

## THE PRESENCE OF SMES AT BUCHAREST STOCK EXCHANGE

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**ABSTRACT.** The importance and contribution of the SME sector to the economic growth was frequently stated and discussed. While Bucharest Stock Exchange does not have a dedicated segment for SMEs, we concentrate our attention on this stock exchange, considered to be a frontier emerging market, due to the fact that the market capitalization was notoriously low. The natural question that arisen was: how many of Bucharest Stock Exchange listed companies are SMEs? The present paper documents the presence of SMEs within Bucharest Stock Exchange 2<sup>nd</sup> category and tests the size effect for a number of 10 selected companies, which were split in two portfolios.

**Key words:** *SMEs, stock exchange, size effect, Romania*

**JEL classification:** M19, G1, G19

### 1. Introduction

The importance and contribution of the SME sector to the economic growth is well established. Their role in terms of employment creation, upholding the entrepreneurial spirit and innovation has been crucial in fostering competitiveness in the economy. Though SME contribute to GDP, their contribution is neither duly recognized nor they have access to cheaper funds resulting in index realization of their potential growth ([www.smeworld.org](http://www.smeworld.org)).

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In order for the SMEs to be listed on a stock exchange, certain conditions have to be fulfilled ([www.smeworld.org](http://www.smeworld.org)): a platform should be provided for trading SMEs' shares; an improvement of the visibility of performing SMEs in order to generate and increase the investor's interest. Once these conditions fulfilled, they might enable SMEs to raise funds at reasonable rates.

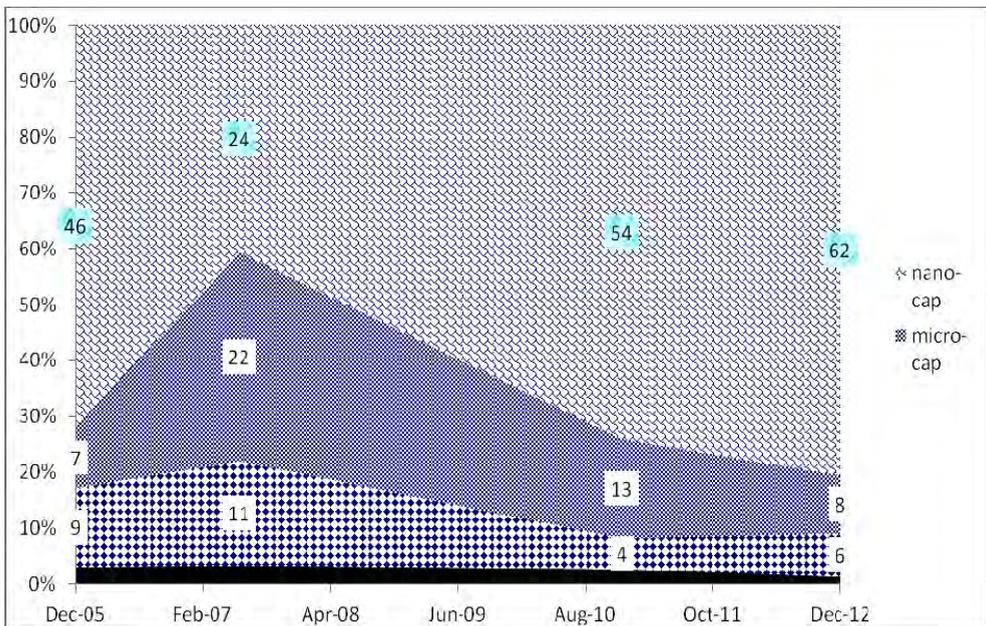
An exchange for SMEs is a stock exchange/platform dedicated to trading the shares/securities of SMEs who otherwise find it difficult to get listed on a main market segment ([www.smelisted.net](http://www.smelisted.net)). The concept originated from the difficulties faced by SMEs in gaining visibility and attracting sufficient trading volumes when listed along with other stocks on the main market segments of various stock exchanges. World over, dedicated SME trading platforms or exchanges exist; they are known by different names such as 'Alternate Investment markets' or 'growth enterprises market', 'SME Board' etc. Some of the most known markets for SMEs are AIM (Alternate Investment Market) in UK, TSX Ventures in Canada, GEM (Growth Enterprise Market) in Hong Kong, MOTHERS (Market of the high-growth and emerging stocks) in Japan, Catalist in Singapore and the latest initiative in China - Chinext. As a matter of fact, NASDAQ also started as an SME exchange ([www.smelisted.net](http://www.smelisted.net)). The OTC Exchange of India (OTCEI), set up in 1990, was also dedicated to SMEs. However, it failed to take off. Some regional Indian stock exchanges were meant to cater to SMEs, but could not grow ([www.smeworld.org](http://www.smeworld.org)). As it can be observed from the several examples mentioned above, SMEs trading platforms have the tendency to succeed within mature and more sophisticated markets, rather than in emerging markets. One explanation might be provided by the investors' attitude toward trading SMEs, their knowledge and understanding of SMEs growth potential and risks.

While Bucharest Stock Exchange (BVB<sup>3</sup> henceforth) does not have a dedicated segment for SMEs, we concentrate our attention on this stock exchange, considered to be a frontier emerging market, due to the fact that the market capitalization was notoriously low. As shown by Pop et al. (2012), BVB's capitalization was half of Budapest Stock Exchange

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<sup>3</sup> This abbreviation (BVB) was chosen, instead of the more natural BSE in order to avoid any confusion with Budapest Stock Exchange, Bratislava Stock Exchange, Belgrade Stock Exchange and Bulgarian Stock Exchange. Any of these exchanges might be abbreviated BSE.

capitalization, and almost 9 times smaller than Warsaw Stock Exchange capitalization. This situation triggered a brief investigation of BVB's listed companies' capitalization and the results indicate a massive presence of nano-cap<sup>4</sup> companies, as graph 1 below shows. As it can be observed, only when BVB reached its pick (June-July 2007, before the first signs of the financial crisis started to manifest and triggered an over 18 months downward trend) the number of nano-cap companies decreased in favor of small and micro-cap companies. Annex 1 provides further details regarding the capitalization intervals for the BVB listed companies.



**Graph 1.** BVB listed companies' structure by capitalization

Source: authors' calculations based on BVB data

<sup>4</sup> Based on [www.investopedia.com](http://www.investopedia.com) the levels of capitalizations are: mega capitalization (mega-cap): over 100 billion USD; large capitalization (large-cap): between 10 and 100 billion USD; mid capitalization (mid-cap) between 2 and 10 billion USD; small capitalization (small-cap): between 250-300 million USD to 2 billion USD; micro capitalization (micro-cap) between 50 and 250-300 million USD; nano capitalization (nano-cap): less than 50 million USD. For the current paper we respect the value intervals, but we applied them at the capitalization calculated in EUR for the BVB listed companies.

The natural question that arisen was: how many of BVB listed companies are SMEs? Along with this question, two other subsequent questions followed: the presence of size effect can be identified for those companies that will be found as SMEs? and did those companies used BVB as a financial resources provider for further development? Neither of these topics was investigated at BVB level. The present paper, by answering to the questions above, will bring a new point of view regarding the types of companies listed within a frontier market exchange, the Romanian main stock exchange.

## **2. Literature review**

The academic literature regarding the topic of SMEs listed on stock exchange platforms is relatively scarce. However, during the recent years a number of papers emerged, discussing different aspects. Bang (2012) discusses the solution represented by a SMEs exchange for India. Caccavaio et al. (2012) discuss the problem of Italian SMEs of going public. Fadil (2012) discuss the growth choices of French listed SMEs. Lardon & Deloof (2012) investigate the financial disclosure policy of small and medium-sized enterprises listed on a stock market with very low disclosure requirements: the Free Market of the Euronext Stock Exchange. Mwarari (2013) discuss the factors influencing the listing of Kenyan SMEs. Neither of these papers discusses the topics we try to investigate within the current paper.

While various aspects of the Bucharest Stock Exchange (BVB) were analyzed in several papers like the aspects regarding the development of Bucharest Stock Exchange (Matei, 2008), directions of change at the Bucharest Stock Exchange (Lupu & Tudor, 2008), the evolution and the perspectives of Bucharest Stock Exchange (Grecu, 2008), the number of companies listed on Bucharest Stock Exchange (Giurca Vasilescu & Tufan, 2007) and the factors that determine the capital structure of the listed companies (Duca, 2012), none have taken into consideration the presence of SMEs among the BVB listed companies. Only the paper of Curutiu (2010) discusses the initiative that existed between 2005 and 2006 to create a platform for SMEs trading at BVB, however nothing was achieved. Thus, in a presentation done by BVB officials in June 2013, their willingness to consider SMEs and to promote among them the financing alternative offered by the exchange was declared again ([http://www.bvb.ro/info/2013\\_07\\_24\\_BVB\\_IR\\_presentation\\_en.pdf](http://www.bvb.ro/info/2013_07_24_BVB_IR_presentation_en.pdf)).

The size effect is one of the oldest and most important anomalies observed for capital markets. Banz (1981) was the first to discover this anomaly in their event study. The size effect can be observed that companies with smaller capitalization register abnormally high yields compared to those which register high capitalization values. This topic is investigated in this paper in relation with the SMEs listed at BVB in order to see if there investors can establish a profitable investment strategy by considering these small companies as an alternative portfolio.

At international level, the size effect is a frequently investigated phenomenon. Among the most recent studies we mention Kassimatis (2008) examining the significance of the size effect in explaining portfolio trends in the Australian stock market to find that the size effect has significant explanatory power; Amel-Zadeh (2011) investigating the size effect in the German stock market to find a conditional relationship between size and returns with strong momentum across size portfolios; Wu (2011) makes use of the Fama–French three-factor asset pricing model in the case of Chinese A-share markets to show, by contrast, no significant size effect. Shubita & Al-Sharkas (2010) evaluate the ‘size-effect’ utilizing a relatively large sample of NYSE stock prices to show that size impacts stock returns. All these studies concentrate on mature or on advanced emerging stock markets.

The size effect presence at BVB was investigated by Balint (2012) and the paper found that this effect did not manifest itself and the Romanian investors cannot obtain profit by investing in companies that register small capitalization.

The present paper continues, at a niche level of SMEs, the investigation started by Balint (2012).

### **3. Questions, data and methodology**

*The questions asked in order to shape this study*

Q1: How many of BVB listed companies are SMEs?

Q2: Did these companies use BVB as a financial resources provider for further development?

Q3: The presence of size effect can be identified for those companies that will be found as SMEs?

### Data

As a first step, the data was collected, as of December 2012 from BVB. Only the 52 companies listed within second category (tier) companies were considered, since the first category contains the blue chips, supposed to be larger than SMEs companies.

The 52 companies of the 2<sup>nd</sup> category/ tier were analyzed from the perspective of equity capital and the number of employees. The data regarding the number of employees was collected from the Ministry of Public Finance website.

The legal requirements for a company to be considered a SMEs (at European level, including Romania) are: an equity capital of maximum 50 million EUR, the number of employees between 10 and 249. These two requirements should be fulfilled simultaneously.

As Table 1 below shows, of the 52 companies under scrutiny, 22 (42.30%) fulfilled the conditions to be considered SMEs.

**Table 1.**

*General information regarding the companies listed on the 2<sup>nd</sup> tier of BVB as of December 2012*

Company	Field of activity (as listed on the dedicated page at BVB)	Equity capital (EUR*)	Number of employees	Comments
ALU	Wholesale of metals and metal ores	1,402,603.23	167	Listed since April 16 <sup>th</sup> 2007 <b>IPO December 2006</b>
AMO	Production of electricity	24,969,885.32	18	Listed since December 11 <sup>th</sup> 1997
APC	Manufacture of railway locomotives and rolling stock	1,656,108.39	205	Listed since June 20 <sup>th</sup> 1997
ARM	Manufacture of other taps and valves	897,666.07	202	Listed since February 20 <sup>th</sup> 1997 Suspended; share capital decrease (March 20 <sup>th</sup> 2013)
BCM	Hotels and similar accommodation	3,755,377.02	65	Listed since May 12 <sup>th</sup> 2008 <b>IPO December 2007</b>
BVB	Administration of financial markets	17,222,167.86	53	Listed since June 8 <sup>th</sup> 2010 <i>Highest capitalization</i>
CAOR	Beverage serving activities	11,548,996.18	151	Listed since May 11 <sup>th</sup> 2012
CBC	Production of abrasive products	2,178,186.27	220	Listed since February 11 <sup>th</sup> 1997
CEON	Manufacture of bricks, tiles and construction products, in baked clay	5,899,292.86	100	Listed since April 6 <sup>th</sup> 2010

THE PRESENCE OF SMES AT BUCHAREST STOCK EXCHANGE

Company	Field of activity (as listed on the dedi- cated page at BVB)	Equity capital (EUR*)	Number of employees	Comments
CGC	Manufacture of instru- ments and appliances for measuring, testing and navigation	4,349,846.72	228	Listed since December 12 <sup>th</sup> 2008 <b>IPO February 2008</b>
CMCM	Manufacture of ready- mixed concrete	5,303,336.62	118	Listed since April 7 <sup>th</sup> 2009
COTR	Construction of residen- tial and non-residential buildings	7,004,375.90	125	Listed since July 11 <sup>th</sup> 2008
ECT	Manufacture of electricity distribution and control apparatus	3,254,039.50	131	Listed since December 24 <sup>th</sup> 1998
ELJ	Manufacture of electricity distribution and control apparatus	1,450,075.18	116	Listed since November 14 <sup>th</sup> 1997 Became SME only in 2011
ENP	Electrical installation	1,135,914.95	167	Listed since January 30 <sup>th</sup> 1998 Suspended; insolvent; not traded since (Feb 18 <sup>th</sup> 2013)
MECF	Manufacture of agricul- tural and forestry machinery	5,383,942.10	206	Listed since February 15 <sup>th</sup> 2006
MEF	Manufacture of other parts and accessories for motor vehicles	1,187,773.79	16	Listed since March 4 <sup>th</sup> 1997
MJM	Manufacture of plastic plates, sheets, tubes and profiles	3,261,167.19	24	Listed since April 4 <sup>th</sup> 2001 <i>Lowest capitalization</i>
PEI	Wholesale of solid, liquid and gaseous fuels and related products	1,375,775.36	19	Listed since January 4 <sup>th</sup> 1999
PPL	Manufacture of other plastic products	3,831,325.18	75	Listed since August 11 <sup>th</sup> 1997
RTRA	Manufacture of electric motors, generators and transformers	2,244,435.59	122	Listed since June 14 <sup>th</sup> 2011
STZ	Manufacture of other organic basic chemicals	2,225,513.69	94	Listed since May 12 <sup>th</sup> 1997

Source: authors' calculations based on BVB data ([www.bvb.ro](http://www.bvb.ro)) and Ministry of Public Finance ([www.mfinante.ro](http://www.mfinante.ro))

\*The exchange rate used: 1 EUR = 4.4560 RON

It is interesting to mention that the market capitalization of the 22 SMEs listed at BVB as of December 2012 represented less than 1% (0.60%) of BVB market capitalization, indicating the direct relation that exists at BVB between the low (nano) capitalization and the low level of equity capital.

**Q1** and **Q2** were answered by analyzing the general data available at BVB.

Answer to **Q1**: as of December 2012, 22 companies listed within the 2<sup>nd</sup> category/ tier fulfill the requirements to be considered SMEs. They represented over 40% of the second category companies.

Answer to **Q2**: of the 22 listed companies identified as SMEs, only 3 raised their capital through an initial public offering (IPO). None of the 22 companies used BVB for new share offerings or for corporate bond offerings.

For the second step, in order to test for the size effect, from the 22 SMEs listed at BVB, in order to have an uniform series of data, 2 (the extreme ones) were eliminated, respectively: BVB symbol (the company with the largest capitalization) and MJM symbol (the company with the lowest capitalization). Further, from the remaining 20 companies, two more were eliminated because they were suspended from trading for a long period: ARM symbol due to a decrease in equity capital and ENP symbol due to insolvency.

When the remaining 18 companies were further investigated, it was observed that several of them could be enlisted in the SMEs category only from 2010 or 2011 according to the number of employees, while their equity capital was in the range of a SME since long (in most cases since their listing at BVB). Therefore, it can be stated that one of the effects of the financial crisis was the increasing number of SMEs (in terms of number of employees) listed at BVB.

Based on the findings regarding the moment when a company could be considered as SME, the 18 companies were divided into two portfolios. The first original one contains the companies that fulfill the requirements as SMEs since they start listing, while the second original portfolio contains companies that could be considered SMEs from January 2010. Because of this, ELJ symbol was eliminated due to the fact that it became a SME only from 2011, while CEON symbol was eliminated because it start trading only in April 2010.

Based on these first findings, for the first portfolio we considered 7 companies, while for the second one 9 companies were taken into consideration, as presented in Table 2.

**Table 2.**

*The companies considered for the two portfolios*

Portfolio 1 original	Portfolio 2 original
APC - <b>voestalpine VAE APCAROM</b>	ALU - <b>ALUMIL ROM INDUSTRY</b>
BCM - <b>CASA DE BUCOVINA-CLUB DE MUNTE</b>	AMO - <b>AMONIL</b>
CAOR - <b>CALIPSO</b>	CBC - <b>CARBOCHIM</b>
ECT - <b>GRUPUL INDUSTRIAL ELECTROCONTACT</b>	CGC - <b>CONTOR GROUP</b>
PEI - <b>PETROLEXPORTIMPORT</b>	CMCM - <b>COMCM</b>
RTRA - <b>RETRASIB</b>	COTR - <b>TRANSILVANIA CONSTRUCTII</b>
STZ - <b>SINTEZA</b>	MECF - <b>MECANICA CEAHLAU</b>
	MEF - <b>MEFIN</b>
	PPL - <b>PRODPLAST</b>

Further, the observation period was established from January 2010 to June 2013 in order to include the companies that became SMEs at the end of December 2009/ beginning of January 2010. Due to this choice of observation period, two companies were eliminated from the original Portfolio 1 due to their more recent listing date: CAOR (listed since May 2012) and RTRA (listed since June 2011).

In order to have uniform portfolios, from the original Portfolio 2 four more companies were eliminated. We chose to eliminate the companies with the lowest capitalization and low trading frequency: AMO, CGC, MEF and PPL symbols.

The final portfolios contain the following companies, as presented in table 3. Portfolio 1 includes the companies that could be considered SMEs since they start listing, while Portfolio 2 contains the companies that became SMEs at the beginning of 2010. In order to test the size effect for these portfolios, the sample data consists of monthly capitalization values of the 10 SMEs considered.

**Table 3.**

*The final portfolios*

Portfolio 1	Portfolio 2
APC - <b>voestalpine VAE APCAROM</b>	ALU - <b>ALUMIL ROM INDUSTRY</b>
BCM - <b>CASA DE BUCOVINA-CLUB DE MUNTE</b>	CBC - <b>CARBOCHIM</b>
ECT - <b>GRUPUL INDUSTRIAL ELECTROCONTACT</b>	CMCM - <b>COMCM</b>
PEI - <b>PETROLEXPORTIMPORT</b>	COTR - <b>TRANSILVANIA CONSTRUCTII</b>
STZ - <b>SINTEZA</b>	MECF - <b>MECANICA CEAHLAU</b>

### *Methodology*

After the companies have been divided into the two portfolios according to the recorded values, for each portfolio it has been calculated the average capitalization of each company contained (CB), the total capitalization (CBT) and the weight that each of these companies has in total capitalization ( $X_i$ ).

$$CBT = \sum_{i=1}^{10} CB_i \quad (1)$$

where  $i$  represents the companies included in each portfolio, and  $CB_i$  the average return of each company.

The weight of every company has been calculated as following:

$$X_i = \frac{CB_i}{CBT}, i = \overline{1,10} \quad (2)$$

The weighted capitalization of each portfolio was calculated, in order for the size effect to be tested on the Romanian capital market.

For a better analysis and comparison the following three indexes were taken into account: BET (blue chip index), BET-C (the composite index that includes all ten companies considered) and BET-FI (the financial sector index).

## **4. Discussions and empirical results**

The companies included in the two portfolios, were also analyzed taking in consideration the net profit ratio, the amount of dividend paid and the loan to equity capital ratio.

Table 3 shows the situation of net profit/ loss for the selected companies. The best company is APC, which exhibit constant net profit over the 4 year period, while the worst performer is ECT, which registered losses for 4 years in a row. Both these companies were SMEs since they start listing and both are included in Portfolio 1. Three of the companies considered for Portfolio 2 registered profit for the entire period taken into consideration, while two registered losses in just one year. From this point of view, the companies selected for Portfolio 2 show better end year results than those selected for Portfolio 1.

**Table 3.**

*Net profit/loss of the companies included  
in the two portfolios (2009-2012)*

	P1 (EUR*)				
	APC	BCM	ECT	PEI	STZ
2009	2,618,291.36	341,951.24	-565,399.66	-936,693.41	113,168.29
2010	1,381,808.59	204,089.17	-97,799.24	-365,998.95	3,641.18
2011	1,690,437.01	186,898.94	-140,750.14	55,532.46	-313,949.36
2012	1,191,456.69	177,751.12	-133,861.09	257,585.05	247,323.83
	P2 (EUR*)				
	ALU	CBC	CMCM	COTR	MECF
2009	1,971,501.19	417,19.26	47,405.90	71,502.37	-1,854,950.32
2010	516,365.71	505,406.07	-768,721.11	79,613.53	52,7931.78
2011	869,079.26	346,401.05	268,975.44	256,243.89	171,0004.48
2012	714,907.32	64,125.22	643,431.33	483,978.01	1,662,239.23

Source: authors' calculation based on [Ministry of Public Finance data \(www.mfinante.ro\)](http://www.mfinante.ro), and Romanian National Bank data ([www.bnro.ro](http://www.bnro.ro)) for the exchange rates

\*The exchange rates used: 1EUR = 4.2373 RON (2009), 1 EUR = 4.2099 RON (2010), 1 EUR = 4.2379 RON (2011), 1 EUR = 4.4560 RON (2012)

In terms of dividends paid between 2009 and 2012, as it can be observed from Table 4, two companies (ECT and PEI) from Portfolio 1 and one company (CMCM) from Portfolio 2 never paid dividends for the period under scrutiny. Five companies paid dividends only once, three of them paying dividends for 2012. Only APC paid dividends for three consecutive years. The amount of dividend paid is small or very small. The highest dividend value was paid by COTR in 2012 (0.2693 EUR) and the smallest by MECF in 2012 (0.0013 EUR). As Table 4 shows, the SMEs currently listed at BVB are not interesting from the dividend payment point of view. Table 4 information combined with Table 3 information show that in most cases, when the selected companies register profit, they are reluctant in distributing even a part of it as dividends. This indicate that the profit is retained for further developments and gives a nuance to the Q3 previous answer, showing that the selected companies did not use BVB facilities for raising funds. However, due to the relative small dimension of their profits, the development they could finance is rather modest. This behavior explain why a number of companies instead of growing since listed, remained at the level of SMEs.

**Table 4.**

*Dividend per share<sup>5</sup> paid by the selected companies  
(2009-2012)*

	P1 (gross value - EUR)					P2 (gross value - EUR)				
	APC	BCM	ECT	PEI	STZ	ALU	CBC	CMCM	COTR	MECF
2009	0	0	0	0	0	0.0189	0	0	0	0
2010	0.0523	0	0	0	0	0	0.0736	0	0	0
2011	0.0212	0.0021	0	0	0	0	0.1298	0	0	0
2012	0.0153	0	0	0	0.0042	0	0	0	0.2693	0.0013

Source: authors' calculation based on BVB ([www.bvb.ro](http://www.bvb.ro)) data and Romanian National Bank data ([www.bnro.ro](http://www.bnro.ro)) for the exchange rates

\*The exchange rates used: 1EUR = 4.2373 RON (2009), 1 EUR = 4.2099 RON (2010), 1 EUR = 4.2379 RON (2011), 1 EUR = 4.4560 RON (2012)

Further, the presence of the size effect has been tested. For each portfolio based on the average capitalization recorded, the total capitalization and the weight of each company in the total were calculated. Further, the capitalization-weighted portfolios were calculated, in order for the size effect to be tested for the selected companies listed at BVB. The results are presented in Table 5 and 6 below.

**Table 5.**

*Descriptive values of portfolios studied for effect size  
(January 2010- June 2013)*

	P BET	P BET-C	P BET-FI	P1	P2
Mean	0.000148	-0.000112	-0.002355	0.003344	-0.003072
Median	0.000595	-0.000066	0.008276	0.002098	0.001186
Std.dev.	0.010673	0.006146	0.072244	0.114418	0.081718
Skewness	-0.459432	-0.186826	-1.531450	0.663554	-1.148109
Kurtosis	2.822759	3.088882	6.749668	4.997419	5.340258

Source: authors' calculation

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<sup>5</sup> We chose this set of data instead of the reported dividend yield (DIVY) within BVB monthly reports due to the fact that we identified some mistakes regarding the respective officially reported ratio.

**Table 6.***Correlation between the portfolios and the considered indices*

	P BET	P BET-C	P BET-FI
P1	0.363336	0.361142	0.518996
P2	0.402199	0.435191	0.526476

Source: authors' calculation

Answer to **Q3**: The SMEs capitalization of Portfolio 1 achieved higher returns. As such, we can say that the size effect is present for this Portfolio 1. For the Portfolio 2 the size effect does not exist.

In the case of Portfolio 1, the return is positive compared with BET-C and BET-Fi which exhibit negative returns, and is higher than BET positive return, indicating that the companies that were SMEs since start listing performed better than the BVB's blue chips. However, the standard deviation analysis shows that Portfolio 1 is also the most risky. This situation is natural, given the small dimensions of the considered companies.

In the case of the five companies that became SMEs since January 2010, the size effect does not exist. Their Portfolio 2 exhibit a negative return, lower than the returns of BET-C and BET-Fi, and a higher standard deviation compared with the same indices. The absence of size effect in the case of Portfolio 2 needs further investigations. Up to a point, an explanation can be found in the absence of a consistent dividend policy for these companies and their low growth capacity despite the retained profit for further developments.

The negative skewness recorded for all the indices and for Portfolio 2 indicates that the distribution is tilted to the left. Only for Portfolio 1 the skewness is positive, with a distribution tilted to the right, indicating a higher percentage of positive returns. A normal distribution has a kurtosis of 3. BET and BET-C are the closest to this value. However, the kurtosis of Portfolio 1 is lower than in the case of Portfolio 2 and significantly lower than in the case of BET-Fi.

Table 6 presents the correlation between the two portfolios and the selected indices. The results need also further investigation because the highest correlation with the BET-Fi index is not normal. Since all the selected companies are included in the portfolio of BET-C index, the highest correlation should have been registered there. However, these results do not come as a surprise and might be explained by BET-Fi position as an index leader at BVB, as presented by Pop et al. (2012).

## 5. Conclusions

The present study showed that while BVB has no special segment dedicated to SMEs trading, a number of 22 companies listed within the 2<sup>nd</sup> category of the main market, as of December 2012, fulfill the conditions to be considered SMEs. They represent over 40% of the companies listed at this category. (Answer to Q1)

The general data showed also that only three companies used IPOs for raising capital and that after listing none of the selected companies used BVB facilities to raise capital either through the issuance of new shares or through corporate bond offerings. One reason for this situation was given by analyzing profit/ loss situation of a selection of 10 companies in combination with their dividend payment. The results showed that in most cases, these companies prefer to retain the profit for further development. However, the relative modest amount of the profit generate only modest developments, which do not attract investors' interest and can explain why companies that started listing as SMEs remained SMEs after years of trading. (Answer to Q2)

Further investigations showed that a number of 9 companies of the 22 identified as SMEs could be considered SMEs only since the beginning of January 2010, due to personnel dismissal. This situation shows that one of the effects of the global financial crisis was the transformation of these companies in SMEs. Another group of 7 companies were SMEs since they start listing.

The size effect was tested for two portfolios composed of selected companies. Portfolio 1 included 5 companies that were SMEs since listed at BVB. Portfolio 2 included 5 companies that became SMEs since January 2010. The size effect was present in the case of Portfolio 1 and absent in the case of Portfolio 2, despite the fact that Portfolio 2 included companies with less losses than Portfolio 1. However, the risk associated with the profit of size effect is important and should be well understood by any investor considering investing in a portfolio of listed SMEs. (Answer to Q3).

Through these findings the present paper documents the existence of SMEs listed within BVB 2<sup>nd</sup> category, and the fact that these companies do not use their listed position to raise capital through BVB channels. The paper also partly confirm the absence of size effect as presented by Balint (2012), thus shows that this size effect can be found for selected companies. However the size effect should be considered with care due to the high risk involved by such an investment.

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**Annex 1**

*Intervals of market capitalization at BVB and  
the companies in the respective category*

<b>Time</b>	<b>Capitalization type</b>	<b>Value intervals</b>	<b>Number of companies</b>
December 2005	mid-cap	2.6 to 7.3 billion EUR	2
	small-cap	300 to 800 million EUR	9
	micro-cap	50 to 170 million EUR	7
	nano-cap	1.2 to 49.8 million EUR	46
June 2007	mid-cap	6.2 to 9.6 billion EUR	2
	small-cap	390 million EUR to 1.9 billion EUR	11
	micro-cap	50 to 270 million EUR	22
	nano-cap	2.1 to 49.7 million EUR	24
December 2010	mid-cap	2.0 to 4.4 billion EUR	2
	small-cap	330 to 770 million EUR	4
	micro-cap	51 to 290 million EUR	13
	nano-cap	0.4 to 43.9 million EUR	54
December 2012	mid-cap	5.5 billion EUR	1
	small-cap	315 million EUR to 1.7 billion EUR	6
	micro-cap	52 to 210 million EUR	8
	nano-cap	0.4 to 48.9 million EUR	62

**Annex 2**

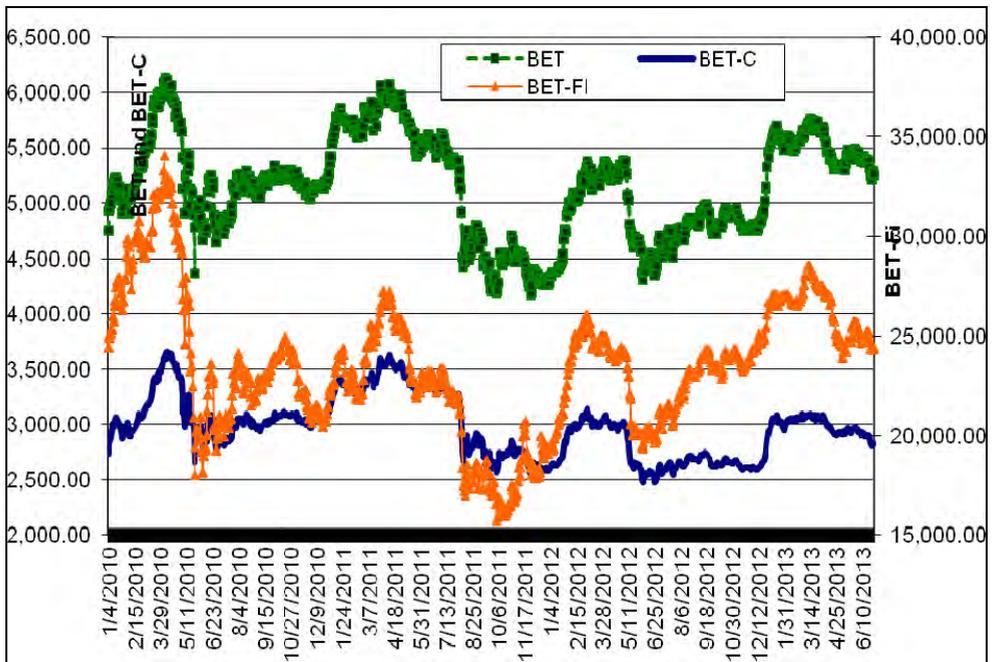
*The 22 SMEs market capitalization  
(EUR)*

<b>Company</b>	<b>Market Capitalization (2012)</b>
ALU	7,714,317.77
AMO	1,722,922.09
APC	11,940,540.71
ARM	984,739.68
BCM	3,154,516.70
BVB	39,610,986.09
CAOR	9,701,156.89
CBC	6,534,558.46
CEON	1,964,464.49
CGC	1,326,703.22
CMCM	9,546,005.84
COTR	7,280,305.86
ECT	911,131.06
ELJ	1,856,096.26
ENP	617,937.79

Company	Market Capitalization (2012)
MECF	8,878,120.52
MEF	2,280,525.67
MJM	101,096.18
PEI	1,650,930.43
PPL	4,846,626.35
RTRA	3,591,097.09
STZ	5,637,967.73

Source: authors' calculation based on the data available at BVB ([www.bvb.ro](http://www.bvb.ro)); the exchange rate used: 1 EUR = 4.4560 RON

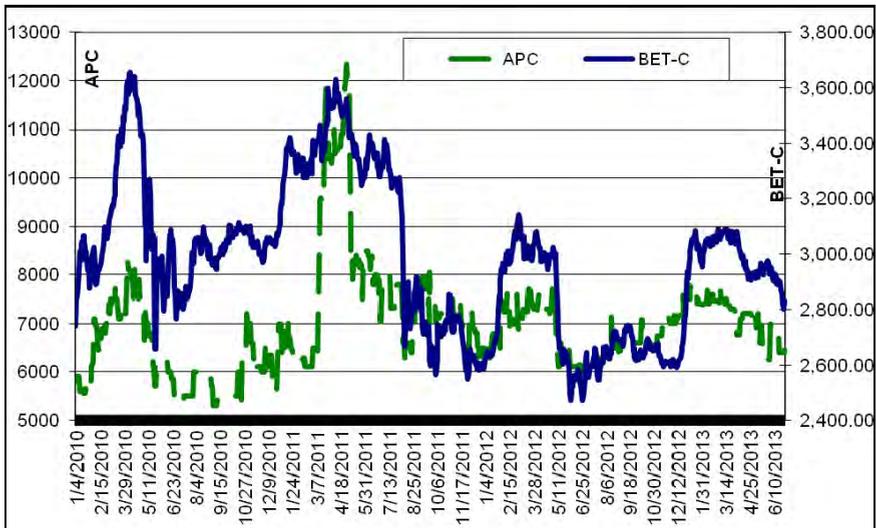
### Annex 3



Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

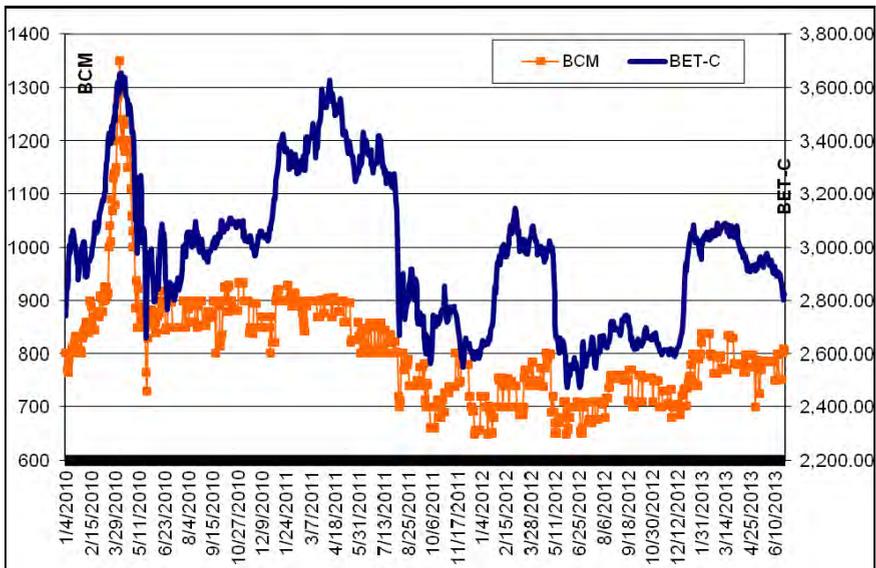
**Graph 3.1.** *The selected indices evolution (closing values) between January 2010 and June 2013*

**Portfolio 1 companies**



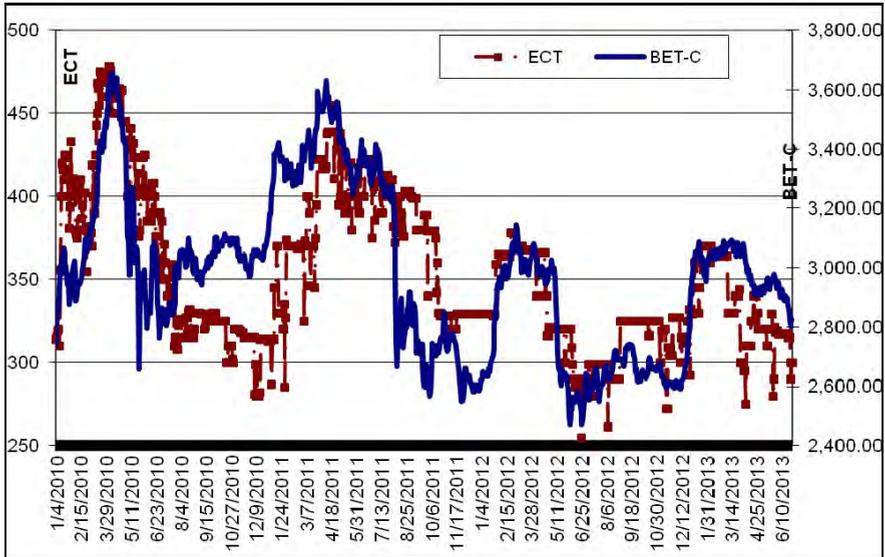
Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

**Graph 3.2.** Closing price evolution of APC against BET-C between January 2010 and June 2013



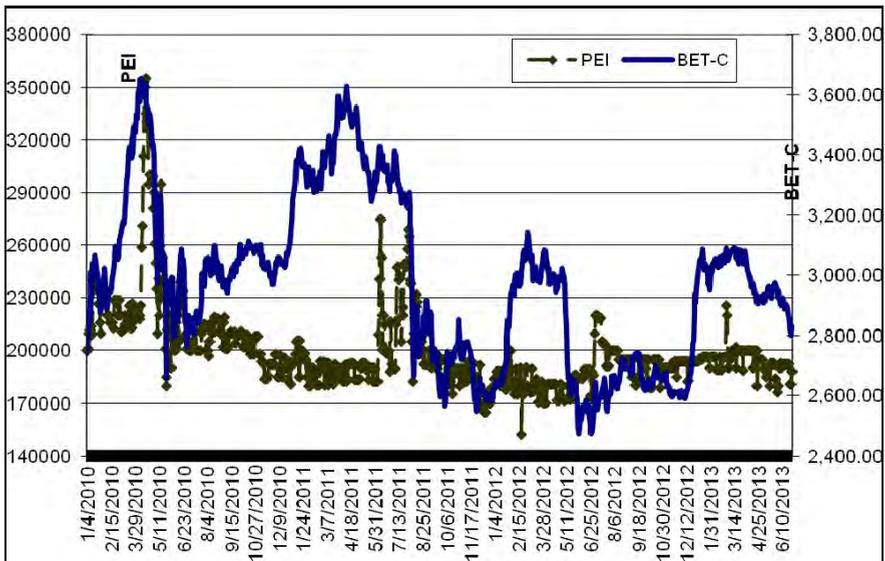
Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

**Graph 3.3.** Closing price evolution of BCM against BET-C between January 2010 and June 2013



Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

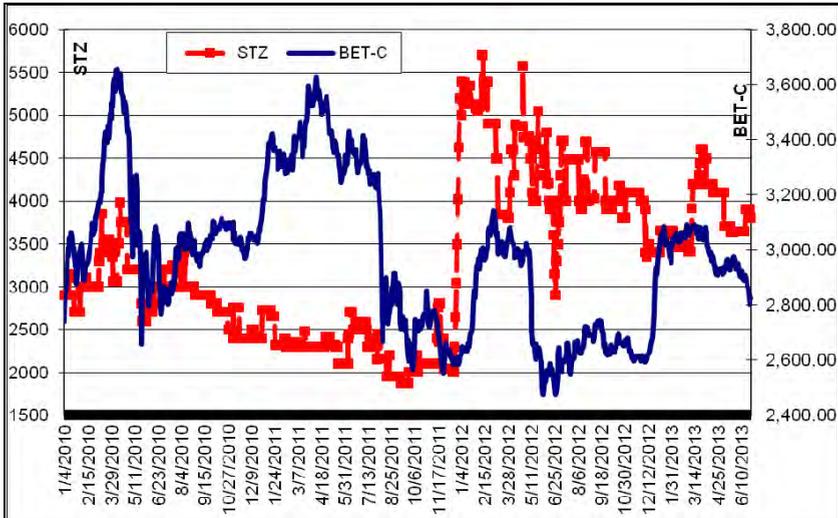
**Graph 3.4.** Closing price evolution of ECT against BET-C between January 2010 and June 2013



Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

**Graph 3.5.** Closing price evolution of PEI against BET-C between January 2010 and June 2013

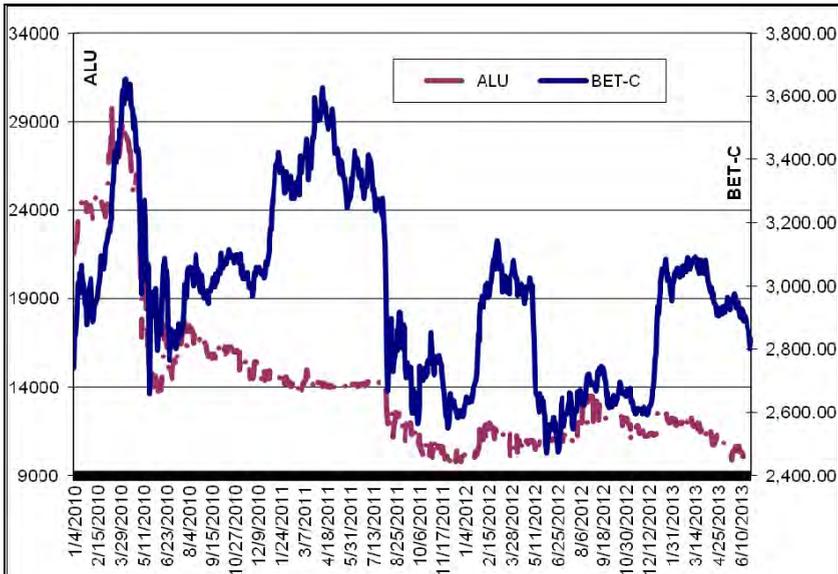
THE PRESENCE OF SMES AT BUCHAREST STOCK EXCHANGE



Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

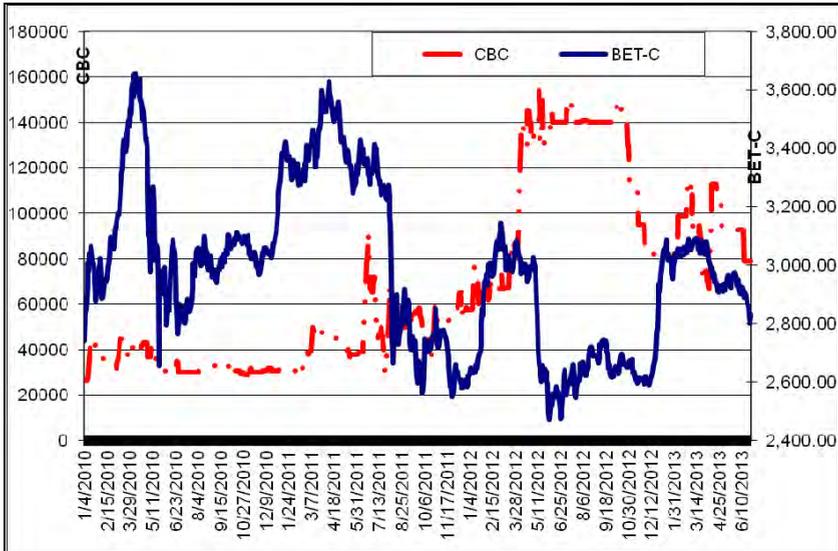
**Graph 3.6.** Closing price evolution of STZ against BET-C between January 2010 and June 2013

**Portfolio 2 companies**



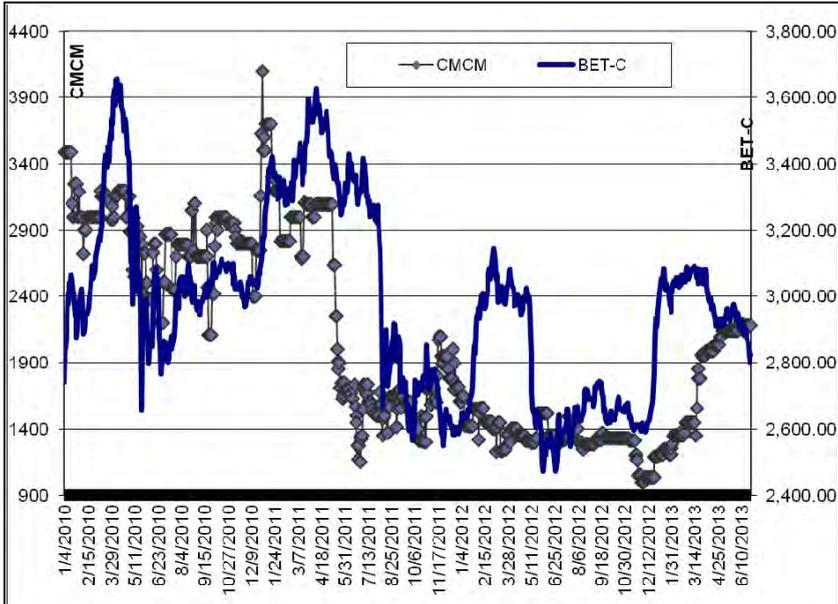
Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

**Graph 3.7.** Closing price evolution of ALU against BET-C between January 2010 and June 2013



Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

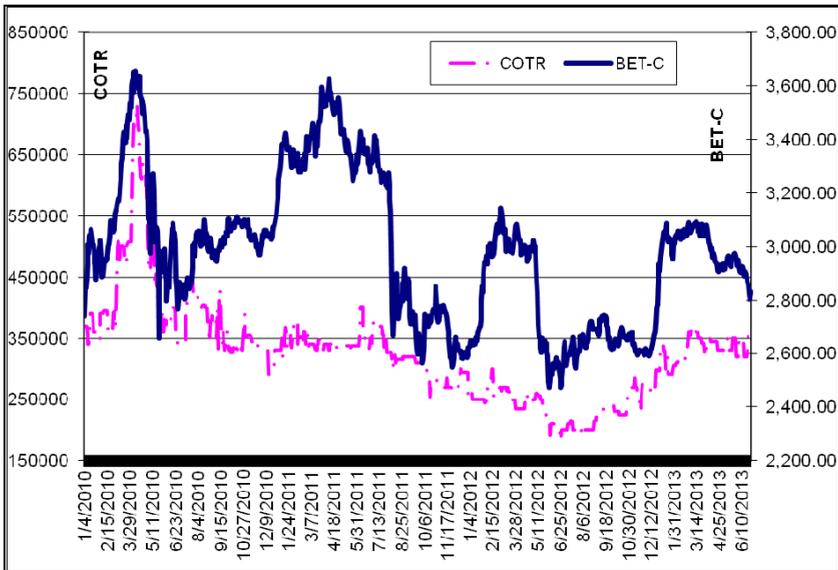
**Graph 3.8.** Closing price evolution of CBC against BET-C between January 2010 and June 2013



Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

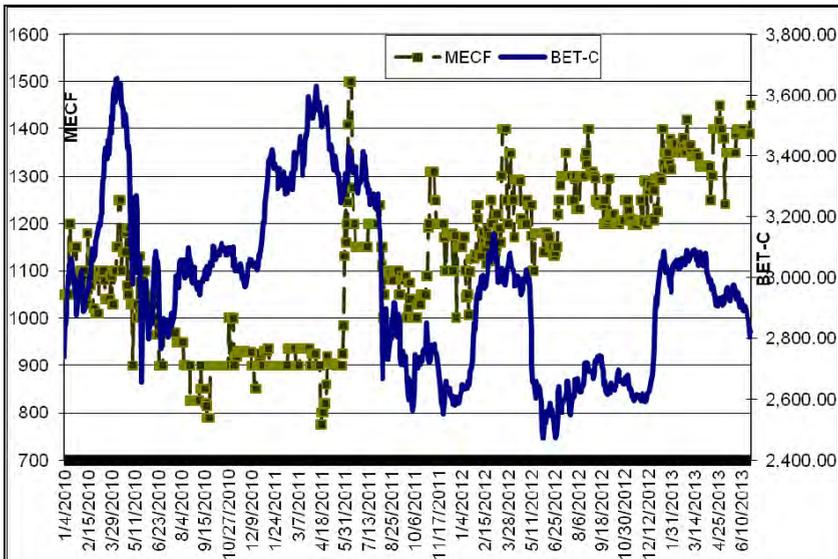
**Graph 3.9.** Closing price evolution of CMCM against BET-C between January 2010 and June 2013

THE PRESENCE OF SMES AT BUCHAREST STOCK EXCHANGE



Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

**Graph 3.10.** Closing price evolution of COTR against BET-C between January 2010 and June 2013



Source: based on BVB data ([www.bvb.ro](http://www.bvb.ro))

**Graph 3.11.** Closing price evolution of MECF against BET-C between January 2010 and June 2013