

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.

Voxel

Recommended action

We keep our LT fundamental Buy recommendation and ST relative Overweight rating intact.

We expect good 4Q20 financial showing stemming predominantly from testing for SARS-CoV-2 virus.

We assume the Company keeps performing tests for SARS-CoV-2 virus until the entire population is vaccinated, and afterwards we expect a strong demand for diagnostic imaging services to surface earlier deferred by the pandemic. The Group can carry on with testing on a round-the-clock basis and we expect it to be a beneficiary of this situation.

4Q20 financial results preview

On March 30 Voxel will release their 4Q20 financials. We forecast NI at PLN 20 million (up 212% yoy); we attribute such a massive improvement to a launch of testing for SARS-CoV-2 virus and envisage this will be visible in the results of subsidiaries, Alteris and Vito-Med.

Since Jan. 1 the Group has been consolidating 2 new entities: Rezonans Powiśle (RP) and Scanix, which also perform diagnostic tests reimbursed by NFZ. We assume that 4Q20 the Group was equipped with 26/ 17/ 7 MRI/ CT/ PET-CT scanners, 4 SPECT scan machines and one device for fusion biopsy.

In 1Q/ 2Q/ 3Q20 the volume of scans performed reached 54,600 (up 12% yoy)/ 36,800 (down 37% yoy)/ 53,000 (down 11% yoy). In 4Q20 we assume Voxel performed 52,500 procedures altogether (down 11% yoy), including c. 18,000 (down 23% yoy)/ 32,000 (down 3% yoy)/ 3,000 (flat yoy) MRI/ CT/ PET scans. It seems that the Company may go for an increase of MRI procedures at the expense of CT scans. We forecast unconsolidated 4Q20 revenues at PLN 35 million, slightly down yoy.

3/2020/GPW (23) March 3, 2021

Analyst: Sylwia Jaśkiewicz, CFA

Sector: Health care Fundamental rating: Buy (\rightarrow) Market relative: Overweight (\rightarrow) Price: PLN 45.20 12M EFV: PLN 54.7 (\rightarrow) Coverage Program George Program George Program Market Cap: US\$ 126.3 m Bloomberg code: VOX PW Av. daily turnover: US\$ 0.07 m 12M range: PLN 26.00-47.60 Free float: 51%

Guide to adjusted profits

Results adjusted for (i) gains on the occasional purchase of Scanix, (ii) real estate disposal, and (iii) compensation.

Key data

2020E 320.6 85.7 76.5 51.6	2021E 314.0 94.7 94.7	2022E 281.3 84.2 84.2	2023E 293.4 87.8
85.7 76.5 51.6	94.7 94.7	84.2	
76.5 51.6	94.7		87.8
51.6		84.2	
		04.2	87.8
	60.6	48.7	50.7
42.3	60.6	48.7	50.7
34.3	45.3	35.2	37.4
27.5	45.3	35.2	37.4
3.27	4.31	3.36	3.56
50	32	-22	6
2.61	4.31	3.36	3.56
13	65	-22	6
113.8	85.5	72.5	50.5
13.8	10.5	13.5	12.7
17.3	10.5	13.5	12.7
6.9	6.0	6.7	6.4
7.7	6.0	6.7	6.4
6.9	5.9	6.5	6.0
7.7	5.9	6.5	6.0
11.4	9.2	11.2	10.3
13.9	9.2	11.2	10.3
0.91	1.44	1.90	1.48
2.0	3.2	4.2	3.3
10.5	10.5	10.5	10.5
	27.5 3.27 50 2.61 13 113.8 13.8 17.3 6.9 7.7 6.9 7.7 11.4 13.9 0.91 2.0	$\begin{array}{cccc} 27.5 & 45.3 \\ 3.27 & 4.31 \\ 50 & 32 \\ 2.61 & 4.31 \\ 13 & 65 \\ 113.8 & 85.5 \\ 13.8 & 10.5 \\ 17.3 & 10.5 \\ 6.9 & 6.0 \\ 7.7 & 6.0 \\ 6.9 & 5.9 \\ 7.7 & 5.9 \\ 11.4 & 9.2 \\ 13.9 & 9.2 \\ 0.91 & 1.44 \\ 2.0 & 3.2 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$



Source: Bloomberg

Upcoming events

1. Release of consolidated FY20 financials: March 30

3. Release of consolidated 2Q21 financials: August 23

4. Release of consolidated 3Q21 financials: November 25

^{2.} Release of consolidated 1Q21 financials: May 24

We forecast 4Q20 revenues of RP/ Scanix/ Exira/ Vito-Med to stand at PLN 1 million/ 4 million/ 2 million/ 47 million. Vito-Med launched the diagnostic laboratory dedicated to testing for SARS-CoV-2 on June 1. Alteris (except for testing for SARS-CoV-2) might have experienced a yoy profitability deterioration due to a high level of fixed costs and portfolio mix change. Vito-Med's hospital ward burdened with high costs related to the intensified sanitary regime.

We forecast the Group's consolidated revenues to reach PLN 131 million (up 94% yoy) and assume the profitability improvement on the back of new activities in general, albeit the parent company and We forecast the Group's EBIT and NI to reach PLN 27 million and PLN 20 million, respectively, in 4Q20.

Fig. 1.	Voxel; 4Q20	financials'	forecasts
---------	-------------	-------------	-----------

IFRS consolidated	i.								уоу
(PLN m)	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20E	chg
Sales	49.1	46.6	48.6	67.3	50.4	52.6	86.7	130.9	94%
Profit on sales	7.2	7.8	8.5	10.0	1.5	-3.4	16.1	26.8	167%
Profit on sales margin	14.7%	16.8%	17.5%	14.9%	3.0%	-6.4%	18.5%	20.5%	-
EBITDA	12.8	13.7	14.6	16.2	17.3	6.8	25.3	36.2	124%
EBITDA margin	26.1%	29.3%	30.0%	24.0%	34.4%	13.0%	29.2%	27.6%	-
Adj EBITDA	12.8	13.7	14.6	16.7	10.2	4.7	25.3	36.2	117%
Adj EBITDA margin	26.1%	29.3%	30.0%	24.8%	20.2%	9.0%	29.2%	27.6%	-
EBIT	7.4	8.1	8.8	10.0	9.0	-0.8	16.3	27.0	171%
EBIT margin	15.1%	17.4%	18.1%	14.8%	17.8%	-1.5%	18.8%	20.7%	-
Adj EBIT	7.4	8.1	8.8	10.5	1.9	-2.9	16.3	27.0	158%
Adj EBIT margin	15.1%	17.4%	18.1%	15.6%	3.7%	-5.5%	18.8%	20.7%	-
Pre-tax profit	6.2	6.9	7.6	7.8	7.4	-2.1	14.9	25.4	225%
Pre-tax profit margin	12.5%	14.8%	15.6%	11.6%	14.7%	-4.1%	17.1%	19.4%	-
Net profit	5.0	5.5	6.0	6.5	3.6	-1.2	11.7	20.2	212%
Net profit margin	10.1%	11.8%	12.4%	9.6%	7.2%	-2.4%	13.5%	15.4%	-
Adj NP	5.0	5.5	6.0	7.8	-1.1	-3.3	11.7	20.2	160%
Adj NP margin	10.1%	11.8%	12.4%	11.5%	-2.2%	-6.4%	13.5%	15.4%	-

Adjusted for (i) gains on the occasional purchase of Scanix, (ii) real estate disposal

Source: Company, DM BOŚ SA estimates



Fig. 2. Voxel; Tests per quarter

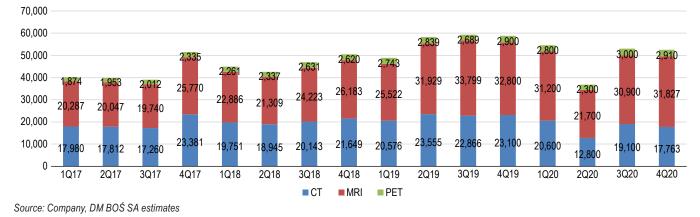
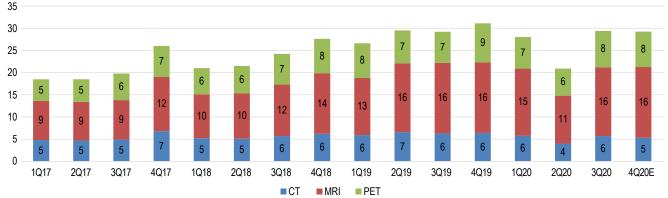


Fig. 3. Voxel; Quarterly revenues from tests performed (PLN m)



Source: Company, DM BOŚ SA estimates

FY21 financial forecasts

We update our financial forecast for the Company incorporating Vito-Med's higher operating costs on the back of the intensified sanitary regime and difficulties in providing pandemic-unrelated services. We forecast the Group's sales/ EBIT/ NI to arrive at PLN 321 million/ 52 million/ 34 million in FY20 and at PLN 314 million/ 61 million/ 45 million in FY21.

We expect the Group to grow organically this year and add a MRI scanner (in Tarnów) and a PET scanner (in a hospital in Warsaw) to their equipment. We expect replacement investments regarding MRI devices in Zamość, Zabrze and Bielsko Biała as well.

Since the Group performs tests for SARS-CoV-2 virus, we forecast revenues and EBIT in this area to reach PLN 52 million and PLN 26 million, respectively, in FY21 vs PLN 63 million and PLN 31 million expected in FY20; we assumed no revenues etc. from 2022. We estimate the volume of tests performed monthly till July at c. 22,000 and 7,000 in the following months. An average price per test will stand at PLN 280 (in total we assume 185,000 tests to be performed in FY21 vs 219,000 expected in FY20).



Fig. 4. Voxel; Changes in DM BOŚ SA forecasts

IFRS consolidated		2020E			2021E			2022E	
(PLN m)	current	previous	change	current	previous	change	current	previous	change
Sales	320.6	309.6	4%	314.0	319.8	-2%	281.3	280.3	0%
EBITDA	85.7	91.2	-6%	94.7	96.4	-2%	84.2	83.9	0%
Adj EBITDA	76.5	82.0	-7%	94.7	96.4	-2%	84.2	83.9	0%
EBIT	51.6	57.1	-10%	60.6	62.4	-3%	48.7	48.3	1%
Adj EBIT	42.3	47.8	-11%	60.6	62.4	-3%	48.7	48.3	1%
NP	34.3	38.9	-12%	45.3	46.6	-3%	35.2	34.8	1%
Adj NP	27.5	32.0	-14%	45.3	46.6	-3%	35.2	34.8	1%
Net debt	113.8	109.1	4%	85.5	81.9	4%	72.5	69.8	4%

Source: DM BOŚ SA estimates

Valuation

Our 12M EFV for Voxel constituting a 50% - 50% mix of DCF FCFF method and peer-relative

valuation, stays intact at PLN 54.7 per share. The DCF FCF/ peer relative valuation implies PLN 59/ PLN 51 per share.

Tabela 5. Voxel; Model DCF

	2022E	2023E	2024E	2025E	2026E	2027E	2028E
Cost of equity							
Risk free	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Equity market premium	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Unlevered beta	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Leveraged beta	1.0	1.0	0.9	0.9	0.9	0.9	0.9
Required rate of return	8.9%	8.7%	8.5%	8.7%	8.3%	8.3%	8.3%
Cost of debt							
Pre-tax cost of debt	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Effective tax rate	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
After-tax cost of debt	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%
WACC							
Equity share	84%	85%	85%	86%	86%	86%	89%
Debt share	16%	15%	15%	14%	14%	14%	11%
Cost of equity	8.9%	8.7%	8.5%	8.7%	8.3%	8.3%	8.3%
After tax cost of debt	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%
WACC	8.0%	7.8%	7.7%	7.9%	7.6%	7.6%	7.7%
Financial forecasts (PLN m)		·					
Sales	281.3	293.4	305.9	317.3	329.2	341.5	354.3
EBIT	48.7	50.7	53.1	54.9	56.8	58.7	60.5
NOPLAT	39.4	41.1	43.0	44.5	46.0	47.5	49.0
Depreciation	35.6	37.1	38.5	40.1	41.8	43.5	45.5
PPE + intangibles	24.7	26.3	27.7	29.2	31.0	32.7	34.7
Right-of-use assets	10.8	10.8	10.8	10.8	10.8	10.8	10.8
NWC change	3.9	-1.2	-1.2	-1.1	-1.1	-1.1	-1.2
Capex	-25.5	-27.2	-28.9	-30.4	-32.2	-34.0	-36.0
Capital lease payments	-10.8	-10.8	-10.8	-10.8	-10.8	-10.8	-10.8
FCFF	42.5	39.0	40.6	42.2	43.7	45.1	46.6

Źródło: prognozy DM BOŚ SA



Fig. 6. Voxel; DCF Valuation (PLN m)

Fig. 7. Voxel; Sensitivity to terminal growth rate and equity market premium (PLN m)

FCFF terminal growth	1.0%	
WACC in residual period	7.7%	F
Residual value	703.5	
PV of residual value	425.5	
PV of FCFF	227.2	
Monorities	4.0	
Enterprise value	648.7	
Net debt, excl. IFRS16	45.4	S
Dividend (paid in 2021E)	15.1	
Equity value	618.4	
Number of shares (million)	10.5	
12M forward equity value per share (PLN)	58.9	

		Re	sidual WAC	C	
FCFF residual growth	7.3%	7.5%	7.7%	7.9%	8.1%
0.0%	55.2	54.2	53.3	52.4	51.5
0.5%	58.1	57.0	55.9	54.9	53.9
1.0%	61.5	60.1	58.9	57.7	56.6
1.5%	65.4	63.8	62.4	61.0	59.7
2.0%	70.1	68.2	66.5	64.8	63.3

Source: DM BOŚ SA estimates

Source: DM BOŚ SA estimates

Fig. 8. Voxel; Peer-relative comparison

		P/E		E١	//EBITDA		I	EV/EBIT	
Company	2021E	2022E	2023E	2021E	2022E	2023E	2021E	2022E	2023E
Medica Group	19.5	16.4	13.5	11.4	9.6	9.1	14.3	12.0	b.d.
Integral Diagnostics	23.6	22.1	20.4	11.6	10.7	9.9	17.1	15.5	14.1
Centro De Imagem Diagnosticos	20.5	15.5	12.2	6.4	5.8	5.3	14.1	10.3	8.6
Medpace Holdings	35.7	31.2	27.1	25.2	20.5	18.0	27.9	23.3	19.7
BML	15.0	14.6	17.7	5.0	4.9	4.7	b.d.	b.d.	b.d.
Spire Healthcare Group	65.4	28.5	19.9	6.7	5.4	4.2	13.2	10.0	7.4
Laboratory Corporation of America	11.4	16.4	15.5	8.3	10.7	9.6	9.6	12.5	11.6
Cardinal Health	8.8	8.6	8.2	6.4	5.7	5.2	7.3	7.0	6.5
Amerisourcebergen	12.1	10.8	10.2	8.1	7.2	7.0	9.1	8.2	8.2
Alfresa	24.9	18.5	18.2	9.5	6.5	5.8	b.d.	b.d.	b.d.
China National Accord Medi-B	9.5	8.4	b.d.	2.8	b.d.	b.d.	2.6	b.d.	b.d.
Jointown Pharmaceuticals	11.3	9.4	b.d.	b.d.	b.d.	b.d.	b.d.	b.d.	b.d.
Medipal Holdings	25.3	17.6	17.1	6.7	5.1	4.5	9.5	7.3	b.d.
Mckesson	10.0	9.4	9.2	6.9	6.2	5.9	8.0	7.1	6.7
Bayer	9.0	8.2	7.5	7.9	7.0	6.6	13.1	10.7	10.8
Median	15.0	15.5	15.5	7.4	6.5	5.9	11.4	10.3	8.6
Voxel	10.5	13.5	12.7	5.9	6.5	6.0	9.2	11.2	10.3
Implied Voxel's price (PLN)	64.7	52.0	55.1	58.6	45.2	44.5	57.4	40.8	36.7
Average implied Voxel's price (PLN)				5	0.6				

Source: Bloomberg, DM BOŚ SA estimates

Fig. 10. Voxel; Balance sheet

(PLN m)	2017	2018	2019	2020E	2021E	2022E
Fixed assets	172.7	206.0	260.7	306.0	312.6	313.4
Tangible fixed assets	124.4	136.4	183.1	218.6	224.0	224.3
Intangible fixed assets	8.4	7.9	9.9	9.6	10.8	11.3
Goodwill	39.4	59.4	59.8	65.6	65.6	65.6
Financial, other fixed assets	0.5	2.4	7.9	12.2	12.2	12.2
Current trade assets	66.4	76.3	77.2	114.4	115.1	100.6
Inventory	4.8	6.3	7.3	29.2	12.9	11.9
Net trade receivables	31.5	42.8	46.2	62.9	61.7	55.2
Other receivables	2.5	5.4	0.2	0.3	0.3	0.3
ST investments	8.5	14.2	16.1	1.2	1.2	1.2
Cash	19.1	7.6	7.5	20.7	39.0	32.0
Assets	239.1	282.3	337.9	420.4	427.7	414.0
Shareholders' funds	130.5	143.3	155.8	181.0	211.6	227.4
Liabilities	108.6	139.1	182.1	239.4	216.1	186.6
LT liabilities	51.1	84.8	116.5	130.9	120.4	95.8
Interest bearing debt	11.1	19.2	25.2	37.5	37.5	37.5
Bonds	10.0	34.8	34.9	30.0	20.0	0.0
Leasing	1.7	1.9	28.4	30.2	30.2	30.2
Provisions, other	28.4	28.9	27.9	33.2	32.7	28.0
ST liabilities	57.5	54.3	65.6	108.5	95.7	90.8
Interest bearing debt	13.3	5.7	16.1	21.1	21.1	21.1
Bonds	10.2	0.8	0.8	5.8	5.8	5.8
Leasing	0.7	1.1	8.3	9.8	9.8	9.8
Provisions, other	9.6	22.4	9.4	21.9	14.8	13.6
Trading liabilities	23.7	24.3	31.0	49.9	44.1	40.5
Shareholders equity and liabilities	239.1	282.3	337.9	420.4	427.7	414.0
Ratios:						
Debt/Equity	0.4	0.4	0.7	0.7	0.6	0.5
Net WC / Total assets	0.1	0.1	0.1	0.1	0.1	0.1
Current ratio	1.2	1.4	1.2	1.1	1.2	1.1
Quick ratio	1.1	1.3	1.1	0.8	1.1	1.0
Sales / Total assets	0.7	0.7	0.7	0.8	0.7	0.7
Sales / Net WC	12.6	9.1	9.0	9.9	8.6	9.9
Inventory turnover (days)	17	17	16	26	35	22
Average receivable turnover (days)	69	80	77	62	72	76
Average accounts payable period (days)	73	72	65	58	77	76
Cash conversion cycle (days)	14	24	28	30	30	22
ROA	8.6%	9.0%	7.4%	9.1%	10.7%	8.4%
ROE	16.0%	17.1%	15.3%	20.4%	23.1%	16.1%

Source: Company, DM BOŚ SA estimates



Fig. 11. Voxel; Income statement

(PLN m)	2017	2018	2019	2020E	2021E	2022E
Sales	152.2	170.4	211.7	320.6	314.0	281.3
Costs of sales	-110.5	-122.1	-156.0	-253.4	-221.9	-203.9
Gross profit on sales	41.7	48.3	55.7	67.2	92.1	77.4
SG&A costs	-18.8	-19.1	-22.1	-26.2	-32.2	-28.9
Profit on sales	22.9	29.3	33.6	41.0	59.9	48.6
Result on other operating activities	3.0	1.7	0.7	10.5	0.7	0.1
EBITDA	39.1	45.3	57.2	85.7	94.7	84.2
Adj. EBITDA	39.1	44.2	57.7	76.5	94.7	84.2
EBIT	25.8	31.0	34.3	51.6	60.6	48.7
Adj. EBIT	25.8	29.9	34.8	42.3	60.6	48.7
Financial income	0.3	0.7	0.4	0.5	0.5	0.6
Financial costs	-2.8	-3.1	-6.3	-6.5	-6.1	-5.2
Profit from associates	0.0	0.5	0.0	0.0	1.5	0.0
Pre-tax profit	23.3	29.1	28.5	45.6	56.5	44.1
Income tax	-3.5	-5.7	-5.5	-10.8	-10.7	-8.4
Minorities	0.0	0.0	0.0	0.4	0.4	0.5
Net profit	19.8	23.4	22.9	34.3	45.3	35.2
Adj NP	19.8	22.4	24.2	27.5	45.3	35.2
Margins:						
EBITDA	25.7%	26.6%	27.0%	26.7%	30.1%	29.9%
Adj EBITDA	25.7%	25.9%	27.3%	23.8%	30.1%	29.9%
EBIT	17.0%	18.2%	16.2%	16.1%	19.3%	17.3%
Adj EBIT	17.0%	17.5%	16.5%	13.2%	19.3%	17.3%
Pre-tax profit	15.3%	17.1%	13.4%	14.2%	18.0%	15.7%
NP	13.0%	13.7%	10.8%	10.7%	14.4%	12.5%
Adj NP	13.0%	13.1%	11.4%	8.6%	14.4%	12.5%
Nominal growth:						
Sales	26.1%	12.0%	24.2%	51.5%	-2.0%	-10.4%
EBITDA	33.8%	15.8%	26.3%	49.7%	10.5%	-11.0%
Adj EBITDA	33.8%	12.9%	30.7%	32.5%	23.8%	-11.0%
EBIT	54.7%	20.0%	10.7%	50.2%	17.6%	-19.8%
Adj EBIT	54.7%	15.6%	16.6%	21.6%	43.2%	-19.8%
Pre-tax profit	57.9%	24.7%	-2.3%	60.1%	24.0%	-22.0%
NP	80.0%	18.0%	-1.9%	49.7%	32.0%	-22.2%
Adj NP	80.0%	13.0%	8.3%	13.4%	65.0%	-22.2%

Source: Company, DM BOŚ SA estimates

Fig. 12. Voxel; Cash flow

(PLN m)	2017	2018	2019	2020E	2021E	2022E
Operating cash flow	35.3	30.3	49.2	59.5	89.7	73.9
Pre-tax income	23.3	29.1	28.5	45.6	56.5	44.1
Depreciation	13.3	14.3	22.9	34.1	34.0	35.6
Change in working capital	-0.1	-11.3	0.5	-19.9	11.8	3.9
Other	-1.2	-1.9	-2.6	-0.3	-12.7	-9.7
Net funds from investing activities	-6.8	-29.2	-42.3	-37.2	-29.3	-24.9
Capital expenditures	-5.8	-29.2	-37.8	-37.4	-29.9	-25.5
Other	-1.0	0.0	-4.5	0.2	0.5	0.6
Net funds from financial activities	-14.1	-12.5	-7.1	-9.1	-42.1	-56.0
Income from shares issue	0.0	0.0	0.0	0.0	0.0	0.0
Net change in debt	-5.3	1.0	15.3	17.3	-10.0	-20.0
Dividends paid	-5.8	-10.5	-10.4	-9.6	-15.1	-19.9
Other	-2.9	-3.1	-12.0	-16.8	-17.0	-16.0
Change in cash	14.4	-11.5	-0.1	13.3	18.3	-7.0

Source: Company, DM BOŚ SA estimates

Risk factors	 Drop of public spending on healthcare (high exposure to NFZ) The decline in medical services pricing, in particular, CT, MRI, PET-CT treatments Change in the State's policy regarding private medical contractors Changes in the Company's contracts with NFZ (the majority secured to 2023/2024) Changes in legislation regarding the funding of hospitals/treatments The decline in the society's affluence (FFS and commercial clients contribute up to 20% of Voxel's revenues) New innovative methods of cancer diagnostics/treatment Medical errors - reputational risk Low and deteriorating availability of radiologists Loss/low labor supply Salary pressure (in particular of medical and IT staff) Oversized investments Lagging behind the technological progress in diagnostics
Catalysts	 Aging society The number of diagnostic imaging treatments below the standards in developed countries Change of PET funding in hospital treatments Medical services pricing increase Development of the market of private medical services Improvement of the treatment mix (towards more advanced) New medical services (such as micro-invasive treatments, fusion biopsy, radiofrequency liver ablation, TI, BI, BMN) Development of a profitable segment of pharmaceutical research (clinical trials) Organic growth, new centers (high barriers to entry) Acquisitions – economies of scale Cooperation with Warsaw University; new radio tracers Consolidation of the sector: potential acquisition target

- Consolidation of the sector; potential acquisition target
 Al development and new algorithms for test descriptions
- 14. IT software development for cloud diagnostics
- 15. New business lines (SARS-CoV-2 tests, swabs)

BASIC DEFINITIONS

A/R turnover (in days) = 365/(sales/average A/R)) Inventory turnover (in days) = 365/(COGS/average inventory)) A/P turnover (in days) = 365/(COGS/average A/P)) Current ratio = ((current assets - ST deferred assets)/current liabilities) Quick ratio = ((current assets - ST deferred assets - inventory)/current liabilities) Interest coverage = (pre-tax profit before extraordinary items + interest payable/interest payable) Gross margin = gross profit on sales/sales EBITDA margin = EBITDA/sales EBIT margin = EBIT/sales Pre-tax margin = pre-tax profit/sales Net margin = net profit/sales ROE = net profit/average equity ROA = (net income + interest payable)/average assets EV = market capitalization + interest bearing debt - cash and equivalents EPS = net profit/ no. of shares outstanding CE = net profit + depreciation Dividend yield (gross) = pre-tax DPS/stock market price Cash sales = accrual sales corrected for the change in A/R Cash operating expenses = 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 by an alteration expires and four directly preceding sessions and the average of the benchmark's closing values to the day the recommendation expires and four directly preceding sessions.

Distribution of DM	/ BOŚ's current reco	ommendations			
	Buy	Hold	Sell	Suspended	Under revision
Numbers	39	30	5	9	0
Percentage	47%	36%	6%	11%	0%

Distribution of DM BOS's current recommendations for the companies which DM BOS has supplied

with material mvest	ment services with	In the last 12 mon	113		
	Buy	Hold	Sell	Suspended	Under revision
Numbers	4	6	0	2	0
Percentage	33%	50%	0%	17%	0%

Distribution of DM BOS's current market relative recommended weightings										
	Overweight	Neutral	Underweight	Suspended	Under revision					
Numbers	34	30	10	9	0					
Percentage	41%	36%	12%	11%	0%					

Distribution of DM BOS's current market relative recommended weightings for the companies which

DM BOS has su	DM BOS has supplied with material investment services within the last 12 months										
	Overweight	Neutral	Underweight	Suspended	Under revision						
Numbers	2	6	2	2	0						
Percentage	17%	50%	17%	17%	0%						

Banks

Net Interest Margin (NIM) = net interest income/average assets

Non interest income = fees&commissions + result on financial operations (trading gains) + FX gains Interest Spread = (interest income/average interest earning assets)/ (interest cost/average interest bearing liabilities) Cost/Income = (general costs + depreciation)/ (profit on banking activity + other net operating income) ROE = net profit/average ageuity ROA = net income/average assets Non performing loans (NPL) = loans in 'basket 3' category NPL coverage ratio = loan loss provisions/NPL

Net provision charge = provisions created - 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 is 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)	
Voxel											
Sylwia Jaśkiewicz	Buy	-	21.07.2019	-	22.07.2019	25.06.2020	10%	32%	28.00	35.10	-
Sylwia Jaśkiewicz	-	\rightarrow	-	30.07.2019	31.07.2019	-	-	-	29.60	35.10	-
Sylwia Jaśkiewicz	-	\rightarrow	-	18.08.2019	19.08.2019	-	-	-	29.50	34.10	↓
Sylwia Jaśkiewicz	-	\rightarrow	-	21.08.2019	22.08.2019	-	-	-	30.20	34.10	-
Sylwia Jaśkiewicz	-	\rightarrow	-	01.09.2019	02.09.2019	-	-	-	30.90	34.10	-
Sylwia Jaśkiewicz	-	\rightarrow	-	10.09.2019	11.09.2019	-	-	-	32.00	35.70	1
Sylwia Jaśkiewicz	-	\rightarrow	-	13.10.2019	14.10.2019	-	-	-	31.50	35.70	_
Sylwia Jaśkiewicz	-	\rightarrow	-	24.10.2019	25.10.2019	-	-	-	31.00	35.70	-
Sylwia Jaśkiewicz	-	\rightarrow	-	17.11.2019	18.11.2019	-	-	-	32.50	35.70	_
Sylwia Jaśkiewicz	-	\rightarrow	-	25.11.2019	26.11.2019	-	-	-	34.00	35.70	_
Sylwia Jaśkiewicz	-	\rightarrow	-	04.12.2019	05.12.2019	-	-	-	32.40	38.40	1
Sylwia Jaśkiewicz	-	\rightarrow	-	08.12.2019	09.12.2019	-	-	-	31.50	38.40	_
Sylwia Jaśkiewicz	-	\rightarrow	-	09.01.2020	10.01.2020	-	-	-	32.70	38.40	_
Sylwia Jaśkiewicz	-	\rightarrow	-	02.02.2020	03.02.2020	-	-	-	31.20	39.50	1
Sylwia Jaśkiewicz	-	\rightarrow	-	04.02.2020	05.02.2020	-	-	-	32.20	39.50	_
Sylwia Jaśkiewicz	-	\rightarrow	-	06.02.2020	07.02.2020	-	-	-	32.30	39.50	_
ylwia Jaśkiewicz	-	\rightarrow	-	03.03.2020	04.03.2020	-	-	-	31.00	39.50	-
Sylwia Jaśkiewicz	-	\rightarrow	-	30.03.2020	31.03.2020	-	-	-	26.50	39.50	-
Sylwia Jaśkiewicz	-	\rightarrow	-	14.04.2020	15.04.2020	-	-	-	27.00	34.00	1
Sylwia Jaśkiewicz	-	\rightarrow	-	22.04.2020	23.04.2020	-	-	-	28.10	34.00	-
Sylwia Jaśkiewicz	-	\rightarrow	-	19.05.2020	20.05.2020	-	-	-	27.30	34.00	_
Sylwia Jaśkiewicz	-	\rightarrow	-	15.06.2020	16.06.2020	-	-	-	28.60	34.00	-
Sylwia Jaśkiewicz	Hold	\downarrow	25.06.2020	-	26.06.2020	29.07.2020	29%	26%	29.80	34.00	_
Sylwia Jaśkiewicz	-	\rightarrow	-	13.07.2020	14.07.2020	-	-	-	30.60	34.00	_
Sylwia Jaśkiewicz	Buy	Ŷ	29.07.2020	-	30.07.2020	Not later than 29.07.2021	17%	6%	38.50	43.00	1
Sylwia Jaśkiewicz	-	\rightarrow	-	23.08.2020	24.08.2020	-	-	-	44.80	50.40	1
ylwia Jaśkiewicz	-	\rightarrow	-	01.09.2020	02.09.2020	-	-	-	39.50	50.40	_
Sylwia Jaśkiewicz	-	\rightarrow	-	08.10.2020	09.10.2020	-	-	-	43.40	50.40	-
Sylwia Jaśkiewicz	-	\rightarrow	-	08.11.2020	09.11.2020	-	-	-	44.70	50.40	_
Sylwia Jaśkiewicz	-	\rightarrow	-	11.11.2020	12.11.2020	-	-	-	42.40	52.30	1
ylwia Jaśkiewicz	-	\rightarrow	-	22.11.2020	23.11.2020	-	-	-	44.40	52.30	_
ylwia Jaśkiewicz	-	\rightarrow	-	06.12.2020	07.12.2020	-	-	-	40.80	54.70	1
ylwia Jaśkiewicz	-	\rightarrow	-	05.01.2021	05.01.2021	-	-	-	41.30	54.70	-
ylwia Jaśkiewicz	-	\rightarrow	-	28.01.2021	29.01.2021	-	-	-	45.10	54.70	_
Sylwia Jaśkiewicz	-	\rightarrow	-	28.02.2021	01.03.2021	-	-	-	44.50	54.70	_
Sylwia Jaśkiewicz	-	\rightarrow	-	03.03.2021	04.03.2021		-		45.20	54.70	_

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

Market-relative recommendation tracker

Analyst	Relative Recommendation	n	Report date	Reiteration date	Distribution date	Expiry date	Price at issue/ reiteration*	Relative performance
Voxel								
Sylwia Jaśkiewicz	Overweight	-	21.07.2019	-	22.07.2019	25.06.2020	28.00	32%
Sylwia Jaśkiewicz	-	\rightarrow	-	30.07.2019	31.07.2019	-	29.60	-
Sylwia Jaśkiewicz	-	\rightarrow	-	18.08.2019	19.08.2019	-	29.50	-
Sylwia Jaśkiewicz	-	\rightarrow	-	21.08.2019	22.08.2019	-	30.20	-
Sylwia Jaśkiewicz	-	\rightarrow	-	01.09.2019	02.09.2019	-	30.90	-
Sylwia Jaśkiewicz	-	\rightarrow	-	10.09.2019	11.09.2019	-	32.00	-
Sylwia Jaśkiewicz	-	\rightarrow	-	13.10.2019	14.10.2019	-	31.50	-
Sylwia Jaśkiewicz	-	\rightarrow	-	24.10.2019	25.10.2019	-	31.00	-
Sylwia Jaśkiewicz	-	\rightarrow	-	17.11.2019	18.11.2019	-	32.50	-
Sylwia Jaśkiewicz	-	\rightarrow	-	25.11.2019	26.11.2019	-	34.00	-
Sylwia Jaśkiewicz	-	\rightarrow	-	04.12.2019	05.12.2019	-	32.40	-
Sylwia Jaśkiewicz	-	\rightarrow	-	08.12.2019	09.12.2019	-	31.50	-
Sylwia Jaśkiewicz	-	\rightarrow	-	09.01.2020	10.01.2020	-	32.70	-
Sylwia Jaśkiewicz	-	\rightarrow	-	02.02.2020	03.02.2020	-	31.20	-
Sylwia Jaśkiewicz	-	\rightarrow	-	04.02.2020	05.02.2020	-	32.20	-
Sylwia Jaśkiewicz	-	\rightarrow	-	06.02.2020	07.02.2020	-	32.30	-
Sylwia Jaśkiewicz	-	\rightarrow	-	03.03.2020	04.03.2020	-	31.00	-
Sylwia Jaśkiewicz	-	\rightarrow	-	30.03.2020	31.03.2020	-	26.50	-
Sylwia Jaśkiewicz	-	\rightarrow	-	14.04.2020	15.04.2020	-	27.00	-
Sylwia Jaśkiewicz	-	\rightarrow	-	22.04.2020	23.04.2020	-	28.10	-
Sylwia Jaśkiewicz	-	\rightarrow	-	19.05.2020	20.05.2020	-	27.30	-
Sylwia Jaśkiewicz	-	\rightarrow	-	15.06.2020	16.06.2020	-	28.60	-
Sylwia Jaśkiewicz	Neutral	\downarrow	25.06.2020	-	26.06.2020	29.07.2020	29.80	26%
Sylwia Jaśkiewicz	-	\rightarrow	-	13.07.2020	14.07.2020	-	30.60	-
Sylwia Jaśkiewicz	Overweight	\uparrow	29.07.2020	-	30.07.2020	Not later than 29.07.2021	38.50	6%
Sylwia Jaśkiewicz	-	\rightarrow	-	23.08.2020	24.08.2020	-	44.80	-
Sylwia Jaśkiewicz	-	\rightarrow	-	01.09.2020	02.09.2020	-	39.50	-
Sylwia Jaśkiewicz	-	\rightarrow	-	08.10.2020	09.10.2020	-	43.40	-
Sylwia Jaśkiewicz	-	\rightarrow	-	08.11.2020	09.11.2020	-	44.70	-
Sylwia Jaśkiewicz	-	\rightarrow	-	11.11.2020	12.11.2020	-	42.40	-
Sylwia Jaśkiewicz	-	\rightarrow	-	22.11.2020	23.11.2020	-	44.40	-
Sylwia Jaśkiewicz	-	\rightarrow	-	06.12.2020	07.12.2020	-	40.80	-
Sylwia Jaśkiewicz	-	\rightarrow	-	05.01.2021	05.01.2021	-	41.30	-
Sylwia Jaśkiewicz	-	\rightarrow	-	28.01.2021	29.01.2021	-	45.10	-
Sylwia Jaśkiewicz	-	\rightarrow	-	28.02.2021	01.03.2021	-	44.50	-
Sylwia Jaśkiewicz	-	\rightarrow	-	03.03.2021	04.03.2021		45.20	-

* 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 Pilot Program 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 4, 2020 at 7.10 a.m. The report was distributed on March 4, 2020 at 7.20 a.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.

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).

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

Research

Sobiesław Pająk, CFA (Equity strategy, TMT) tel.: +48 (22) 504 32 72 s.pajak@bossa.pl

Sylwia Jaśkiewicz, CFA (Construction materials, Consumer staples & discretionary, Health care) tel.: +48 (22) 504 33 75 s.jaskiewicz@bossa.pl

Tomasz Rodak, CFA (Consumer discretionary, Video games) tel.: +48 22 504 33 23 t.rodak@bossa.pl

> *Łukasz Prokopiuk, CFA* (Chemicals, Mining, Mining – machinery, Oil & gas) tel.: +48 (22) 504 32 59 I.prokopiuk@bossa.pl

Michał Sobolewski, CFA, FRM (Financials) tel.: +48 (22) 504 33 06 m.sobolewski@bossa.pl

Jakub Viscardi (Telco, Consumer staples & discretionary, IT – hardware distribution, Utilities) tel.: +48 (22) 504 32 58 j.viscardi@bossa.pl

> Maciej Wewiórski (Residential construction, Construction, Real estate) tel.: +48 (22) 504 33 07 m.wewiorski@bossa.pl

> > *Mikołaj Stępień* Associate

> > > Michał Zamel Associate

Copyright © 2020 by DM BOS 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

DM BOS 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#voxel

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#voxel. 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 BOS 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.