

This report is prepared for the Warsaw Stock Exchange SA within the framework of the Analytical Coverage Support Pilot Program. This is a translation of the Polish analytical report.

Rafako

20/2019/GPW (73) June 30, 2020

Analyst: Wojciech Romanowski

Sector: Construction
Fundamental rating: Sell (→)
Market relative: Underweight (→)
Price: PLN 1.350
12M EFV: PLN 0.66 (→)

Market Cap: US\$ 43.5 m
Bloomberg code: RFK PW
Av. daily turnover: US\$ 0.11 m
12M range: PLN 0.370-2.045
Free float: 57%

FY19 financial results overview

On June 30, after the market close, Rafako revealed FY19 financial results.

Below we present key issues of Rafako's last year's financial performance.

- 4Q19 sales stood at PLN 427.2 million (+11% yoy) which is close to our expectations.
- Gross loss on sales at PLN -140.2 million turned out to be higher by c. PLN 20 million than implied by the preliminary showing for the parent company and the SPV completing the Jaworzno project (our forecast preceded the preliminary data release). Such a deep loss stems from the costs the Company incurred related to the Jaworzno project albeit the result include neither the cost related to the boiler malfunction during its start-up nor the cost arising from the prolongation of the contract deadline (both one-offs in 2020).
- FY19 results were burdened by numerous write-offs, predominantly made in 4Q19, totaling PLN 50.9 million. Additionally, Rafako created PLN 14.4 million of provisions for future costs.
- SGA costs reached PLN 17.9 million and were lower by PLN 2.1 million than we expected.
- EBITDA and EBIT stood at PLN -219.3 million and PLN -223.5 million, respectively.
- The Company's financial costs included write-offs for PBG's bonds at PLN 27.8 million and PLN 11.5 million write-offs for loans.
- 4Q19/FY19 net loss amounted to PLN -273.9 million/-473.1 million.

Guide to adjusted profits

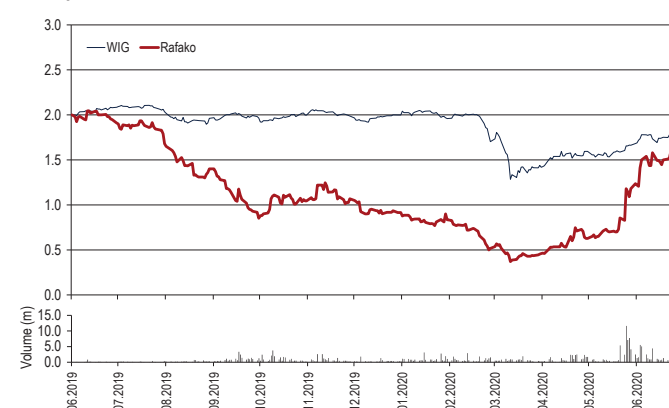
Profits adjusted for a release of provisions for the voluntary redundancy program (PLN 5.9 million)

Key data

IFRS consolidated		2018	2019	2020E	2021E
Sales	PLN m	1,268.8	1,244.9	2,318.9	1,192.7
EBITDA	PLN m	55.4	-420.0	37.7	25.3
Adj EBITDA	PLN m	49.5	-420.0	37.7	25.3
EBIT	PLN m	40.5	-437.6	24.3	12.6
Adj EBIT	PLN m	34.6	-437.6	24.3	12.6
Net profit	PLN m	33.6	-473.1	16.2	6.3
Adj net profit	PLN m	28.8	-473.1	16.2	6.3
Adj EPS	PLN	0.23	-3.71	0.13	0.05
EPS yoy chg	%	163	n.m.	n.m.	-61
Net debt	PLN m	32.1	60.0	47.0	45.6
P/E	x	6.0	neg.	10.6	27.4
P/CE	x	3.9	neg.	5.8	9.0
EV/EBITDA	x	4.1	neg.	5.8	8.6
EV/EBIT	x	5.9	neg.	9.0	17.3
DPS	PLN	0.00	0.00	0.00	0.00
Gross dividend yield	%	0.0	0.0	0.0	0.0
No. of shares (eop)	m	127.4	127.4	127.4	127.4

Source: Company, DM BOŚ SA estimates

Stock performance



Source: Bloomberg

Upcoming events

1. Release of 1Q20 consolidated financial results: July 28
2. Release of 1H20 consolidated financial results: September 30
3. Release of 1-3Q20 consolidated financial results: November 27

Fig. 1. 4Q19 results compared to expectations

IFRS consolidated (PLN m)	4Q19 vs. DM BOŚ			3Q19	4Q18	qoq chg	yoy chg	FY19	FY18	yoy chg
	3Q19A	4Q19E DM BOŚ	expectations							
Sales	427.2	403.6	→	298.6	385.6	43%	11%	1,244.9	1,268.8	-2%
Gross profit on sales	-140.2	-58.5	↓↓	-9.8	27.0	n.m.	n.m.	-287.3	118.7	n.m.
Gross profit on sales margin	-32.8%	-14.5%	↓↓	-3.3%	7.0%	-	-	-23.1%	9.4%	-
EBITDA	-219.3	-78.0	↓↓	-25.9	10.9	n.m.	n.m.	-420.0	55.4	n.m.
EBITDA margin	-51.3%	-19.3%	↓↓	-8.7%	2.8%	-	-	-33.7%	4.4%	-
EBIT	-223.5	-82.5	↓↓	-30.3	7.1	n.m.	n.m.	-437.6	40.5	n.m.
EBIT margin	-52.3%	-20.4%	↓↓	-10.1%	1.8%	-	-	-35.1%	3.2%	-
Pre-tax profit	-261.5	-82.7	↓↓	-30.6	7.7	n.m.	n.m.	-475.7	43.2	n.m.
Pre-tax margin	-61.2%	-20.5%	↓↓	-10.3%	2.0%	-	-	-38.2%	3.4%	-
Net profit	-273.9	-86.9	↓↓	-24.7	11.9	n.m.	n.m.	-473.1	33.6	n.m.
Net margin	-64.1%	-21.5%	↓↓	-8.3%	3.1%	-	-	-38.0%	2.6%	-

Source: Company, PAP, DM BOŚ estimates

- The cash position at the end of FY19 was PLN 66.1 million.
- The Company's contract backlog stood at PLN 2,559 million as of December 31, 2019. In FY19 Rafako acquired contracts worth PLN 1,245 million.

Liquidity risk and threat to continuing business activities

Given the depth of losses and low cash position the statutory auditor expressed concern with respect to the principle of continuing business activities. The risk is mainly related to (i) finalization of the Jaworzno contract and maintaining liquidity and profitability of this project, (ii) securing external funding (loans and banking guarantees) till the end of 2020, (iii) obtaining funding from the E-bus project or any alternative in case of failure of the E-bus project, and (iv) outcome of negotiations with key clients as regards the value increase of the pending projects.

On June 30, before the financial results release, Rafako informed about signing the following annexes:

- With Enea; the appointment of a new deadline for the finalization of the project in Kozienice (March 30, 2021). Besides, both parties agreed to withdraw mutual claims regarding the untimely delivery of the contract and remuneration for

additional works as well as for extraordinary change of circumstances;

- With PKO BP; the credit limit has been extended to November 10, 2020 (from June 30 before) accompanied by its lowering to PLN 142 million;
- With the Industrial Development Agency (ARP in Polish abbreviation); the prolongation of an exclusive negotiation period concerning a disposal of a 100% stake in E-bus until July 31, 2020.

Though these measures limit the liquidity risk, they do not wipe it out completely. The Company prepared a long-term development strategy based, among other things, on searching for new revenue sources that will do without coal combustion. However according to the Company's management the implementation of this strategy will necessitate obtaining new funding (financial injection or debt financing) and cost restructuring.

Expected impact: *Negative. The losses are so severe that both the loss of liquidity and discontinuation of business activity seem real. As it was stated in the financial report, Rafako needs financial injection. We see some positive signals (signing the abovementioned annexes), but we are afraid that they may not suffice. We would like to note that currently Rafako's financial standing may dramatically differ from the picture presented in the FY19 financial report as 6 months have passed since then.*

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 = $\text{gross profit} / \text{sales}$
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 BOŠ 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 BOŠ 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 BOŠ's current recommendations

	Buy	Hold	Sell	Suspended	Under revision
Numbers	30	38	8	9	0
Percentage	35%	45%	9%	11%	0%

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

	Buy	Hold	Sell	Suspended	Under revision
Numbers	4	8	0	2	0
Percentage	29%	57%	0%	14%	0%

Distribution of DM BOŠ's current market relative recommended weightings

	Overweight	Neutral	Underweight	Suspended	Under revision
Numbers	31	29	16	9	0
Percentage	36%	34%	19%	11%	0%

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

	Overweight	Neutral	Underweight	Suspended	Under revision
Numbers	4	6	2	2	0
Percentage	29%	43%	14%	14%	0%

Banks

Net Interest Margin (NIM) = $\text{net interest income} / \text{average assets}$
Non interest income = $\text{fees} + \text{commissions} + \text{result on financial operations (trading gains)} + \text{FX gains}$
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 BOŠ 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.

LT fundamental recommendation tracker

Analyst	Recommendation	Report date	Reiteration date	Distribution date	Expiry date	Performance	Relative performance	Price at issue/reiteration*	EFV (12 months)
Rafako									
Michał Stalmach	Buy	10.12.2015	-	10.12.2015	04.12.2016	-16%	-22%	6.70	10.10 →
Michał Stalmach	-	-	13.12.2015	14.12.2015	-	-	-	6.99	10.10 →
Michał Stalmach	-	-	17.01.2016	18.01.2016	-	-	-	7.15	10.10 →
Michał Stalmach	-	-	15.02.2016	16.02.2016	-	-	-	7.29	10.10 →
Michał Stalmach	-	-	18.02.2016	19.02.2016	-	-	-	7.39	10.10 →
Michał Stalmach	-	-	21.03.2016	22.03.2016	-	-	-	8.10	10.10 →
Michał Stalmach	-	-	13.04.2016	14.04.2016	-	-	-	8.42	10.10 →
Michał Stalmach	-	-	16.05.2016	17.05.2016	-	-	-	7.95	10.10 →
Michał Stalmach	-	-	27.06.2016	28.06.2016	-	-	-	5.89	10.10 →
Michał Stalmach	-	-	24.07.2016	25.07.2016	-	-	-	6.50	10.10 →
Wojciech Romanowski	-	-	11.08.2016	12.08.2016	-	-	-	6.59	9.30 ↓
Wojciech Romanowski	-	-	31.08.2016	01.09.2016	-	-	-	6.78	9.30 →
Wojciech Romanowski	-	-	12.10.2016	13.10.2016	-	-	-	6.36	9.30 →
Wojciech Romanowski	-	-	01.11.2016	02.11.2016	-	-	-	6.02	7.30 ↓
Wojciech Romanowski	-	-	02.11.2016	03.11.2016	-	-	-	6.02	7.30 →
Wojciech Romanowski	-	-	14.11.2016	15.11.2016	-	-	-	5.98	7.30 →
Wojciech Romanowski	Buy	04.12.2016	-	05.12.2016	09.05.2017	36%	6%	5.61	7.30 →
Wojciech Romanowski	-	-	12.01.2017	13.01.2017	-	-	-	6.24	7.30 →
Wojciech Romanowski	-	-	08.02.2017	09.02.2017	-	-	-	7.22	7.30 →
Wojciech Romanowski	-	-	21.02.2017	22.02.2017	-	-	-	7.13	7.30 →
Wojciech Romanowski	-	-	07.03.2017	08.03.2017	-	-	-	8.80	7.30 →
Wojciech Romanowski	-	-	11.04.2017	12.04.2017	-	-	-	8.05	7.30 →
Wojciech Romanowski	Hold	09.05.2017	-	10.05.2017	25.03.2018	-34%	-31%	7.62	7.30 →
Wojciech Romanowski	-	-	30.05.2017	31.05.2017	-	-	-	8.07	7.30 →
Wojciech Romanowski	-	-	12.07.2017	13.07.2017	-	-	-	8.05	7.30 →
Wojciech Romanowski	-	-	26.07.2017	27.07.2017	-	-	-	7.70	7.30 →
Wojciech Romanowski	-	-	03.09.2017	04.09.2017	-	-	-	5.90	7.30 →
Wojciech Romanowski	-	-	15.10.2017	16.10.2017	-	-	-	4.75	7.30 →
Wojciech Romanowski	-	-	05.11.2017	06.11.2017	-	-	-	4.49	7.10 ↓
Wojciech Romanowski	-	-	09.11.2017	10.11.2017	-	-	-	4.24	4.70 ↓
Wojciech Romanowski	-	-	15.11.2017	16.11.2017	-	-	-	4.09	4.70 →
Wojciech Romanowski	-	-	10.12.2017	11.12.2017	-	-	-	4.18	4.70 →
Wojciech Romanowski	-	-	10.01.2018	11.01.2018	-	-	-	4.80	4.70 →
Wojciech Romanowski	-	-	13.02.2018	14.02.2018	-	-	-	4.89	4.70 →
Wojciech Romanowski	-	-	12.03.2018	13.03.2018	-	-	-	4.83	4.70 →
Wojciech Romanowski	Under revision	25.03.2018	-	26.03.2018	22.05.2018	-18%	-17%	4.80	Under revision →
Wojciech Romanowski	-	-	16.04.2018	17.04.2018	-	-	-	4.20	Under revision →
Wojciech Romanowski	Sell	22.05.2018	-	23.05.2018	09.12.2018	-50%	-49%	3.94	2.90 →
Wojciech Romanowski	-	-	29.05.2018	30.05.2018	-	-	-	3.74	2.90 →
Wojciech Romanowski	-	-	16.07.2018	17.07.2018	-	-	-	3.46	2.90 →
Wojciech Romanowski	-	-	02.08.2018	03.08.2018	-	-	-	3.54	2.90 →
Wojciech Romanowski	-	-	30.08.2018	31.08.2018	-	-	-	3.38	2.90 →
Wojciech Romanowski	-	-	11.10.2018	12.10.2018	-	-	-	2.02	2.90 →
Wojciech Romanowski	-	-	23.10.2018	24.10.2018	-	-	-	2.03	2.90 →
Wojciech Romanowski	-	-	14.11.2018	15.11.2018	-	-	-	1.45	2.90 →
Wojciech Romanowski	Hold	09.12.2018	-	10.12.2018	05.12.2019	-48%	-46%	1.970	2.80 ↓
Wojciech Romanowski	-	-	10.01.2019	11.01.2019	-	-	-	1.740	2.80 →
Wojciech Romanowski	-	-	04.02.2019	05.02.2019	-	-	-	1.800	2.80 →
Wojciech Romanowski	-	-	26.02.2019	27.02.2019	-	-	-	1.800	2.80 →
Wojciech Romanowski	-	-	26.03.2019	27.03.2019	-	-	-	2.170	2.80 →
Wojciech Romanowski	-	-	22.04.2019	23.04.2019	-	-	-	2.155	2.80 →
Wojciech Romanowski	-	-	24.04.2019	25.04.2019	-	-	-	2.045	2.80 →
Wojciech Romanowski	-	-	30.05.2019	31.05.2019	-	-	-	1.980	2.80 →
Wojciech Romanowski	-	-	17.07.2019	18.07.2019	-	-	-	1.934	2.80 →
Wojciech Romanowski	-	-	23.07.2019	23.07.2019	-	-	-	1.868	2.40 ↓
Wojciech Romanowski	-	-	30.07.2019	31.07.2019	-	-	-	1.830	2.40 →
Wojciech Romanowski	-	-	20.08.2019	21.08.2019	-	-	-	1.330	2.40 →
Wojciech Romanowski	-	-	25.08.2019	26.08.2019	-	-	-	1.310	2.30 ↓
Wojciech Romanowski	-	-	01.09.2019	02.09.2019	-	-	-	1.400	2.30 →
Wojciech Romanowski	-	-	02.09.2019	03.09.2019	-	-	-	1.400	2.30 →
Wojciech Romanowski	-	-	05.09.2019	06.09.2019	-	-	-	1.312	2.30 →
Wojciech Romanowski	-	-	30.09.2019	01.10.2019	-	-	-	0.918	2.30 →
Wojciech Romanowski	-	-	13.10.2019	14.10.2019	-	-	-	1.110	2.30 →
Wojciech Romanowski	-	-	24.10.2019	25.10.2019	-	-	-	1.008	1.80 ↓
Wojciech Romanowski	-	-	17.11.2019	18.11.2019	-	-	-	1.140	1.80 →
Wojciech Romanowski	-	-	25.11.2019	26.11.2019	-	-	-	1.058	1.80 →
Wojciech Romanowski	-	-	27.11.2019	28.11.2019	-	-	-	1.028	1.80 →
Wojciech Romanowski	-	-	01.12.2019	02.12.2019	-	-	-	1.068	1.80 →
Wojciech Romanowski	Sell	05.12.2019	-	06.12.2019	Not later than 05.12.2020	31%	48%	1.034	0.75 ↓
Wojciech Romanowski	-	-	08.12.2019	09.12.2019	-	-	-	0.925	0.75 →
Wojciech Romanowski	-	-	17.12.2019	18.12.2019	-	-	-	0.935	0.75 →
Wojciech Romanowski	-	-	09.01.2020	10.01.2020	-	-	-	0.839	0.75 →
Wojciech Romanowski	-	-	16.01.2020	17.01.2020	-	-	-	0.830	0.75 →
Wojciech Romanowski	-	-	30.01.2020	31.01.2020	-	-	-	0.900	0.75 →
Wojciech Romanowski	-	-	04.02.2020	05.02.2020	-	-	-	0.784	0.75 →
Wojciech Romanowski	-	-	05.02.2020	06.02.2020	-	-	-	0.777	0.66 ↓
Wojciech Romanowski	-	-	06.02.2020	07.02.2020	-	-	-	0.770	0.66 →
Wojciech Romanowski	-	-	03.03.2020	04.03.2020	-	-	-	0.568	0.66 →
Wojciech Romanowski	-	-	30.03.2020	31.03.2020	-	-	-	0.445	0.66 →
Wojciech Romanowski	-	-	22.04.2020	23.04.2020	-	-	-	0.642	0.66 →
Wojciech Romanowski	-	-	28.04.2020	29.04.2020	-	-	-	0.706	0.66 →
Wojciech Romanowski	-	-	19.05.2020	20.05.2020	-	-	-	0.700	0.66 →
Wojciech Romanowski	-	-	20.05.2020	21.05.2020	-	-	-	0.700	0.66 →

LT fundamental recommendation tracker (continued)

Analyst	Recommendation	Report date	Reiteration date	Distribution date	Expiry date	Performance	Relative performance	Price at issue/reiteration*	EFV (12 months)
Wojciech Romanowski	- →	-	25.05.2020	26.05.2020	-	-	-	0.828	0.66 →
Wojciech Romanowski	- →	-	28.05.2020	29.05.2020	-	-	-	1.090	0.66 →
Wojciech Romanowski	- →	-	11.06.2020	12.06.2020	-	-	-	1.436	0.66 →
Wojciech Romanowski	- →	-	15.06.2020	16.06.2020	-	-	-	1.494	0.66 →
Wojciech Romanowski	- →	-	30.06.2020	01.07.2020	-	-	-	1.350	0.66 →

* 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
Rafako								
Michał Stalmach	Overweight	-	10.12.2015	-	10.12.2015	31.08.2016	6.70	-5%
Michał Stalmach	-	→	-	13.12.2015	14.12.2015	-	6.99	-
Michał Stalmach	-	→	-	17.01.2016	18.01.2016	-	7.15	-
Michał Stalmach	-	→	-	15.02.2016	16.02.2016	-	7.29	-
Michał Stalmach	-	→	-	18.02.2016	19.02.2016	-	7.39	-
Michał Stalmach	-	→	-	21.03.2016	22.03.2016	-	8.10	-
Michał Stalmach	-	→	-	13.04.2016	14.04.2016	-	8.42	-
Michał Stalmach	-	→	-	16.05.2016	17.05.2016	-	7.95	-
Michał Stalmach	-	→	-	27.06.2016	28.06.2016	-	5.89	-
Michał Stalmach	-	→	-	24.07.2016	25.07.2016	-	6.50	-
Wojciech Romanowski	-	→	-	11.08.2016	12.08.2016	-	6.59	-
Wojciech Romanowski	Neutral	↓	31.08.2016	-	01.09.2016	14.11.2016	6.78	-11%
Wojciech Romanowski	-	→	-	12.10.2016	13.10.2016	-	6.36	-
Wojciech Romanowski	-	→	-	01.11.2016	02.11.2016	-	6.02	-
Wojciech Romanowski	-	→	-	02.11.2016	03.11.2016	-	6.02	-
Wojciech Romanowski	Overweight	↑	14.11.2016	-	15.11.2016	21.02.2017	5.98	15%
Wojciech Romanowski	-	→	-	04.12.2016	05.12.2016	-	5.61	-
Wojciech Romanowski	-	→	-	12.01.2017	13.01.2017	-	6.24	-
Wojciech Romanowski	-	→	-	08.02.2017	09.02.2017	-	7.22	-
Wojciech Romanowski	Neutral	↓	21.02.2017	-	22.02.2017	09.05.2017	7.13	-15%
Wojciech Romanowski	-	→	-	07.03.2017	08.03.2017	-	8.80	-
Wojciech Romanowski	-	→	-	11.04.2017	12.04.2017	-	8.05	-
Wojciech Romanowski	Overweight	↑	09.05.2017	-	10.05.2017	26.07.2017	7.62	1%
Wojciech Romanowski	-	→	-	30.05.2017	31.05.2017	-	8.07	-
Wojciech Romanowski	-	→	-	12.07.2017	13.07.2017	-	8.05	-
Wojciech Romanowski	Underweight	↓	26.07.2017	-	27.07.2017	09.11.2017	7.70	-44%
Wojciech Romanowski	-	→	-	03.09.2017	04.09.2017	-	5.90	-
Wojciech Romanowski	-	→	-	15.10.2017	16.10.2017	-	4.75	-
Wojciech Romanowski	-	→	-	05.11.2017	06.11.2017	-	4.49	-
Wojciech Romanowski	Neutral	↑	09.11.2017	-	10.11.2017	25.03.2018	4.24	22%
Wojciech Romanowski	-	→	-	15.11.2017	16.11.2017	-	4.09	-
Wojciech Romanowski	-	→	-	10.12.2017	11.12.2017	-	4.18	-
Wojciech Romanowski	-	→	-	10.01.2018	11.01.2018	-	4.80	-
Wojciech Romanowski	-	→	-	13.02.2018	14.02.2018	-	4.89	-
Wojciech Romanowski	-	→	-	12.03.2018	13.03.2018	-	4.83	-
Wojciech Romanowski	Under revision	-	25.03.2018	-	26.03.2018	22.05.2018	4.80	-17%
Wojciech Romanowski	-	→	-	16.04.2018	17.04.2018	-	4.20	-
Wojciech Romanowski	Underweight	-	22.05.2018	-	23.05.2018	09.12.2018	3.94	-49%
Wojciech Romanowski	-	→	-	29.05.2018	30.05.2018	-	3.74	-
Wojciech Romanowski	-	→	-	16.07.2018	17.07.2018	-	3.46	-
Wojciech Romanowski	-	→	-	02.08.2018	03.08.2018	-	3.54	-
Wojciech Romanowski	-	→	-	30.08.2018	31.08.2018	-	3.38	-
Wojciech Romanowski	-	→	-	11.10.2018	12.10.2018	-	2.02	-
Wojciech Romanowski	-	→	-	23.10.2018	24.10.2018	-	2.03	-
Wojciech Romanowski	-	→	-	14.11.2018	15.11.2018	-	1.45	-
Wojciech Romanowski	Neutral	↑	09.12.2018	-	10.12.2018	30.09.2019	1.970	-53%
Wojciech Romanowski	-	→	-	10.01.2019	11.01.2019	-	1.740	-
Wojciech Romanowski	-	→	-	04.02.2019	05.02.2019	-	1.800	-
Wojciech Romanowski	-	→	-	26.02.2019	27.02.2019	-	1.800	-
Wojciech Romanowski	-	→	-	26.03.2019	27.03.2019	-	2.170	-
Wojciech Romanowski	-	→	-	22.04.2019	23.04.2019	-	2.155	-
Wojciech Romanowski	-	→	-	24.04.2019	25.04.2019	-	2.045	-
Wojciech Romanowski	-	→	-	30.05.2019	31.05.2019	-	1.980	-
Wojciech Romanowski	-	→	-	17.07.2019	18.07.2019	-	1.934	-
Wojciech Romanowski	-	→	-	23.07.2019	23.07.2019	-	1.868	-
Wojciech Romanowski	-	→	-	30.07.2019	31.07.2019	-	1.830	-
Wojciech Romanowski	-	→	-	20.08.2019	21.08.2019	-	1.330	-
Wojciech Romanowski	-	→	-	25.08.2019	26.08.2019	-	1.310	-
Wojciech Romanowski	-	→	-	01.09.2019	02.09.2019	-	1.400	-
Wojciech Romanowski	-	→	-	02.09.2019	03.09.2019	-	1.400	-
Wojciech Romanowski	-	→	-	05.09.2019	06.09.2019	-	1.312	-
Wojciech Romanowski	Underweight	↓	30.09.2019	-	01.10.2019	24.10.2019	0.918	8%
Wojciech Romanowski	-	→	-	13.10.2019	14.10.2019	-	1.110	-
Wojciech Romanowski	Neutral	↑	24.10.2019	-	25.10.2019	01.12.2019	1.008	7%
Wojciech Romanowski	-	→	-	17.11.2019	18.11.2019	-	1.140	-
Wojciech Romanowski	-	→	-	25.11.2019	26.11.2019	-	1.058	-
Wojciech Romanowski	-	→	-	27.11.2019	28.11.2019	-	1.028	-
Wojciech Romanowski	Underweight	↓	01.12.2019	-	02.12.2019	Not later than 01.12.2020	1.068	47%
Wojciech Romanowski	-	→	-	05.12.2019	06.12.2019	-	1.034	-
Wojciech Romanowski	-	→	-	08.12.2019	09.12.2019	-	0.925	-
Wojciech Romanowski	-	→	-	17.12.2019	18.12.2019	-	0.935	-
Wojciech Romanowski	-	→	-	09.01.2020	10.01.2020	-	0.839	-
Wojciech Romanowski	-	→	-	16.01.2020	17.01.2020	-	0.830	-
Wojciech Romanowski	-	→	-	30.01.2020	31.01.2020	-	0.900	-
Wojciech Romanowski	-	→	-	04.02.2020	05.02.2020	-	0.784	-
Wojciech Romanowski	-	→	-	05.02.2020	06.02.2020	-	0.777	-
Wojciech Romanowski	-	→	-	06.02.2020	07.02.2020	-	0.770	-
Wojciech Romanowski	-	→	-	03.03.2020	04.03.2020	-	0.568	-
Wojciech Romanowski	-	→	-	30.03.2020	31.03.2020	-	0.445	-
Wojciech Romanowski	-	→	-	22.04.2020	23.04.2020	-	0.642	-
Wojciech Romanowski	-	→	-	28.04.2020	29.04.2020	-	0.706	-
Wojciech Romanowski	-	→	-	19.05.2020	20.05.2020	-	0.700	-
Wojciech Romanowski	-	→	-	20.05.2020	21.05.2020	-	0.700	-
Wojciech Romanowski	-	→	-	25.05.2020	26.05.2020	-	0.828	-

Market-relative recommendation tracker (continued)

Analyst	Relative Recommendation	Report date	Reiteration date	Distribution date	Expiry date	Price at issue/ reiteration*	Relative performance
Wojciech Romanowski	- →	-	28.05.2020	29.05.2020	-	1.090	-
Wojciech Romanowski	- →	-	11.06.2020	12.06.2020	-	1.436	-
Wojciech Romanowski	- →	-	15.06.2020	16.06.2020	-	1.494	-
Wojciech Romanowski	- →	-	30.06.2020	01.07.2020	-	1.350	-

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

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Institutional sales

Bartosz Janczy

tel.: +48 (22) 504 32 46
b.janczy@bossa.pl

Tomasz Grabowski

tel.: +48 (22) 504 32 47
t.grabowski@bossa.pl

Grzegorz Kołodziejczyk

tel.: +48 (22) 504 33 34
g.kolodziejczyk@bossa.pl

Michał Zawada

tel.: +48 (22) 504 33 36
m.zawada@bossa.pl

Maciej Bąk

tel.: +48 (22) 504 33 78
m.bak@bossa.pl

Bartosz Zieliński

tel.: +48 (22) 504 33 35
b.zielinski@bossa.pl

Marcin Kozerski

tel.: +48 (22) 504 33 35
m.kozerski@bossa.pl

Marcin Stosio

tel.: +48 (22) 504 33 37
m.stosio@bossa.pl

Research

Sobiesław Pająk, CFA

(Equity strategy, TMT)
s.pajak@bossa.pl

Sylwia Jaśkiewicz, CFA

(Construction materials, Consumer staples & discretionary, Health care)
s.jaskiewicz@bossa.pl

Maciej Wewiórski

(Residential construction, Construction, Real estate)
m.wewiorski@bossa.pl

Michał Sobolewski, CFA, FRM

(Financials)
m.sobolewski@bossa.pl

Jakub Viscardi

(Telco, Consumer staples & discretionary, IT – hardware distribution, Utilities)
j.viscardi@bossa.pl

Łukasz Prokopiuk, CFA

(Chemicals, Mining, Mining – machinery, Oil & gas)
l.prokopiuk@bossa.pl

Tomasz Rodak, CFA

(Consumer discretionary, Video games)
t.rodak@bossa.pl

Wojciech Romanowski

(Construction, Construction materials, Consumer discretionary)
w.romanowski@bossa.pl

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