hall, 1998). With a lack of media recognition and inconsistency in macroeconomics policy, the region's image continues to be characterized by instability that usually has an impact on politics, economy, culture and tourism.

This study aims to investigate the impacts of financial and fiscal measures effects, taken by the Romanian authorities in the context of global downturn, on the

* *Lecturer, Ph.D., "Spiru Haret" University, Romania, trandafir.adina@yahoo.co.uk*

Romanian Black Sea Coastline and I have chosen a very specific area, i.e. the southern part and namely a specific seaside resort Neptun – Olimp and also one of the hotels of it: Hotel Cocor.

The article has three parts: first part is a brief overview of Romanian as a tourism destination for its residents and more specifically it's about the development of tourism destination, the second part examines the impact of fiscal measures taken by authorities on the number of Romanian tourists and on the number of accommodation days, using a linear correlation, and the last part presents the conclusions of issues considered.

2. ROMANIA AS A TOURISM DESTINATION FOR ITS RESIDENTS

The importance of considering the destination as a unit had consequence in making a wide range of research based on certain issues in relation to the development of a destination. Therefore, existing research has paid attention to a large number of issues such as, for example, strategic destination planning (Formica & Kothari, 2008), dynamic destination management (Sainaghi, 2006), destination competitiveness, collaboration in tourism policymaking (Bramwell & Sharman, 1999), collaboration and community-based tourism planning (Jamal & Getz, 1995), collaborative destination marketing, destination marketing organizations (Gretzel et al., 2006) and destination governance.

Tourism destination development can be defined as the number of activities that take part in the development of an overall strategy for the destination generating value for the individual actors.

An overview of this new and improved strategy requires changes on the macro-level, improvements to the transport infrastructure and wider acceptance of reorganization and privatization. Further investment in entertainment facilities and other things that can increase the tourist season is of great benefit to Romania. It is also necessary to build smaller hotel facilities that can fulfill the requirements of individual tourists. Tourism can also highlight positive economic benefits over the entire community such as development in rural areas and diversification. Another major objective or task for any tourism destination is to continuously integrate resources and competencies distributed across a number of different actors, and change these configurations intro products and services that are demanded by customers (Rodriguez-Diaz & Espino-Rodriguez, 2008). This will involve activities spanning individual actors both in producing products and services and communicating these offerings to the market (Sheehan et al., 2007). Destinations may thus benefit from capabilities both in relation to how they communicate about their products and services to the market and in relation to the production of products and services. We argue that two distinct capabilities are especially important in this regard. These are: (1) destination image and branding (Hosany et al., 2007) and (2) utilization of distributed resources and competencies (Melian-Gonzalez & Garcia-Falcon, 2003).

Previous research has shown that destinations can benefit from building a consistent cognitive image based on shared attributes. The idea of a destination is not of much value if all companies and other stakeholders at the destination are only concerned with their own organizational image in their communications with customers. An important task for all destinations is thus to develop a shared and consistent image and effectively communicate this image to the market (Buhalis, 2000). Forming and building an image of a destination that is shared by the actors at the destination is a prerequisite for developing a destination brand and building brand equity. In other words, a destination image should reflect the geographic region as well as the actors having activities, developing projects in the area.

From the previous argument, it can be acknowledged that unskilled and young people usually affected by the long-term unemployment can also benefit from tourism, because they eventually find a job in the area they seek, contributing to the tourism growth as well. However, tourism in the coastline area is in a close relation with the host community and individual projects that do not fit with cultural or symbolic values will have negative effects.

It is important to note that tourism may also impose various pressures on the host community, particularly during growth phases (Brown & Giles, 1994). In this context, the Romanian Government could focus more on the coastline tourism industry and implement it as a strategic sector in the Romanian economy.

3. THE IMPACT OF THE EFFECTS OF FINANCIAL MEASURES ON THE BLACK SEA COAST TOURISM

The impact of the established average income at the national level on the number of Romanian tourists as well as on their accommodation days can be analyzed with the help of simple linear correlation between the macroeconomic variable medium salary and the Romanian tourists accommodated in the unit as well as the number of the accommodation days /year of these tourists. Granger, the impact of the above mentioned is presented as follows, by using Eviews software package and the variables:

- Medium salary, which is the gross medium salary earned in the period analysed at the national level, as an independent variable;
- Accommodation days, which is the accommodation days /year of the Romanian tourists made in the analyzed unit , as a dependent variable;
- Number of Romanian tourists which is the number of Romanian tourists accommodated in the unit in the analyzed period, as a dependent variable.

The descriptive statistics of the variables is shown in table 1.

In the carried-out analysis of the above case study, the independent variable is represented by the medium salary while the dependent variables are given by the number of the accommodation days and the number of the Romanian tourists accommodated in the unit during the analysed period. As shown in the correlation matrix (Table 2), there is a fairly strong positive relationship between all the variables taken into account.

For highlighting the association of the utilized variables in the econometric calculation, I determined the matrix of the correlations between the variables.

Table 1. **Descriptive statistics of the variables**

The descriptive statistics of the variables			
Sample: 2004 2011			
	Medium Salary	Accommodation Days	Romanian Tourists Number
Mean	1482.25	21763.25	6013.625
Median	1578.5	23298	6097
Maximum	2022	31806	9262
Minimum	818	9722	2298
Std. Dev.	463.3717	7939.048	2686.635
Skewness	-0.25657	-0.249592	-0.160524
Kurtosis	1.475794	1.683228	1.611299
Jarque-Bera	0.862172	0.661025	0.677187
Probability	0.649803	0.718555	0.712772
Sum	11858	174106	48109
Sum Sq. Dev.	1502994	4.41E+08	50526050
Observations	8	8	8

Source: Own calculations with the help of Eviews programme

Table 2. The matrix of correlations between the analysed variables

MATRIX OF CORRELATIONS			
	MEDIUM _ SALARY	ACCOMODATION _DAYS	ROMANIAN_ TOURIST- NR
MEDIUM_ SALARY	1	0.958484	0.949349
ACCOMMODATION_ DAYS	0.958484	1	0.976359
ROMANIAN_ TOURISTS NR	0.949349	0.976359	1

Source: Own calculations with the help of Eviews programme

For estimating the correlation between the medium salary and the other two indicators mentioned above, I will use the regression technique, applying the method of least squares for determining the parameters of the following regression equation for each variable.

$$Y = \alpha + \beta X$$

Y – is the dependent variable
X – is the independent variable
α, β – are the parameters of the regression equation.

The correlation between the medium salary and the accommodation days of the Romanian tourists.

By using the method of least squares, the regression equation between the two variables over 2004-2011 period is shown in table 3.

On the basis of the table above, the regression equation of the variables is:

ACCOMMODATION_DAYS=-2578.141+16.422*MEDIUM_SALARY

According to this econometric relationship, the correlation of the accommodation days of the Romanian tourists and the medium salary is proportional, that is a rise of 1 leu of the medium salary implies a modification in the same way of 16.422 accommodation days in that unit.

Table 3. The correlation between the medium salary and the accommodation days of the Romanian tourists

Dependent Variable: ACCOMMODATION_DAYS
Method: Least Squares
Sample: 2004 2011
Included observations: 8
ACCOMMODATION_DAYS=C(1)+C(2)*MEDIUM SALARY

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-2578.141	3080.121	-0.837026	0.4346
C(2)	16.42192	1.994477	8.233696	0.0002

R-squared	0.918692	Mean dependent var	21763.25
Adjusted R-squared	0.905141	S.D. dependent var	7939.048
S.E. of regression	2445.162	Akaike info criterion	18.65393
Sum squared resid	35872911	Schwarz criterion	18.67379
Log likelihood	-72.61571	Hannan-Quinn criter.	18.51998
F-statistic	67.79374	Durbin-Watson stat	1.702639
Prob(F-statistic)	0.000173		

Source: Own calculations made with the help of Eviews programme

The coefficient of determination for regression (R-squared) signifies the fact that 91.87% of the variation in the accommodation days is explainable by the modification of the medium salary.

The correlation between the medium salary and the number of the Romanian tourists accommodated in the unit

Estimating the parameters of the regression equation between the medium salary and the Romanian tourist number over 2004-2011 period, the following results are obtained (table 4).

According to the data in the table above, the regression equation between the analyzed variables is under this form:

ROMANIAN_TOURISTS_NR=-2145.182+5.504*MEDIUM SALARY

According to this econometric equation, the correlation between the Romanian tourist number and the medium salary is proportional, in the sense that a rise of 1 leu of the medium salary implies a modification in the same way of about 5.5 in the number of Romanian tourists.

The determination coefficient for the regression (R-squared) signifies the fact that 90.13% of the variation in the Romanian tourist number is the result of the modification of the medium salary in Romania.

I will further my analysis to the Granger causality for each pair formed in the five variables.

Table 4. Medium salary and Romanian tourist number Correlation

Dependent Variable: ROMANIAN_TOURIST_ NR
Method: Least Squares
Sample: 2004 2011
Included observations: 8
NR_TURISTI_ROMANI=C(1)+C(2)*SALARIU_MEDIU

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-2145.182	1148.627	-1.867606	0.1110
C(2)	5.504340	0.743773	7.400564	0.0003

R-squared	0.901264	Mean dependent var	6013.625
Adjusted R-squared	0.884808	S.D. dependent var	2686.635
S.E. of regression	911.8407	Akaike info criterion	16.68113
Sum squared resid	4988721.	Schwarz criterion	16.70099
Log likelihood	-64.72450	Hannan-Quinn criter.	16.54718
F-statistic	54.76834	Durbin-Watson stat	2.342109
Prob(F-statistic)	0.000313		

Source: Own calculations made with the help of Eviews programme

The type tests **Causality-Grangerwhy** (CG) indicate what variables are useful for forecasting other variables. More precisely, we may say that X causes -Granger Y if the forecasting of Y is made considering information about X history which is better than one that ignores the X history. We may check if X (the independent variable, which is the fiscal pressure) causes-Granger Y (the dependent variable given by the unemployment, inflation, economic growth, and public dept) testing if the parameters are significantly different from zero.

I need to underline that despite the name, CG cannot be interpreted as the real causality (structural). CG is consistent with (without being either necessary or sufficient for) the authentic causality, in that the effect has to follow the cause in time. More importantly, CG is extremely useful when answering question such as: ”What variables can signal anticipatorily a rise in the X variable?”

According to the test p-value null hypothesis claiming that X does not Granger cause Granger Y is rejected for values lower than 0,05 of the associated probalities. Thus, the null hypothesis alleged default of the associated probabilities is rejected.

Table 5. Testing of Granger causality between the variable

Pairwise Granger Causality Tests			
Sample: 2004 2011 Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Probability
ROMANIAN_TOURIST_NR does not Granger Cause MEDIUM SALARY	6	4.69687	0.31018
MEDIUM-SALARY does not Granger Cause ROMANIAN_TOURIST_NR		6.34825	0.27021
ACCOMMODATION_DAYS does not Granger Cause MEDIUM_SALARY	6	6.02817	0.27675
MEDIUM_SALARY does not Granger Cause ACCOMODATION_DAYS		20.9802	0.15257
ACCOMMODATION_DAYS does not Granger Cause ROMANIAN_TOURIST_NR	6	1.55348	0.49345
ROMANIAN_TOURIST_NR does not Granger Cause ACCOMMODATION _DAYS		0.11859	0.89905

Source: Own calculations made with the help of Eviews programme

3. CONCLUSIONS

By using the regression technique and Granger causality in the analysis on the impact of the medium salary in Romania, in the period between 2004-2011, the following were observed:

- the correlation between the number of the accommodation days of the Romanian tourists and the medium salary is directly proportional in the sense that a rise of 1 leu of the salary triggers a modification in the same way of 16.42 in the number of the accommodation days
- the correlation between the number of Romanian tourists and the medium salary is a direct one in the sense that a rise of 1 leu triggers a rise of 5.50 in the number of Romanian tourists.

The modification of the two dependent variables analysed is 90% justified by the modification of the independent variable that is the medium salary. This result indicates the direct relationship, which is strong enough, between the analysed variables.

So, in conclusion, as a result of my analysis I could say that the financial measures taken by the Romanian authorities in the context of global downturn, reflected by the medium salary, affected to a great extent the Black Sea Coast tourism.

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BOOK REVIEW

ON

"Persuasion Elemenents Used in Logistical Negotiation: Persuasive Logistical Negotiation", 1 edition 2012

FORMAL ATTRIBUTES: *Authors: Ioan Constantin Dima and Ştefan Vlăduțescu, Publisher: LAP Lambert Academic Publishing, Language: English*

The book "*Persuasion Elemenents Used in Logistical Negotiation: Persuasive Logistical Negotiation*" (Saarbrucken, LAP Lambert, 2012), by Ioan Constantin Dima and Ştefan Vlăduțescu, is an scientific events. The study is interdisciplinary and lays at the intersection of persuasive communication with the negotiation of logistic type.

The research that has been made so far considers negotiation as a rational act, either as a principled act (Roger Fisher, William Ury and Bruce Patton speak of "the method of principled negotiation") or as a conditioned act (Gavin Kennedy sees negotiation as based on "if-then") or as a rational activity (M. H. Bazerman and M. A. Neale militate for" negotiating rationally").

The interesting and well proofed thesis of the book is that logistical negotiation is prevalent persuasive. "Negotiation" is not a strictly rational approach and implemented inferentially. It always involves an emotional component and a major dose of persuasion. Therefore, any "negotiation" and, particularly, logistic negotiation reveals a persuasion feature. To argue-prove the thesis arguments of authority are used, acknowledged examples and an experiment on 20 subjects in the logistics field, on which the "low ball" ("low balling") technique-stratagem is tested.

In relation to the concept of persuasion (substantiated by Ştefan Vlăduțescu, in "Negative Journalistic Communication" published in 2006 by the Romanian Academy) as a mechanism with four operations (seduction, fiction, myth, and lies), the book conclude that the logistic operator seduces, captures, delights, fascinates, designs fiction, exploits emotional attachment, lies, deceives, cheats, deceives. In other words, it follows that in logistic negotiating persuasive communication prevails.

We conclude that the book present high relevance in the space of logistics, of negotiation, and of logistical negotiation.

Index of Authors

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