

Dumitru-Cristian OANEA
Bucharest University of Economic Studies, Bucharest, Romania

FINANCIAL INTERMEDIARIES' ACTIVITY ON ROMANIAN CAPITAL MARKET

Empirical
study

Keywords

Capital market
Financial intermediaries
Market capitalization

JEL Classification

D53, G20

Abstract

The financial shifts encountered in the last decade, increase the importance of capital markets in emerging countries, which is also Romania's case. The banking system was for a long period of time the main source of liquidity for the economy. Meanwhile, the situation is changing due to the importance that capital market has in financing the economy.

Through this paper we analyze the transactions' evolution made by financial intermediaries on Romanian capital market, by highlighting the Societies for Financial Services and Investments (SSIF). Based on this evolution, we identified the main significant differences and similarities between the SSIFs existing on the market.

Introduction

Even if the activity on Romanian capital market was restarted in 1995, when the Bucharest Stock Exchange (BSE) was reopened, its history dates back in 19th century. On December 2nd, 1882, BSE was opened in the building of Trade Chamber. It is well known that almost 47 years the capital market was inexistent in Romania, due to the communist regime, and the nationalization process, BSE being closed in 1948.

The first step in reorganizing the capital market in Romania, was made in 1994, through the adoption of the first law regarding the capital market, namely Lawno. 52/1994. Anghelache (2007) pointed out very clearly the main steps regarding the capital market regulation. After the year 1994, when the first law regarding the capital market was approved, in 1995 BSE was reopened, and one year later it was possible to operate on RASDAQ market. One important year in capital market evolution is represented by 2002, when a legal framework regarding the entire structure of capital market was adopted, namely:

- Equities, financial services and markets;
- Organisms of collective placements;
- Goods market and derivatives market;
- Statute of National Commission for Equities.

The year 2004 is a crucial one in the capital market evolution, due to fact that it was approved the Law no. 297/2004, a unique law for Romanian capital market. This moment can be considered the foundation of a stock exchange having the highest European standards by implementing all the EU regulations.

The BSE activity was characterized by a positive trend, such that in the year 1995, when it was reopened, the market capitalization of BSE was 25 million RON, and increased up to the value of 134 billion RON in year 2013. Despite this, the highest increase in market capitalization was recorded after 2000, when it was achieved the value of one billion RON. It seems that 2005, the year which marked 10 years from the BSE reopening was a very good one for the capital market, based on the results and also by implementing the capital market regulations (Anghelache, 2006a).

The aim of this paper is to analyze the activity of financial intermediaries on Romanian capital market, by identifying the main differences or similarities between them.

This paper is structured in four sections. The first section presents the main theoretical aspects regarding the capital market and financial intermediaries. In the second section, we describe the methodology and the data used in the paper. The main results are presented in the third section, while the last section concludes the paper.

1. Capital market and financial intermediaries

The capital market gained a higher importance in the company's decisions regarding financing sources. Based on the theoretical framework, the capital market can be considered to be the system of relations and mechanisms based on which the available financial sources from economy are directed towards the public or private companies which are searching for financial sources (Anghelache, 2009). In the same time, the capital market can be considered the financial instruments market based on which we can invest on short period of time or long period of time (Radu and Boaj , 2012).

The capital market importance is highlighted by its functions, through which the most important is represented by capital allocation. The economic literature (Wurgler, 2000) discusses this function of capital market, through which the companies which are seeking capital will obtain it from other companies at the lowest cost.

Moreover, the capital market can be considered an economic barometer, because the price evolution of financial instruments will show us the economic situation of a country. This point of view is presented by Poon and Granger (2003), who are considering capital market volatility an indicator which highlights the vulnerability of financial sector and economy. Regarding this, it was empirically found that a period, characterized by increasing trend in financial instruments prices, is a boom period, while a period characterized, by decreasing trend in financial instruments prices, is a recession period.

The theoretical approach highlights the fact that the price of a financial instrument is the real one, being formed on the market based on offer and demand, by knowing all available information. Despite this, many empirical studies pointed out some specificities. Regarding this, it was shown that in the emerging economies, the price evolution is synchronized (Morck at al. 2000). Going further, the price of a financial instrument can be wrong, due to speculators, which are trading based on inside information. Another way of influencing the price is through announcing a false information about one financial instrument in such way, the price will be manipulated in the desired direction. (Allen and Gale, 1992).

The existence of a stock exchange and in the same time of capital market is an assurance for investors that they are able to transform in cash any financial instrument they bought. This is known as capital market liquidity. Despite this, it seems that sometimes the market's liquidity depends bon economic cycle or total volume of financial transactions. Based on this, Chordia et al. (2001) pointed out that the liquidity depends by the week day. Regarding this, they showed through an empirical study that the market's liquidity is

decreasing on Friday and increasing on Tuesday, due to changes in transactions' volume. Going further, Brunnermeier and Pedersen (2009) analyzed the impact of financial crisis on capital market liquidity. Based on their paper, they showed that during financial crisis a liquidity spiral was recorded. This is happening because the market liquidity depends on the transactions made on capital market. In the same time these transactions depend on financial resources level of the financial intermediaries. In the end these resources can depend on the market liquidity.

Societies for Financial Services and Investments (SSIFs) has as main purpose to offer services for financial investments. These SSIFs are authorized by the Financial Services Authority. As main activity, they have to receive and send on the market the clients' orders for buying or selling financial instruments, based on their portfolio (utea, 2006).

In general terms, any financial transactions involve a specific risk. In order to protect the investors, financial intermediaries are obliged to respect some prudential regulation established by Financial Services Authority. As Anghelache (2006b) highlights in her paper, the financial intermediaries must activate in an honest manner and satisfy the client's needs. Because of this, the internal procedures of each SSIF must include the aspects regarding:

- Internal control;
- Risk evaluation and administration;
- Confidential data protection;
- Transactions with financial instruments;
- Inclusion/exclusion of professional clients;
- The policy for order execution;
- Preventing the conflicts of interest;
- Customer relationships.

2. Methodology and data

Through this paper we highlight the importance of financial intermediaries based on their activity on Romanian capital market. All the data regarding the transactions made by each financial intermediary are available on official website of BSE.

Besides the simplest evolution of transactions made by each SSIF, we deeply analyzed any significant differences between the most important SSIFs regarding the activity on the market. The selection of SSIFs took into account only the monthly transactions made by them in the period January 2011 – September 2014. To achieve this we use a paired sample t-test, which has the following hypothesis:

$$(1) \begin{aligned} H_0 : \sim_{SSIF(i)} &= \sim_{SSIF(j)} \\ H_1 : \sim_{SSIF(i)} &\neq \sim_{SSIF(j)} \end{aligned}$$

Based on the hypothesis presented in relation (1), we checked if the average of monthly value of transactions made by SSIF(i) is significantly different from the average of monthly value of transactions made another SSIF(j).

Before applying the test, we computed the series of differences between the monthly values of transactions for the two selected SSIFs, based on the relation (2):

$$(2) \quad X = SSIF(i)_k - SSIF(j)_k, k = \overline{2011.01, 2014.09}$$

We know that the expected value of the differences series is 0 ($\sim_X = 0$), and the number of observation from the sample is 45 (N=45), the paired sample t-test is computed based on formula (3):

$$(3) \quad t = \frac{(\bar{X} - \sim_X)}{s_x} = \frac{(\bar{X} - \sim_X)}{\sqrt{\sum (X - \bar{X})^2}} \cdot \sqrt{\frac{N-1}{N}} = \sqrt{\frac{44}{45}} \cdot \frac{\bar{X}}{\sqrt{\sum (X - \bar{X})^2}}$$

where \bar{X} is the mean of the differences series between the two series for the monthly value of transaction of each SSIF, s_x is the standard deviation of the differences series between the two series for the monthly value of transaction of each SSIF.

This test was applied for the entire period (January 2012 – September 2014), and also for each year in order to highlight some differences regarding the transaction's behavior of analyzed SSIFs.

3. Results

For a better understanding of the entire picture, we present the analysis of the transactions made on Romanian capital market. The first indicator which is under our attention is represented by the market capitalization of BSE for period 1995 – 2013, which it is shown in figure 1.

At a first glance, we can see that before 2000, we cannot speak about an "active" capital market in Romania, because until 2000 the market capitalization of BSE was under 1 billion RON.

In the same time, we are able to see that period 2000 – 2007 the market capitalization of BSE increased over 85 times, until the value of 85 billion in 2007. This evolution has some explanations. The main explanation is represented by the process of EU integration. Due to this, Romania had to implement several regulations imposed by EU. Because of this, in 2002 they are adopting the first regulation regarding the capital market, while in 2004 it was adopted the Law no.

297/2004, the unique law for capital market. Starting with this moment, the capital market from Romania is perceived by investors as being more certain and having European standards, that's why the transaction made after this year significantly increased.

Despite this, the increasing trend for the market capitalization of BSE was stopped by the financial crisis, which determined a decrease in this indicator. The lowest value for market capitalization of BSE was recorded in 2008 (45.7 billion RON), when the value of this indicator decreased with 46%. Another significant decrease was recorded in the year 2011 of about 30%.

Based on market capitalization of BSE we can see clearly that the function of economic barometer for the Romanian capital market is validated. During this period the specific fluctuations in prices for a recession period are recorded, as we mentioned in the previous section.

Beside this indicator, we can analyze other indicators namely: number of traded stocks, value of traded stocks, volume and value of transactions made by residence persons and non-residence persons. All these aspects were presented in a previous paper (Oanea and Vasilescu, 2014), in which we showed that the financial crisis had a significant impact on market capitalization of BSE, value of traded stocks, number of listed companies, and the value of buying transactions made by non-residence persons.

Before analyzing the transactions made by financial intermediaries in more detail, we present in figure 2, the evolution of the number of financial intermediaries which were active on the capital market for period 1995 – 2013.

Based on figure 2, we are able to see that the evolution is opposite compared with the market capitalization evolution in figure 1. Before 2000, the number of financial intermediaries which activated on the market was around 100, the maximum value being recorded in 1998, when there were 173 financial intermediaries. In period 2002 – 2007 the number of financial intermediaries was around the value of 70, while after 2008, due to financial crisis this value decreased at 60.

This evolution can be explained based on the EU integration process, which assumed the implementation of several European regulations regarding the capital market. The conditions imposed by the new regulation were too hard to be accomplished by a part of the existing financial intermediaries, that's why several of them had to go out of the market.

Regarding the evolution of financial transactions made by each financial intermediary, we took the data from the monthly reports from the official site of BSE. The values are available for the period January 2011 – September 2014. The evolution is presented in figure 3.

Even if the average of the monthly value of transactions for the entire period was 1.72 billion RON, this value fluctuates on each year. Based on this we are able to see a decrease of the average of monthly value of transactions in 2012 of about 25.5%. This decrease is followed by an increase in the next years, due to the IPO of Romgaz (November 2013) and Electrica (June 2014). So in 2013, there is recorded an increase of 52% of the average of monthly value of transactions, and in 2014 (January – September) we see an increase of 19%, compared with 2013.

Further, we are interested in presenting the transactions made by each SSIF. For this purpose, we selected the first 25 SSIFs based on the total value of transactions made during the period January 2011 – September 2014. A descriptive statistics for these transactions are presented in table 1.

Without applying the paired sample t-test, we are able to see that the most important SSIF based on transactions value is Swiss Capital S.A., with a value of transactions of 18.78 billion RON for period January 2011 – September 2014. The results for the paired sample t-test for the entire analyzed period presented in table 2 pointed out the same conclusion. Moreover, we showed that there does not exist significant differences between the value transactions made by S.S.I.F. Broker and BT Securities.

Analyzing more deeply the differences regarding the transactions value for the first 4 SSIFs for each year, we obtain that only in 2012 and 2014 there are significant differences between the transactions value for all these 4 SSIFs. In the same time in 2011 and 2013 between the transactions value made by S.S.I.F Broker and BT Securities there were not recorded significant differences. The results are presented in table 3.

Due to these results, we can say that the investors will be indifferent when they have to choose between S.S.I.F Broker and BT Securities, because these two SSIFs are similar in their activity on capital market.

4. Conclusions and discussions

Through this paper, we highlighted the value of transactions evolution from the capital market made by financial intermediaries, by pointing out the transactions made by SSIFs.

Based on the analysis made, we were able to see that the Romanian capital market was affected by two major events: EU integration process and financial crisis.

The first event, EU integration process, affected positively the market evolution, through a significant increase in market capitalization of BSE. Based on this we saw that the market capitalization of BSE was 1 billion RON in 2000 and increased up to the value of 85 billion RON in

2007. Moreover, the adoption of the capital market law, no. 297/2004 accelerated the increasing trend of the entire market. Due to this, all investors were more confident in Romanian capital market, and started to increase the trading on BSE. Moreover, we consider that the process of EU integration of Romania determined an increase in competition and financial markets' efficiency. The same effect was pointed out by Schipke et al. (2004) for Baltic countries: Estonia, Latvia, and Lithuania.

The second event, financial crisis, affected negatively the capital market. A significant decrease of market capitalization of BSE was recorded in 2008, when the recorded value was about 45.7 billion RON. The decrease of 46% from 2008, was followed by another decrease of 30% in 2011.

The evolution of the number of financial intermediaries, which activated on the market, is opposite to the market capitalization evolution. Before 2000, there were approximately 100 financial intermediaries on the market. For the period 2002 – 2007 the number decrease to 70, and after 2008 due to financial crisis, the number of financial intermediaries decrease to 60.

The average of the monthly value of transactions made by financial intermediaries during the period January 2011 – September 2014 was 1.72 billion RON. Despite this there are variations from year to year. Significant increases are recorded in 2013 and 2014 due to IPO of Romgaz (November 2013) and Electrica (June 2014).

The most active SSIF on capital market is Swiss Capital S.A., such that for the analyzed period the transaction value made by this SSIF was about 18.78 billion RON, which it is about 24% from the total value of entire transactions from the market. Moreover this value is almost 45% from the transactions' value made only by SSIFs.

In our investigation based on which we identified it there aren't any significant differences between transactions value of the most important SSIF from the market, we pointed out that for period January 2011 – September 2014 there are significant differences between the transactions value of S.S.I.F Broker and BT Securities.

Investors are interested in finding the financial intermediaries which are most active on capital market. Regarding this, our results help the investors to choose the right financial intermediary. Based on our results, we pointed out that the most active SSIF on the capital market, taking into account the transitions value, is represented by Swiss Capital S.A.

Despite this, our results are very useful also for the Financial Services Authority, because the transactions concentration only in the activity of one SSIF, namely Swiss Capital S.A., (almost 25% from the total value of transactions from the capital market) can trigger risks which can affect the entire

market, in the case that the financial situation of this important SSIF will worsen.

Due to this, this paper is just the first step from a complex process through which we highlight the relation between the activity of each SSIF and the risk which can be triggered by them. In this way, by taking into account the activity on financial market and the financial situation of each SSIF, we will be able to have a clearer image of risk encountered on Romanian capital market.

Acknowledgements

This work was financially supported by the project "Excellence Academic Routes in Doctoral and Post-doctoral Research – READ", contract no. POSDRU/159/1.5/S/137926, co-funded by the European Social Fund through the Development of Human Resources Operational Sectorial Program 2007-2013

Reference list

- [1] Allen, F., & Gale, D. (1992). Stock-price manipulation. *Review of financial studies*, 5(3), 503-529.
- [2] Anghelache, G. (2006, a). The Evolution of the Romanian Capital Market—Limits and Performances. *Theoretical and Applied Economics*, 1(496), 56–59.
- [3] Anghelache, G. (2006, b). Financial Investment Services Regulation. *Theoretical and Applied Economics*, 2(497), 47–54.
- [4] Anghelache, G. (2007). The Capital Market in the Context of the Integration within the European Union. *Theoretical and Applied Economics*, 9(514), 21–28.
- [5] Anghelache, G. (2009). *Capital market in European context* [Pia a de capital în context European]. Bucharest: Editura Economic ..
- [6] Brunnermeier, M. K., & Pedersen, L. H. (2009). Market liquidity and funding liquidity. *Review of Financial studies*, 22(6), 2201–2238.
- [7] Bucharest Stock Exchange, official website: <http://www.bvb.ro/>
- [8] Chordia, T., Roll, R., & Subrahmanyam, A. (2001). Market liquidity and trading activity. *The Journal of Finance*, 56(2), 501–530.
- [9] Morck, R., Yeung, B., & Yu, W. (2000). The information content of stock markets: Why do emerging markets have synchronous stock price movements?. *Journal of financial economics*, 58(1), 215–260.
- [10] Oanea D.C. & Vasilescu S.B. (2014). Overview on Romanian capital market transactions: 1995 to present. *SEA - Practical Application of Science*, 2(4), 295–302.
- [11] Poon, S. H., & Granger, C. W. (2003). Forecasting volatility in financial markets: A review. *Journal of economic literature*, 41(2), 478–539.

- [12] Radu S. C. & Boaj D. M. (2012) *Capital markets. Institutions and traded financial instruments* [Pie e de capital. Insitu ii i instrumente financiare tranzac ionate]. Bucharest: Editura Universitar .
- [13] Schipke, A., Beddies, C., George, S. & Sheridan, N. (2004). Capital markets and financial intermediation in the Baltics. IFM Occasional Paper, No. 228.
- [14] urlea, E. (2006). Investment decisions on capital market and the role of internal control regarding the financial and accounting information. *Annals of "1 December 1918" University of Alba Iulia, Economic Series*, 1(8).
- [15] Wurgler, J. (2000). Financial markets and the allocation of capital. *Journal of financial economics*, 58(1), 187-214.

Appendix

Table 1.
Descriptive statistics for the transactions value of the main SSIFs

SSIF	Total	Monthly average	Max	Min
Swiss Capital S.A.	18,783	0,408	1,226	0,010
S.S.I.F. Broker	3,233	0,072	0,197	0,028
UniCredit CAIB Securities Romania*	2,921	0,122	0,416	0,010
BT Securities	2,691	0,060	0,179	0,021
IFB Finwest	1,583	0,035	0,073	0,010
NBG Securities Romania S.A.	1,450	0,052	0,134	0,008
Intercapital Invest	1,180	0,028	0,108	0,007
Tradeville	1,140	0,027	0,081	0,009
Carpatica Invest	1,105	0,027	0,112	0,007
Actinvest	1,049	0,039	0,087	0,007
IEBA Trust	1,012	0,028	0,076	0,008
KBC Securities	0,681	0,034	0,100	0,006
Voltinvest	0,515	0,025	0,148	0,009
Estinvest	0,487	0,015	0,033	0,006
Prime Transaction	0,396	0,013	0,026	0,006
Confident Invest Bucuresti	0,389	0,024	0,087	0,006
Equity Invest	0,351	0,029	0,060	0,011
GM Invest	0,342	0,024	0,064	0,010
Goldring	0,232	0,015	0,033	0,007
AvantGarde Finance S.A.	0,216	0,014	0,024	0,006
Super Gold Invest	0,127	0,013	0,021	0,008
Alpha Finance Romania	0,126	0,013	0,032	0,005
Eldainvest	0,114	0,023	0,030	0,015
Transilvania Capital	0,105	0,013	0,033	0,007
S.S.I.F. City Invest S.A.	0,090	0,045	0,059	0,031

Note. The values are expressed in billion RON; SSIFs presented in the table were selected based on the transaction value for the period January 2011 – September 2014, the transactions made by selected SSIFs represent 90% from the total value of transactions, if we are excluding the investment banks; *Based on FSA decision no. A165/28 June 2013 it was withdraw the operating permit for SSIF Unicredit CAIB Securities România SA,

Table 2.
Paired sample t-test results for selected SSIFs for entire period (January 2011 – September 2014)

SIFF	Swiss Capital S.A.	S.S.I.F. Broker	BT Securities
S.S.I.F. Broker	11,078*** (0,000)		
BT Securities	11,239*** (0,000)	1,678 (0,100)	
IFB Finwest	12,154*** (0,000)	6,262*** (0,000)	6,700*** (0,000)

*** - the null hypothesis is rejected at 1% significance level;

Table 3.
Paired sample t-test results for selected SSIFs for each year

SIFF	2011			2012		
	Swiss Capital S.A.	S.S.I.F. Broker	BT Securities	Swiss Capital S.A.	S.S.I.F. Broker	BT Securities
S.S.I.F. Broker	4,462*** (0,001)			5,814*** (0,000)		
BT Securities	4,446*** (0,001)	0,795 (0,443)		5,102*** (0,000)	-2,477** (0,031)	
IFB Finwest	4,712*** (0,001)	3,151*** (0,009)	3,789*** (0,003)	6,114*** (0,000)	4,968*** (0,000)	5,072*** (0,000)

	2013			2014 ^a		
S.S.I.F.	5,382 ^{***}			8,908 ^{***}		
Broker	(0,000)			(0,000)		
BT Securities	5,927 ^{***}	1,662		13,734 ^{***}	2,735 ^{**}	
	(0,000)	(0,125)		(0,000)	(0,026)	
IFB Finwest	5,985 ^{***}	4,722 ^{***}	3,465 ^{***}	13,048 ^{***}	3,797 ^{***}	2,404 ^{**}
	(0,000)	(0,001)	(0,005)	(0,000)	(0,005)	(0,043)

***, ** - the null hypothesis is rejected at 1%, respectively 5% significance level;

^a - data for period January – September 2014;

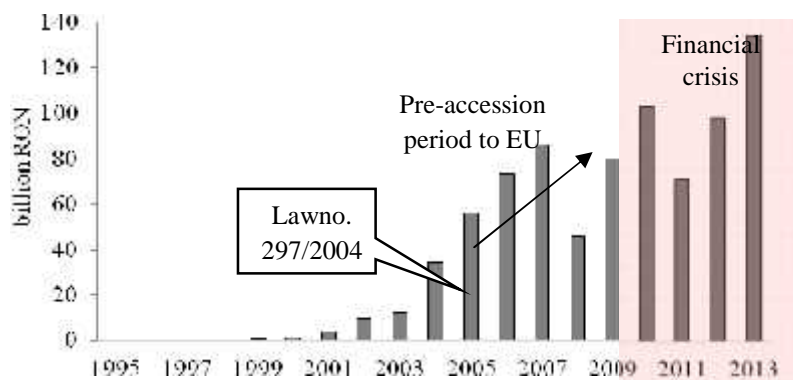


Figure 1. Evolution of market capitalization of BSE for period 1995 – 2013 (billion RON)

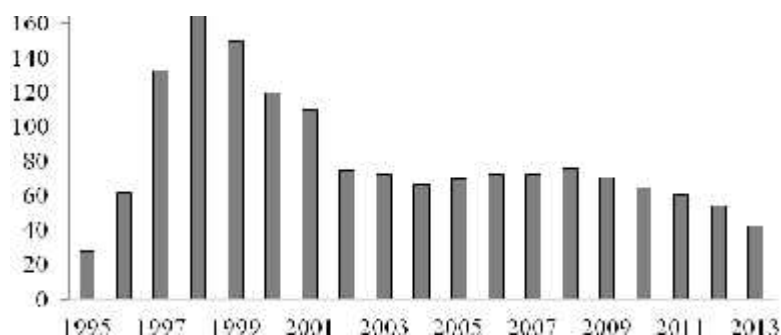


Figure 2. Evolution of the number of financial intermediaries for period 1995 – 2013

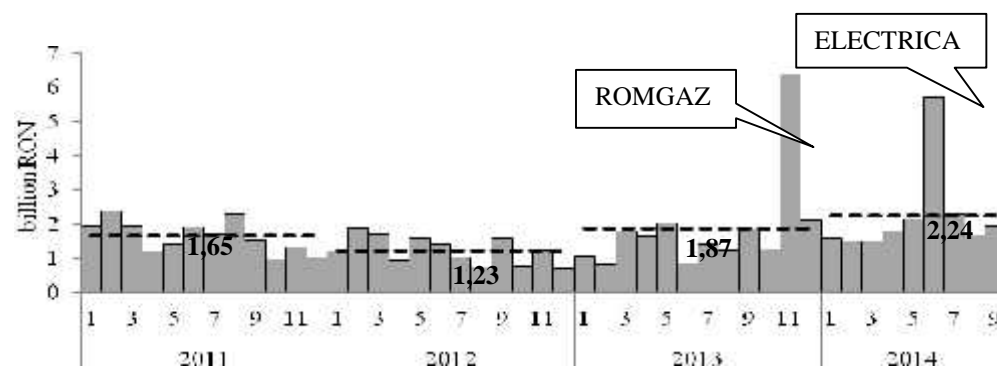


Figure 3. Evolution of the transactions value made by financial intermediaries in period January 2011 – September 2014 (billion RON)