

7/2024/GPW (14) March 27, 2024

This report is prepared for the Warsaw Stock Exchange SA within the framework of the Analytical Coverage Support Program 4.0.

Ferro

Recommended action	2
4Q23 financial results summary	2
Recent events	2
Upcoming events	2
Financial forecasts	3
Valuation	3
Strategy	3
Risk factors	4
Catalysts	4
Disclaimer	5

7/2024/GPW (14) March 27, 2024

This report is prepared for the Warsaw Stock Exchange SA within the framework of the Analytical Coverage Support Program 4.0. This is an excerpt from the Polish version of DM BOŚ SA's research report.

Analyst: Sylwia Jaśkiewicz, CFA

Sector: Construction materials
Fundamental rating: Buy (→)
Market relative: Overweight (→)
Price: PLN 33.50
12M EFV: PLN 39.3 (↑)

Market Cap: US\$ 178.4 m
Bloomberg code: FRO PW
Av. daily turnover: US\$ 0.07 m
12M range: PLN 23.60-34.00
Free float: 100%

Ferro

Recommended action

We uphold our recommendations: LT fundamental Buy and ST relative Overweight, for Ferro. Our 12M EFV rises by 7% to PLN 39.3 from PLN 36.6 per share.

4Q23 operating results are ahead of our expectations (by 26% and 30%, respectively, on the EBITDA and EBIT level) and higher yoy. In 4Q23 the installation fittings segment and the segment of batteries and accessories did better than we expected with the visible positive impact of the raw materials prices and goods purchase prices.

FY23 EBITDA reached PLN 118 million (down 2% yoy), while we expected PLN 112 million (down 7% yoy). The Group fared quite well in 2023 in spite of the difficult market environment. We would like point the attention to strong OCF (PLN 163 million) with a yoy drop of inventories and eop net debt.

4Q23 financial results summary

The Group's 4Q23 revenues at PLN 201 million (down 4% yoy) were lower than we expected as we assumed a 5% yoy decline.

The segments delivered sales as follows:

- the segment of batteries and accessories: PLN 88 million, down 4% yoy,
- the installation fittings segment: PLN 71 million, up 0.4% yoy,
- the heating systems segment: PLN 37 million, down 11% yoy.

We assumed a 9%/4%/0% yoy decline of sales in the segments of batteries and accessories/ installation fittings/ heating systems in 4Q23.

Guide to adjusted profits

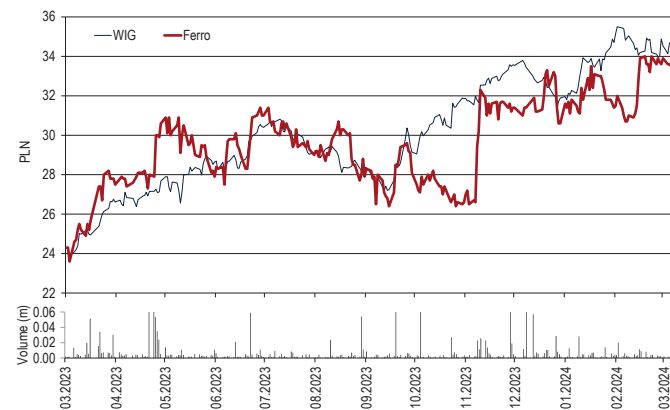
Income tax.

Key data

IFRS consolidated		2023	2024E	2025E	2026E
Sales	PLN m	803.2	891.6	1,007.5	1,138.4
EBITDA	PLN m	117.8	130.4	144.7	163.6
EBIT	PLN m	100.1	110.7	123.2	140.1
Net income	PLN m	67.0	76.7	88.9	103.3
EPS	PLN	3.16	3.61	4.19	4.86
Adj EPS yoy chg	%	2	14	16	16
Net debt	PLN m	96.2	94.7	88.2	78.2
P/E	x	10.6	9.3	8.0	6.9
EV/EBITDA	x	6.9	6.2	5.5	4.8
EV/EBIT	x	8.1	7.3	6.5	5.6
DPS	PLN	1.50	1.58	1.80	2.09
Gross dividend yield	%	4.6	4.7	5.4	6.2
Number of shares (eop)	m	21.2	21.2	21.2	21.2

Source: Company, DM BOŚ SA estimates

Stock performance



Source: Bloomberg

Recent events

1. Release of consolidated 1Q23 financial results: May 29, 2023
2. Logistic center launch in Romania: 1H23
3. Release of consolidated 1H23 financial results: September 27, 2023
4. Release of 3Q23 consolidated results: November 28, 2023
5. Release of FY23 consolidated financial results: March 27, 2024

Upcoming events

1. Release of consolidated 1Q24 financial results: May 22
2. Release of consolidated 1H24 financial results: September 17
3. Release of 3Q24 consolidated results: November 13

In the discussed period the Group's sales in Poland/ Czechia/ Slovakia/ Hungary/ other countries dropped by 4%/ 11%/ 11%/ 16%/ 7% yoy to PLN 86/ 32/ 12/ 9/ 19 million, while sales in Romania were up 10% yoy and reached PLN 43 million.

We assumed the Group's sales in Poland/ Czechia/ Slovakia/ Romania/ Hungary/ other countries to fall 5%/ 5%/ 15%/ 6%/ 2%/ 2% yoy to PLN 85/ 34/ 12/ 36/ 10/ 20 million.

4Q23 EBIT margin stood at 12.3% and beat our expectations, as we assumed a profitability increase to 9.6% vs 9.2% in 4Q22. The costs of goods and products sold and wages turned to be lower than we assumed, albeit costs of materials and energy and other costs were higher.

In the discussed period the segment of batteries and accessories/ installation fittings/ heating systems delivered profit at PLN 35/ 25/ 16 million (up 12%/ 32%/ 4% yoy).

The Group's EBIT at PLN 25 million (up 28% yoy) beat our forecast by PLN 6 million.

The Company's net financial costs at PLN -6 million were above our expectations at PLN -3 million, as we assumed positive FX differences at PLN 1 million.

In consequence, the Group's 4Q23 PBT hit PLN 19 million (up 35% yoy) and NI arrived at PLN 16 million (up 33% yoy) (low effective tax rate) vs PLN 13 million according to our forecasts (up 11% yoy).

At the end of 4Q23 the Group's inventories stood at PLN 237 million (down 19% yoy). Net debt reached PLN 96 million vs PLN 182 million at the end of 2022. Last year's operating/ investing cash flows reached PLN 163/ -15 million vs PLN -4/ -26 million in 2022.

Financial forecasts

We modify our financial forecasts for the Company (with the special focus on the inventories level and

cop net debt) incorporating actual 4Q23 figures. The economic situation seems to stabilize which bodes well for demand in the coming quarters. Raw materials price levels have been favorable enough for the Company's margins, though copper prices went up. The launch of a logistic center in Romania should gradually contribute positively to the Company's results due to expected savings on transport costs, better accessibility of goods, and expansion of heating systems in the Southern European markets. We believe the market environment would finally improve, especially from the heating systems segment's perspective.

Valuation

Our valuation for Ferro falls under the impact of (i) the risk free rate revision (at 5.5% currently vs 5.4% in the definite forecast period previously), (ii) valuation horizon forward shift in time, (iii) peer valuation update, and (iv) modification of financial forecasts. Our 12M EFV constituting a 50%-50% mix of DCF FCFF method and peer-relative valuation, increases by 7% to PLN 39.3 from PLN 36.6 per share previously. The DCF FCFF/ peer-relative valuation yields PLN 47/ 32 per share (previously PLN 42/ 31 per share).

Strategy

The management confirms the assumptions articulated in the Company's strategy despite materially lower economic growth. The implementation of the F1R2 strategy (without acquisitions) should allow Ferro to generate PLN 1,400 million of revenues and PLN 193 million of EBITDA in 2026, with annual capex below PLN 30 million. Our FY26 forecast assumes lower top line and EBITDA (at PLN 1,138 million and PLN 164 million, respectively). The Strategy F1R2 assumes a dividend payout in the amount not less than 50% of the Company's NI in the stable market and financial situation including, among other things, the consolidated ND/ EBITDA ratio staying $\leq 2.5x$.

Risk factors

1. Economic slowdown in Europe
2. Falling demand for new flats
3. Falling frequency of renovations
4. Qualified workforce shortage
5. Pressure on salaries
6. Volatile raw materials prices (of copper and zinc, in particular)
7. Unfavorable/volatile FX rates (currency risk when PLN and CZK weaken against US\$ and EUR)
8. Lack of stability in the region
9. Temporary higher inventories
10. High interest rates

Catalysts

1. Higher demand in Poland and neighboring countries
2. Expansion in European countries
3. Strengthening position on the existing markets
4. New logistic center in southern Europe
5. Launching new products
6. Favorable FX rates and raw materials prices
7. Acquisitions in attractive segments
8. Implementation of the adopted strategy F1R2

BASIC DEFINITIONS

A/R turnover (in days) = $365/(\text{sales}/\text{average A/R})$
Inventory turnover (in days) = $365/(\text{COGS}/\text{average inventory})$
A/P turnover (in days) = $365/(\text{COGS}/\text{average A/P})$
Current ratio = $(\text{current assets} - \text{ST deferred assets})/\text{current liabilities}$
Quick ratio = $(\text{current assets} - \text{ST deferred assets} - \text{inventory})/\text{current liabilities}$
Interest coverage = $(\text{pre-tax profit before extraordinary items} + \text{interest payable})/\text{interest payable}$
Gross margin = $\text{gross profit on sales}/\text{sales}$
EBITDA margin = $\text{EBITDA}/\text{sales}$
EBIT margin = EBIT/sales
Pre-tax margin = $\text{pre-tax profit}/\text{sales}$
Net margin = $\text{net profit}/\text{sales}$
ROE = $\text{net profit}/\text{average equity}$
ROA = $(\text{net income} + \text{interest payable})/\text{average assets}$
EV = $\text{market capitalization} + \text{interest bearing debt} - \text{cash and equivalents}$
EPS = $\text{net profit}/\text{no. of shares outstanding}$
CE = $\text{net profit} + \text{depreciation}$
Dividend yield (gross) = $\text{pre-tax DPS}/\text{stock market price}$
Cash sales = $\text{accrual sales corrected for the change in A/R}$
Cash operating expenses = $\text{accrual operating expenses corrected for the changes in inventories and A/P, depreciation, cash taxes and changes in the deferred taxes}$

DM BOŚ S.A. generally values the covered non bank companies via two methods: comparative method and DCF method (discounted cash flows). The advantage of the former is the fact that it incorporates the current market assessment of the value of the company's peers. The weakness of the comparative method is the risk that the valuation benchmark may be mispriced. The advantage of the DCF method is its independence from the current market valuation of the comparable companies. The weakness of this method is its high sensitivity to undertaken assumptions, especially those related to the residual value calculation. Please note that we also resort to other valuation techniques (e.g. NAV-, DDM- or SOTP-based), should it prove appropriate in a given case.

KEY TO INVESTMENT RANKINGS

This is a guide to expected price performance in absolute terms over the next 12 months:

Buy – fundamentally undervalued (upside to 12M EFV in excess of the cost of equity) + catalysts which should close the valuation gap identified;
Hold – either (i) fairly priced, or (ii) fundamentally undervalued/overvalued but lacks catalysts which could close the valuation gap;
Sell – fundamentally overvalued (12M EFV < current share price + 1-year cost of equity) + catalysts which should close the valuation gap identified.

This is a guide to expected relative price performance:

Overweight – expected to perform better than the benchmark (WIG) over the next quarter in relative terms
Neutral – expected to perform in line with the benchmark (WIG) over the next quarter in relative terms
Underweight – expected to perform worse than the benchmark (WIG) over the next quarter in relative terms

The recommendation tracker presents the performance of DM BOŚ S.A.'s recommendations. A recommendation expires on the day it is altered or on the day 12 months after its issuance, whichever comes first.

Relative performance compares the rate of return on a given recommended stock in the period of the recommendation's validity (i.e. from the date of issuance to the date of alteration or – in case of maintained recommendations – from the date of issuance to the current date) in a relation to the rate of return on the benchmark in this time period. The WIG index constitutes the benchmark. For recommendations that expire by an alteration or are maintained, the ending values used to calculate their absolute and relative performance are: the stock closing price on the day the recommendation expires/ is maintained and the closing value of the benchmark on that date. For recommendations that expire via a passage of time, the ending values used to calculate their absolute and relative performance are: the average of the stock closing prices for the day the recommendation elapses and four directly preceding sessions and the average of the benchmark's closing values for the day the recommendation expires and four directly preceding sessions.

Distribution of DM BOŚ's current recommendations

	Buy	Hold	Sell	Suspended	Under revision	Not rated
Numbers	45	22	10	9	1	4
Percentage	49%	24%	11%	10%	1%	4%

Distribution of DM BOŚ's current market relative recommended weightings

	Overweight	Neutral	Underweight	Suspended	Under revision	Not rated
Numbers	27	36	14	9	1	4
Percentage	30%	40%	15%	10%	1%	4%

Banks

Net Interest Margin (NIM) = $\text{net interest income}/\text{average assets}$
Non interest income = $\text{fees\&commissions} + \text{result on financial operations (trading gains)} + \text{FX gains}$
Interest Spread = $(\text{interest income}/\text{average interest earning assets})/(\text{interest cost}/\text{average interest bearing liabilities})$
Cost/Income = $(\text{general costs} + \text{depreciation})/(\text{profit on banking activity} + \text{other net operating income})$
ROE = $\text{net profit}/\text{average equity}$
ROA = $\text{net income}/\text{average assets}$
Non performing loans (NPL) = loans in 'basket 3' category
NPL coverage ratio = $\text{loan loss provisions}/\text{NPL}$
Net provision charge = $\text{provisions created} - \text{provisions released}$

DM BOŚ S.A. generally values the covered banks via two methods: comparative method and fundamental target fair P/E and target fair P/BV multiples method. The advantage of the former is the fact that it incorporates the current market assessment of the value of the company's peers. The weakness of the comparative method is the risk that the valuation benchmark may be mispriced. The advantage of the fundamental target fair P/E and target fair P/BV multiples method is its independence of the current market valuation of the comparable companies. The weakness of this method is its high sensitivity to undertaken assumptions, especially those related to the residual value calculation. Assumptions used in valuation can change, influencing thereby the level of the valuation. Among the most important assumptions are: GDP growth, forecasted level of inflation, changes in interest rates and currency prices, employment level and change in wages, demand on the analysed company products, raw material prices, competition, standing of the main customers and suppliers, legislation changes, etc. Changes in the environment of the analysed company are monitored by analysts involved in the preparation of the recommendation, estimated, incorporated in valuation and published in the recommendation whenever needed.

Distribution of DM BOŚ's current recommendations for the companies which DM BOŚ has supplied with material investment services within the last 12 months

	Buy	Hold	Sell	Suspended	Under revision	Not rated
Numbers	8	4	1	1	0	3
Percentage	47%	24%	6%	6%	0%	18%

Distribution of DM BOŚ's current market relative recommended weightings for the companies which DM BOŚ has supplied with material investment services within the last 12 months

	Overweight	Neutral	Underweight	Suspended	Under revision	Not rated
Numbers	5	6	2	1	0	3
Percentage	29%	35%	12%	6%	0%	18%

LT fundamental recommendation tracker

Analyst	Recommendation	Report date	Reiteration date	Distribution date	Expiry date	Performance	Relative performance	Price at issue/reiteration*	EFV (12 months)		
Ferro											
Sylwia Jaśkiewicz	Hold	-	21.07.2019	-	22.07.2019	04.12.2019	11%	20%	13.70	17.10	-
Sylwia Jaśkiewicz	-	→	-	30.07.2019	31.07.2019	-	-	-	13.50	17.10	→
Sylwia Jaśkiewicz	-	→	-	01.09.2019	02.09.2019	-	-	-	12.05	17.10	→
Sylwia Jaśkiewicz	-	→	-	10.09.2019	11.09.2019	-	-	-	12.10	17.10	→
Sylwia Jaśkiewicz	-	→	-	15.09.2019	16.09.2019	-	-	-	12.65	17.10	→
Sylwia Jaśkiewicz	-	→	-	13.10.2019	14.10.2019	-	-	-	13.40	17.10	→
Sylwia Jaśkiewicz	-	→	-	24.10.2019	25.10.2019	-	-	-	13.00	17.10	→
Sylwia Jaśkiewicz	-	→	-	17.11.2019	18.11.2019	-	-	-	13.00	17.10	→
Sylwia Jaśkiewicz	-	→	-	18.11.2019	19.11.2019	-	-	-	13.00	17.10	→
Sylwia Jaśkiewicz	Buy	↑	04.12.2019	-	05.12.2019	28.01.2020	17%	15%	15.20	17.80	↑
Sylwia Jaśkiewicz	-	→	-	08.12.2019	09.12.2019	-	-	-	15.00	17.80	→
Sylwia Jaśkiewicz	-	→	-	09.01.2020	10.01.2020	-	-	-	16.30	17.80	→
Sylwia Jaśkiewicz	Hold	↓	28.01.2020	-	29.01.2020	22.07.2020	-4%	5%	17.80	18.50	↑
Sylwia Jaśkiewicz	-	→	-	04.02.2020	05.02.2020	-	-	-	17.90	18.50	→
Sylwia Jaśkiewicz	-	→	-	06.02.2020	07.02.2020	-	-	-	17.50	18.50	→
Sylwia Jaśkiewicz	-	→	-	03.03.2020	04.03.2020	-	-	-	15.20	18.50	→
Sylwia Jaśkiewicz	-	→	-	30.03.2020	31.03.2020	-	-	-	12.25	18.50	→
Sylwia Jaśkiewicz	-	→	-	22.04.2020	23.04.2020	-	-	-	14.00	18.50	→
Sylwia Jaśkiewicz	-	→	-	23.04.2020	24.04.2020	-	-	-	14.00	18.50	→
Sylwia Jaśkiewicz	-	→	-	19.05.2020	20.05.2020	-	-	-	13.65	18.50	→
Sylwia Jaśkiewicz	-	→	-	15.06.2020	16.06.2020	-	-	-	16.60	18.50	→
Sylwia Jaśkiewicz	-	→	-	13.07.2020	14.07.2020	-	-	-	17.90	18.50	→
Sylwia Jaśkiewicz	Buy	↑	22.07.2020	-	23.07.2020	16.04.2021	75%	51%	17.00	20.30	↑
Sylwia Jaśkiewicz	-	→	-	01.09.2020	02.09.2020	-	-	-	18.60	20.30	→
Sylwia Jaśkiewicz	-	→	-	17.09.2020	18.09.2020	-	-	-	18.90	20.30	→
Sylwia Jaśkiewicz	-	→	-	29.09.2020	30.09.2020	-	-	-	18.70	19.90	↓
Sylwia Jaśkiewicz	-	→	-	08.10.2020	09.10.2020	-	-	-	19.00	19.90	→
Sylwia Jaśkiewicz	-	→	-	03.11.2020	04.11.2020	-	-	-	17.30	22.00	↑
Sylwia Jaśkiewicz	-	→	-	08.11.2020	09.11.2020	-	-	-	17.25	22.00	→
Sylwia Jaśkiewicz	-	→	-	19.11.2020	20.11.2020	-	-	-	18.40	23.40	↑
Sylwia Jaśkiewicz	-	→	-	26.11.2020	27.11.2020	-	-	-	20.00	23.40	→
Sylwia Jaśkiewicz	-	→	-	06.12.2020	07.12.2020	-	-	-	24.80	25.70	↑
Sylwia Jaśkiewicz	-	→	-	05.01.2021	05.01.2021	-	-	-	25.50	25.70	→
Sylwia Jaśkiewicz	-	→	-	28.01.2021	29.01.2021	-	-	-	26.50	25.70	→
Sylwia Jaśkiewicz	-	→	-	09.02.2021	10.02.2021	-	-	-	25.70	30.80	↑
Sylwia Jaśkiewicz	-	→	-	28.02.2021	01.03.2021	-	-	-	26.10	30.80	→
Sylwia Jaśkiewicz	-	→	-	31.03.2021	01.04.2021	-	-	-	27.00	30.80	→
Sylwia Jaśkiewicz	Buy	→	16.04.2021	-	16.04.2021	14.04.2022	16%	9%	29.30	30.80	→
Sylwia Jaśkiewicz	-	→	-	10.05.2021	11.05.2021	-	-	-	29.80	34.10	↑
Sylwia Jaśkiewicz	-	→	-	27.05.2021	28.05.2021	-	-	-	32.50	34.10	→
Sylwia Jaśkiewicz	-	→	-	30.05.2021	31.05.2021	-	-	-	33.00	34.10	→
Sylwia Jaśkiewicz	-	→	-	09.07.2021	09.07.2021	-	-	-	35.30	34.10	→
Sylwia Jaśkiewicz	-	→	-	12.08.2021	13.08.2021	-	-	-	38.00	41.70	↑
Sylwia Jaśkiewicz	-	→	-	31.08.2021	31.08.2021	-	-	-	40.50	41.70	→
Sylwia Jaśkiewicz	-	→	-	30.09.2021	01.10.2021	-	-	-	35.60	41.70	→
Sylwia Jaśkiewicz	-	→	-	07.10.2021	07.10.2021	-	-	-	38.90	41.70	→
Sylwia Jaśkiewicz	-	→	-	02.11.2021	03.11.2021	-	-	-	37.50	41.70	→
Sylwia Jaśkiewicz	-	→	-	04.11.2021	04.11.2021	-	-	-	37.20	41.70	→
Sylwia Jaśkiewicz	-	→	-	29.11.2021	30.11.2021	-	-	-	34.60	41.70	→
Sylwia Jaśkiewicz	-	→	-	05.12.2021	06.12.2021	-	-	-	33.00	39.60	↓
Sylwia Jaśkiewicz	-	→	-	16.01.2022	17.01.2022	-	-	-	34.80	39.60	→
Sylwia Jaśkiewicz	-	→	-	01.02.2022	02.02.2022	-	-	-	32.00	39.60	→
Sylwia Jaśkiewicz	-	→	-	07.02.2022	07.02.2022	-	-	-	32.50	39.60	→
Sylwia Jaśkiewicz	-	→	-	28.02.2022	28.02.2022	-	-	-	29.00	39.60	→
Sylwia Jaśkiewicz	-	→	-	30.03.2022	31.03.2022	-	-	-	30.90	39.60	→
Sylwia Jaśkiewicz	Buy	→	14.04.2022	-	14.04.2022	03.10.2022	-21%	9%	31.70	39.60	→
Sylwia Jaśkiewicz	-	→	-	20.04.2022	21.04.2022	-	-	-	31.30	37.10	↓
Sylwia Jaśkiewicz	-	→	-	25.05.2022	26.05.2022	-	-	-	27.20	37.10	→
Sylwia Jaśkiewicz	-	→	-	26.05.2022	26.05.2022	-	-	-	28.20	37.10	→
Sylwia Jaśkiewicz	-	→	-	15.07.2022	15.07.2022	-	-	-	25.50	37.10	→
Sylwia Jaśkiewicz	-	→	-	24.07.2022	25.07.2022	-	-	-	24.30	37.10	→
Sylwia Jaśkiewicz	-	→	-	16.08.2022	16.08.2022	-	-	-	26.60	37.10	→
Sylwia Jaśkiewicz	-	→	-	02.09.2022	02.09.2022	-	-	-	25.20	37.10	→
Sylwia Jaśkiewicz	-	→	-	20.09.2022	21.09.2022	-	-	-	25.50	37.10	→
Sylwia Jaśkiewicz	-	→	-	26.09.2022	27.09.2022	-	-	-	23.10	37.10	→
Sylwia Jaśkiewicz	Hold	↓	03.10.2022	-	04.10.2022	27.09.2023	25%	-11%	23.50	28.70	↓
Sylwia Jaśkiewicz	-	→	-	07.10.2022	07.10.2022	-	-	-	23.30	28.70	→
Sylwia Jaśkiewicz	-	→	-	28.10.2022	28.10.2022	-	-	-	22.80	28.70	→
Sylwia Jaśkiewicz	-	→	-	20.11.2022	21.11.2022	-	-	-	24.00	28.70	→
Sylwia Jaśkiewicz	-	→	-	01.12.2022	02.12.2022	-	-	-	22.60	28.70	→
Sylwia Jaśkiewicz	-	→	-	04.12.2022	05.12.2022	-	-	-	23.00	28.70	→
Sylwia Jaśkiewicz	-	→	-	13.01.2023	13.01.2023	-	-	-	23.50	28.70	→
Sylwia Jaśkiewicz	-	→	-	03.02.2023	03.02.2023	-	-	-	25.00	28.70	→
Sylwia Jaśkiewicz	-	→	-	16.02.2023	17.02.2023	-	-	-	24.50	28.70	→
Sylwia Jaśkiewicz	-	→	-	10.03.2023	10.03.2023	-	-	-	24.10	28.70	→
Sylwia Jaśkiewicz	-	→	-	30.03.2023	31.03.2023	-	-	-	25.50	28.70	→
Sylwia Jaśkiewicz	-	→	-	13.04.2023	13.04.2023	-	-	-	26.70	28.70	→
Sylwia Jaśkiewicz	-	→	-	28.04.2023	28.04.2023	-	-	-	27.40	28.70	→
Sylwia Jaśkiewicz	-	→	-	29.05.2023	29.05.2023	-	-	-	30.50	28.70	→
Sylwia Jaśkiewicz	-	→	-	29.05.2023	29.05.2023	-	-	-	30.50	28.70	→
Sylwia Jaśkiewicz	-	→	-	14.07.2023	14.07.2023	-	-	-	30.90	28.70	→
Sylwia Jaśkiewicz	-	→	-	31.07.2023	01.08.2023	-	-	-	30.00	30.10	↑
Sylwia Jaśkiewicz	-	→	-	02.08.2023	03.08.2023	-	-	-	30.70	30.10	→

LT fundamental recommendation tracker

Analyst	Recommendation	Report date	Reiteration date	Distribution date	Expiry date	Performance	Relative performance	Price at issue/reiteration*	EFV (12 months)	
Sylwia Jaškiewicz	-	→	-	31.08.2023	31.08.2023	-	-	29.40	30.10 →	
Sylwia Jaškiewicz	-	→	-	12.09.2023	13.09.2023	-	-	28.60	30.10 →	
Sylwia Jaškiewicz	Hold	→	27.09.2023	-	28.09.2023	28.11.2023	-5%	-18%	27.90	30.10 →
Sylwia Jaškiewicz	-	→	-	12.10.2023	12.10.2023	-	-	28.80	30.10 →	
Sylwia Jaškiewicz	-	→	-	25.10.2023	25.10.2023	-	-	27.10	30.10 →	
Sylwia Jaškiewicz	-	→	-	06.11.2023	06.11.2023	-	-	27.40	30.10 →	
Sylwia Jaškiewicz	Buy	↑	28.11.2023	-	29.11.2023	Not later than 28.11.2024	26%	16%	26.60	33.30 ↑
Sylwia Jaškiewicz	-	→	-	10.12.2023	11.12.2023	-	-	31.60	34.70 ↑	
Sylwia Jaškiewicz	-	→	-	09.01.2024	09.01.2024	-	-	32.00	34.70 →	
Sylwia Jaškiewicz	-	→	-	01.02.2024	01.02.2024	-	-	32.40	34.70 →	
Sylwia Jaškiewicz	-	→	-	06.02.2024	07.02.2024	-	-	32.30	36.60 ↑	
Sylwia Jaškiewicz	-	→	-	29.02.2024	29.02.2024	-	-	30.70	36.60 →	
Sylwia Jaškiewicz	-	→	-	27.03.2024	27.03.2024	-	-	33.50	39.30 ↑	

* prices at issue/reiteration are the closing prices at the report or reiteration date

Market-relative recommendation tracker

Analyst	Relative Recommendation	Report date	Reiteration date	Distribution date	Expiry date	Price at issue/reiteration*	Relative performance
Ferro							
Sylwia Jaśkiewicz	Neutral	-	-	-	-	-	-
Sylwia Jaśkiewicz	-	21.07.2019	-	22.07.2019	18.11.2019	13.70	-2%
Sylwia Jaśkiewicz	-	-	30.07.2019	31.07.2019	-	13.50	-
Sylwia Jaśkiewicz	-	-	01.09.2019	02.09.2019	-	12.05	-
Sylwia Jaśkiewicz	-	-	10.09.2019	11.09.2019	-	12.10	-
Sylwia Jaśkiewicz	-	-	15.09.2019	16.09.2019	-	12.65	-
Sylwia Jaśkiewicz	-	-	13.10.2019	14.10.2019	-	13.40	-
Sylwia Jaśkiewicz	-	-	24.10.2019	25.10.2019	-	13.00	-
Sylwia Jaśkiewicz	-	-	17.11.2019	18.11.2019	-	13.00	-
Sylwia Jaśkiewicz	Overweight	18.11.2019	-	19.11.2019	28.01.2020	13.00	41%
Sylwia Jaśkiewicz	-	-	04.12.2019	05.12.2019	-	15.20	-
Sylwia Jaśkiewicz	-	-	08.12.2019	09.12.2019	-	15.00	-
Sylwia Jaśkiewicz	-	-	09.01.2020	10.01.2020	-	16.30	-
Sylwia Jaśkiewicz	Neutral	28.01.2020	-	29.01.2020	23.04.2020	17.80	-1%
Sylwia Jaśkiewicz	-	-	04.02.2020	05.02.2020	-	17.90	-
Sylwia Jaśkiewicz	-	-	06.02.2020	07.02.2020	-	17.50	-
Sylwia Jaśkiewicz	-	-	03.03.2020	04.03.2020	-	15.20	-
Sylwia Jaśkiewicz	-	-	30.03.2020	31.03.2020	-	12.25	-
Sylwia Jaśkiewicz	-	-	22.04.2020	23.04.2020	-	14.00	-
Sylwia Jaśkiewicz	Overweight	23.04.2020	-	24.04.2020	16.04.2021	14.00	60%
Sylwia Jaśkiewicz	-	-	19.05.2020	20.05.2020	-	13.65	-
Sylwia Jaśkiewicz	-	-	15.06.2020	16.06.2020	-	16.60	-
Sylwia Jaśkiewicz	-	-	13.07.2020	14.07.2020	-	17.90	-
Sylwia Jaśkiewicz	-	-	22.07.2020	23.07.2020	-	17.00	-
Sylwia Jaśkiewicz	-	-	01.09.2020	02.09.2020	-	18.60	-
Sylwia Jaśkiewicz	-	-	17.09.2020	18.09.2020	-	18.90	-
Sylwia Jaśkiewicz	-	-	29.09.2020	30.09.2020	-	18.70	-
Sylwia Jaśkiewicz	-	-	08.10.2020	09.10.2020	-	19.00	-
Sylwia Jaśkiewicz	-	-	03.11.2020	04.11.2020	-	17.30	-
Sylwia Jaśkiewicz	-	-	08.11.2020	09.11.2020	-	17.25	-
Sylwia Jaśkiewicz	-	-	19.11.2020	20.11.2020	-	18.40	-
Sylwia Jaśkiewicz	-	-	26.11.2020	27.11.2020	-	20.00	-
Sylwia Jaśkiewicz	-	-	06.12.2020	07.12.2020	-	24.80	-
Sylwia Jaśkiewicz	-	-	05.01.2021	05.01.2021	-	25.50	-
Sylwia Jaśkiewicz	-	-	28.01.2021	29.01.2021	-	26.50	-
Sylwia Jaśkiewicz	-	-	09.02.2021	10.02.2021	-	25.70	-
Sylwia Jaśkiewicz	-	-	28.02.2021	01.03.2021	-	26.10	-
Sylwia Jaśkiewicz	-	-	31.03.2021	01.04.2021	-	27.00	-
Sylwia Jaśkiewicz	Overweight	16.04.2021	-	16.04.2021	05.12.2021	29.30	7%
Sylwia Jaśkiewicz	-	-	10.05.2021	11.05.2021	-	29.80	-
Sylwia Jaśkiewicz	-	-	27.05.2021	28.05.2021	-	32.50	-
Sylwia Jaśkiewicz	-	-	30.05.2021	31.05.2021	-	33.00	-
Sylwia Jaśkiewicz	-	-	09.07.2021	09.07.2021	-	35.30	-
Sylwia Jaśkiewicz	-	-	12.08.2021	13.08.2021	-	38.00	-
Sylwia Jaśkiewicz	-	-	31.08.2021	31.08.2021	-	40.50	-
Sylwia Jaśkiewicz	-	-	30.09.2021	01.10.2021	-	35.60	-
Sylwia Jaśkiewicz	-	-	07.10.2021	07.10.2021	-	38.90	-
Sylwia Jaśkiewicz	-	-	02.11.2021	03.11.2021	-	37.50	-
Sylwia Jaśkiewicz	-	-	04.11.2021	04.11.2021	-	37.20	-
Sylwia Jaśkiewicz	-	-	29.11.2021	30.11.2021	-	34.60	-
Sylwia Jaśkiewicz	Neutral	05.12.2021	-	06.12.2021	03.10.2022	33.00	11%
Sylwia Jaśkiewicz	-	-	16.01.2022	17.01.2022	-	34.80	-
Sylwia Jaśkiewicz	-	-	01.02.2022	02.02.2022	-	32.00	-
Sylwia Jaśkiewicz	-	-	07.02.2022	07.02.2022	-	32.50	-
Sylwia Jaśkiewicz	-	-	28.02.2022	28.02.2022	-	29.00	-
Sylwia Jaśkiewicz	-	-	30.03.2022	31.03.2022	-	30.90	-
Sylwia Jaśkiewicz	-	-	14.04.2022	14.04.2022	-	31.70	-
Sylwia Jaśkiewicz	-	-	20.04.2022	21.04.2022	-	31.30	-
Sylwia Jaśkiewicz	-	-	25.05.2022	26.05.2022	-	27.20	-
Sylwia Jaśkiewicz	-	-	26.05.2022	26.05.2022	-	28.20	-
Sylwia Jaśkiewicz	-	-	15.07.2022	15.07.2022	-	25.50	-
Sylwia Jaśkiewicz	-	-	24.07.2022	25.07.2022	-	24.30	-
Sylwia Jaśkiewicz	-	-	16.08.2022	16.08.2022	-	26.60	-
Sylwia Jaśkiewicz	-	-	02.09.2022	02.09.2022	-	25.20	-
Sylwia Jaśkiewicz	-	-	20.09.2022	21.09.2022	-	25.50	-
Sylwia Jaśkiewicz	-	-	26.09.2022	27.09.2022	-	23.10	-
Sylwia Jaśkiewicz	Underweight	03.10.2022	-	04.10.2022	20.11.2022	23.50	-14%
Sylwia Jaśkiewicz	-	-	07.10.2022	07.10.2022	-	23.30	-
Sylwia Jaśkiewicz	-	-	28.10.2022	28.10.2022	-	22.80	-
Sylwia Jaśkiewicz	Neutral	20.11.2022	-	21.11.2022	16.02.2023	24.00	-8%
Sylwia Jaśkiewicz	-	-	01.12.2022	02.12.2022	-	22.60	-
Sylwia Jaśkiewicz	-	-	04.12.2022	05.12.2022	-	23.00	-
Sylwia Jaśkiewicz	-	-	13.01.2023	13.01.2023	-	23.50	-
Sylwia Jaśkiewicz	-	-	03.02.2023	03.02.2023	-	25.00	-
Sylwia Jaśkiewicz	Underweight	16.02.2023	-	17.02.2023	25.10.2023	24.50	1%
Sylwia Jaśkiewicz	-	-	10.03.2023	10.03.2023	-	24.10	-
Sylwia Jaśkiewicz	-	-	30.03.2023	31.03.2023	-	25.50	-
Sylwia Jaśkiewicz	-	-	13.04.2023	13.04.2023	-	26.70	-
Sylwia Jaśkiewicz	-	-	28.04.2023	28.04.2023	-	27.40	-
Sylwia Jaśkiewicz	-	-	29.05.2023	29.05.2023	-	30.50	-
Sylwia Jaśkiewicz	-	-	29.05.2023	29.05.2023	-	30.50	-
Sylwia Jaśkiewicz	-	-	14.07.2023	14.07.2023	-	30.90	-
Sylwia Jaśkiewicz	-	-	31.07.2023	01.08.2023	-	30.00	-
Sylwia Jaśkiewicz	-	-	02.08.2023	03.08.2023	-	30.70	-

Market-relative recommendation tracker

Analyst	Relative Recommendation	Report date	Reiteration date	Distribution date	Expiry date	Price at issue/ reiteration*	Relative performance	
Sylwia Jaškiewicz	-	→	-	31.08.2023	31.08.2023	-	29.40	-
Sylwia Jaškiewicz	-	→	-	12.09.2023	13.09.2023	-	28.60	-
Sylwia Jaškiewicz	-	→	-	27.09.2023	28.09.2023	-	27.90	-
Sylwia Jaškiewicz	-	→	-	12.10.2023	12.10.2023	-	28.80	-
Sylwia Jaškiewicz	Neutral	↑	25.10.2023	-	25.10.2023	28.11.2023	27.10	-8%
Sylwia Jaškiewicz	-	→	-	06.11.2023	06.11.2023	-	27.40	-
Sylwia Jaškiewicz	Overweight	↑	28.11.2023	-	29.11.2023	Not later than 28.11.2024	26.60	16%
Sylwia Jaškiewicz	-	→	-	10.12.2023	11.12.2023	-	31.60	-
Sylwia Jaškiewicz	-	→	-	09.01.2024	09.01.2024	-	32.00	-
Sylwia Jaškiewicz	-	→	-	01.02.2024	01.02.2024	-	32.40	-
Sylwia Jaškiewicz	-	→	-	06.02.2024	07.02.2024	-	32.30	-
Sylwia Jaškiewicz	-	→	-	29.02.2024	29.02.2024	-	30.70	-
Sylwia Jaškiewicz	-	→	-	27.03.2024	27.03.2024	-	33.50	-

* prices at issue/reiteration are the closing prices at the report or reiteration date

This report has been prepared by Dom Maklerski Banku Ochrony Środowiska SA registered in Warsaw (hereinafter referred to as DM BOŚ SA) and commissioned by the Warsaw Stock Exchange SA (hereinafter referred to as WSE SA) pursuant to the agreement on the research report preparation between DM BOŚ SA and WSE SA within the framework of the Analytical Coverage Support Program. 4.0 described on the WSE SA website: <https://www.gpw.pl/gpwpa> (hereinafter referred to as the Agreement). DM BOŚ SA will receive a remuneration for the research report in accordance with the Agreement.

The production of the report was completed on March 27, 2024 at 11.00 p.m.

The report was distributed on March 27, 2024 at 11.10 p.m.

The report is an investment research within the meaning of Commission Delegated Regulation (EU) 2017/565 of 25 April 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council as regards organizational requirements and operating conditions for investment firms and defined terms for the purposes of that Directive.

This report constitutes a recommendation within the meaning of Commission Delegated Regulation (EU) 2016/958 of 9 March 2016 supplementing Regulation (EU) No 596/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the technical arrangements for objective presentation of investment recommendations or other information recommending or suggesting an investment strategy and for disclosure of particular interests or indications of conflicts of interest. This report is for information purposes only.

This report constitutes neither investment advice nor provides investment service as referred to in Article 76 of the Act on Financial Instruments Trading as of 29 July 2005 (Journal of Laws, 2018, Item 2286 as amended), hereinafter referred to as the Act on Trading; it does not constitute any legal or tax advice, neither does it constitute an indication whether an investment is suitable or appropriate in an individual situation of an investor. In particular this report is not a personal recommendation based on any individual needs or situation of any investor. DM BOŚ SA informs that the investment advice services exclusively consist in the preparation of a personal recommendation based on individual needs and situation of a given client and transferring it to them. To receive this type of a recommendation an agreement on providing investment advice services must be signed with an investments company offering these services.

Neither the information nor the opinions expressed in the report constitute a solicitation or an offer to buy or sell any securities referred herein. The opinions expressed in the report reflect independent, current judgment of DM BOŚ SA.

This report was prepared with due diligence and scrutiny. The information used in the report is based on all public sources such as press and branch publications, company's financial statements, current and periodic reports, as well as meetings and telephone conversations with company's representatives prior to the date of report's release. We believe the above mentioned sources of information to be reliable, however we do not guarantee their accuracy and completeness. All estimates and opinions included herein represent our judgment as of the date of the issue. All opinions, forecasts, calculations and estimates herein constitute the author's subjective assessment as of the date of the issue and can be modified at any time without prior notice. DM BOŚ SA informs that this report will be updated in the manner as referred to in the Agreement, at least once a year.

DM BOŚ SA is an investment firm within the meaning of the Act on Financial Instruments Trading. The legal entity supervising DM BOŚ SA is Polish Financial Supervision Authority in Warsaw (Komisja Nadzoru Finansowego, KNF in Polish abbreviation).

DM BOŚ SA, its management and supervisory bodies and employees do not take any responsibility for decisions taken on the basis of this report and opinions stated herein. Investors bear all responsibility for investment decisions taken on the basis of the contents of this report. The report is intended solely for private use of investors.

Copyrights to this report belong to the WSE. The rules for use of this report have been specified in the Agreement. This report mustn't be redistributed, reproduced or conveyed in any manner or form conflicting with the rules defined in the Agreement.

This report is made available on the day of its issue in the public domain on the website <https://bossa.pl/analizy-i-informacje/wsparcie-pokrycia-analitycznego-gpw#ferro>

DM BOŚ SA is entitled to conveying or translation of the report into foreign languages on behalf of their clients and this shall not be sooner than making the report available on its website <https://bossa.pl/analizy-i-informacje/wsparcie-pokrycia-analitycznego-gpw#ferro>.

DM BOŚ SA follows internal regulations for handling of conflicts of interest which include in particular internal organizational and administration arrangements as well as information barriers established for prevention and avoidance of conflicts of interest related to recommendations. A special organizational arrangement that constitutes an information barrier is so called Chinese walls prohibiting an uncontrolled flow of information among particular organizational units or employees of DM BOŚ SA. Where justified, DM BOŚ SA can create Chinese walls upon the realization of a particular project. Potential conflicts of interests referring to a specific recommendation which is made available to the public or to a wide range of persons are disclosed either in the recommendation or in the document attached.

The person(s) preparing this report receive(s) variable compensation indirectly based upon the financial results of DM BOŚ SA which in turn depend – among other factors – on the result on the brokerage activity.

DM BOŚ SA has not held any long or short position net exceeding 0.5% of the issuer's basic capital in total with respect to the company/companies indicated.

Apart from the mentioned above cases, there are neither ties of any kind between DM BOŚ SA, the analyst/ analysts involved in the preparation of the report and the issuer(s) of securities as referred to in the report nor circumstances that can justifiably be expected to have a negative impact on objectivity of the recommendation with regard to interests or conflicts of interests on their part or on the part of any natural person or legal entity which pertains to the financial instrument or the issuer.

The report was not shown to the analyzed company before the distribution of the report.

The history of all recommendations issued by DM BOŚ in the last 12 months can be found at the following link: <https://bossa.pl/analizy/rekomendacje>

Stockbrokers

Piotr Kalbarczyk
tel.: +48 (22) 504 32 43
p.kalbarczyk@bossa.pl

Research

Sobiesław Pająk, CFA
(Equity strategy, TMT)

Sylwia Jaśkiewicz, CFA
(Construction materials,
Consumer discretionary,
Health care & biotechnology)

Tomasz Rodak, CFA
(Consumer discretionary, Video games)

Łukasz Prokopiuk, CFA
(Commodities (Chemicals, Energy, Mining))

Michał Sobolewski, CFA, FRM
(Financials)

Jakub Viscardi
(Telco, Consumer staples & discretionary,
IT – hardware distribution, Utilities)

Maciej Wewiórski
(Residential construction,
Construction, Real estate)

Mikołaj Stepien
Junior Analyst

Michał Zamel
Junior Analyst

Copyright © 2024 by DM BOŚ S.A.

**Dom Maklerski Banku Ochrony
Środowiska Spółka Akcyjna**
ul. Marszałkowska 78/80
00-517 Warszawa
www.bossa.pl
Information: (+48) 0 801 104 104