

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Coca, Viorel; Dobrea, Mihaela; Vasiliu, Cristinel

Article

Towards a sustainable development of retailing in Romania

Amfiteatru Economic Journal

Provided in Cooperation with:

The Bucharest University of Economic Studies

Suggested Citation: Coca, Viorel; Dobrea, Mihaela; Vasiliu, Cristinel (2013): Towards a sustainable development of retailing in Romania, Amfiteatru Economic Journal, ISSN 2247-9104, The Bucharest University of Economic Studies, Bucharest, Vol. 15, Iss. Special No. 7, pp. 583-602

This Version is available at: https://hdl.handle.net/10419/168803

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



http://creativecommons.org/licenses/by/4.0/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





TOWARDS A SUSTAINABLE DEVELOPMENT OF RETAILING IN ROMANIA

Viorel Coca¹, Mihaela Dobrea² and Cristinel Vasiliu^{3*}

¹⁾S.C.Selgros Cash&Carry SRL

^{2) 3)} The Bucharest University of Economic Studies, Romania

Abstract

Sustainable development becomes increasingly important in the design of development policies. The economic field, due to the businesses it involves, is regarded as a tool capable of generating social well-being by caring for resource conservation. The retailing is part of this process, playing an important role due to the connection it provides between producers and consumers.

The objectives of this study were to highlight the extent to which retailing developed in Romania, to measure the efficiency of firms in the industry and to identify sustainable development practices these firms used.

In developing our approach a sample of 12 firms were selected, which were defined as constituting a reference framework based on their size and turnover. Further on, the descriptive research method was used, based on secondary sources of data investigation.

After analyzing the data, it was concluded that the retailing sector in Romania is a powerful one, with a market slightly increasing, dominated by trends of concentration and with efficiency in line with the European average. The use of the principles of sustainable development into trade business companies in Romania is low. There is no urge to see these principles as business opportunities and sources of competitiveness.

Keywords: sustainable development, retailing, environment protection, efficiency, social responsibility.

JEL Classification: L 81, O 01.

Introduction

The issue of sustainable development has undergone a number of important phases up to its becoming part of public policies, and also of the work of organizations in various fields. We consider as relevant to the comprehension of the role of sustainable development, the following events occurring on a global scale: Brundtland Commission (1983), the

_

^{*} Corresponding author, Cristinel Vasiliu - cristi vasiliu@yahoo.com



Brundtland Report (1987), the Rio Conference (1992), the Johannesburg Summit (2002) etc. (Gogoneață, 2010; National Environmental Protection Agency - NEPA, 2013).

Certainly, within the EU, sustainable development is subject to numerous summits, treaties and agreements, the most important being the "Lisbon Treaty" in 2007 (NEPA, 2013).

Our country actively participated in these events and as a result, on 12 November 2008, the Government approved the National Sustainable Development Strategy 2013-2020-2030 (Government of Romania, 2008).

If initially, sustainable development implied the conservation of current resources for future generations (Gogoneață, 2010), the concept evolved and currently seeks balance between three areas - ecology, society and economy. Based on these 3 poles - environmental, social and economic - development respects environmental integrity, contributing to the wellbeing of individuals and societies based on economic performance achieved in this framework. In other words, environment protection is a prerequisite, economic efficiency is a means and social and individual development is an objective of sustainable development (Gendron and Revéret, 2000).

Therefore, the business field suffers major changes due to its need to include sustainable development objectives in each company strategy. Retailing, as a connection between producers and consumers is an important link in the logistics chains. As such, it plays a major role in influencing both producers and consumers, by raising awareness among them about the principles of sustainable development (Jones et al., 2005; Erol et al., 2009, United Nations Environment Programme - UNEP, 2011).

Sustainable development approach to retailing is the object of researches and studies outlined in the academic literature. There are two angles to this approach. The first one reveals the progress registered in retailing in applying sustainable development practices: reducing energy and water consumption, reducing greenhouse gas emissions, the use of clean technologies, waste recycling, green building design, selecting a healthy trading range, employment of responsible human resources, etc. The second angle of approach reflects the influences *upstream*, for raising the awareness of producers regarding the principles of sustainable development, and *downstream* for raising consumer awareness (Burger and Christen, 2010; Wiese et al., 2012; Kotzab et al, 2011; Witold and Zelner, 2010).

Also, a number of sustainable practices applied by retailers can be identified. Thus, the main sustainable practices applied in retailing are: energy efficiency, recycling and reusing products and packaging, reducing waste, reducing greenhouse gas emissions, using minimal packaging, increasing the use of biodegradable packaging, of green energy sources, implementing green procurement practices etc. (Delai and Takahashi, 2013).

In addition, sustainable development in retailing involves specific measures in human resources-related to employee continuing education, skills development, improving working conditions. This leads to versatility, hourly flexibility and increase of responsibility.

In relation to producers, sustainable supply chains are developed, based on the extensive application of the principles of sustainable development, control of supply, development of green criteria in selecting suppliers, fair trade orientation etc. (Kotzab et al., 2011).



The benefits resulting from these practices consist of the application of principles of sustainable development, which, in retailing covers the compliance of products, the distribution efficiency, the reduction of distribution costs, service differentiation, improving market image, etc.

Firms were forced to integrate sustainable development principles into their daily practices and to present the impact and their contribution to sustainable development (Kolk et al., 2010; Sharicz and Smith, 2011). The results of such pressures have resulted in the proliferation of product codes, reporting guidelines, best practices, etc. (Robinson et al., 2006).

Subsequent to the development of the strategy of sustainable development, Romania has adopted numerous regulations relating to: general legislation for environmental protection, packaging, electrical and electronic equipment waste, used tires, end of life vehicles, batteries and accumulators, waste oils, waste transfer and transport etc. The statistics in these areas are, however, carried out at national level without distinguishing between the fields of activity. Thus, we can say that there are no data on the evolution of sustainable development indicators in retailing firms, as well as in other sectors of the national economy (ANMP, 2012).

Studies and researches in our country have revealed little impact of the implementation of sustainable development policies and low awareness of its favourable impact on the environment, society and economy (Olaru et al., 2010, Toma, 2011).

We propose in this article to highlight the status of the trade in Romania in relation to the expansion of the presence of large international groups and the manifestation of the global economic crisis. One aim of this research relates to measuring the effectiveness of the big players in the field of activity in our country. Also, we consider the identification of sustainable practices in the Romanian retailing companies.

1. Trends in retailing

Retailing market is globalized. Creating sources of competitive advantage is becoming increasingly difficult. One success factor is the innovation. In the retailing industry, innovation is manifested in the form of the shops, brand politics, commercial range, internal processes, consumer experience, information technology, new communication and payment tools, methods of order fulfilment, etc. (Reinartz et al., 2011)

As Eckhard Cordes stated - CEO of METRO Group, the retail sector suffered major changes in recent years, citing the introduction of RFID technology at the operational level, the increasingly wider awareness of environmental issues and climate change "and revolutions occuring in retailing of emerging markets, particularly eastern Europe, China and India" (Kraft and Mantrala, 2010, p V).

Cox and Brittain (2004), similar to Kotler and Armstrong (2001), analyse the trends in retailing in a classical manner, mentioning the shift of consumption of goods towards services (catering, holidays, financial services, etc.), the decrease of business units due to competition from large commercial networks, the orientation of entrepreneurs towards bigger and bigger retail shopping centres, with a wide range of products and services, the polarization of retailing in that department stores are turning to the concept of "one - stop", while the smaller retailers tend to specialize. Also, a tendency of concentration can be



observed through a process of mergers and acquisitions meant to form increasingly larger trade groups, especially in the food trade area and a strong development of electronic commerce, in particular due to the development of technology and its costs which are getting lower.

Among European retail trends, Dawson (2010) noted that large commercial companies (Wal-Mart, Carrefour, Tesco, Metro, etc.) "grow" faster than the rate of growth of the retail sector, also noted a sharp strategic approach to management decisions, an organizational structure becoming more complex due to the increase of the size of trade companies, and a growth of the role of large retailers in coordinating the value chain, so that the value can be obtained throughout the chain, not just at the final point of sale. It also noted the growing trend of brands notoriety stores that are somewhat at the expense of branded products or trademarks established.

It also needs to be observed the trend of growing notoriety of brands stores that are somewhat at the expense of branded products or renowned trademarks.

Among the trends that can be observed in relation to the retailing industry in emerging markets is "bullwhip effect" in the development of modern retail trade. This phenomenon is enshrined in economics about supply chain management - delivery (Lee, Padmanabhan and Whang, 1997; Lee, So and Tang, 2000; Balan, 2008) and describes the increased amplitude of the demand as it moves from the end customer to the manufacturer. In the retailing case, the bullwhip effect is generated by the very favourable response from consumers in emerging markets to modern retail formats in the form of signals whose amplitude increases as they reach major decision makers in the industry, land owners and commercial and real estate brokers. The bullwhip effect materializes in an accumulation of commercial spaces, which often prove inefficient due to high prices of acquisition or rental, seasoned with an acute shortage of lands and commercial spaces. The supply chain role is played by the external environment of the firm, defined through its essential aspects: demographic, economic, natural (environment), technological, political and cultural (Kotler, 1997), and the role of stocks of goods is taken by the number of retail business units sales, respectively, the cumulative area of commercial premises.

2. Research methodology

In developing our approach we proceeded to the selection of 12 retail companies, this selection defining a reference field. The selection criteria of ranked firms are related to retail development as a main activity and a yearly turnover of more than a billion Ron.

Of the twelve companies present in the ranking, two are using cash & carry format, five are using the hypermarket format, two are using the discount format and three are using the supermarket format.

It is relevant to note that the company Carrefour Romania SA operates simultaneously by 25 hypermarkets and around 50 supermarkets, but given that official reports towards state authorities do not distinguish according to the company in two formats and sales volumes is provided predominantly by hypermarkets, we considered that the company operates exclusively on the latter format.



The 12 companies have a market share of about 46% of the retail market, although it represents less than 1% of the total number of companies in this sector. This is a conclusive picture on the degree of concentration on this market.

For the study we used a descriptive research. This was determined by the nature of the information that we wanted to achieve and by the need for specific tools for collecting the relevant data.

Data collection was performed by the method of investigation of secondary sources:

- Publications of the Romanian institutions the National Bank of Romania, National Institute of Statistics, Ministry of Public Finance and others, and international institutions Eurostat , and the magazine Piata, relevant to the retail sector;
 - Online research sites of the chosen companies.

Please note that the data collected about the 12 selected companies in the benchmark were analyzed in their dynamic between 2007-2011, to provide a conclusive picture and avoid difficulties related to the reporting period of the documents and their dissemination.

3. Main players of the Romanian retail market

Table no. 1 presents the ranking of main Romanian companies in the reference range, calculated by turnover in 2011.

Table no. 1. Ranking of main Romanian companies in the reference range, calculated by turnover in 2011

Rank	Turnover (million RON)	Format	2007	2008	2009	2010	2011	The average rate of growth
1	Kaufland Romania SCS	Hipermarket	2.141	2.865	3.694	4.671	5.586	27,09%
2	METRO CASH & CARRY ROMANIA SRL	Cash&carry	n.d.	n.d.	5.747	5.278	4.963	-7,07%
3	Carrefour Romania SA	Hipermarket	2.641	3.800	4.353	3.919	4.031	11,15%
4	Selgros Cash & Carry SRL	Cash&carry	2.741	3.162	3.042	3.219	3.408	5,59%
5	REAL,- HYPERMARKET ROMANIA S.R.L.	Hipermarket	1.364	2.643	3.224	3.280	3.009	21,87%
6	REWE (Romania) SRL	Discount	834	1.257	1.560	1.618	1.750	20,37%
7	Lidl Discount SRL	Discount	n.d.	1.021	1.308	1.451	1.679	18,03%
8	Auchan Romania SA	Hipermarket	517	1.025	1.303	1.498	1.578	32,17%
9	Romania Hypermarche SA	Hipermarket	1.355	1.469	1.395	1.377	1.378	0,43%
10	Mega Image SRL	Supermarket	335	486	612	884	1.221	38,13%
11	Billa Romania SRL	Supermarket	1.075	1.192	1.222	1.142	1.127	1,20%
12	Profi Rom Food SRL	Supermarket	219	348	490	617	934	43,77%
	Total selection		13.222	19.269	27.949	28.953	30.666	23,41%

Source: Ministry of Public Finance, 2013

It can be seen that the average annual growth rate of turnover for the twelve selected companies is 23.41%. The companies with the highest growth rates are Profi Rom Food Ltd. (43.77% per year) - its turnover increased in the last five years over four times, Mega Image Ltd. (38.13% per year) - its turnover increased in the last five years over three times, and Kaufland Romania SCS (27.09% per year) - - its turnover more than doubled in the last five years, propelling it from the third rank in 2007 to the first rank in 2011.



It is notable the situation of the company METRO Cash & Carry Ltd., which was the only one between the years 2009 - 2011 to register a decrease in turnover, with an average annual rate of 7.07%.

Even if they consider deflating the Consumer Price Index (CPI), the increased turnover deflated is consistent. In Table no. 2 we can see that the turnover of selected companies grow by an average annual rate of 17.83%. Besides the company METRO Cash & Carry Ltd. which presented a decrease also in the previous case, there emerged two more firms with turnover decrease: Romania Hypermarche SA (CORA) with 4.11% decrease per year and Billa Romania Ltd., with 3.37% decrease per year.

Table no. 2. Ranking of main Romanian companies in the reference range by the turnover in 2011 deflated by CPI

								The average
Rank	Turnover CPI (base 2006, million RON)	Format	2007	2008	2009	2010	2011	rate of
								growth
	CPI base 2006 (%)		106,38%	112,51%	117,17%	124,90%	128,00%	
1	Kaufland Romania SCS	Hipermarket	2.013	2.547	3.153	3.740	4.364	21,34%
2	METRO CASH & CARRY ROMANIA SRL	Cash&carry	n.d.	n.d.	4.904	4.226	3.877	-11,09%
3	Carrefour Romania SA	Hipermarket	2.483	3.378	3.715	3.138	3.149	6,13%
4	Selgros Cash & Carry SRL	Cash&carry	2.577	2.810	2.597	2.577	2.663	0,82%
5	REAL,- HYPERMARKET ROMANIA S.R.L.	Hipermarket	1.282	2.349	2.751	2.626	2.351	16,36%
6	REWE (Romania) SRL	Discount	784	1.117	1.331	1.296	1.367	14,93%
7	Lidl Discount SRL	Discount	n.d.	908	1.116	1.162	1.312	13,06%
8	Auchan Romania SA	Hipermarket	486	911	1.112	1.199	1.233	26,20%
9	Romania Hypermarche SA	Hipermarket	1.274	1.306	1.190	1.102	1.077	-4,11%
10	Mega Image SRL	Supermarket	315	432	523	707	954	31,89%
11	Billa Romania SRL	Supermarket	1.010	1.060	1.043	915	881	-3,37%
12	Profi Rom Food SRL	Supermarket	206	309	418	494	730	37,27%
	Total selection		12.429	17.127	23.853	23.181	23.957	17,83%

Source: Data processed from Ministry of Public Finance, 2013 and National Institute of Statistics (INSSE), 2012

The consistent growth in turnover of selected companies, with an annual average rate of about 20% over the reference sector, cannot be explained solely by the increase of economic performance, but also by the continued expansion of the firms. The expansion of modern retail firms is reflected in the number of units, the total sales and number of employees. In Table no. 3 is presented the top of the selected companies, calculated on the average number of employees in 2011.

It can be seen that the average annual growth of turnover of firms in the top is accompanied by a substantial increase in the number of employees, an average of 15.47% per year, which confirms the growth hypothesis based on expansion mentioned above.

However, changes in the number of employees are very different from one firm to another: Kaufland Romania SCS has doubled the number of employees, increasing it by about 5,000 employees during the years 2007-2011; Profi Rom Food SRL has increased more than four times the number of employees between the years 2007 – 2011, and Selgros Cash & Carry Ltd reduced its number of employees by approximately 15% in the same period.



Table no. 3. Top of main Romanian companies in the reference range by average number of employees in 2011

Rank	Number of employees	Format	2007	2008	2009	2010	2011	The average rate of growth
1	Kaufland Romania SCS	Hipermarket	5.896	7.512	8.258	9.993	10.493	15,50%
2	Carrefour Romania SA	Hipermarket	5.006	7.760	7.738	7.123	6.951	8,55%
3	METRO CASH & CARRY ROMANIA SRL	Cash&carry	n.d.	n.d.	5.884	6.132	6.003	1,01%
4	REAL,- HYPERMARKET ROMANIA S.R.L.	Hipermarket	4.437	7.205	7.896	7.530	5.771	6,79%
5	Mega Image SRL	Supermaket	1.288	1.785	2.383	2.998	4.277	34,99%
6	Selgros Cash & Carry SRL	Cash&carry	5.001	5.090	4.893	4.307	4.248	-4,00%
7	Romania Hypermarche SA	Hipermarket	2.793	2.883	2.660	3.146	3.665	7,03%
8	Auchan Romania SA	Hipermarket	2.465	3.156	3.103	3.184	3.289	7,48%
9	Billa Romania SRL	Supermaket	2.053	2.225	2.643	2.752	2.734	7,42%
10	REWE (Romania) SRL	Discount	1.273	1.667	2.151	2.075	2.493	18,30%
11	Profi Rom Food SRL	Supermaket	571	755	1.117	1.492	2.476	44,30%
12	Lidl Discount SRL	Discount	n.d.	1.388	1.856	2.074	2.325	18,76%
	Total selection		30.783	41.426	50.582	52.806	54.725	15,47%

Source: Ministry of Public Finance, 2013

Table no. 4 shows top main companies in the Romanian retail market, calculated according to the total area sales in 2012. Values in the table are those at December 31 of each year.

In 2012, it can be seen a decrease of approximately 150,000 square feet in the REAL, - Hypermarket Romania SRL company's portfolio, which are to be found in the Auchan Romania SA company's portfolio. This is the result of a transaction finalised in 2012 between METRO Group, as owner, and Auchan Groupe, transaction through which, the Real hypermarkets division from Eastern Europe is sold to the latter (METRO GROUP, 2012). Mega Image SRL can be also noted, with major annual average growth rate of total area selling (43.92%) and Profi Rom Food SRL (32.66%) as well as Kaufland Romania SCS with average annual growth of about 50,000 square meters.

Table no. 4. Top of main Romanian companies in the reference range by total area sales in 2012

Poz.	Total sales area (sqm)	Format	2010	2011	2012	The average rate of growth
1	Kaufland Romania SCS	Hipermarket	302.544	359.794	409.094	16,28%
2	Carrefour Romania SA	Hipermarket	204.486	227.212	228.731	5,76%
3	METRO CASH & CARRY ROMANIA SRL	Cash&carry	186.326	191.276	191.276	1,32%
4	Selgros Cash & Carry SRL	Cash&carry	178.000	188.000	188.000	2,77%
5	REAL,- HYPERMARKET ROMANIA S.R.L.	Hipermarket	177.727	177.727	28.414	-60,02%
6	Lidl Discount SRL	Discount	113.560	135.280	164.680	20,42%
7	REWE (Romania) SRL	Discount	97.582	106.164	113.059	7,64%
8	Auchan Romania SA	Hipermarket	73.500	96.200	257.813	87,29%
9	Mega Image SRL	Supermarket	46.511	75.371	96.335	43,92%
10	Romania Hypermarche SA	Hipermarket	56.500	72.300	90.300	26,42%
11	Billa Romania SRL	Supermarket	64.405	68.010	74.919	7,85%
12	Profi Rom Food SRL	Supermarket	42.490	55.670	74.780	32,66%
	Total selection		1.543.631	1.753.004	1.917.401	11,45%

Source: Bădescu, 2012, 2013

In terms of sales area, it is noted that, in the period between 2010 and 2012, the format of the accelerated growth belongs to the supermarkets format, with an average annual growth rate of 26.64%, followed by the discount format, with an average annual growth rate of 14.69%. The growth area of cash & carry format is very low (2.03% per year), while growth on the hypermarket format is still encouraging (11.58% per year).

This is supported by data in Table no. 5, which presents the evolution of the number of retail units in the G47division, on sales area.

Table no. 5. Commercial network of retail companies

	•	NACE R	ev.2	
Area category		Number of sho	ps - total	
	2008	2009	2010	2011
Total	134.878	132.856	133.521	124.407
Up to 120 m ²	128.290	125.128	125.471	116.526
121 - 399 m ²	5.020	5.868	6.070	5.778
400 - 999 m ²	976	1.189	1.203	1.277
1000 - 2499 m ²	373	406	453	501
2500 - 4999 m ²	94	110	158	142
5000 - 9999 m ²	92	114	120	129
10000 m ² and over	33	41	46	54

Source: INSSE, 2012

4. Economic efficiency of main players in the Romanian retail market

Among the indicators considered relevant, presented in this chapter can be listed market share, work productivity, productivity of the commercial area, rates of return, general liquidity index, and general leverage rate and the inventory turnover. A component analysis of the turnover, the economic rate of return and the commercial rate of return is shown in the data sheets of public companies in order to detect elements that favoured the positive developments to the detriment of those which favoured negative developments.

Table no. 6 presents the top of the first twelve Romanian trading companies by market share in 2011, calculated by reporting to the reference market.

In 2011, the combined market share of the first twelve companies from the top is 46.09%, while the market share of the first five companies in the top, in the same year is 31.56%. The dynamics of the market shares of selected companies is also remarkable, Kaufland Romania SCS doubling its market share in the period 2008 - 2011 and Profi Rom Food SRL nearly tripling its market share in the same period.



Table no. 6. The top of the Romanian firms in the reference range, calculated by market share in 2011

Market share / reference range - Div. 47.1.1 + Div. 46.3.9 (%)	2008	2009	2010	2011	The average rate of growth
Kaufland Romania SCS	4,33%	5,55%	7,40%	8,40%	24,66%
METRO CASH & CARRY ROMANIA SRL	n.d.	8,63%	8,37%	7,46%	-7,06%
Carrefour Romania SA	5,75%	6,54%	6,21%	6,06%	1,77%
Selgros Cash & Carry SRL	4,78%	4,57%	5,10%	5,12%	2,32%
REAL,- HYPERMARKET ROMANIA S.R.L.	4,00%	4,84%	5,20%	4,52%	4,19%
REWE (Romania) SRL	1,90%	2,34%	2,57%	2,63%	11,44%
Lidl Discount SRL	1,54%	1,97%	2,30%	2,52%	17,78%
Auchan Romania SA	1,55%	1,96%	2,37%	2,37%	15,21%
Romania Hypermarche SA	2,22%	2,10%	2,18%	2,07%	-2,31%
Mega Image SRL	0,73%	0,92%	1,40%	1,84%	35,69%
Billa Romania SRL	1,80%	1,84%	1,81%	1,69%	-2,04%
Profi Rom Food SRL	0,53%	0,74%	0,98%	1,40%	38,68%
Total selection	29,14%	41,99%	45,90%	46,09%	16,51%

Source: Data processed from Ministry of Public Finance, 2013 and Eurostat, 2013

Table no. 7 shows the top by labour productivity in 2011, expressed as a ratio of annual turnover (in Euro) and average number of employees of major companies in Romania from the reference range, next to the productivity calculated nationally for Romania, Germany, France and the European Union (27 countries).

Table no. 7. The top of the Romanian firms in the reference range, calculated by work productivity in 2011

Rank	Labor productivity (Turnover	Format	2007	2008	2009	2010	2011	The average rate of
Italik	Euro/employee/year)	Tomac	2007	2000	2003	2010	2011	growth
	Exchange rate (RON/Euro)		3,3373	3,6827	4,2373	4,2099	4,2379	6,15%
1	METRO CASH & CARRY ROMANIA SRL	Cash&carry	n.d.	n.d.	230.487	204.444	195.086	-8,00%
2	Selgros Cash & Carry SRL	Cash&carry	164.255	168.678	146.742	177.543	189.311	3,61%
3	Lidl Discount SRL	Discount	n.d.	199.776	166.301	166.210	170.402	-5,16%
4	REWE (Romania) SRL	Discount	196.230	204.693	171.152	185.274	165.656	-4,15%
5	Carrefour Romania SA	Hipermarket	158.077	132.985	132.749	130.684	136.850	-3,54%
6	Kaufland Romania SCS	Hipermarket	108.825	103.577	105.567	111.028	125.622	3,65%
7	REAL,- HYPERMARKET ROMANIA S.R.L.	Hipermarket	92.114	99.622	96.347	103.470	123.027	7,50%
8	Auchan Romania SA	Hipermarket	62.855	88.226	99.115	111.755	113.216	15,85%
9	Billa Romania SRL	Supermarket	156.878	145.481	109.142	98.602	97.310	-11,25%
10	Profi Rom Food SRL	Supermarket	114.727	125.182	103.429	98.152	89.015	-6,15%
11	Romania Hypermarche SA	Hipermarket	145.382	138.382	123.732	103.938	88.745	-11,61%
12	Mega Image SRL	Supermarket	78.028	73.893	60.646	70.005	67.366	-3,61%
	Romania		54.908	59.874	54.546	61.257	n.d.	
	Germany		n.d.	162.846	155.636	158.967	n.d.	
	France		n.d.	274.530	247.502	250.616	n.d.	
	European Union (27 countries)		n.d.	171.375	162.987	172.028	n.d.	
	Average selection	•	127.737	134.590	128.784	130.092	130.134	0,47%

Source: Data processed from Ministry of Public Finance, 2013, National Bank of Romania, 2013 and Eurostat, 2013



It is thus observed that the cash & carry format is in the top of work productivity, which is quite natural, given the specific predominant selling of large lots, but also due to the fact that this format is among the first companies that have entered the market in Romania.

The dynamics of labour productivity in the companies presented is insignificant (average increase of 0.47% per year), but taken on each company has very different values. METRO Cash & Carry Ltd, albeit registers a consistent decrease in productivity (average 8% per year in the period 2009-2011) retains top position in this ranking. Auchan Romania ltd. in the period between 2007 and 2011, recorded the highest average annual growth rate of labor productivity (15.85%), while Romania Hypermarché ltd. has the highest average annual rate of decline (11, 61%).

It is notable that the productivity of firms in the ranking is twice higher than the average national productivity and is comparable to that of Germany or the European Union, but only half of that of France.

Table no. 8 shows the top by sales surface productivity in 2011, expressed as a ratio between annual turnover (in Euro) and total sales surface of major Romanian companies in the reference field.

Table no. 8. The top of the Romanian firms in the reference range, calculated by sales surface productivity in 2011

Rank	Sales density (Euro/sqm/year)	Format	2010	2011	The average rate of growth
1	METRO CASH & CARRY ROMANIA SRL	Cash&carry	6.728	6.123	-9,00%
2	Romania Hypermarche SA	Hipermarket	5.787	4.499	-22,27%
3	Selgros Cash & Carry SRL	Cash&carry	4.296	4.278	-0,43%
4	Carrefour Romania SA	Hipermarket	4.552	4.187	-8,03%
5	REAL,- HYPERMARKET ROMANIA S.R.L.	Hipermarket	4.384	3.995	-8,87%
6	Profi Rom Food SRL	Supermarket	3.447	3.959	14,87%
7	Billa Romania SRL	Supermarket	4.213	3.912	-7,15%
8	REWE (Romania) SRL	Discount	3.940	3.890	-1,26%
9	Auchan Romania SA	Hipermarket	4.841	3.871	-20,05%
10	Mega Image SRL	Supermarket	4.512	3.823	-15,28%
11	Kaufland Romania SCS	Hipermarket	3.667	3.664	-0,10%
12	Lidl Discount SRL	Discount	3.036	2.929	-3,52%
	Average selection		4.450	4.094	-8,01%

Source: Data processed from Ministry of Public Finance, 2013 and Bădescu, 2012

The highest value of the sales area productivity is obtained by Metro Cash & Carry Ltd. (6.123 Euro / sq. m / year) due to its specific predominant selling of large batches and due to the maturity of the market in Romania (as well as for labor productivity) and the lowest sales area productivity is the company Lidl Discount Ltd. (2.929 Euro / sq. m / year), most likely due to a strategy mainly oriented towards extension (perspective that can be observed in the average annual growth of the total area of sales) and less towards efficiency.

Sales area productivity growth between the years 2010 - 2011 is negative (8% per year), most likely due to the expansion of network stores (average annual growth rate of sales area 11.45%) coupled with a rebound of consumption due to deteriorating economic conditions,



generally translated into an increase in sales during that period with a lower annual average rate (5.91%).

It is noted positively Profi Rom Food Ltd., with an average sales area productivity increase of 14.87% per year, and negatively Romania Hypermarche SA with an average decrease sales area productivity of 22.27% per year. Even in this situation, Romania Hypermarche SA still holds an honourable second place in the top of the selected firms.

The values of the sales area productivity of main Romanian companies selected for this study are comparable to those of the main companies in the retail market in Germany, as shown in Table No. 9.

Table no. 9. The top of the main retail companies in Germany by turnover in 2010

	TOP 10 retailers in Germany 2010									
Rank	k Company	Segment or retail format	No. of stores	Sales- area [sqm]	Sales- density [€/sqm]	Average store area [sqm]	Turnover [€bn]			
1	EDEKA	Grocery, C&C	12,783	11,638,953	3,746	911	43.6	EDEKA center, EDEKA neukauf, EDEKA aktiv markt, Marktkauf, Netto Marken-Discount, EDEKA C+C Groß märkte		
2	REWE	Grocery, C&C	11,182	10,981,442	3,306	982	36.3	REWE, toom Markt, toom Getränkemarkt, nahkauf, Penny Markt, Fegro Selgros C&C, ProMarkt, toom Baumarkt ()		
3	Metro Gruppe	Grocery, C&C	942	5,709,933	5,377	6,062	30.7	Metro/Makro C&C, Real, Media Markt, Saturn, Galeria Kaufhof		
4	Schwarz Gruppe	Hyperstores, grocery discounter	3,849	4,709,300	5,818	1,224	27.4	Lidl, Kaufland, KaufMarkt, Handelshof		
5	Aldi	Grocery-discounter	4,310	3,118,840	8,176	724	25.5	Aldi Nord, Aldi Süd		
6	Lekkerland	Convenience wholesale	20 Lager	n/a	n/a	n/a	7.9	Lekkerland		
7	Tengelmann	Grocery, DIY	2,983	1,571,578	4,581	527	7.2	Kaiser's Tengelmann, KiK, OBI Bau- und Heimwerkermärkte, Plus Eastern Europe		
8	Schlecker	Drugstores	10,735	2,153,800	2,182	201	4.7	Schlecker		
9	Globus	Hypermarkets, DIY	132	1,163,536	3,610	8,815	4.2	Globus, Hela, Alpha-Tecc		
10	DM- Drogeriemarkt	Drugstores	1,185	648,195	5,708	547	3.7	DM-Drogeriemarkt		

Source: Lebensmittelzeitung 2011; www.igd.com; KPMG research

Source: KPMG, 2011

In 2011, from the point of view of commercial rate of return, expressed as the ratio between net income and turnover, in Table no. 10 can be seen the top firms in the reference range.

Carrefour Romania Ltd. ranks first, with a commercial rate of return of 3.32%, while the last position is occupied by Lidl Discount Ltd. with a negative commercial rate of return of 16.88%. Compared to the annual inflation rate, only Carrefour Romania SA has a higher commercial rate of return, all other companies in the ranking being under the rate.

The negative dynamics of commercial rate of return can be attributed to the bullwhip effect in the development of modern trade (average annual growth rate of sales area, 11.45% in the period 2010 - 2012 - Table no. 4) in conjunction with rebound consumption due to the deteriorating general economic climate.



Table no. 10. Top of main Romanian companies in the reference range, calculated by commercial rate of return in 2011

Rank	Commercial profitability (%)	Format	2007	2008	2009	2010	2011	The average rate of growth
1	Carrefour Romania SA	Hipermarket	3,12%	1,95%	2,02%	3,59%	3,32%	1,56%
2	Kaufland Romania SCS	Hipermarket	2,46%	0,48%	2,14%	3,68%	3,00%	5,13%
3	Romania Hypermarche SA	Hipermarket	3,10%	4,93%	6,07%	4,80%	2,90%	-1,64%
4	Selgros Cash & Carry SRL	Cash&carry	4,42%	4,55%	3,44%	3,12%	2,54%	-12,91%
5	METRO CASH & CARRY ROMANIA SRL	Cash&carry	n.d.	n.d.	2,21%	2,64%	1,92%	-6,90%
6	Profi Rom Food SRL	Supermarket	-2,24%	0,21%	4,58%	0,59%	1,42%	89,47%
7	Mega Image SRL	Supermarket	0,54%	-0,61%	-2,29%	0,26%	1,07%	18,71%
8	Billa Romania SRL	Supermarket	3,27%	3,19%	2,57%	0,10%	0,46%	-38,64%
9	REWE (Romania) SRL	Discount	2,50%	2,36%	2,56%	1,91%	0,29%	-41,45%
10	Auchan Romania SA	Hipermarket	-0,57%	-2,41%	-3,15%	-1,29%	-0,45%	-5,52%
11	REAL,- HYPERMARKET ROMANIA S.R.L.	Hipermarket	-11,61%	-7,72%	-7,61%	-2,77%	-4,01%	23,32%
12	Lidl Discount SRL	Discount	n.d.	-6,95%	-5,59%	-17,07%	-16,88%	-34,43%
	Average selection		1,43%	0,36%	0,73%	1,03%	0,48%	-23,76%
	The annual inflation rate (%)		6,57%	6,30%	4,74%	7,96%	3,14%	-16,85%

Source: Ministry of Public Finance, 2013, BNR, 2013

Table no. 11 presents the ranking of the reference companies in 2011, taking into account most of the indicators presented above, weighted by an arbitrary factor of relevance, but justified by the relevance given to the indicator. Notes for each of the indicators taken into account range from 10 to 0 (on columns), ten being the highest and zero being the minimum grade (granted to the last two positions in the ranking). The final grade is calculated on the lines of each company, taking into account the weighting factor.

Table no. 11. General ranking of major Romanian firms in the reference range in 2011, calculated by analysed indicators

Top companies in the reference range NACE G47.1.1 & G46.3.9	Commercial profitability (%)	Return on asset utilization (%)	Current ratio	Debt ratio (%)	Stock turnover ratio (days)	Labor productivity (RON/employee/year)	Sales density (RON/sqm/year)	Turnover (million ron)	Final grade
Share	15%	15%	15%	15%	2%	10%	15%	13%	100%
METRO CASH & CARRY ROMANIA SRL	6	9	6	7	8	10	10	9	8,03
Selgros Cash & Carry SRL	7	7	5	10	4	9	8	7	7,44
Carrefour Romania SA	10	8	3	5	6	6	7	8	6,71
Romania Hypermarche SA	8	10	8	2	10	0	9	2	6,01
Kaufland Romania SCS	9	5	0	6	7	5	0	10	4,94
REWE (Romania) SRL	2	2	10	4	0	7	3	5	4,50
Mega Image SRL	4	4	9	9	3	0	1	1	4,24
Profi Rom Food SRL	5	6	7	3	0	1	5	0	4,00
Billa Romania SRL	3	3	4	8	9	2	4	0	3,68
REAL,- HYPERMARKET ROMANIA S.R.L.	0	0	2	1	5	4	6	6	2,63
Auchan Romania SA	1	1	1	0	2	3	2	3	1,48
Lidl Discount SRL	0	0	0	0	1	8	0	4	1,34

Source: Data processed from Ministry of Public Finance, 2013 and Bădescu, 2012



It can be seen that, with minor differences, the ranking from table no. 11 coincides with the chronological order of market entry in Romania of the firms, starting with Metro Cash & Carry Ltd – 1996, Selgros Cash & Carry Ltd and Carrefour Romania SA - 2001, Romania Hypermarche SA - 2003, Kaufland Romania SCS - 2005 and ending with REAL, - Hypermarket Ltd. and Auchan Romania SA - 2006 and Lidl Discount Ltd. which has taken over the operations of Pludi Market Ltd. (Plus stores, part of Tengelmann Group of Germany) in 2010.

On a European level, as shown in table no. 12, the number of companies in Romania in the reference range is comparable to that in Italy, about twice greater than that of Germany and about 12% of the European overall total.

Table no. 12. Number of the firms in the reference range calculated by the European Union level and by a representative selection of countries

Number of the firms G47.1.1 + G46.3.9	2008	2009	2010
European Union (27)	449.795	454.940	464.560
Bulgaria	21.835	24.601	24.088
Germany	24.823	31.201	26.691
France	21.417	23.858	30.327
Italy	59.650	56.339	54.372
Hungary	16.886	15.947	15.690
Poland	72.724	67.749	71.362
Romania	63.225	56.831	52.155
Slovenia	848	808	783
Slovakia	392	373	2.632

Source: Data processed from Eurostat, 2013

When considered the average turnover of each firm, the situation is very different in the sense that, in Romania its value is over 25 times lower than that of firms in France and Germany and about 9 times lower than of the European average, which can be seen in Table no. 13.

Table no. 13. The average turnover of each firm compared to the European Union level and a representative selection of countries

Turnover / firm (euro) G47.1.1 + G46.3.9	2008	2009	2010
European Union (27)	2.542.980	2.445.359	2.410.433
Bulgaria	132.210	135.515	150.083
Germany	7.374.665	6.715.060	7.860.320
France	8.553.990	8.178.326	6.538.982
Italy	1.992.654	2.116.205	2.222.848
Hungary	836.533	769.800	792.607
Poland	543.511	494.577	511.219
Romania	284.237	276.277	287.181
Slovenia	4.983.491	5.293.564	5.406.513
Slovakia	8.986.224	9.133.244	1.497.188

Source: Data processed from Eurostat, 2013

The value of average labour productivity measured as percentage between the annual turnover and the number of employees in the relevant field is about three times lower in Romania than the European average, aspect that can be seen in Table no. 14.

Table no. 14. Average labour productivity at the level of the European Union and at the level of a representative selection of countries

Turnover / employee (euro) G47.1.1 + G46.3.9	2008	2009	2010
European Union (27)	183.746	177.095	184.769
Bulgaria	32.997	34.081	36.521
Germany	222.228	201.872	207.598
France			293.952
Italy	247.575	248.355	254.734
Hungary	105.311	93.049	93.000
Poland	84.104	75.333	82.237
Romania	61.917	60.201	61.405
Slovenia	156.989	160.531	166.889
Slovakia	110.092	100.106	101.254

Source: Data processed from Eurostat, 2013

Both the small average turnover and the low productivity per firm in Romania can be attributed to the large number of companies reported in the reference range, although in the period 2008 - 2010 the number decreased by an average of 9% per year.

5. Aspects of the sustainable development in major Romanian retail firms

From the very beginning it should be noted that, in Romania, there is no statistical data on sustainable development indicators for the retailing trade. However, The National Institute of Statistics developed "Statistical indicators of sustainable development "(INSSE, n.d.), with components related to aspects of structural change and macroeconomic balances, climate change and clean energy, sustainable transport, sustainable consumption and production, etc. In spite of this, there are no separate data related to retailing. The same situation can be seen in the case of the National Environmental Protection Agency, which does not provide distinct data for the retail sector.

Therefore, we did a research of the sites of the Romanian retail companies retained in the reference field. Of the 12 companies, only one, REWE (Romania) Ltd., operating the chain Penny Market XXL, does not allow free access to the site, being required a registration. As a consequence, our analysis was performed on the rest of the companies in the reference range.

A first observation is that if the international groups they belong to have clear concerns on the implementation of sustainable development policies, in Romania, only 6 companies are interested in these issues: Kaufland Romania SCS , Selgros Cash & Carry Ltd, Real - Hypermarket Romania ltd., Auchan Romania SA , Mega Image Ltd. and Billa Romania Ltd.. This can be explained in several ways: lack of legislative pressure, the way in which the retail market operates, the sources of competitiveness and low expectations of the



Romanian consumer. The activity of the 6 selected companies appears therefore as voluntary for purposes of image and social responsibility.

Of the six companies, only one, Auchan Romania SRL, develops a "Sustainability Report" (Auchan, 2013), which briefly summarizes a number of courses of action and concerns regarding sustainable development. Also, absolute data and specific reporting indicators are not presented.

The other five companies state a number of concerns, actions and objectives related to sustainable development, but these ones reach just certain parts of sustainable development.

Kaufland promotes "Commitment to people and the environment" (Kaufland, nd), made up of three areas:

- Environmental protection recycling, green technology, office materials
- Range certified products, organic products, protection of forests and animals
- Society environmental action, educational campaigns, healthy lifestyle

Selgros Cash & Carry promotes "Social responsibility" (Selgros, nd), stating a range of charitable actions, educational ones, sponsorship of sports teams, environmental protection - ecology, renovation.

Real Hypermarket has a recycling program in which the main activities carried out are specified (Real Hypermarket, nd).

Mega Image has two components, namely "Factory for a clean future", with activities related to green energy, recycling, partnerships, raising of awareness of suppliers towards corporate responsibility and "Mega Image Fund for Community" focusing on social, environmental and educational projects (Mega Image, nd).

Billa Romania mentions "social responsibility" with two components (Billa Romania, nd):

- Sustainability bags, flyers, recycling, energy
- Social, charitable, environmental

In conclusion, we note a relatively low concern for the principles of sustainable development in business firms in the reference range. Mainly, their activities relate to corporate social responsibility and environmental protection. We find that human resources are not included in the policy of sustainable development. Actions for raising awareness of consumers and producers are sporadic. Finally, information on the studied sites are not updated.

6. Discussions

From the data and analysis presented it can be concluded that the major players in modern trade will keep on developing, on the one hand due to the erosion of market share relating to traditional commerce, and on the other hand, due to the expanding number of commercial business units, even if the development rhythm will be slowed amid unfavorable economic context.

In order to integrate the principles of sustainable development policy in their own business, retailers can adopt a series of measures aimed at finding out the environmental impact of their activities, their influence on the behavior of members of supply chains and consumer education.



The management of the impact of the traders' own activities from sustainable perspective it is aimed at designing sustainable green buildings, implementation of energy and water conservation, waste recycling, appropriate policies for recruitment, training and motivation of the workforce etc. (Witold and Zelner, 2010).

Building sustainable supply chains turns out to be the right decision in terms of both economic and competitiveness (Kotzab et al., 2011). In this sense, a series of actions are required, actions aimed at achieving: cooperation in developing of innovative products with sustainable features, stimulation in the adoption of clean production techniques and technologies, the use of sustainable criteria for selection of suppliers, development of active partnerships with manufacturers and their inclusion in corporate social responsibility programs, effective communication, etc. (UNEP, 2011).

Consumer education is one aspect of sustainable development with favorable impact. In such an approach, priority should be given to finding solutions to stimulate sustainable consumption, to offer incentives for buying eco-friendly products, to offer advice on the sustainable features of the products, on how to use and destroy them, etc. (Petregal Diaz , 2006).

Conclusions

Romanian retail market is growing, but the growth rates are lower and lower. This growth is mixed, based on both extensive development (opening new stores) and intensive development (efficiency of the operation of sales areas). The tendency of sector concentration continues, the number of firms being diminished, but the size of their surfaces increasing.

The efficiency of the exploit of commercial areas is in the European average, but the value of sales is given mainly by the level of prices (mark-up rates) and not by the quantity of goods sold. The attractiveness of investments in this sector is given both by the absolute size of the Romanian market, but also by the benefits of labour costs in our country (lower than the European average).

Concerns for integrating the principles of sustainable development in the strategies of retail firms are modest, aiming, notably, corporate social responsibility and environmental protection. This latter aspect gets some attention due to legislative constraints, and due to incentives granted by public authorities. In addition, the principles of sustainable development are significant savings opportunities (energy, fuel, water, etc.). In parallel, they constitute a challenge for policies of planning and territorial development - employment, local supply, waste management etc.

There are several issues which limit our research of which may be listed:

- No account was taken of a very important factor influencing the evolution of the turnover of firms in the ranking the evolution of the number of stores, respectively of the total area sell of the main players in the reference period of 2003-2012. This is due to the difficulty to obtain statistics from reliable sources.
- The research area was restricted to twelve companies, the first in the ranking in the relevant field, by the share they hold and the features they have.
- There are political factors which influence both national and international economic level, that have not been taken into account and whose relevance has not been estimated.



Although not the subject of the research, falling only at the context, some relevant aspects should be mentioned:

- The speculative behaviour in the management of large players in the retail market, a strategic plan without substance and the lack of attention paid to the impact of macroeconomic factors have led to the failures evidenced by the closure of large commercial establishments (Metro, Carrefour, Real) or even to the exit of Romania's market of some of the major players (Tengelmann, SPAR, Interex Groupement des Mousquetaires-ITM Entreprises, Real, etc.).
- The latest national regulation regarding cash&carry type wholesale allows the sale to both individuals and businesses within the same locations provided that the "retail/wholesale price differentiation" is maintained thus aligning the national legislation to the new trend represented by the warehouse club format (warehouse club or membership club) (McLaughlin, Hawkes and Perosio, 1992; Brittain and Cox, 2004), a large area store whose customers become members on a subscription basis (they receive a membership pass), that serves both end and professional ones.
- The accelerated development of the main players in the food retail industry in Romania is likely to encourage the implementation of sustainable development principles at a similar level to that of Western European countries, especially towards an increasing focus on environmental and consumer education.

All these constitute challenges for new directions in research and concerns for further studying of sustainable development practices occurring in the business field.

References

ANMP, 2012 *National report concerning the environment in 2011*. [pdf] Available at: www.anpm.ro/upload/82095 starea mediului 2011.pdf>, [Retrieved on 12.08.2013].

ANMP, 2013. *Sustainable Development*. [Online] Available at <www.anmp.ro/Mediu/dezvoltare durabila-18>, [Retrieved on 23.07.2013].

Auchan Romania, 2013 Report of Sustainable Development Auchan Romania 2012-2013. [Online] Available at: <www.auchan.ro/sites/all/themes/auchan/raport-dezvoltare.php> [Retrieved on 05.09.2013].

National Bank of Romania, 2013. *Exchange rate. Daily, monthly and anual series*. [Online] Available at: http://www.bnr.ro/Cursul-de-schimb-3544.aspx, [Retrieved on 27 April 2013].

Bădescu, C., 2012.Boom years in the modern retailing. *Piața Journal*. [e-Journal] Available at: < http://www.revista-piata.ro/Ani_de_boom_in_retailul_modern-id7432.html>, [Retrieved on 12 December 2012].

Bădescu, C., 2013. Expansion and consolidation. *Piața Journal*. [e-Journal] Available at: http://www.revista-piata.ro/Expansiune_si_consolidare-id8659.html, [Retrieved on 27 February 2013].

Bălan, C., 2008. The effects of the lack of coordination within the supply chain. *Amfiteatru Economic*, Issue no. 24, pp. 26-40.

Billa Romania, n.d. *Social responsibility* [Online] Available at https://www.billa.ro/Layouts/dd_bi_subseite2008.aspx?pageID=1131834&folderid=126099>. [Retrieved on 10.09.2013].

Burger, P. şi Christen, M., 2011. Towards a capability approach of sustainability. *Journal of Cleaner Production*, 19(8), pp.787–795.

Cox, R. şi Brittain, P., 2004. *Retailing. An Introduction*. 5th ed. Harlow: Pearson Education.

- Dawson, J., 2010. Retail trends in Europe. In: Krafft, M. and Mantrala, M. K. eds., 2010. *Retailing in the 21st Century Current and Future Trends*. 2nd ed. Berlin: Springer-Verlag, pp. 63-81.
- Delai, I., Takahashi, S., 2011. Sustainability measurement system: a reference model proposal. *Social Responsibility Journal*, 7(3), pp.438-471.
- Diaz Pedregal, V., 2006 Le commerce équitable: un des maillons du développement durable?, *Développement durable et territoires Dossier 5*. [Online] Available at: http://developpementdurable.revues.org/1644>, [Retrieved on 08.09.2013].
- Erol, I., Cakar, N., Erel, D. and Sari, R., 2009. Sustainability in the Turkish retailing industry. *Sustainable Development*, 17, pp.49-67.
- Eurostat, 2013. *Annual detailed enterprise statistics for trade (NACE Rev. 2 G)*. [Online] Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sbs_na_dt_r2&lang=en, [Retrieved on 21 May 2013].
- Eurostat, 2013. Annual detailed enterprise statistics on trade (NACE Rev. 1.1 G). [Online] Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sbs_na_3b_tr&lang=en, [Retrieved on 21 May 2013].
- Eurostat, 2013. *Annual net earnings*. [Online] Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=earn_nt_net&lang=en, [Retrieved on 22 May 2013].
- Eurostat, 2013. HICP (2005 = 100) annual data (average index and rate of change). [Online] Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=prc_hicp_aind&lang=en, [Retrieved on 22 Mai 2013].
- Eurostat, 2013. Purchasing power parities (PPPs), price level indices and real expenditures for ESA95 aggregates. [Online] Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=prc_ppp_ind&lang=en, [Retrieved on 22 Mai 2013].
- Gendron, C. and Revéret, J.P., 2000. Le développement durable. Économies et sociétés. *Collection F Développement, croissance et progrés*, 9, pp.111-124.
- Gogoneață, B., 2010. The Long-Run Relationship Between Commerce and Sustainable Development in Baltic and Central and Eastern European Countries. *Amfiteatru Economic*, XII (27), pp. 36-51.
- Romanian Government, 2008. *National Sustainable Development Strategy 2013-2020-2030*. [pdf] Available at: http://strategia.ncsd.ro/docs/sndd-final-ro.pdf. [Retrieved on 10.09.2013].
- INSEE, 2012 *Romanian Statistical Yearbook 2012*. Bucharest: House of Publishing Revista Română de Statistică.
- INSEE, n.d. *Statistic indicatior of sustainable development*. [Online] Available at: http://www.insse.ro/cms/files/Web_IDD_BD_ro/index.htm. [Retrieved on10.09.2013].
- Jones, P., Confort, D. şi Eastwood, I., 2005. Retailers and sustainable development in the UK. *International Journal of Retail & Distribution Management*, 33(3), pp.207-214.
- Kaufland România SCS, n.d. *Commitment to people and the environment*. [Online] Available at: <www.kaufland.ro/Home/05_Compania/002_Responsabilitate/index.jsp>. [Retrieved on 10.09.2013].
- Kolk, A., Hong, P. and Dolen, W.V., 2010. Corporate Social Responsibility in China: an Analysis of Domestic and Foreign Retailers' Sustainability Dimensions. *Business Strategy and the Environment*, 19, pp.289-303.



- Kotler, P., 1993. *Marketing Management Analysis, Planning, Implementation and Control*. 8th ed. Translation from English by D. Criste, A. Duca, R. Costescu and I. Jarnea, 1997. Bucharest: Teora.
- Kotler, P., Armstrong, G., 2001. *Principles of Marketing*. 9th ed. Translation from English by Smaranda Nistor and Cosmin Crişan, 2003. Bucharest: Teora.
- Kotzab, H., Munch, H.M., de Faultrier, B., and Teller, C., 2011. Environmental retail supply chains: when global Goliaths become environmental Davids. *International Journal of Retail & Distribution Management*, 39(9), pp.658–681.
- KPMG, 2011. *German Retail Property Market Analysis*. [Pdf] Available at: http://www.kpmg.com/global/en/issuesandinsights/articlespublications/pages/german-retail-property-market-analysis.aspx. [Retrieved on 23 November 2013].
- Krafft, M. and Mantrala, M. K. eds., 2010. *Retailing in the 21st Century Current and Future Trends*. 2nd ed. Berlin: Springer-Verlag.
- Lee, H.L., Padmanabhan, V. and Whang S., 1997. The Bullwhip Effect in Supply Chains. *Sloan Management Review*, 38(3), pp.93-102.
- Lee, H.L., So, K.C. and Tang, C.S., 2000. The value of information sharing in a two-level supply chain. *Management Science*, 46(5), pp.626-643.
- Mega Image, n.d. *Factory for a clean future*. [Online] Available at: http://www.mega-image.ro/fabrica-pentru-un-viitor-curat/, [Retrieved on 10.09.2013].
- Mega Image, n.d. *Mega Image Fund for Community*. [Online] Available at: http://www.doilasuta.ro/fcb/>. [Retrieved on 10.09.2013].
- Ministry of Public Finance, 2012. Economic agents and public institutions identification data, tax information, balances. [Online] Available at: http://www.mfinante.ro/infocodfiscal.html, [Retrieved on 13 May 2013].
- Olaru, M., Dinu, V., Stoleriu, G., Şandru, D. and Dincă, V., 2010. Responsible Commercial Activity Of SMEs and Specific Values of Sustainable Development in Terms of the European Excellence Model. *Amfiteatru Economic*, XII(27), pp.10-26.
- Real Hypermaket Romania, n.d. *Recycle!* [Online] Available at: < http://www.real-hypermarket.ro/?page=pagini&PageId=Ecotic_140>, [Retrieved on 10.09.2013].
- Reinartz, W., Dellaert, B., Kraft, M., Kumar, V. and Varadarajan, R., 2011. Retailing Innovations in a Globalizing Retail Market Environment. *Journal of Retailing*, 87S(1), pp.53-66.
- Robinson, H.S., Anumba, C.J., Carillo, P.M. and Al-Ghassani, A.M., 2006 Steps: a knowledge management maturity roadmap for corporate sustainability. *Business Process Management*, 12(6), 793-808.
- Selgros Cash&Carry, n.d. *Social Responsibility*. [Online] Available at: http://www.selgros.ro/ne-implicam.html, [Retrieved on 10.09.2013].
- Smith, P.A.C., Sharicz, C., 2011. The shift needed for sustainability. *The Learning Organization*, 18, pp.73-86.
- Toma, S., 2011. Exploratory Research on Students' Opinions Regarding the Features of the Educational Process in a Knowledge-Based Economy. *Amfiteatru Economic*, XIII (30), pp.565-579.
- UNEP, 2011 Resource Efficient and Cleaner Production. [Online] Available at: http://www.unep.org/resourceefficiency/Business/CleanerSaferProduction/ResourceEfficientCleanerProduction/tabid/102615/Default.aspx, [Retrieved on07.09.2013]
- Wiese, A. Kellner, J., Lietke, B., Toporowski, W. and Zielke, S., 2012. Sustainability in retailing a summative content analysis. *International Journal of Retail & Distribution Management*, 40(4), pp.318–335.



Witold, H. and Zelner, B.A., 2010. The Hidden Risks in Emerging Markets. *Harvard Business Review*, April, pp.88–96.