

FAIR VALUE OF THE BANKING SECTOR COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND WITHIN 2007-2016 AND THEIR FINANCIAL ANALYSIS

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ABSTRACT

This paper examines share price of the companies listed on the WIG-BANKI and their fair value between 2007-2016. Data from 2007 to 2016 were collected from the Stooq.pl (Polish portal of shares). Two hypotheses are tested: (1) value of the shares based on the market price; (2) value of the shares as the fair value of shares. Moreover, the financial condition of several companies with respect to the sector was examined with the selected financial ratios. In addition, the author expressed his view on the opportunities of the property companies' market's WIG-BANKI in 2016-2017.

Keywords: bank, company, market value of shares, profit

1. INTRODUCTION

The valuation of shares is the most complex process on the financial market because the value of shares does not only depends on the demand and supply on the market but it is also reliant on many factors, which shape its exchange rate from the valuation of the company, with the use of various methods in time, until presentation of the mechanisms changing the value of shares in a way which increases or lowers its value.

In the paper, the banking sector's companies, quoted on the Warsaw Stock Exchange in Poland, were subject to analysis, and the fair value of shares was calculated objectively and on the basis of values as well as economic and financial indicators of each studied company.

The value of the banking sector's companies, quoted on this stock index, was studied on the basis of estimating their fair value because currently their values are presented as the decreased in relation to the market value, therefore, they are not fair values.

The studies were conducted on 14 companies of the banking sector in 2007 – 2016 using the indicator and comparative method, in order to prove that the theory on the fair value is appropriate.

2. FAIR VALUE OF LISTED COMPANIES

Share price of the companies listed on the Stock Exchange should reflect also their fair value. The fair value can be defined in several ways. In view of the foregoing, the fair value is a value used repeatedly in accounting, and thus in Article 28 (6) of the Accounting Act of 29.09.1994 as "the amount for which a given asset component could be exchanged, and the liability could be paid on market transaction terms between interested and well-informed, unrelated parties.

In view of whether the price of shares that are quoted on the stock exchange corresponds to their fair value, should be found in the value alone, since, after all, the values may be diverse, like the value of a similar company, producing similar goods and operating in the same industry, will also be diverse for various reasons.

The subject of trade covers minority shares, and the main market participants are retail investors or minority institutional investors, thus the price of shares should reflect the fair value characterizing the liquid minority interest.

The value presented in this way seems righteous, which is confirmed by the premium paid by the investors who announce calls for subscription for shares and plan in this way the purchase of the controlling interest. Then the premium reflects the difference between the level of liquid minority interest and the level of controlling interest. Sometimes the level takes into account benefits resulting from synergy. An investor purchasing the controlling interest in this way receives premiums that appear after taking over control of a company, in the form of funds, business management and making a number of strategic decisions.

The fair value of the share price should be determined in accordance with the idea of capital market, namely the market participants should have equal access to data, information and all messages concerning a given company [8, 11, 12]. However, the investors are divided into three groups:

- a) People with access to the most closely guarded information that affects the price and the business value, namely those can the company's management board or shareholders,
- b) Institutional investors with blocks of shares with simultaneous access to the company's management board,
- c) Individual investors who have access to public information.

At this point, there should be no differences in particular groups, at least officially, however, it happens that a group that is closest to the company has information which can obviously change its value overnight or distort its value artificially, e.g. other data or informal data, and even fictitious data.

Worldwide we can also appreciate companies that treat individual investors seriously, namely provide them data concerning a company and treat them as equal and as strategic investors, with a large impact on a company in the present and in the future.

Transactions that are concluded on the Warsaw Stock Exchange relate to transactions between interested parties, namely a purchase or sale order should be submitted. Sometimes there are cases of wrongly submitted orders, but these are marginal orders that do not have a large impact on the transactions conducted on the Warsaw Stock Exchange [9].

Share liquidity is understood as a percentage quantity of shares in a company that are in the possession of minority shareholders. This is, at the same time, free float and the face value of such shares and the value of average daily trade in shares in a given company.

Thus, we may presume that if during a day a large trade in shares takes place and a greater part of shares remains in the hands of minor shareholders, the share price reflects their fair value. We cannot agree with the fact that at small or minimum trade the value of shares is reduced to its daily minimum and it would be its fair value. Then it is only a change in the share price to a lower one and it does not indicate its fair value, as the trade alone suggests that this is only a pure coincidence. Such an impact can be exerted by large shareholders, as they can, by using one block, decrease the share value, preventing smaller players from raising the price for one reason: the capital of smaller shareholders does not enable them to raise the share price.

There is one premise more to determine the fair value of share price. The investors are fond of investing in shares, namely they buy them as in the past they managed to earn on them and they feel that presently the share price is ideal and reflects their fair value and will enable them to

obtain fair dividend in the future. Such a purchase or sale of shares can largely overestimate or underestimate the share value of a quoted company. Here the IT industry may serve as an example, namely shares in technological companies at the beginning of the new millennium, when shares in these companies were being purchased without any analysis in technical terms, but looking at their name and value, which was increasing overnight. In view of the foregoing, this led to excessively high business value above its fair value. The share price should thus reflect the fair value of a company listed on the Warsaw Stock Exchange. For the value of these companies be fair, the market must make available to all investors information regarding companies listed on the Warsaw Stock Exchange [11]. The shareholders should be treated equally; therefore we cannot distinguish majority shareholders as those who should have information unavailable for minority shareholders. First of all, shares should be liquid securities, therefore they should be in free float and have real-time transferability, namely at any moment and at any time during the office hours of the Warsaw Stock Exchange on a business day.

The WIG-BANKI index, presented in Figure 1, shows that from 2009 to the first quarter of 2014, the WIG-BANKI sector's companies in Poland showed an upward trend in their values.

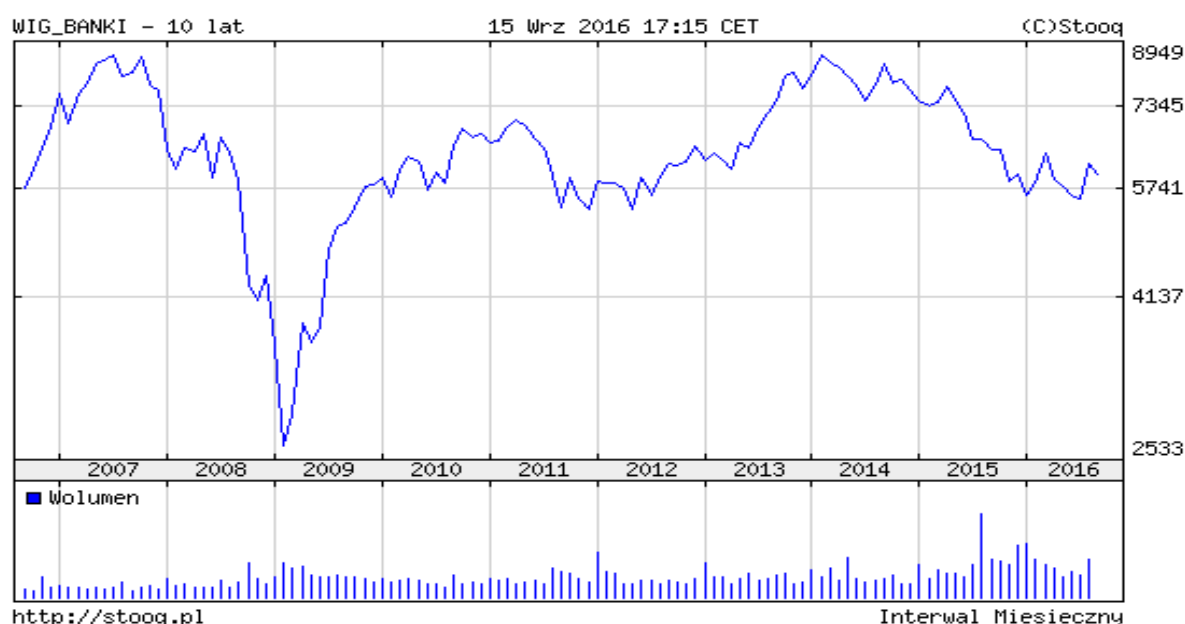


Figure 1: WIG-BANKI in the period from 01.2006 to 09.2016 [10] (source: stoq.pl).

However, from the second quarter of 2014, a significant downward trend can be noticed and consolidation at the level of 6078.24 points on the index take place. The values reported on 15.09.2016 reflect the lateral trend and confirm it. However, the market values do not reflect their fair value.

3. ANALYSIS AND VALUATION OF THE WIG-BANKI SECTOR COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE (WSE) IN POLAND

In the WIG-BANKI sector, three companies, the values of which approach to their maximum prices on 15.09.2016, and they are INGBSK and BZWBK. However, one company does not show its maximum or even fair value, though it can show the net profit and good financial condition, and this is MBANK, PEKAO and PKOBP. Some companies were overvalued by even 95%.

These companies are GETINOBLE, and UNICREDIT. The flagship companies, such as ALIOR, HANDLOWY, IDEABANK, MILLENNIUM, PEKAO, PKOBP and SANTANDER, stay ahead with the best results, as shown in Table 1-2.

TABLE 1: THE PROPERTY WIG-BANKI SECTOR'S COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND AS OF 15.09.2016 (prepared by the author on the basis of the financial data of the WIG-BANKI companies).

Name	Average rating	rating
ALIOR	3.5/5.0	B
BOS	4.0/5.0	B-
BZWBK	4.0/5.0	B+
GETIN	4.0/5.0	B+
GETINOBLE	4.0/5.0	B-
HANDLOWY	2.5/5.0	B
IDEABANK	5.0/5.0	No data
INGBSK	4.0/5.0	B
MBANK	3.5/5.0	B
MILLENNIUM	3.5/5.0	B
PEKAO	3.5/5.0	B+
PKOBP	3.5/5.0	B
SANTANDER	4.0/5.0	AAA
UNICREDIT	4.0/5.0	B-

In the WIG-BANKI sector, it can be seen that GETINOBLE has a overestimated value in relation to the maximum value by more than 95%, but the MBANK, PEKAO and the PKOBP are presented as companies of a high value in the sector.

Table following on the next page

TABLE 2: THE PROPERTY WIG-BANKI SECTOR'S COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND AS OF 15.09.2016 (prepared by the author on the basis of the financial data of the WIG-BANKI companies).

Name	Current price PLN	Maximum price PLN from the beginning of the stock exchange quotation
ALIOR	46.30	79.15
BOS	9.81	115.00
BZWBK	310.50	389.20
GETIN	1.16	6.71
GETINOBLE	0.47	6.47
HANDLOWY	75.95	115.70
IDEABANK	23.60	28.00
INGBSK	142.00	151.00
MBANK	345.95	538.40
MILLENNIUM	5.60	12.50
PEKAO	126.85	195.10
PKOBP	26.92	43.31
SANTANDER	17.60	32.35
UNICREDIT	8.60	119.50

It is obviously a very good recommendation for future investors. These companies prosper properly and are quoted on the Warsaw Stock Exchange [1, 3, 4, 5, 6, 7]. In tables are nominal prices in PLN.

In table 3-4, the most important ratios presenting the financial condition of the WIG-BANKI sector's companies were presented. The profit per share was generated in 14 examined companies. It shows that WIG-BANKI invest a lot, what determines their value and the generated profit per share [2].

The price to the operating earnings shows the losses of the company, and this state of affairs was reported in the examined stock exchange quoted companies (BOS and GETINOBLE). The ALIOR, BOS, HANDLOWY, INGBSK, PEKAO, PKOBP achieved a very high ratio, and the BZWBK – an average one.

Generally, the value of the index P/OE is a useful tool for determining an absolute share value referred to the operating profits. Using the operating profit instead of a net profit (the P/E index) allows for rejecting single events. Moreover, a net profit is easier to handle. Fewer companies incur losses at the level of an operating profit rather than a net value, which allows for a broader use of P/OE [2, 3, 4, 5, 12].

TABLE 3: TECHNICAL EVALUATION OF THE PROPERTY WIG-BANKI SECTOR'S COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND AS OF 15.09.2016 (prepared by the author on the basis of the financial data of the WIG-BANKI companies).

Name	P/OE (price/ operating earnings)	P/BV (price/ book value)	P/PF (price/ profit)
ALIOR	15.63	1.03	1.76
BOS	-8.39	0.43	0.75
BZWBK	10.34	1.52	3.77
GETIN	2.47	0.28	0.41
GETINOBLE	-7.82	0.24	0.38
HANDLOWY	12.86	1.51	5.12
IDEABANK	0.00	0.00	0.00
INGBSK	12.22	1.71	3.88
MBANK	8.05	1.14	2.79
MILLENNIUM	7.28	1.01	2.29
PEKAO	13.74	1.50	4.31
PKOBP	9.82	1.07	2.54
SANTANDER	2.56	0.60	1.87
UNICREDIT	1.00	0.20	0.52

The P/BV index informs how the company's own capital is valued by the market at a given moment. A general interpretation of the index consists in the fact that the P/BV indices below 1 mean a low price of a company, whereas a value over 3 that a company is overrated [2, 6, 7, 13].

The value of the P/PF index is expressed in the way that when the value of the index is lower, then the price for the purchased company's shares is theoretically lower too, which means that the enterprise is more attractive. It is used in order to demonstrate cyclic profits and losses of the analyzed companies (the income is much more stable than the company's profit) [2].

In contrast, analysing P/BV and P/PF, it should be noted that both the price to the book value and the price to profit demonstrate that ten companies exemplary operate on the market and have a value of more than 1.0, and these are ALIOR, BZWBK, GETIN, HANDLOWY, INGBSK, MBANK, MILLENNIUM, PEKAO, PKOBP SANTANDER and UNICREDIT.

Other companies do not significantly differ from the average values. Only BOS and GETINOBLE is significantly below the thresholds.

TABLE 4: TECHNICAL EVALUATION OF THE PROPERTY WIG-BANKI SECTOR'S COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND AS OF 30.06.2016 (prepared by the author on the basis of the financial data of the WIG-BANKI companies).

Name	Net profit (net loss) in thousands PLN	Depreciation in thousands PLN
ALIOR	81661	23161
BOS	1170	11377
BZWBK	723492	68847
GETIN	168004	11209
GETINOBLE	1130	20770
HANDLOWY	221978	0
IDEABANK	276598	7315
INGBSK	406900	45600
MBANK	388504	75166
MILLENNIUM	293764	14878
PEKAO	690513	85677
PKOBP	873549	203513
SANTANDER	1646000	0
UNICREDIT	920000	0

Table 4-5 presents the studies concerning, among others, the net profit, depreciation, EBITDA and assets of the WIG-BANKI sector's companies.

Table following on the next page

TABLE 5: TECHNICAL EVALUATION OF THE PROPERTY WIG-BANKI SECTOR'S COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND AS OF 30.06.2016 (prepared by the author on the basis of the financial data of the WIG-BANKI companies).

Name	EBITDA in thousands PLN	Assets in thousands PLN
ALIOR	No data	47041752
BOS	No data	21146877
BZWBK	No data	142248818
GETIN	No data	23604298
GETINOBLE	No data	70091500
HANDLOWY	No data	44183297
IDEABANK	No data	19528449
INGBSK	No data	115639700
MBANK	No data	128733485
MILLENNIUM	No data	66695968
PEKAO	No data	166012283
PKOBP	No data	272442089
SANTANDER	No data	1342906000
UNICREDIT	No data	891477000

According to the obtained values, it is clear that only BANK BPH showed a small profit, which was confirmed by the previous ratios included in Table 3.

Table following on the next page

TABLE 6: TECHNICAL EVALUATION OF THE PROPERTY WIG-BANKI SECTOR'S COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND AS OF 30.06.2016 (prepared by the author on the basis of the financial data of the WIG-BANKI companies).

Name	Profit per share	Book Value per Share
ALIOR	0.632	44.874
BOS	0.051	63.102
BZWBK	7.291	193.660
GETIN	0.230	2.737
GETINOBLE	0.000	1.975
HANDLOWY	1.699	50.197
IDEABANK	3.528	30.172
INGBSK	3.128	83.091
MBANK	9.198	302.138
MILLENNIUM	0.242	5.542
PEKAO	2.631	84.527
PKOBP	0.699	25.288
SANTANDER	0.128	6.901
UNICREDIT	0.149	8.110

According to the book value per share and profit per share, it is possible to deduce that some companies are overvalued, and they are ALIOR, BOS, BZWBK, HANDLOWY, INGBSK, MBANK, PEKAO and PKOBP, and in the case of the GETIN, SANTANDER, UNICREDIT company, they are undervalued. However, it is important not to follow this opinion because the values are only the book values [2], and the calculation of them is purely mathematical and financial. In the case of using the economic attitude and interpretation, it would occur that the companies do not have the fair value (table 6).

The profitability of the equity, as well as the profitability of assets is shown by HANDLOWY and GETIN does not have it. Therefore, according to the presented study, it is possible to observe that the flagship banks have the profitability and they are not threatened by any disturbance of the financial liquidity (table 7). Return on equity (ROE) measures the rate of return for ownership interest (shareholders' equity) of common stock owners. It measures the efficiency of a firm at generating profits from each unit of shareholder equity, also known as net assets or assets minus liabilities. ROE shows how well a company uses investments to generate earnings growth.

TABLE 7: TECHNICAL EVALUATION OF THE PROPERTY WIG-BANKI SECTOR'S COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND AS OF 30.06.2016 (prepared by the author on the basis of the financial data of the WIG-BANKI companies).

Name	ROE	ROA
ALIOR	No data	No data
BOS	No data	No data
BZWBK	No data	No data
GETIN	-0.94	-0.89
GETINOBLE	No data	No data
HANDLOWY	0.15	0.02
IDEABANK	No data	No data
INGBSK	0.17	0.01
MBANK	0.21	0.01
MILLENNIUM	0.20	0.01
PEKAO	0.14	0.02
PKOBP	0.23	0.03
SANTANDER	No data	No data
UNICREDIT	No data	No data

The return on assets (ROA) shows the percentage of how profitable a company's assets are in generating revenue.

Table following on the next page

TABLE 8. THE WIG-BANKI SECTOR'S COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND AS OF 15.09.2016 (prepared by the author on the basis of the financial data of the WIG-BANKI companies).

Name	Fair value	Deviation from the fair value in PLN
ALIOR	70.00	23.70
BOS	85.00	75.19
BZWBK	312.00	1.50
GETIN	6.21	5.05
GETINOBLE	5.00	4.53
HANDLOWY	101.65	25.70
IDEABANK	28.00	4.40
INGBSK	142.54	0.54
MBANK	421.69	75.74
MILLENNIUM	10.83	5.23
PEKAO	180.00	53.15
PKOBP	40.32	13.40
SANTANDER	30.85	21.25
UNICREDIT	78.00	69.40

Deviation from the fair value in PLN = DevFV

DevFV = Fair value - current value.

Other companies have shown a substantial profit which was generated in 06.2016, and they were 10 companies. Currently, the value of companies significantly deviates from the maximum value achieved a few years ago. The only exceptions are IDEABANK and INGBSK, which achieved almost the maximum value in its history. Other companies have the value less than 95% of the maximum one (Table 8).

However, the fair value which should be reflected by the share prices of the examined companies significantly differs from the calculated value, which was presented in Table 8. In some cases, it is even 95% of the current value. The fair value is considerably higher than the current value of the examined companies.

4. CONCLUSION

The share price of selected companies of the bank sector's companies quoted on the Warsaw Stock Exchange in Poland is significantly underestimated by the current financial situation in the world. The flagship companies of the WIG-BANKI sector achieve enormous profits, which was proved in the examination of ratios in last years and a net profit in 2016. SANTANDER, MBANK, PEKAO and UNICREDIT are an example of it. The share price of the property WIG-BANKI sector's companies quoted on the Warsaw Stock Exchange in Poland is significantly underestimated by the current financial situation in the world [8, 11, 13]. The fair value of the

WIG-BANKI sector's companies quoted on the Warsaw Stock Exchange in Poland should be reached within two years, that is up to 2017 because it is the right estimation of further fast development of the Polish WIG-BANKI sector. The share price of the banking sector's companies quoted on the Warsaw Stock Exchange in Poland is significantly underestimated by the current financial situation in the world, and even by the speculation of individual capital groups, which circulate around the World and exist thanks to the speculation, producing only a surplus for the purchase and sale of shares and transferring the capital to another place. The value of the banking sector's companies should be appreciated since banks hold the majority of assets expressed in money and legal tenders. At the same time, it is important to emphasise that the banks reveal quite a profit, therefore they are the companies, which do not have much risk as the manufacturing companies, which are exposed to failure in the form of lack of the potential customers markets or turning the customers' back on the companies. Banks earn money because they mostly focus not only on the credits, from which they have interest, but also on the provisions and fees, from which they derive large profits. Moreover, banks still create new financial products, which must be attractive to the clients, due to the fact that the money derived from the depositors is cheaper than the acquired on the interbank market. The fair value of the banking sector's companies quoted on the Warsaw Stock Exchange in Poland should be achieved within two years, until 2017-2018, with the improvement of situation on the Global financial markets.

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