

**48/2022/GPW (137)** December 1, 2022

This report is prepared for the Warsaw Stock Exchange SA within the framework of the Analytical Coverage Support Program 3.0.

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# Ferro

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# Ferro

48/2022/GPW (137) December 1, 2022

Analyst: Sylwia Jaśkiewicz, CFA

Sector: Construction materials  
Fundamental rating: Hold (→)  
Market relative: Neutral (→)  
Price: PLN 22.6  
12M EFV: PLN 28.7 (→)

Market Cap: US\$ 107.5 m  
Bloomberg code: FRO PW  
Av. daily turnover: US\$ 0.02 m  
12M range: PLN 22.40-35.80  
Free float: 100%

## Key points

- Business model.** The Group has 3 warehouses (in Poland and Czechia) with another under construction (in Romania), 7 distribution centers outside Poland, two production plants (in Poland and Czechia), is present in above 40 countries, and employs above 900 workers. Ferro's business is highly diversified, both geographically and in terms of the offer.
- In 1-3Q22, 47%/ 33%/ 19% of the Company's consolidated sales stemmed from batteries and accessories/ installation fittings/ heating systems (acquired by Termet & Tester). 45%/ 19%/ 17%/ 6%/ 5%/ 9% of revenues were generated in Poland/ Romania/ Czechia/ Slovakia/ Hungary/ other countries in 1-3Q22. Exports of the heating system segment are much lower than of other segments (<10%), while Ferro's sales in Poland nearly doubled after the acquisition of Termet & Tester.
- Drivers.** The demand for the Company's goods and products is driven by the development of the residential market in the region. In the installation fittings segment, the replacement demand constitutes c. 55% with c. 45% coming from new investments. In the section of batteries and accessories, 80% of demand results from renovations and 20% from new residential investments. The acquisition of heating business increased the Group's dependence on the primary market. Ferro distributes its goods and products through traditional (75%) and modern (25%) channels.
- Strategy.** The new strategy for 2022-26 is based on 4 pillars: (i) market expansion (new markets for particular products, market share increase) (ii) product expansion, (iii) production (investments in the production capacities limiting the risk related to supply chains), (iv) effectiveness

## Guide to adjusted profits

Income tax.

## Key data

IFRS consolidated		2021	2022E	2023E	2024E
Sales	PLN m	830.5	924.7	970.9	1097.1
EBITDA	PLN m	119.5	120.7	110.8	145.7
EBIT	PLN m	106.6	105.3	93.8	126.7
Net income	PLN m	107.8	66.1	63.2	92.5
Adj net income	PLN m	73.3	66.1	63.2	92.5
Adj EPS	PLN	3.5	3.1	3.0	4.4
Adj EPS yoy chg	%	18	-10	-4	46
Net debt	PLN m	103.7	206.8	197.0	189.5
P/E	x	4.5	7.3	7.6	5.2
Adj P/E	x	6.5	7.3	7.6	5.2
EV/EBITDA	x	4.9	5.7	6.1	4.6
EV/EBIT	x	5.5	6.5	7.2	5.3
DPS	PLN	2.20	1.51	1.56	1.49
Gross dividend yield	%	9.7	6.7	6.9	6.6
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 1H22 financial results: September 20
2. Release of consolidated 3Q22 financial results: November 18

## Upcoming events

1. Logistic center launch in Romania: 1H23
2. Release of consolidated FY22 financials: March 2023

(the Group's stability). The Company's strategy also covers M&A activities with a focus on the complementary products or e-commerce segment.

- The management estimates that the realization of two main assumptions of the Strategy F1R2 will allow the Group to deliver in 2026: (i) revenues at PLN 1,400 million, (ii) EBITDA at PLN 193 million, with (iii) the annual capex not exceeding PLN 30 million. The Strategy F1R2 assumes a dividend payout in the amount not less than 50% of the Company's NP in the stable market and financial situation including, among other things, the consolidated ND/ EBITDA ratio at  $\leq 2.5x$ .
- **4Q22E earnings.** We forecast the Group's 4Q22 revenues to be slightly lower with the EBIT margin down yoy (8.7% in 4Q22E vs 9.8% in 4Q21). Given the current FX rates, financial costs should decline both yoy and qoq (PLN -5 million FX losses in 3Q22) and then the NP may be slightly higher yoy. At the end of 3Q22 the Group's inventories stood at PLN 363 million (up 11% qoq) and the net debt totaled PLN 190 million. The value of inventories may slightly drop due to a decline of raw material prices and changes in FX rates, yet the ND may be higher qoq at the year-end.
- **FY financial forecasts.** We fine-tune our financial forecast for the Company incorporating 1-3Q22 financials.
- **2023E outlook.** We are afraid that operating results may deteriorate in 2023E, due to the lower demand (high stocks at distributors/ networks), launch of ERP (4Q22/1Q23; disturbed sales), and internal expansion (costs connected with opening of a new central warehouse in Romania). The inventories may be elevated for two-three quarters due to longer intervals between supplies related to seasonal holidays in Europe (Christmas and New Year) and in China (Chinese New Year at February 22, 2023 (in 2022 it was February 1)) which implies about a month and half without a possibility to stock, and the launch of a warehouse in Romania. The Company should benefit from lower prices of freight and raw materials (3M prices of aluminum/ zinc/ copper fell 25%/ 18%/ 4% yoy at 3Q22-end) and more room for price negotiations with Chinese suppliers due to the lower global demand. PLN appreciation may also soften the pressure on costs.
- **Risks to financial forecasts.** High, both ways.
- **Valuation.** Our 12M EFV representing a mix of the DCF valuation (50%) and peer relative valuation (50%) rests at PLN 28.7 (prev. PLN 28.7) per share.
- **Recommended action.** The market environment does not seem friendly, in our view, as new housing investments in the region start to stumble which will undoubtedly affect the demand for construction materials in the quarters to follow. Moreover, deteriorating consumer condition may hurt the secondary market. It looks like a spark of hope for the Company may constitute the perspective of the recovery and reconstruction in Ukraine, but first the war has to end. A tad better situation is on the commodities market with raw materials prices falling in 2Q and 3Q22 and slightly rising in 4Q22 which is offset by PLN appreciation vs US\$. The Group plans to launch a new logistic center in Romania in 1H23 which implies temporary higher OPEX and higher inventories, albeit we deem the new warehouse opening is beneficial from the strategic perspective because not only will this enable a revenues growth and faster penetration of South European markets, but will also curb costs streamlining logistic processes (no transportation from Poland).

**Fig. 1. Ferro; Changes in DM BOŚ SA forecast**

IFRS consolidated (PLN m)	2022E			2023E			2024E		
	current	previous	change	current	previous	change	current	previous	change
Sales	924.7	924.4	0%	970.9	989.1	-2%	1,097.1	1,117.6	-2%
EBITDA	120.7	112.8	7%	110.8	111.4	-1%	145.7	146.0	0%
EBIT	105.3	97.3	8%	93.8	95.0	-1%	126.7	127.6	-1%
NP	66.1	62.6	6%	63.2	63.9	-1%	92.5	93.0	-1%
Net debt	206.8	160.0	29%	197.0	166.0	19%	189.5	161.1	18%

Source: DM BOŚ SA estimates

**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. Energy/ heat price increase
7. Volatile raw materials prices (of copper and zinc, in particular)
8. Unfavorable/volatile FX rates (currency risk when PLN and CZK weaken against US\$ and EUR)
9. Lack of stability in the region
10. Temporary higher inventories
11. High interest rates

**Catalysts**

1. Expansion in European markets
2. Strengthening position on the existing markets
3. Launching a new logistic center in the southern Europe
4. New products (expanding the product offer)
5. Own brands repositioning
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** =  $\text{EBIT}/\text{sales}$   
**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	39	32	7	8	0	2
Percentage	44%	36%	8%	9%	0%	2%

### Distribution of DM BOŚ's current market relative recommended weightings

	Overweight	Neutral	Underweight	Suspended	Under revision	Not rated
Numbers	38	30	10	8	0	2
Percentage	43%	34%	11%	9%	0%	2%

## 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	7	6	0	1	0	2
Percentage	44%	38%	0%	6%	0%	13%

### 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	7	4	2	1	0	2
Percentage	44%	25%	13%	6%	0%	13%

LT fundamental recommendation tracker

Analyst	Recommendation	Report date	Reiteration date	Distribution date	Expiry date	Performance	Relative performance	Price at issue/reiteration*	EFV (12 months)	
<b>Ferro</b>										
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	Not later than 03.10.2023	-4%	-22%	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 →

\* 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	
<b>Ferro</b>								
Sylwia Jaśkiewicz	Neutral	→	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	Not later than 20.11.2023	24.00	-9%
Sylwia Jaśkiewicz	-	→	-	01.12.2022	02.12.2022	-	22.60	-

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

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