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THE PROFITABILITY ANALYSIS OF ROMANIAN COMPANIES USING THE STATEMENT OF INTERMEDIATE BALANCES

Marius, Gust¹

Abstract:

The performance of Romanian companies, appreciated by indicators of return (using the statement of intermediate balances) and analysed through a series of data for 21 years (1994-2014), show us numerous disappointing results. Sure there are some increases in indicators of results, but in many cases indicators from the end of the review period are not more favourable compared with those recorded in 1994. Net earnings and rates of return calculated on the basis of this indicator are very low that you feel that the process of restructuring did not begin and companies did not adapt to the market economy. The crisis amplified deterioration in the performance and in many cases many indicators have not yet reached pre-crisis values.

Keywords: performance, profitability, companies, intermediate balance management

J.E.L. classification: L25

The topic of this report is the performance recorded by Romanian forms in the two and a half decades since command economy was switched to market economy. In order to evaluate the performance of companies, one of the best solutions is that of using raw data, contained within the companies' profit and loss accounts.

Table nr. 1a. Overview of intermediate balance management – as established

High level revenue/balance	Expenses	Intermediary balance
Revenue from sale of goods	Cost of sold goods	Contribution margin
Sold production	Decrease of production stocks	Operation production
Stored production		
Asset production		
Contribution margin	Tertiary consumption (raw mat., materials, Value added	
Operation production	mat. costs, energy, water)	
Value added	Personnel expenses	Gross operating
Operating grants	Tax, payment expenses	surplus/deficit
Gross operating surplus	Value adjustment expenses	Operation result
Value adjustment revenue	Other operating expenses	
Other operating expenses		
Other operating expenses	Financial expenses	Current result
Financial revenue		
Extraordinary revenue	Extraordinary expenses	Extraordinary results
Current result	Profit tax	Net result
Extraordinary result		

Source: Marius Gust, Geanina Tudose – Analiză economică financiară, Practical course, Publisher Independența Economică, Pitești, 2010

Florian Neagu, Florin Dragu, Adrian Costeiu, in their work “După 20 de ani: schimbări structurale în economia României în primele decenii postdecembriste”, Papers Nr. 42/2016 BNR 2016 occasional publications section, www.bnr.ro, publish data about the evolution (1994-2014) of data from profit and loss accounts of active Romanian companies (that submitted their financial status) and that are approximately 600 thousand, compared to the 975 thousand that were registered at the Trade Register at the end of 2014. The study presents information that cannot be found in official statistics, but are nonetheless very important for economic and financial analysis and for companies in general. At the same time, it must be known that the information is based on a sum of the

¹ Prof. PhD, „Constantin Brâncoveanu” University Pitești, mariusgust@yahoo.com

values found in profit and loss accounts, rather than the calculation of an average value. The primary consequence is that negative data is cancelled by the positive, but it allows their correlation with the values of indicators aggregated at national economy level. For ease of comparison, real values, adjusted to inflation and calculated into 2014 prices.

Table nr. 1b. Overview of intermediate balance management – as utilized

High level revenue/balance	Expenses	Intermediary balance
Turnover	Decrease of production stocks	Operation production
Stored production		
Asset production		
Operation production	Tertiary consumption (raw mat., materials, mat. costs, energy, water) Cost of sold goods	Value added
Value added	Personnel expenses Tax, payment expenses	Gross operating surplus/deficit
Gross operating surplus	Value adjustment expenses	Operation result
Value adjustment revenue	Other operating expenses	
Other operating expenses		
Operation result	Financial expenses	Current result
Financial revenue		
Current result	Profit tax	Net result
Extraordinary result		

Although the study also presents the information contained in the profit and loss account's structure, due to the more expansive informational content, the presentation of this information in the form of the overview of intermediate balance management (TSIG) was preferred. The overview of intermediate balance management, same as the profit and loss account(CPP), strives to calculate the company's result (profit or loss). In fact, the two use the same information, so the results ought to be the same. The difference between TSIG and CPP is that CPP organizes the company's results (profit or loss) into categories of activity, whereas TSIG adds the criterion of activity, a type of stages/levels at which the result would appear, as balance without value or with less value in terms of profitability is contained at the upper level of TSIG, while balance with significant valence in terms of profitability is calculated at the lower level. It must also be mentioned that, because of the data, the TSIG model used (table nr. 1a) differs somewhat from traditional TSIG models (table nr. 1b), without impacting on the analysis' results.

At TSIG (table nr. 2) primary balance level, which has little value in terms of profitability, the following mutations can be observed:

1. The turnover's evolution between 1994 and 2014, thus 21 years, indicates a growth of approximately 140% until the start of the crisis, in 2008, followed by a brutal decrease of almost 20% in just one year, with a slow regain afterwards. Interestingly enough, a new decrease of the turnover, admittedly smaller, occurred in 2013. In 2014, the cumulated turnover of all companies in Romania had not reached the level it had been before the crisis.

2. The turnover's correlated analysis with the production of the operation shows us that the biggest part of production is sold, the stock's value decreases from approximately 7% of the production's value little over 1% in the last years, which denotes a strong focus towards market by the companies (worth noting is that the production value used within the company has modest values). Another stock growth before crisis and its subsequent decrease ought to be observed.

3. Another indicator to emphasize Romanian companies' performance is value added. As an absolute value, it doubles in the analysed period, however from a relative point of view, as a share of the turnover, it shows that the economy's performance remains the same as it was in 1994. As a result, the share of value added in the turnover remains

38%. The best performance is registered in 2009, when it reaches 40%, while the weakest at 34% in 2003. Worth noting that even overcoming the crisis is accomplished through a decrease in the value added, down to 35,9% in 2012.

Table nr. 2. Correlations between turnover, operation production and value added and material indicators (billion lei, and reports in percentage)

Year	Turnover (CA)	Operation Production (PE)	CA/PE	Value added	VA/CA	Purchase of raw materials (CMP)	Other material expenses (ACM)	Other external expenses (energy and water)	Tertiary consumption (CT=CMP+ACM+CU)	Expense regarding goods (CM)	CMP/CA	ACM/CA	CU/CA	CT/CA	CM/CA
1994	523	562	93,1	200	38,2	151	11	24	185	177	28,9	2,1	4,6	35,4	33,8
1995	596	635	93,9	221	37,1	167	14	23	204	209	28,0	2,3	3,9	34,2	35,1
1996	673	722	93,2	255	37,9	195	17	24	236	232	29,0	2,5	3,6	35,1	34,5
1997	556	598	93,0	210	37,8	157	12	25	195	194	28,2	2,2	4,5	35,1	34,9
1998	446	473	94,3	163	36,5	115	9	16	139	171	25,8	2,0	3,6	31,2	38,3
1999	480	498	96,4	181	37,7	110	25	13	148	169	22,9	5,2	2,7	30,8	35,2
2000	482	500	96,4	178	36,9	118	14	13	146	176	24,5	2,9	2,7	30,3	36,5
2001	528	547	96,5	185	35,0	134	21	15	170	192	25,4	4,0	2,8	32,2	36,4
2002	578	594	97,3	207	35,8	139	27	16	182	204	24,0	4,7	2,8	31,5	35,3
2003	649	664	97,7	226	34,8	151	34	17	202	237	23,3	5,2	2,6	31,1	36,5
2004	761	778	97,8	281	36,9	167	35	17	220	277	21,9	4,6	2,2	28,9	36,4
2005	793	809	98,0	294	37,1	171	30	18	219	295	21,6	3,8	2,3	27,6	37,2
2006	884	900	98,2	333	37,7	192	30	19	240	327	21,7	3,4	2,1	27,1	37,0
2007	1.047	1.070	97,9	400	38,2	218	30	19	268	403	20,8	2,9	1,8	25,6	38,5
2008	1.216	1.246	97,6	476	39,1	261	33	21	315	455	21,5	2,7	1,7	25,9	37,4
2009	1.000	1.014	98,6	401	40,1	197	27	18	241	373	19,7	2,7	1,8	24,1	37,3
2010	1.012	1.027	98,5	388	38,3	210	26	17	254	386	20,8	2,6	1,7	25,1	38,1
2011	1.090	1.107	98,5	393	36,1	247	29	19	294	419	22,7	2,7	1,7	27,0	38,4
2012	1.114	1.131	98,5	400	35,9	251	28	19	297	433	22,5	2,5	1,7	26,7	38,9
2013	1.065	1.080	98,6	398	37,4	242	25	19	285	396	22,7	2,3	1,8	26,8	37,2
2014	1.080	1.095	98,6	411	38,1	243	23	17	284	401	22,5	2,1	1,6	26,3	37,1

Source: Florian Neagu, Florin Dragu, Adrian Costeiu – După 20 de ani: schimbări structurale în economia României în primele decenii postdecembriste, Papers Nr. 42/2016 BNR 2016 occasional publications section, www.bnr.ro and own calculations

4. The reasons for this disappointing value added's stability must be found in the increase in goods expenses, thus the economy's commercial profile, sector known to generate the smallest value added. The percentage of goods expenses in the turnover grows from 33,9 to 38,9%. Other material expenses show good progress, in the sense that they decrease: raw material expenses from 29 to approximately 22%, which means a better capacity to process them and reduction of specific consumption, respectively, in the case of energy and water expenses, from 4,6% to 2%, hinting at their rationing. That the industrial profile of the economy has changed can also be said, industrial companies having been liquidated.

The balance at TSIG's (table nr. 2) average level, that begin to explain the company's profitability, show the following changes:

5. The distribution of value added is done primarily for companies and in a small measure for employees.

Table nr. 3. Correlation between value added, personnel expenses, gross operating surplus, other operating expenses and operation result (billion lei, and reports in percentage)

Year	Turnover (CA)	Value added	Personnel expenses	CP/CA	CP/VA	Gross operating surplus	EBE/VA	Value adjustments on assets	AVI/EBE	Other operating expenses	ACE/EBE	Operation result	RE/EBE
1994	523	200	87	16,6	43,5	97	48,5	10	10,3	50	51,5	42	43,3
1995	596	221	95	15,9	43,0	115	52,0	18	15,7	60	52,2	45	39,1
1996	673	255	105	15,6	41,2	139	54,5	18	12,9	76	54,7	49	35,3
1997	556	210	75	13,5	35,7	123	58,6	13	10,6	69	56,1	46	37,4
1998	446	163	61	13,7	37,4	90	55,2	9	10,0	61	67,8	24	26,7
1999	480	181	63	13,1	34,8	102	56,4	13	12,7	68	66,7	24	23,5
2000	482	178	60	12,4	33,7	103	57,9	13	12,6	67	65,0	27	26,2
2001	528	185	65	12,3	35,1	107	57,8	16	15,0	72	67,3	27	25,2
2002	578	207	68	11,8	32,9	126	60,9	20	15,9	88	69,8	24	19,0
2003	649	226	69	10,6	30,5	144	63,7	22	15,3	105	72,9	32	22,2
2004	761	281	74	9,7	26,3	194	69,0	29	14,9	139	71,6	46	23,7
2005	793	294	79	10,0	26,9	201	68,4	31	15,4	141	70,1	49	24,4
2006	884	333	87	9,8	26,1	234	70,3	33	14,1	167	71,4	58	24,8
2007	1.047	400	105	10,0	26,3	282	70,5	39	13,8	211	74,8	78	27,7
2008	1.216	476	124	10,2	26,1	338	71,0	49	14,5	255	75,4	66	19,5
2009	1.000	401	112	11,2	27,9	276	68,8	51	18,5	222	80,4	30	10,9
2010	1.012	388	105	10,4	27,1	270	69,6	51	18,9	220	81,5	32	11,9
2011	1.090	393	108	9,9	27,5	272	69,2	51	18,8	223	82,0	32	11,8
2012	1.114	400	109	9,8	27,3	278	69,5	50	18,0	229	82,4	37	13,3
2013	1.065	398	110	10,3	27,6	274	68,8	49	17,9	227	82,8	41	15,0
2014	1.080	411	115	10,6	28,0	278	67,6	51	18,3	217	78,1	46	16,5

Source: Florian Neagu, Florin Dragu, Adrian Costeiu – După 20 de ani: schimbări structurale în economia României în primele decenii postdecembriste, Papers Nr. 42/2016 BNR 2016 occasional publications section, www.bnr.ro and own calculations

6. As a result, personnel expenses register a significant recoil from approximately 44%, as a share in the value added, to only 28%. The smallest values can be found before the crisis and at its beginning, where they drop to 26% as a share in the value added. It must be stated that this also is a consequence of the change of economic structure, or the reduction of industrial branches and the growth of commerce and services, sectors that statistically lead with regards to low salaries. In context, Mr Florin Georgescu's observation in his work (Capital in the Romania of 2015, Bucharest, 24th November 2015, www.bnr.ro, presentations and interviews section) should be highlighted, stating that a clear inversion of the value added split ratio, whereas in developed economies the ratio is 60-65% for labour and 30-35% for capital. While in developed countries, capital receives 40% of the net national revenue and labour 60%, in Romania, the situation is reversed: capital receives 60%, with labour receiving under 40% in 2014, and, in Romania, the cost of the crisis was transferred unto employees, with the ratio degrading, unfavourably for labour.

7. The distribution of gross operating surplus, as in the value added accruing to companies, is also contradictory.

8. The amortization of assets (adjustment for depreciation of tangible assets) has doubled in its share. As a result, the adjustment for the depreciation of assets, as a share in the gross operating surplus have grown from 10% to almost 19%, reflecting companies' possession of more expensive technology, but also the fact that, compared to 1994, many companies today use faster amortization methods, which resolve the recovery of investments in a shorter time, but aggregate costs and lower profits.

9. The operation result, or the companies' profit from the operationalization of their activities, decreases as share in the gross operating surplus total from 43% to 15-16% today. During the crisis, the operation result's share decreases to 10-12%.

Table nr. 4. Correlations between turnover, operation result, current result, financial expenses, profit tax and net result (billion lei, and reports in percentage)

Year	Turnover (CA)	Operation result	RE/CA	Current result	RC/CA	Financial expenses	CF/CA	CF/RE	Extraordinary result	REXTRA/CA	Profit tax	IP/CA	IP/RC	Net operation result	RN/CA
1994	523	42	8,0	23	4,4	29	5,5	69,0	-13	-2,5	7	1,3	30,4	15	2,9
1995	596	45	7,6	29	4,9	28	4,7	62,2	-11	-1,8	9	1,5	31,0	19	3,2
1996	673	49	7,3	24	3,6	41	6,1	83,7	-38	-5,6	10	1,5	41,7	11	1,6
1997	556	46	8,3	23	4,1	39	7,0	84,8	-95	-17,1	11	2,0	47,8	1	0,2
1998	446	24	5,4	7	1,6	25	5,6	104,2	-60	-13,5	7	1,6	100,0	-5	-1,1
1999	480	24	5,0	0	0,0	36	7,5	150,0	-98	-20,4	6	1,3	***	-16	-3,3
2000	482	27	5,6	8	1,7	30	6,2	111,1	-102	-21,2	6	1,2	75,0	-8	-1,7
2001	528	27	5,1	10	1,9	27	5,1	100,0	-41	-7,8	6	1,1	60,0	0	0,0
2002	578	24	4,2	8	1,4	29	5,0	120,8	-28	-4,8	7	1,2	87,5	-1	-0,2
2003	649	32	4,9	19	2,9	26	4,0	81,3	-1	-0,2	9	1,4	47,4	10	1,5
2004	761	46	6,0	44	5,8	28	3,7	60,9	0	0,0	11	1,4	25,0	33	4,3
2005	793	49	6,2	45	5,7	27	3,4	55,1	1	0,1	9	1,1	20,0	35	4,4
2006	884	58	6,6	63	7,1	25	2,8	43,1	0	0,0	12	1,4	19,0	51	5,8
2007	1.047	78	7,4	61	5,8	45	4,3	57,7	0	0,0	14	1,3	23,0	47	4,5
2008	1.216	66	5,4	28	2,3	79	6,5	119,7	-1	-0,1	14	1,2	50,0	14	1,2
2009	1.000	30	3,0	2	0,2	57	5,7	190,0	1	0,1	11	1,1	550,0	-9	-0,9
2010	1.012	32	3,2	10	1,0	65	6,4	203,1	1	0,1	11	1,1	110,0	-2	-0,2
2011	1.090	32	2,9	15	1,4	63	5,8	196,9	0	0,0	10	0,9	66,7	5	0,5
2012	1.114	37	3,3	16	1,4	60	5,4	162,2	0	0,0	10	0,9	62,5	6	0,5
2013	1.065	41	3,8	27	2,5	47	4,4	114,6	-2	-0,2	11	1,0	40,7	16	1,5
2014	1.080	46	4,3	33	3,1	36	3,3	78,3	-2	-0,2	11	1,0	33,3	21	1,9

Source: Florian Neagu, Florin Dragu, Adrian Costeiu – După 20 de ani: schimbări structurale în economia României în primele decenii postdecembriste, Papers Nr. 42/2016 BNR 2016 occasional publications section, www.bnr.ro and own calculations

10. But the strangest change occurs in the accounting category "other operating expenses", which grow from approximately 50% of the gross operating surplus, in 1994, to almost 80% in 2014. Worth mentioning that, during the years of crisis, this category's share reaches as much as 83%. This is likely to be the leak in Romanian companies' performance.

Normally, the category "other operating expenses" includes: maintenance and repair expenses; rent and fee expenses; insurance premium expenses; collaborator expenses; commission and fee expenses; protocol, advertising and publicity expenses; goods and personnel transport expenses; travel, detachment and transfer expenses; postal and telecommunication tax expenses; banking and similar expenses; other tertiary service expenses etc.

TSIG's final balances contain the indicators that measure the company's performance in regards to profitability. In analysing these (table nr. 4) the following conclusions are reached:

11. The operation result undergoes a disappointing evolution. The level of departure in 1994 is 42 billion lei, which drops to 24 billion lei in 2002, then rises until 2006 to 76 billion lei, after which it drops abruptly and in a very short time to 30 billion lei during the crisis. It seems to be growing back in the last few years. Either way, it must be noted that in 2014, it reaches 46 billion lei, a little over the 1994 level.

12. The company's commercial profitability, calculated as the ratio between operation result and turnover, deteriorates significantly in the analysed period, halving itself. Thus, it drops from approximately 8% to a little over 4%. The primary cause is the difference in rhythm between the two indicators, the turnover – the support indicator – has an index of 240%, whereas the operation result stays at almost the same level. The lowest value is registered during the crisis, in 2009, 2,9%.

13. The financial policy, in context of reduced operation profitability, has a significant impact on the total profitability of companies. As a result financial expenses, although having reduced shares in the turnover total, between a minimum of 2,8% in 2006 and maximum of 7,5% in 1999, have a tendency to almost entirely annul the profit obtained by companies from operations. 2 periods are notable, 1998-2002 and 2008-2013 respectively, when financial expenses outgrow the operation result, in three years, 2009, 2010, 2011 being approximately twice as big compared to the operation profit.

14. The impact of debt is immediately reflected on the company's current result. As such, with just one exception (2006), each year out of the 21 analysed the current result shows values lower than the operation result. Furthermore, in two years, the costs of debt annul the operation result entirely (1999, current result 0, and in 2009, only 2 billion)

15. The operation result, with the exception of the end of the 90's and beginning of the 2000's, has a neutral or negligible impact on profitability. This is probably one of the reasons that determined its rejection from new accounting regulations.

16. Taxation, as measured by the profit tax's impact on earnings, has a strong impact, exerting significant pressure on companies. Thus, the following conditions should be kept in mind: a result eroded by other operating expenses and by debt. Profit tax as an absolute value varies between 7 and 11 billion lei at the ends of the analysed interval, within which a minimum of 6 billion at the end of the 90's and start of the 2000's and a maximum of 14 billion before the crisis, when the economy was fluctuating, are registered. As share in the GDP it represents 1 and 2%, but if it is correlated to the current result (the result from which it supports itself, because TSIG does not know the category of operation result/gross result, it affects a minimum of 20% of it and up to a maximum of 55% from current result in 2009. Values above 40% of the gross result being registered in 14 out of the 21 years, so in 2 out of 3 years, the profit tax erodes at least 40% of the current result.

17. All of these ensure that, in 10 years out of the 21, the commercial profitability calculated as a ratio between net result and turnover is negative or 0, something.

There can only be one conclusion, that of weak performance by Romanian entrepreneurship and weak progress compared to 1994. In any case, in evaluating the performance of Romanian economy, it must not be overlooked that, at the end of 2014, our country is the one where 42% of GDP is produced in Bucharest and Ilfov county, so less

than 1% of the country's surface, that 43% of registered companies have 0 employees, that 27% of companies active from an economic standpoint have 0 turnover and that 50% of Romanian companies have negative capital, meaning that losses exceed the capital paid up by their owners.

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Annex nr. 1. Overview of intermediary management balances - economy total (billion lei, actual values, prices 2014)

Indicator	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Turnover	523	596	673	556	446	480	482	528	578	649	761	793	884	1.047	1.216	1.000	1.012	1.090	1.114	1.065	1.080
Stored Production	38	36	44	38	24	15	16	16	12	12	14	12	12	17	23	10	11	13	13	10	10
Asset Production	2	3	4	4	3	3	2	3	3	3	3	3	4	6	7	4	4	4	4	5	4
1. Operation production	562	635	722	598	473	498	500	547	594	664	778	809	900	1.070	1.246	1.014	1.027	1.107	1.131	1.080	1.095
Acquisition of raw materials	151	167	195	157	115	110	118	134	139	151	167	171	192	218	261	197	210	247	251	242	243
Other material expenses	11	14	17	12	9	25	14	21	27	34	35	30	30	30	33	27	26	29	28	25	23
Other external expenses (energy and water)	24	23	24	25	16	13	13	15	16	17	17	18	19	19	21	18	17	19	19	19	17
Tertiary consumption	185	204	236	195	139	148	146	170	182	202	220	219	240	268	315	241	254	294	297	285	284
Expenses on goods	177	209	232	194	171	169	176	192	204	237	277	295	327	403	455	373	386	419	433	396	401
2. Value added	200	221	255	210	163	181	178	185	207	226	281	294	333	400	476	401	388	393	400	398	411
Taxes and fees	16	10	10	12	12	16	15	13	14	13	13	14	12	12	14	12	13	13	13	14	17
Personnel expenses	87	95	105	75	61	63	60	65	68	69	74	79	87	105	124	112	105	108	109	110	115
3. Gross Operating Surplus	97	115	139	123	90	102	103	107	126	144	194	201	234	282	338	276	270	272	278	274	278
Other operation revenue	4	8	3	5	4	4	5	10	8	18	22	23	32	45	40	32	34	36	37	42	37
Other operation expenses	50	60	76	69	61	68	67	72	88	105	139	141	167	211	255	222	220	223	229	227	217
Commercial discounts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	7	7	8
Adjustments for provisions	0	0	0	0	0	0	0	0	1	1	0	2	5	-2	4	1	1	2	1	0	3
Value adjustments on current assets	0	0	0	0	0	0	0	1	2	2	2	1	3	2	4	5	5	7	4	6	6
Value adjustments on assets	10	18	18	13	9	13	13	16	20	22	29	31	33	39	49	51	51	51	50	49	51
4. Operation result	42	45	49	46	24	24	27	27	24	32	46	49	58	78	66	30	32	32	37	41	46
Financial revenue	10	12	16	16	8	12	10	10	13	13	26	22	30	28	40	28	43	47	39	33	22
Financial expenses	29	28	41	39	25	36	30	27	29	26	28	27	25	45	79	57	65	63	60	47	36
5. Current result	23	29	24	23	7	0	8	10	8	19	44	45	63	61	28	2	10	15	16	27	33
Extraordinary result	-13	-11	-38	-95	-60	-98	-102	-41	-28	-1	0	1	0	0	-1	1	1	0	0	-2	-2
Profit tax	7	9	10	11	7	6	6	6	7	9	11	9	12	14	14	11	11	10	10	11	11
7. Net operation result	15	19	11	1	-5	-16	-8	0	-1	10	33	35	51	47	14	-9	-2	5	6	16	21

Source: Florian Neagu, Florin Dragu, Adrian Costeiu – După 20 de ani: schimbări structurale în economia României în primele decenii postdecembriste, Caiet de studii nr.42/2016 BNR, 2016, secțiunea publicații ocazionale, www.bnr.ro

INFORMATIONAL RISK AND NECESSITIES AUDIT

Inga, Bulat ¹

Summary

We are living in an informational era where the changes and challenges are very complex and at high speed. The informational system has become a premises for starting a new day. Its presence within the activity of a certain institution is more and more dispensable.

Nowadays the auditors have a very important role in studying the systems, the processes, the mechanisms, etc, so that the approach in offering recommendations is the result of everything that is going on and which can generate. The audit activity is external, independent, but human, thus it cannot lack risks. The risk associated to the audit activity, considered as being an inherent, checking and residual risk, brings forward to the user that the accountant information which is validated by means of audit cannot itself lack risks, so we can notice a direct relation between the audit risk and the risk associated to the information given publicly by entities. That is why, the tendency which the audit societies must follow is to manage as efficiently as possible the risks afferent to these activities, which for them, is becoming a risk of an economic origin.

Key words: risk, audit, auditor, information, control, system, institution

Classification JEL: M15, M42

*"An unseen point yesterday, is a target
today and will be a starting point tomorrow"*
Maclaulay

1. Introduction

The analysis of risks or barriers makes us stress on various criteria, in order to be able to make a more ample analysis referring to the next day. Beyond its regulation, nominalization and standardization, the information of the internal control requires an approach from the qualitative point of view. In this way, the control sufficient up to a certain moment has become insufficient to guarantee the reliability of the information which is relevant. In these circumstances, an external and independent validation of the relations and the plans given publicly by the operational managers is imposed. In this way the internal audit responded to an acute need of validating the information presented by the institution internally and externally as well.

1.1. The management of risks in the audit framework

Some risks are acceptable and unavoidable referring to different activities, but there exist unacceptable risks, too. The purpose of each institution is to avoid as much as possible the unaccepted risks and to mention at a tolerant level the accepted risks to achieve the proposed objectives.

The audit objectives is to evaluate the risks of the internal controlling system up to detecting the frauds, a process which implies a more detailed checking of all the processes and the systems of internal control, by means of risks.

Thus, the degree in which the information reflects the correctness of applying the mechanism is determined, but the auditor's efforts are intensified to identify the further manipulations with the information offered by the system of internal control in order to avoid the cases of errors and frauds.

The information offered by the specialists in the field are necessary for all the categories of staff.

¹ Doctorand, Institutul Național de Cercetare Economică din Chișinău, bulat.inga124@gmail.com

For this reason the results of the audit works must be correct and well made being based on the legal documents in force. They must assure the quality and coherence of the system of internal control and are meant to reflect correctly, fairly and completely the described processes. At present there are more types of audit missions:

a) *the system audit*, which examines the system of financial management and control to estimate the efficiency of its functioning;

b) *the compliance audit*, which verifies the procedure of the legal framework, the applied policies and, if the case, the need to improve the internal checking procedures used to insure the compliance with the legislation;

c) *the financial audit*, which estimates the adequate and efficient functioning of the internal checking procedures afferent the financial systems;

d) *the performance audit*, which examines the use of the resources within a programmer, functions, operations or management system to determine if the resources are used as economically and efficiently as possible to achieve the institution's goals.

e) *the informational technologies audit*, which examines the efficiency of the financial management and the control of the informational technologies.

The analysis of risks implies a process of identification of the main risks, stating the amplitude and involving the risks, as well as identifying the segments which present a great risk and which must be monitored. The risk analysis is made a part of the whole measures which is generically called the management of risks. The evaluation of the informational risks implies a process of a more detailed analysis of risks that must be done for more reasons:

1) Identifying the primary objectives of the institution regarding the realization of its visions;

2) Creating some following stages in getting rid of the conditions which can contribute to the appearing of some risks when the context is complex, but an alternation of its functioning cannot be applied but by means of small steps policy;

3) Stating the compulsiveness of some actions and of some deadlines to create some objectives which deal with the implementation of the recommendation given within the audit missions;

4) Creating a perspective of a whole of acquiring resources and services so that the financial effort to be taken into account regarding the fact of finding the most efficient solutions;

5) The analysis of the controlling programmer with the institution's mission;

6) It offers more detailed evaluation criteria of some processes or system of control.

Every audit mission implies risks, but their identification, at the stage of planning the work, is one the most important objectives of the audit. We must state that this is a very difficult activity and it does not offer any full guarantees. To provide a result regarding the level of the risks, first of all, it is necessary to identify them.

The National Standards of Internal Audit take into account three most important categories of risks: *the inevitable risk, the risk of control and the residual risk*.

The risks of control present the inequalities and the errors that are not discovered with the inefficient control. The evaluation of these risks is made depending on the used informational system, on the way the system of control is organized, on the way the procedures are organized and applied. The risk of control cannot be equal to zero, because the internal control cannot offer guarantees as to prevent or to detect the errors. The auditor cannot change the level of the control, he/ she can only "influence" it through recommendations of improving it, but this influence will only be seen in later audit periods and only following the circumstances in which the leadership will take into account the given suggestions.

The inevitable risk and the risk of control are independent of the auditor's activity and cannot be checked by him, but they can be estimated and they determine the basic procedures that will maintain the residual risk at an acceptable level.

The residual risk presents the risk as a basic procedure of an auditor not to detect a mistaken information, which could be significant in an individual way, or when it is combined with wrong information from other sources. The level of the residual risk is directly connected to the procedures used by the auditor. In comparison with the inevitable risk and the risk of control, the residual risk can be checked by the auditor by:

- auditor's adequate planning;
- corresponding stating of the sample type;
- identifying and evaluating the performances of the quality insurance;

Estimating the risks in the audit system is a complex activity and there is no agreement yet about how the problem should be treated. Practitioners use mostly the model given by the national standards of internal control, though this one is often criticized in literature, the main arguments against it are the simple way by which the issue is approached and the inability to meet requirements of all the auditors. On the other hand, the probabilistic models are often much more complex and need deeper knowledge from other fields like; Maths, Statistics, etc. Anyway, they witnessed a great development during the last years, especially in the legal framework. A solution for this problem is the software development which, theoretically and probabilistically based, should offer the practitioners easily used solutions and give a correct evaluation of the risks in the audit and not only. This would lead to overpassing the subjectivity which at present characterizes many audit missions and would, somehow, set the auditor free from the charge of estimating the risk using only his own experience and knowledge. Thus, the interpretation and the presentation of the audit risks by probabilistic methods offers another perspective of the way this issue can be solved, an objective and more precisely a problem concerning more specialists from this filed.

The biggest part of the administrative and operational functions of the institutions is conducted at present with the help of the informational systems, which is necessary that the audit system be well-equipped. Within the audit missions, various methods to evaluate the internal control systems and the risks that can threaten these systems will be used.

II. Evaluating the risks in the system of computer information

One of the most important problems in auditing the electronic systems is evaluating the risks and the system of the internal control. That is why, in planning those four audit components, the auditor must get an understanding of the meaning (materiality) and the upper complexity of the activity of the informational computer systems (further on ICS) and of the data availability which is used in the audit.

The nature of the risk and the features of the internal control on the average ICS includes: (5:52)

a) *the lack of evidence regarding the operations* Some ICS are so created, that some full evidence useful in audit regarding the operation, can only be for a period of time or just in an electronic way, due to the great number of processing steps;

b) *the uniform processing of the operations.* The computer processing works out uniformly similar operations, based on the same instructions of processing. In this way, the errors of editing documents which are at the basis of the operations and which as usual were associated with the manual processing, are virtually eliminated. On the contrary, the errors of programming (or the errors in hardware or software) result in working out incorrectly all the operations.

c) *the list of separation of functions*. Some procedures, which normally are done manually by different persons, in ICS can be concentrated in such a way that a person who has access to the programs, procedures or computer data could perform incompatible functions.

d) *the possible appearance of errors and inequalities*. The probability of appearing of human errors in developing, maintaining and exploiting ICS is bigger than manual processing. There is a greater possibility that some persons get unauthorized access to data or even to alter data without visible evidence than in the SIC medium. Diminishing human implication in ICS can diminish the notice of errors and inequalities.

e) *initializing and executing some operations*. In an ICS medium, the computer's ability to initialize and execute automatically some operations can be included. These operations can not necessarily be so documented as in the manual system, but the manager's authorization regarding these operations can be implicit by way the computer system was designed.

f) *the dependence on other controls by computer processing*. Computer processing can produce reports and data that are used in making the manual control procedures, whose efficiency depends in this way, on the efficiency of the controls over the completeness and the precision of the computer processing.

g) *raising the degree of the manager's supervision*. An ICS medium offers the institution's administration a large variety of analytic tools which can be used to supervise the operations, in this way enhancing the activity of the whole internal control team.

h) *raising the degree of using computer assisted audit technics*. The use of computer in processing and analyzing a big amount of data can offer the auditor the possibilities of using computer assisted audit technics. The inevitable and control risks are limited in evaluating the systems of control, that derive from (5:54)

- ✓ developing and maintaining the programs;
- ✓ supporting the software systems;
- ✓ the types of processed operations;
- ✓ the physical security of ICS;
- ✓ the control over the access to the used programs;

The subjective evaluation of risks will lead to the increase the potential of error appearance and of the fraudulent activities in applications, data base or files and other processing activities.

III. The evaluation and the management of the informational risks in IT audit.

Starting from the idea of having limits in the audit system, more stress on the significant identification corresponding to all deeds, activities and events is recently put. Every manager has to find the solution, on the one hand, to manage the threats, otherwise, he would disqualify and on the other hand, to fructify the opportunities to the benefit of the institution proving this way its efficiency.

The risk is the event able to exercise an influence on performing internal audits in the IT system or monitoring the processes in an initially created way. Most of the managers focus more on the analysis of risks to overpass the crisis and to lower the losses. Every auditor in analyzing the risks state different criteria of quantitative and qualitative evaluation of risks.

Depending on the fields that are monitored the financial losses are taken into account too. More often, the complexity of the risky factors is conventionally divided into objective and subjective. The objective factors focus on : changing the data of the beneficiary conditions, late providing of information, the force major circumstances; but those subjective include: characterizing the mutual relationships between the beneficiary and the audit team, so everything that refers to the so-called" human factor".

Another premises to make an analysis from where the challenges or the threats may come by means of ecosystem, can categorize the risks into those internal and those external. For a good functioning of the IT system it is important to remember that there are risks: ratable and not evaluable depending on the circumstance or on the vulnerability of the situation we are in. The risks and the threats are identified, usually mutually. They discuss about a risk and they infer implicitly the threats that can be produced by that risk. Risk is a more abstract notion than the threats that implicitly refer to the costs of implementing the respective threat, intuitively and the quantification of the effective realization of the threat.

The evaluation of the informational risk is an approach for the internal audits, because the uncertainty represents a daily reality, respectively, the reaction to the uncertainties must become a permanent preoccupation. The computer, the information technologies and the communication have dematerialized the financial information and have ensured the rise of possibilities of rapid gain as well as the global circulation which enhanced the possibilities of manipulation of it by issuers as well.

The analysis of risks is meant to help the realization of the audit on theoretical basis and solid practices. The risk approach distinguishes by:

1. *the quantitative analysis*
2. *the qualitative analysis*
3. *the analysis of every workstation within the system;*

The quantitative analysis of the risk implies the following stages:

Identifying and evaluating the assets- the hardware, software components, the operating data, the staff involved in the process, the afferent documents, the respective support, etc. We must take into account the analysis and the calculation of the cost of the workmanship during the intervention; the time needed to state the cause of the malware; the duration of the loading and the testing of the application, the period of restoration, recharging the big application systems. As for the staff working with these processes, the main criteria that can be grouped around them are: the amount and the qualifications of the personnel, the costs of additional instruction, the psychological effects of the disasters;

Determining/ stating the vulnerability- implies stating the threats towards the activity and the frequency they can produce: natural, accidents, intentional acts. The impact of these threats depends mostly on certain factors, of which most of them are: facilities for the organizing framework, information density, the local economic conditions, the warning and protection implemented systems, the visibility, the easy access to the assets, methods and procedures of saving, acknowledging the security and protection measures.

Estimating the probability of producing an incident- stating the probability of producing an incident in a short period of time, well-estimated, using statistic data which can fix the rate of producing an incident. The calculation of the annual estimated losses- each threat is calculated.

$$PAE_b = \sum_{j=0}^m V_b E_a \quad (1)$$

where **PAEa**= annual estimated losses for threat **a**.

Vb= the asset value **b** (being assets labeled from **0** to **n**)

Ea= estimating the number of incidents and threat **a** (there taken int account the treats labeled from **0** to **m**)

The annual estimated losses can be calculated by: categories of assets and threats or major pairs of assets/ threats.

✓ *Determining the main measures of preventing and control- the major losses and threats are put at its basis.*

The calculation of estimating the ratability of the infestation (RI)- it is calculated to identify the cost of an applied control: *the vulnerability, assigning a rate/ value optimal for every event/ way of controlling, estimation the annual costs for implementing the measures of the respective control. (11)*

$$(RI): RI = rc + PAE_a \quad Cc \quad (2)$$

Where we operate with the notations:

Cc= the annual cost for applying the control **c**

Rc= the efficiency indices for the control **c**

PAE= Estimated Annual losses for the threat **a**

Choosing the additional measures of control must be based on the following objectives: the bigger Value of Ratability of the Investment and minimizing PAE.

The bigger factor's value **RI** will be obtained acting upon the indices of rentability **Rc** by raising it up to its maximum value 1, or upon the annual cost for applying the control **Cc** by diminishing the costs of implementing the control. The quantitative method lacks something:

- *-The difficulty in finding a number which quantifies more exactly the frequency of producing an event;*
- *-The difficulty in quantifying certain values;*
- *-The methods does not distinguish between the big or small threats, it characterizes the financial effects in the same way;*
- *-The choice of the used numbers can be considered subjective*

The qualitative analysis of the risk- is more often used by smaller institutions, where the analysis of the risk is not conducted on basic statistic data, but it uses the incoming and outgoing documents and the estimated losses. Even more often they operate with the terms: often/ high, average, rarely/ reduced- referring to the probability and the impact; vital, critical, important, general and informational- referring to the type of classification; numbers 1, 2, 3.

While conducting audits it is useful to use the quantitative and the qualitative analysis of the risks as well. The qualitative analysis is more often used to state the objectives of the analysis of some processes, systems, etc

The quantitative analysis of the risks is used when we are based on documents or on the sums, which are estimated while stating the evidence of evaluation of the system that undergoes the studies.

Thus, we will be able to state what the greater risks from the controlling system's side are of the informational system or of any other process.

The analysis of every workstation within the system- it is a more ample analysis at the basis of which are both the qualitative and the quantitative analyses. It is much more expensive and needs more time. At present it is being used mainly by bigger companies.

Conclusion: The informational era already implies a penetration in various fields and a complexity in stating the risks within the audits.

The audit of the informational systems is not an isolated audit, but it is based on the analysis of systems in the administrative activity. Today the informational applications are a set of administrative, financial programs, etc. which create a system of operating and monitoring of the institution's activity.

The challenges and the tendencies of the modern society leads the audit to fixing the limits of the internal audit by means of analyzing the acceptable internal risks as well as the

external ones. According to the analysis of all the types of information frauds and errors will be prevented as well as the diminishing of the risks in realizing the objectives, which will lead to new changes or transformations imposed from the outside of the institution.

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ASSESSMENT OF INTERNAL AUDIT APPEALING TO KEY PERFORMANCE INDICATORS

Ruse Elena¹,
Susmanschi (Badea) Georgiana²

Abstract

The positive / added value brought by internal audit function to an entity requires effective ways and criteria measured. It is true that it's pretty difficult to establish these sort of values. There are several indicators used to measure / assess the value addition provided in the company, but that does not fully reflect the actual value of the internal audit function. Through this paper, we want to present a method for assessing the internal audit and its effectiveness within an economic entity, through the use of performance indicators. Indicators render the image of internal audit and its effectiveness.

Key words: internal audit, evaluation of internal audit, performance indicators, balanced scorecard.

JEL Classification: M10, M42.

1. Concept of internal audit

Of all resources available to humanity, only one seems to be inexhaustible. This resource is called **Information**. Information is a factor of power, a truthfully one, which can be labeled as a social good that influence directly and immediately the welfare of societies. (Badea et al, 2014) Although, information is not a tangible asset and it is not visible to our eyes, it unmistakably participates in the evolution of the modern society.

Common to all is that we are subject to the same laws of economic and social development. Here we do not refer expressly to the laws and legal regulations, but rather to the natural laws of the economy, for example the law of supply and demand, the law of marginal utility.

Moving on to the main topic of this scientific work, which is reflected in the title, namely internal audit, we note that internal audit is one of the activities of modern society undertaken in an economic entity (at least under its present name, not to mention the fact that it can be correlate with the control activity used since inception), is a scientific activity based on rules, regulations elaborated by international professional bodies (the Institute of Internal Auditors-IIA, L'Institut Français des Auditeurs et Contrôleurs Internes- IFACI), approved / implemented at national level by national professional bodies (in Romania-Romanian Chamber of Financial Auditors - CAFR).

Internal audit is a profession shaped throughout time as an answer to entities' economic needs. Entities' economic needs roughly have the same characteristics as human needs have, such as (Ruse et al, 2014):

- they are unlimited: although the primordial need that identifies itself with the major objective of any enterprise is that of maximizing profit, the economic entity has many more needs/ necessities that, once met, congregate towards meeting the primary need;
- they are complementary: entities' economic needs are numerous and complementary, they complete each other; the need for capital, human resources, material resources, the existence of a legislative and normative framework, etc., all these elements can be classified within the category of needs the economic entity has and without the fulfillment of which it cannot function;
- capacity of regeneration (needs currently disappear when they are met, but they reappear in time): the need for personnel: a vacant job may exist at one given point. Once

¹ Professor, PhD, Andrei Saguna University, Constanta

² Teaching Assistant, PhD., Spiru Haret University, Constanta, corresponding author: georgianasusmanschi@yahoo.com

occupied, the need is considered to have been fulfilled, but the company's development can lead to the emergence of new jobs, therefore the need for personnel will be topical all over again. We can also look upon profit from this perspective. Any company wants to obtain profit at the end of the fiscal year. If this happens, the company's need for the respective year shall be fulfilled, but along with the beginning of the financial year, this need will become again the company's major objective. However, the profit gain can be rather seen as a permanent need because it is never extinguished.

- they are conditioned both objectively (according to the economic development degree, the progress degree), and subjectively (each company having its own needs, others than those common to all entities – such as profit gain).

Although internal audit is not a function with applicability in all types of companies,

Internal audit provides to the management of an economic entity, whether public or private, a wide range of specific, comprehensive information about all activities in the company, according to the specific of each internal audit mission.

Although internal audit is not a function applicable to all companies, since legislation does not require setting up an internal audit department in any economic entity, but only within certain types of companies (such as public institutions, banking institutions, certain business entities under Ordinance no. 37 of 29 January 2004, etc.), internal audit is presented, in companies that have already implemented this feature, as a department responsible for effectiveness aiming at identifying nonconformities (of the product / service / activity).

2. General methods of assessment of internal audit

An internal audit department benefits, added-value economic entity, however we can not affirm the existence of such department directly and exceptionally lead to total reduction of non-conformances of any kind (legal, process, form, etc.) whereas that activity can record any mistakes, be they human (an activity undertaken by people through people) or technological (technological system errors, software).

The added value of internal audit is highly difficult to quantify.

The added value of the audit work is not exclusive nor in the internal audit report and any recommendations and conclusions issued. These are just means of communication with the management of the audited entity. (Ghita, 2005)

The value of internal audit is the ability to improve the audited system/process/activity. (Ruse et al, 2015)

Internal audit is a promoter of added value generating savings, creating opportunities, helps to avoid losses by its actions. At the same time, a benefit that internal audit brings refers to the changing of the mentality of those audited (actually of those who undertake the audited processes as internal audit does not audit people, but the activities/processes), even if there is no unity measure to track their progress.

In this regard, it is necessary from time to time that internal audit work to be also verified and evaluated. We can refer to this as a verification, an *audit of an audit*. This would have the effect of determining the degree of effectiveness of internal audit and possibly identifying ways to improve the functioning of audit. Thus, methods have been developed for the assessment of internal audit.

The effectiveness of the internal audit plan can be evaluated by an internal quality control plan and can be internal or external. (As seen in Table no.1). Effectiveness of internal audit is measured using instruments such as indicators, surveys or benchmarking. (Dubis, 2010)

Regarding internal evaluation, the head of the internal audit department can conceive or improve an existing questionnaire on internal audit work carried out by members of the audit team. As advantage of internal evaluation type, we believe that by participating in the mission

and be responsible for internal audit mission, the head of internal audit should be aware of the shortcomings of the mission. Each internal audit mission is different; in that it has a specific target, depends on the process / service audited, on the level and scope of activity of the economic entity, the professional training and experience of the members of the audit team.

Table no. 1. Evaluation (internal/external) of internal audit

Type of evaluation	Responsible	Action	It follows
Internal evaluation	head of internal audit department	Supervision	<ul style="list-style-type: none"> • communication quality; • compliance with audit methodology; • choice of investigating tools; • quality and relevance of the findings and observations; • the quality and timeliness of audit; • reports and recommendations realism, • the applicability and effectiveness of the recommendations
External evaluation	external auditors	Revisions of documents	<ul style="list-style-type: none"> • completeness and compliance with the audit plan; • internal audit standard implementation; • methodology; • quality of audit reports and recommendations; • quality of internal audit manual and audit guidelines; • assessment of internal audit by management.

Source: Author's personal representation

Models for the evaluation of internal audit were developed by some researchers using management methods such as Balanced Scorecard (Vintilescu et al, 2010) by Kaplan and Norton, first time in an article published in the Harvard Business Review in 1992, then developed in the book the Balanced Scorecard- Strategy Translating into Action in 1997, Gantt chart, usable in internal audit planning and visualization during the mission (stage, completeness).

We consider it appropriate to conduct a survey among employees economic entity in order to identify how employees (as part of the auditory system, not directly, since we are not auditing people, but actions taken by them) perceive the internal audit department and whether they believe in the improvement of the processes / services audited.

Of course, that in order to assess the performance of internal audit we can call any of the methods listed above, we can use combinations of methods, or conceive new methods.

3. Performance evaluation of internal audit through the use of performance indicators.

The added value by internal audit function requires effective ways of measuring. Touching implies internal audit performance, as in any other activity, the existence and effective and efficient combination of resources (financial, material and human). It is important that these resources be properly budgeted and allocated where needed at the time.

Financial resources must be targeted on types of spending, and where internal audit is divided into several main categories: salaries of internal auditors, expenses, training expenses, office supplies necessary to conduct business in optimum conditions, expenses related to trips made under internal audit plan, etc. (Badea et al, 2013)

There are several indicators used to measure / assess the value addition provided the company. Indicators restore the image and quality assessment of internal audit activity and the means of improving efficiency.

Indicators are those that give the image quality of activity and are, in essence, a means of improving efficiency and are calculated in three categories: activity indicators, quality indicators and cost indicators (see Table 2).

Table no. 2. Performance indicators used in evaluation of internal audit

Type of the indicator	Indicator	Formula
Activity	Measurement of plan and achievement and outcomes improvements	• number of missions developed / number of missions set in the plan
	Measurement of the average audit time	• number of audit days / number of missions
	Measuring the time evolution for strict auditing operations compared to the overall time	• number of audit days / days worked
	Measuring the evolution of training allocated to each party auditor	• number of training days / days worked
	Measuring the evolution of the average number of pages of audit reports	• number of pages of reports / number of reports
Quality	Number of missions	• number of unforeseen tasks / number of missions
	Assessment recommendations	• recommendations rejected / total recommendations
	Measuring the quality of implementation of recommendations	• unrealized recommendations / accepted recommendations
	Measurement of working periods for Heads of Mission and senior auditors	• number of days devoted to management / days worked
	Assessing the quality of work	• incomplete audit files / number of missions
Mission Costs	Evolution of budget and staff employees	• cost of service / number of auditors
	Comparison of the workday market costs	• cost of service / number of days of mission
	Professional training expenses	• training costs/number of auditors
	Movements according to the plan	• costs/number of auditors
	Office needs	• costs/number of missions

Source. Author's personal representation

In the following lines, we present a case study aimed at assessing the performance of internal audit, based on some of the indicators mentioned in Table 2. Thus foregoing entering data into a spreadsheet (Excel format). Please note that the data are indicative.

Table no. 3. Determining performance indicators of an internal audit mission

Indicators	Mission's efficiency / activity and quality indicators				Percentage/Efficiency
Measurement of plan and achievement and outcomes improvements	number of missions developed	6	number of missions set in the plan	5	120%
Number of unforeseen missions	number of unforeseen tasks	1	number of missions	6	83.33%
Assessment recommendations	recommendations rejected	2	total recommendations	11	81.82%
Measuring the quality of implementation of recommendations	unrealized recommendations	2	accepted recommendations	9	77.78%
Assessing the quality of work	incomplete audit files	2	number of missions	6	66.67%
Average percentage					85.92%
Mission's costs (lei)					
					*Budgeted/expenses
Evolution of budget and staff employees	expenses	6900	Budgeted	6900	100%
Proffesional training expenses	expenses	1000	Budgeted	900	90%
Movements according to the plan	expenses	258	Budgeted	200	78%
Office needs	expenses	1000	Budgeted	800	80%
Average percentage					87%
Other indicatos					
Measuring the evolution of the average number of pages of audit reports	number of pages of reports	72	number of reports	6	12.00
Measurement of the average audit time	number of audit days	253	number of missions	6	42
Measuring the evolution of training allocated to each party auditor	number of training days	20	Days worked	253	7.91%
Notes:					
<ul style="list-style-type: none">• we rely on a number of 253 working days per year for the year 2015, in compliance with the number of official holidays (13 days);• referring to the monthly expenses of the department of internal audit (related to salaries);• travel expenses include fuel expenses for the movement;• office materials costs (monthly) include: paper tops, pens, folders, ink printer, etc.• training expenses include expenses incurred by the entity in order to improve auditors work, attending conferences and / or annual trening• *Budgeted/expenses: we have chosen this method of calculation and not the reversed formula : expenses/budgeted, as we see the inconsistency in the budget as a minus in efficiency (strictly related to the costs of the mission, not related to the quality of the work). The reversed formula denotes an efficiency of over 100 % which would result in an incorrect calculation of the overall performance (as shown in Table 5)					

Source: Author's personal representation

Besides the calculation of these indicators, we consider it appropriate and necessary work undertaken by the internal audit team members to be evaluated based on interviews and assessment by the management of the economic entity and the head of audit structure.

Thus, we consider the average points given by internal auditors entity. Table no. 4- Evaluation sheet of internal audit by the management.

Table no.4. Evaluation sheet of internal audit by the management

No.	Object	Ratings					Obs.
		1	2	3	4	5	
1	Clarity of communications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2	Sufficiency of information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3	Added value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4	Setting goals consistent with activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5	Presenting findings in a logical / coherent / structured / manner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6	Adequacy of internal audit deployment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7	Feed-back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8	General evaluation of the mission	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9	Efficient communication between the auditors and the audited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10	Appropriate and professional behavior of auditors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11	Comments						
Total		10	20	30	40	50	
Obtained		0	0	0	16	30	46
Average	46/50=	92%					

Based on information above, we summarize the results in Table no. 5. Mission performance.

Table no.5. Mission performance

Efficiency	85.92%
Costs	87%
Management rating	92%
Average performance of the mission	88.27%

4. Conclusions and proposals

To determine the path to improve internal audit we must evaluate and analyze the performance of the internal audit within the economic entity. Thus, to evaluate internal audit's missions and their results in order to determine the way that were developed and contributed to achieve company's objectives. Then we will consider the review of the implementation of

recommendations made by the internal audit department, especially if they determined visible improvements / measurable processes, leading thus to obtain global performance.

By registering a high level of performance of internal audit directly it ensures a high level of performance of the economic entity. Of course, responsible for the implementation of recommendations made by the Internal Auditor is the manager, but in our opinion, as long as the internal audit department conducts activities / tasks with maximum seriousness, conscientiousness and professionalism, the manager will be to some extent forced to implement the recommendations, having a high confidence in those.

Specifically, internal audits can be more efficient by:

- An accurate and detailed assessment of internal audit to determine the level of overall performance and categories of indicators in order to identify what is and can be improved;
- Identify and implement procedures / methods basically looking for ways to lighten the work, to diminish their efforts, but with maximal effects. This is especially true for the internal auditor's working papers which demand time and effort, when the auditor could allocate more attention to risk analysis;
- Ensuring that internal department has unrestricted access to all information / data about the economic entity and processes audited, as a full and adequate internal audit helps to properly assess processes and be able to find ways to improve. Not knowing the full aspects of a process could lead to the development of incomplete recommendations;
- Ensuring that there are sufficient resources allocated to internal audit mission;
- A continuous professional specialization of internal auditors, that they are aware of the news in the field and are able to cope the dynamic business environment;
- Ensuring of a good knowledge of the economic entity and processes audited. This does not mean that the internal auditor should have extensive knowledge in manufacturing, for example. The internal auditor cannot and does not need to be an expert in every process / activity audited. His duty is to show understanding, to be able to look at the processes audited as a whole and in detail to capture any irregularities.

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PARTICULARS ON APPROACHES AND METHODS USED TO VALUE INTANGIBLES ASSETS

Cristina Gabriela, Leliuc (Cosmulese)¹

Dorel Mateş²

Laurentiu Anisie³

Abstract

Valuing intangible assets is a long running, complex and controversial issue and is viewed with skepticism because both nationally and internationally there are no clearly defined principles and rules regarding them. Despite their increasingly significant role in enhancing firm value is difficult to obtain a reliable estimate value for these assets. In this paper devoted to assessing intangible assets we have considered firstly the achievement of an incursion in the field of intangible assets valuation from a theoretical standpoint, both by presenting various notions, concepts regarding the valuation process and by highlighting the characteristics of the main approaches (methods) in assessment present in specialized literature. From the analysis on intangible assets according to the specialized literature, we believe that from an accounting perspective it is very difficult even impossible to implement an accepted valuation method. The reliability, safety, confidence of the results, justification or objectivity are some key features that we identified it would lack more or less from the approaches presented.

Keywords: *methods for valuationig intangible assets, reproduction cost, income approach valuations, market approach*

JEL: M41

Introduction

Over time, reality has proven that the company is not only a center for the production of profit and capital accumulation, but also a collection center for technological and organizational knowledge and experience, and when all these forms of accumulation evolve into a balanced way, the enterprise carries out its mission for which it was created. The value of an enterprise can be measured by the size of its material heritage, but also subsists in the ability to acquire, generate and distribute intangible resources (Toffler, 1995, p.74).

In the last two decades, intangible assets have grown in importance in the economic system and in determining the success of a business enterprise and it appears that the traditional economic and managerial concepts are not adequate enough to provide answers and accurate and satisfying interpretations to the new reality of industrial and corporate systems where the change is attributed to the creation and proper management of intangible assets.

This need for new knowledge result from a corresponding need to make use of instruments and methods in order to identify, uncover, understand, evaluate and track over time the key to success of a company asset.

Research methodology

To develop this study were consulted reference work on the subject intangible asset valuation leading to understanding different approaches and methods regarding the evaluation of intangible assets. Firstly there were studied from the bibliographic literature methods underlying the valuation of intangible assets, and secondly were analyzed the views of researchers that have tried various ways of evaluation and measuring the intangible assets through techniques, tools or models appropriate.

¹ PhD Student, *Faculty of Economics and Public Administration, Ștefan cel Mare University* of Suceava

² PhD, Professor Faculty of Economics and Business Administration, West University of Timișoara

³ PhD Student, *Faculty of Economics and Public Administration, Ștefan cel Mare University* of Suceava

Regarding the research typology, we can say that the report focuses on theoretical research (basic), with narrative character. The basic principle of these alternative methods are based on critical and analytical research indicating lack of objectivity in determining the actual value of the low degree of relevance / credibility of evaluation methods and their adaptation to the current economic climate incomplete.

The sources of information underlying this research are the specialized books relevant to the reference legislation, official documents, press releases, magazines and other documents issued by different national and international organizations working in the field of accounting (IASB).

Thus, in terms of current research predominantly present paper fits into a scientific approach that is intended to be positivist, not lacking the interpretativiste and critical approaches aimed to explain different concepts about the most appropriate methods evaluation of a certain intangible asset, highlighting the advantages or disadvantages, limitations and strengths of the implementation of these methods....

Issues concerning the definition and classification of intangible assets

The concept of intangible assets called in fr. immobilisation incorporelle is derived from the need to assess, account for and capitalize immaterial elements such as those resulting from exclusive rights given by original creation that take the form of patents, trademarks, industrial designs models, franchising, software, copyrights, etc., or items that are found to be true competitive advantages in the market such as research and development, relationships with suppliers and customers, quality management, internal organization schemes, location favored for business, commercial venue, the quality of the natural environment, the reputation of an individual, group or organization, contracts etc (Bănașcu, 2009, pg.94).

The attention to intangible assets appeared along with the notification of the significant differences between the market value of a company and its net book value. Basically, those involved were trying to identify the cause that made the enterprises, which had essentially the same financial, physical and human resources, to obtain different results.

Independently of measures and accounting rules, authors such as Stewart (1998), Blair (2001), Lev (2001) and Andriessen (2004) express their opinion on the impact of the intangible assets to create a substantial part of the value added of companies.

Karl-Erik Sveiby (2001, pp. 2-5), sees the intangible assets as an invisible assets that include individual skills of employees, internal structure and external structure of an economic entity.

Intangible assets are defined by Blair et al. (2001, pp.9-10) as non-physical factors that contribute or are used in producing goods or providing services, or factors that are expected to generate future benefits for individuals or companies witch are in control of using these factors.

An operational definition of intangible assets is given by Zaman Gh. (2009, pg.944) comprising identifiable non-monetary goods category, without physical substance, specific to the capital and intellectual property, including knowledge of the results of the research and development (embodied in the concept studies, scientific, treatises, documents, patents, innovative certificates etc.), brands or trademarks, trade secrets and industrial, advertising titles, software, copyrights, licenses to use , training activities and education etc.

Arthur Andersen (1992) apud Suciuc (2004, pg.16) deems them as those resources controlled by the company witch have the following attributes: assets that is not physical in nature; they are capable of producing net profits in the future; they are legally protected.

The solid definition assigned to intangible assets was given by Lev Baruch (1999, pp. 419-449), one of the most respected researchers that regard them as intangible resources capable of generating future economic benefits that can be controlled or at least influenced by

entity, and which were obtained as a result of events or past operations (eg. obtained from their own production or purchased), and may or may not be sold separately from other assets. The definition coincide completely with the one attributed to an asset by the International Financial Reporting Standards IAS / IFRS (conceptual Framework IASB).

The problem of measuring intangible assets is certainly not a novelty in itself in sense that it was subject of a numerous sets of regulations and accounting standards.

Therefore to evaluate the elements that make up intangible patrimony of a company is necessary, first, a correct *definition and identification* of these intangible elements. The definition, the criteria for classification and recognition, the methods of evaluating them are substantiated by national accounting regulations (OMPF 1802/2014 for the approval of accounting regulations on the annual individual and consolidated financial statements, published in the Official Gazette no. 963/30.12.2014) and those requested by the International Financial Reporting Standards (IAS/IFRS, 2013).

In the meaning of International Accounting Standards (IAS 38 "Intangible assets") intangible assets are defined as identifiable non-monetary asset, without physical substance. An asset is a resource that is controlled by the entity as a result of past events (for example, purchase or self-creation) and from which future economic benefits (inflows of cash or other assets) are expected. [IAS 38.8]

To recognize an intangible asset, IAS 38 recommends three critical attributes of an intangible asset:

- identifiability;
- control (power to obtain benefits from the asset);
- future economic benefits (such as revenues or reduced future costs).

The identifiability criteria: an intangible asset is identifiable when it [IAS 38.12]:

- is separable (capable of being separated and sold, transferred, licensed, rented, or exchanged, either individually or together with a related contract) or;
- arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

According to the same standard, an intangible asset is a resource controlled by the entity. However, an entity controls an asset if it has the opportunity to obtain future economic benefits and also if it has the power to restrict access to other entities at related benefits, which result from legal rights on which it can appeal to a court.

Future economic benefits that it can bring an intangible asset arising from the sale of products or services, the use or lease of assets or to reduce production costs further (Duțescu, 2001, p.161). IAS 38 require the enterprise to recognize an intangible asset, at purchase, if and only if it is possible for the company to obtain future economic benefits attributable to the asset, and the cost of the asset can be measured reliably.

Ministry of Public Finances 1802 / 12.29.2014 presents the types of intangible assets that can be accounted for in terms of their content and duration of depreciation, namely: expenses, development costs, concessions, patents, licenses, trademarks, similar rights and assets except those created entity, intangible exploration and evaluation assets of mineral resources, positive goodwill, other intangible assets; and advances to suppliers of intangible assets.

Intangible elements that can not be fully assessed and accounted are called "intangible resources invisible" or "intellectual capital" of the company (eg, knowledge and skills, staff loyalty, credibility company in dealing with business partners) they are considered by some authors as components of goodwill (Deaconu, 1998, pg.264).

IAS 38 requires intangible assets to be subject to the same evaluation rules as tangible assets, ie the evaluation of the input value (acquisition cost, production cost, fair value, etc), and evaluating at the balance sheet value (amortized cost and impaired revalued amount) (Duțescu, 2001, pg.161).

To assist companies to better allocate the cost of the business combination, IFRS 3 - Business Combination provides a list of examples of intangible assets that meet these two

criteria (separability and contractual law) and therefore are accounted for as an asset separately from goodwill (Firescu, 2009, pg.102).

This guide identifies six categories of intangible assets¹:

1. Marketing-related intangible assets: trade names, brands, services related trademarks, internet domain name, competition clauses, unique commercial design.

2. Customer-related intangible assets: customer lists; customer contracts and relationships associated with them; orders and delays in production; non-contractual customer relationships.

3. Technology-related intangible assets: ownership and proprietary technologies patented; software; databases; trade secrets etc.

4. Contract-related intangible assets: licenses and copyrights; contract of supply; leases; building permits; franchises etc.

5. Artistic-related intangible assets: theater, opera, ballet; books, magazines, newspapers and other literary works; musical works, paintings, photographs; audiovisual materials etc.

6. Goodwill. Factors that contribute to this resultant are likely objective: quality of management, technical competence and knowledge of staff; industrial know-how; establish resource supply; clientele, commercial venue, outlets, studies and research; reputation and image of the company (Fântână, 2006, pg.3).

The commercial fund represents a special situation. Again according to OMPF no. 1802/2014 - the commercial fund is usually recognized during consolidation and it represents the difference between the acquisition cost and the fair value of the part from the net assets purchased by an entity on the transaction date.

Within intangible assets usually distinction is made between identifiable and unidentifiable intangible. Identifiable intangibles include intellectual property (IP) such as patents, copyrights, trademarks, intellectual trade secrets, etc. Assets shown in the first group can generate future economic benefits, which is reflected in their cost. Assets shown in the second group, on the contrary, have no specific acquisition cost, and therefore are associated with a high degree of uncertainty and risk.

Identifiable		Non-identifiable	
Acquired from third parties	Generated internally	Acquired by another company	Generated internally
- Individually - As part of the business		Acquired or external goodwill	Internal goodwill (Intellectual Capital)
- R&D expenses - Industrial Property - Intellectual Property - Administrative concessions - Right of disposal - IT applications - Franchise		- Clientele - Localisation - Organisational structure - Prestige - Know-how - Human capital - Commercial channels	
Useful life determined ∇ amortized		Indefinite useful life ∇ tested for impairment	

Figure 1 – Identifiable intangible assets and non-identifiable

Source: Adapted from Cristina Álvarez Villanueva (2011), Towards a new model for evaluation of intangibles, Doctoral thesis, Universitat Jaume I, Castellón, pg. 3

¹ This classification framework has been adopted by IFRS 3 from “Business Combinations”- *Statement of Financial Accounting Standards, No. 141* (Norwalk, Conn.: FASB, 2001).

Another classification of intangible assets is the one proposed by the International Accounting Standards, which initially made the distinguish between generic intangibles (or goodwill) and specific intangible assets. Therefore under IAS 38, intangible assets are classified into purchased vs. internally created intangibles, and limited-life vs. indefinite-life intangibles.

Specific category of intangible assets can be classified in a lifecycle perspective such:

1. with a finite useful life is amortised (see IAS 38 paragraphs 97–106).
2. with an indefinite useful life *shall not be amortised* (see paragraphs 107–110) but in accordance with IAS 36, an entity is required to test an intangible asset with an indefinite useful life for impairment by comparing its recoverable amount with its carrying amount: annually, and whenever there is an indication that the intangible asset may be impaired.

Specifics of intangible asset valuation

Evaluating intangible assets involves understanding particular aspects of evaluation, determined primarily by the particular characteristics they have. It is considered that the assessment of intangible assets is for the assessor undertaking because in most cases their value is linked to an enterprise using those assets.

According to IAS 38 și IFRS 3 there are several features of the evaluation of intangible assets namely (Bănac, 2012, pp. 96-97):

- assessment of intangible assets is made at fair value (which in accordance with IFRS 2013 is a concept identical to the concept of market value as defined in the International Valuation Standards IVS 1 - Market value, based on the evaluation drafted by IVSC);
- if the intangible asset is measured by the method registered in the cost approach (eg. a management software) will take into account the savings tax (tax benefit);
- when two approaches are used, is selected the result of the and more credible approach, and not an average of the two approaches;
- when two procedures of the same valuation methods are used and result two different values (but similar) may be proposed as a final value, an average of the two results;
- always is privileged the result of the assessment, which is based on direct marketing information; in the case of intangible assets that are traded on the market, respectively, with either current trading prices of identical intangible assets (eg. taxi licenses, fishing licenses) or current transaction prices of similar intangible assets; in the second case some corrections are necessary to reflect differences between selected elements of comparison (ie differences between the evaluated asset and assets selected as appropriate equivalent).

The uncertainty about the future economic benefits, lack of control and lack of active markets that can assess the confidence in the intangible elements, made the regulators to be reluctant to adopt more liberal measures.

Classical approaches and methods of evaluation of intangible assets.

Methodological approaches and assessment methods (economic) are the same no matter of the type of property that is being valued, asset or business. We refer here to the methodology approved by the regulatory bodies in the field of evaluation which has theoretical fundamentals and is enshrined in assessment practices.

Classical methods used to assess intangible assets have some common elements with those used to evaluate tangible, such as the real estate sector. Important differences in most cases consist in to data availability, mean finding comparable transactions or relevant historical financial information. Often, comparable transactions or reference information needed to establish a logical and intellectual basis for intangible asset valuation conclusions are not available.

Evaluation of intangible assets (intangible) is the subject of International Valuation Standards Committee (IVSC), GN 4 - Valuation of Intangible Assets and prescribes the accounting treatment for intangible assets, analyze the criteria which an intangible asset must fulfill for recognition, specifies the carrying amount of assets intangible and sets out requirements for disclosure of intangible assets. Valuation standards acknowledge that "there are several assessment approaches, such as option methods....These approaches may be appropriate for assessing intangible assets in certain situations" (IVSC, 2010).

Assessment methods of intangible assets are presented in the three classical approaches for the evaluation of any type of property, some peculiarities concerning the names methods of evaluation as and the relevance / applicability thereof:

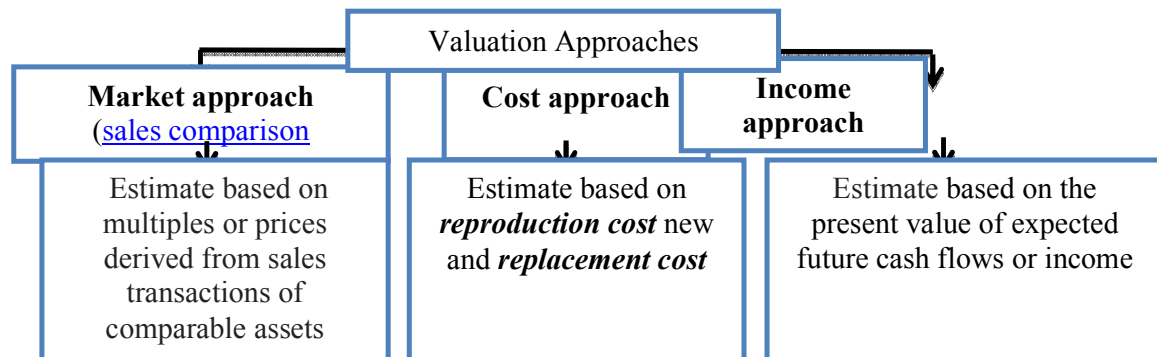


Figure 2 – Three approaches to valuing intangible assets
(Source: elaborated by the author)

The choice of method for a particular event within a specific situation always depends on the circumstances. In most cases it is necessary to use several methods for the evaluation due to the need of self-checking the results obtained (Nancu, 2013, pg.32). It also should not be ruled the possibilities that the appraiser to develop their own techniques and methods specific to a particular case, using elements of several methods.

Next, we will precede to the analyzing of these approaches, highlighting the advantages or disadvantages, limitations and strengths of the implementation of these methods, highlighting where is needed their incomplete adaption to current economic circumstances.

1. Cost approach is based on reproduction of an exact replica or something that is judged to be functionally equivalent.

To assessing an asset or a significant resource, to synthesize the qualitative and quantitative characteristics in a monetary value, means practical to attribute a value to this element patrimonial.

The goal of this evaluation is to measure the ensemble of future benefits which the using an intangible asset they can produce, based on the monetary resources necessary to replace that item with another identical, or at least to offer the same competitive advantage.

Cost approach includes the following methods	{	Historical cost Replacement cost Reproduction cost
When is used	{	Software Customers Workforce Disputes involving specific patents
What is consider	{	Profit/ loss "time to market" Taxes Remaining life (amortization/ obsolescence) Likelihood of success

Historical cost - involves identifying costs incurred over time with the development of that intangible asset and their updating the valuation date by a discount factor, calculated by considering an appropriate inflation index (Grosu, 2015, pg. 63).

Reproduction cost - consider recreating an intangible asset identical to that assessed (IVSC, 2010). It represents the estimated cost required to build on the assessment date and at current prices, an intangible asset identical to that evaluated, using the same materials, production standards, design and quality of the workforce, as in the case of intangible asset analyzed.

Replacement cost - measure the spending needed to develop an asset with the same utility and is suitable in situations such as determining a target price before negotiations or for calculating of a base for a suitable royalty rates or appropriate transfer pricing.

The objectivity of this approach is less consistent when information system does not allow assessing with certainty of the costs incurred to achieve this type of resource; also, this method does not take advantage of the opportunities of assessment technology nor development and its dissemination in the reference market.

The cost approach is most useful in cases where there is no revised economic activity, such as early-stage technology, producing no revenue yet.

2. Income approach

This approach estimates the value of an intangible asset by calculating the present value of profit, cash flow (cash flow) or savings generated of intangible assets, which they would get market participants, owners of intangible assets during lifetime useful / remaining contractual.

Schematic the income approach is presented as follows:

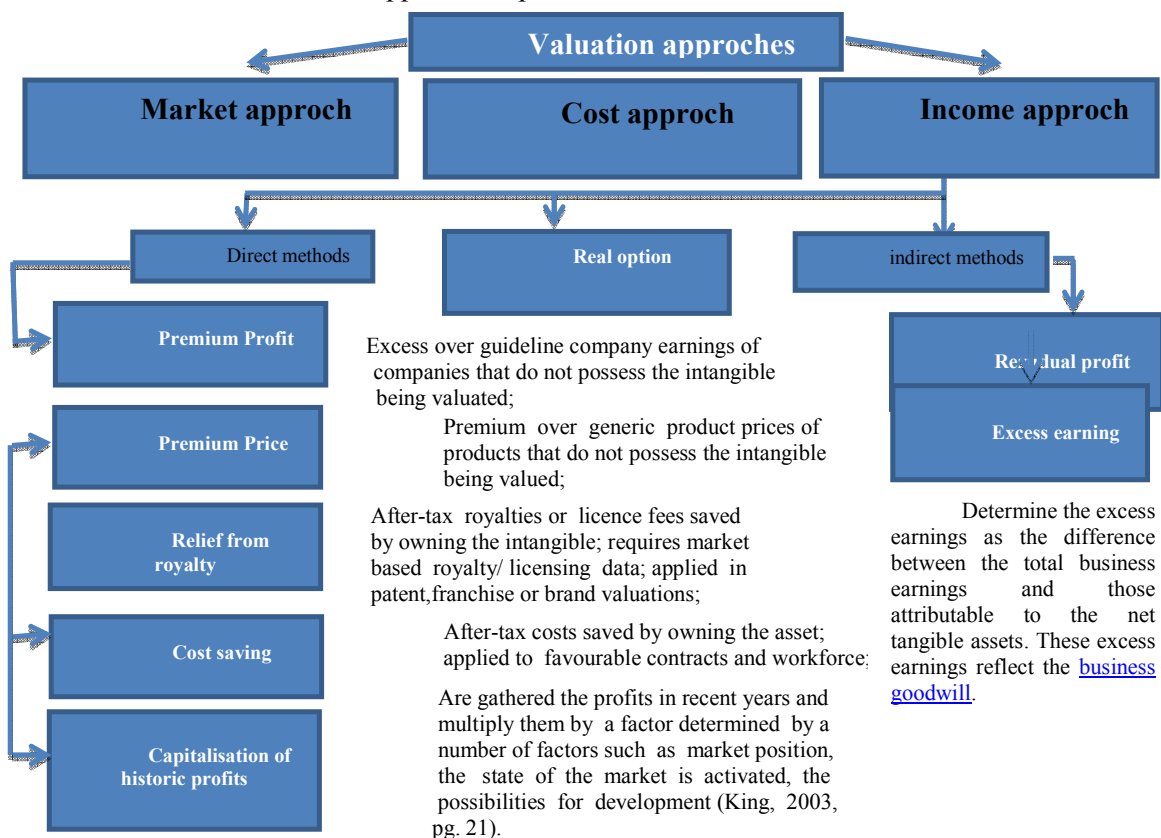


Figure 3 - Income approach

(Source: Adapted from Tony Hadjiloucas, *Intangible Asset Valuation*, April 2014, pg. 10)

3. Market approach

Underlying this approach sits the evaluation of asset by comparing values which were sold with other similar assets using multiples based on various factors, such as the relationship between price and income.

The approach is represented by the multiple method or the comparison, applied to certain benefits deemed to be related to the appraised item and can be characterized by the following methodological approaches (Zanconato, 2008): comparable transactions method, empirical multipliers.

The method is considered particularly good but its use may be limited by the lack of information necessary to ensure comparability.

Comparable transactions method (Valente P., et al, 2014, pg. 135) is based on recognition of a specific intangible element with a corresponding value to prices recent transaction compared to the valuation date, having as object similar goods. But lack of information may represent the weak point of this method, because it is necessary that the subject of transactions compared be homogeneous; otherwise the prices can not be compared.

The market multiples method - allows the evaluation of intangible asset by applying the multiples deemed to be appropriate, deductibles market. This method is obvious for listed companies operating in the same sector. Market multiples are involved in setting prices negotiated with operations financing extraordinary "deal". This method requires to have available market data, comparable, such as transaction values and conditions under which they operate.

Usually are used as a method of control because of shortcomings that characterizes them most times, especially when it is not possible to gain access to information and confidential data.

Methods based on market studies (Grosu, 2013, pp. 415-423): Interbrand, brand rating and value of customer relations - have the aim to assess it, to identify factors that can be converted quantitatively and thus transformed into multiples of economic value.

The model Interbrand is based on brand strength, reasoning based on the following aspects: leadership (market position); stability mark (customer loyalty); market; internationalization; Long-term development trends; maintaining market - investment in marketing, in order to protect the brand; legal protection.

Multiple value is determined based on the scores awarded for each factor separately and then applied to the profit differential calculated on the last three years.

In practice, this approach is often used as a testing instrument given the fact that in most cases intangible assets are unique. One of the reasons for which the comparison approach is usually not the main approach consists in the fact that market that are traded intangible assets infrequently can be considered an active market (Anghel, 2010).

Points of view of the grouping of methods of quantifying of intangible assets

In literature there are many methods used to quantify intangible assets. Sveiby's works (2002), Bontis (2001), Bontis et al. (1999), Luthy (1998) Petty, Guthrie (2000) and Andriessen (2004) identified more than 30 different methods. The large number of methods is probably the result of research on intellectual capital and intangible assets resulted initially from desires of practitioners to create and develop sophisticated measurement tools and methods, which meant a great progress (Bontis, 2002, pg.623).

Some perspectives, goes beyond the simple accounting measures and believes that expenditure carried as the investments should be assessed in accordance with the yield investment.

1. In his work "Methods for Measuring Intangible Assets", **Karl Erik Sveiby** (2001) based on the classifications suggested by the Luthy and Williams propose a grouping of

intangible asset valuation methods encountered in practice into four groups namely (Firescu, 2009, pg. 107):

a) Direct Intellectual Capital methods” – DIC, involves estimating the value of intangible assets by identifying and evaluating each of its components identified, and once these components are identified, are evaluated directly, individually or as an aggregated coefficient.

For example: Technology broker, Inclusive Valuation Metodology

b) Market Capitalization Methods - MCM: it involves calculating the difference between the market capitalization of the company and shareholder's equity.

For example: Tobin's Q

c) *Return on Assets methods* - ROA method consists of calculating ROA by reporting average enterprise income before tax for a period of time, the average tangible assets of the company, and comparison the result obtained of industry media of company. The difference is multiplied by average tangible assets of the company to calculate an annual average intangibles.

For example: Economic Value Added (EVA); MVA

d) Scorecard Methods - SC: are identified the various components of intangible assets and are generated indicators and indices which are reported in a sheet scores (scorecards) or as graphs. Methods DIC and SC are similar methods, except that there are not making monetary evaluation of intangible assets.

For example: Intangible Assets Monitor, Scandia Navigator, IC Index

These methods offer different advantages and disadvantages. Methods such as MCM and ROA are useful both in mergers and acquisitions, and in the case of the capital market. The methods can be also used when comparing companies in the same field. Expressing everything in value terms these methods can sometimes be insufficiently relevant and even superficial.

2. Manfred Bornemann et al. (2003) according to financial criteria, he grouped methods into two groups, each in turn comprising four subgroups (Miclea, 2013, pg.1000):

a. *monetary methods* (based on market transactions, based on cost, discounting future revenues, "real options") - uses financial indicators, but they are impractical for the following reasons: lack of the market as the basis for measuring generally the cost does not reflect the real value, can not predict with accurately, discounting factor is difficult to determine;

b. *non-monetary methods* (method structural, balanced scorecard, methods which reflect processes, EFQM) - generally use both financial indicators and non-financial and they following disadvantages: the indicators used are usually not comparable with competitors or others industry; indicators should be interpreted according to the conteyxt in which lies the enterprise (market, product life cycle, the degree of development of the enterprise, etc.).

Taking into account the opinion of Sveiby (2001) we believe that the most comprehensive and complete classification of methods of quantifying intangible assets is provided us the European Commission's work "Study on evaluating intangible assets and associated reporting practices":

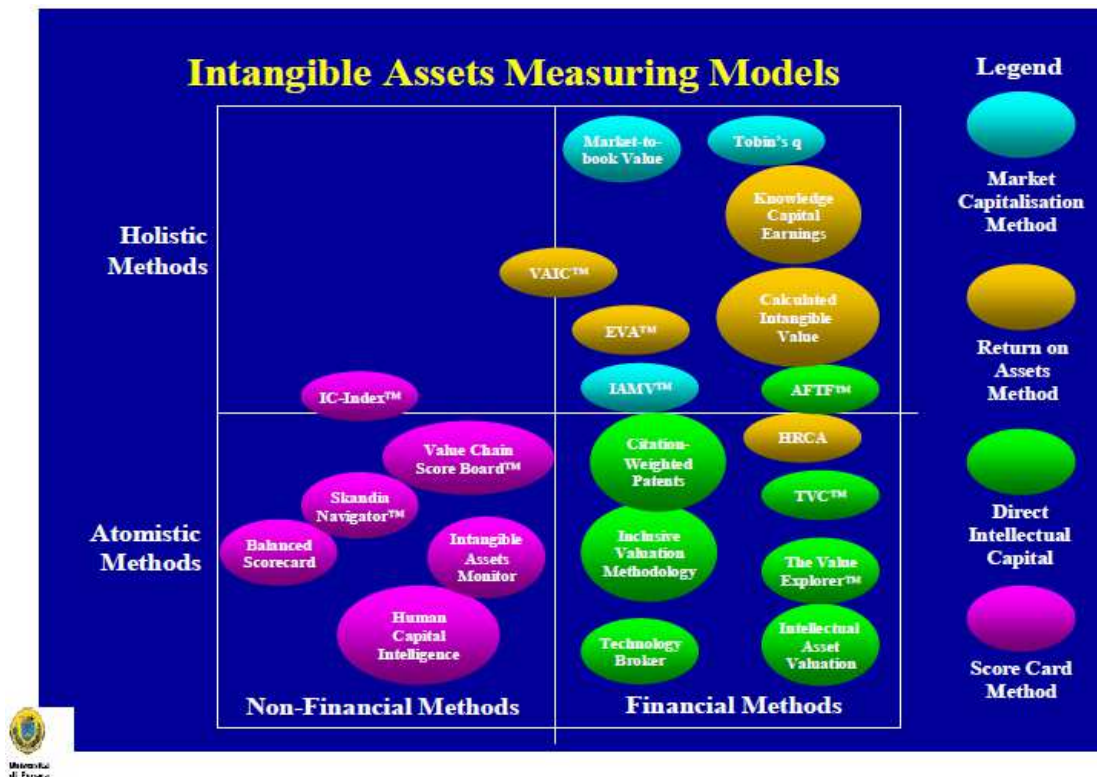


Figure 4 - Grouping of methods of quantifying of intangible assets

Source: Adapted from Zambon S. (2010), Intangibles & IC: Accounting, Regulation & Reporting, WIPO Headquarters, Geneva, 1-2 December, pg. 19

Overall, if we analyze existing methods of measurement of intangible assets, It can be noted two main trends, the assigning a financial value and to measure through the of performance.

In the first case, applying traditional models of assessment proves to be very difficult because in most cases can not identify a revenue stream clearly to that asset and in the determination of the value based on transactions of sale on market for most of intangible assets does not exist such a market.

In the second case, most authors suggest the idea to not only use financial metrics because they do not reflect the true value of the company.

Conclusion

We mention that in studying the intangible assets we faced many obstacles due to the lack of predetermined criteria in defining and identifying them. The problem of definition and the conceptualization of this asset is underestimated, which is why it's not surprising that for a entity, evaluation, recognition and reporting of information on this subject are chaotic, unimportant and credibility.

Most definitions associated with the concept of intangible assets found in the literature (particularly in the area of accounting) make reference to that susceptible element which can be associated with another intangible asset or tangible given it can generate future economic benefits to an entity ..

The evaluation methods developed so far appears to be ineffective to achieve a complete representation of all items owned by a company, regardless of their nature; what is lacking these methods is that there is not harmonization between the proposed method of

accounting doctrine that are still fragmented and in some cases overlapping of which evidently results, data and information with certain limitations.

The problem of the valuation of intangible asset remains an ongoing challenge and the existing criticisms currently, refers on that traditional balance sheet that does not contain the full amount of all related intangible assets, value which currently holds increasing share in a company's value and have potential all more strongly in its growth prospects. There are also numerous applicative researches, that clearly demonstrates that everything means future economic growth is based on factors the nature of collective knowledge, the management skills, in the capacity for innovation and development of trademarks and other intangible.

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IFRS 8 OPERATING SEGMENTS: GENERAL CONSIDERATIONS REGARDING THE MANAGEMENT APPROACH

Cristina Aurora Bunea-Bontas¹

Abstract:

The aim of this paper is to discuss some general considerations regarding the management approach contained in International Financial Reporting Standard (IFRS) 8 Operating Segments, issued by International Accounting Standards Board (IASB) in November 2006. Using this approach, the IASB promoted a disaggregated information based on the internal organization of the entity, in order to contribute to more relevant segment information by allowing the users to analyze companies' performances through the management view and, thus, supporting a better consistency between the segment information represented in the financial statements and the information disclosed in the internal management reports.

Key words: IFRS 8, operating segments, the management approach.

JEL classification: M41.

1. Introduction

In order to explore new markets or to reduce operating risks, many companies have diversified their operations, developing various lines of businesses and operating in different geographic locations.

For these companies, segmental information is an essential management instrument because it allows management to monitor performance, allocate resources and conceive profitable market strategies (Grand Thornton, 2009). On the other hand, it helps financial statements users better understand the entity's performance, assess its future profitability, and make more informed judgments about its activity as a whole (Li, 2013).

Segmental reporting has always been a matter of concern for standard setters, being mandatory for entities that engage in more than one significant business to provide information concerning their business segments and/or geographic areas.

In this regard, International Accounting Standards Board (IASB) issued the IFRS 8 *Operating Segments*, which became effective for accounting periods starting on or after 1 January 2009. This Standard replaced International Accounting Standard (IAS) 14R (Revised 1997) *Segment Reporting* and converged, except for minor differences, with Statement of Financial Accounting Standard (SFAS) 131 *Disclosures about Segments of an Enterprise and Related Information*, issued by the Financial Accounting Standards Board (FASB). IFRS 8 was endorsed for use in the European Union in November 2007.

The core principle of IFRS 8 requires an entity to: "...disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates" (IFRS 8, para 1).

The Standard introduces a '*management approach*' for identifying and measuring the financial performance of an entity's operating segments, meaning that reported segment information is based on the information used internally by management.

The management approach is based on the way in which management organizes the segments within the entity for making operating decisions and assessing performance. The segments are evident from the structure of the entity's internal organization and the information reported internally to the chief operating decision maker (CODM).

This is a different approach from IAS 14R and has the potential to emphasize sensitive information to users of financial statements as well as to the competitors. In that way,

¹ Lecturer PhD., Constantin Brancoveanu University of Pitesti, Faculty of Management Marketing in Economic Affairs of Braila, bontasc@yahoo.com.

financial statements users are able to see the entity through the eyes of management (KPMG, 2010). Consequently, management needs to understand the requirements of IFRS 8 and think carefully about what the required disclosures say about the way that they manage the business (Grand Thornton, 2009).

2. Differences between IFRS 8 and IAS 14R

The essential difference between IFRS 8 and IAS 14R refers to the identification of the segments. IAS 14R required identification of two sets of segments, one of them being based on related products and services, and the other on geographical areas. IAS 14R regarded one set as primary segments and the other as secondary segments. On the contrary, IFRS 8 requires segments to be identified based on the management approach that is related to the internal reports that are regularly reviewed by the chief operating decision maker for purposes of evaluating performance and making resource allocation decisions (IFRS 8, IN11).

The primary reason for the change in reporting segment information is to enable financial statements users to evaluate the entity's information from the management perspective.

The objective of IAS 14R was to establish principles for segment reporting by line-of-business and by geographical areas. The criteria for defining operating segments and disclosing related information were not limited solely for management reporting purposes. Therefore, according to IAS 14R, entities could prepare different types of segment information, the information viewed internally by management and the information reported externally. In many cases, these different sets of reporting caused concerns to financial statements users in that the flexibility in the application of the segment definition under IAS 14R provided few relevancies on how a company manages its segment operations (Li, 2013).

IFRS 8 fundamentally changes the reporting of segment information on a company's financial statements. It requires much of the management information to be published externally so that investors, analysts and other users of entities' financial statements can review the entity's operations from the same perspective as management.

Also, IFRS 8 requires judgement in its application. Management should consider the key principle as it determines its segment disclosures rather than relying on a set of rules (PricewaterhouseCoopers, 2008). The key concept is that the entity should provide information used by management that will allow users to understand the entity's main activities, where those activities are located and how well those activities are performing.

Other important change concerns the measurement of segment information. IAS 14R required segment information to be prepared according to the accounting policies adopted for the preparation and presentation of the consolidated financial statements. IFRS 8 requires the amount reported for each segment item to be the measure reported to the chief operating decision maker for the purposes of allocating resources to that segment and assessing its performance (IFRS 8, IN13). Operating segments are measured as reported to management.

In contrast to IAS 14R, IFRS 8 does not define segment revenue, segment expense, segment result, segment assets and segment liabilities, but requires an explanation of how segment profit or loss, segment assets and segment liabilities are measured for each operating segment.

As a consequence, under IFRS 8 entities have more discretion in determining what is included in segment profit or loss, being limited only by their internal reporting practices (de Graaf, 2011).

Table no. 1. Differences between IFRS 8 and IAS 14R

	IFRS 8 <i>Operating Segments</i>	IAS 14R <i>Segment Reporting</i>
Reporting segments	Management approach Operating segments are identified based on the internal reporting of financial information to the CODM.	Risk and rewards approach Reporting segments are identified based on the dominant source and nature of an entity's risk and rewards that are products / services, or geographical areas.
	Includes components that sell primarily to other components.	Looks only to external revenue.
Measurement	Operating segments are measured as reported to management. Requires explanations on how disclosure items for each operating segment, such as profit or loss, segment assets and segment liabilities, were measured.	Measures used in financial statements. Defines how to measure disclosure items, such as segment revenue and expenses, segment asset and liabilities.
Disclosure	Requires disclosure about factors used to identify the operating segments and explanations on the types of products or services from which the reportable segment derives its revenues. Requires disclosure of how much of the segmental information is reviewed by the CODM.	Specifies the items that must be disclosed for each reportable segment.

3. Benefits and concerns regarding the management approach

Several advantages as well as concerns have been expressed regarding the usefulness of the management approach adopted by the IFRS 8.

The report of the Directorate-General for Internal Market and Services – a service of European Commission - regarding the analysis of potential effects of IFRS 8 endorsement in EU, points out the potential benefits of the Standard (European Commission, 2007). Some of these are summarized below:

- The use of the management approach has a positive effect on the quality of the segment information, increasing its usefulness and relevance. This approach has the advantage of grounding the definition of segments in corporate practice (Véron, 2007). Users generally see value in the management approach so long as it does not lead to distortion of the economic depiction of operations.

- The increased usefulness and relevance of the segment information based on the management approach outweigh concerns expressed about the comparability of financial reports. IAS 14R did not always ensure comparability and stability of segmental information. Moreover, comparability is not the criterion that should necessarily prevail over the accurate presentation of organisational structures and risk exposures.

- IFRS 8 appropriately addresses the global needs of financial statements' users for geographical disclosures and does not reduce this information in practice compared to IAS 14R.

- IFRS 8 provides appropriate segment reporting rules for smaller listed companies. All listed companies, regardless of size, should provide similar information as the needs of

investors do not substantially differ based on company size. Therefore, there is no reason for special rules concerning segment reporting for these entities.

The management approach should be less expensive for entities, as it includes information already prepared for internal reporting purposes (Mantziou, 2013). The IASB maintains that, because the segment information required to be disclosed are readily available, it should help entities save time and money.

At the same time, many concerns about the management approach have been expressed, considering primarily the competitive harm that may occur by disclosing too much internal information (Mantziou, 2013; Li, 2013). The disclosure of certain confidential information raises management concerns that potential competitive prejudice would be generated by unveiling strategic plans of the company to competitors. Also, the disagreement on adopting the management approach is based on the opinion that the segment information was most useful for investors when it was based upon economically similar or related product/service lines or geographical factors, as IAS 14R required.

In commenting on ED (Exposure Draft) 8 *Operating Segments* (issued by the IASB in January 2006), there were arguments that it is inferior to IAS 14R because segment information does not have to be reported on the same basis as the financial statements using IFRS. To counter this criticism, the final IFRS 8 required increased disclosure regarding the basis on which the information has been prepared. Overall, the IASB believed the benefits of the management approach, together with some expanded disclosure, would outweigh the lack of comparability that might arise (Ernst & Young, 2009).

Other concern relates to the content of segment information that is the financial disclosures which are made for each segment. IAS 14R required consistency with definitions of financial aggregates in the consolidated financial statements. IFRS 8 allows for much more discretion and for inconsistent aggregates, e.g. the use of EBITDA or other measures of performance which are not used in the consolidated financial statements. From this perspective, concerns were expressed that IFRS 8 would lead to larger difficulties if adopted in the EU because EU member states have diverging traditions of financial reporting and no unity of accounting enforcement (Véron, 2007).

Also, there might be severe inconsistencies in the content of segment information because the frequent internal reorganisations would result in a loss of trend data.

Geographical information is important to financial users to understand risks, especially those linked to country or regional factors. Regarding the geographical information, IAS 14R required a number of geographical disclosures by all companies. On the contrary, IFRS 8 allows companies to avoid providing geographical information on grounds of the cost of producing it. Geographical segments are required to the extent that they are considered as operating segment regularly reviewed by the CODM.

In order to address the concerns expressed regarding the implementation of IFRS 8, IASB has conducted a post-implementation review process beginning with Q1 2012. The report was published in July 2013. IFRS 8 was the first Standard that was subject to a post-implementation review by the IASB. The key findings are summarized below:

- regarding the use of the management approach, the information provided to the post-implementation review confirmed many of the IASB's expectations when it issued IFRS 8, making easier the communication by management with investors;
- the incremental costs of the implementation of IFRS 8 were low;
- general opinion of the preparers was that the Standard meets their expectations; also auditors, accounting firms, standard setters and regulators generally support the Standard, but have made some suggestions to improve its application; and
- investors views were mixed. Some of them preferred to have information about how management views the business, according to the IFRS 8 requirements. When all aspects of

an entity's reporting align so that operating segment information in the financial statements, management commentary and presentations to analysts all agree, this provides more detailed, integrated information to them. Still, other investors expressed concerns about a segmentation process that is based on the management approach. In their opinion, this approach creates the premises for reporting segments in such a way as to obscure the entity's true management structure or to mask loss-making activities within individual segments (IASB, 2013).

4. Conclusions

Under IFRS 8, the reported segment information is required to be the information actually used by management for making operating decisions and evaluating performance of the business segments.

The Standard requires the amount reported for each operating segment item to be the measure reported to the chief operating decision maker for the purposes of allocating resources to the segments and assessing its performance.

The adoption of the management approach results in the disclosure of information for segments in substantially the same manner as it is reported internally and used by the entity's CODM.

The management approach means that:

- the way entities identify segments and measure and present segment information could change;
- there might be more diversity in reported segment information;
- segment information may not be measured in accordance with IFRS – entities are required to reconcile segment financial information to the consolidated financial statements; and
- entities are no longer need to prepare two sets of information for internal and external reporting (PricewaterhouseCoopers, 2008).

Adopting the management approach has benefits and disadvantages. Some of the benefits are the following: achieves convergence with US GAAP, that is SFAS 131; improves users' ability to predict future results and cash flows; points out risks that management think are important; is less expensive, as it includes information already prepared for internal reporting purposes. Concerns are related to the following aspects: inconsistent segments may be reported between entities, because the internal organization of each entity might differ; frequent internal reorganizations would result in a loss of trend data; and the segment information disclosed is measured on the basis used for management reporting, thus non-IFRS measures used by management may not be understood.

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THE EVOLUTION OF THE ROMANIAN COURT OF ACCOUNTS' PERFORMANCE EVALUATION SYSTEM IN THE PERIOD 2014-2015

PhD. Candidate Ilidor Tiberiu, Pleșa¹
PhD. Ion, Stegăroiu²

Abstract

This paper aims to analyze the performance in terms of specific activity (control and audit) carried out by the supreme audit institution in Romania, the Court of Accounts. It also presents the relationship between auditees and the Court of Accounts in 2014, following the assessments made on the basis of questionnaires sent to the auditees after audits completion.

The paper also examines the evolution of the performance evaluation system of the Romanian Court of Accounts in the period 2014-2015, which seeks regular analysis of how audit and control activities are realized and distributed in order to identify strengths and weaknesses appearing in public external auditors' work and the solutions that may improve the institution's activity.

Finally, it presents the quality assurance and control activity regarding the specific activity of the Romanian Court of Accounts.

Keywords: control, audit, management, performance, supreme audit institution, public finances.

Jel Code: M10, M40.

1. Introduction

Theodore Poster defines performance as a "process of defining, monitoring and use of objective indicators that, regularly used, indicate the level of performance of an institution or program of government or nonprofit sector" (Theodore H. Poister, 2003, pag. 3).

"Performance management is an omnipresent term in today's business environment, being included in various disciplines and being used at all organizational levels" (Brudan, 2010).

However, there are differences between the performance understood in private area that, most often refers to economic indicators touched, respectively revenue or profit and the performance within the public system, which is more difficult to quantify.

The Romanian Court of Accounts is a public authority of constitutional rank, which aims is set out by article 140 par. (1) of the Romanian Constitution, which provides: "Art. 140 (1) The Court shall exercise the control over the formation, administration and use of the financial resources of state and public sector ... »", thus representing the supreme audit institution and control of the Romanian state.

The importance of this institution is vital for the proper functioning of a democratic state, member of the European Union.

A strong and independent Court of Accounts ensures a climate of stability, especially in conditions of economic crisis, as it was the case of the recent financial and economic crisis that started in 2008 and which affected all of Europe.

The importance of the Supreme Audit Institutions is recognized at the United Nations, being adopted at the 69th General Assembly a new resolution that clearly defines the necessary conditions for the effective functioning of these institutions in order to promote sustainable development of public administration internationally. It's about the UN resolution A/69/228 Promote and encourage efficiency, accountability and transparency of administration by strengthening supreme audit institutions (adopted in December 2014), which complements the UN Resolution A / 66/209 on the independence of Supreme Audit Institutions, adopted in 2011.

¹ The author is PhD. Candidate at "Valahia" University of Târgoviște, e-mail: tiberiu.plesa@gmail.com

² The co-author is PhD. at "Valahia" University of Târgoviște e-mail: tiberiu.plesa@gmail.com

The Romanian Court of Accounts is organized as a collegiate body, consisting of 18 counselors of accounts appointed by the Romanian Parliament for a term of 9 years, which cannot be extended or renewed. The executive management is ensured by the Court of Accounts' President and two Vice-Presidents.

The Court's staff is composed of specialized personnel (external public auditors, performing the Romanian Court of Accounts' specific activity of audit and control), public servants and contractual staff.

Together with the Romanian Court of Accounts is working the Audit Authority for external funds granted to Romania in the accession period, as well as the funds granted to Romania's post-accession, as a Member State of the European Union. The Audit Authority is headed by a president and two vice presidents, members of the Romanian Court of Accounts' Plenum.

In terms of organizational structure, the Romanian Court of Accounts includes a central structure (12 departments led by a counselor of accounts), 42 County Chambers of Accounts (which provide audit and control at the local level) and 8 regional audit offices (territorial structures of the Audit Authority).

The specific activity carried out by the Romanian Court of Accounts is represented by three types of audits under the Regulation on the organization and carrying out the specific activities of the Court of Accounts, and the documents resulting from these activities:

- "compliance audit (control): activity designed to verify and monitor whether the management of public and private patrimony of state and administrative-territorial units and also whether the execution of revenue and expenditure budgets of the controlled entity are consistent with the purpose, objectives and tasks set out in the regulations by which the entity was founded and whether it complies with the principles of legality, regularity, economy, efficiency and effectiveness;

- financial audit: activity which seeks whether the financial statements are complete, accurate and in compliance with laws and regulations and whether the governance of public and private patrimony of state and administrative-territorial units and the implementation of revenue and expenditure of the audited entity are in accordance with the purpose, objectives and tasks set out in regulations by which the entity was founded and the compliance with the principles of legality, regularity, economy, efficiency and effectiveness, while providing an opinion to this effect.

- performance audit: an independent evaluation of the way that an entity, program, project, process, activity or operation works in terms of economy, efficiency and effectiveness"(Regulation on the organization and carrying out the specific activities of the Court of Accounts, and the documents resulting from these activities, 2014, art.5, page 6).

2. Performance evaluation system of the Romanian Court of Accounts in 2014

In 2014, the Romanian Court of Accounts introduced experimentally the "Performance Evaluation System of the Court of Accounts", which seeks regular analysis of how control and audit activities are realized and distributed, in order to identify the strengths and weaknesses that appear in the activity of the specialized personnel (external public auditors) and to find solutions that can improve the Court of Accounts' performance and public financial management of the examined entities.

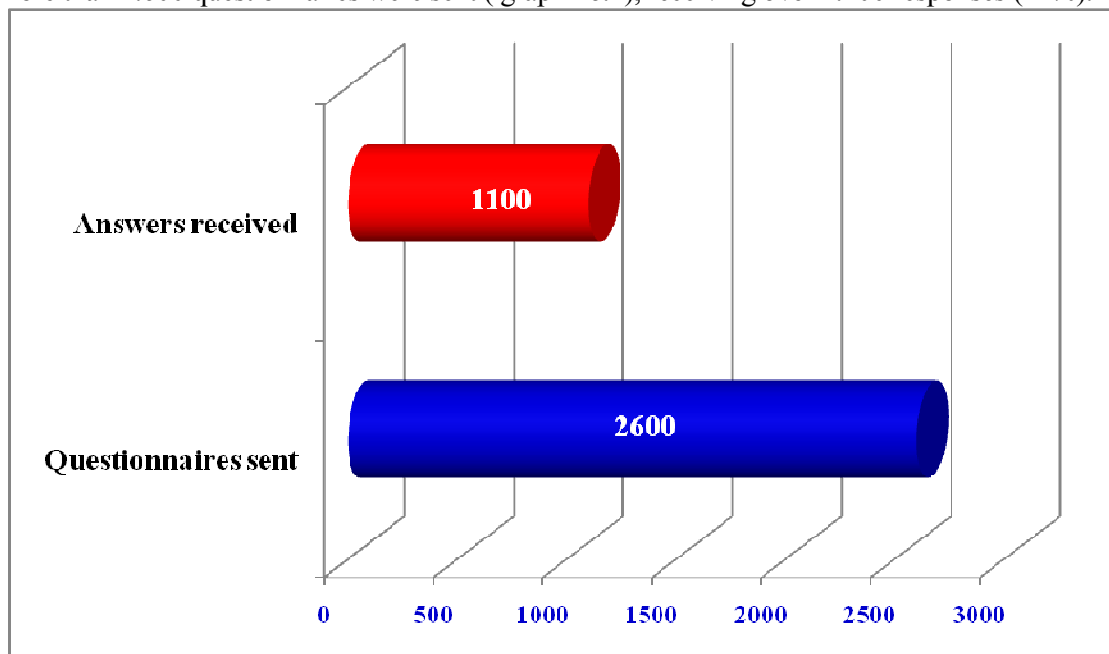
One of the most important indicator used is "Opinion of the examined entities' management on the quality of the audit performed by the Court of Accounts and its impact on the examined entities, as well as on the compliance by external public auditors with ethical principles and values" by which the Romanian Court of Accounts has implemented a provision of the ISSAI¹ 30 Standard – INTOSAI¹ Code of Ethics, according to which the

¹ ISSAI- International Standards of the Supreme Audit Institutions

Supreme Audit Institutions (including the Romanian Court of Accounts) should obtain information about the stakeholders' perception of the independence and impartiality of the external public auditors during audit and control.

The information are obtained through questionnaires that are sent electronically to all audited entities, after the completion of the audit and control actions. Subsequently, this information is used to express and measure this indicator.

According to the Romanian Court of Accounts' Annual Public Report for 2014, in 2014, more than 2.600 questionnaires were sent (graph no.1), receiving over 1.100 responses (41%).



Graph no. 1 - Difference between the questionnaires sent and responses received on the relationship between the entities audited and the Romanian Court of Accounts in 2014

Most entities who responded to those questionnaires (71%), assessed the relationship between them and the Court of Accounts as "very good", (graph no.2).

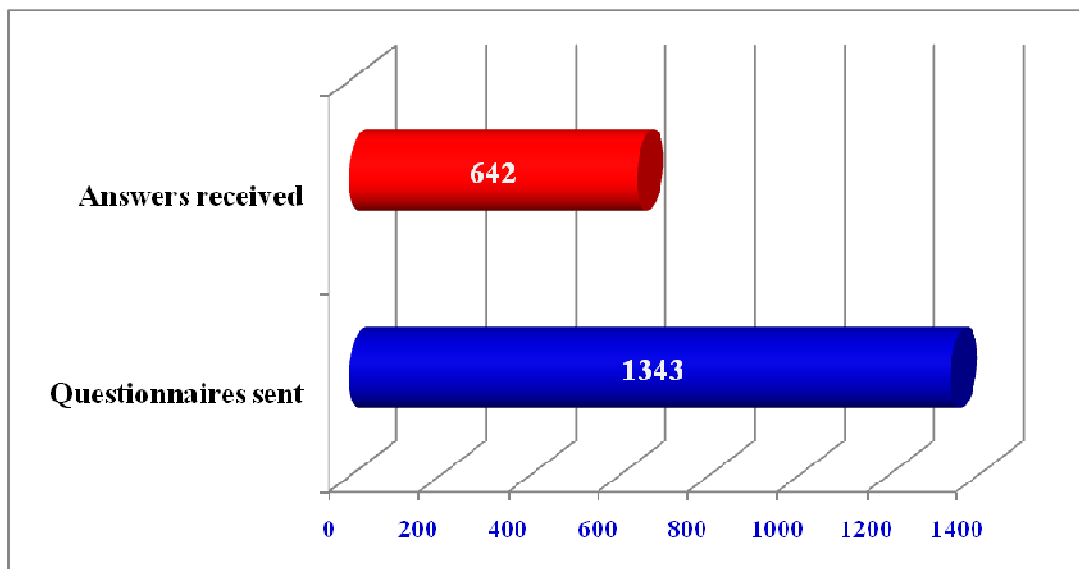


Graph no. 2 – The relationship between auditees and the Romanian Court of Accounts following the assessments based on questionnaires addressed to the auditees after completing the audits

¹ INTOSAI – International Organization of the Supreme Audit Institutions

3. Performance evaluation system of the Romanian Court of Accounts in 2015

Compared to 2014, in the first half of 2015 the Romanian Court of Accounts has sent over 1.343 questionnaires, being received over 642 responses, representing a 48% response rate (graph no.3).



Graph no. 3 - Difference between the questionnaires sent and responses received on the relationship between the entities audited and the Romanian Court of Accounts in 2015

Compared to 2014, when they were sent 2,600 questionnaires, in 2015 there were sent fewer questionnaires, respectively 1343.

The Ethics Committee has developed, based on the conclusions from the analysis of questionnaires, a quarterly report that was presented to the Romanian Court of Accounts Plenum. This Committee is a working structure subordinated to the Court Plenum, whose main tasks is monitoring ethics and integrity of the specialist staff, respectively external public auditors.

The Romanian Court of Accounts decided that the directors of the specialized structures must analyze and present to the external public auditors subordinated the issues identified through the questionnaires, including criticisms of auditees. All these aspects will be presented both in public external auditors monthly meetings and during training sessions.

4. Quality assurance and control in the specific activity of the Romanian Court of Accounts

Within the Romanian Court of Auditors, the activity of quality assurance is carried out in two stages: first, it is performed during the specific activities of the Court of Accounts, and in the second stage is carried out after the completion of specific activities, at the compartment assessing the specific activities of the Court of Accounts.

The evaluation of the activities' quality of control / audit carried out by the structures of the Romanian Court of Accounts is based on the provisions of section 452 of the "Regulation on the organization and activities specific to the Court, and the documents resulting from these activities" and paragraph 1.6 of the "Standard on quality assurance and control in auditing" from the Romanian Court of Accounts' Audit Standards.

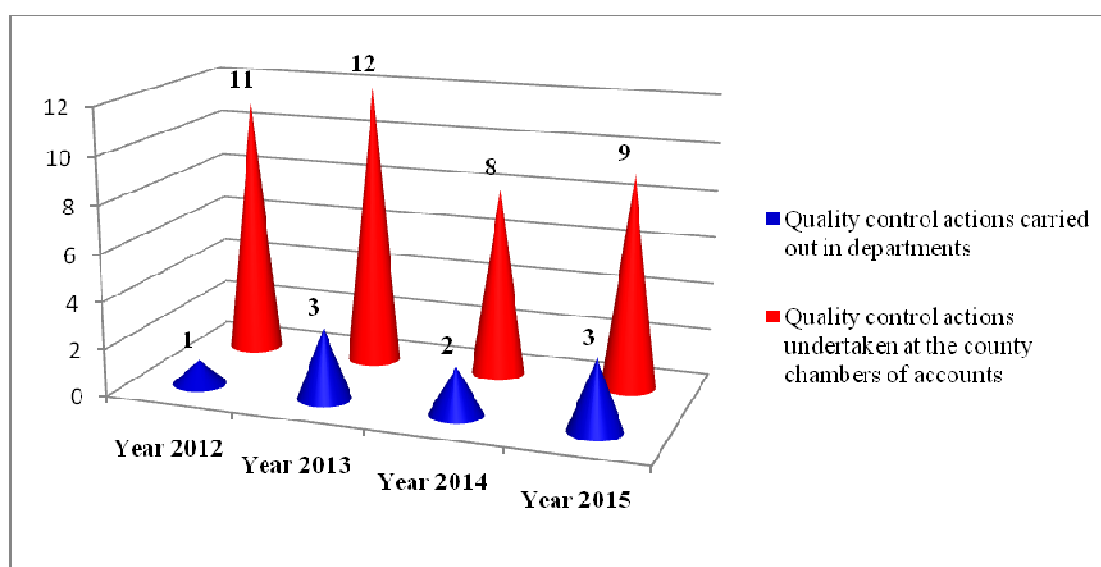
The purpose of this type of evaluation is to ensure continuous high quality output of the quality of the Romanian Court of Accounts' specific activities.

In the period 2012-2015 there were organized several actions of quality control (table no.1), as follows:

Table no. 1

No.	Year	Quality control actions carried out in departments	Quality control actions undertaken at the county chambers of accounts	TOTAL
1	2012	1	11	12
2	2013	3	12	15
3	2014	2	8	10
4	2015	3	9	12

Source: The Romanian Court of Accounts' activity reports (2012, 2013, 2014 and 2015)



Graphic no. 4. Graphical representation on quality control actions undertaken at the level of departments and county chambers of accounts.

Analyzing the data in the table above, it can be noted that the activity of quality control in the specific activity of the Romanian Court of Accounts for 2012-2015 took place mainly at local chambers of accounts, most of the actions taking place in 2013, respectively 15 actions (graph no.4).

This activity is conducted by the special assessment compartment established and it is based on an inspection program approved annually by the executive and approved by the Romanian Court of Accounts Plenum. This program is designed to ensure the verification of each structure of control / audit at least once to every 5 years, but there can be made also ad-hoc inspections ordered by the Romanian Court of Accounts management.

Conclusions

Performance management is a long term investment, whose effects can be seen from the results achieved. The measurement of the results obtained must be closely related to the stages of the implementation of performance management system, starting with the measurement of the objectives established, thus indicating the level of targets set.

Key performance indicators helps to quantify the achievement of a result, providing visibility in relation to performance, allowing in the same time the decision makers to take

action to achieve the desired goals. These indicators are key elements of process measurement and performance monitoring.

The main purpose of the performance indicators of the Romanian Court of Accounts is to determine all employees to act so as to achieve the objectives set out in the Court. The performance indicators are chosen so as to meet the strategic objective, i.e. the target reflecting strategic objective or intermediate values corresponding to the progress achieved.

In addition to the performance indicators, an important role has the quality assurance in the specific activity undertaken by the Romanian Court of Accounts, namely control and audit. A combination of these two elements, the performance indicators and quality control, helps to increase the efficiency of the institution.

Regarding the role of management, it should create an appropriate environment, for the employees to understand the benefits of performance measurement and their roles and how their efforts contribute to the success of the institution.

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FEATURES OF INTERNAL CONTROL MANAGEMENT IN HIGHER EDUCATION INSTITUTION

Boldureanu Daniel ¹,
Boldureanu Gabriela ²

Abstract:

Internal control management and management audit of public institutions are dynamic and constantly evolving processes. Within higher education institutions these processes have a number of common features and particularities specific for education field.

The article analyzes the development program of audit and management control system in institutions of higher education in Iasi. From this study we can identify and summarize a series of measures that could contribute to the development and qualitative improvement of the current situation of Romanian higher education.

Keywords: *internal control, management audit, management, audit system.*

JEL Classification: M 10.

1. Introduction

In the current economic crisis, management control and management audit are considered the main tools to achieve the organization's objectives.

Internal audit is a profession that is based on a benchmark framework recognized worldwide, even if the variety of environments in which it is practiced, it must be adapted to take into account the specificities laws and regulations of each country's rules governing certain sectors (banking, for example) or simply the size and organizations culture.

În țara noastră activitatea de audit managerial a fost reglementată relativ recent (Legea nr. 672/2002 privind auditul public intern), iar activitatea de audit intern din cadrul instituțiilor publice trebuie abordată într-un mod diferit, european, față de cel în care se desfășurase până la acea dată.

In our country management audit was recently regulated (Law no. 672/2002 on public internal audit) and internal auditing activity of public institutions must be approached in a different way, European way, from that was being carried out before.

Very close, until a few years ago, by the accounting and financial function, internal audit is currently subordinate leaders of organizations and is a well organized profession with increasing influence (Renard 2002, Mitea Adrian et al, 2006: 14). The same trend is noticed in public educational institutions, but with specific features of the educational field.

2. Literature review

According to Order no. 400/2015 approving the internal/managerial control code for public entities, internal control / management is defined as "all forms of control exercised at the level of the public entity, including internal audit, established by management in accordance with its objectives and legal regulations, to ensure the administration of public funds economically, efficiently and effectively; it also includes organizational structures, methods and procedures. "

Within that order which complements the Government Ordinance no. 119/1999 on internal control and preventive financial control, internal control is associated with a larger sense, this is seen as a managerial function and not a verification operation. By exercising

¹ Lecturer Ph.D., Faculty of Medical Bioengineering, "Gr. T. Popa" University of Medicine and Pharmacy Iasi, boldureanu@yahoo.com.

² Researcher Ph.D., "Alexandru Ioan Cuza" University of Iasi, Department for Interdisciplinary Research in Social Sciences and humanities

control function, the management staff finds the results deviations from targets, analyze the causes that determined and take the corrective or preventive measures.

Of that law, the phrase "internal / managerial control" emphasizes the responsibility of all hierarchical levels for controlling all the internal processes undertaken to achieve the general and specific objectives.

Unlike the internal control, internal public audit is an independent function and a objective activity of assurance and advice designed to add value and to improve the organization's activities; it helps to achieve the objectives through a systematic and methodical approach, evaluates and improves the efficiency and effectiveness of risk management, control and processes. SOURCE

The main purpose of the audit is to evaluate the corrective actions required to eliminate weaknesses and opportunities for improvement of the system, its processes, products and services (Marieta Olaru, 1999 :277).

Internal / managerial control standards define the minimum management rules that all organizations are required to follow.

Thus, by the regulations of this law (Order no. 400/2015 approving the internal/managerial control code for public entities), standards are grouped under the five key elements of internal / managerial control:

- internal environment. It groups the problems of organization, human resource management, ethics, deontology and integrity;
- performance and risk management. This key concerns management issues related to setting objectives, planning (annual planning), software (management plan) and performance (performance monitoring);
- control activities. The standards grouped in this key of internal/ managerial control focuses on: documentation of procedures; continuity of operations; recording exceptions (deviations from the procedures); separation of powers; supervision etc .;
- information and communication. In this section are grouped issues related to creating of an adequate information system and a system of reports regarding the implementation of the management plan, budget, resource use, and management of documents;
- evaluation and audit. The issues covered by this group of standards regards the development of evaluation capacity of internal / managerial control in order to ensure continuity of the process and to improve it.

The further analyze of the internal/managerial control distinguish a total of 16 standards as follows:

Table nr. 1. Standards of internal / managerial control of public entities

Internal environment	
Standard 1	Ethics and integrity
Standard 2	Duties, functions, tasks
Standard 3	Competence, performance
Standard 4	Organizational structure
Performance and risk management	
Standard 5	Objectives
Standard 6	Planning
Standard 7	Performance monitoring
Standard 8	Risk management

Control activities	
Standard 9	Procedures
Standard 10	Supervision
Standard 11	Activity continuity
Information and communication	
Standard 12	Information and communication
Standard 13	Document management
Standard 14	Accounting and financial reporting
Evaluation and audit	
Standard 15	Assessment of the internal / managerial control
Standard 16	Internal audit

Source: Processed after Order no. 400/2015 for approving the internal/ managerial control code for public entities

3. Material and methods

This study is the result of a process of induction and deduction, investigative and critical interpretation and comparative studies produced many nationally and internationally on the subject investigated. In analysis of the internal control process and managerial process they were used data, information, public reports from high education institution from public profile.

(<http://www.umfiasi.ro/organizare/Pages/Managementulcalitatii.aspx>,
http://www.uaiasi.ro/ro/files/DAC/Raport_anual_DAC_2013-2014.pdf, <http://www.uaic.ro/organizare/biroul-control-intern>).

4. Results and discussions

During February 2016 were analyzed data, information and reports from the most important public higher education institutions in Iasi regarding the internal control management and managerial audit.

Starting from the standards of internal / managerial control of Order no. 400/2015 these measures were grouped into five basic key elements: internal environment, performance and risk management, control activities, information and communication, evaluation and audit.

4.1. Internal environment

Standard 1. Ethics and integrity

This first standard is fulfilled when the university management and employees know and support the organization's values and ethical values, respects and applies rules on ethics, integrity, conflicts of interest, prevention and reporting of fraud, corruption and irregularities alert.

The main measures that can be taken to achieve this standard are:

- adopting a code of ethics and professional deontology and an implementing regulation;
- revision of the code of ethics (if it already exists);
- setting up a disciplinary commission for reviewing the cases of irregularity, fraud and violation of ethics and integrity;
- assessing violations of the code of ethics and its regulations;
- facilitating open communication by employees of their concerns in matters of ethics and integrity and creating an stimulating environment for their activities.

Standard 2. Duties, functions, tasks

The second standard refers to the permanent preparation and updating of documents regarding the organization's mission, internal regulations and job descriptions, which will be communicated to all employees.

Measures that can be taken under this standard are:

- development of organization and functioning regulations for academic and administrative staff, as well as the university's strategic plan;
- publication on the institution website of the organization and functioning regulations and their dissemination to the employees;
- developing and updating of the job descriptions;
- identifying new and difficult tasks of employees and helping them to solve it at university level.

Standard 3. Competence, performance

The standard number 3 means hiring competent persons, employees are given tasks according to their competencies, ensuring optimal conditions for training and improving their skills.

The actions recommended on this standard are:

- annual individual performance evaluation of professional employees in order to confirm their professional knowledge, skills and abilities to perform the duties and responsibilities entrusted to their job description;
- annual updating of staff training plan for both management functions and for the executive functions;
- optimization of finance resource allocation to the deficient areas of employees training.

Standard 4. Organizational structure

In this standard will be identify and define the organizational structure, powers, responsibilities, competents, responsibilities, tasks, reporting lines for each structural component and communicate to all employees of the documents formalizing the organizational structure.

Measures in this standard:

- regular updating of documents on the organization and functioning according to the organizational changes occurred;
- determination by management, in writing, of the limits of the competents and responsibilities who are delegated;
- periodical determination of the adaptability degree of organizational structure to the inside and / or outside changes, to ensure the continued relevance and effectiveness of the internal managerial control.

4.2. Performance and risk management

Standard 5. Objectives

In the standard five are defined the objectives determinant related to the organization's goals, as well as additional related information like the reliability of information, compliance with laws, regulations and internal policies and communication of the objectives to all employees and interested third parties.

Under this standard it is possible to adopt the following measures:

- development of the objective system for each organizational structure;
- centralizing all the specific objectives in the statement on the objectives of the university system;
- transpose the overall objectives into specific objectives and expected results for each activity and employee communication;
- periodical evaluation of the objectives achievement.

Standard 6. Planning

The general requirements of this standard require the preparation of plans that are put in line with the activities required to achieve the objectives with maximum possible allocated resources, so that the risks which may affect the achievement of the objectives to be minimal.

The measures required under this standard are:

- identification of the activities necessary to achieve the objectives;
- establishing the resources necessary to achieve the objectives;
- drawing up plans which bring into line the maximum available resources necessary to the activities of the organization;
- measures implementation set out in the strategic and operational plans of the organization.

Standard 7. Performance monitoring

Performance monitoring for each objective and activity it is accomplished through relevant quantitative and qualitative indicators, including on the economy, efficiency and effectiveness.

Specific actions in this standard are:

- assessing and reporting on performance indicators associated to the specific objectives of each department of the unit;
- the minimum allocation to each specific objective of a performance indicator by which relates the achievements;
- opportunity revaluation of related indicators with specific objectives.

Standard 8. Risk management

Fulfilling standard requires the implementation of a risk management process to facilitate efficient and effective achievement of the objectives of the organization. Measures within this standard:

- monitoring risks to the entire university;
- minimising risk management in each sector;
- analysis of the effectiveness implementation of measures set out in the university action plans.

4.3. Control activities

Standard 9. Procedures

This standard assure the elaboration of written procedures to ensure the development of activities undertaken in the organization and bringing them to the attention of the employee involved.

To fulfill the standard may take the following measures:

- inventory of all existing procedures;
- the further development of new procedures as needed;
- revision and completing of the process or operational procedures based on necessary needs.

Standard 10. Supervision

Organization should develop appropriate controls surveillance activities, operations and transactions in order to achieve effectively their objectives. Also the supervisory checks should be monitored to ensure that procedures are followed by employees effectively and continuously.

Measures adopted in this case:

- establishing an appropriate tools to monitor activity at central level and at lower levels;
- the systematic evaluation of the activities of every employee in its field of competence;
- regular analysis of reporting at all levels of management.

Standard 11. Activity continuity

Under this standard it is identified the main threats on the continuity and performance of processes and activities. In this standard are provided appropriate measures so that work can continue at all times, in all circumstances and in all plans, whatever the nature of a major disruption.

The concrete measures adopted concern:

- analyzing situations generating discontinuity;
- the establishment of control measures applicable in this situation;
- periodical testing and review (at least once a year) of the optimal functioning of these measures.

4.4. Information and communication

Standard 12. Information and communication

By this standard are set the types of information, content, quality, frequency, sources, recipients and it is develop an effective internal and external communication system, so that management and employees to fulfill effectively and efficiently the tasks and information to reach users complete and timely.

Specifically in this standard can be take the following actions:

- inventory and centralization of documents managed by various organizational structures;
- establishing clear rules for managing the receipt and transmission of information and communication;
- identifying the ways to efficiency the flow of information.

Standard 13. Document management

By this standard it is administrate the creation, review, organization, storage, use, identification and archiving internal documents process and those from outside the organization, providing complete control over their life cycle and accessibility to the leadership and employees.

Recommended actions are addressed to:

- defining a clear set of rules and procedures on registration, sending, editing, classification, filing, protection and custody of documents;
- periodical review of the procedures for sending documents (including e-mails) in a controlled manner.

Standard 14. Accounting and financial reporting

This standard establishes that the data and information used for annual accounting statements and financial reports are accurate, complete and timely.

Concrete measures are:

- realization of regular accounting reports as required;
- ensure that information and accounting data used in accounting and financial statements reflect the real situation;
- internal evaluation of the financial situation;
- review of financial and accounting procedures consistent with regulatory requirements applicable to financial accounting.

4.5. Evaluation and audit

Standard 15. Assessment of the internal / managerial control

At this standard by assuming management responsibility it is necessary to prepare annually a report on its system of internal / managerial control.

The measures which may be adopted:

- correct completing of self-assessment questionnaires and assessment, taking the reality of the data presented;
- preparation of the report on the internal control system / managerial;
- conducting management review meetings.

Standard 16. Internal audit

Internal audit provides independent and objective evaluation of the internal control system / managerial level. This objective is achieved through a competent structure of auditors, whose work is generally carried out under programs based on risk assessment.

Possible measures to be adopted:

- conducting internal audit missions as scheduled;
- continuing periodic review process of regular evaluation of the implementation of internal control standards in the audit process.

5. Conclusions

These measures developed on Order no. 400/2015 approving the internal/managerial control code for public entities contribute to the smooth conduct of the internal control / managerial control within higher education institutions.

The main common measures at universities refer to:

- internal environment: review of the organization and operation regulations, codes of ethics, the best evaluation of the employees performances, periodical updating of the organizational structures;
- performance and risk management: regular assessment of the objectives, identifying the best measures for their implementation, permanent monitoring of employee performance, efficient management of risks;
- control activities: developing new procedures as needed, monitoring the employee activity;
- information and communication: efficiency the flow of information, reviewing financial and accounting procedures according to the changes in regulations;
- evaluation and audit: conducting internal audit missions as it is planned, conducting management review meetings.

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CURRENT APPROACH OF THE ENTERPRISE COST MANAGEMENT

Luiza, Ionescu¹

Abstract

In the current economic context, any enterprise that wants to achieve sustainability market, should be concerned also by the means of control and reducing costs. The enterprise's sustainable competitive advantage depends on the ability to minimize costs relative to its direct competitors, in order to obtain higher profit margins. So, a realistic cost management strategy becomes a necessity. It should not overlook that the success of a based-cost strategy requires the existence of some opportunity conditions defined and delimited on three levels: at the enterprise level, at the specific market and in the industry. Through this study we intend, using predominantly theoretical approach, a consistent and as complete as possible presentation of the role that cost management may have across the enterprise, in the Romania's current economic context.

Key words: cost, decision, management, cost strategy

JEL classification: M21, M41

1. Introduction

Generally, it can say that the evolution of the costs system building and interpretation, accompanies the global economy mutation. With an economy where the resources are rare and lower than the demand, the cost systems have to distribute optimally all these resources. When the resources are higher than the demand, the main concern is not saving the materials and the labor, but identifying the sources of value. In this case, the economic information systems that include also the costs system should be orientated on the produced value and not the consumed resources.

The definition of the costs management must be linked to its capacity of developing and maintaining those functional models allowing managers to consider the cost and the value in the same time.

The actual demand is that a new product, starting with its conception, has to respond at the market needs, especially those related to the price. So, it's necessary to find all the information linked to the affordable price for the customers starting with the product conception. That information can be helpful for the managers to make the right cost systems.

Also, for the costs strategies, in order to ensure the competitiveness of the company, the expenses which have the most impact on the final result, should be optimized. For this, it's necessary to know the specific structure of the cost on each activity area.

Regardless the activity fields, the efficient management of the most important cost elements ensures a crucial competitive advantage to the company (Niculescu, 2003), of course with the condition to have the necessary resources.

2. The role of the cost in the company's management

The role of the costs in the company's management starts from the idea that the cost represents an important tool for the administration of a company, having the role to inform managers about the company's activity and identifying some strategic directions for the next activities (Niculescu, 2003).

Also, costs provide an estimated measure of the resources that the organization uses in providing a product or service. By understanding their costs, managers can make trade-off decisions to use their resources more effectively (Oliver, 2000).

In Table 1, are defined several types of management decisions based on cost information.

¹ Associate Professor, PhD, Valahia University of Târgoviște
luizaionescu75@yahoo.com

Table 1. Based-cost management decisions

Cost information	Management decisions
Complete cost information	Decisions on unit selling price fixing Decisions on planning and optimizing production Decisions of "make or buy" Decisions related to the product portfolio management
Partial cost information	Decisions on sizing and optimizing production Decisions on sizing and optimizing volume sales Decisions related to the management of product portfolio Decisions on how to increase enterprise performance
Margin cost information	Decisions on production capacity Decisions on launching new products Decisions of acceptance to the new orders

Managerial speaking, to be able to satisfy the actual market demand, the company has to prove the resources availability and also the ability to combine and use all these resources in terms of efficiency and effectiveness.

The use of cost accounting systems and methods to guide current and future operations toward specified objectives; the analysis and interpretation of cost data is critical to the decision-making process (Lenhard and Colton, 2000).

A business professional must understand the organization's cost accounting practice to competently manage a specified area and understand how personal accountabilities are calculated and tracked (Stenzel and Stenzel, 2003).

In this context, it can be introduced the concept of strategic cost management which propose a new vision of the costs calculation and analysis. This consists in taking into account necessary the aspects and strategic priorities of the company (Drury, 2008).

3. Actions of strategic cost management

To ensure the success of a strategic cost management, it should be done three main actions (Ionescu, 2008): analysis of value chain; analysis of strategic positioning; analysis of cost sources.

Analysis of the value chain consists in detailing and analyzing all stages of conception and sale of a product corresponding to an activity area, starting with the raw materials and finishing with the sale of products or if it's the case, with the after-sales services. The method of analyzing the value chain is considered to be the most appropriate method of effective routing and / or cutting costs, which means:

- identification of the sector's value chain and attaching the costs to those activities that create value;
- identification of the factors that influence the specific costs of each activities;
- obtaining a durable competitive advantage managing the factors with influence on the costs better than the competitors and reconfiguring the value chain.

The value internationalization of the cost system becomes the pivot competition game between firms. The value support being correctly judged, the competitors impose the calculation of resources consumption necessary for obtaining it, in the most appropriate way. Finding the pertinence is replaced by the exactness as the customers can understand more clear the value chain. On the other hand, knowing the value that an activity brings to the customers, it is aimed to ensure this value with limited resources. As far as this is possible, the company can hope to maximize the added value internally, and to obtain additional competitive advantage externally.

In M. Porter (2004) opinion, the competitive advantage can depend on the way a company can manage its value chain: the company can offer superior quality for an equivalent price or equivalent quality for a lower price.

The analysis of strategic positioning starts from the idea that the companies can have two types of competitive advantages: cost advantage and advantage derived from offering superior products, differentiated. Combining those two advantages, it can result a third advantage.

The strategic position represents the second key of the cost management, after the value chain. Inside a company that applies a strategy based on reducing costs, on a consumer goods market that reached the maturity, the rigorously determined costs can be a solid instrument to control the management activity. In the other case, when a company uses a strategy based on differentiation, on a market with a significant growth rate, the manufacturing costs management is less important.

When the costs systems are made, it has been taken into account the strategic context where the company operates and the firm's mission, which can be influenced by: increasing the share market; maintaining the share market or maximizing short-term benefits.

The third key of the strategic management, analysis of the cost sources, starts from the idea that the identification and the analysis of the real cost factors can explain and quantify the best their behavior. So, the analysis of the cost sources can help to choose the best strategic options.

Professionals tried to separate the cost sources in two parts: structural sources and operational sources.

The structural sources depend on the economic structure of the company, being influenced by: internal organization, company size, the range of coverage, experience, technology and production complexity. Every structural factor requires from the managers decisional and strategic choices which will determine the positive or negative changes in costs. The operational sources include: use of enterprise labor force, use of production capacity, the efficient use of the company space, quality system, manufacturing of products, exploiting links with suppliers and customers.

4. Opportunity conditions for cost strategies

The materialization of the cost-based management is to develop and implement cost strategies. The cost strategy or volume strategy means that set of decisions with strategic feature, which are meant to guide primarily the company's efforts to minimize its cost of production. This includes production and design costs, engineering, distribution, advertising and promotion costs. This strategy is based on the idea that the strong competitive advantage is closely linked to the company ability to reduce its costs at minimum, compared to the direct competitors. This will provide a superior profit margin. For the successful of a cost strategy, the opportunity conditions should have three levels: the sector of the company's activity; the specific market; the enterprise itself.

Figure 1 shows the delimitation of conditions of opportunity for cost strategy on three levels cited above.

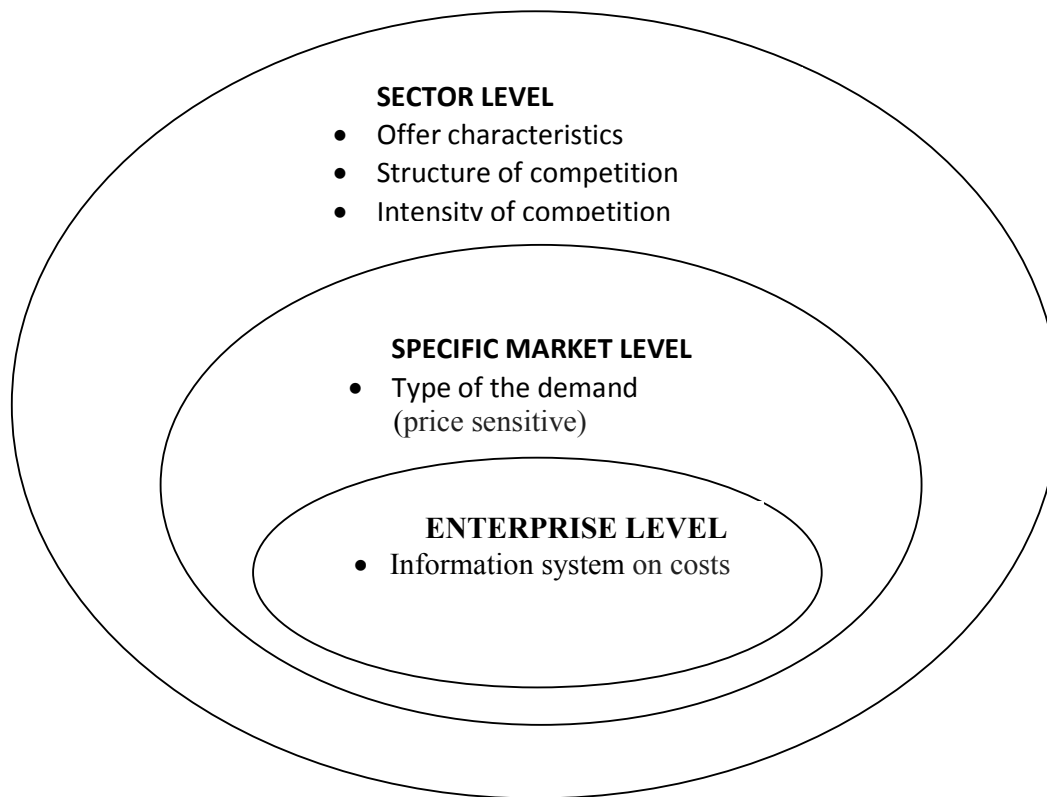


Figure 1. Delimitation of conditions of opportunity for cost strategy

At the sector level, the offer characteristics, the structure and intensity of competition are factors that can determine the costs to become a crucial strategic variable. In what may concern the pertinence of this variable, the studies made by Boston Consulting Group showed that the cost-based strategies are relevant in those sectors where can be exploited a limited number of key success factors, while the cost is a permanent factor and last used. It's the case of the industries based on volume and in some extend, of the deadlock industries.

At the specific market level, the type of the demand is taken into account because it can have direct influence in choosing the cost variable. Generally, this choice is considered to be good and economically justified when the demand is very price sensitive.

At the enterprise level, the choice of this strategy means that it is possible to implement an information system focused on careful observation of the costs. The cost system should allow: identification of causality links in costs, identifying opportunities for sharing-impairment, identifying responsibility centers and value perception. The final assessment of the cost system is primarily, according to its contribution to value creation and secondary, depending on the accuracy of the allocation of resources consumed. In practice, minimizing costs means to have savings of resources engaged to manufacture a unit of product. This is based on the optimal combination of three costs effects: volume effect, scale effect and experience effect.

The volume effect - corresponds to the scale economy and results directly from the production volume (activities volume). The economy of scale results on one hand, from the allocation of fixed costs over a greater volume of goods produced, and on other hand, from the reduction of investment per unit of capacity, when the total production capacity is increased. The increases of the production volume imply an optimal utilization of production capacity and a good organization of labor. Once obtained, the growth of a business activity,

therefore of its size, allows it to obtain a privileged place in dealing with the social partners (e.g. with suppliers), having favorable conditions in relation to competitors.

Theoretical and practical implications of the volume effect are concentrated in determining the Break-Even point (critical level of activity, in Figure 2) and the optimal level of activity (Petrescu, 2003).

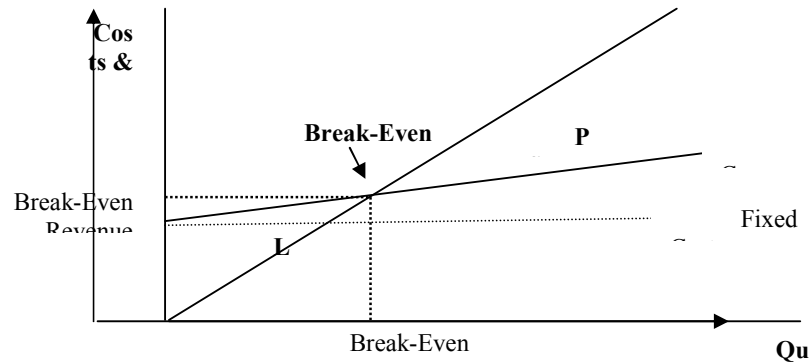


Figure 2. Break-Even Point chart

Effect of scale - called the range effect refers to the effect obtained by performing several different products within the same enterprise, compared to their production in several specialized companies.

When, within a single firm, there is several different production processes, their implementation will require both specific costs and significant common costs and the savings will be obtained mainly from the second category.

Economies of scale apply to a variety of organizational and business situations and at various levels. For example, a large manufacturing facility would be expected to have a lower cost per unit of output than a smaller facility, all other factors being equal, while a company with many facilities should have a cost advantage over a competitor with fewer. The economic concept dates back to Adam Smith and the idea of obtaining larger production returns through the use of division of labor.

In Figure 3 observed as quantity of production increases from Q to Q_1 , the average cost of each unit decreases from C to C_1 (Sullivan and Sheffrin, 2003).

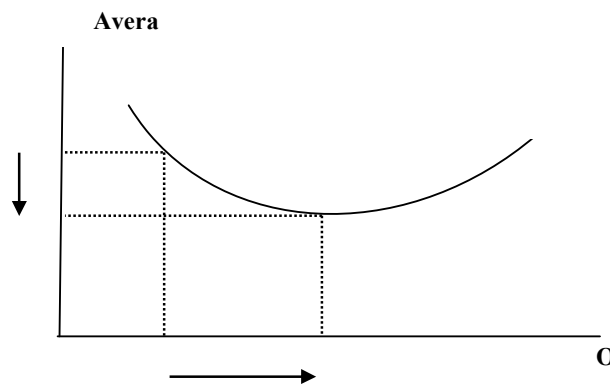


Figure 3. Economies of scale

The experience effect - is the best known in strategic analysis, being first observed in the 30s in the U.S. aviation industry and resumed in 1971 by the Boston Consulting Group. Later on, many management theories have turned to the use of this concept and highlighted the strategic implications that determine in practice.

According to the theory of the experience effect, the total unit cost of a product decreases by a constant percentage each time when the cumulative production company for the product doubles, specifying that the cost unit is measured in constant monetary units. It is noted that this theory links in a determining relationship, two coordinates of the activity: cumulative production and the unit cost of the product.

The cost reduction, determined with doubling cumulative production, varies depending on the sector, ranging between 10% - 30%, which means that allow under a sustained growth of the quantitatively factor, to obtain a decreasing curve of the unitary cost. This curve is called in economic theory the experience curve cost. This curve, also known in the cost theory as the average cost curve on long-term (Niculescu, 1997), it's not proper only for one company, but the whole activity area can be described based on its specific returns. The extents to which the existing firms in the sector benefit from the experience curve effects depend, however, on how manage their own resources. When the management resource proves to be ineffective, despite the accumulation of experience, unit costs departs from the experience curve, registering a cost derive.

The experience curve is a graphical representation in Figure 4.

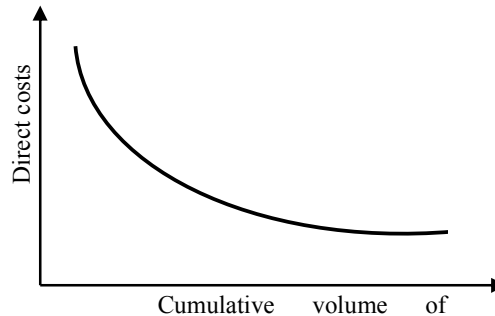


Figure 4. The experience curve

Therefore, the experience curve will be convex and have a downward slope, as shown in the adjacent diagram. It refers to the effect that firms learn from doing, which means that the higher the cumulative volume of production (X), the lower the direct cost per new unit produced (C).

There is a simple rationalization behind all this: there is a reduction in the average cost of production of a particular product, as a consequence of an increase in the firm's experience.

The experience curve is defined by the following function:

$$C_n = C_1 X^a$$

where: C_1 = direct cost of first unit of production

C_n = direct cost of n^{th} unit of production

X = cumulative volume of production

a = experience rate (%)

The experience rate corresponds to the elasticity of cost with regard to output.

The strategic implications of the experience effect can be traced primarily, but not exclusively, in those sectors or areas of mass activity where to fulfill the objective of accumulating experience, the companies try to maximize their production volume. When the market allows it, maximizing the output implies a proper increase in turnover and winning an important share of the market, to the detriment of competitors. The companies continuous fight to gain and maintain market position, generally results in a decrease in the average price to a level very close to the cost of the most important competitor (in terms of workload). As a result, competitors whose activity volume is low (implying a reduced size of these companies)

are unable to obtain an effect of experience comparable to the industry average, which leads to holding a marginal position in the market or even to their elimination.

We note that the cost advantage can be different depending on production volume (scale of the produce) and on type of production. Figure 5 shows how to obtain comparative cost advantage for two types of firms: one with small scale production (production on orders specializes in small batches) and other with mass production (high volume).

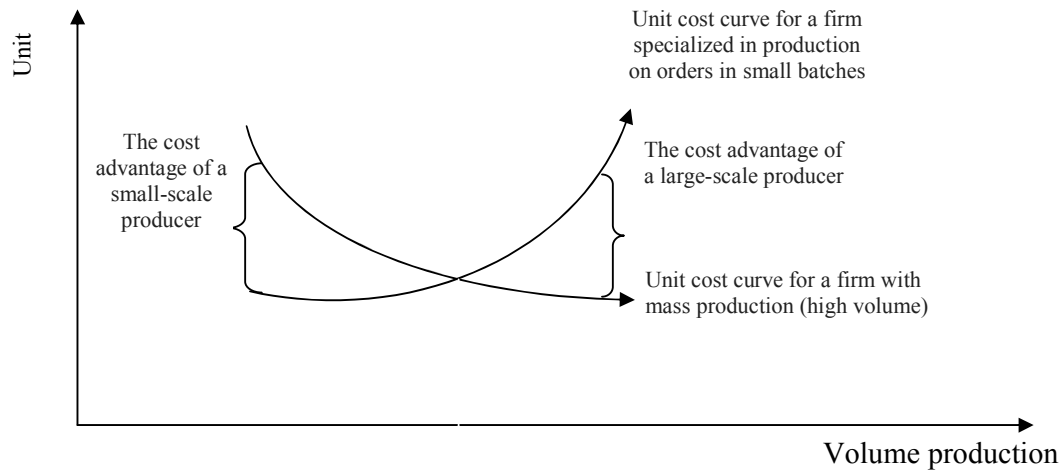


Figure 5. The cost advantage based on the volume and type of production

5. Cost strategies limits

Even though the cost strategy advantages are obviously, we think it's necessary to present also the limits of this strategy, for a better understanding. So, following the concept of experience curve in practice is not always easy, especially because of the difficulty to standardize the sectors development in the form of relevant experience curves. It's the case of those sectors where the big, medium and small size enterprises are together. The medium and the small ones are not forced to close their activities because can't reach the dimension that allows them to have the experience effect advantage. Also, in the sectors where most companies are medium to large size, and the effect of experience can feel in the cost, the pressure on firms directly involved is very high and the risk of making mistakes is high. It is well-known that a forced increase in the activity volume, without regarding the quality and production value perceived by customers, lead along with the market "saturation" at an excessive increases in stocks and inevitably at the cancellation of the advantage offered by reduced costs due to effect of experience. A past of this limit can be given by the cost strategy along with another/other consistent/compatible strategy/strategies. Uncontrolled expansion of production capacity in order to obtain rapid experience effect can generate losses with exponentially growing, many times greater than the economy realized by increasing labor productivity (Vâlceanu et al., 2004). This is explained by the influence of fixed costs arising from production capacity, regardless of its use degree. Since the international economic environment tends to turn from complicated into complex, the risks are more obvious: reducing costs being directly linked to increased workload should be noted that any significant increase in production capacity including research capacity, design and/or distribution, involves immobilization of financial resources and working capital necessary to ensure continuity of mining process. The problem is even bigger as the enterprises don't have these resources and are forced to contract significant bank loans. But, because the firms are not trustful anymore for the banks, it was established

excessive guarantees and a high level of interest, leading to an unacceptable cost of debt (which partially cancels the company's profitability).

Also, any financial blockages in the economy affect the enterprises activity through non-collecting the receivables-customers on time and failure to pay term debts. The cost strategy may turn against the company that implemented it through a boomerang effect on short and medium term. So, the balance proves to be hardly maintained in favor of positive effects and for this reason it is advisable that the cost strategy to be well founded and maintained in accordance with the characteristics of the economic environment (business environment) to avoid waste of resources in activities that do not purchase a real and sustainable competitive advantage.

The entry of a new competitor on the market may represent another risk, the effect of experience may be reduced or canceled if he succeed (by various means) to incorporate improvements of old competitors similar products to his products, to learn from an experience that is not his own, without spending the same amount as his competitors and, in the same time, manages to convince a financial institution to provide the resources necessary to obtain a significant amount of work in a relatively short time.

Cost strategies applied rigidly can negatively guide the enterprise's synergy to a reduced range of products, even unique, making it vulnerable to environment external threats. The danger of triggering a "fight" of market prices is another risk of applying this strategy, given that many competitors applies it, temporarily sacrificing their profit margins to sell at prices as low as possible, desiring more favorable market positioning. The consequence may be a degradation of the sector profitability and maintaining approximately the same market distribution between competitors.

Conclusions

The sustainable competitive advantage of a company depends on its ability to minimize costs in relation to direct competitors, which will enable them to obtain higher profit margins. For this purpose, the cost is a priority tool and therefore, a realistic optical cost management and strategy becomes a necessity of the current management.

However, the success of a cost strategy requires the existence of opportunity conditions defined at three levels: enterprise sector; specific market and the company itself.

At the sector level, offering features, the structure and intensity of competition are factors that may cause costs to become a crucial strategic variable.

At the specific market level, taking into account the nature of the demand, it can directly influence the strategic choice of the variable cost. Generally this choice is considered good and economically justified when demand is very price sensitive.

At the enterprise level, the choice of this strategy requires that it will be possible to implement an information system focused on careful observation of the costs. The cost system should allow: identification of causality costs, identifying opportunities for sharing-impaired, identifying centers of responsibility and value perception. The final assessment of the cost system is a priority, according to its contribution to value creation and secondary, depending on the accuracy of the consumed resources allocation.

For proper understanding of the utility of a cost strategy in the management company, it is necessary that, besides the obvious advantages, to be considered and taken into account the limits and risks inherent in implementing this type of strategy.

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CONSIDERATIONS REGARDING THE COMPANY RESULTS RESULT OF ACCOUNTING, TAX RESULT AND RESULT SHARE

Pavel Nicoleta¹

Summary:

The objective of the annual financial reporting is to provide a true and fair view of the financial position, financial performance and other information on the work entities or groups of entities, according to the applicable accounting regulations.

Information on financial position are provided, first, balance, those on the outcome, through profit and loss and data on changes in equity are provided in the statement drawn up for this purpose.

Notes to the annual financial statements provides additional information aimed at facilitating the understanding of the information presented in the balance sheet and profit and loss.

The resulting concept of accounting is used more broadly, including both current year result and the outcome of previous years (reputed result).

Accounting result (gross result for the year or year result before tax) is calculated based on accrual accounting requirements, respecting the principle of independence that requires delimitation exercise while revenues and expenses.

The current result of the exercise can be influenced, on the one hand the accounting rules applied by the entity (accounting regulations on the annual individual and consolidated financial statements, approved by Ministry of Public Finance no. 1802/2014, as amended and supplemented and accounting regulations in accordance with International Financial Reporting standards applicable to companies whose securities are admitted to trading on a regulated market, approved by Ministry of public finance no. 1286 / 2012, as amended and supplemented) and, on the other hand, accounting policies that it applies to accounting regulations allow the choice of accounting treatments.

It therefore has the possibility (limited) to influence the size of the profit in the desired direction.

One of the components of equity presented separately in the financial statements is retained earnings.

Retained earnings are, by nature, the result of previous financial reporting, and result of operations regulated and can be represented by the profit or loss.

The notion of retained earnings is included in both the accounting regulations consistent with European directives and in accordance with the accounting regulations of International Financial Reporting Standards, with the same meaning.

Due to developments in the normalization process accounting and convergence between accounting regulations consistent with European directives and comply with International Financial Reporting Standards, and the complexity of the operations they perform entities, retained earnings has become a comprehensive, extremely important for users of financial information.

In some cases, an entity shall reflect income and expenses that are attributable to earlier periods is due to the detection of errors, either due to change in accounting policies.

Switching to the application of IFRS by certain entities had the effect of introducing the accounting regulations of explicit requirements concerning the presentation of detailed information on earnings.

Regarding fiscal result, it takes into account the taxable profits of the period and other taxable items from a tax perspective.

Tax result is determined according to Law no. 227/2015 regarding the Fiscal Code, as amended and supplemented.

Distributable result is not reflected in the financial statements, this information is available, as proposed in the note accompanying the annual financial statements.

The outcome may be materially different from distributable result sheet (current and deferred) presented in the financial statements.

A study conducted on a total of 10 listed companies revealed accounting policies impact on earnings, the current earnings and profits distributed to shareholders.

As a conclusion, we can say that the accounting policies adopted by the entity under the applicable regulatory framework can influence the size of the result (current and deferred).

¹ Phd Candidate, Accounting Doctoral School of the Academy of Economic Studies, Univ Prof Dr coordinating teacher Vasile Raileanu
Email adress nicoletapavel@gmail.com

Accounting result is important information for users of information, but not in all cases, relevant and sufficient information to make decisions on investments in equity of an entity. The decision to invest should be made after considering all the information on the entity.

Keywords: *the objective of financial reporting, faithful image , enterprise performance , profit and loss account, result of accounting, reported result, tax result, result share*

Clasificarea JEL: Dimensions and Challenges of Financial Accounting and Auditing

1. The objective of general purpose financial reporting

The objective of the annual financial reporting is to provide a true and fair view of the financial position, financial performance and other information on the work entities or groups of entities, according to the applicable accounting regulations.

Information on financial position are provided, first, balance, those on the result of the income statement and information on changes in equity are provided in the statement drawn up for this purpose.

Notes to the annual financial statements provides additional information aimed at facilitating the understanding of the information presented in the balance sheet and profit and loss.

Accounting regulations compliant with european directives don't define explicitly the objective of general purpose financial statements, but these regulations refer to the true and fair requirement.

A description of the objective of general purpose financial reporting is included in the Conceptual Framework issued by the IASB in September 2010.

According this framework, the main objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in the decisions they take regarding:

- buying, selling and holding equity instruments;
- granting and repayment of loans;
- assessment of the outlook for net cash inflows;
- evaluating the use by the Board and management has its resources;
- performance by management has responsibilities for resource protection and performance in compliance with laws, regulations and contractual provisions.

Other users of information in general purpose financial reports may be regulatory bodies and other members of the public, but the primary objective of such reporting does not target these groups.

According to point 17 of the Accounting regulations concerning annual financial statements and consolidated annual financial statements, approved by order of the Ministry of Public Finance no. 1802/2014, as amended and supplemented, the objective of the annual financial statements is to provide information about the financial position, financial performance and cash flows of an entity, a useful broad categories of users.

2. True image in general purpose financial reports

Faithful representation is a requirement for the information to be credible. The information must represent faithfully the transactions and accounting events.

Financial reporting is done by presenting both the nature and value elements, namely the effects of an event and faithful representation is a concept applicable to both.

According to IAS 1 "Presentation of Financial Statements" general purpose financial reporting must provide a true picture of a company's financial position at year end, providing useful information to a wide range of users.

True image is defined synthetic or analytical accounting rules but, basically, the meaning is the same.

The following represents the way in which is found the true image defined in the accounting rules:

According to the conceptual framework	IAS 1	Order no. 1802/2014
<p>1. Faithful representation is one of the qualitative characteristics of financial information - accounting. The information is considered credible if present fairly transactions and events of the undertaking.</p> <p>2. The reasoning accountant should always start from providing a true and fair view of the assets of an undertaking when presented financial information</p>	<p>1. A fair presentation of the financial position and cash flows requires the use of relevant, reliable, comparable and understandable. The presentation shall be so conducted as not to cause confusion and not misleading.</p> <p>2. Fair presentation requires the faithful representation of effects of transactions, other events and conditions in accordance with the definitions and recognition criteria for assets, liabilities, income and expenses set out in the Framework.</p> <p>3. In almost all cases give a fair presentation by compliance with applicable IAS. A fair presentation requires:</p> <ul style="list-style-type: none"> - selection and application of accounting policies so that financial reports comply with all requirements of each applicable International Accounting Standard; - disclosure and accounting policies is provided in a manner that provides reliable, relevant, comparable and understandable information; - to provide additional information when the requirements of the standards are insufficient to enable users to understand the impact of transactions on the financial position and financial results. 	<p>The annual accounts must give a true and fair view of the assets and liabilities, financial position and profit or loss of the company, as follows:</p> <ul style="list-style-type: none"> - be provided mandatory format for the balance sheet and profit and loss; - have provided the minimum content of the notes to the accounts and the annual report.

Because of the importance, even the concept of fair picture appears in the Accounting Law no. 82/1991, with subsequent amendments and establishes that "the annual financial statements present fairly the financial position, financial performance and other information related to work".

3. Enterprise performance

In a broader sense, the performance of an entity can be measured by indicators of return on investment or earnings per share.

Underlying profit calculating these indicators is presented in the income statement.

Information about these financial statements are provided mainly for profit and loss, but some of the notes will complete information on the company's performance.

The elements directly related to financial performance evaluation through profit or loss are income and expenses.

Since profit is the result of revenue and expenses recognised in profit and loss, it is important to know by users of information on how you defined the concepts of income and expenditures, according to the applicable regulatory frameworks

In Romania operators apply either Accounting regulations on the annual individual and consolidated financial statements, approved by Ministry of Public Finance no. 1802/2014, as amended and supplemented, or Accounting regulations in accordance with International Financial Reporting Standards applicable to companies whose securities are admitted to trading on a regulated market, approved by Ministry of Public Finance no. 1286 / 2012, as amended and supplemented (IFRS).

In order to ensure comparability of information contained in the annual financial statements prepared by entities, accounting regulations consistent with European directives have taken over most of the concepts and definitions within the general conceptual

Thus, this definition comparability revenues, expenses, gains and losses within conceptual framework and accounting regulations on the annual individual and consolidated financial statements, approved by Ministry of Public Finance no. 1802/2014, as amended and supplemented.

The conceptual framework	Order no. 1802/2014
1. Revenues represent increases in benefits economic during the accounting period under active form of inflows or enhancements of assets or decreases of liabilities that result in increases in capital own, other than those relating to contributions participants in equity. (Pt. 4.25)	1. Revenue is recorded increases in economic benefits during the accounting period in the form of inflows or increases in assets or debt relief, which is reflected in increases in equity other than those resulting from contributions by shareholders. (Pt. 19 alin. (2) lit. a)
2. Expenses are decreases in economic benefits during the accounting period as outflows or depletion of assets or assumption of debts, resulting in reductions in equity other than those relating to distribution to equity participants. (Pt. 4.25)	2. Expenditure is recorded decreases in economic benefits during the accounting period as outflows or decreases in the value of assets or increases in liabilities, which translates into reductions in equity other than those arising from their distribution to shareholders. (Pt. 19 alin. (2) lit. b)
3. Gains are other items that meet the definition of income and may or may not occur as a result of current activity of the entity. Gains represent increases in economic benefits from this point of view no different in nature from revenue. (Pt. 4.30)	3. Gains represent increases in economic benefits that may arise or result from current activity, but differ in nature from revenue from this activity. (Pt. 431 alin. 4)

<p>4. Losses represent other items that meet the definition of expenses and may arise or as a result of current activity of the entity. Losses represent decreases in economic benefits from this point of view no different in nature from other expenses.</p> <p>(Pt. 4.34)</p>	<p>4. Losses represent reductions and economic benefits may result or not due to the current activities of the entity. They do not differ in nature from other expenses.</p> <p>(Pt. 449 alin. (2))</p>
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4. Profit and Loss Account for the financial year

Balance is considered the document that describes a company's financial position at a time, indicating the size of the result. It appears necessary but the presence of another accounting document presentation explaining the constitution of the outcome and allow some conclusions about the performance of the entity's operations. This document is the second component of the financial statements is "profit and loss" or "statement of profit or loss and other comprehensive income in the period," according to IAS 1.

Profit and loss account summarizes the economic flows or income and expenditure reporting period.

5. Result of current accounting

Accounting result (gross result for the year or year result before tax) will be calculated taking into account the requirements of accrual accounting, complying with the principle of independence of the exercise which involves the delineation of incomes and expenses.

In defining the outcome in terms of total revenue minus cost relationship overall, it starts from the fact that any activity is also resource intensive and producing results. In terms of resource consumption accounting is defined in the value plan structure, as the "product" is defined by the structure of earnings.

Both resource consumption and the result set table and causes changes in the structure of the entity's assets. Thus, total income designate property relationships in value terms on the finding, getting and achieving results in the production and sale of goods and services, investments and financial transactions of the company and other operations which are non-repeatability.

The total cost includes expenses related to hiring and consumption of resources in the activities of the entity.

Analyzing the sequence of operations determined by calculating accountant distinguish gross result, which represents the total amount of profit or loss recorded in accounting, net income before tax, and which is the sum of gross profit minus tax.

The accounting result can be perceived differently by users of financial statements, depending on their position.

Usually, investors and creditors perceive the result calculated as a difference between revenues and expenditures of which were excluded losing interest due status and become an impairment expenses (distribution) profit for lenders. From the point of view of production factors (owner, personnel, state, bankers, investors and creditors) calculated result is added value in principle, the difference between revenue and expenditure own intermediate consumption. Accordingly, other expenses, such as salaries and other personnel expenses, taxes, interest and depreciation, impairment or become profit distributions.

As mentioned, the result is the difference between income and expenses for a period. Although the criteria for recognition of revenue and expenditure under the accounting rules applicable to different categories of entities are similar, there are differences in accounting treatment for certain transactions economic and financial impact in the income statement.

Transition to International Financial Reporting Standards applying the accounting basis by certain entities revealed that the result of the exercise determined under IFRS is different from the result determined according to accounting regulations consistent with European directives.

6. Reported result

One of the components of equity presented separately in the financial statements is reported result.

Reported result is, by nature, the result of previous financial reporting and may be represented by the profit or loss.

The notion of reported result is found both in the accounting regulations consistent with European directives and in accordance with the accounting regulations of International Financial Reporting Standards, with the same meaning.

Due to developments in the normalization process accounting and convergence between accounting regulations in accordance with the Accounting Directives and in accordance with International Financial Reporting Standards, and the complexity of the operations they perform entities, reported result has become a comprehensive, extremely important for users of financial information.

In the process of analyzing the components of equity information users need not confine itself to finding a sum that reported result (profit or loss), but should analyze the composition of that amount through the nature of the operations that can be recorded to reported result.

For correct information to users of information in the income statement for the period stands only revenue and expenditure of the reporting period. In some cases, an entity shall reflect income and expenses that are attributable to prior periods, either because it found accounting errors, either due to change in accounting policies following the decision of the entity or due to legal requirements.

Practical experience has revealed that to change accounting rules were situations where the recognition criteria of assets were more restrictive than the existing one new regulation, which resulted derecognition of those assets. For these situations, the accounting regulations laid down, as a rule, highlighting the distinct operation on derecognition of assets reported result account separate from other operations of the entity.

By switching to the application of accounting regulations approved by Ministry of Public Finance no. 1802/2014, as amended and supplemented, it was done to unify the accounting treatment of the revaluation of tangible assets as provided by accounting regulations compliant with International Financial Reporting Standards applicable to companies whose securities are admitted to trading on a regulated market, approved by Ministry of public finance no. 1,286 / 2012, as amended and supplemented. This treatment has the effect of transferring unit of the revaluation surplus realized in the reserve account to the account of retained earnings, analytically distinct.

For entities applying IFRS accounting regulations, earnings can be significantly affected by two types of operations, namely:

- reprocessing operations with the transition from accounting regulations consistent with European directives IFRS accounting regulations;
- operation of fair value in the case of entities adopting fair value as cost accounting policy for intangible assets.

Therefore, considering the multitude of operations, different in nature, which can be highlighted in the account of retained earnings presentation in the annual balance thereof, without detailing the notes component / structure satisfies only partially the need for information users.

To facilitate understanding the information presented, retained earnings includes the following components:

Accounting regulations in compliance with European Directives	IFRS accounting regulations
1171. Profit/loss carried forward (A / P)	1171. Profit/loss carried forward (A / P)
1172. Reported result from first time adoption of IAS, less IAS 29 (A / P)	1172. Reported result from first time adoption of IAS, less IAS 29(A / P)
1173. Reported result from changes in accounting policies (A/P)	1173. Reported result from changes in accounting policies (A/P)
1174. Reported result resulting from correction of accounting errors (A / P)	1174. Reported result resulting from correction of accounting errors (A / P)
1175. Reported result representing surplus from revaluation reserves (P)	1175. Reported result representing surplus from revaluation reserves (P)
1176. Reported result from the application of accounting regulations compliant with European directives (A / P)	1176. Reported result from the application of accounting regulations compliant with Directive IV of the European Economic Community (A / P)
	1177. Reported result from the application of IFRS, less IAS 29 (A / P)
	1178. Reported result derived from, the date of transition to IFRS application of fair value as deemed cost (A / P)
	118. Reported result from first adoption of IAS 29 (A / P).

7. Tax result

The result of the fiscal entity considers taxable profits of the period, but other taxable items from a tax perspective.

Tax result is determined according to Law no. 227/2015 regarding the Fiscal Code, as amended and supplemented.

According to the new Fiscal Code, the taxable profit is calculated as the difference between revenues and expenses recorded in accordance with applicable accounting rules, net of non-taxable income and tax deductions and deductible expenses plus. The outcome of tax are taken into account, and related items of income and expenditure and tax losses that are recovered. The positive tax result taxable profit, and the result is negative fiscal tax loss.

8. Result share

Distributions of cash or other assets to the entity's shareholders or companies are regulated by Law no. 31/1990, republished, as amended and supplemented.

According to art. 67 of the Law, the share of profits that is associated dividend shall be paid.

Dividends are distributed to shareholders in proportion to its participation in share capital, unless the articles of association provide otherwise.

The law provides that they will not be able to distribute dividends than the profits determined according to the law.

The dividend is set by the Ordinary General Meeting of shareholders, which must meet at least once a year.

Share result is not reflected in the financial statements, this information is available, as proposed in the note accompanying the annual financial statements.

A study based on individual annual financial statements prepared as at 31 December 2014 and 31 December 2013 and published on its website, for a total of 10 companies listed on the Bucharest Stock Exchange (OMV Petrom, Transelectrica, Romgaz SA, Electromagnetic SA, Carbochim SA Nuclearelectrica SA, Romcarbon SA Buzau, Antibiotice

SA, Bermas SA, Rompetrol Well Services), highlighted the following issues relating to dividends distributed in 2014:

- Three companies (OMV Petrom SA, Transelectrica SA and Nuclearelectrica SA) presents the annual results reported significant value, and profit accounting;
- Romgaz SA presents the annual profits of significant value and reported result by a significant amount;
- Antibiotice SA, Bermas SA, Rompetrol Well Services presents net profit of the same amount as reported result.

As the reported result were found the following:

- *For companies with majority state ownership were distributed for dividend payment 80% of profit (81.28% Transelectrica, Romgaz SA 99.51%, 80.53% Nuclearelectrica SA);*
- If private companies were distributed amounts of profit for dividend payments, as follows: 36% OMV Petrom SA, 16.32% Electromagnetic SA, 49% Antibiotice SA, 30.24% and 92.95% Rompetrol Well Services Bermas SA.

The decision to distribute a dividend of the profit taken by majority state-owned companies is based on Government Ordinance no. 64/2001 regarding profit distribution to national societies, national companies and companies owned or majority state, and the RAs, as amended and supplemented.

Companies with private capital allocated to dividends only part of the profit for the year, the difference being left to local development company.

The decision on the amount of dividends that can be distributed should be based on an analysis of the sources of achieving profit, combined with cash flow and the strategy pursued by the shareholders, namely rapid gains (dividends) and business development (increase the value of an entity's assets).

Conclusion

As a conclusion, we can say that the accounting policies adopted by the entity under the applicable regulatory framework can influence the size of the result (current and reported).

Accounting result is important information for users of information, but not in all cases, relevant and sufficient information to make decisions on capital investment in an entity. The decision to invest should be made after considering all the information on the entity.

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4. IAS 1 "Presentation of Financial Statements", 2015 Edition
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EVALUATION ASPECTS REGARDING THE MANIFESTATION OF THE INTERACTION BETWEEN THE TAX AUTHORITIES AND THE TAX PAYERS IN THE CONTEMPORARY ROMANIAN SOCIETY

Ionel Leonida¹

Abstract

The social-economical evolution and progress of a country are significantly influenced by the condition of the national tax system, its history, consolidation and performances. At their turn, the tax system performances are the evolutive results, stratified and consolidated in time, materialized in the quality of the interaction between the tax authorities and the tax payers. These fiscal elements, manifested between the tax authorities and the taxpayers, of a behavioristic and even cultural nature and less quantifiable, can be traced in the quality of the fiscal regulations, their voluntary conformation degree, the mutual interaction style and, consequently, the dynamics of some fiscal-budgetary and economic indices. The proposed paper draws away from the quantitative approach of taxation and aims at offering an exclusive qualitative evaluation of the interaction action between the tax authorities and the taxpayers in the contemporary Romanian society, by combining research methods, such as the logical analysis and the descriptive analysis.

Keywords: tax system, authorities, taxpayers, tax interaction

Introduction

The disappearance of totalitarian regimes in some countries, as in the case of Romania, and the rise of democracy, governed by rules which express the claims and demands of society towards the conduct of its members, has led to the emergence of shortcomings in the design, implementation and compliance, which are conditions necessary for the triumph of democracy. The respect to rules shown by the society's members depends on the degree to which such rules enjoy overall support and the ease with which they can be violated by a citizen without being identified.

The adjustment difficulties manifested by corruption, the expansion of the underground economy and tax evasion reveal a lack of harmonization between regulation type and the human nature. The erosion of autochthonous traditional values, some poor results in education and the degradation of the civic responsibility, in line with the desire to move expeditiously to a certain democratic modernity, created a phenomenon of relative disarray, which led to the expansion of acts of non-compliance and lawlessness.

Taxation is one of the areas that fall within this description, which is a very important macroeconomic adjustment tool, attractive for business in securing the contracts financed from public funds, but also for taxpayers in terms of non-compliance and non-observance of tax regulations, which situation generates immediate revenue for them.

Most taxpayers comply with the law, but there is a minority of taxpayers who do not comply, and their behavior affects the functioning and effectiveness of fiscal institutions, delay and alter the healthy economic, social and cultural development of the society, prevent the natural processes and diverts the resources from their allocation to important goals and affect the aspirations to legality and prosperity, as well as to the increase of the civilization level of the citizens who respect the law and the moral values of a democratic society.

The tax system reforms have generally focused on providing and ever increasing tax revenue, the dynamics of bases and tax rates, the insurance of a balanced budget within the bounds established in treaties and agreements with international institutions, on providing a fiscal environment attractive for foreign investments and less on improving the relation with taxpayers.

¹ PhD, Centre for Financial and Monetary Research "Victor Slăvescu" 13 Septembrie street, ne. 13, Academy House, B building, 5th floor, 5th District, Bucharest, Romania, Corresponding author. Tel.: + 04 0744 330 827, E-mail address: leonidaionel@yahoo.com

Starting from these stated aspects, we further make an evaluative description of the role and behavior of the tax authorities, the taxpayers' behavior and their interaction in the contemporary Romanian society.

1. Description of the purpose and behavior of fiscal authorities

The purpose of the tax authorities is the application of the tax system and tax rules, which involves activities of determining the fiscal burden, collecting taxes and duties, tracking, prevention and control of tax compliance. Within the specific actions to achieve their purpose, the tax authorities' behavior should be appropriate to the perspective of achieving the general governmental objective, namely the collection of taxes and duties with efficiency, but also to provide assistance through which the taxpayers could consolidate their tax education.

To meet this objective, the tax authorities must create a fiscal environment of cooperation in which all taxpayers meet their tax obligations voluntarily. Creating a cooperative environment refers to facilitating the payment of tax liabilities for taxpayers, advising them, diminishing the options of evading payment obligations, measures of prevention of acts of noncompliance and punishing the intentional and/or repeated acts of noncompliance.

The tax theory does not provide an optimal strategy, at least when applicable, by which the authorities ensure an optimal environment of voluntary tax compliance of the entire mass of taxpayers, but recommends fundamental principles which the authorities must comply with in the implementation and enforcement of the tax system. The "oldest" of these, made by Adam Smith, recommends tax authorities to tax each taxpayer according to his ability to pay tax, establish unequivocally all elements related to the amount, term, manner and place of the payment of taxes, provide facilitating compliance by cutting red tape and taxpayers' administrative costs and pursuing effectiveness (collection rate) and efficiency (low costs of administration). These principles were completed and refined over time (by Maurice Allais, French economist), with recommendations to the tax authorities on the need to develop the personality of the citizen by the fiscal policy, non-discrimination of taxpayers by avoiding the differences in setting taxes, aiming at the increase in economic efficiency by taxes, applying differentiated tax treatment in relation to the legitimacy of the income of taxable subjects and eliminating arbitrariness in the settlement of the tax burden through the development of clear and simple rules of taxation.

We appreciate the importance and necessity of implementing and enforcing all tax principles, but our approach in this paper will emphasize the need to develop the personality of the citizen / taxpayer as an objective to be pursued within the interaction between tax authorities and taxpayers.

In developed countries, the tax systems are, for the most part, results of historical fiscal developments, respecting and applying the mentioned tax principles, which led to the gradual, long studied and analyzed accumulation, to formalize them as tax rules, pre acceptance by taxpayers and the society, which contributed to the formation of taxpayers' personality and strengthening of the taxpayers' culture in tax matters, which later contributed to a positive shaping of the fiscal behavior

In emerging countries with young democracy and a relatively short history of tax systems, respecting the mentioned principles is relative because the authorities apply a way of interacting with antagonistic features, with frequent legislative changes, with a situational character in order to create an attractive environment for foreign investment and less oriented towards taxpayers and to their prior consultation on legislative changes, which would require a certain pre acceptance and could exacerbate their dignity and personality.

At the national level, the intensification of integration and globalization processes, the regional tax competition in capital attraction and the awareness of enhancing and increasing tax revenues induced frequent and dynamic changes in the structure of tax systems, which did not achieve the stability and consistency of the tax system, but created opportunities for the manifestation of corruption in the field of public finances, thus affecting the consolidation of a modern tax system based on practice and experience, on strengthening the preventive educational behavior of the tax authorities in their interaction with the taxpayers. These changes in tax systems, which transpose, in fact, amendments / changes to the tax code and the fiscal procedure code without a prior assessment of their impact in terms of adjustments required to the taxpayers, the tolerance of human behavior to the dynamics of legislative changes, the effect on the personal income and other important issues contained in the national tax culture can generate low degrees of collecting and a trend towards non-compliance from taxpayers, who will not feel morally obliged to fulfill their part of the institutional contract with the state, due to difficulties in understanding, adaptation and rapid application of new amendments.

The mechanisms and tools for modeling the behavior of taxpayers' non-compliance used by the tax authorities at national level (Leonida, 2013), present limiting characteristics, generated in particular by the limited and exclusively coercive instruments, oriented only on results without taking any human and social factors into account. They focus only on improving the collection of income without taking into account the relationship between taxpayers, tax inspectors and related equity aspects.

With the passage of time, the accumulation of certain experiences and the need to respect EU recommendations on the need to improve the fiscal discipline in the interaction between tax authorities and taxpayers have made some progress, specialized institutions were set up, the tax legislation was condensed into a tax code, a code of fiscal procedure has been developed, the proposed legislative amendments have entered a more intense public debate and independent institutional assessment, carrying out recommendations before the formalization of legislative proposals, the statistical reporting has improved and standardized quarterly and annual reports have appeared, since 2010, with specific indicators.

2. Description of taxpayers' behavior

The democratization of society in general, which includes the tax environment, as mentioned in the introduction, should consider adapting the regulations to the evolution of human processes, deepening transparency and other changes that would enable the taxpayers to benefit from better information, better educational knowledge, assistance and educational counseling in the application of the tax burden and, perhaps not least, the emphasis on personality and dignity in dealing with the tax authorities. Now, at least in Romania, a former socialist country, there is a certain gap between the willingness of taxpayers to be respected and the type of tax legislation, meaning that taxpayers have assimilated faster the rights and obligations involved by the establishment of democracy, while the State, by its authorities, recorded some delays in adapting the type of regulation, still practicing a control-control type of regulatory system.

Meanwhile, the taxpayers have mostly appropriated and adapted the principles required in a democratic society, while the tax authority has neglected placing the relationship with them in positions of priority, vigilance being almost exclusively related to the mentioned financing issues. This behavior of taxpayers expressed their position to the tax authorities and the tax system applied by coercion by them. It is indisputable that the vast majority of taxpayers has an honest position to the tax authorities, observe regulations and comply voluntarily, thus valuing democracy and the conditions that enable them to lead a decent life. There is a minority of taxpayers who are positioned, intentionally or unintentionally, to some

opposition to the tax authorities, trying various forms of partial or total avoidance of taxes resulting from economic activities.

The legislative harmonization encompassing both the aim and the objectives of tax authorities and the taxpayers' needs and requirements in a form mutually accepted seems to be time-consuming, requiring historical and experimental accumulations. The time history of the relationship between taxpayers and tax authorities, quantified by mutual accumulation and experience, which could turn into fiscal rules or be included in the existing rules, which increase their effectiveness at national level, is an important factor still untouched, as the modern tax system has a relatively short history. Also, in addition to the historical factor and the situational and frequent regulations, that minority of taxpayers in a certain opposition to the tax authorities, who exhibits a certain inflexibility, must accept and understand that in a democratic society there is a direct link between democracy, freedom and law and the respect for them.

3. Description of the interaction between tax authorities and taxpayers nationwide

As we have found to this point in our paper, except for a large majority of taxpayers who are willing to comply voluntarily to paying taxes, there are taxpayers who do not comply voluntarily, in which case the tax authorities must intervene and extinguish the flow of tax evasion by monitoring and detection mechanisms, recover damages and apply penalties, in which case a direct interaction occurs between the two sides.

The picture of the interaction between tax authorities and taxpayers is diverse and acquires shades of hostility, dispute and refusal to accept each other, but also shades of good cooperation, mutual openness and good communication. Amid these features, in the theories concerning the interaction between tax authorities and taxpayers, two types of interaction have been outlined: the antagonistic interaction and the synergistic interaction.

The antagonistic interaction features generally express a distance between tax authorities and taxpayers manifested by a lack of mutual trust. Such interaction creates a less cooperative environment, in which the authorities use exclusively control and punishment as methods and tools for modeling the behavior of non-compliance of tax payers. The taxpayers, under the coercive power of the authorities, feel treated as potential tax evaders and manifest adverse reactions, becoming tax-evaders or amplifying their non-compliance behavior. This type of interaction involves increasing the number of checks, namely high administrative costs, and its effectiveness is reduced.

The synergistic interaction features generally express a cooperative climate in which authorities are willing to provide advice and counseling to taxpayers. This type of interaction is based on transparency, respect and social partnership in which both parties have rights and obligations. The taxpayers' reaction to such treatment from the authorities is positive, of confidence, inducing, even by their attitude, positive contagion effects on the part of tax-evaders, thus supporting the tax authorities in their work. This type of interaction requires lower administrative costs and has a high degree of effectiveness.

In Romania, after a long period of civism imposed by the communist regime, changing the organization of the state and the strong feeling of freedom generated an anti-tax reaction, developing fiscal behaviors of various forms: underground economy, tax evasion, corruption, all of them being stimulated by loose and inadequate law to combat and prevent anti-fiscal behavior.

Against this background, the interaction between taxpayers and tax authorities embarked on a purely antagonist path, based on the force of law and authority, on limited instruments, inflexible to the needs of democratization of the Romanian fiscal system. The practices applied by the authorities to combat tax evasion and tax fraud demonstrated that the checks frequently pursued the effect, not the cause that had naturally to be fought to eliminate the effect.

With the passage of time, due to the accumulation of certain experiences and the need to respect international agreements, the interaction between tax authorities and taxpayers has

made progress , specialized institutions were set up, tax legislation has been condensed into a tax code and quarterly and annual standardized reports started to be drawn up, with statistical results showing the interaction .

The relationship between taxpayers and tax authorities is on an upward trajectory, with the tax strategies of the National Agency for Fiscal Administration showing a tendency towards a synergistic type of interaction by increasing taxpayers' advice and counseling.

4. Conclusions

The behavior of fiscal authorities aiming at achieving their purpose and objectives has not always been a constant consistent and objective one, which did not lead to a positive response from all taxpayers, amplifying some negative influences on a minority of taxpayers, which perpetuated the development of a tax evasion behavior among them.

Most taxpayers are aware of the need to improve interaction with the tax authorities in order to ensure the financing and provision of public goods at a qualitatively and quantitatively superior level and conforms to this goal, but the fiscal authority - taxpayer relationship is still tense, based on coercion and punishment, generated not specifically by the level of the tax burden, but by the perception of taxation, of the tax authority coercion and of the bureaucratic framework implemented by it.

The history of the last decades shows that people feel more comfortable and freer with the forms of democratic organization of companies and they have begun to be aware of freedom as a desire to be respected, especially by the authorities. Now, at national level, there is a certain gap between people's desire to be respected and the type of regulations, in the sense that people have assimilated faster the rights and obligations of democracy, while the state is lagging behind in adapting to the type of regulation. This individual freedom of taxpayers should be an important tool for modeling the regulation, from the command and control type to the type of regulation that ensure transparency, inducing educational effects and ensure greater compatibility with the human nature.

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LEADERSHIP VERSUS MANAGEMENT IN LOCAL PUBLIC ADMINISTRATION FROM ROMANIA

Sorina – Cristina, Marin¹

Abstract

Work entitled "Leadership versus Management in local public administration from Romania" is focused mainly on a document research of general aspects of leadership and public management.

In this regard, both major concepts plays an essential role, in theory as in practice from public administration, the role of thesis it is to bring out relief a analize comparing two of those, but with a trend of focusing in leadership, especially on delimitations of management leadership and exactly comparisons or report between manager and leader.

A clear image regarding the relation between both, with different and commune elements will help us understand their importance for a administrative system in reforming process, with a vision of developing a type of leadership for Romania.

Key words: *leadership, management, public administration, leader vs. public manager, administrative reform*

Clasification JEL: *D73, H1, H83*

1. Defining the terms of leadership and management

Leadership and management do not represent new or unique concepts in Romania. On the contrary, we come across them both in the state's private and public sector, but there appears to be an imbalance between approach, application and quantification, meaning that leadership was given more attention to in the private sector, being a topic which is continuously expanding, and less approached in the public sector, whereas management is met predominantly in the public sector.

Based on these facts, a comparative analysis of the two concepts will highlight the similarities and differences and will generate, why not, another reason for the current public administration, which talks about a deep reform, to accentuate idea of public leadership development.

Even if leadership is known worldwide as being efficient and is applied based on the characteristics of each country, in Romania, even though the issue of highlighting leadership during the process of administrative reform was addressed, nothing was done to cultivate the idea of leadership in the public administration, and even less when it came to finding a strategy in this regard.

Management, conceptually, as theory and applied science, is lawfully and indissolubly linked to the activity conducted by „the father of scientific management” – Frederik W. Taylor (1971), who really put his stamp on the thinking process and practice of management science, his contribution being thus recognized as a decisive input when it comes to applying science in the governance process.

The work of Henry Fayol (1916), known as „the father of management's modern theory”, is also remarkable through its outstanding valences, being dedicated to management's development. Thus, in his work entitled „General and industrial management”, which represents the base of his administrative views, he emphasizes the governance's role and functions, referring directly to: anticipation, organization, orders distribution, coordination and control.

In Romania, we talk about a public management which appeared as a separate field of the governance's science in the public sector after 1989 and which imposed the need for its rising, knowledge and development as a condition of solving the management crisis; it needed, obviously, to be formed and prepared accordingly in order to meet the Romanian

society's demands regarding the human resources from the public sector, meaning the permanent public officials and those selected who operate in the public administration institutions.

In the worldwide literature, which is rich when it comes to defining management, we come across more opinions, among which we can find that of Alexandru Puiu (2007), who said that the management, as a general meaning, „represents a system of concepts, methods and instruments which lead to orienting and leading an economic entity (national economy, company etc.) to achieve certain goals, in order to reach performances as high as possible”.

Peter Druker (1972) also said that „the manager directs the activity of others and achieves its activity by making others achieve theirs” or, summarized, „management equals the people who govern”.

We are still referring to Romania but, this time, we talk about a quite permissive leadership, meaning that it can have more meanings.

The explanatory Dictionary of the Romanian Language defines leadership as a governance activity or function. Even though this definition is pretty clear (if we talk about leadership, we talk about governance), it isn't enough to fully understand the concept.

Some definitions emphasize the governance as a process. For example, Jaques and Clement (1994) define leadership as a „process through which a person sets a goal or a direction for one or many people and makes them act together with competence and complete dedication in order to achieve them”.

Other definitions of leadership highlight the leader's capacity to make people to do something (which they wouldn't have done on their own) in order to achieve some goals or a common target. A third approach in defining leadership emphasizes the human relationships which form within it. This being said, Massarik, Tannenbaum and Wescheler (1961) define leadership as an „interpersonal influence, performed in a certain situation and directed through a process of communication towards achieving a goal or specific targets”.

Having said these, we can state that leadership and management actually represent distinct dimensions, even if they have common elements, meaning that leadership represents the capacity to determine people to act, whereas management ensures the achievement of goals through its functions.

1.1. Conceptual boundaries leadership - management

This subchapter doesn't aim to highlight different aspects that could put one of the two domains of activity on a pedestal at the expense of the other, on the contrary, even if leadership and management are totally different activities, they do not exclude each other, even more, they complete one another.

If the concept of management refers to “taking up responsibilities in order to achieve a goal and efficiently assigning resources (physical and human) to this end” and the concept of leadership refers to “the process of influencing and directing the members of an organisation towards achieving the goal”, Bennis and Nanus (1985) managed to summarize the difference between leadership and management into one phrase: “Managers are people who do things as they need to be done, and leaders are people who do the right things”.

Given the complexity and ambiguity of the concept of leadership, a confusion appears. Thus, the concept of leadership overlaps, for many people, with the process of management. In reality, the two, even if they have common features, are different concepts, and mentioning this difference is very important in order to describe the elements which define the ruling act (Clegg and Birch, 2002).

The two processes are different from each other, starting from their final aim.

When it comes to management, we talk about more efficiency and stability, whereas, in leadership, these goals are secondary, because the main attention is paid towards motivating and leading people in order to achieve the targets (effectiveness).

1.2. Managers and Leaders: Are they different?

The leaders represent managers or any other type of people who have a special capacity of leading collectives as broad as possible, including nations, who powerfully motivate their subordinates and channel them in order to achieve a certain goal; they are the people who possess the gift of influencing the faith of as many people as possible. Leaders are not always managers, they can simply be the first in their branch of activity. For example, we can say that Mihai Eminescu is the leader of Romania's poets or, as they say, „the Evening star of Romanian poetry” .

„A leader is born or formed?”

This is a question whose answer consists in the fact that these alternatives aren't necessarily exclusive. In order to become a leader one needs, without a doubt, innate special qualities, but these need to be cultivated and developed.

A powerful ruling requires innate talent, thus being an art, but it also needs some special skills and complex techniques, which can be achieved through school, experience, thus being also a science.

The same thing could also be said about the manager, you are not born a manager, you develop as a human and a specialist in this certain field through deep study, work, thus through experience.

A manager does not need to be brilliant, he must prove he is tough, consistent, intelligent, that he has strength of character, analytical skills, tolerance and benevolence (Zaleznik, 1977).

Even though Zaleznik perceives the leader and the management as complementary entities, they differentiate through motivation, way of thinking and manner of action.

Here are a few significant differences between a manager and a leader:

- The attitude they have when it comes to goals – managers tend to adopt impersonal, and even passive attitudes towards the proposed goals and see the fulfillment of these goals as a necessity rather than a desire; on the other hand, the leader is dynamic and adopts an open attitude, is active when it comes to goals, him being the one who determines the direction in which the entity is heading.
- How they perceive the work process – for managers, the instinct of conservation is the one which dictates the activities, they choose pragmatism most of the time, routine and safety when it comes to new situations which imply major changes; leaders, on the other hand, in order to be more efficient, awaken people's interest, adopt strategies which imply a higher risk and, when the chance of an opportunity and a reward seems promising, they are willing to seek risk or danger.
- Their relations with the organization's members – the manager's attitude towards human interactions can have different aspects, the desire for interrelationship, but also the preference of a lower degree of emotional involvement in these relations. Leaders interact in a more intuitive and emphatic manner. The difference arises between the manager's attention towards the manner in which the events happen and the leader's attention towards the event's semnification, as seen by the participants. An interesting feature is the way in which the subordinates characterize their managers or leaders. In their opinion, the manager is relentless, detached and manipulative, whereas the leader is described using adjectives with a highly emotional content.

For example, Alexandru Puiu (2007) makes a comparison in (table nr. 1) between the main characteristics of a manager-leader and a manager (regular), which doesn't interfere with the qualities that justify the leader.

Table nr. 1 : Comparison manager – leader and regular manager

MANAGER - LEADER	REGULAR MANAGER
A. Key features	
- Chooses, creates and produces events, enthusiasm, confidence;	- Allows the achievement of goals with the help of other people;
- Creates organizational groups and cultures;	- Relies on organizing and control;
- Has a long-term vision, lives in the present, but is concerned with the future;	- Carries out responsibilities, focusing mainly on the present;
B. Creating an agenda	
- Looks at situations in the context of the whole system.	- Looks at situations summarized at cell level.
C. Human relations system	
- Gathers people, offering them a purpose, using their passions, triggering their emotions, helps and supports.	- Encourages competition, organizes people according to rules, making use of its authority.
D. Implementation	
- Motivates and inspires people's effort to overcome political barriers, bureaucratic barriers and resource boundaries;	- Monitors the results, identifies the misconducts, replans the activity;
- Seeks new responsibilities.	- Is prepared to accept responsibilities.
E. Result	
- Leads to change, many times in a dramatic manner, engages in big international competitions, under the condition of sharp fluctuations in the market.	- Makes orders, has a certain predictability, has the ability to give consistency to some key-results.

Undoubtedly, the leader and the manager represent ruling positions, but the difference could be made by the managerial capacity, meaning the multidisciplinary ability.

2. Do we need leaders or managers in the public administration?

Yes, we do have managers in the public administration, and yes, we may need some leaders in the public sector, but we must identify and form the latter ones. Since 2003, with the help of European projects, we tried creating a board of public managers in the public administration but, unfortunately, 13 years apart, the results are not those hoped for, meaning that very few of them have truly become leaders in the public administration, others got lost through various ministries and aren't used at their true professional training, or very few of them even remember of the project entitled „public manager”.

It is obvious that we must watch the particularities of the public and private sector closely, particularities linked to leaders versus managers. This is because, in the private sector, the zero goal is profit, whereas in the public sector the zero goal is satisfying the beneficiaries' interests, so we witness a different type of leadership, because the managerial instruments used for implementing are also different.

If we talk about decisional, financial and motivational autonomy in the private sector, in the public sector everything changes, and we come across some economic variables (no money in the budget), human variables (staff shortage, etc.), motivational variables (lack of motivation and appreciation); it is hard to talk about a real type of leadership in

Romania and about the need of promoting a leadership which is specific to the public administration domain.

People wish for a reform of the public administration system in Romania and, even if we want a real reform, we must give leadership an important role in implementing the reform, because leadership contains two extremely important factors: people and change.

Why? Because leadership expresses itself only during human interactions and the changes that happen among employees, manifested through behaviour and mentality, represent the change in that specific entity. And, in order to have a successful reform of the public sector, we need to train leaders in the public administration, leaders which, at their turn, could help spread, promote and maintain the new values.

Leadership isn't a new or foreign concept in Romania's public sector, the problem is that its implementation was never a priority.

Studies show that other countries, such as Great Britain, Sweden, Holland, Austria, Germany, Norway, Iceland, New Zealand, USA, Finland, Poland, Japan have given high importance to this subject over the years, and the results have not ceased to appear.

Why not in Romania?

3. Strategies used for adopting a type of leadership in Romania's public administration

Even if the administrative reform started in stages and the public sector dealt with a lot of problems in Romania, our country owns such a human and intellectual capital that it could develop a certain type of leadership which could come up with solutions and could adapt to our country's public administrative structures.

According to an UNDP (United Nations Development Programme) report, in the present, in all the countries in the world, including Romania, arise more and more reasons to develop and apply the science of leadership; this is also because the leader of the public organization has to deal with creating visions regarding these organizations' manner of taking action in the future.

The leader, who is daring, full of judgement, open to new ideas and intuitions, is essential for a constant progress and superior achievements.

Today's Romania doesn't have a strategic system plan in order to develop leadership in the public administration, plan which should be included in the reform process. It doesn't even have, at least, governmental departments, institutions or work groups which could think and draw inspiration from successful Western models, so as to develop a leadership strategy in the public administration, to evaluate the public management's actual state and to develop the current public management programs in order to include programs of leadership development.

3.1. Proposals for developing a new type of leadership in Romania's public administration

1. Leadership should also exist as a priority issue of reform in the government's strategy of reform and administrative strengthening.

Due to the fact that the purpose of this work was doing a comparative analysis of the two concepts, leadership vs. management, focusing on leadership, the following suggestions, inspired from the foolhardies who studied the two concepts, could result in leadership activities within a project which could be entitled „Leadership versus Management Report. Promoting leadership in the public administration. Case study: Romania”.

2. During this project, the real state of the two fields could be evaluated and action plans to develop leadership could be created.

3. Action plans for generating a national strategy of leadership in the public administration, with public departments or institutions specialized in developing leadership in order to support the creation of methods of training and counseling the current and future leaders.

Conclusions

Leadership and management are two fundamental concepts for the administration's science. As I explained in this paper, the two domains complement rather than exclude each other.

They are highly important in the reform process for Romania's public administration, passing from a pre and pro-bureaucratic system to a post-bureaucratic system; both of them hold the vital role, meaning that the leader's role is that of setting vision and direction, and the management's role is that of streamlining the available resources.

Any need for a reform must implement, on one hand, a modern management system, one that is efficient, action responsible and responsive to citizens' needs, and, on the other hand, it must concentrate on promoting authentic leaders who can offer the necessary vision and guide the whole process.

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THEORETICAL EVIDENCES REGARDING METHODOLOGIES OF CALCULATING EFFICIENCY OF PUBLIC SECTOR

Asem Alshami¹

Abstract

This paper consists of the literature and practice investigation regarding measurements metrics of public sector performance. The proposed investigation begins with consideration of the features of the public sector and the difficulties to measure the performance due to multiple principals and multiple tasks. The analysis provides the limitations of performance measurement systems. Although a variety of performance measures exist, our investigation emphasizes need for creation of composite indicators (aggregate indicators) in the public sector used widely in infrastructure, health, social services, education, administration and other service areas. Despite the apparent simplicity of composite measures, our paper reveals that their use and interpretation raises several challenges: i) different methods and methodologies of constructing composite indicators (Data Envelopment Analysis (DEA), Free Disposal Hull (FDH) methodology, Principal Component analysis (PCA)); ii) the uncertainty influence on composite indicators; iii) the variation in performance due to factors beyond the control of managers or iv) the iterative consultative approach performance.

Key words: public sector, efficiency, performance, composite measures

JEL Classification: H11

1. Introduction

A proficient use of public resources and high-quality fiscal policies in dealing with economic growth and individual welfare had a place of utmost importance due to a considerable amount of developments achieved recently. Countries' scope for expenditure increases is hindered by macroeconomic constraints. Public spending is a difficult issue to tackle when addressed both empirical and theoretical. Nevertheless, from a practical point of view, the level of public expenditure must be decided on so as to increase social well-being. Each country has its own pace when it comes to dealing with expenditure levels and the impact that additional spending has on welfare gains is still in question. However, the specialized literature has proved over the years that when exceeding a certain threshold, benefits that come from larger public spending (calculated through better social and economic indicators) have a tendency to go down.

The objective of the paper is to provide empirical evidence and raise awareness regarding the effectiveness of some combination of the approaches, metrics, and processes used to assess the public sector performance, by extending and practice investigation regarding measurements metrics of public sector performance (PSP). The proposed investigation begins with consideration of the features of the public sector and the difficulties to measure the performance due to multiple principals and multiple tasks.

This study is composed of four sections, respectively: the opening part, the related studies analyzed in the second part in the field of semantics of the definitions, the third part comprises the methodology of the study regarding quantifiable and comparable performance measures, the fourth section includes the evaluation of the findings and finally the conclusions, limitations of the study and recommendations for further research in the final section of the paper.

2. Literature review

Assessing the qualitative and appropriately performance metrics is complex. There are at least four challenges that the public organizations face (Oracle, 2009):

1. Creating a truly transformational government;

¹ PhD Student, West University of Timisoara

2. Meeting heightened constituent expectations;
3. Managing workforce transition;
4. Minimizing the risks of implementing new technologies;

Study done by Sánchez and Bermejo (2007) clarified the relationship between public sector structure, performance and innovation in Europe, the empirical results emphasized that the EU's innovation system needed to be thoroughly reformed if the EU was to make an important shift towards realizing the broad features of which had been laid out in the Lisbon 2010 agenda. A structural reform and institutional change, and an emphasis on competitiveness based on science and on knowledge was a requirement for the Union to catch up with the United States and the energetic Asian economies, and public sector had a key role in this process

In the study Tanzi and Schuknecht did (2000), they clarified the relationship between higher public sector expenditure and higher socio-economic indicators, used the macro approach but they did not reach any relation of higher benefits with higher public expenditure. For this study 18 industrialized countries were in sample. At the same time, the countries with lower public expenditure had good socio-economic indicators. In a later study, Afonso, Schuknecht and Tanzi (2010) evaluated the result of public policies and the relationship between the resources used to measure government performance and efficiency through the concepts of Public Sector Performance (PSP) and Public Sector Efficiency (PSE) applied, at first, to a sample of twenty-three industrialized countries and later on to a handful of developed economies. The conclusion was that small governments got better indicators and were at the same time more efficient than bigger governments. We also found in Hauner and Kyobe (2008) that the rich countries had better public sector performance and efficiency and the institutional and demographic factors also had an important role. Another finding was that higher government expenditure to GDP tended to be in relation with lower efficiency in the sector.

When it came to measuring efficiency, an estimation of costs, an estimation of output and a comparison between the two would be required. The productiveness of this concept, applied to the spending activities of government was seen when, given the amount spent, it produced the largest possible benefit for the country's population. This comparative sense of efficiency could be applied to total government expenditure or for expenditure related to functions such as health, education, poverty alleviation, building of infrastructures etc. The comparison implied that costs as well as benefits should be measured in acceptable ways. It might have been easy with machines but difficult with governmental activities. As far as the benefits from a governmental expenditure were concerned, it was most difficult to measure them appropriately: 1. deficient budgetary classifications; 2. lack of reliable data, 3. difficulties in allocating fixed costs to a specific function; and 4. failure to impute some value to the use of public assets used in the activity, could also hamper the determination of real costs.

In both profit and non-profit organizations, efficiency and effectiveness were the central terms in assessing and measuring their performance (Mandl, 2008; Hájek, Stejskal, 2014). However, there was confusion in determining the conceptual meaning of what effectiveness, efficiency and the overall performance meant.

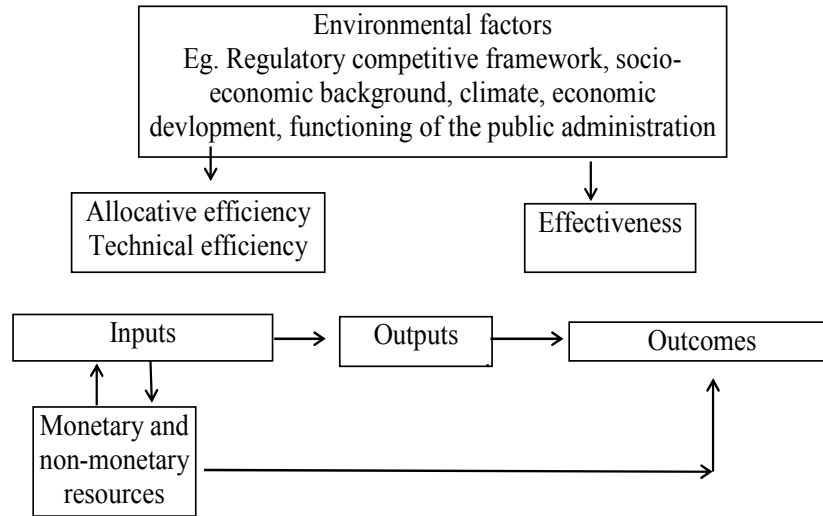


Figure no. 1 Conceptual framework for efficiency and effectiveness

Source: Mandl, 2008

Figure 1 depicts input, output and outcomes. Inputs consist of monetary and non-monetary resources used in the public sector to produce an output (e.g. health expenditure affects the health care system) consequently the input-output ratio is the basic measure of efficiency.

Efficiency and effectiveness are the two mutually exclusive components of the overall performance measure yet they may influence each other more specifically; effectiveness can be affected by efficiency or can have an impact on efficiency as well as have an impact in overall performance (Kumar, 2010).

Methods for measuring efficiency and effectiveness of the public sector and then the overall performance have a common point how to calculate and measure the sharp of the efficiency frontier (Keh, 2006) and this may be possible by using both parametric and non-parametric methods.

3. Data and Methodology

As was mentioned by Afonso, Schuknecht and Tanzi, (2006, 2013), public sector performance was assessed by composite indicators based on measurable socioeconomic variables which the pursued public policies had as a result. Thus, the PSP for country i with j areas was determined by:

Where $f(I_k)$ was a function of k observable socio-economic indicators.

While Afonso et al, (2006) defined at least seven indicators of public performance, we define these indicators as two main parts, the first part includes four indicators: administrative, education, health, and infrastructure. All these indicators tried to reflect quality of the action between fiscal policies and market process and the influence on individual opportunities. The second part had three indicators reflecting the Musgravian tasks for government, these three indicators were distribution, stability and economic performance. All these (three) indicators tried to measure the outcomes of the interaction and reactions to the market process by government. The public sector performance depended on the value of economic and social indicators (I). For example there are i countries and areas j of government performance which together determine performance in country i , PSP_i :

$$PSP_i = \sum_{j=1}^n PSP_{ij} \quad (2)$$

With $PSP_{ij} = f(I_k)$

Table no. 1 World governance indicators

International Organization Authors	Indicators	Description	Website
World Bank	1. Voice and Accountability	“Captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media”.	http://info.worldbank.org/governance/wgi/index.aspx#home
World Bank	2. Political Stability and Absence of Violence	“Terrorism measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism”.	http://info.worldbank.org/governance/wgi/index.aspx#home
World Bank	3. Government Effectiveness	“Captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies”.	http://info.worldbank.org/governance/wgi/index.aspx#home
World Bank	4. Regulatory Quality	“Captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development”.	http://info.worldbank.org/governance/wgi/index.aspx#home
World Bank	5. Rule of Law	“Captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence”.	http://info.worldbank.org/governance/wgi/index.aspx#home
World Bank	6. Control of Corruption	“Captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests”.	http://info.worldbank.org/governance/wgi/index.aspx#home

Source: The Worldwide Governance Indicators (WGI) project
<http://info.worldbank.org/governance/wgi/index.aspx#home>

Lobont (2011) realised a critical analysis of different ways to perceive “quality of governance” or “good governance”. The author highlighted the most important elements of institutional architecture: i) Degree of Democracy, ii) Quality of Governance through its six dimensions presented by World Bank, iii) Corruption, iv) Level of Integrity, v) Fiscal Policy items, vi) Political Conditions for Economic Reform, and vii) Economic Freedom. A more detailed approach can be found in Lobont (2013).

From all these indicators, we found that Quality of Governance through its six dimensions presented by World Bank Table(1) reported aggregate and individual governance indicators (these indicators were calculated for 215 economies over the period 1996–2014), for six dimensions of governance. These aggregate indicators combined the views of a large number of enterprise, citizen and expert survey respondents in industrial and developing countries. They were based on over 30 individual data sources produced by a variety of survey institutes, think tanks, non-governmental organizations, international organizations, and private sector firms.

Lobont (2012), provided a synthetic evaluation of five fragility metrics (The Failed States Index, The Global Peace Index, The Human Development Index, The Index of State Weakness and The State Fragility Index and Matrix) in a study for Romanian societal-systems regarding its political, security, economic and social fragility.

State fragility index's ranks were based on twelve indicators of state vulnerability, namely four social indicators, two economic indicators and six political indicators. (Table2) The indicators were not designed to forecast when states might experience violence or collapse. Instead, they were meant to measure a state's vulnerability to collapse or conflict.

Table no. 2 Indicators of state vulnerability

Indicators	Sub-Indicators
Social Indicators	1. Demographic pressures; 2. Massive movement of refugees and internally displaced persons; 3. Legacy of vengeance-seeking group grievance; 4. Chronic and sustained human flight;
Economic Indicators	5. Uneven economic development along group lines; 6. Sharp and/or severe economic decline;
Political Indicators	7. Criminalization and/or delegitimation of the state; 8. Progressive deterioration of public services; 9. Widespread violation of human rights; 10. Security apparatus as "state within a state"; 11. Rise of factionalized elites; 12. 12. Intervention of other states or external factors;

Source: WorldBank, Database, (1996–2014), States Of Fragility

In general, the quality and accuracy of composite indicators should evolve in parallel with improvements in data collection and indicator development. From a statistical point of view, the construction of composite indicators can help identify priority indicators for development and weaknesses in existing data.

4. Results and Conclusions

Despite the apparent simplicity of composite measures, our paper reveals that their use and interpretation raises several challenges: i) different methods and methodologies of constructing composite indicators (Data Envelopment Analysis (DEA), Free Disposal Hull (FDH) methodology, Principal Component analysis (PCA)); ii) the uncertainty influence on

composite indicators; iii) the variation in performance due to factors beyond the control of managers or iv) the iterative consultative approach performance.

Composite indicators are synthetic indices of individual indicators and are increasingly being used to rank countries in various performance and policy areas. We need to use composite indices because the composite indicators are useful in their ability to integrate large amounts of information into easily understood formats based on the basis of socioeconomic variables and are valued as a communication and political tool. Composite indicators are increasingly being used to make cross-national comparisons of country performance in specified areas such as competitiveness, globalization, and innovation.

In general, the quality and accuracy of composite indicators should evolve in parallel with improvements in data collection and indicator development. From a statistical point of view, the construction of composite indicators can help identify priority indicators for development and weaknesses in existing data. The current trend towards constructing composite indicators of country performance in arrangement with policy fields may provide an impetus to improving data collection, identifying new data sources and enhancing the international comparability of statistics.

We noticed that the Public sector performance as defined by Afonso, Schuknecht, and Tanzi (2006) was assessed by constructing composite indicators based on observable socioeconomic variables.

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EFFECTS AND IMPLICATIONS OF THE IMPLEMENTATION OF IFRS 15 - REVENUE FROM CONTRACTS WITH CUSTOMERS

Veronica, Grosu¹,
Marian, Socoliuc²

Abstract:

The Standard IFRS 15 - Revenues from Contracts with Customers was developed by the IASB in order to replace some of the IAS and US GAAP standards still in force, as well as to introduce significant changes to the accounting of revenues. For most companies, the implementation of this standard will result in significant effects on accounting and reporting techniques, on the business processes and the IT systems, as it practically changes the reasoning used for revenue recognition. This paper is focused on the future implementation of the IFRS 15 and on its impact on the company's performance.

Keywords: IFRS 15, revenue, recognition and measurement, IAS/IFRS.

JEL Classification: M 41

1. INTRODUCTION

The IFRS 15 - *Revenues from Contracts with Customers* accounting standard was published, on May 28, 2014, under the IFRS-USGAAP convergence process initiated by the IASB (*International Accounting Standard Board*) and the FASB (*Financial Accounting Standard Board*); on the same date, the FASB published a document entitled: *Accounting Standards Update 2014-09- Revenues from Contracts with Customers* (FASB, topic 606, 2014).

The objectives of this standard, which are themselves convergent, are geared towards creating a complete reference frameworks in terms of revenue reporting, being applied to all commercial contracts, excluding leasing, insurance contracts, and financial instruments.

IFRS 15 practically replaces IAS 18 – Revenues, IAS 11 - Construction Contracts, IFRIC 13- Customer Loyalty Programs, IFRIC 15- Agreements on construction of real estate properties, IFRIC 18- Transfer of assets from customers, SIC 31- Revenues - Barter transactions involving advertising services.³ The applicable accounting standards for revenue recognition, such as IAS 18 - *Revenues* and IAS 11 - *Construction Contracts*, were issued more than 20 years ago, and most professionals consider them to be incomplete and outdated; these two accounting standards were supplemented, over the years, by many interpretations.

For example, IAS 11 defines a construction contract as a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology, function or their ultimate purpose or use." The objective of this standard is to prescribe the accounting treatment of construction contracts. The primary issue in accounting for construction contracts is the "allocation of contract revenue and contract costs to the accounting periods in which construction work is performed." This standard establishes, inter alia, the recognition criteria used to determine when contract revenue and contract costs should be recognised in the profit and loss account.

¹ Faculty of Economic Sciences and Public Administration, Stefan cel Mare University, Str. Universității 13, 720229 Suceava, Romania, email: veronicag@seap.usv.ro

² Faculty of Economic Science and Public Administration, Stefan cel Mare University, Str. Universității 13, 720229 Suceava, Romania, email: marians@seap.usv.ro

³ IFRS 15 applies to the financial years beginning after January 1st, 2017, <http://www.infolegal.ro/standardul-ifrs-15-se-aplica-exercitiilor-financiare-care-incep-dupa-1-ianuarie-2017/2014/07/24>

It is known that the adoption of IAS/IFRS leads to changes in the financial reporting system of reporting entities and, obviously, to a review of the criteria for recognition, measurement, and presentation of property items in the financial statements (Grosu, 2010).

In our country, according to OMPF 881/2012, starting with the 2012 financial year, listed companies are required to adopt IFRS for individual annual financial statements.¹

Since the objective of financial statements is to present information on the company's performance, financial position, and evolution, aimed at a large number of users, in order to substantiate economic decisions, this information must be useful to determine both the capacity of the enterprise to generate future cash flows, as well as the amount, period, and safety of their generation (Tabără et al, 2009).

Returning to the new IFRS 15 standard, its role is to promote two types of approaches to revenue recognition, namely: the first approach is the recognition *at a point in time* and the second is gradual recognition, *over time*. At the same time, IFRS 15 distinguishes itself by the application of a five-step model, used to analyse transactions and to determine how the revenues are to be recognised, related both to the period of time when they were derived, and to their value.

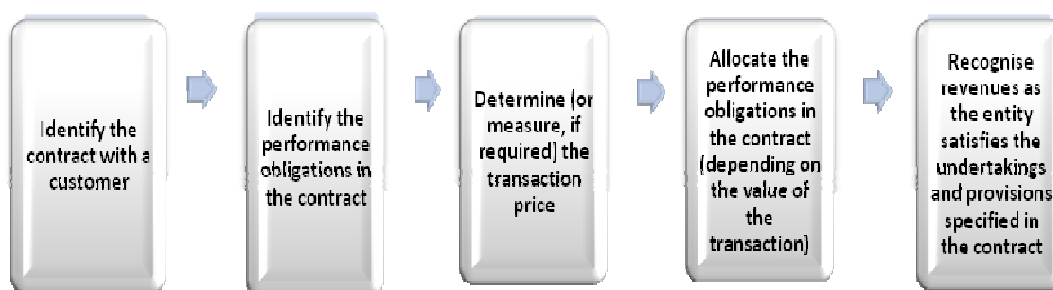


Figure 1- The five-step model used for revenue recognition, under IFRS 15

Source: IFRS, News Letter, no 3, 2010, Ordine dei Dottori Commercialisti e degli Esperti Contabili di Milano Commissione Principi Contabili

The basic principle of the IFRS 15 standard is that entities that adopt IAS/IFRS in the preparation of financial statements must recognise revenues when the transfer of goods or the provision of services occurs, and they must be expressed by an amount corresponding to the consideration or payment that the entity expects to receive.

IFRS 15 will therefore improve the accounting reporting of revenues and the overall increase in comparability of the information included in the financial statements. In this way, the new accounting standard will enable the optimisation of information related to revenues, will provide a series of guidelines for subsequent operations, which were not included expressly (such as revenues from services, revenues from additional services or from some contractual changes), and will also contribute to improving information on multiple-element arrangements.

The approval process of IFRS 15 is ongoing, and EFRAG concluded, in relation to its approval, that this accounting standard meets all relevant criteria, including those relating to the European public interest. EFRAG also considers that the advantages of applying IFRS 15 should exceed the related costs. In order to complete the approval process of IFRS 15, the EFRAG Council took into account all the remarks received from members and considered that this standard may have positive effects on the cost of capital, and was unable to identify any possible adverse effects on the European Commission. The final opinion on the approval, drawn up in

¹OMPF 881/2012 on the application of the International Financial Reporting Standards by companies whose securities are admitted for trading on a regulated market, Art. 1.

March 2015, contains this observation (Relazione Della Commissione Al Parlamento Europeo E Al Consiglio sulle attività della Fondazione IFRS, dell'EFRAG e del PIOB, 2014).

In 2014, EFRAG participated in the consultation process of the IASB and published a series of letters containing remarks, after the public consultation in relation to all IASB decisions, including the *Conceptual Framework* (EFRAG, Annual Review, 2014). EFRAG has also continued discussions on the draft regarding leasing operations and on the draft of IFRS 4 - *Insurance Contracts*.

2. EFFECTS AND IMPLICATIONS RELATED TO THE IMPLEMENTATION OF IFRS 5

Under IFRS 15, obligations (undertakings) and contractual provisions may be considered fulfilled at a given time (e.g. following the delivery of a good), or during a certain period of time (e.g. the provisions of a service).

IFRS 15 defines income as "increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities, which result in an increase in equity, other than those relating to contributions from equity participants" (IFRS 15- Revenue from contracts with Customers)

IAS 18 - *Revenue*, still in force until the implementation of IFRS 15, specifies that revenue (IAS 18 – Revenues, 2013) should be recognised when it is probable that the entity will obtain future economic benefits associated with the increase in value of an asset or with the decrease of a liability, and their measurement can be done reliably and with sufficient certainty. In practical terms, however, as required by IAS 18, the revenue recognition criteria are usually applied separately to each transaction in order to reflect economic reality. For example, when the selling price of a product includes an identifiable amount for successive services, this amount is recorded in advance and recognised as revenue over the period in which the service was performed.



Figure 2 - Transactions covered by IAS 18 - *Revenues*

We should also take into account the fact that legislative differences in different countries may cause the revenue recognition criteria to be fulfilled at different times (IAS 18, 2013).

The International Accounting Standard 18 "Revenues" aims to determine the accounting treatment of revenue arising from certain types of transactions and events. Revenues are defined in the General Accounting Framework for the Preparation and Presentation of Financial Statements as "increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities, which result in an increase in equity, other than those relating to contributions from equity participants." This standard identifies the circumstances in which revenue recognition criteria are met and revenues recognised.

Under IAS 18, the conditions that must be met for revenue to be recognised are:

- a) it is probable that certain economic benefits will flow to the entity in the future;*
- b) the economic benefits can be measured reliably.*

The main new elements that can be identified in IFRS 15 (IFRS, News letter, 2010), at first reading, are:

- Concentrating (treating all accounting aspects) all types of revenue into a single standard;
- Introducing a model based on the concept of transfer of control; in fact, IFRS 15 indicates revenue recognition and transferability of control over goods and services to customers, while the basic criterion for revenue recognition is based, in the current standard, on the concept of transfer of risks and rewards;
- The measurement of revenues based on the consideration that the entity considers it is entitled to receive (or collect) under the contract, while IAS 18 requires revenues to be measured based on the fair value related to the received or expected consideration. Therefore, there is a shift from a neutral or subjective criterion, such as fair value, to a perspective that simplifies the subjectivity of measurement;
- The introduction of new and specific criteria to allocate the consideration for goods or services rendered under the same contract (unbundling);
- The introduction of a specific regulation to account for *variable* or *potential* consideration.

Also of note, the fact that IFRS 15 substitutes IAS 11 - *Construction Contracts* containing recognition criteria not only for revenues, but also for expenditure related to works in progress. These issues are partly reflected in IFRS 15. At the same time, IFRS 15 extends the mandatory information disclosed in the notes, in terms of quantity and quality, in order to enable users of financial statements to better understand the nature, value, appropriateness and potential uncertainties related to obtaining revenue and the related cash flow, derived from customer contracts. It is therefore necessary to pay more attention to the development of the *Explanatory Notes*, given that this information could include data on conducting business and prospects for investors, which in the past were not provided.

Among the expected effects resulting from the implementation of IFRS 15, we would like to mention the perfect timing (early or delayed, depending on the current standards in force) for revenue recognition, as well as the application of different methods (e.g. revenue recognition *over time*, rather than recognition upon obtaining or vice versa). However, the above topics will condition, directly or indirectly, the contract type or the business practices, especially when using clauses which specify the amount of the margin, but which can result, after the introduction of the new IFRS 15, in significant effects on the revenue recognition criteria.

In order for IFRS 15 to apply, the customer contracts must meet certain conditions, as shown in the Figure 3 below.

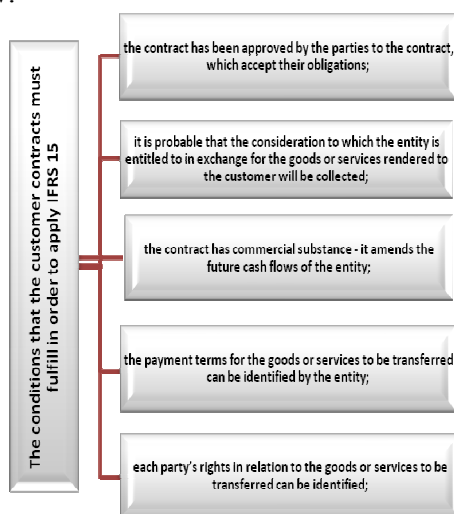


Figure 3 – Conditions set out in IFRS 15 for customer contract recognition

Source: IFRS 15 Revenue from Contracts with Customers, Summary, PKF, p. 2,
<http://www.pkf.com/media/31867/IFRS%2015%20Summary.pdf>

In conclusion, IFRS 15 could indirectly have relevant effects on tax procedures, on tax planning strategies, and on certain taxation obligations (constraints) (*financial covenants*), etc.

The implementation of IFRS 15 will occur in the financial year 2017 (or afterwards), early implementation being permitted only if the IASB document is already approved by the EU.

For the purposes of the first implementation, IFRS 15 will be implemented retroactively, and certain simplification techniques (*practical expedients*) are also allowed, as well as an alternative approach (*cumulative effect approach*) which will avoid the re-exposure of the years presented in the comparative information; in the latter case, the effects deriving from the application of the new standard will be presented in its equity structure, for the financial year in which the IFRS 15 is first applied. It should also be noted that, for the purposes of the implementation of the IFRS 15 accounting standard, the IASB and the FASB have created the *Joint Transition Resource Group for Revenue Recognition*, in order to identify and discuss possible issues regarding its implementation.

In other words, IFRS 15 is the only reference resource for entities and lines of business i

Example 1: *The company Enea delivers to the company Universia goods worth RON 10,000. After a short time, Universia's ability to pay is proven to have impaired significantly. In this situation, under IFRS 15, Enea analyses whether it can receive the consideration in exchange for the goods to be transferred to the customer.*

If an amendment to a contract generates additional obligations, then such amendment constitutes a separate contract, and if it does not generate additional obligations, the amendment is considered an adjustment to the initial contract.

Example 2: *A contract for the interior remodelling of a hostel has an estimated price of RON 50,000, the total costs incurred by the company which remodels the hostel being of RON 35,000.*

Near the end of the contract, the customer requests changes that result in a change in total costs amounting to RON 1,000 and in a change in price amounting to RON 2,000.

In this case, the change is treated like an adjustment to the initial contract, since it does not generate additional obligations.

Identifying the performance obligations in the contract

Any contract includes certain obligations to transfer goods or services to a customer. In this regard, an obligation to transfer a good or to render a service to a customer is deemed severable if the following conditions are met cumulatively:

- The customer can benefit from the goods or services transferred separately or together with other available resources;
- The promise of the entity to transfer the goods or services to the customer is identified separately from other promises under the contract.

Example 3: *A construction company enters into a contract with a customer to build a warehouse, as well as interior fittings, connection to utility networks and other specific works. Based on this information, the construction company identifies the following obligations arising from the contract:*

- *building the warehouse;*
- *completing interior fittings*
- *connection to utility networks*
- *other specific works.*

Remark: There are various companies that provide guarantees to customers for goods delivered or services rendered. If the customer receives the guarantee in question, this constitutes a separate obligation, because it provides the customer with an additional service. If the guarantee means that the delivered good meets certain specified conditions, then it does not constitute a separate obligation. Basically, the exact determination of the performance obligations requires the separate registration of all items.

Determining the transaction price

The entity must determine the amount of the consideration that it must receive in exchange for goods and services promised in the contract, in order to recognise revenue. The transaction price may be a fixed amount, and may vary as a result of discounts or bonuses granted.

Example 4: *A company enters into a contract with a customer for the construction of a parking lot in an urban area with access to a national road, for the price of RON 75.50 million. The company must pay penalties if the deadlines for the completion of works are not observed.*

The example shown includes a fixed component, the transaction price, i.e. the price of RON 75.50 million, and a variable component, i.e. the penalty.

Example 5: *A company sells computing equipment to a customer in exchange for a price of RON 10,000. The cost of production of the equipment amounts to RON 8,000. The customer may return the products within a maximum of four months.*

As evidenced by this example, the consideration obtained in exchange for the transfer of the equipment is variable, as it is influenced by the number of devices that are estimated not to be returned.

Let's assume that 90% of the equipment will not be returned.

The supplier believes that no significant cancellation of the accrued revenues will occur when the uncertainty associated with the variable consideration is removed (i.e. upon expiry of the 4-month period).

*Therefore, the revenues recognised by the entity is of RON 10,000 * 90% = RON 900.*

If the consideration received by the supplier from the customer is non-monetary in nature, it shall be measured at fair value (Gîrbină, 2014).

IFRS 13 - *Fair value measurement* defines fair value as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date." Also, fair value measurement takes into account the characteristics of the asset or liability, such as asset location and restrictions on the sale or use thereof (IFRS, Part B, 2013).

If fair value cannot be determined, it is estimated indirectly, considering the selling price of the goods and services transferred to the customers.

If a customer makes available to the company goods and services to facilitate the performance of a contract by the company, the latter will establish whether it acquires control over such goods and services. Therefore, goods and services received are considered non-monetary consideration from the customer (Gîrbină, 2014).

Allocating the transaction price among the performance obligations generated by the contract

When a contract includes several separate obligations, the company allocates the transaction price to each obligation, depending on its individual price. The price of each obligation is determined considering the price in exchange for which the good or service is sold separately by the entity. If this price is not observable, the entity must estimate it.

Example 6: A supplier enters into a contract with a customer that provides for the sale of three categories of products: detergents, beauty products and cleaning products, at the price of RON 7,000.

The company usually only sells detergents and beauty products, therefore the price of these products is directly observable. For the cleaning products, the prices may not be observable, as usually the entity does not sell these products separately. Under IFRS 15, the prices for the final product should be estimated.

The prices for the 3 products are:

- detergents: RON 4,000
- beauty products: RON 2,000
- cleaning products: RON 2,000

TOTAL = RON 8,000

The supplier gives the client a discount of RON 1,000, which is distributed between the 3 products proportionately to their selling price.

The selling price of RON 7,000 (RON 8,000 minus discount of RON 1,000) is allocated between the 3 products as follows:

- detergents - $\text{RON } 4,000 / \text{RON } 8,000 \text{ lei} * \text{RON } 7,000 = \text{RON } 3,500$
- beauty products - $\text{RON } 2,000 / \text{RON } 8,000 \text{ lei} * \text{RON } 7,000 \text{ lei} = \text{RON } 1,750$
- cleaning products - $\text{RON } 2,000 / \text{RON } 8,000 * \text{RON } 7,000 = \text{RON } 1,750$

As seen at this stage, the selling price specified in the contract is the price of all the goods or services sold to a customer. If the price is not specified for each item, it can be estimated.

Recognising revenue as the entity satisfies the performance obligation

According to the new rules, revenue is only recognised when a performance obligation is satisfied. In other words, the performance obligation is satisfied when control over the goods and services is transferred to the customer. This type of control implies the ability of the entity to decide on the use and to obtain benefits in relation to the transferred goods or services.

This obligation generated by the contract may be satisfied *at a point in time* (this usually happens in the case of a transfer of goods, or it can be completed over time) for promises to transfer goods or services at a certain point in time (Gîrbină, 2014).

The changes occurring under the new standard require the detailed identification of items of goods and services, of their price, as well as of the manner in which the performance obligations are recorded and satisfied. The changes can be made both by the termination of the original contract and drafting a new contract, and by means of an addendum to the original contract, if the nature of the goods or services is not different.

The change of the elements of the contract will have an impact on allocation and revenue recognition, compared to current date records. This revenue treatment, prescribed by IFRS 15, differs from the one accepted by IAS 18- Revenue. Under IAS 18, revenue is recognised when most risks and rewards of ownership of the goods are transferred to the customer.

IAS 18 also establishes different criteria for recognising revenues from the sale of goods and revenues from services, which are presented in Table 1.

Table. 1- Revenue recognition criteria under IAS 18

The sale of goods	The rendering of services
<p>Revenue is recognised when all the conditions are met:</p> <ul style="list-style-type: none"> • the entity has transferred to the customer all the significant risks and rewards of the ownership of the goods; • the entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold; • the amount of revenue can be measured reliably; • it is probable that the economic benefits associated with the transaction will flow to the entity; • the costs incurred or to be incurred in respect of the transaction can be measured reliably. 	<p>When the outcome of a transaction involving the rendering of services can be estimated reliably, the revenue associated with the transaction must be recognised depending on the stage of completion of the transaction at the end of the reporting period (IFRS, part A, 2013).</p>

Source: IAS 18 - Revenues

In what concerns the revenue recognition criteria under IFRS 15, they can be observed in Table 2.

Table 2- Revenue recognition criteria under IAS 15

At a certain point in time	Over time
<p>Revenue is recognised after analysing the following conditions:</p> <ul style="list-style-type: none"> • the entity has transferred the good to the customer; • the entity has the right to claim payment for the asset; • the customer has accepted the asset; • all risks and rewards of ownership of the asset were transferred to the customer/the customer is the owner of the asset. 	<p>Revenue is recognised when at least one of the following conditions is met:</p> <ul style="list-style-type: none"> • The customer receives the services rendered by the entity and enjoys the benefits as they are provided by the entity; • the rendering of services by the entity gives rise to an asset or increase its value. In these circumstances, the asset is controlled by the customer as it is created or as its value is increased; • the rendering of services by the entity does not give rise to an asset that has an alternative use to the entity, and the entity is entitled to payment for the services rendered so far.

Source: IFRS 15 - Revenues from contracts with customers

To determine whether the asset has an alternative use, the seller will have to consider, at the beginning of the contract, if it can use the asset for a purpose other than that specified in the contract entered into with the customer. Regarding the costs incurred by the entity to obtain contracts, they must be recorded as expenses, except those that would have been incurred if the contract had not been obtained. The changes provided in IFRS 15 will have a major impact in terms accounting for long-term contracts.

Example 7: *A supplier sells a machine to a customer and undertakes to pay its upkeep for a period of 4 years.*

Under IFRS 15, this clause creates an obligation that will contribute to an increase in performance (by the revenue generated by providing maintenance services) to be accounted for separately from the revenue resulting from the sale of the machine. These latest revenues will be estimated before being reported, since they can vary depending on factors that are still unknown, such as machine maintenance costs.

If the supplier anticipates providing maintenance services, the related revenues can be recognised and recorded as deferred income.

Under IAS 18, this revenue can only be recognised at the time the services themselves are performed.

Source: adapted from Gîrbină M., *Noi prevederi internaționale privind recunoașterea veniturilor II*, <http://www.curierulnational.ro/print/217186>.

As noticed from the examples mentioned, revenue is recognised as deferred income, as a result of the clause, stipulated in the contract, which specifies the rendering of services at a later date, that that have no connection with the object of the contract, i.e. the sale. The *performance obligation* is a promise to transfer a good or service, or a distinct group of goods or services.

The transfer of control determines the recording of revenue in the accounting records when the goods or services are transferred to the customer (IFRS 15, 2014).

Example 8: *An author receives an offer from a publisher to publish an article for free, provided that the author takes up a monthly subscription to one of the publisher's journals, the subscription amounting to RON 30/month. The minimum subscription period stated in the contract is of 3 years.*

Step 1. Identifying the contract with a customer

There is a clear obligation between the two contracting parties, over a period of 36 months.

Step 2. Identifying the performance obligations in the contract

- the obligation to provide free publishing services
- the obligation to deliver the journal included in the subscription contract, for 36 months

Step 3. Determining the transaction price

The transaction price is $RON\ 30 \times 36\ months = RON\ 1,080$

Step 4. Allocating the transaction price among the performance obligations generated by the contract


The publishing house usually publishes an article in exchange for the price of RON 200, and a monthly subscription amounts to RON 20.

Performance obligation	The sale price	%	Revenue recognised and recorded in the supplier's (publisher's) accounting records
Article publication	$200 \times 1 = RON\ 200$	21.74%	$RON\ 200\ (21,74\% \times RON\ 920)$
Subscription	$720\ (RON\ 20 \times 36\ months)$	78.26%	$RON\ 720\ (78.26\% \times RON\ 920)$
Total	$RON\ 920$	100%	$RON\ 920$

Step 5. Recognising revenues as the entity satisfies the performance obligation

When the publishing house publishes the work of the author, it must recognise and record revenues amounting to RON 200; the IFRS 15 standard allows the recording in the accounting books, during the month of the article publication, of a revenue equal to their real value. When the publishing house offers subscription services to the person who benefited from the free publication, it must recognise revenues amounting to RON 720.

During the month the article was published, revenues amounting to RON 200 are recorded, revenues that will be collected over a period of 3 years, as provided in the subscription contract.

Type of operation	Debit	Credit	Amount	Time of revenue recognition, in the accounting books
Monthly recording of the subscription to the journal published by the publishing house	Petty cash in RON	% Revenue from services VAT	37.2 30 7.2	
			21.74 (RON 920/36 months)	Revenue from article publication
			78.26 (920/36 months)	Revenues from monthly subscript.

We assume that the contract will start on March 1, 2017, and at year-end the publishing house will record the following values under profits earned as a result of applying IAS 18 and IFRS 15:

Performance obligation	In accordance with IAS 18	In accordance with IFRS 15
Publishing services	0	21.74
Revenues from monthly subscription	$300\ (10\ months \times RON\ 30/month)$	$782.60\ (10\ months \times RON\ 78.26/month)$
Total	300	804.34

As seen from the above example, the application of IFRS 15 will have a different effect on the amount of revenue recorded and, therefore, on the performance of the company. However, the most important element introduced by the new rules relates to how the contracts are drawn up. Contracts should contain new elements that can properly record all revenue items, depending on their nature and the date on which they can be recognised.

If the company applies IAS 18, it will not record any revenue at the beginning of the contract, and afterwards they will be at a constant level, because it will recognise revenue as invoices are issued to customers. Under IFRS 15, the final amount of the revenue is the same, but their recording is different, in terms of moments in time (IFRS 15 vs. IAS 18).

3. CONCLUSIONS

In 2014, the IASB completed and prepared two important accounting standards, which have an important contribution to the information of users of financial statements, namely IFRS 9 - *Financial Instruments* and IFRS 15 - *Revenue from contracts with customers*, also achieving considerable progress in other major projects. IFRS 15 is intended to provide economic entities with complete and updated information, for the purposes of revenue recognition.

After a positive assessment by EFRAG, this standard is currently under approval; the final opinion of EFRAG on the approval of IFRS 15, compared to the other IFRS standards, considers that it is an accounting norm that is flexible enough to cover the different types of business (however, attention should be paid to the conceptual accounting framework, which attaches great importance to types of business).

In conclusion, we can say that IFRS 15 is much more complex than the standards it replaces, and its preparation is justified, as old rules were unable to reflect the complexity of modern business operations. At the same time, due to the fact that IFRS 15 replaces older accounting standards and their related interpretations, the new provisions are contained in a single document.

IFRS 15 is also an effective tool in avoiding financial volatility, given that it contains specific provisions that apply to situations of uncertainty in relation to the recognition of future revenues.

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APPROACHES AND CLARIFICATIONS ON THE IFRS 13 APPLICATION - FAIR VALUE MEASUREMENT

Marian, Socoliuc¹,
Veronica, Grosu²

Summary: *The objective of this article is to analyze the new changes within the application of IFRS 13 in order to solve a problem of "incoherence representative" between the financial statements, where certain asset components were presented at the fair value by the entities as suppliers and which, in turn, were presented as client entity. This assumed approach, in full knowledge of the facts was leading, obviously, to similar results.*

Keywords: *fair value; IFRS 13; evaluation.*

JEL Classification: M41

1. INTRODUCTION

As shown in the abstract, the purpose of this paper is to analyze and understand the standard IFRS 13 - "Fair value measurement", where the aspects/issues underlying the assessment of fair value of certain asset components in the financial situations are clearly delimited, with mandatory application from 1st January 2013. The reason to introduce IFRS 13 is that was desired the concise of all IAS/IFRS in the content of which was presented the fair value evaluation and, therefore, to establish the presence of a common standard, usable for all the reporting entities. Starting from US accounting standard that represented the basic principle to IFRS applied by the EU, the secondary objective of this paper is to refer to SFAS 157, developed by FASB, to can compare the two standards.

The main users of financial-economic information that will benefit from the advantages of IFRS 13 application, in the elaboration of annual financial statements, will be all the listed EU companies on a regulated market and implicitly the companies within our country.

The insertion/introduction of IFRS 13 is, basically, a part from a comprehensive process of accounting rules harmonization taking place internationally (especially between the IASB and FASB standards), but has the role to clarify, as well, certain accounting issues that were overcome/out-of-date in the current context of national economic development. In fact, it is known that there were different approaches of the fair value concept before applying IFRS 13, which cause many heterogeneous situations on the assessments made according to this criterion, situations which, obviously, didn't favored, in any way, the comparable information in the financial statements.

The objective of the new standard IFRS 13 is not to impose new cases of evaluation application on the base of the fair value criterion, but is realized on the reorganization and systematization of all accounting materials on fair value, establishing a unique definition of fair value and providing more accurate information and data on the adopted valuation techniques and providing a greater range of information mandatorily reported. The subject (theme) of IFRS is particularly important today, not only because of its recent insertion/introduction, but due to the circumstances created by the assessments made on the basis of fair value parameter, during the last financial crisis. This evaluation criterion was challenged not only by practitioners but also by academics, because it was considered that reflects in financial statements, values that have contributed to the seriousness of certain

¹ Faculty of Economic Sciences and Public Administration, Stefan cel Mare University, Str. Universității 13, 720229 Suceava, Romania, email: marian@seap.usv.ro

² Faculty of Economic Sciences and Public Administration, Stefan cel Mare University, Str. Universității 13, 720229 Suceava, Romania, email: veronicag@seap.usv.ro

situations, especially in the case of banking institutions. Besides these aspects, fair value theme is particularly interesting, given that it is still an unsolved problem in terms of the inability to evaluate this accounting method, in a manner to adequately reflect the values of the balance sheet position. This finding is often accompanied by the results of compared information, especially in terms of credibility and relevance, which the accounting doctrine proposes for fair value and other criteria, primarily, the historical cost.

In what follows we will make a brief foray on the standards that treat the fair value, evaluation criteria, presenting the methods of application (pre and post IFRS 13), identifying and highlighting the advantages and disadvantages arising from valuation at fair value of the accounting items in the financial statement. All these aspects will help us to understand whether the application of IFRS 13 is able to determine an effective improvement of the evaluation process, given that the evaluators' subjectivity remains a powerful element of influence.

2. IAS/IFRS STANDARDS AND THE FAIR VALUE

This part of the paper will present a brief foray of the IAS/IFRS accounting standards, emphasizing certain aspects of the historical evolution of their application, of the role that they had in the international harmonization process and especially of the effects that their use have generated on some issues, considered to be important; it is basically about the structure of income and so-called "value relevance" related to the information in financial statements, arising from their implementation.

The acronyms IAS and IFRS indicates International Accounting Standards, respectively International Financial Reporting Standards; first name refers to accounting standards published before April 2001; later, as a result of the organizational changes of the issuing entity, their name is converted to IFRS. International accounting standards are developed by the IASB (International Accounting Standards Board) which is basically the operators unit of the IFRS Foundation, an independent, private and non-profit organization (according to the official website of Tendazei this is defined as: "an independent not for-profit private sector organization working in the public interest" which aims the development of a single/unique set of accounting standards, globally accepted. The standards ensemble currently consists of 13 IFRS and 28 IAS, 8 SIC (Standard Interpretation Committee)¹ interpretations and a conceptual reference frame work; it is important to note that these standards are developed by the IASB quite frequently to substitute the old IAS.

The accounting standards IAS/IFRS have evolved in parallel with the globalization process of national economies, something which has led to an intensification of economic entities operating on international capital markets. This phenomenon has imposed the need to develop common rules for making synthesis accounting documents, allowing the reporting of comparable information, credible and timely. This information is basically the foundation for investment decisions for increasing the efficiency and transparency of financial markets (Di Petro, 2007; Saita, et al, 2002; De Angelli, 2013).

The need to resort to international financial markets has imposed to the economic entities to go through reconciliation processes of the summary/synthesis accounting documents, which in turn involved high costs, avoiding administration costs related to entering the international real estate markets. This reconciliation process of accounting rules among other countries has been recognized worldwide, imposing with authority in over 100 countries of the world; in this regard a particular importance had the development of IOSCO report and Basilea Committee. Regarding IOSCO, after a program initiated in 1995, had expressed a favorable opinion on the adoption of IAS/IFRS in 2000; Basilea Committee in

¹ SIC is the body dealing with the interpretation of IAS; like IASB this was reorganized in 2001. For IAS interpreted standards is used the SIC acronym (only for the standards that have been published before IFRS).

turn, had approved in 2000 a set of rules with a significant impact on the financial statements of credit institutions. These events led IASB to change its own organization - representing a foundation which includes not only representatives of the accounting profession, but also academics, financial analysts, investors, auditors and company representatives (Mates, Grosu & Socoliuc, 2008).

Other relevant events that occurred during the 2000s were: the introduction of the agreement with the FASB, to complete the process of convergence between IAS/IFRS and USGAAP and development of EC Regulation no. 1606/2002, which required the mandatory adoption of IFRS standards starting with 1st January 2005 in the preparation of consolidated financial statements of companies listed on a EU regulated market. Since 2008, the IASB began a process of standards revision which aimed the counteracting of the financial crisis, adapting the standards content, in particular of IAS 39 on financial instruments, to the existing economic environment.

In September 2005, the IASB decided on introducing a project that was intended to provide a single definition for fair value, to be common (valid) for all the IFRS and to group together in one document, all the techniques and different application areas of fair value. This project was completed in May 2011, by developing IFRS 13 - Fair value measurement, applicable to all the categories of financial assets and liabilities for which is provided their evaluation at fair value (is not developed just for financial assets and liabilities provided by IAS 39 and IFRS 9).

3. IFRS 13 APPLICATION – PROBLEMS AND IMPEDIMENTS

The objective of the new standard is to establish how fair value should be measured and not how to be applied. In fact, in this regard, it is stated that the standard will be applied to certain categories of assets and liabilities. According to IFRS 13, *fair value* is defined as the price that is charged to sell an asset or the price that is paid to transfer a liability, in the transaction between the contracting parties, on a reference market and on the evaluation date (according to IFRS 13 subparagraph A 473). Comparing the old definition of *fair value* with the new definition are found three significant changes, namely:

- firstly it does no longer refers to an exchange price, but to a selling price of an asset, meaning *exit price*;
- secondly it is introduced the concept of transfer (not only the *giving up*) of a liability;
- thirdly it gives a very clear defining of *market notion*

On first analyze, it appears that the fair value of an asset is its exit price. The above should not lead to relevant differences compared to the previous situation; but a discrepancy between this could occur if an asset is purchased on the primary market and resold on the secondary market. This discrepancy arises from the fact that on the secondary market exist differentiate prices between parties willing to buy (bid price) and parties willing to sell (ask price).

Regarding the new definition of fair value, is referred as in the previous statements, to the old price, knowing that in certain circumstances, an active market can be inexistent. If a certain instrument is traded on different markets, and therefore having different prices, is applied according to IFRS 13, the price of the main market (Quagli, 2011).

IFRS 13 applies a hierarchal fair value (this is introduced in IFRS 7 as well) but paying more attention to the quality of input data/information than to the valuation techniques. Therefore, the new standard requires that it should not choose the method of evaluation, but the method that provides a criterion for evaluation/measurement of fair value as much credible as possible. Despite this, IFRS 13 focuses more on data and less on

evaluation methods, but this does not mean that the latter is invalid, but the contrary. Basically, IFRS requires the use of one of three methods:

- a) Market approach - which consist of the use of prices and other relevant information concerning market transactions with identical or similar assets or liabilities.
- b) Income approach - is based on the future revenues and costs transformation associated with an asset, in one value, been known as the discount/cash flow model. Assumptions regarding cash flow reflect both, market expectations and those of the entity.
- c) Cost approach - based on the substitution cost; this approach can be valid only in the case of tangible assets and therefore does not apply to financial assets and liabilities.

Returning to IAS 39, in August 2011, IASB sent a letter with comments to ESMA (European Securities and Markets Authority) with a focus on definition of fair value of financial assets (not referring to assets classified as held to maturity and loans and receivables) given by IAS 39. Simultaneously, the IASB stressed that there were companies that did not determined correctly the fair value, determining it as the present value of future cash flows resulting from the planned restructuring, relying on internal evaluation models rather than using prices on markets, because these markets are considered inactive as well because of the unreliable prices.

In the letter drafted by the IASB, is stated the fact that the objective of measuring fair value, either using prices observed on markets or valuation models, is to establish a price at which the transaction occurs between the contracting parties, on a market, at the evaluation time. This objective can be achieved either by using the market prices or by determining a theoretical market price through an evaluation model.

The IASB letter ends with the exposure of several special situations arising (Berselli, 2010) from the models used to determine fair value, models that takes into account only the current value of cash flows provided by the planned restructuring and for this reason they might not comply with the requirements of IAS 39. The IASB also presents the difficulties in identifying buyers willing to update the titles that are based on prices which are determined using imposed valuation models. This situation, along with others determined IASB to the revision of IAS 39 accounting rule.

4. CLARIFICATION OF THE NEW APPROACH ON THE FAIR VALUE

The new concept of fair value promoted by IFRS 13 has the same traditional limitations: first, there is a great dose of subjectivity attributed to this value, aspects very easy to verify especially in the absence of an active market, case in which the determination of fair value is closely related, among other issues, to the context and characteristics of the subjects performing fair value measurements. There are some doubts about the credibility of fair value, even with/the presence of an active market, characterized by abundant liquidity and a much higher volume of trade. High volatility risks of financial titles, independent of the company's operational assets evolution/development, make that financial statements for a financial year (semester, quarter, etc.) to be difficult to develop, while contributing to a significant reduction of the fair value information capacity (Quagli, 2009).

So, given the markets in different countries, where there is a comparison between prices and values, we cannot expect a calculation of the fair value accepted by everyone and measured in the same time, which to ensure/guarantee the comparability and consistency of data/information in the financial statements because these values reflect economic contexts and different degrees of markets risk (Potito, 2012).

The main international accounting standards that include the criteria assessment of assets fair value are (before IFRS 13): IAS 16, IAS 40, IAS 38, IAS 36, IAS 27, IAS 28, IAS 31 and IAS 1, unlike current assets they do not provide a definition of non-current assets, which are subsequently identified (in a residual basis). A non-current asset is defined as an asset that does not include the following elements: assets achieved during the normal running of a production cycle, assets achieved in a period of less than 12 months from the date of financial statements preparation, assets held to be sold, cash on hand and equivalent means. (Incollingo, 2008). All of these standards refers to assets of non-current nature. The reason they chose only non-current assets is because in terms of balance sheet positions the transition to standards IAS/IFRS has had the greatest impact on them.

Within each accounting standard outlined above are highlighted possible alternatives regarding the evaluation of the same economic events, and how these options can affect the comparability of information in the financial statements, aspect which strictly contradict the objective of the accounting harmonization process pursued by the IASB.

Forward we will analyze the evaluation criteria previously imposed by the listed accounting rules, using short references to national accounting rules.

4.1. Tangibles assessment methods according to IAS 16

The accounting treatment on tangible assets is provided in most of the IAS 16 standard, excepting certain cases, depending on the economic destination of the assets being valued. Thus, there are tangible assets held to be sold (treated according to IFRS 5), real estate investments (IAS 40) and assets lease contracted (IAS 17). Economic destination of assets may vary from entity to entity and in time; therefore the same property may be the subject of application areas of different standards, due to different destination or after changing its destination in time. The distinction between tangible assets, real estate investments, goods as merchandise, is sometimes difficult to realize, because it is not correlated to the nature of the asset or as we mentioned to its destination within the entity.

The classification of an asset in one category or another, with the application of appropriate accounting treatment, requires sometimes a subjective assessment by the preparers, thing that require a different accounting treatment.

In the financial statements subsequent to initial interpretation of tangible assets, they can be evaluated by two alternative models, namely: cost model and fair value model. IAS 16 standard contains no preference for one of the two criteria and is not mandatory to choose one of the two accounting treatments for all the assets in the balance sheet, but remains mandatory the application of the chosen criterion for the entire class of assets (IAS 16, paragraph. 29).

We will insist on the fair value criteria – the subject of our paper- basis on this model it will be followed the periodic revision (checking) and the redetermination of accounting values of tangible assets to can adapt it to the market value (ex. IASB Part 6).

The revaluation process should be conducted regularly so that the accounting value to not differ in a significant way from the value which would be determined using fair value at the balance sheet closing. The frequency of revaluations depends on the variation (oscillation) of fair value related to the assets that are object to assessment. For those assets which recorded significant oscillations of fair value is required annual reassessment, while for assets whose fair value is less relevant, redetermination of the values can be performed every three to five years. If the fair value of an asset has been determined to an earlier date, prior to financial statements closure, it is necessary to calculate depreciation at the date of closing exercise.

In the previous definition of fair value (IFRS 13, paragraph BC 30, pp. B972) was not specified that:

- is not specify whether the entity sells or purchase the asset;

- it was unclear regarding a debt settlement purposes because it was not referring to the creditor, but to the stakeholders, in full knowledge of the facts;
- does not explicitly stipulate whether the exchange or settlement occurs on the valuation date or other date.

Among the impediments encountered in developing IFRS 13 was counted that the evaluators experts have identified possible differences in certain actions. For example, an exit price for an asset acquired or liability assumed in a business combination may differ from the exchange value if:

- the intentional use of an asset acquired by an entity defined by the most intense and best use by the market participants (than the acquired asset provides a defensive value) or
- a debt is assessed rather on the basis of its settlement with the creditor than on the basis of transfer to a third party, and the entity determines that there is a difference between those assessments.

In these circumstances, the current definition of fair value, in accordance with paragraph BC 36 of IFRS 13 is that it represents an current output price, but in the next paragraph of the same standard the problem of the moment when fair value should be used as a evaluation basis in IFRSs it is controversial, because there is a disagreement about the percentages:

- a) which assets and liabilities should be valued at fair value (for example the fair measure in which the fair value should be restricted to assets and liabilities with prices quoted on active markets, that the entity intends to sell or transfer in the near future).
- b) when those assets and liabilities must be measured at the fair value (for example the extent that based on the most intense and best use, IASB specifies methods for valuing assets on the basis of their defensive (the value associated with improving prospects other assets of the entity by avoiding the use of the assets acquired by competitors), and according to USGAAP that were still being prepared when issuing IFRS 13.
- c) where have to be recognized the fair value subsequent amendments/amendments

4.2. *The fair value hierarchy*

IFRS 13 is a level 2 standard because it helps in identifying a fundamental parameter in the evaluation/measurement process, meaning the fair value, parameter involved in reviewing accounting evaluation treated in several standards. Before drafting the new standard, entered in effect on 1st January 2013, the definition of fair value was treated in many accounting standards; developing IFRS 13 allowed a higher proximity to US standard SFAS 157, signaling an important step in the convergence of accounting systems, meaning the international with the American.

Tabel no. 1 – Implications of IFRS 13 insertion

Addressed issues	Pervious Standards (IAS 16, IAS 32, IAS 39)	IFRS 13
Fair value definition	The definition attributed to the fair value was distributed in several standards	One standard
The fair value hierarchy	There is a postponement approaching to the US standard SFAS 157	One definition of the fair value
Evaluation process	No indication	Step by step indications on revaluation
Liquid or	No indication	Indicators which signals the

Addressed issues	Pervious Standards (IAS 16, IAS 32, IAS 39)	IFRS 13
inactive markets		presence of a inactive markets
Level 3	There is not any specific recommendation	Technical indication of evaluation
Main information to be provided		There is a special extension of the obligations especially if is used mark-to-model

Elements for evaluating a market as active or inactive consist of:

- the number of recent transactions;
- the ability of quoted prices to reflect the most actual information
- price volatility, in time
- presence of recent new emission;
- the presence of forced sales situations

IFRS 13 is using a hierarchy of three levels of fair value as follows (IFRS 13, Paragraful no. BC 166, 2013).

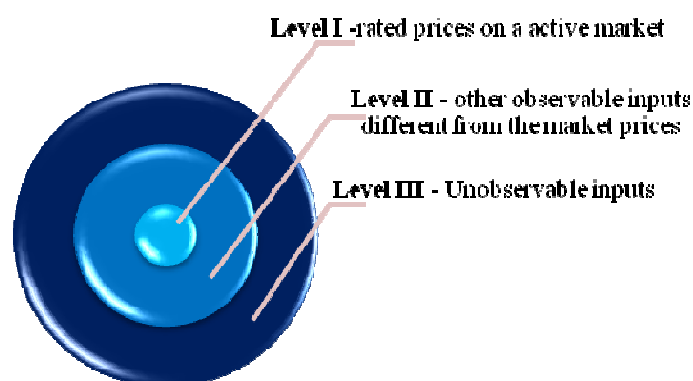


Fig. no. 1 Fair value hierarchy according to IFRS 13

Level I includes:

- first-level inputs, are prices listed on active markets on the evaluation date;
- these inputs are the best evidence of fair value;
- it derives from identifying the main and most advantageous market and the possibility that the entity can perform a transaction at that price;
- these prices do not require corrections.

Level II includes:

- level 2 inputs are those observable inputs, but different from the market prices;
- prices of similar items/elements, but not identical, exchanged on active markets;
- prices of identical items, switched on inactive markets, or on other markets, as the prices of final consumers, used with certain adjustments, to asses at a fair value the final products, in the producers headquarters;
- Other inputs such as interest rates or profitability assessment.

Level III includes:

- unobservable inputs;
- represented by the internal data of the company;
- they have to be used when there are no other inputs necessary for the evaluation;
- arise in the case of inactive or less active markets

- should reflect the exit price
- can be the inputs from internal or external sources, only if market participants proves using other sources.

5. CONCLUSIONS

The purpose of developing IFRS 13 was to unite all accounting standards, dealing with fair value criteria, in one standard; IFRS 13 is the first practical step towards IASB harmonization with US-GAAP. Defining the essential characteristics of SFAS 157 allowed the evaluation of the most important aspects, both in terms of similarities and differences of IFRS 13.

Basically, the most difficult to overcome obstacles, in applying the criteria of fair value in terms of IFRS 13 are represented by the following aspects:

- the complex nature and excessive extent attributed to the fair value
- high degree of subjectivity that characterizes this criterion;
- verifiability is difficult to realize;
- high volatility of data from the financial statements;
- low knowledge on the application of the fair value method;
- asymmetric outputs that characterize the results of the evaluation at the value versus historical cost;
- difficulties on application.

Developing IFRS 13 represents a significant contribution brought to IAS/IFRS current standards, given that convergence process with US GAPP will be rather difficult to achieve because the uniformity of calculations and assessments will continue to be an obstacle difficult to be avoided or overcome, because of the accounting origins of the two continents, in addition to different interpretations of those rules/normes generated by their translation.

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NBR'S MONETARY POLICY AND ITS IMPLICATIONS ON ECONOMIC GROWTH

Elena Violeta, Drăgoi¹
Oana-Mihaela, Ilie²

Abstract

The study was developed to show the interaction between economic growth and monetary policy implemented by NBR to assess its impact on the main macroeconomic variables (GDP, exchange rate, inflation rate), through the influence of monetary authority decisions on economic and financial conjuncture.

Global economic climate facing at the moment with a process of which covers all areas, but especially the aspects that fall under the influence of central banks and monetary policy conducted by them. In this context, the present study aims to determine the optimal degree of monetary authorities to engage in the economy, focusing on this issue for a thorough study of the transmission mechanism of monetary policy and the complex processes of transit effects resulting from monetary policy decisions to macroeconomic variables involved.

Studying the optimal monetary policy of the NBR to achieve final objectives becomes even more important as its in-depth understanding can provide vital clues in responding, because, after all, matters primarily the effects of monetary policy decisions (or their absence), and the link between that decision and the final economic reality is given precisely the structure and functioning of the transmission mechanism.

Key words: inflation, monetary policy, GDP, interest rate, minimum reserve requirement

Jel Classification: E52, E58

1. The role of monetary policy to stimulate economic growth

In the market economy, economic growth can be determined using economic and social policies developed and implemented. To stimulate economic growth an extended period, monetary policy acts by liquidity management on the money market, by increasing / decreasing interest rate of monetary policy and minimum reserve ratio and also by targeting the exchange rate. Through the implementation of monetary policy, resource allocation is achieved efficiently, that allows:

- achieving long-term investment plans;
- proper functioning of market mechanisms;
- discouraging the speculative actions;
- removing economic imbalances (inflation);
- saving resources to invest in productive activities.

Next to monetary policy acts the fiscal policy using the system of taxes, public investment and social protection. A developed economy adopt structural policies, to ensure the functioning of market mechanisms by stimulating investment in certain sectors, but also by a restructuring of underperforming companies and reforming the labor market. So, the application of structural policies can reduce unemployment rate and increase workforce performance and quality of enterprises, helping the economy to function effectively.

Regarding the economic growth on short and medium term as cyclical process, caused by periodic fluctuations, it's clear that economic policies, especially monetary policy, act by adopting anti-cyclical behavior. Thus, in the expansion phase of economic cycle, characterized by the emergence of inflationary pressures, it's better to adopt a tight monetary policy, while in the recession phase of economic cycle, characterized by a lack of inflationary pressures generated by the existence of unused resources is beneficial stimulative monetary policy implementation. However, the decision to adopt a monetary policy becomes difficult given

¹ Assoc. Professor Ph.D., Department of Finance – Accounting, Valahia University of Târgoviște, e-mail: violeta_dragoi@yahoo.com.

² Ph.D. student, Valahia University of Târgoviște, e-mail: ym_oana@yahoo.co.uk.

that supply shocks are dominant, particular in emerging economies. The situation is different in developed economies, because in order to reduce the risk of deflation, monetary policy interest rates have been brought close to zero.

Through monetary policy developed and applied by the central bank adopted an anti-cyclical behavior before and after the outbreak of global financial crisis which aimed to maintain financial stability and ensuring an optimal framework for restoring economic equilibrium. Thus, in the period of economic expansion, the central bank acted significant upside reserve ratios and interest rate monetary policy, tightening credit conditions, defined as restrictive conduct. Moreover, during economic recession, the central bank resorted to significant reduction of monetary policy rate and reserve ratios designed to stimulate aggregate demand.

A first step in the evolution of economic growth can be achieved by applying an economic policy mix, in various ranges, because no state are not used "pure" economic policy. Another way of intervention refers to stimulate aggregate demand in order to relaunch the economy.

Regarding the role of monetary policy, it is focused on maximizing well-being, contributing to sustainable economic growth through price stability and currency. Given the tools at its disposal, monetary policy can determine the inflation level in economy, but can not directly influence the level of GDP in long term. In order to determine inflation level in the Romanian economy NBR adopted an inflation targeting strategy, reducing its level comparative with the European one, despite some variations in trend.

2. NBR's role in the sustainability of economic growth in Romania

In general, the role of central banks is defined by the primary endpoint of monetary policy regarding currency stability and to maintaining financial stability. However, the fundamental objective pursued by central banks seems to be just a path that leads to a sustainable economic growth.

NBR's objective to ensure price stability has been achieved, according to records from the period 2009-2015 (Chart 1). This statement is based on the fact that the objective of reducing the inflation rate was achieved gradually, the unemployment rate hovering at a lower level than the European critical level (10%).

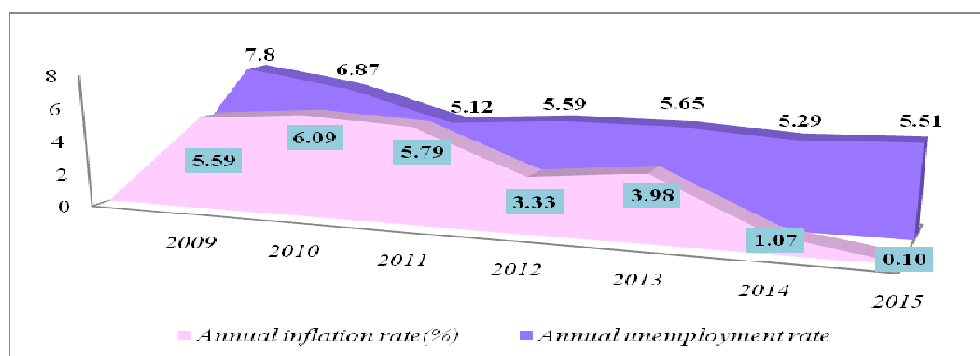


Chart 1 The influence of inflation on unemployment rate evolution

Source: National Agency for Employment, www.anofm.ro

National Statistics Institute, www.insse.ro

Thus, it can be considered that monetary policy implemented by the central bank was a flexible one, designed to preserve financial stability, and thus stopping the economic decline.

3. The effectiveness of NBR's monetary policy

In recent years, the central bank managed to reduce inflation rate by lowering the interest rate monetary policy, as can be seen in the following chart:

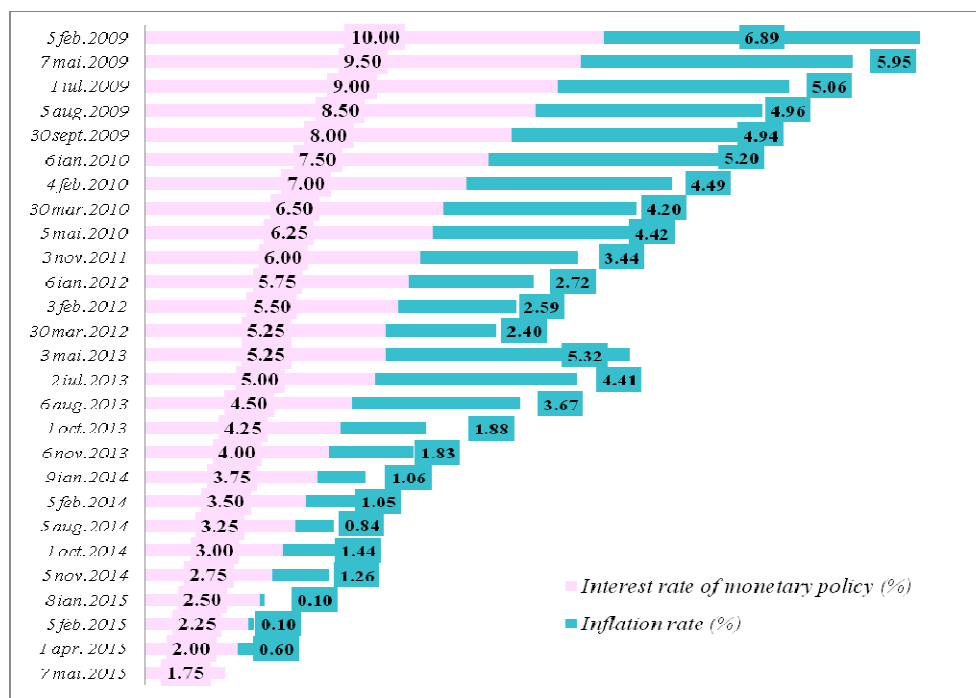


Chart 2 Interest rate monetary policy influence on the evolution of the inflation

Source: NBR monthly bulletins from the period 2009-2015, available on www.bnr.ro

Looking at the chart, we notice two important aspects:

- First, inflation shocks were anticipated, taking action in terms of monetary policy.
- Second, the interest rate of monetary policy respond to possible sources of inflation latent occurring and it manifests only in critical situations (stress) such as the inefficiency of public sector (generated by high costs and results of minimum resource allocation in public) and significant influence of the exchange rate on inflation expectations.

Regarding the transmission of monetary policy to the real economy, it is carried out effectively. Although the interest rate for interbank loans for three months has levels in the same range as that of interest rate of the monetary policy, as can be seen in Chart 3, the money market was not affected because of a optimal amount of liquidity in the banking system.

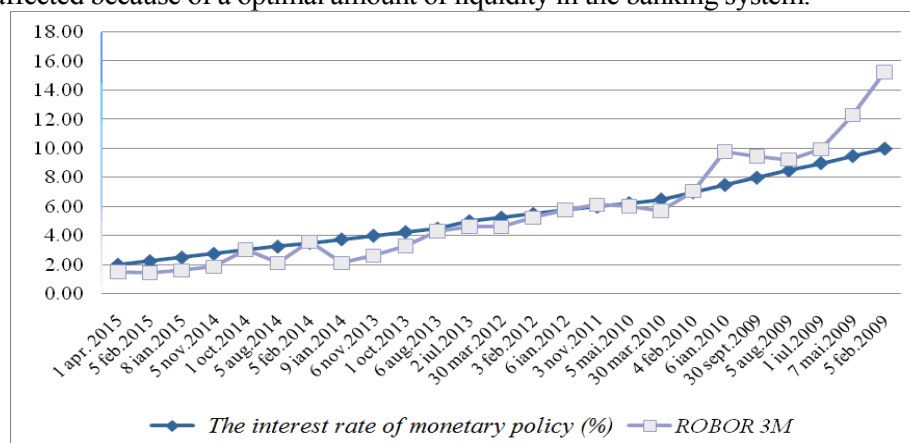


Chart 3 The evolution of monetary policy interest rate level and the level ROBOR 3M

Source: www.bnr.ro

4. Independence of NBR - an essential condition for the functioning of national monetary system

As regards NBR independence, it is essential for the functioning of the national monetary system. Therefore, the first research assumption concerns that greater independence of the central bank increases its degree of credibility and the emergence of more chances in optimal monetary policy management.

Central bank lacks independence for goal setting monetary policy, which is set by the government but independent in relation to:

- choice of instruments used to achieve this goal (independence in terms of the instruments);
- right to decide in any direction on monetary policy and price stability (functional independence);
- selection of the management based on high professional competence, without them being involved in politics or be subject to other pressures (personal independence);
- access to its financial resources to manage their own budget based on (financial independence).

5. NBR's monetary policy objectives

The importance of monetary policy resulting from its primary endpoint, price and currency stability, which is the primary objective of economic policy, along with sustainable economic growth, full employment of labor, balance of payments sustainability. Given that the primary objective is not under the direct control of monetary policy, there need to define intermediate targets which would ensure currency stability, namely:

- money growth to an optimal level;
- maintain interest rates at an appropriate level;
- practicing an optimum exchange rate;
- optimal allocation of financial resources (funds for lending) in the economy;
- limitation of inflation (control).

To achieve these objectives in each country are identified tools that lead to the best results, of which the most important are: fiscal policy, revenue policy, monetary policy, exchange rate policy and trade policy.

6. NBR's monetary policy strategies

Achieving monetary policy requires the adoption and implementation of strategies depending on the environment where the central bank acts (taking into account its independence), the ultimate objective of macroeconomic policy and the mode of action of the central bank. Thus, depending on the mode of action of the central bank stands two strategies:

- direct strategy;
- indirect monetary strategies.

Indirect monetary policy strategies

a) Strategy based on targeting the exchange rate

By strategy based on targeting the exchange rate, NBR tries to ensure exchange rate stability nominal through use their own tools aimed on the one hand changes in the interest rates applied, and on the other hand based on direct interventions in the forex market interventions designed to support the exchange rate. Adopting the strategy of targeting the exchange rate generates advantages and disadvantages. Advantages includes:

- stimulating the growth of commercial flows and investment generated by the stability and attractiveness of the domestic currency;
- promoting international cooperation and coordination.

As arguments directed against this strategy can be considered:

➤ need to maintain a low monthly inflation rates that do not affect the exchange rate and external competitiveness;

➤ high cost of foreign currency reserves;

➤ unable frequent adjustment of the exchange rate.

b) Strategy based on monetary aggregates targeting - involves the selection by the monetary authority of an optimal monetary aggregate that is relevant for the Romanian economy and achieve the ultimate objective of monetary policy.

c) Strategy based on interest rate targeting - is characterized by the fact that NBR has little possibility to influence the level of interest rates, central bank interventions on this indicator concerns only short-term transactions on the interbank market. As a result, the interest rates in the banking system can be quite hard influenced by the central bank, and if influence is exercised, the response is delayed compared to banks when applying monetary policy measure. The interest rate is preferred as intermediate target of monetary policy at the expense of money in the currency as demand recorded strong fluctuations.

d) Strategies based on an implicit nominal anchor

Regarding strategy based on an implicit nominal anchor a precondition for the successful operation of this regime is high credibility of the central bank's credibility based on long-term manifestation of monetary and price stability in the country analyzed.

Direct strategy of monetary policy

As a direct strategic monetary policy, the central bank was focused on inflation targeting, which involves setting a target for the inflation rate over a certain period of time, the target to be achieved through the application of monetary policy measures, so as to ensure stability prices.

7. Analysis of monetary policy instruments used by NBR

The application of monetary policy measures and strategies requires a set of tools through which NBR can exercise its influence on the economy.

As a result, the transmission channels of monetary policy and its effectiveness in achieving the fundamental objectives of macroeconomic policy, monetary policy depend on the way of implementation.

The set of tools and procedures by which the central bank implements monetary policy to achieve its primary objective forms the operational framework which belongs monetary policy. The main instruments of monetary policy that the central bank has at its disposal according to regulations are:

A.Open market operations

Purpose: Influence (guidance) interest rates, money market liquidity management and monetary policy achievement.

According to regulations, the main categories of open market operations available to NBR: repos operations, attracting deposits, issuing deposit certificates, reverse repos, granting loans collateralized with eligible collateral, sale / purchase of eligible assets, the swap rate. An analysis of the evolution of the monetary policy interest rate in the period 2009-2015 shows a decreasing trend, ranging from 10% (5 feb.2009) 2.25% (5 feb.2015) in order to stimulate aggregate demand (Chart 4).

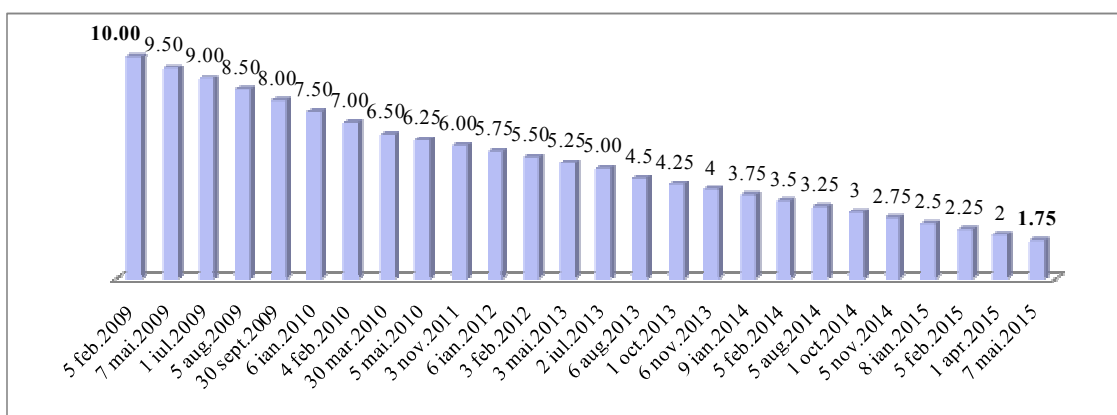


Chart 4 Evolution level of interest rates (%) standing facilities (2009-2015)

Source: National Bank monthly bulletins for the years 2015, 2013, 2011, 2009.

By analyzing the evolution of interest rate level for the standing facilities there is a tendency to decrease the interest rate on the deposit facility and the interest rate on the lending facility. Thus, if the deposit facility rate (threshold) is in decline with 3.75% in February 2009 to May 2010, remaining at 2.25% until 6 January 2012 when another place down 0.25%. The same downward trend is reached in August 2014 that the interest rate on the deposit facility to 0.25% and maintained until February 2015.

Superior to the deposit facility rate is the interest rate on the lending facility (ceiling), whose percentage changes recorded in the same direction as the interest rate on the deposit facility, changing it from 14% (5 feb. 2009) to 4.25% of February 5, 2015 (Chart 5).

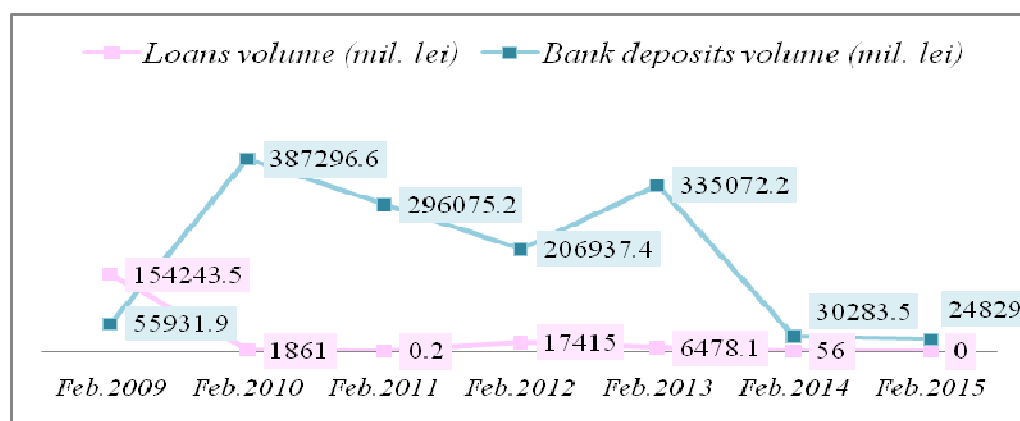


Chart 5 Standing facilities granted to credit institutions by the NBR (2009-2015)

Source: National Bank monthly bulletins for the years 2015, 2013, 2011, 2009

In terms of deposits and credit volume as standing facilities offered by the central bank, in February, in the period 2009-2015, they has experienced the following developments:

In case of deposits, the maximum volume was recorded in February 2010 (142 748 mil. Lei), while the lowest volume was recorded in February 2009 (2 006 mil. Lei).

For overnight loans, the maximum amount was reached in February 2009 (38 625.2 mil. Lei) in 2010, 2012 and 2015 - in February the loans was nil (Chart 5).

B. The minimum reserve

Purpose: balancing interest rates, contributing to monetary expansion and ensuring structural liquidity.

The analysis of the interest rate on the deposits of credit institutions showing the change in the same direction, downwards, to the national currency, and at \$ or € (Chart 6).

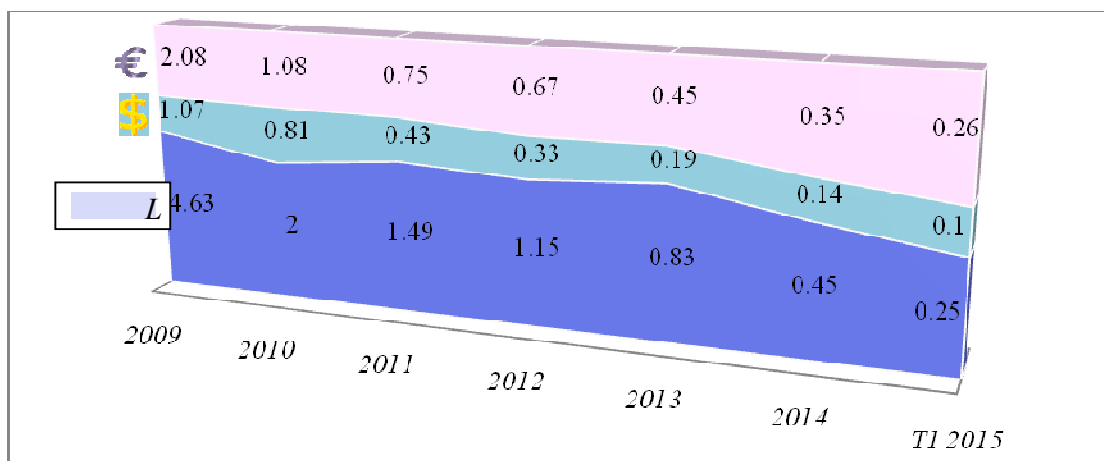


Chart 6 Interest on deposits of credit institutions

Source: National Bank monthly bulletins for the years 2015,2013,2011,2009

Regarding the reserve ratio for the period 2009-2015 (Chart 6):

- RMO rates in national currency (LEI) decrease by 8%, reaching 18% in 2009 to 10% in 2015 to stimulate aggregate demand.
- RMO currency rates changes by 26%, from 40% in 2009 to 14% in 2015.

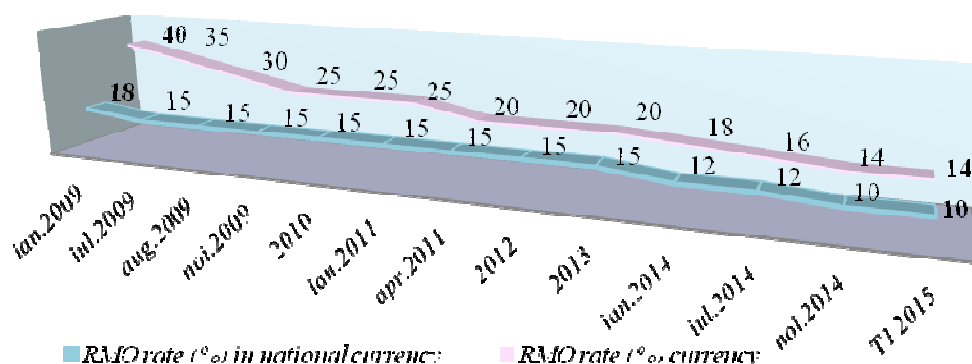


Chart 7 The reserve ratios 2009-2015

Source: National Bank monthly bulletins for the years 2015,2013,2011,2009

In the long term, economic policies can not directly create, economic growth, however, pursuing price stability, monetary policy contributes indirectly to sustainable growth, because no country has achieved economic growth relatively high for long periods under high inflation persistent (Chart 7).

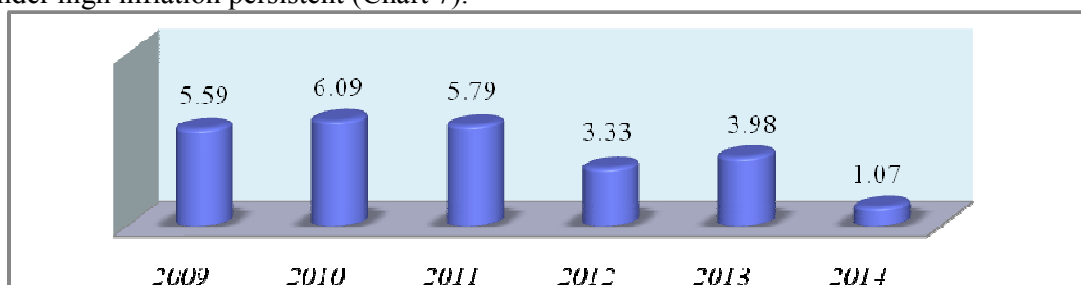


Chart 8 Inflation rate (%) 2009-2014

Source: National Institute of Statistics

Thus, we can say that through control of the monetary policy interest rate, the reserve ratio, the exchange rate and by a liquidity management in the money market, monetary policy may result in economic development. This development can be seen by analyzing the evolution of the GDP in the period 2009-2014 (Chart 9, 10).

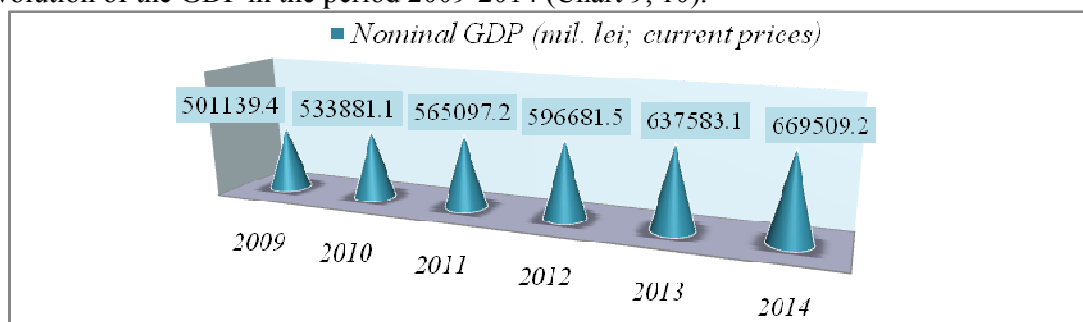


Chart 9 Evolution of nominal GDP

Source: National Bank monthly bulletins for the years 2015,2013,2011,2009

In terms of nominal GDP evolution, he knows an increasing trend in the period, rising from 501 139, 4 mil. lei in 2009 to and 669 509,2 mil. lei in 2014.

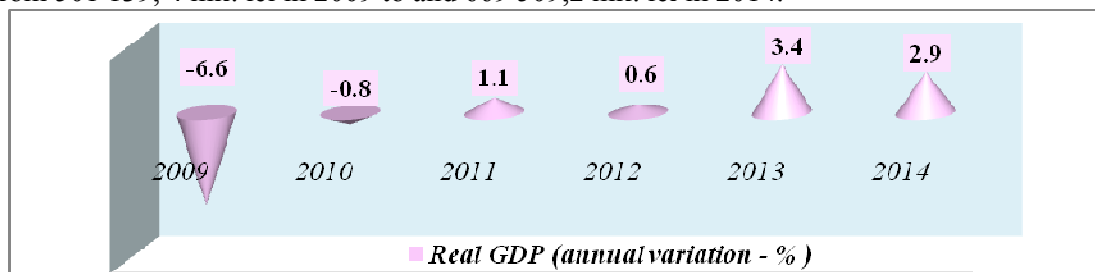


Chart 10 Real GDP

Source: National Bank monthly bulletins for the years 2015,2013,2011,2009

Real GDP registered a positive growth in 2013 (3.4%), the performance is superior to previous years, continuing in the same vein in 2014 (2.9%).

8.Conclusion

Looking at the monetary policy transmission mechanism as a whole and studying each channel association, we find little evidence to advocate a strategy, in terms of principle, the activity of the central bank monetary less. On the contrary, the increased complexity of how the economy works makes the process of auto-balancing of them become impossible. All this indicates the need for a more active attitude of the central bank, which must use a more generous arsenal of monetary policy instruments in order to comply and maintain the economy on a positive vector.

Given that nowhere in the world are no longer used economic policies "pure", but the authorities' actions takes the form of a "policy mix" in the game more varied and composite, it can be said that price stability, increased employment, sustainable growth, financial system stability, stability of interest rates and exchange rates define an optimal monetary policy, characterized in that it is coordinated with fiscal policy and other elements of economic policy.

As regards central bank's monetary policy is acting to maximize welfare, pursuing price stability, thus contributing to sustainable economic growth. Thus, in the period of economic expansion, the central bank adopted a conduct restrictive characterized by considerable increase in required reserve ratios, interest rate increases monetary policy tightening lending standards, and in the period of economic recession, NBR worked to stimulate aggregate demand through interest rate cuts and reductions in monetary policy rates ample reserves.

In conclusion, I believe that a greater role for money would allow to emphasize more strongly the importance of a clear institutional framework, with strong operational independence and a degree of responsibility appropriately. Also, it puts a new light on the need to ensure price stability in the medium term.

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CASE STUDY: LA BOULANGERIE DU VILLAGE

Samuel Hébert¹,
Sandrine Lacroix²,
Christine Plante³,
Doina Muresanu⁴

Abstract:

Taking place in a region of the province of Québec, Canada, the case presents a major change situation due to the departure of a key employee of a family business in the bread industry. The measures adopted within the change, which were appropriate and meant to improve the work conditions for the employees who decided to stay, proved to be difficult to apply and having undeniable negative consequences upon the organizational climate and the employees' satisfaction at work. Addressing to management students, the case places them in the role of the change management expert who should propose solutions in order to solve the problematic situation.

Key words: *bread industry, organizational change, organizational climate, employees' satisfaction at work, change management expert*

JEL classification: *M12 Personnel Management*

The industry

The bread and cake industry has always been seen from a rather artisanal perspective, yet with the technological progress we know today, things have really changed. Now it is possible to produce bread on a large scale and still provide quality and freshness. In the province of Quebec, Canada, although professional bakery training is available, the persons hired to do this job often benefit from work-based learning. The profession is thus acquired « on the job », which requires time and patience from the company trainer, especially when it comes to the area outside the big cities, as the availability of labour force is much more reduced here.

Since the quality resources are very rare on the market, is it difficult for the companies in these areas to hire young or experienced bakers, which makes their operations very complicated. In this field of activity, several causes can explain this problem, especially the work schedule, often during the night or in the weekends, as well as the salaries which are at a quite low level. The work premises are often narrow and the bakers must deal with heavy work tasks. These work conditions leave very little room to a quality personal life.

Bread making requires a lot of complex stages before obtaining the final product and this is the reason why the baker must correctly manage his team in order to obtain quality bread. In addition to this, the baker must keep in line with his clients' consumption tendencies and organize his work in an efficient manner.

Unfortunately, as far as the manpower in Quebec is concerned, the candidates who possess the necessary skills to hold the job of a baker and pastry cook are very rare. It is not unusual for the companies operating in this area to recruit personnel from abroad or even train its own baker, since this profession is not very popular in Quebec.

To La Boulangerie du village

La Boulangerie du village, situated in a small municipality in the southern-eastern part of Abitibi-Témiscamingue, in Quebec, does not constitute an exception to the rule. Since its main competitor has closed his business, the company had a hard time trying to keep up with the increasing demand of the clients in the area. Hiring and selecting new candidates are

¹ Student at Université du Québec en Abitibi-Témiscamingue, Canada.

² Student at Université du Québec en Abitibi-Témiscamingue, Canada.

³ Student at Université du Québec en Abitibi-Témiscamingue, Canada.

⁴ Professor at Université du Québec en Abitibi-Témiscamingue, Canada. doina.muresanu@uqat.ca, contact for this paper

difficult tasks considering the limited recruiting pool. During the latest years, the high rate of the personnel migration from one workplace to another has a negative effect upon the dynamic and harms the work climate. As a matter of fact, it is quite difficult to maintain and keep the employees who have developed skills within the company. The company *Boulangerie du village* counts 31 employees. The majority of them are over 40. They often have a low level of qualification and must be trained at work. On the contrary, we notice that over generations, the management, the executives and the bakers are increasingly trained. The employees are not unionized. Men represent 55% and women 45% of the manpower.

The manufacturing process

The company is semi-industrial; the work is done in part using specialized machines, the rest is made manually. The recipes for every type of bread are made by the head baker. This requires a very high level of expertise so as to be aware of the different impact the ingredients may have on the bread quality, since it varies every day according to temperature, humidity, the various kinds of flour quality and the seasons. Afterwards, the bakers handle the machines which knead and divide the bread. The baker recovers these breads at the end of the production line and places them in carts for the test room. Once they are prepared, the oven employers place them manually into the oven and take them out at the end of the baking process, then places them in a cart. Afterwards the packing employees prepare the products so as they can be sold.

A departure which hurts...

With the mine effervescence which has spread all over the area, several employees are tempted by the astronomical salaries which are offered within this industry. Obviously, as the majority of the companies, this one is incapable of offering salaries or work conditions similar to the standard provided by the giant multinational companies.

Thus, one winter evening, the inevitable occurs and the head baker Mr. Ghislain Girard informs the owner Mr. Daniel Dery that he is going to leave his current job next summer to go work in the mines. This was a major loss for the company since Mr. Dery had gathered over 20 years of experience and he was the most skilful of the three bakers. The reasons why he chose to leave his job were due to the work schedule which was becoming increasingly unbearable as well as to the pressure caused by the growth of the demand. Moreover, he was always complaining about having to train new work colleagues who completely lacked of experience in most of the cases.

Time to question

After this announcement made at the beginning of the year, the managers started analyzing their staff management. They wanted to find a solution in order to meet their clients' requirements and a method to become better organized, considering the unfavourable circumstances. The perspectives did not seem to be very bright once summer arrived, as it was the busiest time of the year. Especially that the company, since January until June, has not managed to find a satisfactory internal solution to replace the head baker. In fact, the latter had actually received a job invitation from his new employer and had already set with the management staff a departure date, which was in a few days.

A few days later...

The departure of the head baker had the effect of an actual shock wave within the company, mainly due to the loss of a major link in the production chain. The management notices that the departure of its head baker is a significant loss as regards the knowledge transfer. As a matter of fact, the only solution in that situation was to appoint a new head baker, but the respective employee had been promoted to this position too quickly and he was not prepared yet to carry out all the job tasks. The group of employees was disorganized because the new leader was not capable of guiding them, besides executing his own tasks.

This situation required an additional effort from the other employees since they always had to support their colleague. The lack of qualifications had as an effect many production faults. The bread quality was affected, many orders were delivered late to the clients, who clearly expressed their discontentment.

Weeks have passed and the situation did not improve, the tension was growing to the point that certain employees decide to follow the head baker and leave their jobs. It was the case of the packer Martine Lapointe, who did not want to work during the night all the time. She used to complain about being incapable of reconciling work and family life considering the work schedule and she also said that her former employer used to offer her better conditions. As for Luc Tremblay, an oven employer for 1 year, he quitted the job at the same moment for approximately the same reasons, but he added: «It's really the work climate, which has become unbearable, that makes me want to leave this job ».

Looking for solutions...

One morning, being aware of the employees' complaints and recriminations concerning the work schedule, the Human Resources Manager (HRM), Mrs. Carole Camirand, suggested to the management to carry out a complete reorganization of the work schedule, by replacing the evening and night work with day and evening production. This change could reduce the employers' complaints about working at night and neglecting their personal life. Although the logic of the night shifts was to maximize the freshness of the products, after consulting expert bakers, Mrs. Camirand sustained that a few extra hours could not make a big difference.

Being somehow taken by surprise by this suggestion, the management tried to understand why everything worked so well during the last 60 years and, all of a sudden, such a change proved to be necessary. Mrs. Camirand explained that times have changed and reconciling family life, work and leisure represented an important principle of the new generation, and this was the neuralgic point that pushed everybody to leave their jobs within the company.

Lacking solutions, the management team gave its approval to the HRM to proceed with the shift revision. According to the management, this change could bring a certain degree of stability to the company since, besides strengthening the production control, it could compensate for the lack of competence of the employees, increase the productivity and improve the work climate.

A little bit of planning...

Mrs. Camirand started by asking the opinions of her key staff, respectively the remaining bakers, Mr. Hugo Hachez and Mr. Yan Iberville. Somehow stunned by the news, they said they had no other option than accept this if they wanted to regain the level of efficiency they used to have. The day when the decision concerning the shift revision was taken, the management team and the HRM worked until the next morning to set up the new schedule and the new work teams. Obviously the selection was made according to the employers' length of service and individual skills.

And finally at the end of the week the management displayed on the notice-board the structure of the new work teams and, of course, the new schedule. It is obviously that the change could not be made entirely smoothly since the rumour about the shift revision had already spread during the last few days and several employers were already hoping they would be assigned the day shift. Unfortunately, a few of them were quite shocked to see that they were going to work in the evening shift.

A lot of protests and uncertainties...

Besides the shift and work team revision, the management has also announced orally that it was going to proceed to an enlargement of the employers' tasks. This measure was taken with the aim of limiting the waste of time, but especially to give a sense of responsibility to all the employees regarding the quality of the products and the maintenance

of an appropriate production rate. Among the enlarged tasks, there were household tasks to perform during the bread baking, the machine maintenance and the preparation of the ingredients. A few employees protested against the addition of these tasks, for example Marc-Antoine Gravel, a packing employee for over 3 years who, in order to express his disapproval, decided to entirely ignore the new tasks. Mr. Gravel stated loud and clear « If they thought I would start doing the household, they are entirely mistaken, after all I'm not a servant...». As a matter of fact, several colleagues complained about this, but the management did not take any measure as they thought it was a passing reaction and that they would finally accept the situation.

The change had been presented as a test for a certain period of time, which ended up by creating a lot of uncertainty to the employers since they believed they had to adapt once again if the scenario proved to be unsuccessful. Several employees sustained it was a major change in their routine and that they refused to go through a similar situation once again. Many conflicts continued to occur, mainly regarding the tasks which had to be fulfilled, and several employers used to get involved in vivid arguments about who had to perform a certain task.

A few weeks later...

Three weeks have passed since the work schedule revision and unfortunately things did not seem to improve; the work atmosphere is very strained and the employees quit their jobs one after the other. Yet, the management team believed they had reached the sore point by identifying the cause which made the employers leave et were convinced that, by improving the work schedule, it was going to be easier to draw work force rather than to keep their old employees.

With the terrible result and a lot of questions pending, the owner often considers closing his business. Yet, he has heard people talking about a group of experts specialized in business rehabilitation with a good reputation in the field. Mr. Dery does not exclude the possibility of consulting them, yet he is aware of the fact that this may be his last chance.

Case questions:

1. Can you identify the triggering element and the nature of the change?
2. How did the change take place? (Analysis according to the model of Collettere *et al.* 2013).
3. Identify the change actors. By relying on the text, please describe the change resistance manifested by the recipients?
4. Let's suppose that you are a member of a group of human resources change consultants which was asked to find solutions for implementing such a change within the company la Boulangerie du village. Which would be your recommendations regarding this aspect?

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THE AGE OF SUSTAINABLE BUSINESS MODELS

Sorin-George Toma¹,
Paul Marinescu²,
Cătălin Grădinaru³

Abstract: *Sustainability has become a key concept in the business world in the past decades. It represents a holistic approach that covers several topics such as environmental issues, social equity or economic development. Companies have understood the need of integrating sustainability in their business models. Business models are connected with their value propositions and show the way companies operate. The old business models are no longer possible. They were grounded only on an economic foundation. The new business models are increasingly sustainable business models that align the profit imperative with the social and environmental benefits. The aims of our paper are to define the concept of sustainable business model and to highlight its significance in the current business world. Our research is based on a literature review.*

Keywords: *business model, sustainability, sustainable development, company*

JEL Classification: M1

1. Introduction

In the past decades the word ‘sustainable’ has been widely used both in the business world and academic environment. Sustainability represents a typical subject of study for economists due to the fact that the scarcity of resources has always constituted a central concern for human society. Starting from the idea that population increased in geometrical ratio and food in arithmetical ratio, Thomas Robert Malthus considered in his book, *An Essay on the Principle of Population*, published in 1798, that this will lead to famine, misery and disease. He asserted that the increase of population is limited by the means of subsistence as “linear growth in food supply cannot make up for the skyrocketing needs of the exponentially growing population” (Friedrichs, 2014, p. 69). Later, Harold Hotelling launched the so-called “exhaustible resource economics”, warned on the world’s disappearing supplies of raw materials, such as minerals, oil and wood, and gave the example of regulating their exploitation. On the other hand, “it may seem that the exploitation of an exhaustible natural resource can never be too slow for the public good” (Hotelling, 1931, p. 138). In his view, there is “an optimum rate of exhaustion, in which the social cost of losing the resource is outweighed by the social benefit which it yields over the period of use” (Kuhlman and Farrington, 2010, p. 3442). On his turn, Robert Merton Solow suggested that “the market for exhaustible resources might be one of the places in the economy where some sort of organized indicative planning could play a constructive role” (Solow, 1974, p. 13).

Today, sustainability is a holistic approach that covers several topics such as environmental issues, social equity or economic development. As companies are “key contributors to economic, environmental and social well-being” (Schaltegger, Bennett and Burritt, 2006, p. 2), they have understood the need of integrating sustainability in their business models. Business models are connected with their value propositions and show the way companies operate. The old business models are no longer possible. They were grounded only on an economic foundation. The new business models are increasingly sustainable business models that align the profit imperative with the social and environmental benefits.

The aims of our paper are to define the concept of sustainable business model and to highlight its significance in the current business world. Our research is based on a literature review.

¹ Prof. univ. dr., Facultatea de Administratie si Afaceri, Universitatea din Bucuresti, tomagsorin62@yahoo.com

² Prof. univ. dr., Facultatea de Administratie si Afaceri, Universitatea din Bucuresti

³ Asist. univ. dr., Facultatea de Administratie si Afaceri, Universitatea din Bucuresti

2. Linking business models with sustainability

Since its emergence the concept of sustainability has changed its meaning. Its first European usage appeared in 1713 in the book *Sylvicultura Oeconomica* published by the German forester and scientist Hans Carl von Carlowitz.

The post-World War II period witnessed the advent of numerous and difficult economical, political, social and environmental problems. As the number of nations multiplied, the challenge of finding sustainable development paths became one of the most stringent for countries all over the world. In 1972, the United Nations organized the “Conference on the Human Environment” that clearly specified the rights of human family to a healthy environment (e.g., the right to safe water). In the same year, the Club of Rome published its report entitled *Limits to Growth* that explored the way exponential growth interacts with finite resources ([Meadows](#), [Meadows](#), [Randers](#) and Behrens III, 1972). Without any doubt the report succeeded in making people to pay a higher attention to sustainability.

Since the designing and printing of the “World Conservation Strategy: Living Resource Conservation for Sustainable Development” in 1980, sustainable development has become a fundamental issue on the global agenda of the United Nations. A generally definition of sustainable development was provided by the Brundtland Commission as follows: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of ‘needs’, in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs” (World Commission on Environment and Development, 1987, p. 43).

For a relatively long period of time only the economic and environmental aspects of sustainable development prevailed in the literature. In recent years social concerns were incorporated into the works of sustainability (Boström, 2012; Davidson, 2009; Littig and Grießler, 2005). Social sustainability refers to “policies and institutions that have the overall effect on integrating diverse groups and cultural practices in a just and equitable fashion” (Polese and Stren, 2000, p. 229) and encompasses four universal principles (Figure no. 1). This is why nowadays it is said that sustainability is related to three mutually dependent goals: “a) to live in a way that is environmentally sustainable or viable over the long term; b) to live in a way that is economically sustainable, maintaining living standards over the long-term; and c) to live in a way that is socially sustainable, now and in the future” (Dillard, Dujon and King, 2009, p. 2). This means that there are three pillars of sustainability: society, economy and environment (Figure no. 2). Consequently, five axioms of sustainability have been identified, as follows:

1. Any society that continues to use critical resources unsustainably will collapse.
2. Population growth and/or growth in the rates of consumption of resources cannot be sustained.
3. To be sustainable, the use of renewable resources must proceed at a rate that is less than or equal to the rate of natural replenishment.
4. To be sustainable, the use of nonrenewable resources must proceed at a rate that is declining, and the rate of decline must be greater than or equal to the rate of depletion.
5. Sustainability requires that substances introduced into the environment from human activities be minimized and rendered harmless to biosphere functions. (Heinberg, 2010)

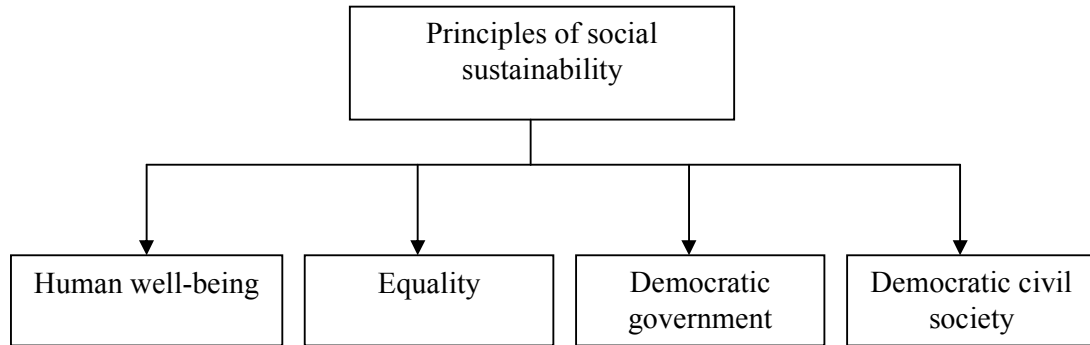


Figure no. 1. The four principles of social sustainability

Source: Magis and Shinn, 2000

Thus, the concept of sustainability has been defined as:

- “a state of affairs where the sum of natural and man-made resources remains at least constant for the foreseeable future, in order that the well-being of future generations does not decline” (Kuhlman and Farrington, 2010, p. 3442).
- “the conceptual framework within which the territorial, temporal, and personal aspects of development can be openly discussed” (Seghezze, 2009, p. 547).
- “a normative notion about the way how humans should act towards nature, and how they are responsible towards one another and future generations” (Baumgärtner and Quaas, 2009, p. 2).

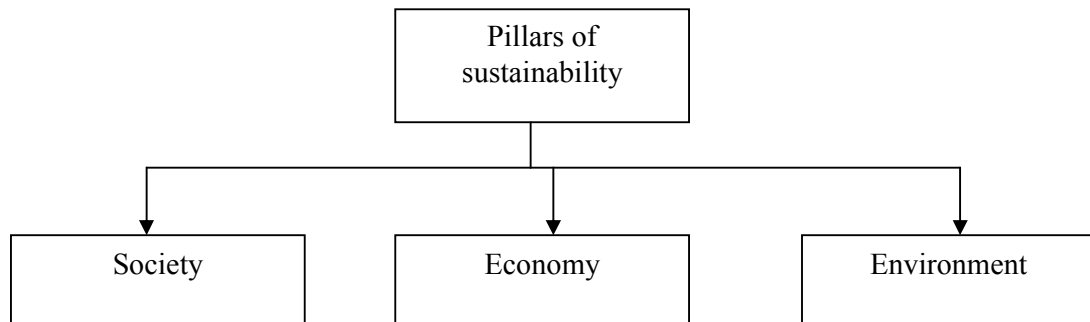


Figure no. 2. The three pillars of sustainability

Source: Strange and Bayley, 2008

These definitions show that sustainability is related to time, territory, people and resources, and emphasises the relationships between humans and nature. Thus, the following dimensions of sustainability have to be underlined:

- place, that contains three dimensions of space;
- permanence, as the fourth dimension (the time dimension);
- persons, as the fifth dimension (the human dimension) (Seghezze, 2009).

In spite of the fact that sustainability got prominence both at macro and micro-level, most companies worldwide has hardly begun to respond seriously to their environmental and social responsibilities in the 1970s and 1980s (Murphy and Bendell, 1999). Things changed at the end of 1990s when companies started to design and implement business models that mix their economic goals with environmental and social concerns.

There are many definitions of the concept of business model that give rise of a multitude of interpretations (Zott, Amit and Massa, 2010). A business model:

- “demonstrates how a business creates and delivers value to customers” and “outlines the architecture of revenues, costs and profits associated with the business enterprise delivering that value” (Teece, 2010, p. 173).
- “is the bundle of specific activities that are conducted to satisfy the perceived needs of the market, including the specification of the parties that conduct these activities (i.e., the focal firm and/or its partners), and how these activities are linked to each other” (Zott and Amit, 2010, p. 2).
- “is the logic of the firm, the way it operates and how it creates value for its stakeholders” (Casadesus-Masanell and Ricart, 2009, p. 7).

Basically, a business model indicates how a company operates and the manner of creating and delivering value to its various stakeholders.

A sustainable economy requires a fundamental change in the purpose of businesses. Thus, corporate sustainability is seen as “the result of management attempts to tackle challenges posed by the need for corporations to move towards the goal of sustainability” (Schaltegger, Bennett and Burritt, 2006, p. 2). As a result, a sustainable business model represents a business model that takes into account a broad range of stakeholders’ interests, including society and environment, and provides competitive advantage to a company by aligning profit with social and environmental objectives.

Sustainable business models are driven by eco-efficiency (e.g., cleaner production), creating value from waste (e.g., recycling) or visions for a new economy (e.g., blue economy). Sustainable business models archetypes have been classified in three groups as follows:

- technological, such as low carbon manufacturing;
- social, such as ethical/fair trade;
- organizational, such as social and biodiversity regeneration (Bocken, Short, Rana and Evans, 2014).

All the above mentioned sustainable business models are of a great importance in today’s business world. As the sustainability concept has increasingly shaped our society, more and more companies have understood the need of changing their old business models, based on economic foundation, with new business models, based on sustainability.

3. Conclusions

Sustainability constitutes a major subject both in the literature and in the business world that covers various issues. This is why companies around the world are fully aware of its significance.

The old approach of business model defines the way a company creates and delivers value to its customers. The new approach takes into account a broad range of stakeholders and is driven by the sustainability concept.

By entering the age of sustainability, companies have to increase their positive impact in society. Keeping their business models viable represents a continuous challenge for current companies. This means that they have to create and implement sustainable business models.

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PROMOTIONAL POLITICS, INFLUENCE FACTOR OF ECONOMIC COMPETITIVENESS GROWTH

Mihaela, Savu¹,
Delia, Teselios²

Abstract:

In an ever changing economy, a firm's competitiveness is an essential issue for a successful business. Increasing competitiveness by raising the visibility is one of the steps that any business can use.

A good communication for the transmission of relevant information about the company and the products or services is important in the current period. Starting from this goal, we determined the average mix that leads to maximizing audience, using the Solver module of the Excel spreadsheet program. Using this module offers the possibility of determining the optimal combination of variants of promotion according to the restrictions set by the company.

Keywords: promotion, competitiveness, linear programming, optimal solution

JEL Code: C61, D00

1. Introduction

Changes in the current economy seem to flicker, so manufacturers must prove their creativity and innovative spirit. Understanding of the existing transformations in the economy determines the success or failure of a business.

"Given the contemporary economic and social dynamism, comprising a growing part of the world states, the successful presence of a company on the market is increasingly difficult. To survive and grow, to face much stronger competition, manifested in the majority of fields, the economic unity must be familiar with the market, to communicate with it, to inform potential customers about its products and services, to receive the buyers or the consumers information." (Papuc, 2004)

Cruceru believes that during the current period, competition is getting stronger day by day, causing competitors to adopt a proactive attitude, able to provide a stable position on the market, but also in the minds of consumers. Attracting consumers towards products or services provided is the goal of any manufacturer.

Most experts believe that a product may be of good quality, have a competitive price and a well chosen distribution network (Papua, 2004), but still, it is needed another force to intervene for it or its image to reach the final consumer. That force is called promotion.

One of promotion techniques that a company can use is advertising. In the present paper, we aimed to show how a business can use linear programming to establish the optimal combination of variants of promotion according to various restrictions.

Optimization, synonymous with mathematical programming when present one or more restrictions symbolizing the available resources (material, financial, labor, time, etc.) is widely used in scientific applications, research, economics, industry, agriculture, etc. The purpose of optimization models is to assist users in making the best decisions in complex situations, thus saving time and money. [5]

2. Economic study

In his paper "Reminiscences about the origins of linear programming" (1982) Dantzig wrote: "Linear programming is viewed as a revolutionary development that gives man the

¹ PhD Associate Professor, "Constantin Brancoveanu" University of Pitesti, Romania
ioneci_mihaela@yahoo.com

² PhD Lecturer, "Constantin Brancoveanu" University of Pitesti, Romania

possibility of fixing general objectives and to find, through the simplex method, optimal decisions for broad class of decision problems of great complexity " [2].

Today, optimization problems are synonymous with mathematical programming problems and represent those problems in which a function of several variables is either maximized or minimized in relation to a set of restrictions [5].

In order to increase economic competitiveness by increasing visibility among potential customers, a trader decides that for one month, to promote its image and product range.

As methods of promotion are chosen: radio spots at a national radio station, TV spots at a local radio station and advertising in a national newspaper.

The amount allocated for the promotion campaign is that of 15000 euros / week, considering the following restrictions:

- to allow at least 20 radio spots per week;
- the maximum amount paid for radio spots to not exceed 8000 euros / week.

(Table 1) shows the maximum number of weekly broadcasts and in (Table 2) are presented the methods of promotion.

Table 1. Maximum number of weekly broadcasts

Method of promotion	Radio spot 30" (7 ⁰⁰ -10 ⁰⁰)	Radio spot 30" (18 ⁰⁰ -21 ⁰⁰)	Advertising in a national newspaper (12x6,25 cm color, max 1312 characters)	TV spot 30" (19 ⁰⁰ -23 ⁰⁰)
Maximum number of weekly broadcasts	25	20	5	10

Table 2. Methods of promotion

Method of promotion	Advertising rates (euros)	Audience obtained by advertising spot (persons)
Radio spot 30" (time frame M-F 7 ⁰⁰ -10 ⁰⁰)	500*	800700***
Radio spot 30" (time frame M-F 18 ⁰⁰ -21 ⁰⁰)	400*	400350
Advertising in a national newspaper (M-F)	440**	10732****
TV spot 30" (time frame M-F 19 ⁰⁰ -23 ⁰⁰)	340	8000*****

Source: * <http://www.bestadvertising.ro/files/rate%20card%20srr%20-%2001%20ian%202015.pdf>

** <http://www.mediapress.ro/ziare-bucuresti/module-romania-libera-m99.html>

*** <http://www.paginademedi.ro/2016/01/cele-mai-multe-matinal-radio-au-crescut-in-audienta-gold-cu-dobro-audienta-dublata-intr-un-an>

**** <http://www.brat.ro/audit-tiraje/publicatie/romania-libera/>

***** <http://www.paginademedi.ro/2016/01/analiza-audienta-tv-in-prime-time-in-2014-si-2015-top-3-neschimbata-scaderi-mari-la-tvr-si-prima-creste-romania-tv-pe-toate-targeturile>

It aims to determine the media mix that leads to maximizing audience.

Alternatively, to obtain the optimal solution was used the Solver module of the Excel spreadsheet.

Whether x_1 = number of radio spots broadcast weekly in the time frame M-F 7⁰⁰-10⁰⁰

x_2 = number of radio spots broadcast weekly in the time frame M-F 18⁰⁰-21⁰⁰

x_3 = number of weekly appearances in the national newspaper

x_4 = number of TV spots broadcast weekly in the time frame M-F 19⁰⁰-23⁰⁰

The mathematical model of linear programming problem is:

$$\max f(x) = 800700x_1 + 400350x_2 + 10732x_3 + 8000x_4$$

$$500x_1 + 400x_2 + 440x_3 + 340x_4 \leq 15000$$

$$500x_1 + 400x_2 \leq 8000$$

$$x_1 + x_2 \geq 20$$

$$x_1 \leq 25$$

$$x_2 \leq 20$$

$$x_3 \leq 5$$

$$x_4 \leq 10$$

$$x_i \geq 0, i = \overline{1,4}$$

The steps required to obtain the optimal solution using the Solver module are shown in (Figure 1) and (Figure 2).

3	Solutia optima	0	0	0	0	
4	Audiența obținută de spotul publicitar	800700	400350	10732	8000	=SUMPRODUCT(\$B\$3:\$E\$3,B4:E4)
5						
6						
7		500	400	440	340	=SUMPRODUCT(\$B\$3:\$E\$3,B7:E7)
8		500	400	0	0	=SUMPRODUCT(\$B\$3:\$E\$3,B8:E8)
9		1	1	0	0	=SUMPRODUCT(\$B\$3:\$E\$3,B9:E9)
10		1	0	0	0	=SUMPRODUCT(\$B\$3:\$E\$3,B10:E10)
11		0	1	0	0	=SUMPRODUCT(\$B\$3:\$E\$3,B11:E11)
12		0	0	1	0	=SUMPRODUCT(\$B\$3:\$E\$3,B12:E12)
13		0	0	0	1	=SUMPRODUCT(\$B\$3:\$E\$3,B13:E13)

Figure 1. Implementing initial data in the spreadsheet

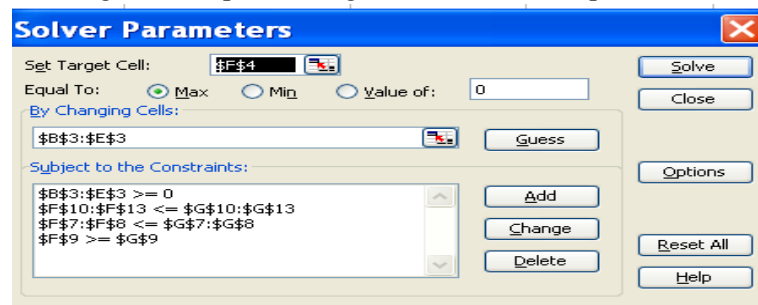


Figure 2. The window “Solver Parameters” completed

5	5	Target Cell (Max)					
6	6	Cell	Name	Original Value	Final Value		
7	7	\$F\$4	Audiența obținută de spotul publicitar	0	8140660		
8	8						
9	9	Adjustable Cells					
10	10	Cell	Name	Original Value	Final Value		
11	11	\$B\$3	Solutia optima	0	0		
12	12	\$C\$3	Solutia optima	0	20		
13	13	\$D\$3	Solutia optima	0	5		
14	14	\$E\$3	Solutia optima	0	10		
15	15						
16	16	Constraints					
17	17	Cell	Name	Cell Value	Formula	Status	Slack
18	18	\$F\$7		13600	\$F\$7<=\$G\$7	Not Binding	1400
19	19	\$F\$8		8000	\$F\$8<=\$G\$8	Binding	0
20	20	\$F\$9		20	\$F\$9>=\$G\$9	Binding	0
21	21	\$F\$10		0	\$F\$10<=\$G\$10	Not Binding	25
22	22	\$F\$11		20	\$F\$11<=\$G\$11	Binding	0
23	23	\$F\$12		5	\$F\$12<=\$G\$12	Binding	0
24	24	\$F\$13		10	\$F\$13<=\$G\$13	Binding	0
25	25	\$B\$3	Solutia optima	0	\$B\$3>=0	Binding	0
26	26	\$C\$3	Solutia optima	20	\$C\$3>=0	Not Binding	20
27	27	\$D\$3	Solutia optima	5	\$D\$3>=0	Not Binding	5
28	28	\$E\$3	Solutia optima	10	\$E\$3>=0	Not Binding	10

Figure 3. The results report

The optimal solution is: $x_1=0$, $x_2=20$, $x_3=5$, $x_4=10$ and $\max f(x) = 8140660$.

In other words, for 20 radio spots broadcast weekly from M-F in the time frame 18⁰⁰-21⁰⁰, 5 weekly issues in the national newspaper and 10 TV spots broadcast weekly from M-F in the time frame 19⁰⁰-23⁰⁰ is obtained an audience of 8140660 people (and implicitly, potential clients). The commercial agent will give up the promotion through radio spots broadcast weekly from M-F in the time frame 7⁰⁰-10⁰⁰.

The report of the sensitivity analysis of input variables provide information regarding: changes of coefficient of variables from objective function, changes of the free terms of restrictions and changes that occur by forcing as a variable to be different from 0, considering that its current value is 0.

The limits of the intervals in which can vary the variables coefficients in the objective function so that the values of variables in the optimal solution does not change are given by: "*Objective Coefficient* \mp *Allowable Decrease/ Allowable Increase*". Following the change of coefficients values in the objective function, the optimum value of the objective function will change [5].

14	Constraints						
15			Final	Shadow	Constraint	Allowable	Allowable
16	Cell	Name	Value	Price	R.H. Side	Increase	Decrease
17	\$F\$7		13600	0	15000	1E+30	1400
18	\$F\$8		8000	4003.5	8000	1400	0
19	\$F\$9		20	-1201050	20	0	4
20	\$F\$10		0	0	25	1E+30	25
21	\$F\$11		20	0	20	1E+30	0
22	\$F\$12		5	10732	5	3.181818182	5
23	\$F\$13		10	8000	10	4.117647059	10

Figure 4. The report of the sensitivity analysis

The shadow price attached to the first resource (allocated amount) is zero, the change with a unit of it leaving unchanged the optimum value of the objective function.

One unit increase in the maximum amount paid for radio spots lead to an optimum of the objective function of 8144663 people, signifying an increase in audience with 4003 people.

One unit increase in the weekly maximum number of broadcasts corresponding to advertising in a national newspaper leads to a value of audience of $8140660 + 10732 = 8151392$ people.

One unit increase in the weekly maximum number of broadcasts corresponding to TV spot leads to a value of audience of 8148660 people.

The value of the audience remains unchanged for an increase by one unit of the weekly maximum number of broadcasts corresponding to the radio spot of 30 " (for both time frames specified above).

3. Conclusions

The way to determine the optimal combination for using a media mix for advertising aimed combining advertising at the mesoeconomic level with the advertising at the macroeconomic level, so as to increase the number of potential customers.

Using these tools in determining the best options for advertising the company and its products show what the company must choose in achieving promotion. At the same time it is reduced the cost with advertising, essential in calculating the cost of production for any company.

However, we must point out that this method of promotion has its limits, because "although advertising is one of the most popular communication techniques, in recent years organizations are turning increasingly towards the use of sales promotion, public relations, selling force, direct marketing, communication through events, wishing to attract more efficiently different audiences." (Cruceru, 2009). The technology available in the contemporary period has produced significant changes in people's lives (Rusăneanu, 2014) but at the same time in the activity of promoting companies.

Given the dynamism of the market economy, we believe that this work can be continued by establishing an optimal promotional mix to attract different population segments to the firm.

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DIAGNOSIS OF CONTEMPORARY SOCIETY'S EDUCATION FOR THE DÂMBOVIȚA COUNTY - DEVELOPING STRATEGIES FOR SUCCESS

Popescu, Constanța¹
Păun, Maria²

Abstract

A state is valuable when it has educated able citizens, and this is interdependent with the existence of an effective education, education compatible with the European systems, that ensures young people equal access to education for sustainable development and for permanently boosting adult education. The theme of the article is education status and it aims at providing an analysis of the most relevant indicators of education. The research focused on the analysis of secondary sources, statistics taken from the INS and ISD.

Keywords: education, learning, student, teacher

JEL:I21

1. INTRODUCTION

The study education has been and remains the focus of many academics and practitioners. Education gives the individual safety, trust and self-esteem. Through education he acquires knowledge necessary for a possible job. Statistical data reflected by the education status serves to highlight the image of the state viewed from the youth point of view as they're seen as an integral part of a society that aspires to evolution.

2. STATS OF THE ART OF EDUCATION

If the educational process, both teachers and students should be aware of the learning styles they prefer and therefore the way they learn is best reflected by their performance in terms of school. Strengths of the individual that is benefiting education(Stănciulescu E , 1998): has the ability to discern right from wrong, gets educating skills that allow him to fend for himself, becomes independent and does not allow those around them to manipulate him since he benefits of various information. Most students and many teachers believe that learning is a process that transmits knowledge and insight not just by active learning, and this is a very difficult thing to change. The role of student-centered learning is to direct the student towards active learning(Manolescu M, 2006).

For the young people of today in order to become an important person for society over the years is fundamental for the teacher to find the most effective ways to capture the attention of the students, and also to keep a volume of information relevant for this society. It is essential to advise him on how to learn. Learning inefficiently demoralizes and confuses learners. They may come to believe that learning is not for them. Sometimes learning can be structured such that learners can't learn on their own and are too dependent on the teacher and the role of student-centered learning means directing the student to learn actively(Smith M, 2000).

Weaknesses facing the educational environment in today's society can be identified through a management approach focused on - strategic diagnosis. Diagnostic analysis constitutes the starting point for developing strategic and tactical solutions to improve the organization(Niculescu M, 1997). The diagnosis is a method which allows the formulation of quantitative or qualitative value judgments on the state, dynamics and prospects. Diagnosis as part of the organization's management is necessary in contemporary society.

¹ Prof. Univ. Dr. Universitatea, Valahia, Târgoviste, paunm89@yahoo.com

² Drd. Univ. Dr. Universitatea, Valahia, Târgoviste, paunm89@yahoo.com

because it ensures: changing decisions fairness, consistency of trends and the competitive environment(Verboncu I, 2001).

3. DIAGNOSIS OF CONTEMPORARY SOCIETY'S EDUCATION

3.1. Metodologi of research

This is a desk research conducted through analysis of secondary sources. The method used is statistical analysis of the sample: students in the Dambovită county, and students throughout the country. The time period analyzed from 1995 to 2014. Among the analyzed indicators: educational establishments, school population and graduate population.

Goals:

- Identify school population trend of recent years in Dambovită county.
- Observation of statistical indicators of schools in 2014.
- Knowing the number of graduates on different study stages in Romania.

Hypothesis

1. In the county of Dambovită there is a significant number of kindergartens,
2. The trend of school population in the county of Dambovită is one of involution,
3. Statistics on levels of education graduates present setbacks.

An eloquent diagnosis, conducted by competent people of the current state of educational environment can lead to identifying deficiencies and developing effective strategies with visible results.

3.2. Statistics of Education Units

The first indicator examined to outline the education status in Dambovită county is presented in the figure below.

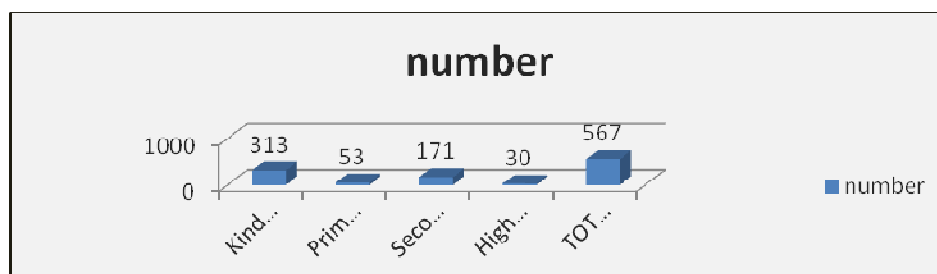


Figure 1. Education units in Dambovită

Source: <http://www.isj-db.ro/>

In the year 2014 a total of 567 educational units, first place is taken by 313 kindergartens, second place by secondary schools and the last place by high schools.

School population statistics

The relevant indicator of the education status in Dambovită is the school population by level of education. See Table 2, Figure 2 and figure 3.

Table 2. School population by levels of education (including private schools)

Dâmbovița County	Total	Pre-school	Primary and Secondary				High school	Vocational and apprentice school	Post high school and foremen	Higher education
			Total	Primary (cl.I-IV)	Secondary (cl.V-VIII)	Special education (cl.I-VIII)				
1990/1991	118096	18098	67436	30938	35922	576	24151	7944	467	-
1995/1996	108522	16110	64288	35401	28141	746	18434	6258	918	2514
2000/2001	109909	13226	63510	28423	34540	547	15857	5348	1803	10165
2001/2002	110001	13479	60932	27037	33463	432	16419	5948	1703	11520
2002/2003	106066	13762	57752	26132	31238	382	16956	6489	1284	9823
2003/2004	105265	14439	55843	26989	28532	322	17121	7106	949	9807
2004/2005	101761	14574	52830	25891	26603	336	17477	6918	766	9196
2005/2006	98774	14513	50529	24798	25446	285	16920	7055	681	9076
2006/2007	95462	14464	48630	23985	24414	231	17202	5833	577	8756
2007/2008	93600	14796	47058	22069	24783	206	17464	5076	845	8361
2008/2009	91633	14860	46373	22172	23999	202	17079	4384	900	8037
2009/2010	90996	15258	45149	21732	23227	190	18293	2579	873	8214
2010/2011	88610	15185	43964	21233	22568	163	19575	1192	936	7758
2011/2012	84468	15038	41464	20539	20765	160	20193	224	1069	6480
2012/2013	83703	13199	44359	23297	20903	159	18972	314	1454	5405
2013/2014	81050	12368	43792	23366	20236	190	17787	451	1727	4925

Source: <http://www.dambovita.insse.ro/main.php?lang=fr&pageid=369>

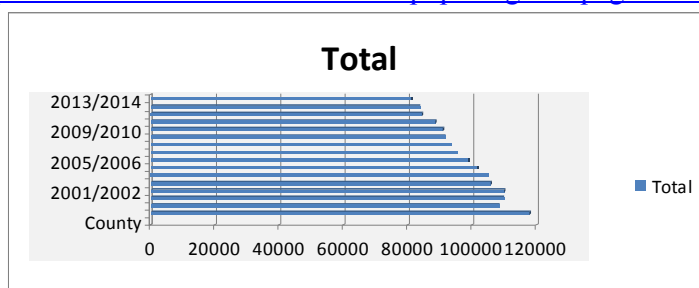


Figure 2. School population

Source: <http://www.dambovita.insse.ro/main.php?lang=fr&pageid=369>

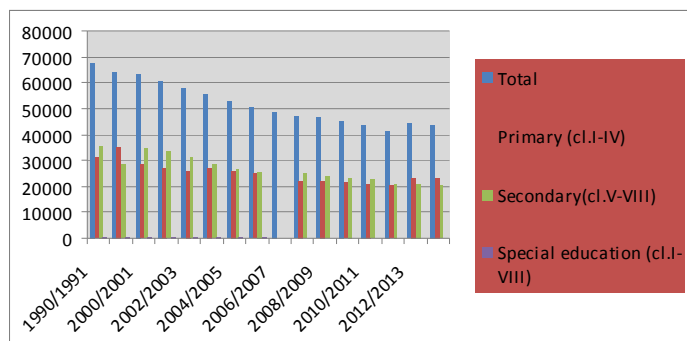


Figure 3. Primary and Secondary

Source: <http://www.dambovita.insse.ro/main.php?lang=fr&pageid=369>

The dynamic analysis of the school population by education level between 1990-2014 reflects some evolution and some regression periods. Starting with the 2002/2003 school year the trend is linear, but has a regressing effect.

4. STATISTICS OF THE SCHOOL POPULATION AT COUNTRY LEVEL.

To reflect a clearer picture of the education status through national statistics relevant issues are presented in detail (Table 3)

Table 3. School population on levels of education by gender in Romania

Total = T / Total = T							
Masculin = M / Male = M							
Feminin = F / Female = F							
	T	4404581	4324992	4176866	4029226	3823515	3734326
Enrolled population	M	2185299	2151452	2084733	2019611	1929331	1888696
	F	2219282	2173540	2092133	2009615	1894184	1845630
	T	650324	652855	666123	673736	673641	581144
<i>Pre-school education</i>	M	332715	333666	340949	344967	344488	297457
	F	317609	319189	325174	328769	329153	283687
	T	1789693	1752335	1719676	1691441	1629406	1744192
<i>Primary and secondary education</i>	M	923812	904733	888518	874606	844675	903471
	F	865881	847602	831158	816835	784731	840721
<i>din care: / of which:</i>							
	T	924518	893166	873997	862588	819280	812241
<i>Secondary education</i>	M	476600	460685	451168	445455	425005	420938
	F	447918	432481	422829	417133	394275	391303
<i>Of primary and secondary education:</i>							
	T	16861	16048	16308	16341	16165	16609
<i>Special education</i>	M	10428	9971	10219	10264	10215	10542
	F	6433	6077	6089	6077	5950	6067
	T	791348	784361	837728	866543	888768	831810
<i>High school education</i>	M	382158	380190	418249	441438	456167	424185
	F	409190	404171	419479	425105	432601	407625
	T	220335	189254	115445	54538	12382	19734
<i>Vocational education</i>	M	136798	118881	72949	35223	7898	14987
	F	83537	70373	42496	19315	4484	4747
	T	45528	55089	62575	69967	79466	92854
<i>Post high school and foremen education</i>	M	12046	15696	17336	19476	23142	29182
	F	33482	39393	45239	50491	56324	63672
	T	4534	6319	6315	6108	6564	7058
<i>Foremen education</i>	M	4189	5806	5903	5763	6140	6556
	F	345	513	412	345	424	502
	T	907353	891098	775319	673001	539852	464592
<i>Tertiary education</i>	M	397770	398286	346732	303901	252961	219414
	F	509583	492812	428587	369100	286891	245178
<i>din care: / of which:</i>							
	T	1485	573	570	610	-	-
	M	558	147	103	105	-	-
<i>Short-term education (colleges)</i>	F	927	426	467	505	-	-

Source: insee.ro

According to the data included in the table below at country level for the entire 2007-2013 time period analyzed, the school population shows a linear regressive trend.

5. GRADUATES STATISTICS

The number of graduates at country level is seen in Table 4.

Table 4. Number of graduates

							Post high school and foremen education				Higher education	
	Secondary education ¹⁾		High school education		Vocational education		Post high school and foremen education				Tertiary education	
	Total	of which: female	Total	of which: female	Total	of which: female	Total	of which: female			Total	of which: female
									of total: foremen education			
									Total	din		
	of which: female											
TOTAL	184599	89797	187521	95330	4570	1342	23386	16113	2688	157	136671	78691

Source: insse.ro

Data provided by the National Institute of Statistics shows that in the year 2014 from 136 671 people only 78691 are higher education graduates.

Conclusion

Dynamic analysis of the most relevant indicators of the education status in Dambovită county shows the fact that the strategy in education is deficient, and so it must be improved. A society evolves when its members adapt to changes in the environment, meaning the necessity to continue the lifelong educational process since the information that is currently available over time it might not be. As Nelson Mandela said, through education we can change the world, and if the education status statistics reflect a negative image this means that some improvement measures should be developed and implemented.

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THE COMPETITIVE BUSINESS MODELS IN E-COMMERCE

Cătălin Grădinaru¹

Paul Marinescu²

Sorin-George Toma³

Abstract

Business models basically represent the way in which a company conducts its business activity and incorporates all the elements involved in such a manner so that it can function properly. It is of utmost importance to comprehend the business configuration because the way in which a company functions and acts from the economic point of view has repercussions throughout the market and can be easily observed by looking at its quantification modality through the revenue stream. Flexibility represents one of the most important features a company should possess within the current economic environment which is somehow turbulent. This feature is usually the differentiator between companies in being first on the market, thus allowing to easily seize higher market shares or even to create new markets – blue oceans. The manner in which a company economically responds or reacts to change is not linked only to employees, turnover, connections (networks, good relationships to various entities, and so on) but to the business model itself. Given all these, E-commerce represents one of the business models which amplify the competitiveness of a company.

The purpose of our work is to enhance the importance of the business models in E-commerce within the current business environment and the advantage it gives to companies in terms of competitiveness to some companies which do not embrace such a connection between the traditional business models and E-commerce. Our research is based on an analysis of the literature.

Keywords: *business, tradition, modernity, reality, virtual, network, commerce*

JEL classification: M10

Introduction

Together with the revolution within informatics and the emergence of the electronic communicational networks based on the high technology and an extremely important information technology, people's way of life, the relational area, the economy, the information (as a removed lack of determination) and even the cognition have changed radically. It is an extremely large leap - from walking to the speed of light and, moreover, from the speed of light, to the speed of information. Every human being on Earth in possession of a computer or a smartphone can join a network and benefit from all the advantages created by the network and its extraordinary strength, quality, communications, and images. How could companies, businesses and trade not take advantage of the competitive and secured network, a wonder of the twentieth century?

Basically, the network effect has changed the world and it is about to bring new radical coordinates in building a new culture – the cognitive culture, the culture of knowledge – together with its patrimony of values, which will be the foundation and the cultural infrastructure of a new type of civilization - the cognitive culture, the culture of knowledge. It is the civilization that is specific to the global era and, ab initio, to the effort of building the main pillars of this type of civilization. What is more, the nervous system and especially, the neuronal system, of this type of civilisation is represented by the network.

Nowadays and especially in the future, everything that exists, from education to business, from scientific research to the discovery of exoplanets, and so on depends on the network and is connected to it. Any type of business belonging to this era in which humanity is active, is a business based on networks, a business connected to the network and,

¹ University Assistant, PhD, Faculty of Administration and Business, University of Bucharest, gradinarubusiness@gmail.com

² University Professor, PhD., Faculty of Administration and Business, University of Bucharest

³ University Professor, PhD., Faculty of Administration and Business, University of Bucharest

therefore, to a type of commerce where the virtual and the reality overlap within the performance area. And such performance is primarily a result of knowledge.

Business in the era of knowledge - even if it does not radically change its essence – is radically changing its supports, configuration, philosophy, physiognomy and even its typology. It will obviously still have a resistance structure to define its purpose and objective, a construct and a *modus vivendi*. The system of relationship, the way of interacting, the behaviour within society, life and especially market will be entirely changed within this *modus vivendi*.

1. E-commerce and the knowledge-based economy

E-commerce is defined by most researchers and practitioners as a complex of activities of buying and selling information and cognition, and, as we dare say, products and services, via a computer network, according to Riggins' and Hyeun's opinions formulated in 1998. But this definition is neither simple, nor complete and it is obviously insufficient. It must also include the possibility of carrying out transactions throughout digital media, as Nicolas Bergeron explains (Bergeron, N., 2001), quoting Bloch, Pigneur and Segev, 1996 and the specific activities of network management and specific internal activities.

E-commerce entails, *inter alia*, the fulfilment of two essential conditions: the existence and use of an electronic trading system; obtaining a competitive advantage. According to some authors (for example, Applegate 1996, quoted by Nicolas Bergeron) (Bergeron, N., 2001) there are three types of e-commerce systems:

- systems that interact directly with consumers (B2C “Business to Consumer” namely retail E-commerce or E-commerce in detail (CID);
- intrabusiness systems (B2E “Business to Employee”), E-commerce within the enterprise;
- E-commerce systems between businesses (B2B “Business to Business”).

All three types of e-commerce (B2C, B2E and B2B) interact with each other and generate a new *modus vivendi* of commerce and, connected to it, of the business. However, each has its peculiarities and its specific mechanisms.

For example, each of the three types of e-commerce uses a specific network or has a specific node to use complex and very complex networks, so that the area of influence and interest for buyers will expand as much as possible, namely until the limit where it can generate dysfunctions, perturbations or saturation, sales will grow and, together with them, the profit. All this would lead toward gaining a competitive advantage.

Retail e-commerce (B2C) directly targets the consumers, regardless of who they are, how and where they are. Thus, the B2C e-commerce system uses all the electronic networks, but especially the Internet, the networks of enterprises, and those from the neighbourhoods, media networks, permanent and temporal networks, network products, cultural networks, private networks and any other type of network that may amplify the information flow and generate the need for knowledge and communication, the need for information and obviously the need for consumption.

E-commerce within the enterprise (B2E), understood as intrabusiness between the members of the enterprise, the company, and the organization of any kind, benefits from *the intranet*. This type of network - generally well secured - ensures, on the one hand, the performance and functioning of the company, as well as its areas and departments and, on the other hand, the process of generating of a new organizational culture and a new cognition, both based on a network. Therefore, a cognitive heritage will be developed within the enterprise (company, organization, university, etc.) and it comprises databases, ways of interrelation etc. At the same time, a business progresses within the company, meaning that every member of the organization will be buying products from this company and from some of its compartments (objects, services, knowledge, assistance, services etc.) and will be selling

work, intelligence, innovation, creation, etc. to the company in return. And this will be achieved primarily through the existing network which will facilitate and enhance the level of information and cognition. However, we won't dwell on these issues which constitute one of the most interesting and complex areas of generating organizational culture, intellectual capital and performance management.

E-commerce between enterprises, companies, organizations etc. (B2B) represents one of the most consistent and most important areas of a business, as it permanently configures, determines and upgrades an intra-organizational framework structure having the role of pressure, voltage, strain and relaxation regulator in the process of generating, configuring, running and optimizing a business. This type of commerce – which is very important especially in the movement of the means of production and cognition - is a special one and this is the reason why it generates, on the network support, a special business with a decisive role within the other businesses on network support - and not only – carried out by enterprises and generally by each unit where a human activity is carried on.

The three types of e-commerce systems may be represented as follows (figure no. 1):

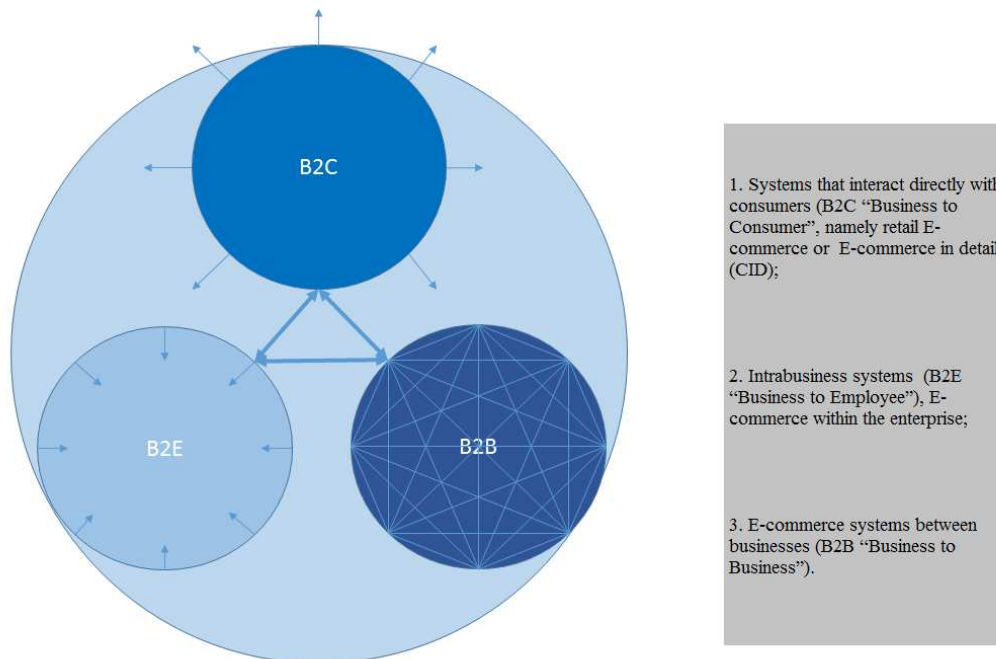


Figure no. 1 Typology of E-commerce systems and the interactions between them

2. Business on support networks, networks as business carriers

The era of electronics, networks and real-time information has generated upgrades for the business and its entire support. This radical mutation generated huge facilities, but also a lot of other issues concerning philosophy, physiognomy, structure, infrastructure and business security. Everything has changed. Almost nothing is as before. Keep in mind that even in the business field the principle that Seneca formed more than 2,000 years ago applies: Live life as if you lived for show. In fact, nowadays, a business, however confidential it may be, can survive only if it is for show; and this is called transparency.

2.1. Remodelling the business model. Flexibility and fluidity

Through electronic business model we understand a way to devise and run a business using the electronic means at its disposal (if necessary, purchasing them), so that the company (enterprise, company, joint stock company, etc.) generates profit. The model is therefore a

framework, a methodology, an algorithm, a project, a *modus cognoscendi*, in which the value systems, including the organizational ones - meaning organizational culture - , heritage, its own databases and the network's databases, the human potential, generate a model on which strategic, operational and tactical planning is performed, meaning a concept that is put into practice and, depending on its impact and on other factors regarding the market, is corrected, optimized and modernized so as to obtain, on the one hand a competitive advantage, which is linked to all impact factors, especially to the quality of human potential and, on the other hand, profit.

2.2. Real virtualization and virtual vectorization

Using the computer networks, information networks, media etc. in designing and conducting a business depends, on the one hand, on the real virtualization and, on the other hand, on the virtual vectorization and even on the virtual reification.

Of course, some ways of planning, deployment and delivering a business through networking, media and advertising are not new. They have always existed and are part of the very concept of business. But the computer and the network brought this process to a level of connection, interconnection, interdependence and efficiency that has never been achieved in the history of mankind.

Before proceeding to a detailed presentation of the business models in e-commerce, we believe we should enlarge upon the business configuration in the new framework opened by electronics and cybernetics in any kind of commerce. (Figure no. 2)

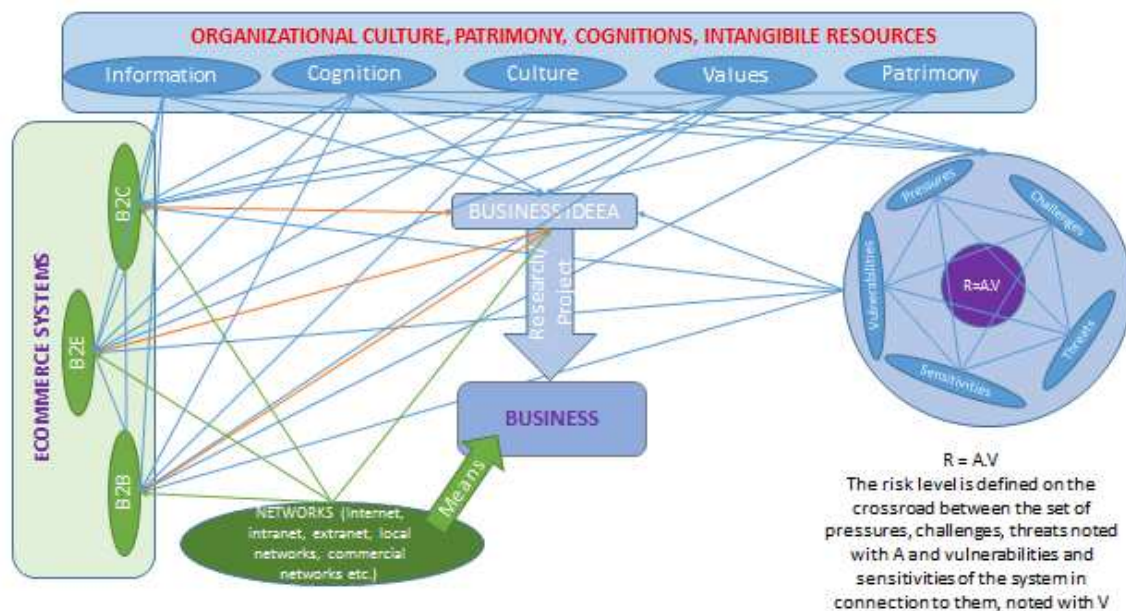


Figure no. 2 Business determinations within the e-commerce systems configuration

The determinations of a business in terms of the three systems of electronic commerce (which we have in mind) are relevant. First of all, they influence the concept of business and, linked to this, the idea of business. When conceiving a business, the idea that generates and sustains the whole effort is from the very beginning conditioned in a complex way. The already existing and tested e-commerce systems offer not only an appreciative background

and experience in the field, but also supports for analysis, rational algorithms, models, calculations, databases.

There is also a certain way, a certain model of virtualizing the reality, for instance the construction of virtual models, starting from the real ones that provide the efficient implementation of an analysis model before its implementation and initiating the process of drawing up a draft and transposing it into a business.

However simple the business we want to deal with, today we must take into account some essential elements and concrete circumstances radically changed from those of, say, a decade ago. Any entrepreneur should know that there are rich documents, databases, networks, expertise factors, preconceived projects that can be used to better understand the mechanism of designing a business in terms of electronic trade, etc.

Just before triggering the planning and progress process of a business, the entrepreneur has to make a website, collect information, to use the existing data in the cyberspace for a thorough analysis and even develop a forecasting within a certain horizon of waiting.

Afterwards he can initiate a dialogue with some specialists, a debate, a way to probe the level of responsiveness, prospective customers, partners, employees, etc. The model he will later develop or use (if already developed) is very important in order to understand the competitive advantages, the specific performance of commercial activity in cyberspace and the entire mechanism of functioning of commercial activities in the existing circumstances at the beginning of the XXIst century. Existing networks greatly facilitate the communication and burn some steps in running a business. But, at the same time they increase the issue related to business security, competitive environment, speed of action or reaction in achieving the tactical surprise (e.g. the appearance by surprise of a product able to shock and to bring a tactical advantage in the market), as well as the strategic surprise when the respective business desires a more distant horizon through the use of new policies and instruments, with the objective to target production lines, geoeconomic areas, geopolitical areas, etc.

We emphasize, also using some data from prof. Jean-Marc Frayret's courses, in July 2002, at the Consortium FOR@C summer school, some of the main models of e-business (Frayret, J-M, 2002).

There are several categories of electronic business, among which are the following:

- the models based on courtesy (placement of offers to buy or sell, meetings between producers and consumers, between sellers and buyers, performance of mutual services, etc.); the purpose of these models is to bring onto the market all interested parties, to offer kindness, mutual understanding, confidence, curiosity, politeness and to create an optimistic frame, extremely favourable to running any business; among these models: „Buy/Sell Fulfilment” (offers to buy or sell in an “n” line system (Frayret, J-M, 2002), and rendering of prices); „Market Exchange” (a model applied in B2B systems, within the selling- buying relations between the enterprises); „Demand Collection System” (a model entitled "name-your-price", initiated by Priceline, according to which a buyer within his market research makes an offer to buy and a courteous agent seeks to solve it) etc.

- advertising models (these models are now the most popular and in a way the safest, as they provide a customized interface of the buyer);

- models based on using info-media;

- models based on negotiation;

- manufactured models (a direct relation with the buyer by using a web page to which he has direct access, which increase the effectiveness and improve customer service);

- affiliation models (offering on site accessible opportunities for the customer who browses the Internet and can affiliate; it's about a model displaying the performance for visitors);

- models based on subscription, subscription models

- community models (displaying for visitors advertising campaigns, using info-media or special portals; they can record revenues also due to their registration rights or their rights to use certain services);
- utilitarian models (paying invoices online and other services - electricity, water supply, telephone etc.).

To each of these models are associated numerous business models that ensure high load of the networks and increase the business performance online due to flexibility, opportunity, relations in real time, effective participation in generating useful and even beneficial relationships between producer and consumer and of other facilities that could be generated and supported only by the network. The networks will never be too loaded or surprised by unexpected events. They will always be operational and very powerful.

The use of the network in this relatively new concept, which is called electronic commerce, is undeniably neither easy nor risk-free. Dangers and threats that have emerged with the operationalization of electronic trade systems typology are numerous and quite difficult to counteract, but the network has the flexibility and power required to ensure a proper security environment.

One way to increase business efficiency in electronic commerce is to ensure systems and procedures, in symmetry with the spread of cybernetics, reify the abstract, materialize the virtual and save cyber values, generating a cyber-culture, which is an essential component of the cognitive culture and of the civilization of cognition.

3. Conclusions

1. The electronic commerce is an effect and a construct of the knowledge era, more precisely of the stage of cybernetic relationships and activities in human society. The process is necessary and natural, thus generating a new culture – the culture of cognition – and, based on it, a new civilization, which is necessary and specific to the stage of globalization – the civilization of knowledge.

2. Throughout this process, the abstraction, virtualization, the ‘cybernetization’ of the real and the reification of the abstract will all occur, this symbiosis generating a new type of behaviour in human society and a new horizon of waiting in human activity, characterized mainly by the contact of extremes and opposites harmonization. This, however, does not entail that within the human society opposites will either be harmonised or destroyed, or that belligerency will be excluded. It simply proves the fact that man will be able to better understand his evolution and expectations, on all ontological, gnoseological and logical levels of his existence.

3. In this framework the electronic commerce will occur as well, specifically, the use of the network and of the network effect in designing, planning and development of a business and of its market support which is the trade. This trade which is based on the network and on the concept of virtualization of reality, is not entirely a new one, but just an upgraded version, where we can use high-tech products and IT, that is, the ultra-performance means and the network for a high-performance leap into the future. The fact that we are a consumer society encourages and even requires this leap, but does not provide the means necessary to make it secure, rapidly shape it after cyber requirements and to generate the appropriate performance.

4. The new requirements of competitiveness imposed by e-commerce, the high tech revolution and IT, are to be found mainly in the reconfiguration of the main nucleus of economy and social life, in a society based on market economy which is represented by business. Today, a business is not merely an idea that turns into an activity which brings profit, but it is a construct based on cognition and on network, meant to generate added value, to be high-performance and to provide competitive advantage.

5. For this reason, the development of this concept requires to further the process of elaboration of certain business models in a competitive regime in a cyber-context, so that the performance will be enabled.

6. The business model, imposed by the new type of society – a society based on knowledge, an epistemic society – consists in a set of parameters, indicators, theoretical and experimental constructions meant to use all opportunities in order to generate strong, flexible, adaptive, interoperable capacities and capabilities, with a powerful feed-back as well as the capacity to explore both the waiting horizons of the distant future and of the uncertain economic, social and cognitive proximity confused by the unprecedented dynamics of hybrid challenges.

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THE STRATEGIC CHARACTER ATTRIBUTED TO NICT (USED) IN THE FRAMEWORK OF THE INFORMATION SOCIETY

Constanța, Popescu¹
Silvia Elena, Iacob²
Oana-Mihaela, Ilie³

Abstract

The fast technological progress has favored the perfect synchronization of the new technologies with the major socio-economic trends, which has determined the use of the New Information and Communications Technologies (NICT), as a real strategic challenge, by certain companies, whereas others considered them only investments in technology.

According to the specialized literature, four groups of variables were identified, highlighting the strategic character of NICT, namely: the context of the company (sector, size and dispersion), the managerial context (form of leadership, structure and strategy), the cultural context (culture of the company) and environmental context (competition level and environmental uncertainty).

The present work focuses on the projection of a theoretical model of the key factors determining the strategic character attributed to NICT by the companies.

Key words: company, culture, management, environment, NICT, strategy

Jel classification: O32, M15.

1. Introduction

At present, the investment in NICT is promoted on a large scale in companies. Due to the possibilities of economic growth and increased efficiency of the company in point of acquisitions, stocking and processing, the companies choose to invest in NICT able to meet the new challenges they are faced with.

For a long period of time, the use of NICT in business has been viewed as a technical problem. From this perspective, the directions that technology is following have been considered responsible for a part of the logistic or technical support and do not fall within the general strategic planning of the company. Thus, NICT are far from being enough to create value for the enterprise.

In order to go beyond the purely technical vision, we have analyzed the patterns of NICT strategic alignment to the company's activities (Jouirou and Kalika, 2007), according to which NICT create value, perceived as a strategic advantage of the company in its fight for competitiveness.

The objectives of this study are to present the way in which today's companies use NICT as a strategic instrument or as a simple investment in technology, to identify and analyze the relations that could exist between certain explanatory variables and the strategic use of these new technologies.

Consequently, the study of the factors explaining the strategic importance attributed to ICT in companies seems essential.

2. The concept of informational society

In time, the term "informational society" has been defined based on certain comparisons:

- postindustrial society versus informational society;
- mass communication versus NICT;
- capital and work versus knowledge, information, communication.

¹ Univ.Prof. Dr., Valahia University of Târgoviște, tantapop@yahoo.com.

² Assoc.Prof. Dr, Academy of Economic Studies, Bucharest, popescusilviaelena@yahoo.com.

³ Doctoral student, Valahia University of Târgoviște, ym_oana@yahoo.co.uk.

At the same time, many authors define the information society by association with the societal transformations that determined the passage to another type of society “which has become dependent on extremely complex electronic information and communication networks; a society allotting a considerable part of its resources to informational and communicational activities” (Melody, 1994).

The whole literature on the information society relies on the founding “technical-economic” paradigm (Schumpeter, 1939, 1943), concerning the economic implications determined by the technological progress. This new technical-economic paradigm highlights the relation that exists between technology, institutions and social structures.

Appeared three decennia ago, the term “information and communication technologies” was associated to “the expanding of computers, which can stock a huge quantity of information and process information in just a few seconds; modern telecommunications, transmitting information almost instantaneously; microelectronics based on organizing information in an inexpensive form” (Preston, 2001).

According to Melody (1994), *the information and communication resources* of a technologically developed society include:

- efficient telecommunications networks;
- microelectronics;
- computer hardware, software and services;
- telecommunications and service equipments;
- mass-media,
- internet, databases and informational services;
- traditional forms (libraries, editorial services, etc.).

Companies give special attention to the present wave of digitalization already affecting us all. IT development goes further with huge steps and its effect is reshaping the society as a whole. Thus, it becomes very important to analyze the context of the company, as a first variable out of a group of four (company context, managerial context, cultural context and environmental context).

3. Company context

The *activity sector of the company* seems to have an influence on the level of use of ICT. Indeed, there appear differences in the use of technology between the industry and the service sector, especially the banking services. The specialized studies have clearly shown that the strategic role of ICT varies depending on the activity sectors. Thus, a first hypothesis is:

H1: There is a relation between the company's activity sector and the strategic importance attributed to NICT.

Regarding the *size of a company*, one can note several arguments in favor of a relation between the size of the company and the level of use of NICT. Moreover, according to Kalika's work (2002), the role of NICT is perceived differently depending on the size of the company, yet the effect given by the dimension of the company is not determining. Some authors support the fact that the proactive criterion is only partially correlated to the dimension of the company. Small companies have initiative and can be more innovative than big ones, because they perceive the usefulness of NICT. Thus, we formulated the next hypothesis:

H 2: There is a relation between company size and the strategic nature attributed to NICT.

Dispersion takes on several forms in a company. They can be organizational and reflect the fact that a company in a group has greater need of information transmission. Dispersion can also be geographic in nature and refer to the localization of units or clients. Wijayanayake and Higa (1999) demonstrated that the distance between the interlocutors influences the choice and the use of NICT. The same researchers have checked the hypothesis

according to which geographically disseminated groups prefer to use e-mail or phone when the geographic distance between the interlocutors grows. This hypothesis has been checked as well by Trevino and his collaborators (2000), who showed that when the distance between interlocutors is great, electronic communication is preferred to the detriment of meetings.

According to the authors Jonas Ridderstråle and Kjell Nordström (2007), the new informational technologies compress time and space. They even considered the cyberspace as the seventh continent. In time, it has been possible to demonstrate a positive correlation between geographic distance and the importance given to NICT. The third hypothesis formulated is:

H3: There is a relation between the dispersion of the company and the strategic nature attributed to NICT.

A second important variable refers to the managerial context, which includes leadership, training, strategy and organizational structure. It is already a certainty that the “*infostructure*”, the electronic nervous system of the company, will become more important than the structure of the organization.

4. Managerial context

Regarding the *leadership*, the level of use of NICT and the importance given to them depends on the leadership policy promoted, and also on the role of the hierarchic superiors in the promotion and the use of NICT (Dahab, 2001).

Damanpour (1991), Kemerer Fichman (1997), Grover and his collaborators (1997) highlighted the fact that the manager's profile and his capacity of reaction to change determine the level of use of innovation. Thus, the fourth hypothesis:

H 4: There is a relation between the commitment of the top leadership in the domain of NICT and their strategic character in the company.

Kalika's research (2002) has managed to prove the existence of a relation between the *training* in the IT domain and the degree of awareness of the strategic importance of NICT. According to Dahab (2001), training in order to use NICT is certainly essential, yet not also sufficient. It has to be accompanied by specific training concerning the new technology. This has led us to the formulation of the following hypothesis:

H 5: There is a relation between the training for the use of NICT and the company strategy.

Among the factors influencing the importance given to NICT, *strategy* plays a key-role because it permits the development of strategic alliances in order to reduce costs, reproject business processes, increase the differentiation between products and services, assure business growth. The strategic character of NICT is related to strategic aspects such as developing partnerships. Thus, the sixth hypothesis:

H 6: There is a relation between the partnership strategies of the company and the strategic character attributed to NICT.

The organizational structure can influence both the design of the information systems and the success of their implementation and use.

The research in this domain has demonstrated that the importance given to the use of NICT is influenced by the type of organization of the company.

The organizational structure of the company imposes the realization of an efficient communication in the group working at a distance, which makes it necessary to invest in NICT. Thus, a seventh hypothesis can be formulated:

H 7: There is a relation between the structure of the organization and the strategic character attributed to NICT.

The impact of technology is omnipresent. Today, information circulates freely. The sequence of technology is unstoppable and one cannot fight it either. The investment in NICT and their implementation can be influenced as well by the variable concerning the cultural context.

5. Cultural context – the culture of the company

The factor concerning the cultural context refers to the culture of the company, which is largely influenced by the national culture. Empirical studies have shown the delayed adoption of NICT in certain countries compared to others (El Louadi, 2002). These studies have analyzed the impact of the national culture on the degree of use of NICT (Ben Zakour, 2002). A strongly hierarchic culture of the country generates an attitude associated to the holding of information. Information relies on the principle of confidentiality, according to which the access to it is limited, while NICT are governed by the principle of transparency. Thus, one can note the contradictory attitude between information and NICT.

Kalika's research (2002) showed that the strategic nature attributed to NICT must replace the old beliefs and the old traditional and professional values by the new thinking patterns. Lagrée and Magne (2001) speak about an "informational" culture of the company. Regarding the cultural context, we have formulated the following hypothesis:

H 8: There is a relation between company culture and the strategic nature attributed to NICT.

The old needs should to make room to the new (J. Ridderstråle, K. Nordström, 2007), because technology is changing and will continue to change faster than the capacity of any government of emitting regulations by which it could control it. Certainly, the organizations that do not adapt to their business environment (which is continually changing and characterized by uncertainty and risk) will die.

6. Environmental context

In the fight for survival on increasingly dynamic, unstable and competitive markets, the companies perceive the environment as being unsure in the case in which the pressure of the strong clients and providers determines the use of information technology. The environmental instability determines the companies to obtain real time information and use business information to face this *environmental uncertainty*. Kalika's work (2002) demonstrated a positive correlation between the perception of the strategic character of NICT and the use of monitoring instruments related to the internet. Thus, a new hypothesis can be stated:

H 9: There is a relation between the uncertainty of the environment of the company and the strategic character attributed to NICT.

Generally, it is admitted that probably the use of NICT is important for the increase of the *competition level*. Dos Santos and Peffus (1998) were able to demonstrate that companies use NICT resources to obtain competitive advantage. However, no significant result has been reached regarding the relation between the strategy attributed to NICT and competitive intensity. The following hypothesis can be formulated:

H 10: There is a relation between competition intensity and the strategic importance given to NICT in business.

A first component of the capacity of a company of transforming information into strategic advantage is represented by the information management practices – the capacity of the company of efficiently managing information during its life cycle – collection, organization, processing and maintenance.

7. Conceptual model

Based on the four groups of variables, namely: *company context* (sector, size and dispersion), *managerial context* (form of leadership, structure and strategy), *cultural context* (company culture) and *environmental context* (level of competition and environmental uncertainty), we have designed the following conceptual model (Figure 1), highlighting the strategic character of NICT:

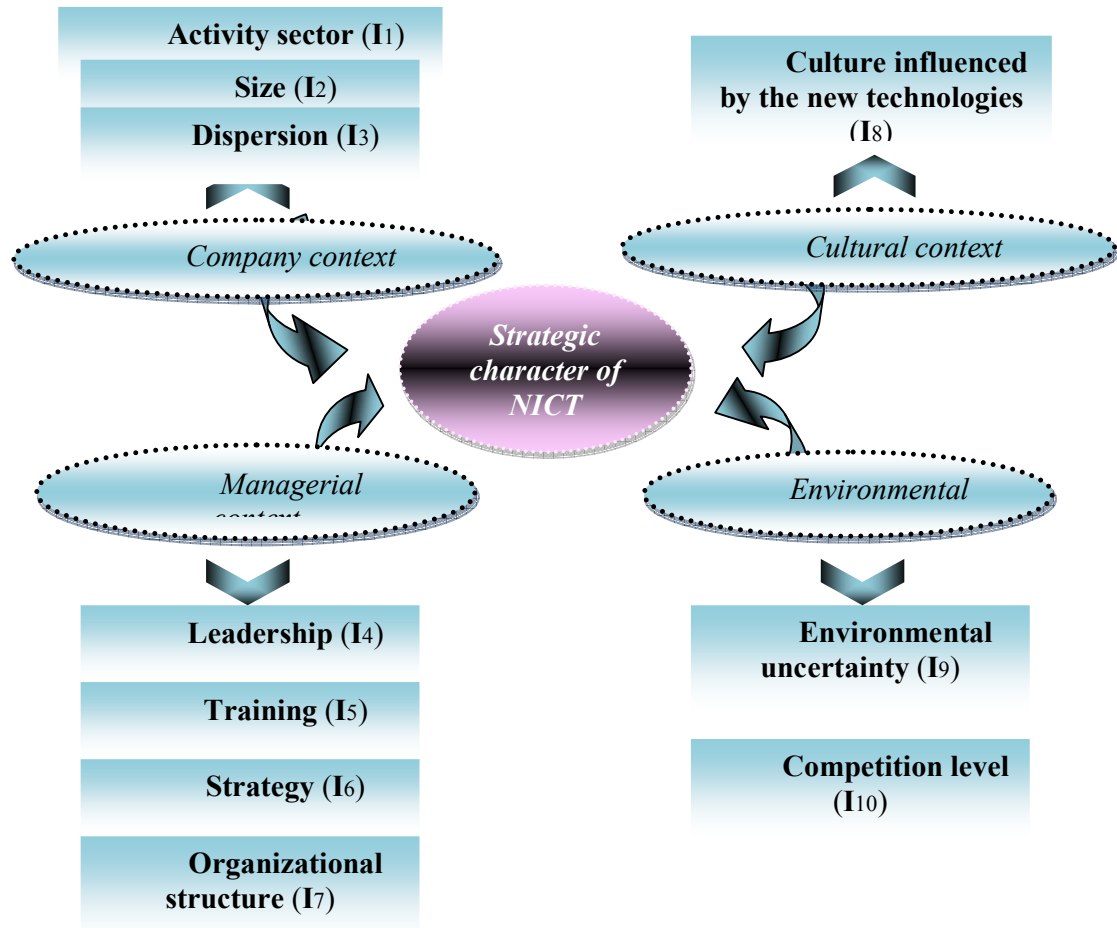


Figure 1. Conceptual model concerning the strategic character of NICT

Source: processed from the specialized literature

Information management can be achieved by means of several processes, the most known and used being *Knowledge Management*, *Business Intelligence* and *Competitive Intelligence* (Figure 2).

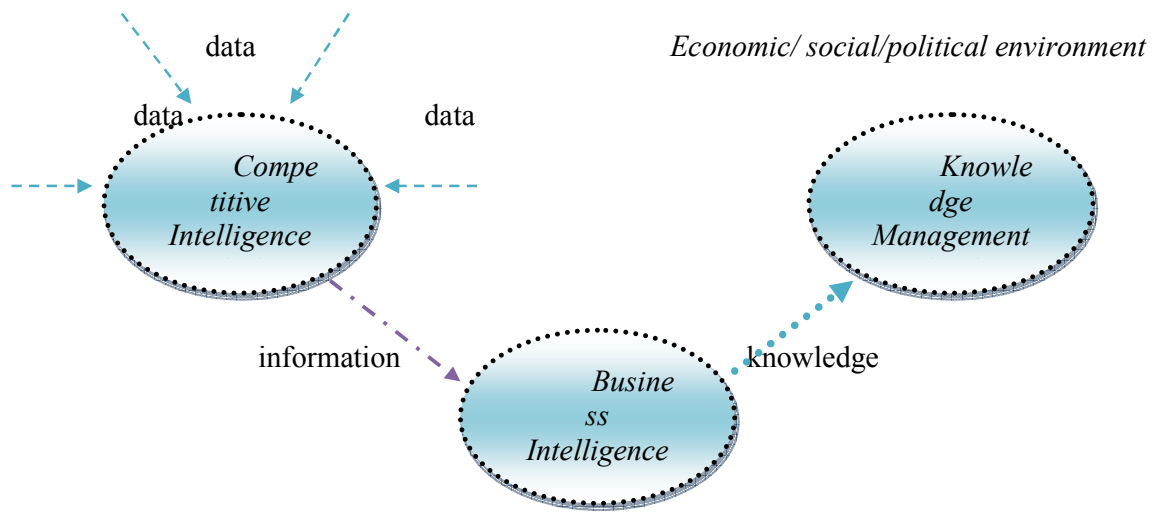


Figure 2. Relation between the concepts CI - BI - KM

Source: processed from the specialized literature

Since these domains have elements in common, several mentions and conceptual delimitations are needed.

Competitive Intelligence is a process meant to collect the information on the external business environment (competitors, partners, providers, clients, groups of interests) and transform it into knowledge needed to make tactical or strategic decisions (M. Coman, 2013). Although a relatively new domain, Competitive Intelligence can be one of the economic disciplines enjoying the fastest growth in notoriety.

On the other hand, Knowledge Management refers to the activities of the company in relation to its external environment, while Business Intelligence is rather an “internal business”, in the sense that it concerns the interdepartmental activities, analyzes the material and informational flows and the ways of improving the activity from within the organization. In the Romanian literature, the expression Business Intelligence is translated by “Inteligența Afacerii/Organizației”, which represents, in essence, business information.

8. Conclusions

This theoretical study permitted the identification of four groups of variables highlighting the need to be aware of the strategic importance of NICT in the information society, characterized by the dependence on electronic information. Thus, NICT are perceived as a competitive lever both for the present and for the future, depending on the changes in the society.

The results of this theoretical research support the idea that the strategic dimension attributed to NICT depends mainly on the nature of the business environment, on the leadership policy promoted, on the "informational" culture of the company and its partnership strategies.

Starting from the superior hierarchic level of an organization, by transparency and information exchange, both internally and externally, one can define the strategic orientation of NICT. Thus, the researchers' previous results highlight the influence of size, dispersion and environment on the importance given to NICT in companies.

Indeed, it is clear that companies are faced with their upstream and downstream partners and give special attention to transparency and to the internal and external sharing of information, NICT playing a key role in the company.

Moreover, NICT encourages the initiatives in this domain, affirming their strategic dimension in the company.

One can conclude that the strategic dimension attributed to NICT is explained mainly by three variables, namely: the dimension of the company, dispersion and the business environment.

Business Intelligence answers all the challenges related to obtaining information, eliminates resource and time waste, excludes errors, crystallizes the vision of the management on the important aspects of the business, delivers information instantaneously to all those involved, regardless of the volume or complexity of the data.

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PSYCHOLOGICAL IMPLICATIONS IN HUMAN RESOURCES PERFORMANCE

Pleşa, Ilidor¹
Şerb, Diana²
Cicioc, Nicoleta³

Abstract

With the theme of psychological implications on performance at work (level of involvement, attitude towards work and colleagues) this article is divided into two parts: state of knowledge and practical part. In the conceptual knowledge stage we use the literature. The practical part is based on a quantitative research conducted with the help of a survey among an organization's human resources.

The working hypothesis of the article was based on the fact that a person might not have a good opinion of himself, a person who is not satisfied with himself is unable to engage in activities in the workplace. To sustain our scientific approach some hypothesis testing was conducted both on absolute and relative frequencies and through parametric and nonparametric tests (correlation and hi square test). The most relevant conclusions drawn as a result of research carried out show that a person with low self-esteem does not obtain performance at work.

Keywords: human resources, psychology, self-esteem, performance

JEL: J24, J28

1. Psychology and performance at work

Performance management (Bailey E et al, 2000) has come to signify more than a list of practices with the singular aim to measure and adapt employees in the work place. It is seen as an integrated process in which managers work with their employees to agreed expectations, evaluating and reviewing results. Eckerson described the key performance indicators for an employee. According to his study he must meet the following (Eckerson W, 2009):

1. The fewer KPIs the better.
2. Human resources should understand what KPI means.
3. Users should know how to obtain results.

Hursman (2010) has defined the following five criteria for KPI (effective dependable performance features) (Hursman A, 2010):

- Specific,
- Measurable,
- Affordable,
- Relevant.
- Related to time

KPI may include remaining skills and leadership. Kaplan and Norton (2007) explained the difference between them. Leading indicator is a value that mainly relate to future developments. The second indicator relates primarily to past and outcomes / results, for example, reflects the history and results of actions and processes (Kaplan S, Norton D, 1996).

Waal (2007) suggests that the ability of an employee to see the connection between his work and his strategic objective of the organization is his positive behavior. This is achieved by the formulation and use of personal goals derived from strategy. Uncertainty about the evaluation criteria used for examination purposes diminishes rewarding because employees know in advance what criteria will be used. Identifying the objectives helps improve the

¹ Drd. Universitatea, Valahia,, din Târgovişte, dianaserb10@yahoo.com

² Drd. Universitatea, Valahia,, din Târgovişte, dianaserb10@yahoo.com

³ Drd. Universitatea, Valahia,, din Târgovişte, dianaserb10@yahoo.com

quality of functional skills and competency profiles. This will result eventually in qualified personnel(Waal A, 2007).

Bohlander suggests the following steps in conducting a performance evaluation(Bohlander et all, 2001):

- 1.scheduling
- 2.preparing for review,
3. conducting the review.

(DDI, 2005) states that a manager must do five things to create a strong employee workforce(Markos S, 2010):

- Align efforts with Strategy Promote and encourage teamwork and collaboration
- Helps people grow and develop
- Provide support and recognition, as appropriate.

2. Psychological implications in human resources performance

2.1. The methodological framework of the research

Goal - the lack of concrete data of how self-esteem increase employee performance necessitated carrying out this research.

Type of research – quantitative

Method-survey

Tool - questionnaire consists of questions focused on knowing the impact of self - esteem on performance, profiling and contouring questions.

The sample consists of 34 people representing human resources within an organization.

The questionnaire comprises of 15 questions of which three of them serve to outline the profile of respondents. The items in the questionnaire present internal consistency, the Cronbach's alpha coefficient consistency has limited the minimum acceptable to 0.70. Data was processed in Excel and SPSS.

Research objectives

- Identifying the self-esteem level of employees,
- Knowledge of respondents attitude towards work,
- Observing the involvement of the employee's assigned by the manager.

Research hypotheses

- Over 50% of research participants are involved in all tasks at work,
- Self - confidence affects their performance of the tasks,
- Complacency occurs as a result of the respondents' knowledge of their qualities.

2.2. The results

We used in the questionnaire a method of scaling called Likert's where respondents were required to submit their agreement / disagreement with a series of statements in the questionnaire. In the table below you can see the score of each item and the overall score. Through the presentation of the results for each item we wanted to achieve all of the objectives in the research methodology.

Table 1. The average score and global items

Item	Score
I'm capable	4.32
I'm a valuable man	4.44
I know my qualities	3.79
I respect myself	4.06
I am a disappointment	2.38

Item	Score
I get involved	4.24
When I get to work I can't wait to go back home	2.68
I do my duties	3.71
I want to work as little as possible	2.12
Involvement	3.76
Satisfied with myself	4.15
I don't think I'm valuable	3
Total score	3.55

Overall score reflects an overall attitude of agreement of respondents, and to present what factors have led to this result we made an interpretation of each average scoring:

- Scoring for the I'm capable item reflects an attitude of agreement.
- Score for the item I'm valuable reflects an attitude of agreement,
- Item number three according to the result shows an attitude of almost agreement,
- Item I respect myself according to their score shows an attitude of agreement,
- Item I am a disappointment on the outcome score reflects an attitude of disagreement,
- Item on the involvement shows an attitude of agreement,
- Scoring item for when I get to work I cannot wait to go back home reflects an attitude of indifference,
- Scoring for the I fulfill my duties show an attitude of almost agreement
- Score for the item I want to work as little as possible is showing an attitude of disagreement,
- Score for involvement showing an attitude of agreement,
- The score for the item I'm satisfied with myself reflects an attitude of agreement,
- Score for the item I am not valuable reflects an attitude of indifference.

To present a more broad image of the psychological implications in obtaining performance in the workplace we calculate the score for psychology and the workplace score.

It can be seen in Table 2.

Table 2. Average score on fields

Item	Score
Self – esteem field	3.79
Work field	3.38

According to these results it appears that the self-esteem shows an attitude of close agreement of respondents while the work field shows an attitude of indifference. Hypothesis testing was done through SPSS. I especially chose the correlation testing method, and absolute and relative frequencies.

H1: Over 50% of research participants are involved in all tasks at work. See Table 3.

Tabelul 3. Involvement in all tasks

		Number	Percent	Valid percent	Cumulative Percent
Valid	indifference	10	29,4	29,4	29,4
	agreement	24	70,6	70,6	100
	Total	34	100	100	

According to the human resources responses: 70% agree with the involvement in activities at work and 30% have an attitude of indifference. The first hypothesis is verified.

- Self - confidence affects doing the tasks,

Table 4. Testing the hypothesis

		Satisfied with themselves	I don't think I'm valuable	I'm capable	I'm valuable	I know my qualities	I respect myself	I am disappointed	When I get to work I can't wait to go back home	I do as little as possible	I want to work as little as possible	involve myself
I don't think I'm valuable	Pearson's coefficient	-0,032	1	0,038	0,134	-0,525**	0,261	0,231	0,111	0,230	-0,680**	-0,473**
	Sig. (2-tailed)	0,857		0,830	0,451	0,001	0,137	0,189	0,531	0,191	0,000	0,005
	N	34	34	34	34	34	34	34	34	34	34	33

There is a significant correlation statistically between the independent variable I don't think I am valuable and dependent variables: I know my qualities, I do my duties and I want to work as little as possible. The test is significant for all cases because the amount does not exceed the level of statistical significance admitted. With the first two variables it is negatively correlated, meaning they are inversely proportional. Where the feeling of self - knowledge is declining there is a decline in the sense of knowledge of one's own qualities, and therefore work efficiency.

With the I want to work as little as possible variable it correlates positively and there is a relationship of direct proportionality. Thus, when self-esteem decreases the desire to work decreases, then there is the feeling of running away from tasks and responsibilities. Between low self - esteem and knowledge of qualities is a medium intensity connection, between low esteem and tasks there is still a medium intensity connection, and between low esteem and desire to flee employment is significant linked statistically, but of low intensity.

Pearson's correlation coefficient indicates that confidence has a strong effect on doing the tasks and so the assumption number two is checked.

- Complacency occurs as a result of the respondents' knowledge of their own qualities.

We also use correlation in this situation in order to test the hypothesis above. See Table 5.

Table 5. Testing the hypothesis

		Satisfied with themselves	I don't think I'm valuable	I am capable	I am valuable	I know my qualities
Satisfied with themselves	Pearson Correlation	1	-0,032	-,045	-0,018	0,618**
	Sig. (2-tailed)		0,857	0,799	0,921	0,000
	N	34	34	34	34	34

In this table we can see that the only statistically significant correlation is between complacency and knowledge about their own qualities. There is no correlation for the others because the value is exceeding 0.05. Complacency positively correlated with knowledge of

qualities, they are directly proportional (one increasing together with the other). Between the two variables there is a moderate link. Hypothesis number three is checked. Respondents profiles are shown in Tables 6 and 7.

Table 6. Structure of respondents by age and gender.

		Graduated education				Total
		High school	Post - secondary school	College graduate	Master's degree	
Respondent's age	between 30-39 years's old	1	0	5	4	10
	between 40-49	7	1	5	0	13
	between 50-59	2	2	5	1	10
	Between 60-69	0	0	0	1	1
Total		10	3	15	6	34

According to data in the age group 30-39 years there is a high school graduate, 5 college graduates and 4 with a master's degree. In the category of the 13 people with the age range 40-49 years: 7 have graduated from high school, 5 have completed college studies and one person graduated from post-secondary studies. To see if there is association between variables we used hi square test.

Table 7. Association test

	Value	df	Sig (2-sided)
Pearson	16,913 ^a	9	0,050
Likelihood Ratio	17,776	9	0,038
Linear-by-Linear Association	,546	1	0,460
N of Valid Cases	34		

There is significant association between the variables analyzed statistically and age has a weak influence on education.

3. Conclusion

A man with low self-esteem does not have self-confidence, always considers himself inferior to the people around him, running away from tasks. He believes that he is doing nothing well and gradually he no longer sees any quality in himself, but only flaws. This individual can cause damage both to the organization and to his work colleagues. A competent manager knows how to motivate employees and recognize their merits, and when he sees a change in the behavior of their employees he tries to prevent a crisis waiting to happen.

For an individual to reach the stage of being satisfied with oneself he should be helped by others, and he has to realize that he has strengths and is able to achieve what he wants. The main conclusions obtained from this research reflects the fact that an individual with low self - esteem is always trying to run away from tasks, seeking to let others carry out his duties. When self-esteem decreases the greater the desire not to get involved in the tasks given by the manager.

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STUDY ABOUT THE INVOLVEMENT OF ETHICS IN THE SELECTION AND RECRUITMENT PROCESS

Funieru, Constanța¹

Abstract

An organization achieves significant financial results when its labor resource is placed on the job according to its skills, not as a result of failure in respecting ethical principles. We cannot talk about a personnel that is adapted to work if during the selection and recruitment process their resume and skills have not been rigorously analyzed. The subject of ethics in the selection and recruitment process is very important to debate on in current times as the recession led to restricted supply of jobs. Given that there are few jobs, and there's a small number of jobs offers to come, and the fact that they might be taken by people without the necessary training, will lead not to progress, but rather to involution. The article has two parts. It combines the theoretical and the practical parts. During the research part we aim to highlight the concept of ethics in the selection and recruitment process. A quantitative research has been conducted based on a survey among the resources of an organization in order to notice how they perceive the ethics and its applicability in the organization based on a questionnaire.

Keywords: ethics, human resources, selection and recruitment.

JEL:J24

1.Theoretical approach

Ethics play an important role in the management of human resources within the organization. This selection process involves *proper and careful resume selection. The superintendent of Human Resources will select resumes that fit the needs of the vacant position*(Jackson J, 1996). In the recruitment process you have to socialize with each candidate selected based on the resume, in a telephone preselection. This phone requires tact on the part of the recruiter, addressing in terms of politeness. Where is required to return a phone call, the time at which you could call will be noted(Hanman G, 1977).

The superintendent of Human Resources should ensure the uniform application of the same methods of recruitment and selection for all candidates, he must not offer a preferential treatment but show professionalism to place the right person for the right job(Kuhn A, Kuhn P, 2002).

The impression of the majority of specialists in the field is that there is an ethical organizational culture, but contemporary society faces the absence of ethical trainings, of complaints on moral themes, discussions on ethical issues, of incorporating ethics in the organization management(Bătlan I,2002)..Code of Ethics aims(Surdu A et colaboratorii,2012):

- Practical aspects related to compliance with laws and regulations;
- Anti-Corruption;
- Fair working conditions;
- Conflicts of interest;
- Financial accounting and reporting;
- Confidentiality;
- Concerns;
- Complaints;
- Accountability.

¹ Drd. Universitatea Valahia, funieru.constanța@yahoo.com

2. Research on compliance with ethics in the selection and recruitment process.

2.1. Methodological issues concerning the design and conduct of the research

Research objectives

- awareness of the organization's human resources concept of ethics;
- identifying the existence of procedures to prevent unethical issues,
- knowing the extent to which human resources managers comply with the code of ethics.

Research hypotheses

- ♣ Respondents mostly know and understand the concept of ethics in the organization.
- ♣ There are mechanisms for the prevention of unethical issues.
- ♣ Respondents believe that during the process of selection and recruitment officers respect the ethical principles.

Research organizing

The size of the sample. The sample consists of 100 individuals among the human resources of an organization in the county.

Method of sampling - For this research was used non-randomized sampling. The research was conducted through **surveys** and its quantitative, using the face to face interview method based on a questionnaire.

The questionnaire contains 12 questions. Processing of the questionnaire was made in the database created in the EXCEL program.

There were pre-testing to validate the questionnaire. Thus, the open questions were dropped in favor of closed questions and the irrelevant ones were removed.

Data collection. The period of application of the questionnaire: 1 to 3 February 2016
The time of the polls: over three days between 10 and 16.

2.2. Results of field research

An interpretation of the results was performed of marketing research undertaken for each question based on summary tables of completed questionnaires and submitted for processing. Results obtained showed an image as realistic as possible and we divided them in three levels:

- Ethics in the organization,
- Ethics in the selection and recruitment process
- Profile of respondents.

1. Are you familiar with the concept of ethics?

Table 1. Absolute and relative frequency

answer	n	%
yes	70	70
no	30	30
I don't know	-	-
Total	100	100

Of the 100 participants in the research 70 stated that they know about the concept of ethics, and 30 of them do not know about this concept.

2. In the organization that you currently have a job at, is there an ethics department?

Table 2. Absolute and relative frequency

answer	n	%
yes	-	-
no	60	60
I don't know	40	40
Total	100	100

According to the respondents we found that 60% of them stated that there is no such department, and 40% do not know information regarding this aspect analyzed.

3. Were you informed about procedures for preventing unethical acts in an organization?

Table 3. Absolute and relative frequency

answer	n	%
yes	10	10
no	60	60
I don't know	30	30
Total	100	100

Of those who participated in the research more than half stated that they were not informed about these prevention procedures (60%), while only 10% indicated that they have been notified about this issue.

4. Have you received courses in the organization on ethics?

Table 4. Absolute and relative frequency

answer	n	%
yes	-	-
no	80	80
I don't know	20	20
Total	100	100

An alarming 80% of respondents have not benefited of such courses in which to debate on ethics in the organization, while 20% of respondents do not know if in the organization were held such courses.

5. Are there mechanisms where you can make complaints on ethical incidents?

Table 5. Absolute and relative frequency

answer	n	%
yes	75	75
no	15	15
I don't know	10	10
Total	100	100

A percentage of 75% of research participants think that there are mechanisms through which they can report situations arising in the organization and but not of ethical character.

6. When you see an unethical situation that occurs at work whom do you address it?

Table 6. Absolute and relative frequencies

answer	n	%
manager	70	70
coworkers	10	10
I don't know	20	20
Total	100	100

According to the responses to this question we see that 70% of respondents address to the manager, 10% turn to colleagues, and 20% don't know how to react in such a situation.

II. Ethics in the selection and recruitment process

7. Following the selection and recruitment process that you participated in did you notice that the human resources favors other participants?

Table 7. Absolute and relative frequencies

answer	n	%
no	70	70
yes	-	-
I don't know	30	30
Total	100	100

Respondents' answers to this question show that 70% did not feel that the recruiters are favoring other people and 30% do not know

8. Express your opinion about the following statements

Table 8. Absolute Frequency

Statement	Strongly agree	Agree ment	Indifference	Disagree	Strongly disagree
Employees are not selected based on age	70	30	-	-	-
During the interview one person shouldn't monopolize the discussion	60	20	20		
Recruitment occurs as a result of a rigorous resume selection	50	30	20		

For this question the Likert scale was used with values between 5-1, 5-Agree, 1-totally disagree. The average score is calculated for each sub-criterion:

- The score for the first sub-criterion 4.7. This result shows an attitude of almost total agreement on the statement that employees are not selected based on age.

- The score for criterion number two = 4.6. According to the result we found that respondents show an attitude of almost total agreement on: At the interview one single person should not monopolize the whole discussion.

- The score for the last sub-criterion = 4.3. This result shows an attitude of agreement on the statement: Recruitment occurs following a rigorous selection of the resumes.

To show the whole picture of the respondents on this criterion the overall score is calculated = 4.53. According to the result we can conclude that all people participating in research strongly agree with the statements.

9. In the interview for your job have you witnessed and action that violates the ethical principles?

Table 9. Absolute and relative frequency

answer	n	%
yes	-	-
no	80	80
I don't know	20	20
Total	100	100

According to most respondents (80%) human resource manager did not violate ethical principles.

III. Identification of respondents profiles. For shaping the profile of those participating we used as criteria: age, gender and environment.

Distribution by sex

According to data from the 100 people who exercise their activity in the organization, 60 are men and 40 are women.

Age distribution

In the 20-29 age range there are 60 people, in the 30-39 age range there are 20 people, 10 people belong to the 40-49 range and 10 people from the 50-59 years age range.

Distribution by area

Analysis of distribution by areas revealed that 60 of the respondents live in urban areas and 40 living in rural areas

3. Research findings

Throughout this article we achieved all of its objectives. All three hypotheses in the beginning of this research were checked, and we showed this during the research undertaken. As a result of this research conducted we found that the organization does not have a human resources department of ethics and does not benefit from courses in ethics. However the recruiter in charge of selection of staff is attentive to ethical principles. Respondents can report unethical acts encountered in the organization by anonymous complaints and the person were the highest percentage of complaints are going to is the organization's manager. In conclusion the research showed that within the organization where this was conducted the ethical principles regardless of the organization, including the selection and recruitment process are respected.

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STUDY REGARDING THE ASSESSMENT OF PERFORMANCE OF A PUBLIC INSTITUTION IN THE FORESTRY IN THE REGION SOUTH MUNTENIA

Elena Mihaela Ilie (Serb)¹,
Carmen Țincu (Bena)²

Abstract

Romania has a natural capital superior to many countries members of the European Union. Sustainability is the field where we can compete at the same level with any country in the European Union, provided that we work with perseverance and realism. In this article we intend to answer the following questions: „How profitable is a public institution in field of forest? ”, „What measures can be taken by the public institution analysed to become profitable?”. To know the answers we analysed the financial statements of a public institution in the forestry. Thus we have noticed the non-profitability registered by it over a period of time and we proposed certain measures to overcome this critical point.

Key words: performance, income tax, the result of the exercise, the gross surplus of exploitation

JEL classification: M41

Introduction

The constant concern of the Romanian society in managing with maximum efficiency, effectiveness and economy the resources and finding some viable solutions for preserving genetic and ecological diversity of the woods contributed in a large extent to conserve the environment.

By the authorized public institutions and its activities, Romania developed and implemented over time, a number of projects in the field of forestry, environmental protection, biodiversity conservation, etc. Also, there were developed strategies and policies designed to bring added value to ensure environmental protection and quality of life.

According to the environmental organizations, as well as to the analyses made by various researchers in the field, in the last years the situation of forests all over Romania reached a deadlock due to illegal cutting and large theft of wooden mass.

In this context, we have conducted a study at a public institution in the region South Muntenia whose object of activity is to ensure the integrity of forests in the programs of national and artificial regeneration and we have analysed aspects connected to the current situation of the institution and the degree of achieving the objectives proposed by it, the profitability of the institution, as well as the measures taken by the public institution to become profitable.

Within our research we started from the following questions: „How profitable is a public institution in the field of forestry?”, „What measures can be taken by the public institution analysed to become profitable?”.

The hypothesis supported by us is that the public institution analysed is unprofitable but it can become very easy profitable if it would be undertaken the optimal strategies.

1. The current situation of the public institution in the forestry area

The research efforts that we have undertaken aimed the public institution in the forestry field in the Region South Muntenia, whose property was in 2015 of 55075 hectares of forest.

¹ Ph. D Student, Valahia University of Târgoviște, Faculty of Economics, 35 Lt. Stancu Ion Str., 130105, Târgoviște, Romania; E-mail address:, elenamihaela_serb@yahoo.ro

² Ph. D Student, Valahia University of Târgoviște, Faculty of Economics, 35 Lt. Stancu Ion Str., 130105, Târgoviște, Romania; E-mail address:, carmen_bena@yahoo.com

From the analysis of the data obtained, results that the largest share of 40 % is held by leaved oak.

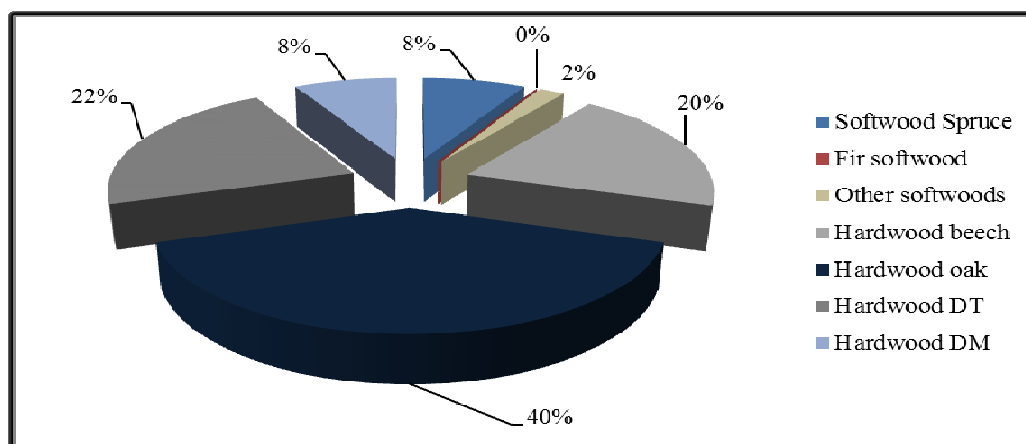


Fig. nr.1 Types of forests in public forest management institution

Also, analysing the information referring to the volume of wood that is harvested annually from the forests belonging to the public institution in the field of forestry- the Region South Muntenia, in the year 2015, the program of harvesting the wooden mass is of 9.412 thousand cubic metres. This volume represents almost 74% of the maximum volume allowable to harvest from the forestry fund public property of the state managed by the administration, calculated according to the legal provisions in force. In contrast in the year 2014, from the forestry fund private property of the state administered by the institution was harvested a volume of 9.076,5 thousand cubic metres of wooden mass. It results that, in the year 2015 was cut more than in 2014 with 335,5 cubic metres.

As a result of the site of the public institution in the Region South Muntenia analysed, the situation of private forests at 30 April 2014, presented in the table below, is of 3.101.594 hectares.

Table nr.1 Destination forest land surfaces released for possession

Individuals (ha)	Associative property (ha)	Religious units/education(ha)	Administrativ units (ha)
1.229.107	744.150	148.332	980.005

One of the important objectives currently in the attention of the public institution in the forestry field of the Region South Muntenia is Zimbrăria Neagră (Black Zimbraria), which benefited in 2015 of a considerable investment. It is about the new Observatory, built on three levels, from where visitors can admire both the rare species of bison, and the beauty of the place.

From the press release sent by the director of the public institution in the field of forestry Region South Muntenia we find out that: „*At the new Observatory you will see a nice investment, where one can look from above, on three levels. Visitors are safe, because those who come there in large groups are usually children. In the last two years they have been in the thousands at the Zimbrăria Neagră*”.

Another important objective of the respective institution is the Țarcul de Vânătoare de la Bolovani (The Hunting Paddock from Bolovani), overpopulated with wild boars. As the number of wild boars increased recently from 78 copies in 2012 to 450 in 2016, the institution considers that the solution to this problem is to encourage the hunting parties. According to the recent statements transmitted by the director of the public institution in the field of forestry in the Region South Muntenia: „*We have high expenses and each year we have to*

find solutions or by the harvesting of hunting or by delivery to other hunting paddocks. If we give at least 100 wild boars, we become profitable”.

To know and assess the performance of the institution we have analysed the Financial Statements on a period of two years (2011-2012), especially the Profit and loss account which allowed the determination of the global result but also the forming of an overall assessment over the financial performances of the management of the public institution in the Region South Muntenia.

Table nr.2 The level and the structure of operating revenue-own processing based on data from income statements, 2012, published by public institution analysed

Indicator	Financial year 2011	Financial year 2012
Operating income	24 942 417	26 544 877
Operating expenses	24 914 591	26 491 975
OPERATING PROFIT	27 826	52 902
Financial income	48 812	49 223
Financial expenses	1 549	134
FINANCIAL PROFIT	47 218	50 750
TOTAL INCOME	24 991 229	26 595 761
TOTAL EXPENSES	24 924 058	26 531 634
GROSS PROFIT	67 171	64 127
Current income tax	86 218	81 886
Deferred income tax	0	0
Income tax asset	0	0
NET LOSS	19 047	17 759

To highlight the key information in this table we created two figures, where we presented the situation of the profit in exploitation and the financial one alongside with their competences.

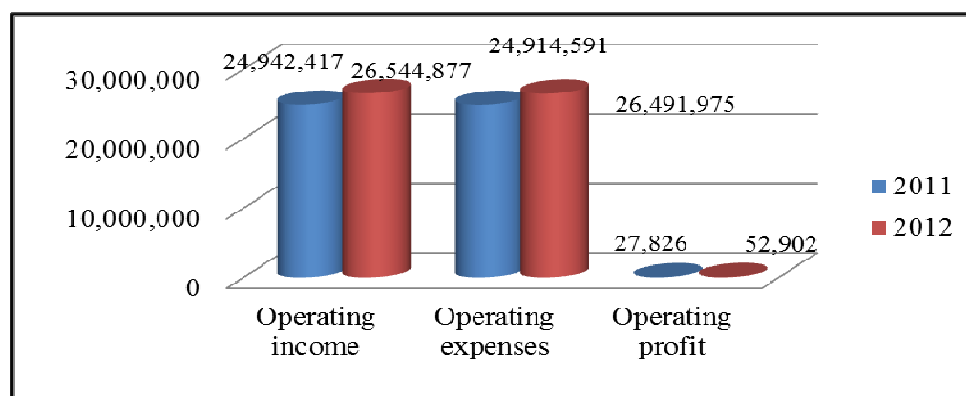


Fig.nr.2 Operating result, 2011-2012, of the public institution analysed

Analysing figure above (fig. nr. 2), we see the almost equal level of the incomes and expenses from the activity of exploitation of the public institution in the field of forestry of the Region South Muntenia, the profit increased in 2012 with 25076, which means 1,9 times. This is a strength obtained by the institution. Instead, in the next figure (fig. no. 3) is obvious a much bigger gap between the financial incomes and the expenses, the financial profit

registering values higher than the one in exploitation; also, in 2012 it registered an increase of 3523 lei (being with 7% higher).

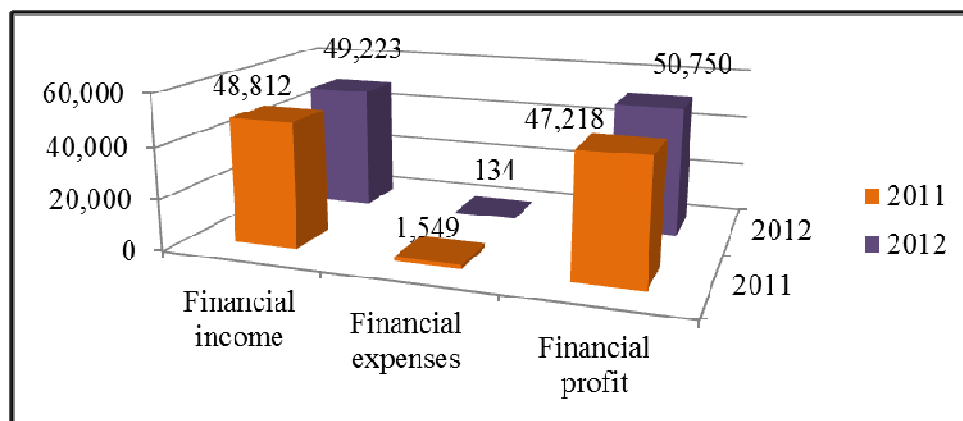


Fig. nr. 3 Financial result 2011-2012 of the public institution in the field of forestry of the Region South Muntenia

The incomes of the institution are considerably diminished by the corporation tax which really changes the profitable situation of the institution in net loss. This loss decreased in 2012 toward 2011 (with 1288 lei), but not enough.

Table nr. 3 Fiscal value and other operating income-own processing after income statements 2012

Indicator	Financial year 2011		Financial year 2012	
	Lei	%	Lei	%
Net turnover	24 493 212	98,00	25 138 763	94,52
Sold production	24 493 212	98,00	25 138 763	94,52
Income from sale of goods	0	-	0	-
Total sales revenues	24 493 212	98,00	25 138 763	94,52
Trade discounts granted	0	-	0	-
Income stocks of products	-295 025	-1,18	177 601	0,67
Income from the production of tangible and intangible assets	2 915	0,01%	7 801	0,03
Other operating revenues	741 315	2,97	1 220 712	4,59
Total operating income	24 942 417	26 544 877		
Share of operating revenue in total revenue	99,80%	-		
		99,81%		
TOTAL INCOME	24 991 229	26 595 761		

Following those mentioned above so far we considered necessary to conduct a graphic on the public institution regarding the sold production by the public institution in the field of forestry- Region South Muntenia during the two years of analysis.

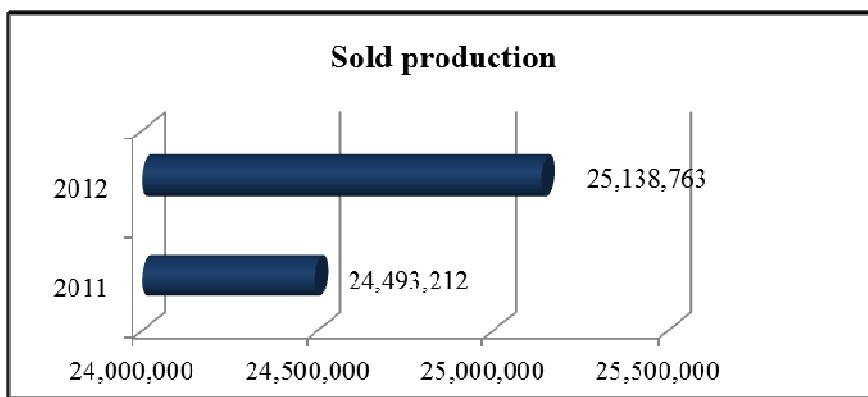


Fig. nr. 4 Sold production of the public institution in the field of forestry of the Region South Muntenia

The production sold increased in 2012 compared to 2011 with 65551 lei, which means 1,026 times. Which proves an effort to increase sales by the institution.

Also, detailing the level and the structure of the exploitation expenses it was noticed the absence of expenses+56+ regarding environmental protection registered in accounting by the respective public institution.

To highlight the share of each expense in the activity of exploitation to the total of expenditures of the analysed institution, it was created the following table.

Table nr.4 Operating projects expenditures expressed as a share of operating income (in percentage) - own processing after income statements 2012

Indicator	Financial year 2011		Financial year 2012	
	Lei	%	Lei	%
Raw materials and consumables wich:	1 893 469	7,59	2 203 343	8,30
- other material expenses	52 961	0,21	132 373	0,49
- ther external charges (eergz and water)	261 012	1,05	314 260	1,18
Expenditure on goods	0	0	0	0
Personnel expenses, wich:	13 782 392	55,30	14 485 935	54,59
a) wages and salaries	10 574 612	42,43	11 069 217	41,72
b) social security and welfare expenses	3 207 780	12,87	3 416 718	12,88
Expenditure on external supply	1 224 545	4,91	1 129 849	4,26
Other taxes, duties and similar	414 862	1,66	460 743	1,74
<i>Environmental protection costs</i>	0	0	0	0
Other operating expenses	5 898 745	23,66	6 251 948	23,56
Value adjustments on fixed assets, current assets and adjustment of provisional	88 410	0,35	243 427	0,92
Total operating expenses	24 914 591	99,96	26 491 975	99,85
TOTAL EXPENSES	24 924 058		26 531 634	

Analysing the data in the table above, it results the following:

- the share of 55,30% for the year 2011 and 54,59% for the year 2012 highlights a relatively high share in the total of expenses by the salaries and salary contributions of the employees of the analysed institution;
- the exploitation expenses make up almost entirely the total expenses of the public institution in the forestry field in the Region South – Muntenia (99,96% and 99,85%);
- the value adjustments to assets over which we see a very small value relative to the total expenses represent another interesting aspect;
- it is observed the higher value of expenses with the adjustments in 2012 toward 2011 of 2,75 times (with 155017 lei) which is actually due to buying a quite small value tool.

Regarding the next figure (fig. no. 5) it is observed that the largest share in the total exploitation expenses is held by staff costs and then by those with raw materials used by the institution.

Thus, staff expenses increased in 2012 toward 2011 with 703, 543 (1,05 times) being 6,57 bigger than the expenses with raw materials.

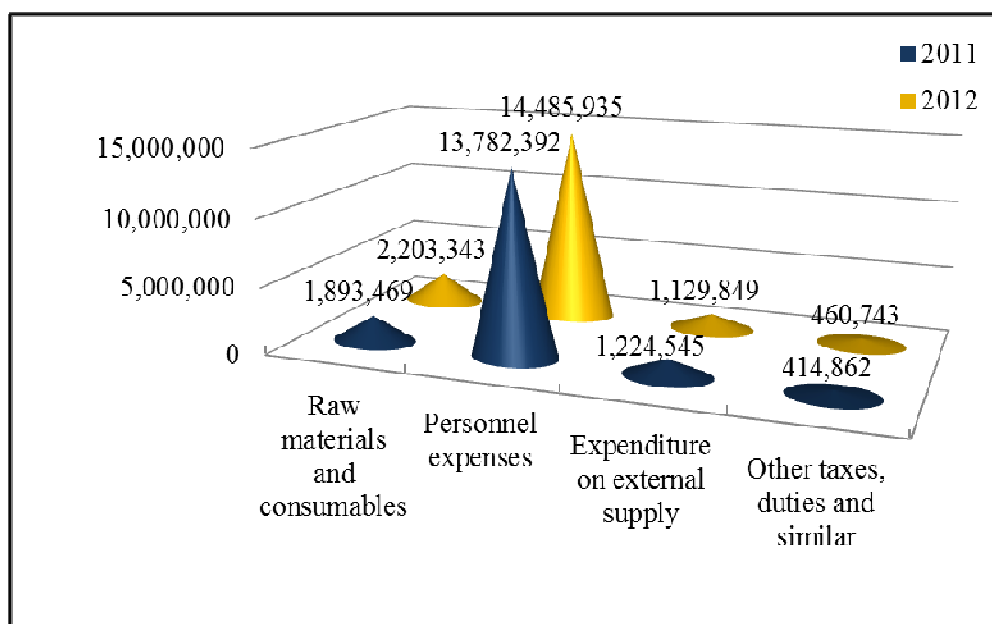


Fig. nr. 5 The main groups operating expenses of the public institution in the field of forestry of the Region South Muntenia

Referring to the interim management balances presented in the table below (table no. 5), in French vision these offer information regarding the profitability of the enterprise on various information.

Table nr.5 Interim management balances - own processing after income statements 2012

Indicatori	Financial year 2011	Financial year 2012
Income from sale of goods	0	0
Expenditure on goods	0	0
Trading margin ¹	0	0
Sold production	24 493 212	25 138 763
Trade discounts granted	0	0
Income costs products stocks	-295 025	177 601
Income producing assets	2 915	7 801
Production year ²	24 201 202	25 324 165
Consumtions from third parties	10 511 761	11 270 677
Value added	13 689 441	14 053 488
Income from grants (acccount7411)	1 203 287	1 259 128
Staff costs	13 782 392	14 485 935
Other taxes, duties and similar	414 862	460 743
Gross surplus of exploitation (EBE)	695 474	365 938
Operating expenses related to depreciation of fixed assets	1 309 374	1 280 209
Income from value adjustments to tangible and intangible assets	0	0
Operating expenses related to the adjustments for current assets	88 410	252 660
Income from value adjustments for current assets	0	9 233
Operating expenses for provisions	0	0
Operating income from commissions	-11 179	-10 112
Other operating income	741 315	1 220 712
Operating profit	27 826	52 902
Financial income	48 812	50 884
Financial expenses	1 594	134
Extraordinary income	0	0
Extraordinary expenses	7 873	39 525
The result before tax	67 171	64 127
Tax (current and deferred)	86 218	81 886
Net result for the year – loss	19 047	17 759

¹ Trading margin refers to the commercial activitz carried out bz the trader, distribution or from the purelz commercial producers.

² It includes the value of goods and services produced by the company to be sold, stored or used for their own needs.

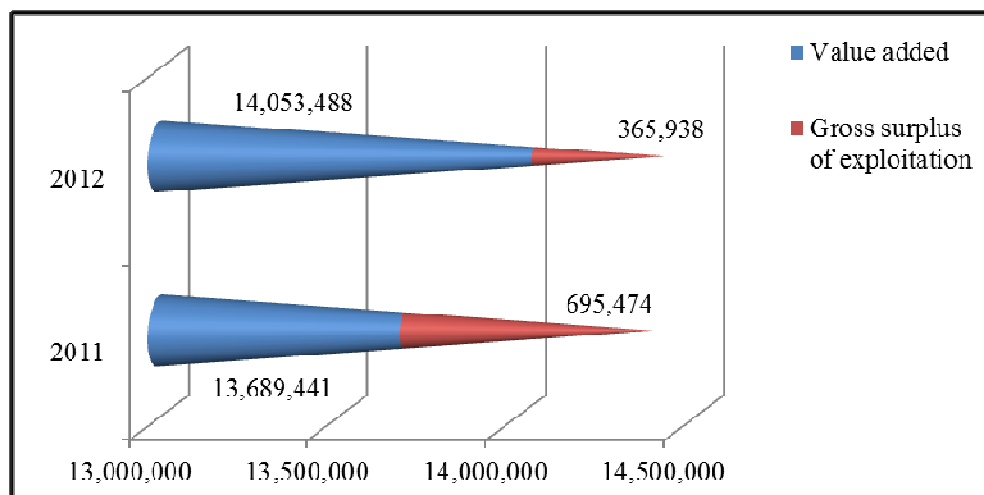


Fig. nr. 6 Value added and EBE

Data on intermediate management balances highlight that the objective regarding profitability to each level of accumulation was not achieved. The net result being considerably influenced by the tax related to the previous and earlier activity.

In our opinion within the public institution would be necessary to implement some measures to increase revenues from exploitation (such as the encouraging of wild boar hunting - due to the exaggerated number of copies 450) and reducing the wage bill to become profitable on short term.

2. Conclusion

As a conclusion the public institution in the field of forestry Region South-Muntenia must rethink its spending and renegotiate contracts with customers so that the profit earned to exceed the tax owed to other years. We believe that there are possibilities but they are not exploited enough.

After the discussions with a part of the employees of the public institution in the field of forestry in the Region South Muntenia we can say that it is wanted a permanent care to improve the regeneration of forests, and for the foresters being a constant task.

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SUSTAINABLE BUSINESS –THE WAY TO ENSURE THE COMPETITIVENESS AND THE EFFICIENCY OF ROMANIAN COMPANIES

Mirela, Ionela, Aceleanu¹

Abstract:

The business world is rapidly changing by globalization, the development of information technologies and the increasing concerns for environment protection. Businesses need to be competitive in a market where not only the profit but also the way of attraction, management and marketing strategies used and care for the environment. The paper presents the Romanian business environment in terms of how companies adapt to trends that are imposed by sustainable development and to requirements for environmental protection. Therefore, there are tracked and analyzed some indicators that capture the extent to which Romanian companies are environmentally responsible. The study shows that in recent years, companies in Romania pay more attention to environmental responsibility, using the benchmark of the large corporations which have developed their businesses in Romania and existing EU legislation. However, the differences between Romania and highly developed countries are still high, and to reduce the development disparities, it should continue the efforts to improve the green management policies and strategies adopted by each firm.

Keywords: sustainable business, competitiveness, Romanian companies, environment

JEL Classification: L20, Q56

1. Introduction

The business world is changing more and more due to the requirements of sustainability. Thus, firms aim, in addition to maximize profits, also a better allocation of resources, and a greater care for the environment. The responsibility of companies has been extending to their contribution to ensuring sustainable development. At company level, Danciu V. (2013) believes that there are three types of sustainability: economic, social and environmental. Economic sustainability requires the company to make a profit, to stay a float in the business world, to attract more customers and to adapt their production to the requirements for the development of an environmentally friendly society. Social sustainability refers to the interaction and social cohesion and environmental sustainability means the company's ability to develop activities with low environmental impact.

As competitiveness of a company is its ability to achieve high productivity, based on innovative use of human, financial and material resources (Chilean MN, Jordan M., 2007), it can be maintained in the current context, if the company takes into account of sustainable development requirements. Otherwise, the company risks not adapt to new markets, consumers and competition which penalizes environmentally damaging behavior.

The sustainable businesses require reducing environmental impact, for example by using recycled waste as raw materials, helping develop markets for organic products, investment in innovation and influencing consumer behavior, to understand the benefits of the green consumption.

Gănescu (2012) and Gănescu, Gangone and Asandei (2013) believe that developing a sustainable business involved a number of factors, promoters or inhibitors of it. The factors that support the sustainable business development are the code of ethics, social responsibility, government or community support, promotion of sustainable management. The factors that affect the sustainable business development are: poor management, economic constraints, lack of social responsibility or competition force.

¹ Proffesor Ph.D., Department of Economics and Economic Policy, The Bucharest University of Economic Studies, email: aceleanu_mirela@yahoo.com or mirela.aceleanu@economie.ase.ro

Romania recorded large competitiveness gaps compared to highly developed countries. This is explained by low labor productivity, the use of outdated technology, insufficient investment for scientific research, management based only on reducing costs, a lack of infrastructure to support innovative start-ups.

For Romania, increasing competitiveness, in terms of developing a sustainable business environment is the main way of catching up with the developed countries. The Romanian companies concern for the environmental care expressed through an suitable management approach, is in an early stage and was driven by ecological behavior of large companies that have entered the Romanian market or European legislation on environmental protection.

The Romanian business performance influences the competitiveness of the entire economy and adopts measures whereby these improve their access to factors of production, participation in the European markets, technologies, respecting the principles of sustainable development, is essential for ensuring the competitive operation of Romanian economy. (NDP 2007-2013)

2. Sustainable business in Romania

The PwC study "Business success beyond the short term: CEO perspectives on sustainability" (PwC 2015) highlights that sustainability underpins the success of any business. The study discusses the risk to which companies obey (those companies that focus solely on financial performance and lose sight of rational management way of resources in terms of environmental protection).

Currently, to be sustainable, companies must adapt to changes on businesses by resource scarcity, climate change, and the need for innovation, the need for identifying the emerging risks in business or demographic changes.

The integration of sustainability into the business models allows obtaining a competitive advantage and ensuring the sustainability of growth and development. But the strategic sustainability, at company level, requires the active involvement of company management in support of the main objective, in the short and long term. (Raderbauer, 2011)

The evaluation of the company performance for the environment, is based on numerous indicators such as the Dow Jones Sustainability Index (DJSI) or Green Business Index (GBI).

The Dow Jones Sustainability Index (DJSI) involves the analysis of economic, environmental and social performance of enterprises, taking into account their attitudes about adopted management, occupational policies, marketing strategies, supply chain standards so that businesses demonstrate that operate in a sustainable and ethical way. This index only includes 333 companies, of 3000 companies worldwide which have the highest degree of sustainability. For example, Enel, present in Romania and other 40 countries, ranked 83 in the ranking for the tenth consecutive year, in 2013. (bursa.ro, 2013)

Green Business Index analyzes, based on questionnaires, corporate environmental responsibility in terms of environmental performance, corporate social responsibility and the transparency in business. There are analyzed indicators on the waste management, transport, resources, environmental impact, green purchasing, and sustainable policies.

For 2015, the response rate of companies in Romania was 38.5% and of the participating companies, the vast majority (58.5%) had a low score in the competition Green Business Index registering below 100 points from a maximum of 700 points.

By sector, the companies in service sector have obtained an average of 333 points, followed by the industry sector with a score of 299 points, the last being the companies in the construction sector, with 201 points. In terms of sub-indicators analyzed, companies in Romania have achieved better results in environmental impact, waste management and sustainable development, being generally concerned on legal compliance and adoption of policy issues and environmental standards at company level. The poor results recorded by

companies in Romania, to indicators such as resource use, sustainable transport, buildings and green spaces or green procurement, show that they produce, usually with limited effectiveness, in terms of consumed resources and do not pay attention to the policies of transport, buildings and green procurement. (GRA-GBI, 2015)

According to the report of Green Business Index 2015 among companies in Romania which have shown that have mobilized their resources and have managed the businesses so that they can ensure their prosperity and the long-term profitability, while respecting the principles of green businesses, are DHL Express, Hochland, Danone, Grup Servicii Petroliere S.A., Electroarges S.A.

The expert reports concerning the sustainability of performance of companies show that the first places in the world rankings are the companies in the UK and Continental Europe. On the opposite side are the North American and Asian companies, the best sustainability being registered by sectors which supply goods and services. (V. Danciu, 2013).

The environmental goods and services sector (green) refers to goods produced so that to prevent, reduce or eliminate the environmental degradation while maintaining the stock of natural resources in order to be protected against exhaustion. (Eurostat, 2016)

According to Eurostat data, the value added in environmental goods and services sector in Romania, had a positive development in 2009-2012, which indicates a slight development of the field. The production value also increased after 2009 as in the previous period has decreased due to the impact of economic and financial crisis and the insufficient development of the legislative framework on the field. (Figure no.1)

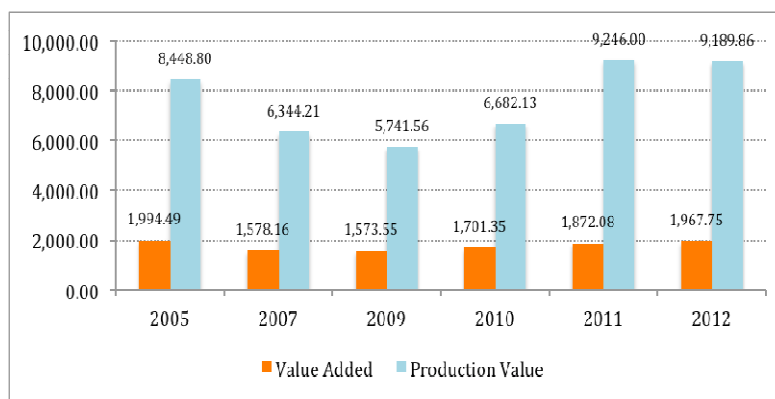


Figure 1. Value Added and Production Value in the environmental goods and services sector (million euro) Romania, 2005-2012

Source: http://ec.europa.eu/eurostat/data/database?node_code=env_ac_egss2

At EU level, the organizations EMAS (Eco-Management and Audit Scheme), that use an environmental management system to assess and improve the environmental performance of the company, have increased in 2005-2012, followed by a slight decrease in 2012-2014. (Figure no. 2)

In Romania, these organizations are very small, in 2014 were registered only five such organizations, compared to 4049, the number that was registered at European Union level. At this indicator, the European Union countries, which registered the best results, are: Germany, Spain, Italy and Austria.

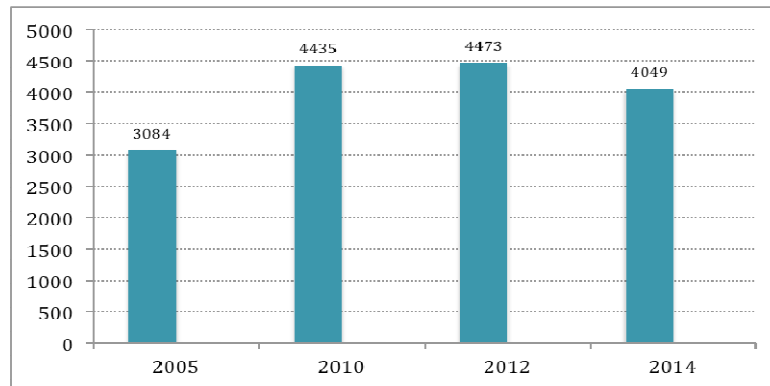


Figure 2. Organisations EMAS (with eco-management and audit scheme registration), EU, 2005-2014

Source: <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&pcode=tsdpc410&language=en>

The performances of organizations are developing as the companies increasingly integrate the sustainability into their strategies and manage to take into account all the components of sustainability in their business models. Sustainability must be included in any policy of a company, whether it is human resources, marketing, management, procurement and research and development. As the indicators on sustainability, companies that focus on sustainability principles have superior financial results and thus create more added value.

In the European Union, sustainability and resource efficiency, at company level or economy, involves tracking the five rules: saving resources; recycling; substituting of resources with others that have a higher efficiency and less impact on the environment, reducing the resources used, the proper evaluation of resources, resource stocks and the efficiency of their use. (European Commission, 2011)

Thus, any business can become sustainable, but some fields are almost in the environment than others, like organic farming, renewable energy, recycling, and tourism. The development of sustainable business in Romania manifested both by increasing the concerns of companies to discuss the sustainability issues in the own management, but also by expanding businesses to the areas of environmentally friendly, in recent years recording more companies in these sectors.

Corporate sustainability also means high social responsibility, which in turn affects a company's competitiveness. A socially responsible company must follow the law, invest in human capital, environment and relations with groups with which it interacts (customers, suppliers, partners). Investing in human capital, in education and training of employees are important factors of labor productivity growth and ensuring of social and economic development. (Savu, Ciucur, 2014)

The experiences with investments in environmentally friendly technologies, in green policies and strategies, have shown that they have a direct impact on company productivity and so the competitiveness. (Barbuta, 2014)

Among the features companies in Romania, on environmental policies, we highlight the following:

- although it is rising, the number of Romanian companies that have publicly available an environmental policy or strategy on sustainability is still low;
- often, companies do not clearly establish their objectives on sustainability;
- some companies have integrated policies on quality, environment, health and safety management system;
- companies use marketing practices which present products as being sustainable, but no further information (on the companies' websites) about what characterizes such a product or service;

- often, the environmental management is simply reactive (to pressure of legislative framework), not strategic, proactive and integrated with primary and secondary activities within the organization. (Suciu, 2015)

3. Conclusion

The sustainability awareness in business development has increased in recent years worldwide. Companies from Romania must adapt to the trend of business development and pursue, as its main objective, in the long term, development of sustainable business to maintain its position in various markets, in order to attract more customers and become internationally competitive.

In recent years, companies in Romania have become more environmentally responsible, although business does not have any extensive experience in this regard. However, the efforts must continue by improving management strategies and green marketing, but also by improving legislation.

The challenge for Romanian companies is to understand how society is changing, to adapt their business models so as to provide a better lifestyle on a planet with limited resources. Sustainability also planned to change the behavior and the mode of action of both firms and consumers and governments. Thus, to achieve the desired results, it is necessary that efforts be joint.

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SENSORY MARKETING OR SENSES IN A SUSTAINABLE BUSINESS

Elena, Enache¹
Cristian, Morozan²

Summary

Starting from the five senses with which a person is endowed - hearing, sight, smell, taste and touch, as well as the customer's desire to personally check what he or she is buying, a new way of induced influence has developed – and that is sensory marketing. It deals of course with the senses, more specifically it develops services and technologies through which the potential customer is attracted, "enchanted" in an inspirational environment. Offerers can not be the same. If the products are similar, then the difference is made by the ambiance.

Keywords: marketing, sensory brand, neurobranding, senses

JEL Classification: M31

1. General Considerations

For many products, the customer's first contact is with its package. In addition to the functionality requirements (it maintains the properties, it protects during transport, it is easily open), the package must take the description of a product that can not be touched or seen. But because it has proved to be insufficient, the package is most of the times removed to leave room for the discovery of the products, for their exploration.

Thus, starting from the five senses with which a person is endowed - hearing, sight, smell, taste and touch, as well as the customer's desire to personally check what he or she is buying, a new way of induced influence has developed – and that is sensory marketing. It deals of course with the senses, more specifically it develops services and technologies through which the potential customer is attracted, "enchanted" in an inspirational environment. Offerers can not be the same. If the products are similar, then the difference is made by the ambiance.

The father of sensory marketing or neuromarketing is Martin Lindstrom - Danish brands designer and brand consultant for Disney, Mars, Pepsi, American Express, Mercedes-Benz, McDonald's, Microsoft. He developed an unorthodox way of doing what any company says it wants to do: to understand the deepest desires of its customers and turn them into innovative products, brands or retail experiences. In 2015, in *Thinkers50* he was ranked 18, among the most influential management thinkers in the world (www.martinlindstrom.com).

Martin Lindstrom's idea was not only to use the visual perception of the brand, but to also connect to it all five human senses. He has conducted studies on the effects that the tools of sensory marketing have on the buyer: these show that a pleasant sound can increase the desire to purchase goods by 65%. Taste accelerates the growth of the readiness to purchase by 23%, a pleasant smell by 40%. A product which is soft at touch has 26% more chances to be bought, and one pleasant to the eye has 46%. Summing up, Lindstrom has obtained the following result: the cumulated effect of all senses should increase the customer's willingness to purchase by 200%. The reality gives good results, even if what the mentioned specialist states is not always confirmed. It is important to plan the marketing strategy using the principles of sensory commercialization in advance. Everything must reflect the brand's values.

¹ PhD Professor, "Constantin Brâncoveanu" University from Pitești, Faculty of Management-Marketing in the Economic Affairs Brăila, e_enache2005@yahoo.com

² PhD Senior Lecturer, "Constantin Brâncoveanu" University from Pitești, Faculty of Management-Marketing in the Economic Affairs Brăila, cgmro@yahoo.com

Sensory marketing can be named "a shopping experience" or the stimulating of the consumer's senses at the point of sale, in order to enhance the customers' experience (www.strategic.ro). Environmental factors cause certain reactions to the clients: psychological, emotional, cognitive, motivational, behavioral.

Based on these responses, customers choose: to spend more time in the place, to buy something, often after a sensory stimulus, to decide to return, to socialize with staff, to look through the shelves and products, to analyze each one of them, to cheer up, to hum etc.

The reactions can also be reversed: the perfume could not be tolerated (too strong, too stifling, too floral etc.), the music could be too loud, the songs could not be part of the customer's preferences, drowsiness could be installed, and the solution to exit such situations is leaving the place.

These aids do not replace quality services and products. No matter the greatness of the effort to get a customer to spend more time on that place, to buy, to return and to recommend to his friends, he will not do so if he is disappointed with the quality of the products and services or if he is not satisfied with the staff's performance. Sensory marketing does not directly focus on sales, but mostly on the emotional relationship between the consumer and the product.

Also, it is not independent of other elements of the business, but it must be effectively integrated into the overall marketing and management strategy, into the policy and tactics for communication with consumers.

We can not certainly affirm which of the senses is more exploited, more approached.

Some people believe that the sense of smell is the most ingrained into memory, relying on the fragrant experiences that are imprinted in memory (<http://ruminref.eu>). But differences arise with the type of business they support. The used sensory marketing tools are the sounds, the colors, the textures, the flavours, the tastes and their impact on consumers when it produces an reflex association: a certain song, a scent or a sensation immediately evokes memories of a brand (www.casinoinside.ro).

2. The sense of smell

The smell, as most of us know, is essential in sensory marketing. Sales may record significant increases if it is well used and stimulated. The range of flavours is diverse and can be easily adapted to different types of locations after their activity and characteristics. This technique is developed in Mall stores: Yves Rocher, The Body Shop, Sephora, Douglas, etc., where perfumes are being sold, then in those stores where clothes are displayed, especially for women, where floral flavours, either intense or gentle, prevail, as it is decided in marketing meetings, in the stores where we find furniture and the smell of wood, of nature is predominant, in bakeries where there are bread or freshly baked cake aromas etc.

The method has been taken over in other areas as well. In the waiting rooms "Business Class" of British Airways Airline it smells like a perfume reminiscing of the freshly cut grass and the sea breeze. It creates comfort to the passenger, the message is: "Relax, remember these enjoyable moments and travel some other time with us again" (<http://ideideafaceri.manager.ro>).

In coffee shops the smell of coffee is breathtaking, from restaurants the alluring smell of freshly cooked meals, of fries pierces.

The Avon brochures contain scented pills that usually show the new products etc.

On this topic, there are some interesting studies: the one from the United States became notorious. It brought together a thousand women, asking them to choose one of the presented four pairs of socks. Although the four pairs were identical, 90% of women chose the one that had been discreetly impregnated with a scent-based on male hormones.

There are positive and negative flavours. Through experiments, it has been demonstrated that the flavours of lavender, chamomile and sandalwood affect the activity of the brain faster than any tranquilizer. Rose, mint and cloves can stimulate cells stronger than strong coffee ... On the other hand, the smell of a fish shop makes you quickly decide on what you want to buy. This is aroma-marketing or, in other words, this is how essences become essential in a business!

3. The sense of touch

Another sense, the tactile sense or touch in common language, has an impact on the decision of buying a product. Women tend to pay particular importance for fabrics or knitted products because when they touch them, they can imagine how the clothes would be when they wear, wash or crumple them, what skin sensation it will offer etc. However, more and more men choose clothes that have a velvet soft touch.

Some experts have come to the conclusion that putting together the sweaters and shirts on large tables which allows their study in detail will give the customer a positive mood, because of the created comfort and the complete control over products, without the intermediation of the seller, fact which will convince the customer to buy. Therefore, many online clothing stores are not successful. Even though a larger number of vendors – supervisors becomes necessary, this strategy works.

People's ability to perceive the effect of the environmental factors through the skin receptors, the musculoskeletal system and through some of the organs (lips, tongue etc.) is a physical security instinct.

Paco Underhill, retail sales specialist, believes that „we live in a society with a lack of tactility and shopping is one of the few opportunities to come into direct contact with the material world.” Underhill argues that brochure based sales or online sales will never be a serious threat to traditional retail stores (<http://ruminref.eu>).

4. Sense of hearing

Relying on the idea that good music sells everything and relying on studies that have concluded that sales will increase by 10% in locations where it is broadcasted (<https://www.martinlindstrom.com>), the client's sense of hearing becomes a target.

If a location has several spaces, for example, a restaurant, then through this system the ambience is diversified; a relaxing song can be heard in the courtyard or on the terrace, jazz or dance in the bar area and in the parlours the background and the served cuisine are taken into account. If the music is very loud and noisy, the buyer goes out faster and viceversa.

A clear connotation of songs which would distract the customers and make them analyze the text is not recommended. Some songs may cause negative associations, bad memories, or they are simply not pleasing the customers. For this reason, it is better not to use well-known songs. Classical music is not appropriate because many people do not understand it and do not like it, although it is recognized as a good treatment. Music depends on the buyers' age, the time and the day that is broadcasted. Recently, it has been scientifically proven that every sound is retained in the psychological and subconscious decisions and affects everyone's actions. The sound effects contribute to sensitizing the buyer and his mood, for example, the sound of waves in the area where fish is sold.

It is recommended to quit listening to radio or watching television, but there are many places where they are still preferred. Such places are the waiting rooms of medical offices, railway stations, where tension, fear, expectation can be easier if one listens to news, music, commercials, telenovelas. These represent a combination of effects on two simultaneous senses: hearing and sight.

Music Master is a program used by diverse retail companies, HoReCa, health and wellness for which one pays a monthly subscription between 60 and 90 euro. The music which is chosen for the compilation must fit the background, the store's concept and the range of products. This must be in harmony with the general style of the company, it must be associated with the brand and it must not repeat itself at short intervals of time.

At present, businessmen from the USA and from Western Europe use these services with the same frequency of the phone subscription. In the USA, the company Muzak is the market leader on this type of service. In Romania, due to the fact that most of the music is illegally downloaded on the internet and the broadcasting is made after the musical preferences of each employer or of an employee, there is just one company with such an activity: Mood Media® Romania, founded in 2000. It is a branch of Mood Media Group, the market leader in Europe, which is present in more than 40 countries of the world. The mother company develops this type of promotion for more than half a century, from the 50s, being the first in Europe to have broadcasted music in a supermarket in France (www.moodmedia.ro). Mood Media uses a musical, visual and olfactory mix in order to stimulate the growth of clients' traffic, the growth of sales and the promotion at sale points because the services which are mainly offered are the audio ones, respectively ambiance music, the recording and broadcasting of audio spots, instore radio (music and the broadcasting of audio messages).

5. Sight

Sight is valued through video contents which are advertised on screens placed in sale points. The images can be promoting, informing or entertaining, there can be sports games with a great stake, matches of national or local teams or other audience TV shows.

Moreover, the lights should not be forgotten. When a location is seen from the street, it is not chosen for its smell or music, these cannot be seen, but the lights, both the exterior and the interior ones...yes, these catch one's attention.

Colour creates a special atmosphere which promotes comfort. According to the results obtained along numerous psychological experiments, scientists have come to the conclusion that through colour a certain influence on human perception about body weight, the room temperature, the distance at which the objects are being carried out. Colour affects the psycho-intellectual status of the person, it has either a calming effect or not. Studies show that 80% of the light and colour is absorbed by the nervous system and only 20% by sight. The colours have a different symbolic from a culture to another. However, we all recognize them this way: white – cold and pure colour; black – conflictual colour, with a feeling of loneliness and isolation from the exterior world; grey – neutral colour which creates a sense of stability, it encourages people to be modest and restrained; red – it generates emotion, restlessness, a desire to do something; pink – sexuality, love, spiritual joy, sensitivity; brown – symbol for the animal inside the man; green – hope; blue – loyalty. And so on! Of course, colours are used in efficient compatible combinations in the hitch-hike. Even the season has an influence upon the choice of the colours, winter, autumn, spring and summer being so different from each other!

6. Taste

The taste impact as a perception channel is more limited because the individuality is very accentuated. What does sweet, salty, bitter and sour mean for each person? It is something uncertain, it cannot have an effect upon a person from the distance, just like all the other senses do. Of course there is a series of unexplored opportunities in this direction too, which can be used in an advantageous manner. In order to enhance the chances to sell for some categories of alimentary products, degustation take place nearby the presentation

shelves. Leerdammer, Danone, Delaco, Nestle, Bucuria, wine brands etc. are just a few of them. For the gustative perception, we can also think of a toothpaste. It has smell, taste and a certain texture. For medicines, which very seldom have a pleasant taste, this becomes increasingly important for children because it is hard to convince them to swallow a bitter pill or potion. Tobacco has been combined with mint for a pleasant taste which offers the mouth a refreshing sensation.

7. Conclusions

Through neurobranding, the consumer is given a special feeling. The magic of sounds, colours and flavours proves its power. Using them separately or together, the marketers create a powerful emotional relation between the product and the customer, which assures the success of the brand. When elaborating the marketing strategies or the promotion campaigns it is important to create feelings for the target audience. This is why they "cling" to perceptions, sensations and feelings which are generated with the help of physical sensors.

The challenge is to obtain a complete positive effect, developing in a simultaneous manner all the consumers' contact points with the brand. Moreover, each and every of these contact points must perceive something unique, something which is not simple at all. There is no certainty that success through sensorial branding is guaranteed, that you can become better than your competitors. Skeptics consider all of these to be a manipulation (www.descopera.ro), an attack upon every consumer, without him to have too many chances to oppose.

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“SECRETS” OF THE CREATIVE MANAGERIAL ACT FOR SUSTAINABLE BUSINESS

Mihaela, Radu¹

Abstract

*Starting from the challenge to configure the robot portrait of the creative manager, I have tried to identify the so-called “secrets” of the successful managerial act. As the expressed vision stops at the time range of 40-50 years, perhaps to allow the young people to verify their ideas, I have extracted the force ideas, respectively the **qualities of the manager of the future**: the new smart technologies will influence the way business will work, this is why one quality will be the **machine-manager**, the more and more necessary creativity will demand the **creative manager**, the need for direct communication will simplify the flow chart, demanding “**flattened**” structures, etc.*

*The preliminary results, synthesized from my personal scientific research, after applying a Questionnaire among top managers, selected into a conclusive sample, place **creativity** on the first position among the qualities of a manager of the future, “at a tie” with **integrity**, remotely followed by ... **intelligence** and, even more remotely, by the **study level**, etc., and these constitute the object of my communication; the conclusions have an interesting impact among the current managers.*

The “desecretization” of the components of the successful managerial act may make our business truly sustainable.

Key words: sustainable business, integrated management, creativity, innovation.

JEL Classification: O320 Management of Technological Innovation and R&D

1. Performant Manager - Sustainable Business

A foreshadow **portrait of creatively manager** is a challenge targeting the next 50 years, so it is natural to inquire what are the fundamentals **secrets** of the performant managerial act, especially since they were “**declassified**” at the beginning of the century when it was said (Alvin Toffler, “Creating a new civilization”, 1995) that for the year 2040 women will be the majority in top management and will have an unprecedented power of decision. It could be that a fundamental secret well hidden by existing managers, mostly men? I, as a future woman manager (successful!), I can’t comment on it, but report it.

Another prediction is beginning to confirm, as well as all of this recognized futurist, about he was saying, also at the beginning of the century, that **migration of Muslims** to the West will increase (quod erat demonstrandum), it is that going to office will not be topical, we can work from home for a company in South Africa, Canada, Brazil etc., especially because, the author justified that **high-speed internet** will become a veritable norm and criterion to distinguish in the field. Moreover, video conferencing, have already become a common practice nowadays that allow future employees not to consume time, money and others to go to office from every corner in the world.

Summarized in all the responses to the request from the executive forum of a remarkable publications (Andrew McAfee, Massachusetts Institute of Technology, The Economist, 2015), the **qualities of a Manager for more than five decades** are configured as follows:

1. A quality is expected to be the **Machine Manager**, an extrapolation of a first impact of humanity with modern cars, in fact, what we often use as an expression called modern management, involving a significant number of coordinators of the work performed by workers in industrial machines. **The new smart technologies will influence the well going once again in the business.** Much of the current work as Presidents / CEOs, executives, from complex analysis, staff recruitment and establishment of the first performance will be given by intelligent computer programs. Already step was taken in this direction by several

¹ PhD Student, VALAHIA University of Târgoviște, mihaela.radu@layher.com

companies (Google app for analyzing human performance, in September. 2014), leading already to sensitive areas such topics as: determining the best questions in recruiting candidates or optimization wage measures. It was imposed even a special algorithm staff at the head of the company, aimed at developing the company's future investments.

2. Will meet certainly outstanding qualities at a **Creative Manager**, specifically, the one who always reconsidering their position with the firm to remain not lost on the road of increasingly faster transition. Some tasks will be divided between creative managers, smart programs, more effective data analysis, and another part will be transferred based on the hierarchical chain to enable quick decisions after a rigorous analysis of data. Today's challenge for the manager are yet to come in areas where cars can't overcome us: **staff motivation and creativity in running the operations of the company**. It is hard to imagine a program able to negotiate or to motivate and lead a team creatively.

3. Performance will lead to **downsizing**: naturally - with an aging population and **ergonomic activities** of a company, through a performant management. Until now, the good economic results of a company were the effect of two simple reasons: productivity and number of employees.

4. **Productivity growth** is showing signs of becoming more weakening than during 15 years ago, and aging population is a global phenomenon. UN forecast shows that the globally annual rate of employment will be only 0.03% over the next 50 years, obviously lower than the 1.8% registered during the past half century. Data collected by the editors of McKinsey would be likely to reassure us but in terms of productivity, analysts interviewed by the publication of top indicating a technological revolution with spectacular results in areas with poor productivity or trade development. Example Alibaba in China and counter-examples of low productivity in India indicates that there are still plenty of areas that will be brought to the top of the productivity parameters (John van Reenen, London School of Economics).

5. **"The flattened"** structures belong to modern management, structures in working directly with a top manager with eight subordinates. Works directly and discreetly, not necessarily know each other, unless the activities are "intersecting" and become interdependent.

2. Common practices of Successful Managers

Current market studies could become useless in just a few decades (data centralized by the editors of McKinsey), globally, half of GDP during 2015-2030 will be conducted in 440 cities across markets in development.

Future managers will face mentality and **cultural differences** of some obscure areas such as Tianjin, Porto Alegre or Kumasi, which raises future challenge to another level. Who will be able to build a future manager to decipher obscure features of an area, the advisory firms or the electronic program guide?

Satisfaction at work depends very much on the relationships we have with managers. However, in our consumer society, where everything evolves so rapidly, managers are not always clear with what they should do so as to create a **pleasant environment at work** and have **happier employees**. From our experiences we encountered, however, some **common practices** that could be really useful for managers to successfully lead a team.

We manage people, not teams. Being in constant pressure, employees, unique individuals, interests, skills, goals and different learning styles, expect personalization in interactions with them. If managers try to be as available to the conversation with each one, they will create and adapt the development plan, their individual needs, and when it comes to promotion, occur ambition, talent and skills of each individual. Forget the general patterns that should all fit to be promoted. We work with people, not robots. We want people to learn how to think, not what to think.

We offer purposes to employees. Most people are looking for mission and purpose in what they do. Today we can't separate so real the personal life than professional life. We can't put on clothes the job for 8 hours and then go back to our environment and to do what we like, what we accomplished. Many employees want to produce change, want their work to make a difference. And to this sense of accomplishment, contribute their manager to. You can't rely only on external motivations to create this feeling, such as bonuses or other extra benefits to salary. The manager must inspire them with a vision to establish ambitious targets and to give them confidence. Therefore offer a clear purpose to motivate them to establish great expectations and to transmit that they can achieve anything.

We focus on feedback. A 2015 survey conducted by the Society for Human Resource Management in the US, found that only 2% of managers provides constant feedback to their employees. Only 2%! Lot of managers are limited to six months or yearly performance review. And when employees receive feedback, its importance is much diminished because mixed with discussions about the compensation plan, promotion etc.

What can we do? We establish weekly one-to-one meetings with our employees and give them feedback. We provide a clear and objective feedback. We do not cut the wings, we offer independence and encourage them to take initiative.

We are listening. Employees tend to be happier when they feel free to contribute with ideas and take the lead and most managers want such people in their team. Why did not this happen? Because, usually managers uphold their very own ideas, not to say that they impose. When employees ask "Why should I bother to come up with new ideas when the boss already has some fixed ideas?". The best leaders listen a lot, meaning active listening. They strung problems and challenges, and ask questions so the whole team can come up with solutions. Innovation and initiative are rewarded.

We are consistent. Who would feel safe with a manager who today says something and the next day do something else? It's hard to feel motivated when things are unpredictable, and in a continually changing and you have no perspective. So be consistent in management style, vision, employee expectations, feedback and open to new ideas.

There is no a certain behavior pattern that a manager should have and guaranteeing happiness to employees, but these **five practices** that I have outlined above, helps a higher retention of team members and also to increase productivity thereof.

The key message is to pay attention to each employee. Yes, requires more time and is consuming process to give a constant feedback, wear frequent discussions with each employee, to build trust, to provide vision and listen to their ideas. There is much work? Absolutely yes! But worth it!

3. Top managers take what is the best from the previous.

We have from whom to learn! Believing that the world begins with us that all who were paraded before us are amateur functions, it's a big mistake.

For example, the Chinese philosopher Lao Tzu, 500 years ago, associate manager with a good knowledge of people, no matter how called it "one who knows people is wise. Wisdom is more than a science gathered in one place, so wise means knowledge and achievement, "and continues:" The best leader is the one that people barely know he exists, not quite as good when the people obey and acclaim him, worse - when it is despised But of a good leader, who talks little when the work is ready and the target is reached, they will say, "we ourselves have fulfilled the thought!" (Lao Tzu, 500 B.C.).

The manager is forced to be a player on the wire. He has to fight the three forces and must maintaining a balance: the people's interests; objectives of the organization; the competitive environment. Role of Manager: harmonize all these forces (adaptation, change, transformation, etc.) that determine individuals to act according to the interests of the

organization, but taking into account their interests in an environment that is never in equilibrium.

In homage to Peter Drucker, father of modern management, present some ideas promoted steadily working as a consultant in management:

1. To choose the most talented people;
2. To focus on opportunities rather than problems;
3. Putting the customer at the center;
4. Understand that you are competitive advantages and continue to develop permanent;
5. Permanent wonder what contribution they can make to the organization;
6. Do you know yourself and find place in the organization where you can bring the best contribution.

We intend to form a **working team**, the benefits they looming for those who wait for them to come with us? In a **debate initiated our Doctoral School** resulted in the following benefits: protects individuals involved; improves / enhances motivation; enables rapid exchange of information; causing emulation, synergy; creates business unit creativity; strengthens decision; facilitate proper application of decisions etc.

Trying to determine **from what are made the winners in a team**, we concluded that it is difficult to hire good people, the more good people to hire. Eliminary tests: **integrity**, people who tell the truth, keep their word, take responsibility of their actions, admit their mistakes, know and apply the laws, respecting rules and pursue success, are incorruptible. In time, many of us develop an instinct to recognize people of integrity. We should not be afraid to use it! Then **test of intelligence**, because education is only a detail, the **test of maturity**, regardless of age, does not leave boiling with anger, dealing with stress, have a sense of humor, enjoy and respect the feelings of others. Obviously, **the decision maker is the character**. Cicero said: *"Character means much without intelligence, intelligence without character does not mean anything."*

Recruitment for management positions involve outside the three eliminary tests and the 4 E's model, leading to a higher level, there is still **four important features**:

- Authenticity or credibility, without a trace of false;
- The ability to foresee events. The best leaders are in a brutally competitive environment, have a sixth sense for changes that will intervene in the market, they have the ability to imagine the unimaginable.
- Strong inclination to surround himself with better people and smarter than they are themselves;
- Greater ability to recover after a failure.

The learner is valuable if he learns from mistakes, refold and then starts again with force, conviction and renewed confidence. Jack Welch, manager of the 20th century, with experience at General Electric, said "I liked especially those who had passed through difficult circumstances, but proved afterwards that they work even better than before". A rule is drawn from experience is not to hire someone in the same position that he held before, except senior management positions. We should not reproach if sometimes hire the wrong person! Remember, our task to fix a bug!

Finally, it is concerned and breakups, layoffs. Not all separations are the same: there are dismissals for theft, lying, cheating or other ethical or legal violation, not subject leniency, then downsizing due to financial problems, and finally, there layoffs due to lack of performance. Every employee, not only the senior managers need to know the company's situation.

The most complex and delicate type of redundancy is that a person must leave the company because of its poor performance. By the time of his departure, our task is to make sure that does not feel ostracized. Give him confidence. To support him, to make him feel that there is

somewhere a good job for him, that his qualities are suitable. We can help you find the job. Every employee who leaves is still a company representative, and can speak ill or can eulogize.

Conclusions

Performance manager is creative, develop their self-awareness and self-knowledge. It exhibits empathy for others, engage in problem solving, and even applying the famous "golden rule" Never do to others what you would not have them do to you. Very important are maintaining behavior within certain limits, to avoid any discrimination, and communication astute critics remain constructive effect.

Adapting to the personal style of each employee in order to strengthen the good relations, conclude own thinking on the qualities of an efficient manager, and declassified to reach us.

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THE LABOUR MARKET IN ROMANIA AFTER 1990

Paşca Cornelia Serena¹

Abstract:

The highly centrally planned Romanian economy needed to evolve towards liberalization, with well – defined market mechanisms. The passing on from centralized to market economy, the amendment of manufacture systems stressing on the introduction of new technologies, the change of market from the one directed to eastern countries to the one regarding the western ones, opened both to Europe and the USA and even Africa, as well as the fact that Romania joined the EU, required for a restructuring of the labor market. The labor market underwent major changes after 1989, due to privatization and mass restructuring and what followed was major economic imbalance, high unemployment rates that determined both regional and international migration. Romanian economy faces extended difficulties in employing manpower, with various delays on the labor market due to a workforce shortage in certain geographic areas or economic branches, considering the difficult conditions brought about by the economic crisis supplemented by technological progress and population aging.

Key words: labour market, employment, unemployment.

JEL Classification: E24, J21

1. WORKFORCE EMPLOYMENT

Having over 240 million workers (2013), the European Union is the main supplier of goods and services world wide, having its own market and currency. In spite of these, one cannot speak of a common labour market at the European Union level, but only a European employment strategy.

The european society is changing, being influenced by different factors such as, technological progress, trade globalization and population aging. Romania's integration into the European Union, implied, since the pre-adherence period, an adaptaion of the social policies to the policy and values of the European Union.

Until the 1989 Revolution, in Romania social phenomena such as unemployment and poverty, were not recognised, bacuse the whole country was socially ensured, being considered in the same time economically employed. This situation changed dramatically with the tranzition to a market economy which implied massive layoffs, early retirements, severance payments, professional reorientation programs that generated major economic changes, such as the implementation of a social protection system, capable of counteracting the negative economic effects on the population.

The major objectives of employment policy at EU level are increasing the employment degree of labour force, improving job quality and working conditions, as well a worker mobility, information and counseling of workers, preventing poverty and social exclusion, promoting gender equality, for the modernization of the social protection systems. Growing inequalities between different groups of people, due to economic stress, determined an increase in health and social assistance expenses, leading to the emergence of vulnerable groups within society, that are subject to poverty. For the employment objectives to be achived, the authorities, syndicates and individuals need to cooperate, coordinate and harmonize national and European policies.

1.1. Labor force employment at the European Union level

Creating a qualifed, trained and adaptable labour force to respond to economic changes includes the development and promotion of a coordinated strategy with regard to the

¹Phd, Faculty of Economics and Business Administration, Babeş Bolyai University, Cluj Napoca, Romania, e-mail pasca_cornelia@yahoo.com

level of labour employment. The employment policy was several times at the edge of the European policies, being mentioned transiently in the initial treaties.

Labour force employment is a process of training, development, providing necessary resources, rewarding and stimulating workforce, a process that is economic, social, cultural and educational. It is not enough to create any jobs but quality positions must be created, that can allow a decent living to less qualified people that do not have many chances of promotion. The level, structure and efficiency of employment reflect the macroeconomic performance, exploitation of available resources, especially the human ones.

The employment rate between 15 and 64 years old in the EU - 28 was 64.9% in 2014. The highest rate, in the 28 EU countries was recorded in 2008, as 65.7 percentage, after which in the following years a decline was registered due to the economic crisis until 2014, when the average value increased to 64.9% which meant that the situation slightly improved. The decline of 1.7 percentage in 2010 as a result of the economic crisis was surpassed in 2011, when a small rise up to 64.2% was recorded, followed by another decline until 64.1% in 2012 and remaining at the same level, as seen in table no. 1.

Table no.1 Employment rates in EU member states for the age group of 15-64 in 2004 - 2014 (%)

Countries	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EU-28	62.9	63.4	64.3	65.2	65.7	64.4	64.1	64.2	64.1	64.1	64.9
United Kingdom	71.7	71.7	71.6	71.5	71.5	69.9	69.4	69.3	69.9	70.5	71.7
Austria	66.5	67.4	68.6	69.9	70.8	70.3	70.8	71.1	71.4	71.4	71.1
Belgium	60.3	61.1	61.0	62.0	62.4	61.6	62.0	61.9	61.8	61.8	61.9
Bulgaria	54.2	55.8	58.6	61.7	64.0	62.6	59.7	58.4	58.8	59.5	61.0
Czech Republic	64.2	64.8	65.3	66.1	66.6	65.4	65.0	65.7	66.5	67.7	69.0
Cyprus	68.9	68.5	69.6	71.0	70.9	69.0	68.9	67.6	64.6	61.7	62.1
Croatia	54.7	55.0	55.6	57.1	57.8	56.6	54.0	52.4	50.7	49.2	54.6
Denmark	75.7	75.9	77.4	77.0	77.9	75.3	73.3	73.1	72.6	72.5	72.8
Estonia	63.1	64.8	68.4	69.8	70.1	63.8	61.2	65.3	67.1	68.5	69.6
Finland	67.6	68.4	69.3	70.3	71.1	68.7	68.1	69.0	69.4	68.9	68.7
France	63.7	63.7	63.6	64.3	64.8	64.0	64.9	63.8	63.9	64.1	64.3
Germany	65.0	65.5	67.2	69.0	70.1	70.3	71.1	72.5	72.8	73.3	73.8
Greece	59.4	60.1	61.0	61.4	61.9	61.2	59.6	55.6	51.3	49.3	49.4
Ireland	66.3	67.6	68.7	69.2	67.6	61.9	59.6	58.9	58.5	60.5	61.7
Italy	57.6	57.6	58.4	58.7	58.7	57.5	56.9	56.9	56.8	55.6	55.7
Latvia	62.3	63.3	66.3	68.1	68.2	60.3	58.5	60.8	63.0	65.0	66.3
Lithuania	61.6	62.9	63.6	65.0	64.4	59.9	57.6	62.0	62.0	63.7	65.7
Luxemburg	62.5	63.6	63.6	64.2	63.4	65.2	65.2	64.6	65.8	65.7	66.6
Malta	54.0	53.6	53.9	55.0	55.5	55.3	56.2	57.9	59.1	60.8	62.3
Netherlands	73.1	73.2	74.3	76.0	77.2	77.0	74.7	74.2	74.4	73.6	73.1
Poland	51.7	52.8	54.5	57.0	59.2	59.3	58.9	59.3	59.7	60.0	61.7
Countries	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Portugal	67.6	67.3	67.6	67.6	68.0	66.1	65.3	63.8	61.4	60.6	62.6
Romania	57.7	57.6	58.8	58.8	59.0	58.6	60.2	59.3	60.2	60.1	61.0
Slovenia	65.3	66.0	66.6	67.8	68.5	67.5	66.2	64.4	64.1	63.3	63.9
Slovakia	57.0	57.7	59.4	60.7	62.3	60.2	58.8	59.3	59.7	59.9	61.0

Countries	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Spain	61.1	63.3	65.0	65.8	64.5	60.0	58.5	58.0	55.8	54.8	56.0
Sweden	72.1	72.5	73.1	74.2	74.3	72.2	72.1	73.6	73.8	74.4	74.9
Hungary	56.8	56.9	57.4	57.0	56.4	55.0	54.9	55.8	56.7	58.1	61.8

Source: Eurostat ([http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Employment_rate_age_group_15%E2%80%9364,_2004%E2%80%932014_\(%25\)_YB16.png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Employment_rate_age_group_15%E2%80%9364,_2004%E2%80%932014_(%25)_YB16.png))

The employment rates maintained in many EU member states during the crisis, mainly because of the increase in the degree of employment of older workers (between 55 and 64 years old) and women. In 2014, the employment rate in Romania, was of 61%, below the EU-28 average, which was of 64.9%. the highest rate was recorded in Sweden (74.9%), over the EU-28 average. In spite the fact that the employment rate of people between the ages of 15 and 64, was in 2014 below EU average, Romania has an employed population higher than Spain, where in 2014 was at 56%, Italy when it was at 55.7% or Greece, who held the last position at the EU level (49.4%).

1.1. Labour force employment in Romania

In Romania, after 1990, the young population decreased while the older population increased, therefore enhancing the demographic gaps. The total fertility, the index that gives information regarding the replacement of a generation in time, is decreasing in Romania. For this index to reflect the replacement potential of a generation, it must have the value of two new-borns per woman, but in Romania's case, this value is of 1,535 children per woman (World Population Review, 2015), which indicates a tendency for decline with respect to this demographic indicator.

In the last 25 years a drastic decline in the total population of Romania was recorded, from 23 489 361 people in 1990 to 19 511 324 inhabitants in 2015, reaching in 2030, according to forecasts to 15 206 524 people as seen in table no. 2. This decline is due to a reduced fertility rate, negative natural increase, child mortality – which is at the highest rate in the EU – as well emigration, a tendency that will continue through the following 35 years (annex 1). A 22% decline is foreseen by 2050 (World Population Review, 2015) reaching to approximately 15 million inhabitants (15 206 524), considering that the total population, worldwide will rise.

Table no. 2 Romania's population between 1990 – 2050

Years	1990	1995	2000	2005	2010	2015
Population	23489361	22965125	22128139	21407619	20298838	19511324
Forecasts						
	2020	2025	2030	2040	2045	2050
	18847505	18229006	17639269	16448539	15835011	15206524

Source: World Population Review, 2015 (<http://worldpopulationreview.com/countries/romania-population/>)

The birth-rate and death-rate are the factors that influence the demographic rate. Statistics place Romania among the last positions worldwide on the chapter of birth-rate (182 out of 192 countries) and among the first places regarding the death-rate (9 out of 192). As a result, the number of new-borns per day is 2,36 reported to the number of deaths, that is 3,588 per day (World Population Review, 2015).

The life expectancy in Romania is of 75,11 years, among women is 78,67 years, being with 7 years more than men, who have a life expectancy of 71,62 years (World Population Review, 2015). Even though, the life expectancy of men is lower than women, the healthy life years¹ is higher among

¹ Healthy life years (also called disability-free life expectancy) is defined as the number of years that a person is expected to continue to live in a healthy condition. ([http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Healthy_life_years_\(HLY\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Healthy_life_years_(HLY))).

men. The reduced fertility rate and gradual reduction of mortality among the elderly, are the main causes that contribute to population aging in Romania and the EU.

The highest employment rate, in Romania, during 2004 - 2014, was at persons between the ages of 25 and 54, reaching a maximum in 2014, of 77.1% (Figure no. 1), being at a distance of 4.3 percentages in comparison with the national target of 70%, established in the 2020 European Strategy, having a population employment rate, between the ages of 20-64, of 65.7% (2014). At the opposite pole, the lowest employment rate is registred at people between the ages of 15-24, that is the young, their percentage reaching declines in the last ten years, until the minimum recorded value in 2014, of 22.5%, a very low level, that is alarmfull.

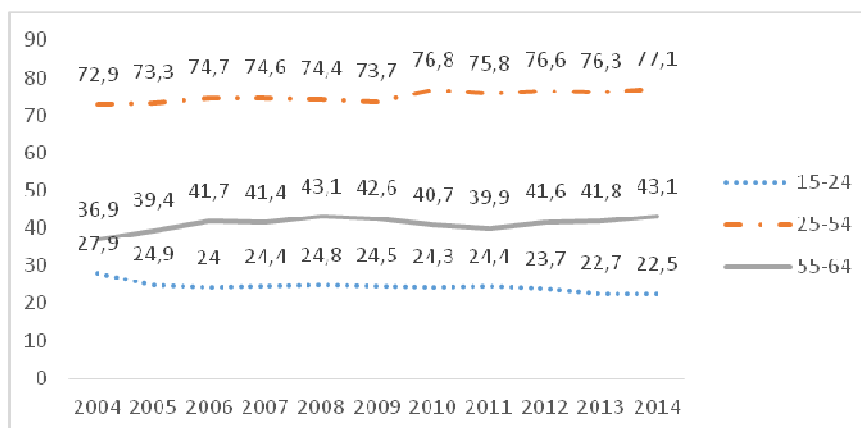


Figure no.1 Employment rate on age groups in Romania during 2004-2014(%)

Source: own editing based on Eurostat data

The population between 15 and 24 years old, that do not work or follow any type of education are called NEETs (“Not in Education, Employment or Training”). On the long term, the consequences of the situation of young people that are not employed, educated or trained are alarming, among which we can mention poverty and social exclusion. In other words, poverty, marginalisation and social exclusion represent the logical consequences of a potential failure of investments in the human capital and education of the young.

Analising the data regarding the evolution of the employment rate of the young and the rate of NEET’s is difficult, since there are few analysis made in this regard. A reduced rate of employment does not necessarily mean that these persons are included in the education system, on the contrary, the most plausible explanation is that a reduced rate of employment of young people and a high number of NEET, indicate that a large number of people are involved in the „underground” economy, doing undeclared work. Another explanation may be that a large number of young people migrated into other EU countries, without declaring this to the authorities (Bălan, 2014).

In rural areas, in the north-east part of Romania, in the roma population, the young, those with low education, the unemployed and the self-employed, poverty has a higher rate than the rest of the country (The World Bank, 2007).

In Romania, work exclusion, education and training are a larger problem than the EU-28, where in 2014, the number of young people with ages between 18-24 is of 16.3% (men: 16% and women: 16.6%) (Table no.3).

Table no.3 Share of young people between 18 and 24 years old that are not in learning, working or training, according to sex (%)

18-24	2010	2011	2012	2013	2014
Total					
UE-28	16,5	16,7	17,1	17,0	16,3
Romania	20,7	21,6	20,8	21,3	21,4
Men					
UE-28	15,9	16,1	16,7	16,7	16,0
Romania	17,7	20,0	18,7	19,3	19,3
Women					
UE-28	17,2	17,3	17,5	17,4	16,6
Romania	23,9	23,3	23,0	23,4	23,7

Source: own editing after Eurostat data

The significant share of these young people that are not employed or in an education or training in Romania, with ages between 18 and 24 years old, especially women where the rate is of with 7.1 percentage points higher than the average of the EU-28 in 2014 (26.7%), draws an alarm sign that must be taken into account since these people are exposed to a high risk of poverty and social exclusion in terms of underperformance in education and due to lack of experience in the work field, without the necessary training in view of improving the economic situation. So, a multidimensional approach is required, that will allow these people to be reintegrated in the education system and offering them jobs.

In order to reduce the number of NEET and increase the degree of employment, a series of measures can be applied, some included in figure no. 2, among which:

1. **Measures to prevent early school abandonment** – this set of measures must be applied before the event happens through the existence of means to sustain them in schools and at home in view of continuous education and/or training.

2. **Measures to reintegrate those who abandoned early the school system** – these measures concern the returning to education and training of the young, by offering support to those who just decided to leave school, and encouraging them to continue their studies or helping them find an alternative to continue their education (ex. training, qualification courses, etc.).

3. **Measures to facilitate the transition from school to job** – the main purpose of these measures is to ease the transition of the young from „to learn to win” and so to sustain completely education and training.

4. **Measures to ensure the employment of the young and measures that help disadvantaged groups on the labour market** – represent measures meant to stop the logistical barriers concerning the hiring by intervening close to the moment of entering the labour field, through finding links between the training and knowledge held by the young and a certain job; as well as removing the barriers that young people face regarding different vulnerabilities on the labour market.



Figure no. 3 Measures to reduce the number of young people that are not in any form of education, employment or training (NEET)

Source: Eurofound

(http://eurofound.europa.eu/sites/default/files/ef_images/emcc/images/neets/neetscompletev2.png)

In the current economy, qualified work is more required than unqualified one. The work demand for people that graduated from a university will rise with 5% from 2003 until 2020, from 18.3% until 23% and the rate of those without professional training will decrease from 12 percentages in 2003 to 9 in 2020 (Grasedieck, 2013). The young people from today's Europe have fewer chances of getting hired or follow training in a company if they do not have at least university studies completed.

The aging process and reduction in the number of inhabitants has as consequences an increase in expenditure in terms of social welfare and healthcare, affecting the internal rate of savings and investments as well as a decrease in Gross Domestic Product (GDP) by diminishing labour's contribution. Achieving the main objective of the Europe 2020 Strategy, to have an employment rate for women and men aged between 20 and 64 years old of 75% is impossible. On medium term, there are several trends that will lead to a continuous increase in employment, in areas such as information technology, green economy or health.

2. MIGRATION OF ROMANIANS

Currently, Romanian immigrants, represent the largest group of immigrants coming from a European country, their number reaching almost 3 million people. According to the National Human Development Report in Romania (UNDP, 2007) one in five families in Romania had a person working abroad. Before the fall of communism in 1989, Romanian emigrants fled the country in order to escape from the persecutions they faced as a result of the communist political regime that transgressed fundamental rights related to the free circulation of people, salary rights, freedom of speech, etc. Individuals emigrated on ethnical grounds, most of them being Germans, Hungarians or Jews and the destination countries were Germany, Hungary, Israel and the USA. No matter the method that Romanians choose to leave abroad, it must be legal, in order to protect migrants from possible inhuman treatment that they might be subject to.

In some regions of Romania, permanent or temporary massive migration, created a labor shortage causing a series of social problems. Initiating new business or investment in the local economy may contribute to the development of the business environment and a local sustainable development. Next to this, keeping specialists in Romania and attracting new ones may lead to a balance of the internal labour market.

Following the EU enlargement to 27 Member States in 2007, it has considerably increased the geographical area where it can exercise free movement of persons although only a few of the old Member States have allowed free access to the labor market. From the 1st of January 2007, Romania became a EU member state, being in return a destination country for illegal migration from people outside the EU, or, even a transit country, being at the eastern border of the EU. Asia, the migrant vessel of our century, represents a challenge because the legal and illegal migration routes are already formed and quite flexible. The transit migration, through Central and Eastern Europe entering Romania, consists of an increasing number of illegal emigrants, out of which some correspond to the asylum criteria, but who, from different reasons do not ask and prefer to transit further, towards the European Union (Constantin, 2004).

The international data regarding the number of Romanian migrants differs significantly. For example, for 2013, the International Migration Organisation reported a number of 2 769 053 Romanian emigrants (I.O.M), representing 12.17% of the total country's population. The World Bank reported a number of 3 430 500 people that left Romania (World Bank, 2016), which represents 17.2 % of the total population (19 900 000) and Eurostat reported a number of 1 536 000 immigrants from Romania out of a total population of 19 947 300, representing 7.7%.

The migration of qualified persons represents an important and growing factor in the last decade (Arslan et al. 2014; Kvedaraitė et al. 2015). The increase in the flow of emigrants from

developing countries into developed ones, as it is Romania's case, is associated with the unbalance between the workforce offer and demand and with the uneven economic development of these countries. Unemployment, salary and lifestyle differences that appear in the economies of different countries, determine the migration of an increased number of young people, especially people with higher education (Kvedaraite et al., 2015). Next to the economic factors that determine migration such as GDP per inhabitant, other aspects were determined that are equally important such as, the existence of networks with regard to migration (Grossman, 2010; Samet, 2014) as well as the prestige of education institutions (Fossland, 2013). There are two types of networks effects: one that encourages commerce, direct foreign investments and technological development, and networks that encourage migration. Educated migrants have an active role in creating these networks within business networks, therefore developing the premises to attract direct foreign investments (Suditu, 2013).

Romania suffered major losses of human intelligence starting from the 90's, when an alarming number of specialists, such as engineers, scientists, researchers, left in countries such as the USA, United Kingdom, France, Ireland and Germany. Most specialists left because of scholarships and substantial salary packages promised as well as achieving a prestigious social status. The substantial budget reduction for research and development to below 1% from the GDP as well as the reduced development of private research institutes, determined the departure in large numbers of researchers, teachers, doctors. The most important fields of activity of migrants are information, law and science.

Because of the fact that from our country, a significant number of qualified people left, it is mandatory to apply national policies to attract specialists in Romania through: stimulating businesses by assistance in starting a new project; stimulating the young in view of starting new businesses; stimulating innovation; developing research. All these measures may lead to balancing the internal labour market with regard to the demand and offer of young and highly qualified workforce (Boboc & Tudose, 2011).

Conclusions

The population structure in our country is not balanced, it is old, even though the life expectancy increased, it does not compensate for the number of young people of working age, which is in a continuous decline, the inactivity rates being high, the life standard being low, emigration reaching alarming proportions, are all the reasons in increasing the employment of the workforce, especially among young people, women and disadvantaged persons.

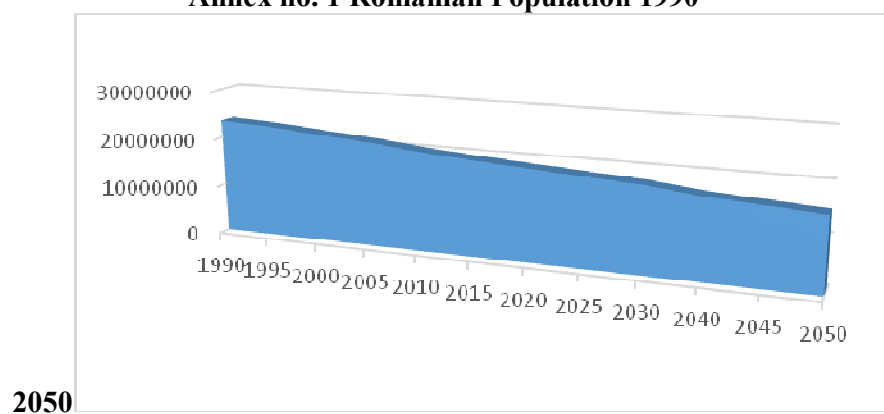
The economic performances and innovation capacity are the concepts of today's society. It is well known that highly trained persons have found quickly a job, anywhere and in any economic context, whether it is precarious or better, so educating the young at the highest level is imposed, in order to benefit from trainings and the best employment opportunities. Unfortunately, every year, well trained persons leave Romania, a phenomena that is called "brain drain", being attracted by much higher salaries they receive in other countries, as well as better working and living conditions.

The sharp decrease in Romania's total population especially during the period 2000-2014, high poverty levels and social exclusion in certain areas of the country, low participation in the labour market, emigration of qualified people, unsatisfactory school results, are all cause for concern for the labour market, therefore necessitating drastic improvements.

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Annex no. 1 Romanian Population 1990 –



2050

Source: own editing based on World Population Review, 2015
(<http://worldpopulationreview.com/countries/romania-population>)

LABOUR MARKET – CONCEPTS, FUNCTIONS, FEATURES, PATTERNS

Pașca Cornelia Serena¹

Abstract:

In an ever changing world, where economic growth interchanges with crisis, society and economy strategic resource is represented by the human resource (manpower or workforce). This article aims to tackle the presentation of a set of conceptual specifications that would reflect the difference between the labor market and the workforce related market concepts, analyzing the main functions and features of the labor market, as well as the presentation of main training and operational patterns of such market.

Keywords: *labour market, concepts, features, functions, models*

JEL Classification: B40, J01

1. THE CONCEPTUALIZATION OF THE LABOUR AND WORKFORCE MARKET

There is no universally accepted opinion regarding the use of one of the two phrases; however one has to mention the fact that the use of the term "market" does not mean that labour is behaving like another commodity or service.

A simple definition of the labour market is given by Derek Bosworth, Peter Dawkins and Thorsten Stromback (1996) who state that the labour market is the place where supply and demand meet, working to determine the price and quantity of the work performed. Michel Didier (1997) defines the market as a means of communication through which sellers and buyers will inform each other about what they have, what they need and the prices that they ask or propose, before closing the transaction. This definition has great applicability on the labour market.

The labour market is the market in which the amount of services that correspond to tasks well established in the job description, are offered for a price or remuneration (Boeri, Van Ours, 2013), that is, to exist on the labour market it is necessary for the work be rewarded.

The labour market is and has to be regulated. In the dictionary of labour law (1997), Beligrădeanu and Stefanescu (1997) define the labour market as "the confrontation between the supply and demand of labour in a given time frame and a geographic area that is usually completed through employment (with an individual employment contract). The worker (employee) means the person exerts his/hers activity based on an employment contract in a public or private company or institution, receiving in exchange a payment.

On the labour market, companies act like buyers on the one hand, but also as bidders with regard to payment, working conditions, and individuals act as sellers, rendering available to employers their knowledge, skills and experience gained. The labour market operates on the principle of competition, the workers competing against each other in view of obtaining or retaining a position. On the other hand, employers compete to attract and maintain within the organizations, the employees that are efficient in the development of the activity and as a result make profit.

Authors like Steliana Pert (1990) or Nita Dobrotă (1997) consider that the labour market is the economic space in which equity holders trade freely, as buyers (the demand), and the owners of the human resource (the supply), as sellers, in which the price mechanism of the work, the real wage, the free competition between economic operators and other specific mechanisms, adjust the labour supply and demand. First and foremost, employees are not an

¹ Phd, Faculty of Economics and Business Administration, Babeș Bolyai University, Cluj Napoca, Romania, e-mail pasca_cornelia@yahoo.com

abstract production factor, but human beings with families, desires and needs and only then, labour force (Samuelson, Nordhaus, 2001).

The labour market is one of the main components of the market economy along with the goods and capital market. From an economic perspective the labour market is one of the components of the production forces (Zamfir & Vlăsceanu, 1993).

The workforce was and is the "living" factor that gives meaning to the economic life and is the main component of production factors, by whose direct or indirect intervention, all economic activities become possible. In statistical terms, the workforce is represented by the employed population (those working and those actively seeking work) to which the unemployed are added (Schiller, 1983).

The result of the buying and selling act is represented by the workforce and not the work itself. Work is just a "consequence" of applying the workforce in production (Eatwel et.al., 1987) which is delivered by the worker and bought by the employer.

Among the arguments the authors advocating for the term of workforce market (Adumitrăcesei & Niculescu, 1995) we can state that the human factor, who owns the qualification, experience, competence and capacity for working, is the one that constitutes the real object of the transaction and not the salary which is only a means of rewarding the work. Another argument is that in order to obtain goods and services, employers use the workforce and not the work itself. This workforce is different from person to person, each having an efficiency, productivity and different costs. Moreover the social protection is performed with respect to the workforce.

It is necessary to distinguish between the work and the individual, that is between what arises from the work process (goods and services) and the individual who possess the skills and knowledge they provide to produce those goods and services.

In specialised literature, the labour market is defined from two different points of view. The first is that the work is like any other good or service through which people sell their labour in exchange for wages while the second appreciates the work as a commodity different from the rest of the goods (goods / services) referring rather to the supply of labour available on the labour market (Hudson, 2000).

In order for the workforce to become a cargo the following conditions must be met (Popescu, 2002):

- a) the possibility to be changed with another commodity through and exchange contract;
- b) giving up the ownership;
- c) storing in time.

Given that the three conditions cannot be fulfilled simultaneously, we will not treat labour as a commodity. Although opinions are divided and because there are still many contradictions in using only one of the two definitions, it seems that the term labour market was often used when the human being was considered a factor of production, because the work was seen as another good. But labour is not a commodity as we have argued above, this is an activity performed by individual, and what is capitalised is the workforce.

2. THE FUNCTIONS, FEATURES, CHARACTERISTICS AND MECHANISMS OF THE LABOUR MARKET

Many authors including Simona Ghita (2005), Marian Chivu (2007), Andrei Cojuhari & Liuba Dorofeev (2014) believe that the labour market presents a complex content, highlighted by the functions that it performs in the market economy, functions of economic, social and educational nature, consisting of:

- *distribution function of employment* on sectors, industries, professions (occupations), qualifications, territorial areas in line with volume and structure of the labour demand;

- *training function and revenue sharing* of economic operators; through this function the labour remuneration is achieved;
- *social function*; through the labour market the supply and demand of labour meet, the improvement of labour conditions, the humanization of labour, social protection of the unemployed and their retraining are done;
- *educational and training function*; this feature provides the information necessary for education, vocational training, retraining and reintegration of labour, the accumulation of work experience;
- *political function*; the feature that reinforces social and political stability.

The labour market ensures the balance between the needs for labour resources of the national economy and the possibilities for their coverage. It features a self-regulation mechanism, which in principle is the same on all markets. Common elements of this mechanism are supply, demand and price.

Having as main transaction objective the labour factor, the labour market by its structure and operation is detached from other markets through specific features:

- a) the labour market is **segmented**. Arthur Cecil Pigou, a classical economist sought to explain the discrepancies between labour supply and demand since the 1940s, saying that the labour market is segmented due to restricted mobility within the industry and between industries (Leontaridi, 1998). In the broadest sense, the labour market is composed of three "levels": primary, secondary and tertiary (the tertiary contains undeclared work, determined by the evolution of the underground economy). The first level includes the workers who benefited from a higher education and training, where incomes and employment stability are higher and where there are real professional growth opportunities (Reich et.al. 1973). Large companies are especially found in this sector, companies that promote individuals, their career and salary, levels are determined largely by their evolution on the "internal markets". Doeringer and Piore (1971) and Saint-Paul (1996) consider this term as a manner of organizing the labour, that consists of filling vacancies resorting to internal promotions rather than hiring new employees. Such an explanation leads to considering each sector as a group of companies, while primary / secondary segmentation can be found even within the economic entity. In the secondary sector we find a completely different situation, namely high staff turnover, low income, low level of skills of employees, without many chances of promotion, a place where in most cases there are few professional growth prospects. Due to this segmentation, on the secondary market, employees have low wages and wage differences are due to minimal access to education and training (Bae, 2014). Structuring the market in two or more levels, make labour mobility very high within each sector, but less between them due to a lack of homogeneity in employment conditions and remuneration. This segmentation of the labour market between jobs that are "good", well paid and "bad", low paid, not only deepen the gap between the two sectors but even determine employees in the secondary sector to resort to illegal labour to get higher income, even if on the medium and long term the losses are higher than current earnings. Authors like Glen Cain (1976), Bulow and Summers (1985) proposed a segmentation of the labour market in three dimensions where the primary sector is divided into two parts referring to an upper part and a «secondary» part, belonging to the primary sector. The upper part refers to persons on top of the hierarchy that have autonomy, innovation and decision-making capacities, and the secondary refers to people who need medium-level qualifications, with relatively high levels of pay and promotion opportunities (Jaoul-Grammar, 2007). The secondary sector refers to low skilled and low paid people, with little chance of promotion. Many studies have divided the labour market in two or more distinct

segments. Segmentation can refer to the characteristics of a firm or an economic entity, occupation, work components, characteristics of the individual or combinations between them (Fichtenbaum, 2006).

To a lesser extent, labour market segmentation can be seen both in terms of labour supply and labour demand.

In terms of labour supply, the segmentation can be made by:

- gender, differentiated between men and women;
- age groups of working age (15-64 years, 16-65 years, 20-65 years, etc.);
- territorial - urban, rural;
- professional categories;
- qualification degrees;
- level of education (primary, secondary, tertiary).

In terms of demand for labour following segmentation criteria may be encountered:

- according to specialities or their chosen professions;
- depending on the jurisdiction - urban, rural, cities, towns and communes;
- depending on the working schedule - full or part time;
- depending on the duration of the contract - indefinite or fixed;
- depending on the location of the labour - inside or outside the company.

- b) the labour market is **rigid and inflexible**. The labour market rigidity is natural, as a result of geographical evolution, lifestyle, professional training, as well as by legal and institutional aspects that are determined by gaps within these systems. The differences between salaries exist not only between companies / industries but also between various regions of the country. These rigidities are met especially where unemployment and inflation are high. The minimum wage could also be a factor of the rigidity in the labour market because it leaves no room for a fast adjustment to market conditions (Serban & Aceleanu, 2015). For employers, the obligation of giving this minimum wage takes into consideration the need to hire new employees reported to the level of productivity. If the employee's productivity level is below the minimum wage, the employer may decide to dismiss or not hire new personnel. If the minimum wage is set at a high level, the negative consequences related to employment are higher for people with low productivity such as young people without experience or education, who are somewhat directly excluded from the workforce market, being forced to perform work without legal forms. If the labour market would be a flexible and dynamic one, employees would be able to change jobs quickly enough, therefore creating high quality working places, leaving aside the jobs that are not so productive. Moreover, on such a market, companies would be encouraged to create better paid jobs that would result in a growth of the number of employees. Flexibility means promoting employment and accepting atypical positions: part-time jobs (reduced working hours), jobs with variable work schedule, working at home, self-employment etc., employment with temporary contracts, occasional contracts, contracts per project or fixed contracts. The need for flexibility is determined by increasing competition on a national level, but mostly internationally. Due to the use of flexible labour there is an increase in the workforce efficiency by reducing labour costs but mostly balancing supply and demand of labour.
- c) the labour market is a **secondary market** from other markets (capital market, goods and services market), receiving the influences of both, being constantly linked with them, anticipating trends in the labour supply and demand, the reaction of economic operators, receiving and transmitting, in return, medium and long term signals and determining effects that are found in all social-economic sectors. The structure and volume of the workforce supply are dependent on the demand for labour, just as the

demand for labour is dependent on the demand of goods and services, and how they are produced.

- d) the labour market is **regulated**; this feature results from the particularity of the workforce as well as from the requirement to ensure employee protection, control the loyal competition through trade unions, allowing the grouping of entrepreneurs who hire wage labour. The labour market legislation must be constantly improved to fight unemployment and ensure the better management of population employment;
- e) it is a **contractual and participatory** market. The contract and negotiations between employers and employees give the instruments for the mechanism of regulating supply and demand of labour with quantitative, qualitative and structural aspects (Cojuhari & Dorofeev, 2014). The relations between sellers and buyers are governed by laws and agreements between representatives of employees, employers and public power. Education, training, demographic factors determine the value of labour. The labour market is very "alive" and in a constant change.
- f) the labour market is an **administrative market** because at this level companies manage their available resources according to the demand for necessary goods and services, that involves the workforce and considering the personnel wage plan (Ghişoiu, 2000);
- g) the labour market has a **multidimensional** character given by the geographic, economic, educational and social scale. *The geographical scale* is given by the profile of the available workforce, population on age categories and the working population. *The economic scale* refers to the population distribution by areas of activity, professions, the public participation in the economic process, the costs implied by the inactivity of the population. *The educational scale* refers to average duration of learning, the population level of training, the number of people that are in a particular form of learning. *The social scale* refer to the costs of social protection, reconversion or insertion of employees on the labour market;
- h) the labour market is **inconsistent**, workers having different levels of training, education, qualification, coming from different geographical areas, of different ages, genders, aspirations and standards;
- i) it is an **imperfect** market - in the contemporary economy, the labour market is not perfectly competitive and it probably never was. This was demonstrated by Kaufman, in his 2007 work, stating that "we have demonstrated that a perfectly competitive labour market is impossible" (Kaufman, 2007a). The price of labour, which is the wage, is not formed in relation with the supply and demand on the market, as it would be natural, but is determined by factors such as the state of the national and international economies, state intervention, the bargaining power of trade unions or patronage intervention (Ghişoiu 2000). It is very important for the performance of the labour market, to be close to the conditions of the perfect competition. The state could intervene to orient the labour market as close to perfect competition as possible or to limit the negative trends of imperfect competition. Most often trade unions are pressuring companies to increase wages regardless of the financial situation of the companies or the state of national economy, taken as a whole, which leads to low economic efficiency of companies and rising inflation (Ghişoiu, 2000).

Alfred Marshall presents his "Principles of Economics" (1997) the four particular aspects of the workforce:

- perishable in time, so it cannot be stored, preserved;
- cannot be borrowed;
- does not react immediately to changes in the market conditions, the population requiring a longer period of time to adjust in terms of size and structure;

- limited nature of the negotiations, which confronts a privileged position of the employer (who can choose the optimal combination of factors of production) and a less advantageous position of the employee who has a narrower range of resources and choices.

Table no.1 summarizes the features, characteristics and particularities of the labour market.

Table no. 1. Features, characteristics and particularities of the labour market

FEATURES	CHARACTERISTICS	PARTICULARITIES
The distribution of employment by sectors, branches, qualifications, territory.	Segmented.	Cannot be stored, preserved.
Training and economic operators income assignment.	Rigid and inflexible.	Cannot be borrowed.
Social (working conditions).	Interdependent.	Does not react immediately to changes in the market conditions.
Educational (training, vocational training, requalification, reinsertion on the labor market).	Regulated	The privileged position of the employer vs the employee.
Political.	Contractual and participatory.	
	Administrative.	
	Multidimensional.	
	Inconsistent.	
	Imperfect.	

Source: own processing based on literature review

2. MODELS OF LABOUR MARKET

The development and performance of the labour market is based on several models (Cojuhari & Dorofeev, 2014), which we will present in tabel no.2:

The first is the **classic** model (Adam Smith, Jean Baptiste Say, John Stuart Mill) and is based on the full employment of labour and the overall balance between supply and demand for labour. In the opinion of the above mentioned authors, unemployment is merely a temporary consequence of the labour market and there is only natural unemployment, and if at some point there are gaps between the supply and demand they are regulated through the increase of wages. These ideas are supported by followers of the Supply-side Economics current (The economics of supply) such as Arthur Laffer (2010) or George Gilder (2012).

The devotees of the **neoclassical** model, Leon Walras (1954), Alfred Marshall (1920), Vilfredo Frederico Pareto (1897) argue that like the other markets, the labour market has as a regulating factor, the price, that is the salary, the balance between supply and demand of labour being achieved through wages, therefore unemployment is nearly inexistent. In a competitive market, at the base of the neoclassical model of the labour market, stands the relationship between the wage and degree of occupancy, the latter being determined by the demand and supply of labour (Kaufman, 2007b).

Another model is the **Keynesian** model named after his father, John Maynard Keynes (1936), which in contradiction with the neoclassical model, argues that the labour market is unbalanced. Keynes and his followers believe that the price of labour or the wage is not flexible, but is fixed and there may be an overall balance in the case of underusing the labour, leading to its underemployment, therefore requiring state intervention to realise full

employment. So it is the state that sets the necessary workforce through economic and financial levers at its disposal.

The **monetary model** sustained by Milton Friedman (in 1960), Karl Brunner and Allan Meltzer (1971) starts from the Keynesian model according to which the wage is fixed and is moving in one direction, upwards (Woodford, 1999). Monetarists together with Edmund Phelps introduced in 1960 the concept of natural unemployment level, where monetary policy can only replace on short-term the unemployment that is under the natural rate. The budget impulses can influence revenues, and as a result the production or degree of occupation of labour, but only on the short-term. In Friedman's view, the existence of a demand or oversupply in the labour market does not depend on the nominal wages but on the real wages, as traders being rational, adjust wages with prices foreseen or anticipated (Dobrescu et. al., 2011). Factors such as the establishment of a minimum wage level by the state, lack of information about vacancies and supply of labour, trade unions tough position, contributes to the imbalance of the labour market. The solution, according to monetarists is the use of monetary policy lending. In the mid 70's monetarism became the new orthodoxy of macroeconomics (Dobrescu et. al., 2011).

An important model is the **unbalanced labour market**, created at the end of the 70's by Stanley Fisher and John B. Taylor, where the existence of collective labour contracts determines the establishment of nominal wage for employment on the long term. They found that monetary policy could have long-lasting effects even after adjusting prices and wages.

The **efficiency wages model** is based on the notion that there is a relationship between relative wage levels and worker productivity (Cappelli & Chauvin, 1999), that makes workers to be paid at levels that maximize productivity and it refers to the selection process and stimulating employee (Snowdon, & Vane, 2005). Carl Saphiro and Joseph Stiglitz created a model in the 80's in which employees tend to avoid working, except for the case in which companies monitor workers' effort and threaten employees with unemployment (Snowdon, & Vane, 2005).

Table no. 2 The main models of formation and functioning of labour market

Model	Authors	Features
Clasic	A.Smith, J.B. Say, J. S. Mill	- full empolyment - perfect balance between supply and demand - natural or involuntary unemployment
Neoclastic	L. Walras, A. Marshall, V. Pareto	- perfect balance between supply and demand through wages - unemployment almost inexistent
Keynesian	J. M. Keynes	- fixed salary - the state determines the neccesary workforce
Monetary	M. Friedman, K. Brunner, A. Meltzer, E. Phelps	- fixed salary - monetary policy lending
Unbalanced labour market	S.Fisher, J.Taylor	- the existence of collective agreements in order to establish nominal wage
Efficiency wages	C. Saphiro and J. Stiglitz	- workers be paid at levels that maximize productivity - the need of selection and stimulation processes of employees

Source: own processing based on literature review

The main models and their manifestation in the labour market are the classical, neoclassical, the Keynesian, monetary, unbalanced labour market and efficiency wages.

3. CONCLUSIONS

The labour market operates by confronting the supply and demand of labour and it works in every country, on a regional and global scale. Any activity that is initiated or exists in society creates the need for labour.

The labour market operates on the same mechanism as the market of any goods or services. Being the main component of the market its factors, structures and principles are similar to those of the other components, the natural resources market and capital market.

Although there is no opinion widely accepted with respect of the use of one of the two phrases labour market or workforce market, it is necessary to distinguish between work and individual and between what arises from the work process (goods and services) and the individual who possesses the skills and knowledge they provide to produce those goods and services.

From the analysis performed, we concluded that the labour market has a high degree of rigidity and inflexibility, the segmentation of this market takes place both at a general level, the segmentation being done on the main sectors of the economy and to a lesser extent from the point of view of the supply of and demand of labour, there is a real need to regulate this market, being both a contractual and participatory market, with a multidimensional character due to its geographic, economic, educational and social scales.

The classic, neoclassical, Keynesian, monetarist, unbalanced labour market and the salary efficiency models caused the formation and functioning of the labour market.

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IMPORTANT BENCHMARKS IN THE CREATIVITY AND INNOVATION OF A BUSINESS MODEL WILHELM LAYHER GMBH & CO.KG COMPANY

Mihaela, Radu¹

Abstract

Creativity and innovation play an essential part in organization life, being a condition for success. Moreover, when operational conflicts are well managed, organizations may focus on finding new, better and more creative solutions to persevere in becoming a model.

On the ground of a fiercer competitiveness and of the significant global challenges, the innovating practices and the creative solutions represent a springboard towards the economic growth and the welfare of the company.

I have chosen, as business model, the enterprise Wilhelm Layher GmbH & Co. KG, the biggest producer of scaffold systems in the world, because: it has a historical background, combines harmoniously and successfully the experience, talent, creativity of three generations and, more importantly, it has a future. Applying an integrated management, a strategic vision, Layher is expanding in a very calculated way on 5 continents and in over 35 countries, among which Romania as well. What started in 1945 with the manufacturing of farming tools made of wood has developed and has become a company with corporate philosophy, giving new vital pulses to the finished product, which is more and more modern, mobile and efficient.

Layher is a business model, an innovative genius, with products of high quality corresponding to the highly increasing requirements of the clients. By means of integrated solutions, Layher makes higher success possible with only 1,500 employees who are extremely qualified and dedicated, chosen from various schools, exigently trained in the company, to be able to permanently answer the required standards.

Key words: *business model, integrated management, creativity, innovation.*

JEL Classification: *O310 Innovation and Invention: Processes and Incentives*

1. Highlights of creativity and innovation in the history of Layher Company

I chose this company to illustrate and justify innovation and creativity applied, **LAYHER (Wilhelm Layher GmbH & Co. KG)**, was founded in 1945, perhaps not by chance, at the end of the Second World War, when reborn European economies, whether were victors or vanquished. Germany was defeated, divided, but it was reborn later in masterly, unimaginable. The production location of Layher company was established in Germany in Gueglingen-Eibensbach.

The **LAYHER Company** was founded by Wilhelm Layher and from then Layher name is found for more than 70 years as a synonym for scaffolding systems of the highest quality at reasonable prices, combined with a wide range of services and a stable and lasting partnership. Permanent objective of the company is **to solve problems intelligently** so that improved working conditions, customers are satisfied and the daily activity is an effective one. Being a partner with extensive experience in international markets, Layher employees are continuously available in the exchange of experience in the interest of the beneficiaries.

Corporate philosophy led certainly remarkable achievements over three generations, until now, we are at the birth of the 4th generation, with the title of the largest producer of scaffolding systems around the world, especially work scaffolding and protection. We mention the Allround Scaffolding, SpeedyScaf and other production lines: Systems and Event Protection, Mobile towers, Stairs.

It is important to note that there are over 1500 employees worldwide, headquartered in Gueglingen, 800-Eibensbach and 700 in the **37 German subsidiaries** and distribution centers in countries around the world.

¹ PhD Student, VALAHIA University of Târgoviște, mihaela.radu@layher.com

Let us follow a **few milestones in creativity and innovation**:

1945 - Wilhelm Layher founds the company in Eibensbach for the manufacture of **wood products** for the agricultural sector;

1948 - begin production of scaffolding ladders;

1951 - the first has opened offices in Frankfurt, Hamburg, Dusseldorf and Nuremberg;

1953 - begins production of **hollow section steel ladders**;

1957 - Mobile Towers is performed first, the **prototype of all mobile scaffolds with no screw connections**;

1965 – Appears Layher brand SpeedyScaf, **steel and aluminum**, revolutionizing the facades: assembly and disassembly much faster, safer;

Since 1970 there are new markets: first branches are established in the Netherlands, France and Switzerland;

1974 - Allround scaffolding is realized, **the invention unprecedented in steel and aluminum**.

Innovative method of connection having 8 pockets allow for a level unsurpassed versatility for over 40 years, until today. Allround scaffolding provides new areas of application in industry, for example, in hangars and shipyards, refineries, petrochemical and chemical factories or power plants.

1978 - the year of **safe and comfortable access towers** with Allround scaffolding and SpeedyScaf;

1984 – is made **the coffered roof** and protection against weather and environmental influences;

1985 - System-Event, **scenes and stands**, expand its product range and introduce new and fast connection technology;

1998 - Protect System, is a new coating that meets the highest requirements regarding the **protection and aesthetics**;

1999 - develops protection system, appear roofs and Keder Hall, setting a **new standard for light protection** against the weather;

2006 - the year of slightly coffered roof, independent system, **high versatility**, translucency and easy solution roof;

2010 - appears Allround support system (Shoring) TG 60, meaning three additional Allround scaffolding components necessary for safe assembly - **high load capacity**, easy assembly and disassembly, varying in height and length;

2011 - Cheder XL roof, which is a further development of Keder Roof **opening up to 40 m**;

2015 - 2016 - Layher scaffolding system develops in the civil and bridges.

Layher's strong points are: the existence of a genuine **logistics Center**, a **Department of material reception** and a systematic **Inspection Department** of the raw material. At the same time, through a rigorous and generous storage ensures availability of excellent delivery.

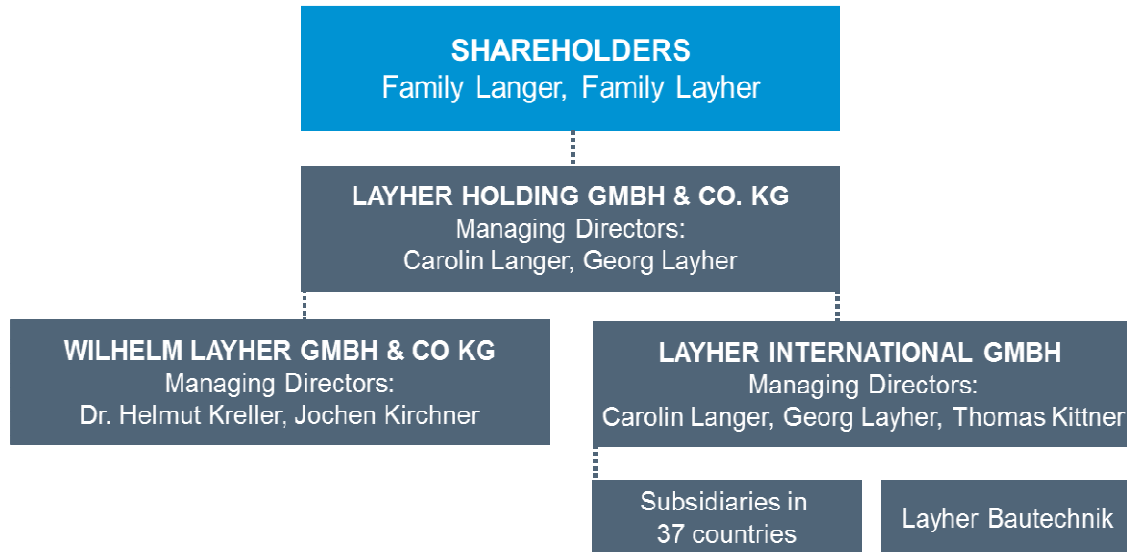
Production decks of steel, aluminum and wood is ensured by a **high automation**, continuity in production and a **rigorous control of quality**.

Another plus is provided by the administration concentration: Headquarters Eibensbach - 250,000 square meters area factory, 110,000 square meters of production space indoors and storage, and Factory II Gueglingen: 68,000 square meters area factory, 32,000 square meters of production space indoors and storage, to present two illustrative examples, to which we add the development, production and logistics location Gueglingen-Eibensbach, meaning short distances, short time reaction plus Layher quality.

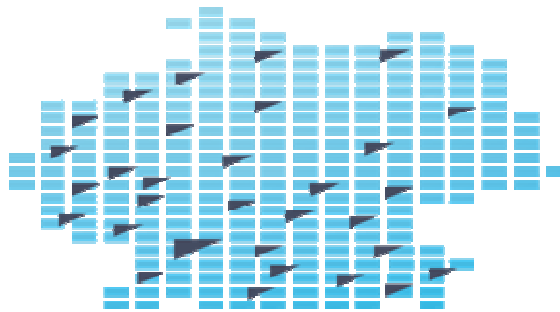
2. LAYHER Corporate Philosophy

Unlimited focusing on the client is the philosophy essence of Layher Corporate, plus: more features, more speed, high level of availability of the material, efficient delivery service, more safety, maximum quality, accuracy, continuity and sustainability - confirmed by

independent certifications, testing and approvals around the world, more proximity through personal counseling in subsidiaries, more simplicity in economic scaffold system and field tested with a range of products expanded by applying consistent currency: less into the future through continuous innovation the products and new business areas. An eloquent on efficient scheme is applied in the figure below (**Fig.1** Scheme of the Company's management Layher):



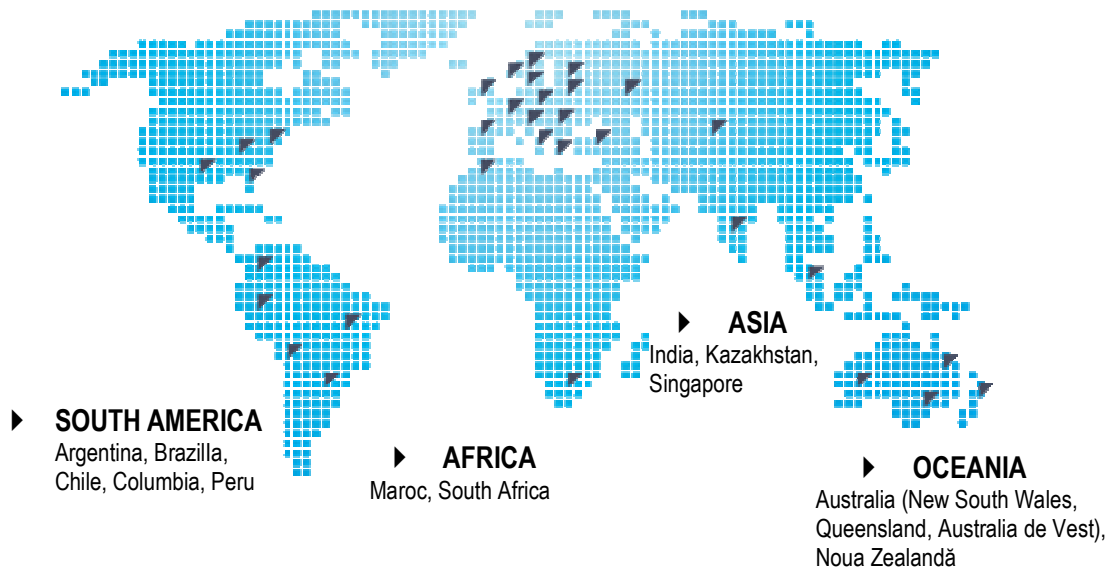
LAYHER in Germany has 31 service centers for rapid availability of materials, 32 local sales representatives for advice and personal counseling to clients (**Fig.nr.2** distribution of business area - Layher Germany).



LAYHER WORLDWIDE means fully owned subsidiaries in 37 countries and more than 50 additional sales partners worldwide, as seen in the figure below (**Fig.nr.3** distribution of the business area – Layher worldwide):

► **NORTH AMERICA**
USA (Alabama, Florida, Maryland, Texas)

► **EUROPE**
Austria, Belgium, Bulgaria, France, Greece, Hungary, Italy, Lithuania, Netherlands, Norway, Poland, Russia, Serbia, Spain, Sweden, Switzerland, Turkey, United Kingdom



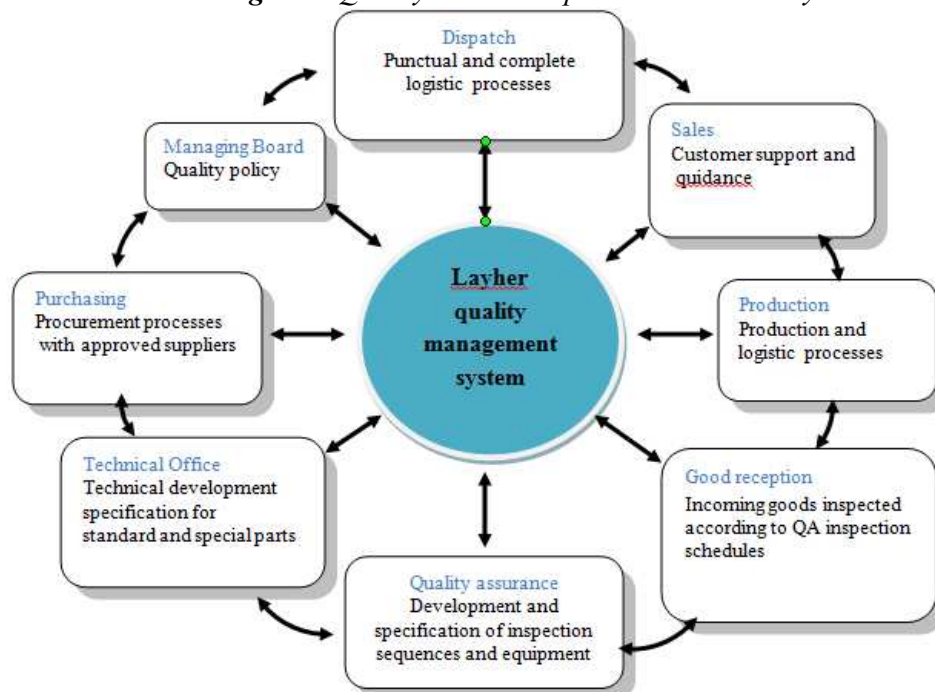
3. The quality management system of Layher

The high quality standard of Layher products is also based on an ingenious system of quality management that begins with precise definition of the necessary materials and quality checks.

Through the acquisition of materials are selected only those suppliers that meet high quality standards of Layher. All materials used for series production are therefore very demanding type undergo tests before being approved. Suppliers are audited at regular intervals to ensure proper implementation of all requirements.

An evaluation program of computer-aided providers analyze and visualize any differences in the quality management system suppliers. Graphical representation of the quality management system: policies, processes, relationships, testing, specifications, etc., in the figure below.

Figure 4 Quality assurance processes within Layher



Continuous and optimized verification of incoming goods with a software inspection based on the vast experience of workers and close connections with suppliers, ensures consistently high quality of raw materials and components. The latest design concepts and standard and special product upgrades by Technical Bureau are incorporated continuously in production after testing and a comprehensive inspection.

It matters infinitely the exchange of views with the customers, because it's the only way to adapt to the stringent requirements of their products and therefore are optimized.

Some conclusions

I presented a business model where success is due to a performant management, in composition of which they find the rightful place, creativity and innovation. Only like this, justifies Layher efficiency, both in its products and in some impressive production figures. To process annually more than 21 million m pipes, meaning the flight distance from Frankfurt to Rio de Janeiro- roundtrip, or more than halfway around the Earth, or more than 1,700,000 m² scaffold bridges for 275 football fields, it means more than notable performance, it means a business model.

How important it is to have tradition, to be able to develop what great grandfather, grandfather and father have put in every level of the business and to realize the joy of transmission to descendants the message of pride for the brand, controlled welfare, generated by hard work and responsibility for the maintenance and development of what we inherited.

Becoming a model is not a favor but a great obligation. On the background of always fiercer competitiveness and of the important global challenges, innovative practices and creative solutions are a springboard to the growth and well-being company, and that means integrated management, strategic vision, a corporate philosophy, it means new vital inputs into finished products, all more modern, mobile and efficient.

Layher is a business model, a innovative genius, with high quality products corresponding to the increasing demands of customers. Looking into the future, using integrated solutions, Layher make possible a superior performance on at least 5, even 10 years ahead, continuously raising standards.

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MANAGERIAL PRACTICES VERSUS THE ATTITUDES AND BEHAVIORS OF EMPLOYEES

Roxana Lucia Mihai¹,
Cătălin Georgian Mihai²

Abstract:

Relationship's represents an integrated part of our lives as human beings and will be always part of our own conscience. Their objectivity will be as much as possible uncertain. Recent studies of the labor market shows that one of the reasons why the employees' are leaving the company is the direct relationship with their upper management level. Efficient management communication helps to better connect with the employee, to create positive relationships but also frame behavior and attitude. Managers represents the organizations and their way of communication can influence the employee behavior. Despite the fact that relationships were considered pillars of management research for decades, the meanings of communications between the management and the employee became more and more essential. The organizations can train supervisors to develop set of good practice ways and tools, to communicate with people, to implement flexible labor contracts, to improve job designs, to involve the employee into important decision taking and to offer important and provocative tasks, having as aim to create the frame for the employee to reach the highest potential and to become an integrated part of their organization

Keywords: corporate communications, employee relations, attitudes of management, employee engagement

JEL Classification: J5, M120

Introduction

There is a change in the way managers communicate with the employees'. In the 50's the companies have putted a lot of effort into reduction of birocracy. From the end of 50's until the 80's the efforts moved into the area of motivation and people involvement to reach employee highest potential. The end of 80's beginning of 90's the organizations have started to consider people as their biggest plus, as they became more and more multinational. But know, this reality is again upraised to a new level. Organizations have started to recognize the employee's as keepers and investors of human capital (Devenport 1999).

Despite the fact that relationships have been a pillar of the management research during last decades, the meanings of communication between managers and employee have become even more important. While emotions role has been underlined in organizational research, the emotion exposior has become even more important research topic in the last years. Increased competition forced organizations to focus more of the way employees' are treated during work.

Management communication – key factor of the employee motivation

The result of the various studies conducted in few of the most important multination companies have revealed that managers are communicating in passive- aggressive and assertive style. The assertive style of the superior develops the most sustainable labor relationship. The support of the supervisor (SS) can fulfill communication needs of the employee and grows up their self-respect to the organization (SRO). While SS grows affective implication – emotional attachment, which can reduce the level of absenteeism, SRO, can improve working performance. (Dasgupta, Suar, and Singh, 2013).

While passive managers, can be week mentors, assertive managers, take into consideration the needs and the wrights of everybody (Arredondo 2003). They have the ability to support and connect with the employee rational and emotional, which helps them to

¹ PhD, Lecturer., ASE Bucharest, roxana.mihai13@yahoo.co.uk

² PhD Student, University of „Vahahia”, Târgoviște, catalinmihai13@gmail.com

be relationship efficient. Assertive managers have offered more support in comparison with the passive ones. Aggressive managers, due to their self-centered behavior couldn't succeed to create positive relationship with their team.

The communication centered by support from the supervisor, builds positive relationships, and as result SS level and satisfaction towards is growing, because their needs are fulfilled (Madlock 2008). Also SS helps the development of the employees SRO by facilitating the participation to the decisions and developing the filling of autonomy in the position they have in the organization. Employee SRO reflects the way they see themselves within the organization (Pierce et al 1989).

Organizational commitment (OC) is the will to stay within the organization. OC has three dimensions: affective, continuing, ruler(Allen and Mayer 1990). Affective commitment represents positive emotional attachment to the company. Continuing commitment represents the will to be part of the organization because of the perception as great loss if they will not be part of it anymore – economic by losing the labor working period- and social, by losing the friendship with the colleagues.

The employees are developing a strong emotional attachment to their organization when they are pleased with the communication with the supervisors. This attachment helps them to avoid the absenteeism. On the other hand the simple fulfilling of the employees needs might not be sufficient enough to increase the performance. It is also possible that an employee stays within the company even if he is unsatisfied of the way he communicates with the manager if he doesn't have an alternative job offer. The employees in that situation don't have a constant performance level.

There are a lot of studies which measure the management practices and offers a lot of opinions about defining, area of application, also the impact of different practices, even debates regarding the existence of “the best practice” or if one of the practice id depending on another one. If we have to choose a list of the best practice, we say that key factor is choosing the wright persons in key positions of the company as well as empathic communication, permanent training and coaching, motivation and offering permanent recompense to all employees even to the ones that are in a lower position within the personal scheme, flexibility and encouraging innovation.

A real challenge for the modern organization is the development of the employee. In the future, together with the speed the information and technical innovation is spread, only the quality of the human resources will make the difference between the highly efficient companies and the medium ones. In this context, human resource development is the best way to keep the people and to enroll the best competences available in the market. This task becomes even more important today in a society which the loyalty to the company is not anymore a value for the new generation of employees. Big companies have their own human resources development department, as part of the HR department.

To integrate better those concepts, we have to talk about training, developing and education, as part of the professional life of individuals. So, training helps the employee to be more efficient in what he is doing, professional development represents the way he can be promoted. Higher educational level sustains the individual to succeed in his career not matter what is his domain of activity.

Training is a good opportunity to develop the communication within the company. Usually, the number or participants are high, and this brings the opportunity to know each other better, and have the chance to create for themselves a holistic image about their company. For the company it has the same importance because the reactions and behaviors of the colleagues can be analyzed by comparison.

Development action has al list three components: general formation, professional formation, working experience accumulation.

Another distinction can be done between general and professional formation at initial stage and any type of continuous formation. We can also at here linguistic stages – including trips in countries where the locals speaks the language- team building, and recreational – educational activity, etc.

Any type of formation, have to develop the employee knowledge – general or specific, practical abilities – measurable competences which implies skills in real situations etc., and capability to communicate, to take responsibilities, to be able to handle stress and conflict situations, to have initiative and to be able, if the situation asks for that, to take action by taking over the technical operations. Results of the formation can be seen in growing of the individual as well as group performances and also in growing of the salaries and promotions. Bernard Gazier in 2015, shows that approximate 50% of salaries increase are coming during the years of formation and experience, the fact being extremely important in career evolution.

The benefit of the training are increasing of the efficiency, customer satisfaction, employee motivation and satisfaction. Training brings benefits only if the way of organizing it and content, are focused on competences necessary for job requirements- knowledge, abilities and attitude. With other words, the training produces effective results, when meets ne needs both of the employee and company. The same importance has in modern management, the formation of the managers. Learning the science of management has as main components developing the leadership skills, sensibility of the leader to human problems, developing of the interpersonal communication skills, formation of efficient behaviors in respect with leading activities. The training modules for leaders, are using complex technics and has as aim balanced development of all of this competences.

In regard of employee motivation, the growing of motivational level, we can see different ways of handling from one management style to another. Even thaw any one has some knowledge, cannot determine a behavior without being oriented to an aim. Behavior – as general term – is used to define the entire group of mechanisms which determine the starting point of a behavior, orientation to an aim, or, the opposite, the rejection or running away and intensity of the energetic mobilization.

Motivation represents the engine of each human action and, as result, its level is extremely important. Not everybody can be determined to be inspired to reach the aims, as well as not everybody can reach high standards.

The level of the aspiration is defined as the standard that a person expects to reach by solving a task. In motivation of behaviors, the level of aspiration has an important role, because the efforts we are making to fulfill a task are in connection with this level. On one hand, the aspiration level is inspiring us to achieve different tasks, on the other hand, the results is influencing the level of aspiration. Success is growing the aspiration level, and in-success is getting it down.

There are also individual differences. Very ambitious persons do not quit their aims even thaw they had a failure. Those atypical reactions are due to the personality characteristics, the environment within the family and the education.

For having results within expectations, communicational management basis on the treating the partners and the employees as rational free people and fully responsible of the assumed tasks.

The motivation is based on the positive acknowledging on the capability to reach the proposed objective, and not on the noticing of the weaknesses observed during the process. Developing of the other will to do something, is based on the motivation to show who he is and what he can do.

To encourage means, first of all, to accept the other level, and then, to show him the way to develop, assuming the fact that he has the motivation to accept the challenge. To encourage means to be able to communicate what is not functioning or what need

improvement, without making him feel badly about it, and then asking him to get to the next stage. To encourage implies also not to over cross the limit of the half way, not to spend more effort than he is willing to spend.

The factors that influence management communication are: positive qualities of the individual which communicates such as credibility, integrity, loyalty and respect, keeping promises, personal example of the manager in top, rightfulness of the information supplied.

To see more accurate how the communication works within an organization, we will study the scheme below (Fig. 1):

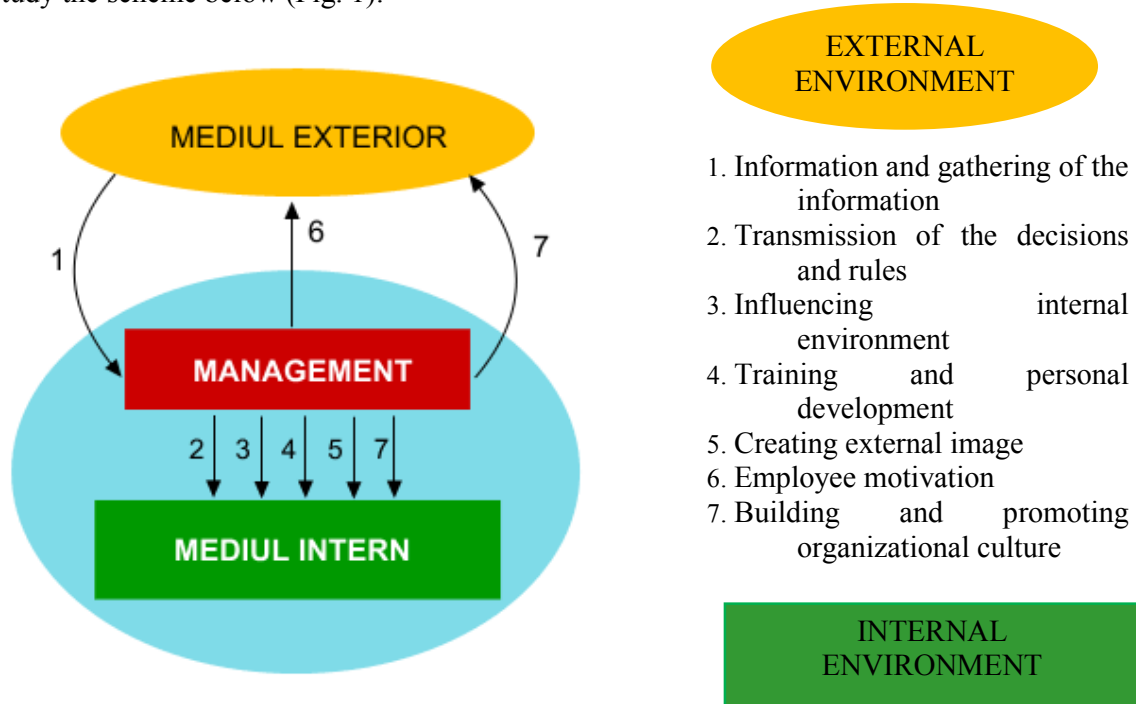


Fig. 1 Communication within organizations

As we can see, the function of the management is not only to inform employees or external environment (customers, potential customers, mass-media), but also to collect information from this environment and processing it. The manager has to analyze the information, take decisions and create rules, but he has also to be preoccupied by influencing positively and developing of the internal environmental structure.

Moving on to the image-making function in the external environment we should mention it is very important first to create the company's image internally and it needs to be cultivated in time.

Very important to note is that promoting organizational culture is not only a responsibility of the management, but also the internal environment can directly influence the image created by the management in the external environment, knowing that employees of companies represents the first multipliers company's image in the external environment.

Conclusions

The theory claims that all personal effectiveness and psychological processes of change it operates by changing individual behavior beliefs, about environmental mastering and personal effectiveness.

Efficiency expectations determine the choice of actions, the effort we make, our persistence when we face of difficulties and our emotional experiences. According to the model personal effectiveness, three basic cognitive processes are fundamental in explaining

and predicting which individuals initiate behavior and the extent to which they persist actions difficulties and obstacles. The same cognitive mediators can be seen as some important components of psychological problems and effective clinical interventions:

1. Expectations and personal efficiency, believes of own capacity to execute a behavior.
2. Expectations towards results, believes of the probability that this behavior to bring consequences or results
3. The value of the results, the subjective value which an individual applies to a result or a category of results. We have to mention that main contribution of the personal efficiency theory to the added value of it is the distinction between the three processes

A pleased employee is an important factor of business development, his energy cannot be lost and can be focused on future initiatives and actions for bringing added value.

A strategy focused on people is an important source of competitive advantage because, in comparison with the technology, cost or developing of new products, it is difficult to copy.

Great leaders creates through communication “connections cultures” which fills the emotional needs of people they rule. The managers who are able to connect with the employee at human level, are minimalizing the differences between superiors and subordinate and in this way they are creating a comfortable environment in which everybody can use and develop their abilities. This is the Darwin-ism of the leadership – survival of the happiest one.

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THE PRELIMINARY PROCEDURE IN THE ADMINISTRATIVE CONTENTIOUS

Gradinaru Nicolae¹

Abstract

The right to notify the court is not an absolute right, it can be limited by law to the extent that it does not limit the access to a court.

The free access to justice is realized only in respect of the equality of citizens before the law and the public authorities, so that any exclusion which would signify breaking the equality of legal treatment is unconstitutional.

The absence of the procedure can be invoked through a background exception, the preliminary procedure being a condition for the exercise of action, it is preemptory/dirimated because, its admission has as a result the annulment of the lawsuit and is relative because it can be invoked only by the defendant by contestation under the penalty of forfeiture.

Admission or rejection of the exception by the court or failure to be resolved constitute grounds for appeal or recourse.

By establishing preliminary conciliation procedure, the legislature wished to put into practice the principle of speeding up litigation between the parties - more prominent in commercial matters - and to relieve the work of the courts. The role of procedural rules, of establishing the procedure is to regulate an extrajudicial procedure that provides the parties an opportunity to agree on any claims of the applicant, without the involvement of the competent judicial authority. To these major reasons, conditioning the referral of the court, by going through the conciliation procedure with the opposing party can not be qualified as a violation of access to justice in the sense prohibited by the constitutional reference, as long as the interested party may apply to the court with the request for summons.

Keywords: *preliminary procedure, exception, Administrative Contentious, Court, request for summons.*

Any person who considers himself harmed in his legitimate right or a legitimate interest by a public authority through an administrative act or by failure to solve within the statutory period of an application, may appeal the contentious administrative court² competent for the recognition of the claimed right or legitimate interest and repaying the damage that was caused. The legitimate interest can be both private and public³.

It can appeal the contentious administrative court and injured party in his legitimate right or a legitimate interest by an individual administrative act, addressed to another subject of law⁴.

The preliminary procedure provided for by art. 7 of Law no.554 / 2004 on administrative litigation¹ stipulates that, before addressing the contentious administrative

¹ PhD Senior Lecturer, "Constantin Brâncoveanu" University from Pitești

² Administrative Court - the activity of dispute by the courts of administrative court competent authorities according to the organic law of disputes in which at least one of the parties is a public authority and the conflict was born from either the issue or the conclusion, as the case may be, of an administrative act within the meaning of this law either of the Strasbourg court at the end of the lawful term times from Unjustified refusal to resolve an application relating to a right or to a legitimate interest.

³ injured person - any person holding a right or a legitimate interest injured by a public authority through an administrative act or by failure to solve of an application, within the statutory period; under this law, they are treated the injured person and the group of individuals without legal personality, holder of subjective rights or legitimate interests in private and social bodies claiming injury by the administrative act under either a legitimate public interest or rights and interests of certain individuals determined

⁴ administrative act - act unilaterally with individual or normative nature issued by a public authority, in a public power, to organize law enforcement or law enforcement in concrete, which creates, modifies or extinguish legal relations; are administrative acts which, under this law, also contracts from public authorities that that concern the the enhancement of public property, works of public interest, public services, public procurement; may be provided by special laws and other administrative contracts subject to the jurisdiction of administrative courts

court, the person who considers himself harmed in his legitimate right or a legitimate interest by an individual administrative act must request the issuing public authority or hierarchically superior authority (prior complaint), if any, within 30 days from the date of the document, to revoke, in whole or in part thereof. Are assimilated to unilateral administrative provisions unjustifiably refusing to resolve a request regarding a right or a legitimate interest or, where appropriate, failing to respond to the applicant within the statutory period, but in this case the prior complaint is not mandatory.

The prior complaint is defined in Article 2 paragraph 1 letter j) of the Law no.554 / 2004 as the demand requesting the issuing authority or hierarchically superior, as applicable, to review of an administrative act with individual or normative character within the meaning of revocation or amendment².

The phrase in the text of the law "should require the public authority" means that the preliminary procedure is mandatory and must be made within 30 days from the date the administrative act.

These provisions also apply if the special law provides a legal administrative procedure and the party did not opt for it.

It is entitled to make a prior complaint and the person aggrieved in his legitimate right or a legitimate interest, by an individual administrative act addressed to another subject of law, since it has become aware in any way of its existence, within the period of 6 months.

The analysis of these laws follows that there are two administrative procedures for verifying the legality of unilateral administrative acts namely, one administrative and one judicial.

In the case of the normative act, the prior complaint can be filed at any time.

The prior complaint in the case of unilateral administrative acts it may be introduced for good reasons, and over the period of 30 days but not later than 6 months from the date of issuance of the act. The 6-month term, is the prescription period.

The prior complaint shall be settled within 30 days of filing the application.

In the case of actions brought by the prefect, the Ombudsman, the Public Ministry, the National Agency of Civil Servants or those relating to applications by persons aggrieved by ordinances or provisions of the ordinance, and in cases "Are assimilated to unilateral administrative acts, even unjustified refusal to resolve a request regarding a right or a legitimate interest or, where appropriate, that the applicant does not respond within the statutory period "when it invokes the exception of illegality of the administrative act the prior complaint is not mandatory.

The complaint preliminary to actions that concern the administrative agreements the provisions of the Code of Civil Procedure. In this case, the complaint must be made within 6 months which commences:

- a) from the date of conclusion of the contract in legal disputes concerning its conclusion;
- b) after the amendment of the contract or, where applicable, from the date of refusal of the request for amendment made by one of the parties in disputes relating to the contract amendment;
- c) from the date of breach of contractual obligations, disputes related to contract execution;

¹ Law no.554 / 2004 on administrative litigation, published in M.Of.no.1154 / 07.12.2004, amended by Law 262/2007 published in M.Of.no.510 / 30.07.2007, Law No.76 / 2012 for the implementation of the Code of civil procedure, published in M.Of.no.365 / 30.05.2012.

² public authority - any organ of state or administrative-territorial units acting in a public power, to satisfy a legitimate public interest; They are treated as public authorities, private legal persons which, by law, have obtained the status of public utility or are authorized to provide a public service, the public power

d) the date of expiry of the contract or, where applicable, from the date of the occurrence of any other causes which attracts extinction of contractual obligations in disputes relating to termination;

e) the date of the finding, the character interpretable of a contract, in disputes concerning the interpretation of the contract.

According to article 12 of Law no.554 / 2004, the plaintiff attached the copy of the administrative action that is attacking him or, as applicable, the answer of the public authority which shall communicate its refusal processing the application. If the complainant received no response to his request, will file the copy of the application certified by number and date of registration at the public authority and any document proving the fulfillment of the preliminary procedure, if this approach was required. If the complainant begins the proceedings against the authority that refuses to enforce an administrative act following the favorable settlement of prior complaint or demand, will file the certified copy after this act.

Where, it notifies the court without the preliminary procedure, the court rejects the request.

They can address the contentious administrative court also who is considered harmed in his legitimate right recognized by law, by the failure to settle or the unjustified refusal to resolve the application. That is, if the application has not been resolved within 30 days of filing the application, the person may appeal to the contentious administrative court, in this case the preliminary procedure is not mandatory.

According to article 2 paragraph 2 of Law no.554 / 2004, assimilating unilateral administrative provisions unjustifiably refusing to resolve a request regarding a right or a legitimate interest or, where appropriate, failing to respond to the applicant, in the legal deadline.

Unresolved in the legal term of the request is failing to respond to the applicant within 30 days of filing the application, unless the law provides otherwise. And unjustified refusal to deal with the application, is the explicit expression with excess power of the will not to solve a person's the request. It is assimilated to the unjustified refusal also failure to enforce administrative act issued as a result of the favorable settlement of the application or, where applicable, the prior complaint.

Referring to Article 7 of Law no.554 / 2004 it was held that no constitutional provision does not prohibit by law to establish a prior administrative procedure without judicial determination, as for example the graceful administrative appeal procedure or the hierarchical¹.

By Decision No. 220/2004 showed also that the establishment, the prior or the graceful appeal is a simple method, fast and exempt from stamp duty, by which the person aggrieved in his legitimate right by a public authority has the possibility to obtain recognition of his claimed right or legitimate interest directly from the issuing body. Is done as on the one hand, to protect the injured person and the administration, on the other hand, relieving administrative courts of those disputes that can be resolved administratively, giving expression to the celerity principle².

From the analysis of the text, it appears that text of the law is not likely to affect the right of access to justice or the right to a fair trial also that the imposition of appeal prior or graceful is a simple method, fast and exempt from stamp duty, the person aggrieved in his

¹ Decision no.39/2005 of the Constitutional Court published in Of.Mo.no.165/24.02.2005.

² Decision no.220/2004 of the Constitutional Court published in Of.Mo.no.539/16.06.2004.

Decision no.1355/2008 of the Constitutional Court published in Of.Mo.no.893/30.12.2008.

Decision no.96/2007 of the Constitutional Court published in Of.Mo.no.168/09.03.2007.

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Decision no.687/2008 of the Constitutional Court published in Of.Mo.no.563/25.07.2008.

Decision no.973/2010 of the Constitutional Court published in Of.Mo.no.561/10.08.2010.

legitimate right by a public authority has the possibility of obtaining recognition of its right or legitimate interest directly from the issuing body¹.

As for the issue of terms governed by art. 11 of Law no. 554/2004 within which the injured party must exercise the right to Administrative Contentious action, it noted that "setting preconditions for the introduction of legal actions does not constitute infringement of free access to justice and a fair trial" and "the legislature may establish, by reason of special circumstances, special rules of procedure, as the manner of exercise of procedural rights, the principle of free access to justice assuming unrestricted opportunity to those interested to use these procedures, the forms and arrangements established by law"².

Par. (1) art. 11 provides the general rule that the deadline for the application to the administrative court is six months, and par. (2) lays down the exception in the sense that for good reasons, if unilateral administrative act, the application may be introduced over this period, but no later than one year from the date of issuance of the act. These regulations apply equally to all persons who consider themselves aggrieved by an administrative act and want to attack it.³

The Constitutional Court observed that it can not be accepted any criticism of unconstitutionality on the violation of Art. 52 para. (1) of the Constitution on the right of a person aggrieved by a public authority. According to para. (2) the alleged constitutional text, "the conditions and limits of this right shall be established by organic law". Or, criticized legal provisions include rules on certain conditions and time limits within which the injured party in his rights by a public authority may exercise its right of action against administrative acts issued by it, so that there is no contradiction between art. 7 and art. 11 of Law no. 554/2004, on the one hand, also art. 52 para. (1) of the Constitution, on the other hand⁴.

Establishment of the appeal prior or graceful is a simple method, fast and exempt from stamp duty, by which the person aggrieved in his legitimate right by a public authority has the possibility to obtain acknowledgment of those rights or of its legitimate interest directly from the issuing body⁵.

The preliminary procedure governed by the legal text criticized is not likely to affect the right of access to justice or the right to a fair trial also that the imposition of appeal prior or graceful is a simple method, fast and free of stamp duty by the injured party in his legitimate right by a public authority has the possibility of obtaining recognition of its right or legitimate interest directly from the issuing body.

The Constitutional Court stated with value of principle that "it is the exclusive competence of the legislature to institute such proceedings intended generally to ensure faster resolution of certain categories of disputes, decongest the courts of cases that can be solved in this way, avoidance costs "and" the legislator may establish, in consideration of special circumstances, special rules of procedure, as the manner of exercise of procedural rights, the principle of free access to justice assuming unrestricted opportunity to those interested to use these procedures, in forms and modalities established by law".⁶

¹ Decision no.973/2010 of the Constitutional Court published in Of.Mo.no.561/10.08.2010.

² Decision no.123/2006 of the Constitutional Court published in Of.Mo.no.257/22.03.2006

³ Decision no.534/2006 of the Constitutional Court published in Of.Mo.no.666/02.08.2006

⁴ Decision no.382/2007 of the Constitutional Court published in Of.Mo.no.340/18.05.2007.

⁵ Decision no.1355/2008 of the Constitutional Court published in Of.Mo.no.893/30.12.2008.

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⁶ Plenum of the Constitutional Court Decision No.1 / 1994 on free access to justice for persons to defend the rights, freedoms and legal interests, published in M.Of.no.69 / 03.16.1994.

Decision no.1224 / 2011 of the Constitutional Court, published in M.Of.no.796 / 10.11.2011.

In connection with these texts, the Constitutional Court ruling that the criticized text of the Fiscal Procedure Code governs the administrative appeal procedure, which leaves the possibility that bodies have issued administrative acts or appealed their upper bodies to return the measures taken. Such procedures, the complaints and appeals that are assigned to himself, the originator of the contested act or superior body it does not meet the elements of the business of jurisdiction - characterized by resolution by an independent and impartial dispute regarding the existence, scope or the exercise of subjective rights - they are a specific administrative function. In conclusion, the documents dealt with by administrative organs complaints, that claims made under the provisions of the Fiscal Procedure Code, there are acts of jurisdiction, but administrative acts subject to censorship court¹.

Establishment of the appeal prior or graceful is a simple method, fast and exempt from stamp duty, by which the person aggrieved in his legitimate right by a public authority has the possibility to obtain acknowledgment of those rights or of its legitimate interest directly from the issuing body. It is done as on the one hand, to protect the injured person and the administration, and, on the other hand, relieving administrative courts of those disputes that can be resolved administratively, giving expression to the celerity principle.

Therefore, it was held that "by going through an administrative procedure prior compulsory non-judicial does not hinder the right of access to justice, as long as the administrative decision may be challenged before a court."

Particularly from those detained must be pointed out that the text of the law criticized states unequivocally that this remedy does not remove the right of action of those who consider themselves wronged in their rights through a fiscal administrative act or lack thereof, and, in the practice of the administrative courts, the lack of appeal does not constitute a plea of inadmissibility of legal action².

The competent court

According to article 10 of Law no.554 / 2004, disputes concerning administrative acts issued or concluded by local authorities and county, as well as those concerning taxes, contributions, customs duties and accessories thereof up to 1,000. 000 lei shall be settled ultimately by the courts of administrative tax and those concerning administrative acts issued or concluded by government, as well as those concerning taxes, contributions, customs debt and accessories thereof below 1,000. 000 lei fund shall be settled in the administrative section also fiscal courts of appeal, unless the special organic law provides otherwise.

All requests for administrative acts issued by central public authorities that have considerable amounts of the grant from the European Union, regardless of value, shall be settled in the polling fund of the administrative and fiscal courts of appeal.

According to article 96 paragraph 1 of the Code of Civil Procedure, the Court of Appeal in the first instance, claims in administrative and fiscal matters³.

The appeal against sentences handed down by courts administrative and fiscal sits in the administrative section also fiscal courts of appeal, and the appeal against sentences handed down by the administrative section also fiscal courts of appeal shall be heard by the Division of Administrative Contentious also fiscal High Court of Cassation and Justice, unless the special organic law provides otherwise.

The applicant may appeal from his residence or that of the defendant. If the applicant has opted for court at defendant can not invoke the exception lacked territorial jurisdiction.

¹ Decision no.409 / 2004 of the Constitutional Court, published in M.Of.no.1063 / 16.11.2004

Decision no.927 / 2007 of the Constitutional Court, published in M.Of.no.801 / 23.11.2007

² Decision no.687/2008 of the Constitutional Court published in Of.Mo.no.563/25.07.2008.

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³ Law no.134 / 2010 Code of Civil Procedure, republished in M.Of.no.247 / 10.04.2015, GEO no.1 / 2016 amending Law no.134 / 2010 on the Civil Procedure Code and certain legislative acts related published in M.Of.no.85 / 02.04.2016.

MULTI-CRITERIA DECISION TOOL USING FIS MAMDANI vs FIS TAKAGI-SUGENO-KANG

Daniel-Petru, Ghencea¹
Miron, Zapciu²

Abstract. *Competitive analysis of the characteristics of an organization using fuzzy logic represents a new approach because it is based on rules that are similar to human thinking. Due to the simplicity of the calculation of datasets uncertain fuzzy logic analysis indicated two ways defuzzification Mamdani FIS and FIS TSK to have a more realistic overview leading to more accurate forecasting. The paper presents the classic calculation and realization of graphs comparing the graphics mode performed with the software Matlab R2011b. The results are based on a comparative analysis between Mamdani FIS and FIS TSK. The purpose of this paper is to show how the practical realization of such an analysis type Multi-Input Single Output - MISO by showing the steps to take and interpretation of results. Type multi-criteria decisions of special interest because it covers a spread spectrum analysis data sets entry through flexibility, which gives robustness in various applications regardless of their field.*

Keywords: *fuzzy logic, FIS Mamdani, FIS Sugeno, competitiveness.*

JEL Classification: A12, C53, C63, D89

1. Introduction

Competitive analysis of the characteristics of an organization using fuzzy logic represents a new approach because it is based on rules that are similar to human thinking.

Because the simplicity of the calculation of datasets uncertain fuzzy logic indicated an analysis by two methods of defuzzification FIS Mamdani and FIS TSK (Takagi-Sugeno-Kang) to have an overview of more realistic leading to forecasting more accurate.

The paper presents the classic calculation and realization of graphics which are compared with the graphical software developed with Matlab R2011b. The results are based on a comparative analysis between Mamdani FIS and FIS TSK.

The purpose of this paper is to show how the practical realization of such analyzes multi input single output (Multi-Input Single Output - MISO) by highlighting the steps to take and interpretation of results.

Multi-criteria decisions of particular interest because it covers a spread spectrum analysis data sets entry through flexibility, which gives robustness in various applications regardless of their field.

2. The concept of Fuzzy Logic Systems

In 1965 Lotfi Zadeh Askar (professor at the University of California, Berkeley) introduced the term fuzzy logic to explain the theory of fuzzy sets [1].

Fuzzy logic continues working with a range of values in the range [0, 1]. Fuzzy set theory translates into quality human reasoning through simultaneous quantitative numerical expressions of numerical data and lexical knowledge [Cetean Răzvan 2014].

Mamdani type defuzzification methods [Yang Wang, Yanyan Chen, 2014; Florin Leon]:

1. centroid of area COA (center of gravity)

¹PhD. Eng.-Ec. Student, POLITEHNICA University of Bucharest, daniel.ghencea@blackseasuppliers.ro

²Professor at POLITEHNICA University of Bucharest, Corresponding member of the Academy of Romanian Scientists, miron.zapciu@upb.ro

This method returns an output defuzzification by calculating the center of symmetry of the area delimited by aggregating the consequences of such fuzzy set:

$$y_{COA} = \frac{\int_v y \cdot \mu_B(y) \cdot dy}{\int_v \mu_B(y) \cdot dy} \quad (1)$$

2. bisector of area BOA

The vertical line corresponds to the output generated by BOA dividing the aggregate fuzzy sets into two sub-regions of equal area. This can be expressed as:

$$\int_{\alpha}^{y_{BOA}} \mu_B(y) \cdot dy = \int_{y_{BOA}}^{\beta} \mu_B(y) \cdot dy \quad (2)$$

where $\alpha = \min\{v|v \in V\}$, $\beta = \max\{v|v \in V\}$. Sometimes resulting value by this method is identical to that generated by COA.

COA and BOA used in control applications because it does not produce jumps in the control surface.

3. smallest of maximum SOM

This method generates a clear exit by taking the lowest values that provide the maximum degree of belonging aggregate fuzzy set.

$$y_{SOM} = \min\{y|\mu_B(y) = \max(\mu_B(y))\} \quad (3)$$

4. largest of maximum LOM

This method generates a clear exit by taking the highest value to provide the maximum degree of belonging aggregate fuzzy set.

$$y_{LOM} = \max\{y|\mu_B(y) = \max(\mu_B(y))\} \quad (4)$$

5. mean of maximum MOM

In this defuzzification, the average maximum is taken as a clear exit.

$$y_{MOM} = \frac{y_{SOM} + y_{LOM}}{2} \quad (5)$$

MOM, LOM, SOM decision is used in applications as this may cause jumps in the control surface. The situation appears most advantageous method of execution when the item presents a finite number of positions that may be associated with strong linguistic terms of "singleton" of the output quantity [3].

Methods of defuzzification type Takagi-Sugeno:

a) weighted average WA

This method of defuzzification generates an output end result FIS Sugeno method of weighting symmetry centers of individual surfaces.

$$y_{WA} = \frac{\sum_{i=1}^M w_i \cdot y_i}{\sum_{i=1}^M w_i} \quad (6)$$

b) weighted sum WS

To reduce calculation WA, WS method only needs the right amount weighted outputs.

$$y_{WS} = \sum_{i=1}^M w_i \cdot y_i \quad (7)$$

In the study as a method of defuzzification for FIS Mamdani – centroid of area (COA), and for FIS TSK – weighted sum (WS).

3. Research methodology

To study use data from the branch of a multinational company from Romania in the trade of heating.

Context: An import company sells heating equipment using the distribution network of 31 outlets in the country. The marketing season of heating is from September 1 to November 30 (91 days or 14 weeks) and the period under review is 2013-2015. Demand is highest is 12 buc./zi, and the lowest is 1 buc./zi. It starts from an initial stock of 14 pieces. to be completed in two days to Metin continuity of supply for an amount equal to the difference between the initial stock and the stock at the end of the day. Stocks varies between 14 pc. and 6 at the end of the day. The maximum amount that can be supplied is 18 pcs. Efficiency and the minimum is 4 pcs.

If a request for 10 pieces. which is the supply capacity for an additional 8 pcs.

Table 1 Sales of heating equipment during the season 2013-2015

		2013						2014						2015					
		L	M	M	J	V	S	L	M	M	J	V	S	L	M	M	J	V	S
SEP	S1	2	3	5	1	1	1	10	3	0	4	2	0	1	5	0	6	1	
	S2	6	7	7	1	4	0	6	2	7	1	2	0	10	8	9	1	4	2
	S3	6	1	0	3	10	4	4	5	5	0	4	2	1	3	6	1	1	0
	S4	5	3	10	4	7	0	11	4	0	1	3	2	6	1	10	2	5	4
	S5	12						10	9					5	6	8			
OCT	S1		8	7	0	7	1			2	4	1	4				1	1	1
	S2	8	7	5	1	1	1	1	2	3	2	0	0	8	0	5	0	4	0
	S3	9	7	7	3	2	4	6	8	6	1	0	1	5	2	3	3	6	1
	S4	12	2	12	8	2	0	10	6	0	2	2	2	10	2	4	10	2	5
	S5	6	2	1	8			12	5	8	3	0		8	12	3	7	4	
NOV	S1					11	0						1	1	1	1	2	3	2
	S2	5	3	7	3	1	0	4	5	5	1	7	0	12	0	4	2	2	0
	S3	3	6	4	1	0	1	1	0	2	1	1	1	1	4	2	0	3	2
	S4	1	1	1	9	1	0	7	1	6	7	1	0	1	1	9	2	7	0
	S5	5	1	3	5	2		2	2	3	1	2	3	0					

Methods (Mamdani and TSK) involve the following steps:

Phase 1. Define **input variables** (v_{intrae}) and **output variables** ($v_{ieşire}$);

Phase 2. Establishing **basic ranges**;

Phase 3. Determining the **type of fuzzy numbers** (triangular, trapezoidal, Gaussian, bell, sigmoid, left ramp, the right ramp).

Phase 4. Establishing **linguistic variable** size (LV) for the input variables.

Phase 5. Building in **Matlab R2011b** depending on membership type chosen variables.

Phase 6. Establishing **ruleset**.

Phase 8. Running the application and interpretation of data.

3.1. Analysis using fuzzy logic Mamdani FIS in Matlab

This method uses the **min** operator implication and compose operator **min-max** [Dosoftei Constantin-Cătălin, 2009].

The three variables that make up the issue request (x), stocks (y) and supply (z) are further treated separately [6].

Supply branch operates under the following **rules**:

R1: IF demand is LOW and supply is LOW and the stock is LOW;

R2: IF demand is LOW and supply is HIGH and the stock is LOW;

R3: IF demand is HIGH and supply is LOW and the stock is HIGH;

R4: IF demand is HIGH and supply is HIGH and the stock is HIGH;

REQUEST is composed of two fuzzy sets: 1 - LOW and 2 - HIGH. It is known that the greatest demand is 12 and the lowest pcs./day 1 pcs./day. By conducting obtain replacements and solving for x values.

$$\mu_{request-low}(x) \begin{cases} 1 & x \leq 1 \\ \frac{12-x}{11} = \frac{12-10}{11} = 0,182 & 1 \leq x \leq 12 \\ 0 & x \geq 12 \end{cases} \quad (8)$$

$$\mu_{request-high}(x) \begin{cases} 0 & x \leq 1 \\ \frac{x-1}{11} = \frac{10-1}{11} = 0,818 & 1 \leq x \leq 12 \\ 1 & x \geq 12 \end{cases} \quad (9)$$

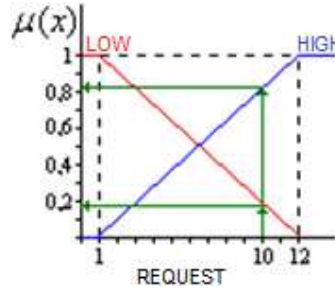


Figure 1 Chart demand (x) by the classical method

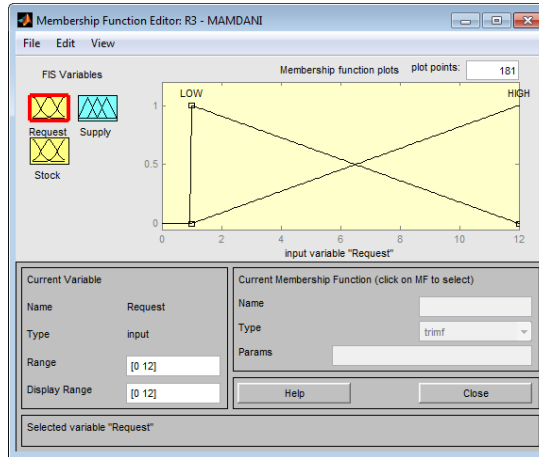


Figure 2 Mamdani FIS demand diagram with triangular membership function - Matlab R2011b, fuzzy

STOCKS are composed of two fuzzy sets: 1 - LOW and 2 - HIGH. It is known that stocks range from 14 pcs. and 6 at the end of the day. By conducting obtain replacements and resolution values for y .

$$\mu_{stocks-low}(y) \begin{cases} 1 & y \leq 6 \\ \frac{14-y}{8} = \frac{14-8}{8} = 0,75 & 6 \leq y \leq 14 \\ 0 & y \geq 14 \end{cases} \quad (10)$$

$$\mu_{stocks-high}(y) \begin{cases} 0 & y \leq 6 \\ \frac{y-6}{8} = \frac{8-6}{8} = 0,25 & 6 \leq y \leq 14 \\ 0 & y \geq 14 \end{cases} \quad (11)$$

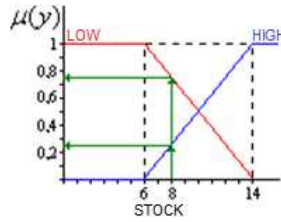


Figure 3 Chart risk (y) by the classical method

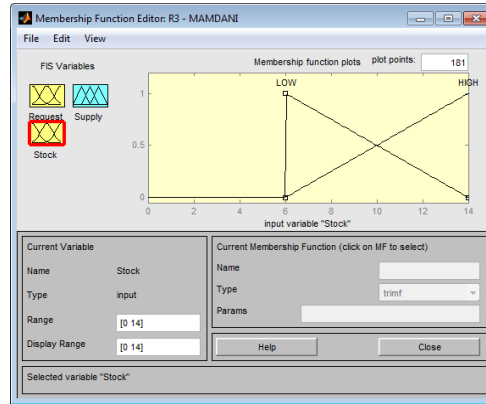


Figure 4 Mamdani FIS risk diagram with triangular membership function - Matlab R2011b, fuzzy

SUPPLY is composed of two fuzzy sets: 1 - LOW and 2 - HIGH. z so we must determine if a request for 10 pcs. which is the supply capacity for an additional 8 pcs.

Determining the value of z by using the *min*.

$$\mu_{supply-low}(z) \begin{cases} 1 & z \leq 4 \\ \frac{18-z}{14} & 4 \leq z \leq 18 \\ 0 & z \geq 18 \end{cases} \quad (12)$$

$$\mu_{supply-high}(z) \begin{cases} 0 & z \leq 4 \\ \frac{z-4}{14} & 4 \leq z \leq 18 \\ 1 & z \geq 18 \end{cases} \quad (13)$$

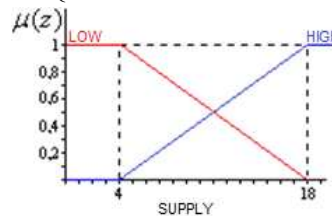


Figure 5 Chart supply (z) by the classical method

Determine coefficients a_1, a_2 for z :

$$\frac{a_1 - 4}{14} = 0,182 \Rightarrow a_1 = 6,55$$

$$\frac{a_2 - 4}{14} = 0,75 \Rightarrow a_2 = 14,5$$
(14)

So we get to a member function following components:

$$\mu_{(z)} = \begin{cases} 0,182 & z \leq 6,55 \\ \frac{z - 4}{10} & 6,55 \leq z \leq 14,5 \\ 0,75 & z \geq 14,5 \end{cases}$$
(15)

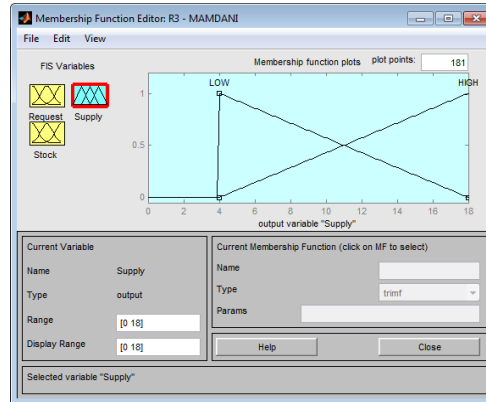


Figure 6 Mamdani FIS supply diagram with triangular membership function - Matlab R2011b, fuzzy

Defuzzification

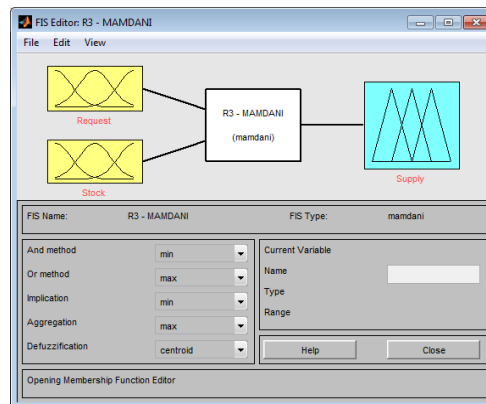


Figure 7 Mamdani FIS features used - Matlab R2011b, fuzzy

The features you use this analysis to FIS are Mamdani:

- ✎ connector: AND;
- ✎ operator: **min** for the implication;
- ✎ operator: **min-max** for the compose;
- ✎ defuzzification: centroid of area;

Rule base contains the type ruleset "if ...then ..." expert established and defined the fuzzy input and output variables. Based fuzzy logic rules they match the description language.

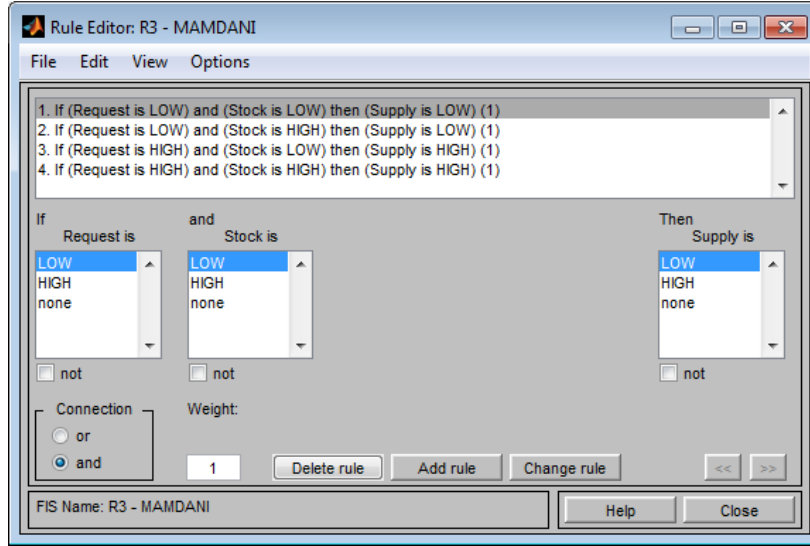


Figure 8 Supply setting rules Mamdani FIS - Matlab R2011b, fuzzy

Use method for defuzzification COA (centroid of area).

$$M_1 = \int_0^{6,55} 0,182 \cdot z \cdot dz = 0,182 \cdot \frac{z^2}{2} \Big|_0^{6,55} = 3,895 \quad (16)$$

$$M_2 = \int_{6,55}^{14,5} \frac{z-4}{20} \cdot z \cdot dz = 0,05 \cdot \frac{z^3}{3} \Big|_{6,55}^{14,5} - 0,2 \cdot \frac{z^2}{2} \Big|_{6,55}^{14,5} = 48,993 \quad (17)$$

$$M_3 = \int_{14,5}^{18} 0,182 \cdot z \cdot dz = 0,182 \cdot \frac{z^2}{2} \Big|_{14,5}^{18} = 42,656 \quad (18)$$

Next calculate the area of each second area.

$$A_1 = 6,55 \cdot 0,182 = 1,19 \quad (19)$$

$$A_2 = \frac{(0,182 + 0,75) \cdot (14,5 - 6,55)}{2} = 3,706 \quad (20)$$

$$A_3 = (18 - 14,5) \cdot 0,75 = 2,625 \quad (21)$$

Finally we get for the z value:

$$z = \frac{3,895 + 42,993 + 42,656}{1,19 + 3,706 + 2,625} = 12,703 \quad (22)$$

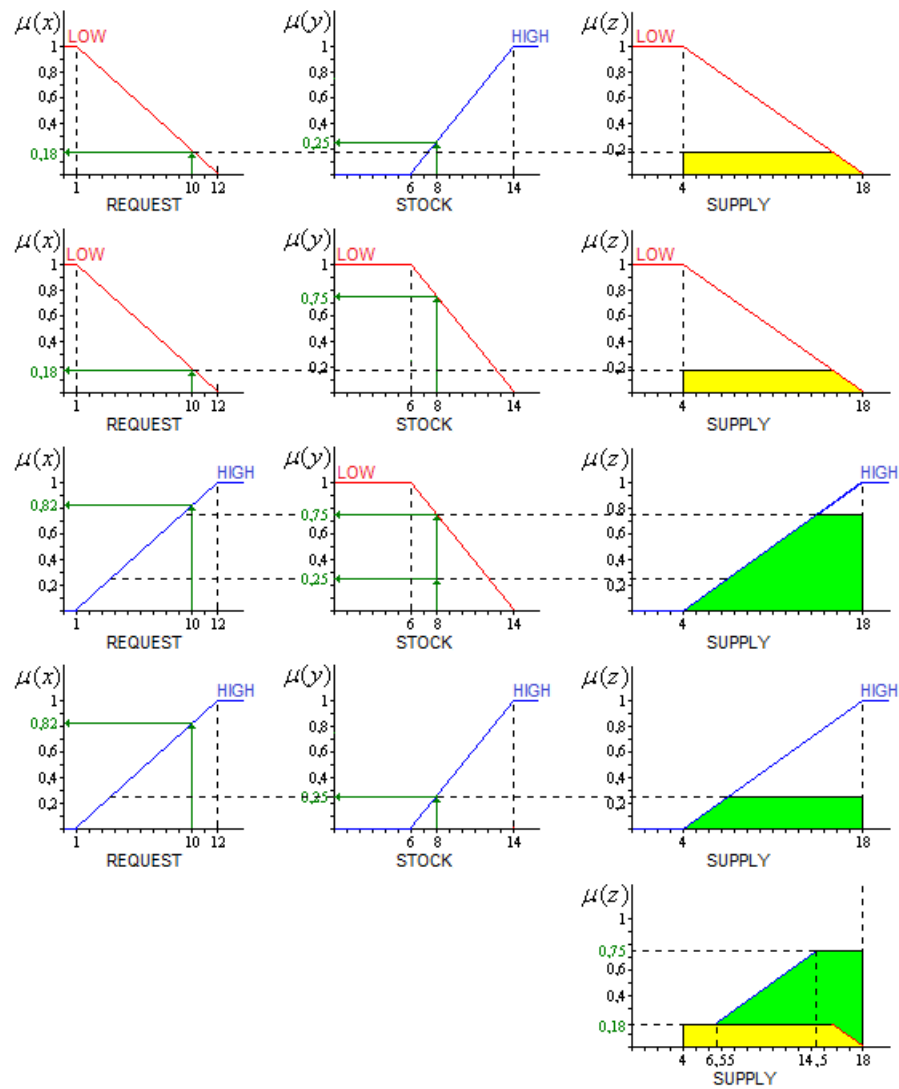


Figure 9 Mamdani FIS classic graphical method of defuzzification using the centroid of area

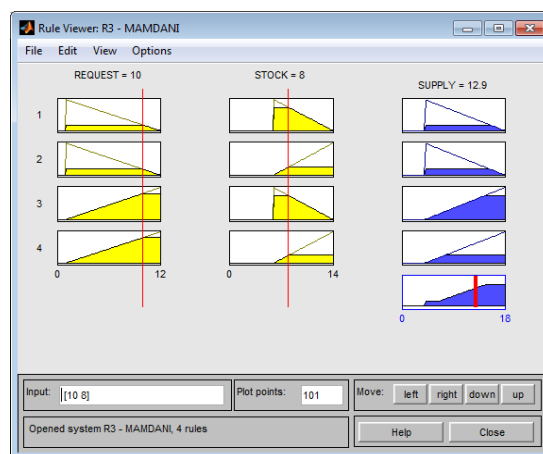


Figure 10 Mamdani FIS defuzzification using centroid of area - Matlab R2011b, fuzzy

Comparing the calculated result $z=12,703$ equation (1.19) calculated using Matlab R2011b at where $z=12,9$ observed that the error $e=-1,53$ it is acceptable which shows that this method is robust, saving time in making management decisions on integrated systems in concept.

With software - Matlab R2011b can be viewed in 2D the wave shapes of input variables respectively *request* and *stock*.

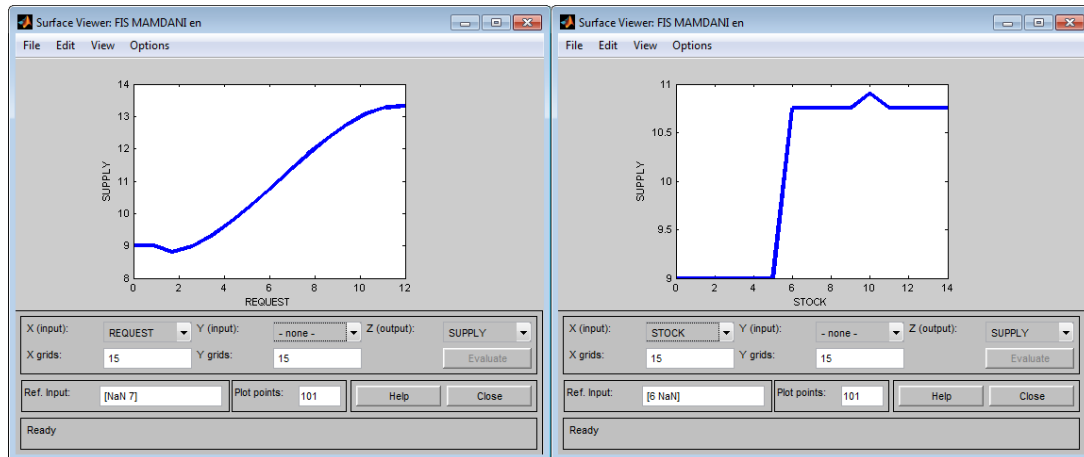
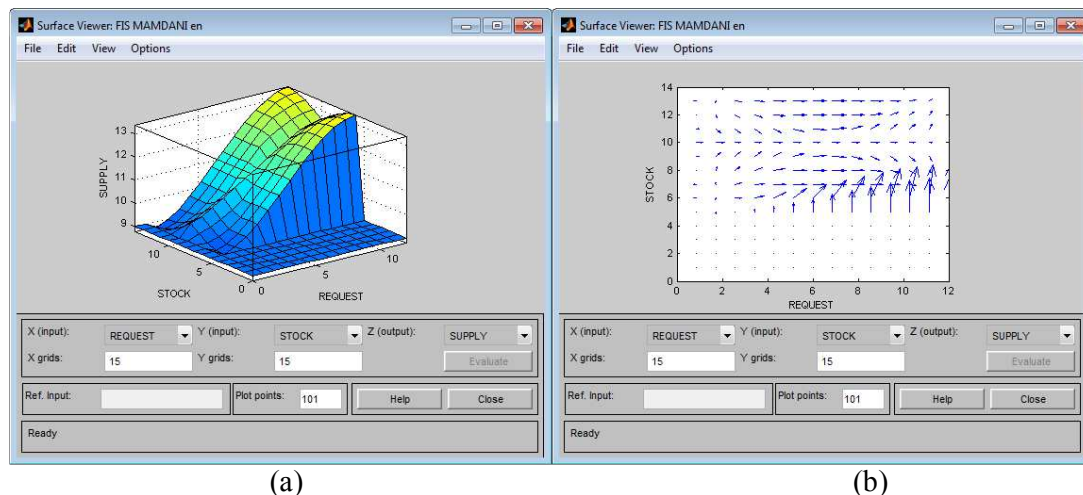


Figure 11 Mamdani FIS waveform to the input variables (request and stock) - Matlab R2011b, fuzzy

You can also switch from 2D view to 3D view where the two input variables are correlated with variable output respectively supply, which leads to a superior interpretation of results.



(a)

(b)

Figure 12 Shape of the surface (a) and quiver (b) Mamdani FIS for the output variables - Matlab R2011b, fuzzy

The dynamics of variation present purpose of Action input variables 3D surface. Figure 12 (b) shows trends in the areas quiver as possible as the target (light-colored areas Figure 12 (a)), so positive targets. There are situations when the same surface Figure 12 (a) quiver to have the sense of action opposite to that shown, so travel from favorable areas to areas devaforabile dark areas in Figure 12 (a)).

3.2. Analysis of fuzzy logic Takagi-Sugeno FIS using the Matlab-Kang

Takagi-Sugeno fuzzy model-Kang Mamdani model is similar except that the output is characterized by equations [8]:

a) Takagi-Sugeno-Kang fuzzy model zero order (constant equation):

$$IF (x_1 \text{ is } A_1) * (x_2 \text{ is } A_2) * \dots * (x_n \text{ is } A_n) THEN z = k \quad (23)$$

b) Takagi-Sugeno-Kang fuzzy model of the order of one (linear equation):

$$IF (x_1 \text{ is } A_1) * (x_2 \text{ is } A_2) * \dots * (x_n \text{ is } A_n) THEN z = p_1 * z_1 + \dots + p_n * z_n + q \quad (24)$$

The input variables shown in Figures 1, 3 and 5 are retained numerical, linguistic variable and membership function. The function of the supply output diagram is shown in Figure 13.

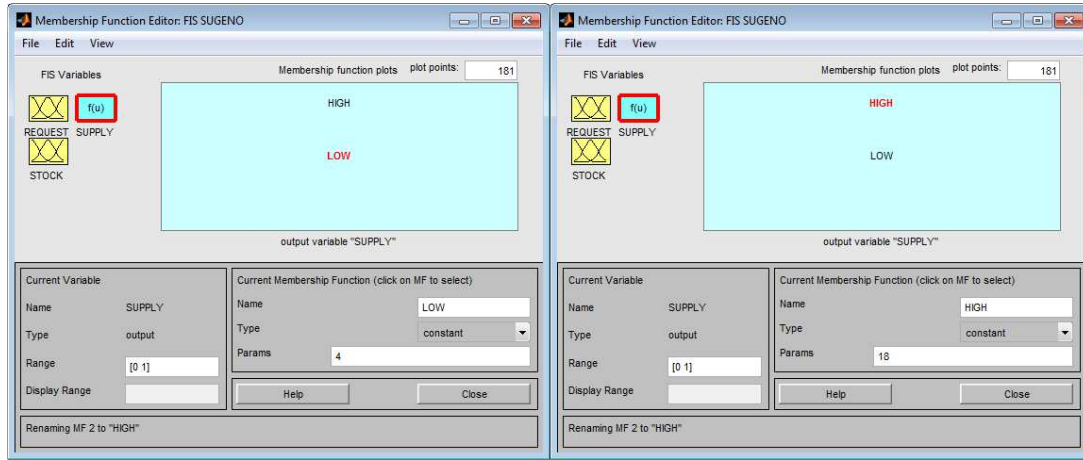


Figure 13 Chart constant supply function FISA TSK - Matlab R2011b, fuzzy

Supply branch operates under the following **rules**:

R1: IF request is LOW and stock is HIGH then supply = request – stoks

$$\begin{aligned} \alpha_1 &= \mu_{request-low} \cap \mu_{stock-high} \\ \alpha_1 &= \min(\mu_{request-low}[10] \cap \mu_{stock-high}[8]) \\ \alpha_1 &= \min(0,1818;0,25) \Rightarrow \alpha_1 = 0,1818 \end{aligned} \quad (25)$$

$$z_1 = 10 \quad (26)$$

R2: IF request is LOW and stock is LOW then supply = request

$$\begin{aligned} \alpha_2 &= \mu_{request-low} \cap \mu_{stock-low} \\ \alpha_2 &= \min(\mu_{request-low}[10] \cap \mu_{stock-low}[8]) \\ \alpha_2 &= \min(0,1818;0,75) \Rightarrow \alpha_2 = 0,1818 \end{aligned} \quad (27)$$

$$z_2 = 10 \quad (28)$$

R3: IF request is HIGH and stock is HIGH and supply = request

$$\begin{aligned} \alpha_3 &= \mu_{request-high} \cap \mu_{stock-high} \\ \alpha_3 &= \min(\mu_{request-high}[10] \cap \mu_{stock-high}[8]) \\ \alpha_3 &= \min(0,818;0,25) \Rightarrow \alpha_3 = 0,25 \end{aligned} \quad (29)$$

$$z_3 = 10 \quad (30)$$

R4: IF request is HIGH and stock is LOW and supply = 1,25 * request

$$\alpha_4 = \mu_{\text{request-high}} \cap \mu_{\text{stock-low}}$$

$$\alpha_4 = \min(\mu_{\text{request-high}}[10] \cap \mu_{\text{stock-low}}[8]) \quad (31)$$

$$\alpha_4 = \min(0,818; 0,75) \Rightarrow \alpha_4 = 0,75$$

$$z_4 = 1,25 \cdot 10 = 12,5 \quad (32)$$

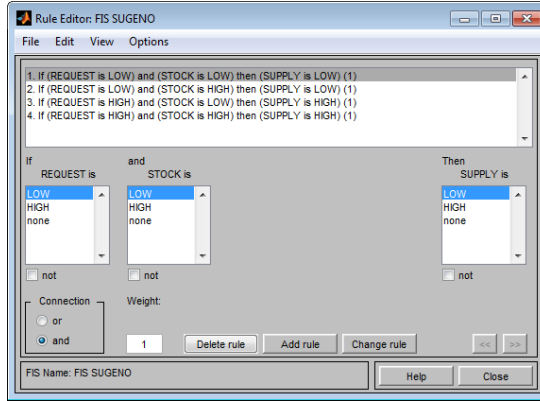


Figure 14 FIS TSK rules establishing the supply - Matlab R2011b, fuzzy

Method *weighted sum* - *WS* usually only needs the weighted sum of outputs:

$$y_{WS} = \sum_{i=1}^M \alpha_i \cdot z_i = \alpha_1 \cdot z_1 + \alpha_2 \cdot z_2 + \alpha_3 \cdot z_3 + \alpha_4 \cdot z_4 \quad (33)$$

$$y_{WS} = 0,1818 \cdot 10 + 0,1818 \cdot 10 + 0,25 \cdot 10 + 0,75 \cdot 12,5 = 15,51 \quad (34)$$

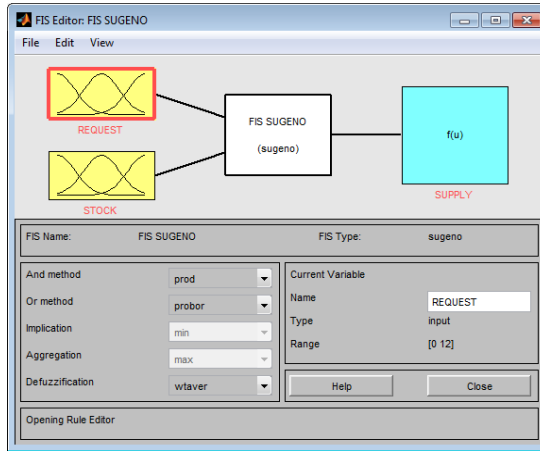


Figure 15 FIS TSK features used weighted sum - Matlab R2011b, fuzzy

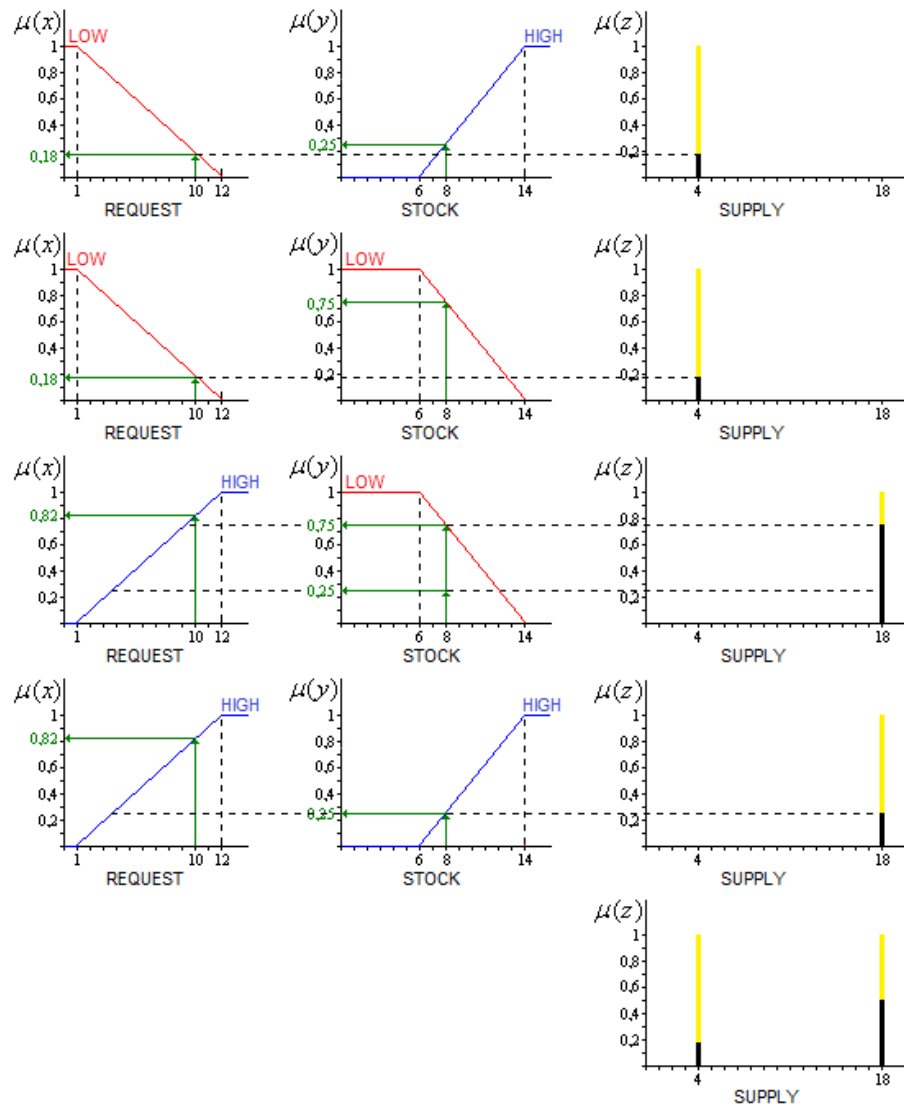


Figure 16 FIS TSK classic graphical method using the weighted sum defuzzification

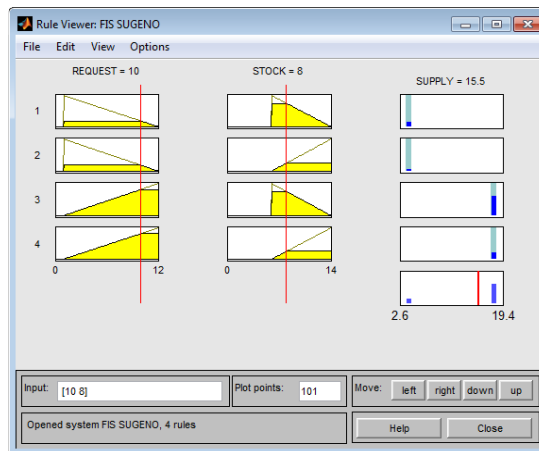


Figure 17 FIS TSK using the weighted sum defuzzification – Matlab R2011b, fuzzy

Comparing the calculated result $z = 15,51$ equation (1.31) calculated using Matlab R2011b at where $z = 15,5$ observed that the error $e = 0,07 < 1$ is very small, unity, and make

this method to be very robust systems management decisions on the integrated design extremely precise.

2D the wave shapes for the input variables respectively request and stock are shown in Figure 18.

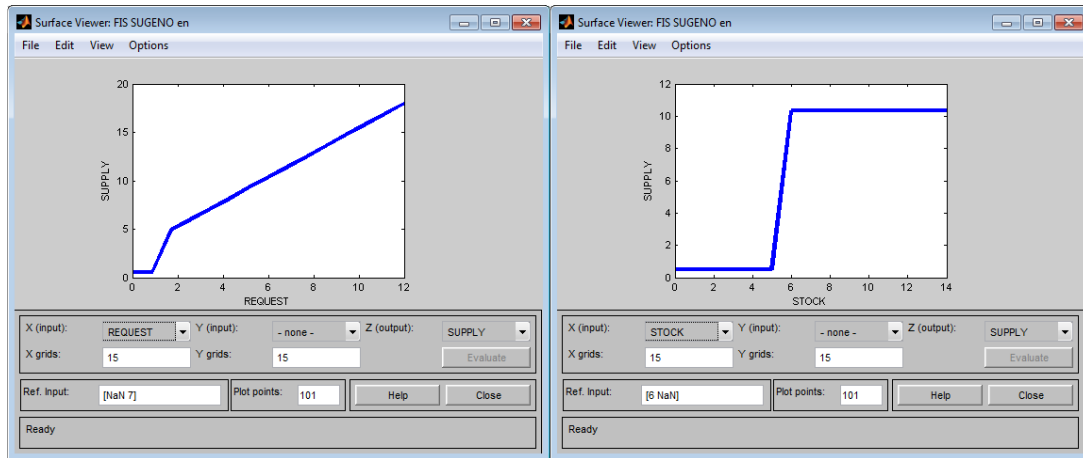


Figure 18 FIS TSK waveform to the input variables (request and stock) – Matlab R2011b, fuzzy

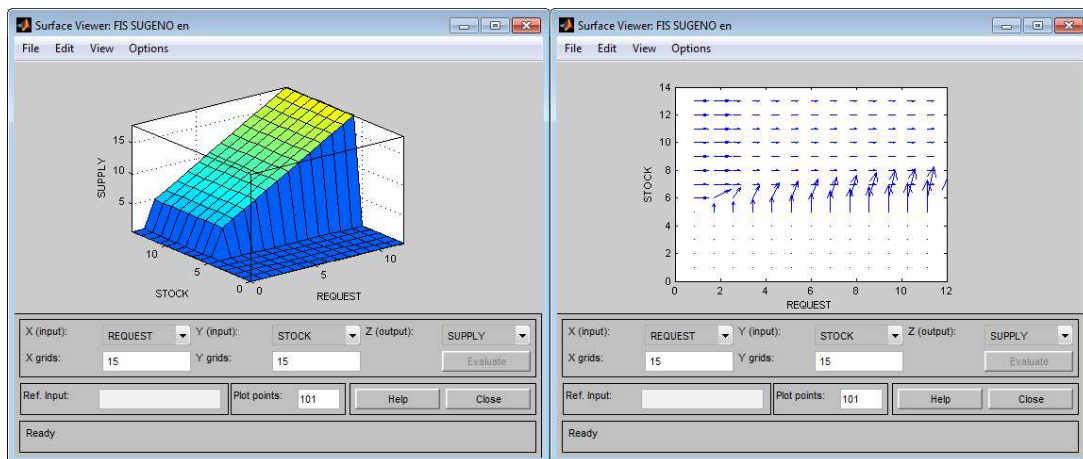


Figure 19 Shape of the surface and quiver TSK display for the output variables – Matlab R2011b, fuzzy

Conclusion

The waveform of the input variables supply demand in the two cases differ in the areas of start stock-supply and if differ only in the end zone. Differentiation occurs when two surfaces 3D models by smoothing the surface slope (FIS TSK) from the surface showing Mamdani sharing this surface slope. Differentiation slope areas leave room for interpretation and decision maneuver on target. It is possible that the best decision to be taken by unifying results areas (consider the average of the two models in those areas). TSK area is characterized by sudden leaps to the Mamdani showing a smooth transition.

Table 2 Mamdani FIS models and TSK errors for the the sample analyzed

	Calculat	Matlab	Eroare
FIS Mamdani	12,703	12,9	-1,53%
FIS TSK	15,511	15,5	0,07%

In terms of the outcome of the TSK defuzzification we can say that FIS is more accurate in forecasting the output error is much smaller. Both models fit in a field error $e = (0 \div \pm 1,5)$.

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