

IMPACT OF THE FINANCIAL CRISIS ON THE MARKET VALUE AND NET PROFIT OF THE POLISH CAPITAL MARKET COMPANIES

Rafał Józwicki

Academy of Management
Department of Finance
ul. Sienkiewicza 9
90-113 Łódź
Poland
e-mail: rjozwicki@swspiz.pl
telephone: +48 503 646 771

Abstract

Financial crisis which we can observe in Europe since 2007 year made market prices and net profit of the capital market companies lower. This is an effect of supply of the shares by stockholders frightened of the result of the financial crisis. However we can ask the question if the lower and lower prices of the market shares are the effects of net profit of the companies or it is only an effect of global bear market without any reason in companies. The main goal of this paper is to answer the question about the influence of the financial crisis on the net gains and prices of stocks of the companies listed on Warsaw Stock Exchange. Investigation was made with support of financial data and results of mentioned above companies listed within index WIG 20 on the 1st October 2009. Period of investigation is from January 2007 till the end of the second quarter of 2009.

Keywords: *financial crisis, stock exchange,*

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1. Introduction

Generally speaking, present recession has started from collapse of high risk mortgage loan market in the USA, where banks lend quite often for people with low financial possibilities (called as subprime mortgage). Individual insolvency manifest itself as lack of money on the credit market and instability of credit institutions. Initially crisis referred to American investment banks, but later it was also transmitted to another segments of American economy. Out of consideration of global interlocking of capital the effects are also visible in the other countries, also in Europe. The best example of generally known bankruptcy, which is an effect of recession is the bankruptcy of the 4th biggest investment bank Lehman Brothers which took place in September 2008. Besides financial sector the effects of crisis are

noticeable in motor industry, on the real property market and the incoming bad information and predictions about recession deepen decline of stock on all stock exchanges.

Financial crisis which we can observe since 2007 created many negative occurrences in economy. One of them is noticeable recession of the companies on the stock exchange. It is a result of predominance of stock supply, created trough investors who are afraid of crisis effects. The main goal of this paper is to answer the question about the influence of the financial crisis on the net gains and prices of stocks of the companies listed on Warsaw Stock Exchange. Investigation was made with support of financial data and results of mentioned above companies listed within index WIG 20 on the 1st October 2009. Period of investigation is from January 2007 till the end of the second quarter of 2009.

2. Capital market in Poland

Before we start detailed analysis I will mention about few aspects of function of capital market in Poland. As you know, financial system of each country is created by few fundamental elements such as juristic acts, financial instruments, institutions and markets. In each country where free-market economy function there are institutions called securities exchanges. Mentioned institutions concentrated supply and demand on securities which are objects of circulation at the market. Thanks to exist of the market companies can gain capital which enable them to development and management of investments while companies which have financial excess could place them in expectation of receive an attractive rate of return.

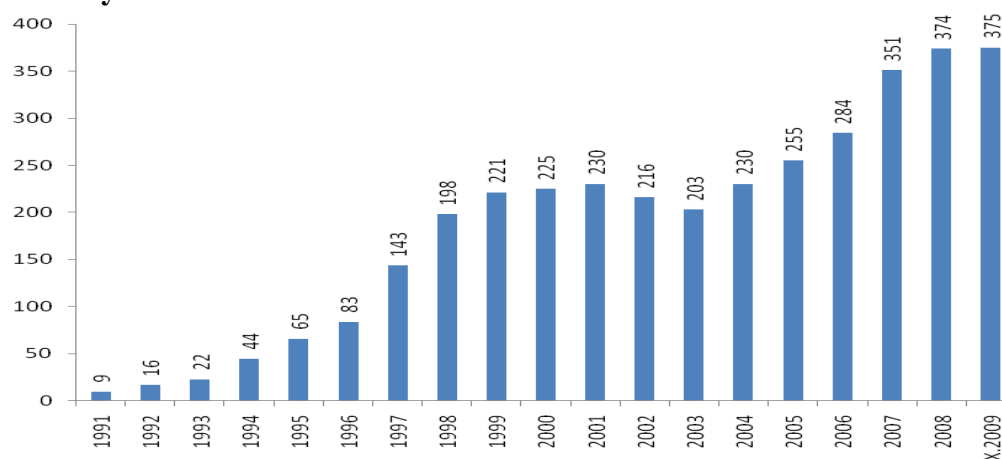
In Poland securities exchange function in Warsaw. The beginning of regulated exchange trade in our country is dated on the first half of XIX century, when the first securities exchange was opened in Warsaw, which was place for trade of notes, bonds and shares. Except of Warsaw, some other cities like Katowice, Kraków, Łódź, Lwów and Wilno had organized markets but the capital of the country concentrated most of total turnover. When the second World War broke out markets stopped their activity. After the War there were trials of renewal function of securities market but central planed system haven't favored these projects. Another successful trial had place in April 1991 when the Minister of Property Conversion and Minister of Finance who represented the Treasury signed foundation act of the Warsaw Stock Exchange. Four days later, on the 16th of April the first stock session took place, at that time there were 5 listed companies.

For the number of companies on the exchange trade influence the appearance of new companies as well as retire of certain companies from the exchange trade. In the situation

when till 1996 non of the companies retire, from 1997 we can observe the phenomenon of mass-retire room the parquet. That phenomenon intensify in 2002 and 2003 when 38 companies retired from the stock. During the next years new companies joined and at the end of September 2009 there were 375 companies on the exchange trade.

On the figure number 1 you can see that since the beginning of quotation till 2009 the number of companies increased almost 4 times, from 9 in 1991 to 375 in 2009.

Figure 1. Number of companies listed at Warsaw Stock Exchange from the 1991 year to IX.2009 year



Source: Author's calculation based on The Warsaw Stock Exchange "Fact Books" from 1997 to 2009 year.

Stock companies which are subject of this examination are in the index WIG20 which is the biggest index of stock exchange companies. Index is published by Warsaw Stock Exchange since 16th April 1994 and the basic value was 1000 points. Values of the index are counted on the basis of 20 stock companies. Index is published every 15 seconds since start till close of the session. WIG20 is price index, so to count it profits from dividends are not taking into account. Changes of the index composition are realized four times a year. In March there is a year revision, in June, September and December there are quarterly correction takes place.

3. Net gains and market process of examined companies

At the beginning, we can analyse the total net gain of companies over the examined period (table number 1). As we can notice, ten companies of all had loses at least once time. Two companies of all had loses five and four times – these companies are Bioton and PGNIG. That means, that ten companies of all had only quarter net gains over examined period.

Table 1. Net gains of the examined companies in the period from 1Q.2007 to the 2Q.2009 (in thousands of PLN)

No .	Company	1 Q'07	2 Q'07	3 Q'07	4 Q'07	1 Q'08	2 Q'08	3 Q'08	4 Q'08	1 Q'09	2 Q'09
1	AGORA	14 272	32 847	26 716	26 429	18 660	21 548	13 907	-30 694	1 083	12 268
2	ASSECOPO L	24 436	32 682	44 990	58 760	51 011	100 823	76 854	100 057	75 051	101 403
3	BIOTON	14 016	62 118	10 036	-56 828	4 756	-15 746	-18 858	685	-19 737	-19 508
4	BRE	222 738	181 128	164 250	141 978	344 623	289 499	202 492	35 190	77 221	-61 557
5	BZWBK	260 612	297 984	225 657	170 442	243 101	324 437	247 062	40 846	119 004	257 966
6	CERSANIT	28 899	37 749	41 292	13 192	20 726	40 880	49 188	-106 024	-48 115	-1 401
7	CEZ	15 515 000	7 818 000	8 414 000	12 642 000	12 681 000	13 068 000	12 302 000	5 625 000	19 091 000	12 550 000
8	CYFRPLSA T	32 074	47 646	45 317	-8 921	64 008	79 843	84 206	41 297	72 649	56 066
9	GETIN	80 059	325 084	110 613	110 521	126 846	151 292	165 170	65 215	103 180	80 451
10	GTC	43 523	211 163	403 174	88 212	122 366	147 789	188 667	152 285	9 650	-46 705
11	KGHM	807 504	1 030 428	1 262 781	860 301	877 812	841 598	791 369	254 528	705 440	585 719
12	LOTOS	56 029	233 970	236 787	244 814	267 916	396 521	-237 889	-903 800	-658 980	739 344
13	PBG	10 204	30 642	20 768	41 973	14 846	26 358	34 540	73 524	23 244	46 925
14	PEKAO	502 086	539 160	554 410	559 822	1 137 519	829 744	841 365	719 336	566 295	613 204
15	PGNIG	786 774	347 726	303 291	-500 929	778 807	280 270	179 009	-310 035	-398 844	-94 604
16	PKNORLEN	49 201	110 014	562 491	634 069	626 268	1 668 013	21 118	-3 047 031	-1 094 873	1 170 665
17	PKOBP	672 472	611 267	745 322	874 771	951 162	897 151	904 180	548 125	540 685	609 873
18	POLIMEXM S	27 886	26 732	21 639	24 909	29 763	27 932	33 327	29 843	34 198	37 938
19	TPSA	518 000	495 000	644 000	616 000	681 000	698 000	630 000	179 000	328 000	374 000
20	TVN	47 004	138 785	-78 325	135 844	63 440	0	5 008	87 634	-29 071	148 993

Source: Author's calculation based on The Warsaw Stock Exchange "Fact Books" from 2007 to 2009 year.

In the table number 2, we can analyse total net gains of all companies. In each period net gain is at the level higher than zero, but looking at the table number three, we can detect, that there were percentage loses of gain quarter to quarter.

Table 2. Total net gains of the examined companies over the period from 1Q.2007 to the 2Q.2009 (in thousands of PLN)

TABLE 2009 (in thousands of PLN)										
	2007				2008			2009		
	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q	3 Q	4 Q	1 Q	2 Q
Total	19 712	12 610	13 759	16 677	19 105	19 873	16 512	3 554	19 497	17 161
net gain	789	125	209	359	630	952	715	981	080	040

Source: As the table number 1.

First going down of the net gains we can see from the second to the first quarter of the 2007 year. The net gain in the second quarter is at the level of 36 percent of the net gain in the first quarter. In four following periods companies had positive change of net gain calculated as quarter to quarter. In periods the third to the second quarter of the 2008 year and in the period of the fourth to the third quarter of the 2008 year total net gains went down again and the changes were: -17% and -78%. In the next examined period we can notice rapid positive change of net gains, which from the first quarter of the 2009 to the fourth quarter of the 2008 reached the level 448%. In the last examined period we can notice, a slight losing of the net gains.

Table 3. Percentage change of total net gains of examined companies over the period from 1Q.2007 to the 2Q.2009

	2 Q'07 / 1 Q'07	3 Q'07 / 2 Q'07	4 Q'07 / 3 Q'07	1 Q'08 / 4 Q'07	2 Q'08 / 1 Q'08	3 Q'08 / 2 Q'08	4 Q'08 / 3 Q'08	1 Q'09 / 4 Q'08	2 Q'09 / 1 Q'09
<i>Percent change</i>	-36	9	21	15	4	-17	-78	448	-12

Source: As the table number 1.

In the table number 4, we can examine percentage change of net gains of all companies calculated quarter to quarter. As we can notice, each company over mentioned period had at least one percentage change at the level below the zero level. The worst situation we can detect in one company: PGNIG, in which we detect eight negative changes during inspected periods. The next two companies: Bioton and BRE had seven down going changes. Another two companies: Agora and TVN had two decreasing changes.

Table 4. Percentage change of the net gains of the examined companies calculated quarter to quarter over the period from 1Q.2007 to the 2Q.2009

No	Company	2 Q'07 / 1 Q'07	3 Q'07 / 2 Q'07	4 Q'07 / 3 Q'07	1 Q'08 / 4 Q'07	2 Q'08 / 1 Q'08	3 Q'08 / 2 Q'08	4 Q'08 / 3 Q'08	1 Q'09 / 4 Q'08	2 Q'09 / 1 Q'09
1	AGORA	130	-19	-1	-29	15	-35	-321	-104	1033
2	ASSECOPO L	34	38	31	-13	98	-24	30	-25	35
3	BIOTON	343	-84	-666	-108	-431	20	-104	-2981	-1
4	BRE	-19	-9	-14	143	-16	-30	-83	119	-180
5	BZWBK	14	-24	-24	43	33	-24	-83	191	117
6	CERSANIT	31	9	-68	57	97	20	-316	-55	-97
7	CEZ	-50	8	50	0	3	-6	-54	239	-34
8	CYFRPLSA T	49	-5	-120	-817	25	5	-51	76	-23
9	GETIN	306	-66	0	15	19	9	-61	58	-22
10	GTC	385	91	-78	39	21	28	-19	-94	-584
11	KGHM	28	23	-32	2	-4	-6	-68	177	-17
12	LOTOS	318	1	3	9	48	-160	280	-27	-212
13	PBG	200	-32	102	-65	78	31	113	-68	102
14	PEKAO	7	3	1	103	-27	1	-15	-21	8
15	PGNIG	-56	-13	-265	-255	-64	-36	-273	29	-76
16	PKNORLEN	124	411	13	-1	166	-99	-14529	-64	-207
17	PKOBP	-9	22	17	9	-6	1	-39	-1	13
18	POLIMEXM S	-4	-19	15	19	-6	19	-10	15	11
19	TPSA	-4	30	-4	11	2	-10	-72	83	14
20	TVN	195	-156	-273	-53	-100	-	1650	-133	-613

Source: As the table number 1.

Aside from net gains, investors are interested in prices of the shares they have in portfolio. In the table number five we can analyse prices of twenty companies during three years period. In columns we can see prices of shares at the beginning of the 2007 year and at the end of the years 2007, 2008 and at the end of the second quarter of the 2009 year. In the three next columns there are calculated percentage changes of prices. In the year 2007 only five companies lost its market value. Shares of companies: Bioton, Cersanit, Lotos, PEKAO and TPSA at the end of this year were listed at the lower level than at the beginning of the year. Looking at the data we can conclude that the worst period for stockholders were in 2008 year. In this year shares of each of 19 companies lost his value (we do not possess data for one company). For example company Bioton lost over 77% of its value, another companies: Agora, BRE, Getin, GTC, KGHM, Lotos and Polimexms lost over 60% of their value. During

the whole examined period from the beginning of the 2007 year till the end of second quarter of the 2009 year, in general sixteen companies lost its market value.

Table 5. Market prices of the examined companies and its percentage change over the period from 1Q.2007 to the end of 2-nd quarter of the 2009

No.	Company	beginning of the 2007	end of the 2007	end of the 2008	end of the 2-nd Q 2009	end of the 2-nd Q 2009 / beginning of the 2007	end of the 2007 / beginning of the 2007	end of the 2008 / end of the 2007
1	AGORA	36,50	55,50	16,20	14,10	-61,37%	52,05%	-70,81%
2	ASSECOPOL	49,95	73,5	47,4	54,45	9,01%	47,15%	-35,51%
3	BIOTON	2,22	0,89	0,2	0,26	-88,29%	-59,91%	-77,53%
4	BRE	337	505	196,5	171	-49,26%	49,85%	-61,09%
5	BZWBK	226	251	110,8	90	-60,18%	11,06%	-55,86%
6	CERSANIT	36,61	33,5	13,78	11,37	-68,94%	-8,49%	-58,87%
7	CEZ	135	183	124	145,9	8,07%	35,56%	-32,24%
8	CYFRPLSAT	-	-	13,5	15,35	-	-	-
9	GETIN	12,65	14,7	4,97	6,3	-50,20%	16,21%	-66,19%
10	GTC	40,5	44,5	15,18	22,05	-45,56%	9,88%	-65,89%
11	KGHM	88,9	105,8	28,12	81,5	-8,32%	19,01%	-73,42%
12	LOTOS	49	44,5	11,95	20,2	-58,78%	-9,18%	-73,15%
13	PBG	253	307,1	196	235	-7,11%	21,38%	-36,18%
14	PEKAO	228	227	126,2	114,5	-49,78%	-0,44%	-44,41%
15	PGNIG	3,61	5,1	3,6	4,06	12,47%	41,27%	-29,41%
16	PKNORLEN	48	51,9	25,73	26,38	-45,04%	8,13%	-50,42%
17	PKOBP	46,5	52,6	35,5	25,5	-45,16%	13,12%	-32,51%
18	POLIMEXMS	6,08	8,56	3,05	3,46	-43,09%	40,79%	-64,37%
19	TPSA	24,51	22,51	19,2	15,37	-37,29%	-8,16%	-14,70%
20	TVN	25	25	13,46	10,02	-59,92%	0,00%	-46,16%

Source: As the table number 1.

Observations made during analysing of the table number five are confirmed at the figure number two. At this chart there is Index WIG20 from the beginning of the 2007 year till the end of the second quarter 2009 year. As we can see, during the 2008 year prices fell down strong, so investors lost the most money in this period.

4. Conclusion

Financial crisis was started from collapse of high risk mortgage loan market in the USA, but its effects we can notice in other industries and areas, especially on the stock exchanges. Data analysis allow to come to a few conclusion. At the beginning, we can notice that out of all twenty companies in case of ten companies there were quarter lose. As we

detected, each company over mentioned period had at least one percentage change at the level below the zero level. In company PGNIG there were eight negative changes during inspected periods. For stockholders the worst period were in 2008 year. In this year shares of each examined companies lost his value. We can point a few companies which lost over 60% of its market value. As a resumption we are allowed to affirm that financial crisis had the negative impact on the net gains of examined companied and their market value.

Figure 2. Index WIG 20 from the beginning of the 2007 year till the end of 2-nd quarter of the 2009 year



Source: Metastock 7.52.

References

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