JSW

Reuters: JSW.WA Bloomberg: JSW PW

Santander Biuro Maklerskie

CEE Equity Research

Coal Mining, Poland

21 July 2023 08:05 CET

Worst-case scenario in the making

Underperform maintained, TP cut to PLN15

At JSW, the government works on solidarity tax (PLN2-2.8bn negative cash one-off in 2023E), and employees persuaded management for PLN230mn one-off bonus, jointly totaling +44% of company's Market Cap. Also, the company did not pay a grosz dividend out of all-time high 2022 profits, and as we expect 1) heavy tax one-off in 2023E and 2) cash burn depleting net cash below Rainy Day's PLN5bn, we assume the opportuning window of JSW dividend(s) is gone forever. Globally, the Chinese economy seems free-falling, fooling investors every second month with fake hopes of bolstering internal demand, and zloty strength remains disruptive to JSW results. Moreover, Australia expects its metcoal exports expanding 18mt (or 11%) in 2024/25 vs 2022/23 (several new mines' opening), which depresses its Jun2025 metcoal price estimates to USD193/t. Summarizing the news flow, JSW's dividend story is gone with the wind, just as PLN2.2-3.0bn in 2023E one-off cash payments, and we expect the company has turned cash-burner, as official high capex guidance will be contrasted with 3Q23E/4Q23E/1Q24E EBITDAs falling to respectively PLN0.9bn, PLN0.7bn and PLN0.3bn, we calculate. With comparative valuation halving to PLN48, our TP falls 52% to PLN15, warranting Underperform recommendation.

Dividend / solidarity tax / one-off bonus… in last several weeks we could observe strong value-destructive news flow from JSW. First, on June 16 the AGM decided on DPS at nil, regardless of PLN9bn cash pile at hand. Furthermore, in early July government promised to introduce solidarity tax soon-ish, which may represent PLN2.3-2.8bn cash outflow (PLN19-24 a share, or 44-56% of company's Market cap). Also, the management approved one-off bonus to employees at PLN230mn, or 5% of Market Cap.

2Q2023 KPIs / preview. 2Q2023E KPIs come in disappointing at coal production and sales, while coke segment remains solid. JSW's coking coal / coke discounts to benchmarks narrowed substantially vs 1Q2023, coming in supportive of our 2Q2023E EBITDA forecasts (presently at PLN1.68bn, down 47% y/y). We expect JSW will burn some PLN0.5bn cash in 2Q2023E. Still, inclusion of one-off bonus and /or solidarity tax represent an unknown yet, both potentially highly detrimental to the reported EBITDA / bottom line / cash burn (we assume bonus might be included in 2Q23, and solidarity tax in 3Q23 results).

Negative Global Outlook. The world's macro outlook remains gloomy, just to mention the Chinese multi-quarter set of weak data, the US growth faltering, and weak industrial PMI readings in Europe. Moreover, the Australian Chief Economist expects country's metcoal exports growing 18mt in 2024/25 vs 2022/23 as several new mines open. He also expects metcoal prices falling to around USD200/t by 2025 and to USD193/t in Jul2025, as supply conditions are improving.

Risks to our call. Geology, mining volumes and USDPLN represent the key down/up-side risks to JSW. The recovery of the Chinese economy or the EU-subsidized rebound in the steel segment would pose an upside risk, we believe, just as the remedied global housing crunch or cancellation of solidarity tax. The re-opening of the borders of Mongolia, the booming Australian exports or the initiation of China-Russia trading would all pose downside risks to JSW.

Forecasts, valuation, recommendation. Weak-ish mining volumes, rallying opex, strengthening zloty and sliding coking coal prices all trigger substantial cut to our 2023/24E forecasts, while volume upped to 14mt stabilizes annual EBITDA at PNL1.3bn in 2025E. We keep JSW's DCF valuation at PLN1 (assuming PLN9.2bn external support required), but 2023E solidarity tax and employee bonus (totaling +44% of Market Cap) halve JSW's comparative valuation to PLN48. The blended TP slides 52% to PLN15, and the substantial share price downside warrants an unchanged Underperform recommendation.

JSW: Financial summary (year to December)

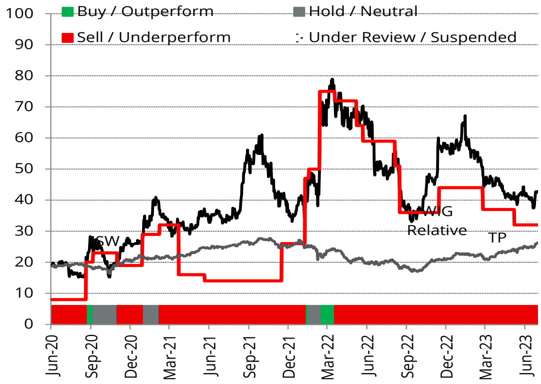
PLNmn	2020	2021	2022	2023E	2024E	2025E
Sales	6,989	10,629	20,199	16,039	13,560	13,654
EBITDA	-638	2,483	10,564	5,235	1,318	1,314
EBIT	-1,743	1,263	9,336	3,709	-308	-412
Net profit	-1,537	904	7,561	625	-370	-468
P/E (x)	-1.4	5.0	0.8	8.2	-13.9	-11.0
EV/EBITDA* (x)	-8.6	3.2	0.1	0.5	3.3	4.4
DY	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FCF Yield	-114.8%	-2.2%	133.5%	-41.4%	-37.6%	-26.6%

*Source: Company data, Santander Brokerage Poland estimates, * includes provisions*

Recommendation	Underperform
Target Price (Dec2024, PLN)	15
Price (PLN, 20 July 2022)	43.83
Market cap. (PLNmn)	5,146
Free float (%)	44.8
Number of shares (mn)	117.4

What has changed

- TP cut 52% to PLN15 from PLN32, recommendation Underperform maintained
- Weak-ish coal volumes but decent discount narrowing in 2Q2023 should allow for PLN1.7bn EBITDA in 2Q2023E…
- …but strong zloty and low coking coal benchmarks should depress JSW's 3Q23E/4Q23E/1Q24E EBITDAs to PLN0.9bn / PLN0.7bn / PLN0.3bn, we calculate
- Last month brought very negative news flow internally, from dividend at nil, trough solidarity tax confirmation by the government and personnel bonus, the two latter likely eating up PLN2.2-3.0bn cash (+44% of JSW's Market Cap)
- External factors remain highly discouraging as well, from strong zloty, through Chinese macro's free-fall, to the Australian outlook for substantial increase in metcoal exports volumes
- Recovery at Chinese macro, weakening zloty, cancellation of solidarity tax, growing steel demand in the EU, and managed housing crunch pose key upsides to JSW. The delivery on official long-term volume guidance would provide decent upside as well, while coal volume-supportive El Nino, high supply of Mongolian coal, geology and Australian metcoal exports growth all posing downside risks



The chart measures performance against the WIG index.

Main shareholders	% of votes
State	55.2

Source: Company data

Company description

Europe's largest coking coal producer, also one of the largest European coke producers.

Analyst

Pawel Puchalski, CFA
Equity Analyst

+48 22 586 80 95 pawel.puchalski@santander.pl

Key Stories

2Q2022 KPIs, 2Q/3Q2023E Preview

2Q2023 KPIs weak-ish at coal production / sales, narrowing coal / coke price discounts save 2Q23E EBITDA

[separate Flash Note published on July 11, 2023]

Fig. 1. JSW: 2Q2023E results' preview (refined) *

PLNmn	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23E	y/y	q/q
Sales	2,179	2,579	3,873	4,931	5,972	5,146	4,149	4,851	**4,152**	*-30.5%*	*-14.4%*
EBITDA	**152**	**659**	**1,567**	**2,636**	**3,187**	**2,910**	**1,831**	**1,956**	**1,681**	***-47.3%***	***-14.0%***
EBITDA margin	*7.0%*	*25.5%*	*40.5%*	*53.5%*	*53.4%*	*56.5%*	*44.1%*	*40.3%*	***40.5%***	*-12.9*	*0.2*
EBIT	-151	358	1,249	2,309	2,890	2,608	1,530	1,575	**1,300**	*-55.0%*	*-17.4%*
EBIT margin	*-6.9%*	*13.9%*	*32.3%*	*46.8%*	*48.4%*	*50.7%*	*36.9%*	*32.5%*	***31.3%***	*-17.1*	*-1.1*
Net profit	-151	268	1,024	1,850	2,355	2,155	1,233	1,267	**1,056**	*-55.2%*	*-16.7%*
Net margin	*-6.9%*	*10.4%*	*26.4%*	*37.5%*	*39.4%*	*41.9%*	*29.7%*	*26.1%*	***25.4%***	*-14.0*	*-0.7*
EBITDA adjusted	**214**	**717**	**1,856**	**2,598**	**3,831**	**2,910**	**1,826**	**1,965**	**1,681**	***-24.4%***	***7.6%***

*Source: Company data, Santander Brokerage Poland estimates, * excluding hypothetical impacts of solidarity tax or bonus to employees*

Comment: Neutral. 2Q2023E KPIs come in disappointing at coal production and sales, while coke segment remains solid. JSW's coking coal / coke discounts to benchmarks narrowed substantially vs 1Q2023, coming in supportive of our 2Q2023E EBITDA forecasts (presently at PLN1.68bn, down 47% y/y). We expect JSW will burn some PLN0.5bn cash in 2Q2023E, and hypothetical inclusion of 2022's solidarity tax into 1H2023 would cut bottom line and cash position by PLN2.8bn, we calculate.

Weak coal volumes… JSW's 2Q2023 coal production fell 2% y/y and q/q to 3.32mt, the lowest quarterly coal production volume since the pandemics. Still, the volume of coking coal inched up q/q to 2.7mt in 2Q2023, with its share in total volume increasing to 81.3%. Working-day recalculation of 1H2023 volumes would imply FY2023E volume at 13.5mt (total coal) and 10.8mt (coking coal), respectively down 4% y/y and 2% y/y. Coke volumes were solid in 2Q2023, with production 10% higher q/q and sales 5% higher q/q. The volume of external coking coal sales slid 6% y/y and 15% q/q to 1.5mt in 2Q2023, the lowest volume since pandemics.

…but price discounts narrow substantially. JSW's realized prices' discounts narrowed substantially vs 1Q2023. The discount at coking coal improved 5pp q/q to -3%, and the discount at coke improved 13pp q/q to -5% in 2Q2023. These (and uniquely high coking coal 5-month benchmark) resulted in realized coking coal / coke prices respectively at PLN1.24k/t (1% higher q/q) and 1.70k/t (7% higher q/q). Realized thermal coal price slid 3% q/q to PLN725/t, with premium to PSCMI1 down 5pp q/q to 2% in 2Q2023.

2Q2023E Outlook (refined): Lowered discounts to support results. At our Flash Note on 2Q/3Q2023E Metals&Mining previews (published on Jun 30th, 2023), we presented JSW's 2Q23E EBITDA at PLN1.4bn. However, while actual coal production and sales come in weaker-than-expected in 2Q2023, strong cut to 1Q2023 discounts (coking coal +5pp q/q, coke +13pp q/q) should come in supportive to our 2Q2023E forecasts, we calculate. We expect JSW to post PLN1.68bn EBITDA in 2Q2023E, with bottom line remaining a notch above PLN1bn mark (probably for the last time). We believe some PLN1.9bn cash outflows (capex & PLN1.3bn tax due) short make the company burn cash in 2Q2023E. Additionally, the government made decision on (hypothetically PLN2.8bn) solidarity tax payable for 2022. If this entry is booked in 1H2023, it would reduce company's net cash to some PLN5bn only, with future quarterly results depressed by low coking coal price, strong zloty and booming opex.

Fig. 2. JSW: Operating performance – Volumes [*negatives in red*, *positives in green*]

Mt	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	y/y	q/q
Total coal production	3.45	3.34	3.57	3.77	3.40	3.43	3.47	3.38	**3.32**	*-2%*	*-2%*
Coking coal production	2.78	2.71	2.75	2.86	2.72	2.64	2.76	2.66	**2.70**	*-1%*	*2%*
Thermal coal production	0.67	0.63	0.82	0.91	0.68	0.80	0.71	0.72	**0.62**	*-9%*	*-14%*
Coke production	0.93	0.92	0.89	0.88	0.89	0.78	0.68	0.77	**0.85**	*-4%*	*10%*
Total coal sales	3.77	3.54	3.80	4.06	3.58	3.49	3.29	3.53	**3.13**	*-13%*	*-11%*
External coal sales	2.56	2.43	2.66	2.82	2.39	2.42	2.38	2.50	**1.99**	*-17%*	*-20%*
Incl. coking coal sales	1.86	1.66	1.63	1.68	1.59	1.58	1.60	1.77	**1.50**	*-6%*	*-15%*
Coke sales	0.87	0.85	0.88	0.95	0.80	0.70	0.75	0.84	**0.88**	*10%*	*5%*
Coking coal share	**80.7%**	**81.1%**	**77.0%**	**76.0%**	**80.0%**	**77.0%**	**79.5%**	**78.7%**	**81.3%**	***1.3***	***2.6***

Source: Company data, Santander Brokerage Poland estimates

Fig. 3. JSW: Operating performance – full-year volumes [*negatives in red*, *positives in green*]

Mt	FY17	FY18	FY19	FY20	FY21	FY22	FY23E*	y/y
Total coal production	14.5	15.0	14.8	14.4	13.8	14.1	**13.5**	*-4.1%*
Coking coal production	10.6	10.4	10.2	11.1	11.0	11.0	**10.8**	*-1.7%*
Thermal coal production	3.9	4.7	4.6	3.3	2.7	3.1	**2.7**	*-12.8%*
Coke production	3.5	3.6	3.2	3.3	3.7	3.2	**3.3**	*1.0%*
Total coal sales	14.3	14.8	13.8	14.0	14.9	14.4	**13.4**	*-7.0%*
External coal sales	10.1	10.4	9.7	9.5	10.3	10.0	**8.8**	*-12.1%*
incl. coking coal sales	5.9	6.0	5.8	6.3	6.9	6.5	**6.6**	*2.0%*
Coke sales	3.5	3.5	2.9	3.6	3.6	3.2	**3.4**	*6.8%*
Coking coal share	**73.1%**	**68.9%**	**69.2%**	**76.9%**	**80.1%**	**78.1%**	**80.0%**	***1.9***

Source: Company data, Santander Brokerage Poland estimates
** FY23E: production volumes based on 1H2023 volumes adjusted for full-year number of working days. Sales volumes based on assumed FY2023 production and reduction of JSW inventory to 50kt metcoal, 50kt thermal coal, 150kt coke*

Fig. 4. JSW: Operating performance – Prices [*negatives in red*, *positives in green*]

	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	y/y	q/q
Coking coal benchmark, 3M TSI [USD/t]	138	264	369	482	451	250	278	343	**244**	*-46%*	*-29%*
Coking coal benchmark, 5M TSI [USD/t]	124	170	311	390	487	362	264	303	**306**	*-37%*	*1%*
Coking coal realized price [PLN/t]	**421**	**611**	**1,081**	**1,366**	**1,924**	**1,560**	**1,203**	**1,222**	**1,235**	*-36%*	*1%*
Coking coal discount (vs 3M TSI)	-18.5%	-40.1%	-27.4%	-31.3%	-2.2%	32.6%	-7.1%	-19.0%	**21.2%**	*23.4*	*40.2*
Coking coal discount (vs 5M TSI)	-9.0%	-7.3%	-13.9%	-15.0%	-9.5%	-8.5%	-2.0%	-8.2%	**-3.4%**	***6.0***	***4.8***
Coke realized price [PLN/t]	**1,151**	**1,328**	**1,753**	**1,976**	**2,671**	**2,386**	**1,705**	**1,590**	**1,699**	***-36%***	***7%***
Thermal coal realized price [PLN/t]	220	221	232	308	301	581	639	746	**725**	***141%***	***-3%***

Source: Company data, Santander Brokerage Poland estimates

Fig. 5. JSW: Operating performance – Prices [*negatives in red*, *positives in green*]

	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	y/y
Coking coal benchmark, 3M TSI [USD/t]	210	207	177	124	224	365	**258**	***-6.0%***
Coking coal benchmark, 5M TSI [USD/t]					181	376	**255**	***-19.4%***
Coking coal realized price [PLN/t]	**656**	**658**	**634**	**440**	**632**	**1,513**	**1,083**	***-19.3%***
Coking coal discount (vs 3M TSI)	**-17.4%**	**-11.6%**	**-6.6%**	**-8.5%**	**-27.0%**	-7.1%	**0.5%**	*-11.8*
Coking coal discount (vs 5M TSI)					-9.4%	-9.8%	**1.4%**	*1.6*
Coke realized price [PLN/t]	**943**	**1,094**	**1,060**	**762**	**1,279**	**2,185**	**1,210**	***-27.2%***
Thermal coal realized price [PLN/t]	207	248	275	250	224	457	**735**	*63.3%*

Source: Company data, Santander Brokerage Poland estimates
FY2023E estimates based on 1H2023 data and 2H2023E forecasts relying on current USDPLN / coke / coking coal prices

Dividend / Solidarity Tax / Employee Bonus

[-] AGM decided on 2023 dividend at nil

[published as separate Flash Note on June 16, 2023]

Today JSW's AGM decided on company's 2023 dividend at nil. This comes in line with the management's official proposal, which was made due to PLN0.6bn outstanding loan from PFR (it would have to be repaid to allow for dividend payout).

Comment: Negative.

One could say that AGM decision comes in line with the management's official proposal, hence it should represent news at all. On the opposite, during the recent meetings with investors the management has been suggesting that dividend payment could be possible if that was the will of majority shareholder, (and that dividend payment would require repayment of preferential PFR loan at PLN0.6bn). Most importantly, the company reported all-time high 2022 results, with its net cash positon expanding to

PLN9.0bn at 1Q2023, equaling 170% of the company's Market Cap as of June 15, 2023. If the company did not pay dividend in such extremely supportive environment, we could imagine that in light of booming opex, capex, strengthening zloty and high uncertainty concerning commodities (all negative to JSW's short, mid, and long-term outlook), the likelihood of dividend payments declines substantially.

Additionally, following today's AGM decision, the issue of control over the cash at the company's Balance Sheet should become paramount to JSW's current and potential minority shareholders. If minority shareholders cannot take advantage of the company's FCF and cash generation at all, we believe that investors might come to the conclusion that JSW's entire net cash positon should not be taken into account in valuation process, and the hypothetical lack of 2023 windfall tax would remain of negligible importance to minority shareholder's future wealth.

If that were the case, JSW minority shareholders could be potentially exposed to company's high (and growing) unit MCC cost and official suggestions of three-year capex above PLN3.5bn p.a., substantially above original PLN2.4bn guidance. We also believe the company will be burning cash as of 2Q2023E onwards, clearly negative to the company's short-term outlook, with potentially elevated imminent risk of upcoming salary increase / one-off bonus claims by the trade unions.

[-] Solidarity tax to be based on 2022 profits

[excerpts from separate Flash Note published on July 07, 2023]

Today at 11:22 am CET the Polish government informed it plans to introduce solidarity tax for large coal mining enterprises. It would be calculated on the basis of 2022 profits, and the government refers to the EU's resolution 2022/1854, where the EU suggests that solidarity tax should be calculated as 33% of profits higher than 2018-2021 average net profits increased by 20%.

The above-mentioned regulations are to be approved in 3Q2023, no specific timing was presented.

Comment: Strong Negative to JSW. The solidarity tax is to be calculated on 2022 profits, which may come in very negative for JSW. JSW reported all-time high 2022 results (2022 net profit at PLN7.6bn, vs PLN0.4bn average in 2018-21). Hence, a 33% solidarity tax based on 2022 profits would imply PLN2.8bn for JSW (in line with management's suggestions, PLN23.8 a share).

[-] Government introduces 33% solidarity tax

[published at Santander's Equity Daily on July 11, 2023]

Last Friday the Polish government hinted it plans implementation of solidarity tax based on coal companies' 2022 profits. Yesterday after close the government decided

"Large Polish coal mining companies" (no names or minimum size specified) would pay a 33% tax from 2022 profits. The detailed calculation assumes the average profits in years 2018-21 increased by 20% are perceived acceptable (no extra tax), precisely in line with the EU's proposals.

The Polish government wants mining companies to finance low electricity prices for households, acc. to the official info. Solidarity tax is to be paid by entities delaying with production, processing or sales of coal.

The government suggests total income from solidarity tax could settle at PLN2bn in 2023, it also sees solidarity tax income at PLN1bn in 2024.

Comment: Expected (in light of previous government's statements), strong negative to JSW. Acc. to our calculations, JSW's solidarity tax may amount to PLN2.8bn (PLN23.8 a share).

[-] PLN230mn one-off bonus payable in July 2023

[published at Santander's Equity Daily on July 12, 2023]

Yesterday the company informed the management and trade unions agreed on one-off PLN230mn bonus to employees. The payments are different for underground miners (PLN11.5k), administration (PLN7.5k) and coal processing plant (PLN9.5k). This bonus is to be paid on July 21, 2023.

Comment: Negative. We were expecting that prior to the Polish Parliamentary elections JSW miners will persuade the management for some kind of one-off payments. Clear value-destruction for minority shareholder at PLN1.95 a share (5% vs yesterday's Market Cap).

[-] AGM decided on 2023 dividend at nil

[published as separate Flash Note on June 16, 2023]

Today JSW's AGM decided on company's 2023 dividend at nil. This comes in line with the management's official proposal, which was made due to PLN0.6bn outstanding loan from PFR (it would have to be repaid to allow for dividend payout).

Comment: Negative.

One could say that AGM decision comes in line with the management's official proposal, hence it should represent news at all. On the opposite, during the recent meetings with investors the management has been suggesting that dividend payment could be possible if that was the will of majority shareholder, (and that dividend payment would require repayment of preferential PFR loan at PLN0.6bn). Most importantly, the company reported all-time high 2022 results, with its net cash positon expanding to PLN9.0bn at 1Q2023, equaling 170% of the company's Market Cap as of June 15, 2023. If the company did not pay dividend in such extremely supportive environment, we could imagine that in light of booming opex, capex, strengthening zloty and high uncertainty concerning commodities (all negative to JSW's short, mid, and long-term outlook), the likelihood of dividend payments declines substantially.

Additionally, following today's AGM decision, the issue of control over the cash at the company's Balance Sheet should become paramount to JSW's current and potential minority shareholders. If minority shareholders cannot take advantage of the company's FCF and cash generation at all, we believe that investors might come to the conclusion that JSW's entire net cash positon should not be taken into account in valuation process, and the hypothetical lack of 2023 windfall tax would remain of negligible importance to minority shareholder's future wealth.

If that were the case, JSW minority shareholders could be potentially exposed to company's high (and growing) unit MCC cost and official suggestions of three-year capex above PLN3.5bn p.a., substantially above original PLN2.4bn guidance. We also believe the company will be burning cash as of 2Q2023E onwards, clearly negative to the company's short-term outlook, with potentially elevated imminent risk of upcoming salary increase / one-off bonus claims by the trade unions.

Mosaic Theory by SAN

JSW takes over Bogdanka, or Let's Have a Cake and Eat a Cake

[published as separate Flash Note on June 05, 2023]

In this Flash Note we present our mosaic theory of JSW taking over Bogdanka. So far there have been no official announcements (companies, or Ministries) supporting this thesis. Yet, we believe such scenario is not totally un-probable, and might be hypothetically orchestrated by the State that at the same time (1) controls miner with high net cash position (JSW) and (2) promises to finalize takeover of another miner (LWB). All calculations below are based on Santander's estimates for two companies, and calculations are based on share prices as of June 02, 2023.

- **JSW**. JSW's 1Q2023 net cash position stood at PLN9bn (PLN1.3bn cash taxes to be paid in 2Q2023, acc. to the management), and adjusted PLN7.7bn net cash represents 160% of the company's Market Cap. We believe that very high uncertainty with respect to future usage of this in-excess cash (except for company's PLN5bn rainy-day fund) represents one of key risk factors;
- **Bogdanka**. At the same time, the Polish State officially announced it would take over Bogdanka in 2H2023, which would represent substantial step in the process of coal-related operations' carve-out from the State-controlled utilities. Currently Enea holds 65% stake in Bogdanka. Company trades at 2023E EV/EBITDA ratio of 0.0x;

Assumptions:

- **Price**. JSW takes over 100% stake of Bogdanka at share price PLN60.56, equalling Enea's acquisition price adjusted for dividends paid out by LWB;
- **Stake**. For the sake of simplicity, in our calculations we assume JSW calls for a 100% stake of LWB. However, we cannot rule out that JSW could call only for the controlling 65% stake held by Enea. In theory, we believe it could be justified by JSW on legal ground, as it would represent an allocation of assets within the State Assets Ministry holdings.

Why it could work?

We believe such transaction might be orchestrated by the State that at the same time (1) controls miner with high net cash position (JSW) and (2) promises to finalize takeover of another miner (LWB).

We find that **accidentally the acquisition of LWB would let JSW deliver on its strategic promises.** Also, as LWB's net cash should settle at PLN1.6bn by year-end 2023E, **some PLN2bn spent on acquisition would imply actual mere PLN0.4bn reduction at JSW's net cash position,** the latter potentially supported by LWB's future EBITDAs / FCFs. **Such acquisition could be also used by JSW as an argument stalling any other hypothetical acquisition(s) of State-controlled entities, we believe.** Last but not least, **after such acquisition JSW would be substantially better off at unit MCC, electricity balance, or methane exposure, we conclude.**

Valuation implications. JSW's scale of operations (and costs) is substantially higher to Bogdanka's ones, and the same relates to hypothetical future origins of total EBITDAs, capex or FCFs. Hence, we would expect such transaction would not change grim outlook of Upper Silesia-domiciled (and suffering from geology, and very high opex/ capex) JSW. Also, please note that our DCF-based valuation of JSW implies that the company will require PLN11bn of external financing. In this light, acquisition of Bogdanka should only insubstantially lower the need for external financing. The only valuation upside could then potentially originate from comparative one (new JSW's EBITDA would settle at PLN4.5bn in 2024E, vs our estimate at PLN2bn in its current shape). However, both companies trade presently at EV/EBITDA very close to nil, which makes any upside at comparable valuation uncertain.

Investment actions. The hypothetical takeover of LWB could offer very limited upside to JSW, we calculate, except for short-term wins at net cash position, reported EBITDA and unit MCC. Hence, **we expect such transaction could come in supportive to JSW share price in the short-term only, with traders taking more advantage of it, than fundamental-relying investors**. In Bogdanka case, **we believe JSW could call off LWB's dividend policy (one of its valuation upside fundaments), hence we would suggest investors to answer to (purely hypothetical, at the moment) a call**.

Net Cash-Neutral Acquisition, Other (less appealing, valuation-wise) Acquisition Ideas Get Delayed? Bidding for a 100% stake at PLN59 a share, JSW would have spent PLN2bn on acquisition of LWB. However, LWB's own 2023E year-end net cash should settle at PLN1.6bn, hence acquisition of Bogdanka would effectively cost JSW only PLN0.4bn at Group's net cash position in year of transaction, while the cancelation of LWB's dividend policy would add to this company's cash generation. Additionally, the hypothetical takeover and implied necessary intra-group restructuring could be used by JSW as solid argument against any other (value-destructive, hypothetically) acquisitions of the Polish State-controlled entities;

Volumes. JSW guides for 16mt coal production in 2026, while so far geological force majeure accidents keep it struggling with 14mt threshold. The acquisition would expand total coal production volume to some 22-23mt;

Cash Cost Effectiveness. JSW's unit MCC should grow to PLN671/t in 2023E (65% higher vs 2020), while unit MCC of the Polish most cost-effective mine LWB should settle at PLN374/t (up 40% vs 2020). Hence, without any internal effort, we see JSW's acquisition of LWB would depress Group's unit MCC to PLN558/t, 17% below JSW's core MCC/t;

Energy. JSW plans to expand its own fleet of renewable/methane/gas units to some 50% of future internal electricity needs. Bogdanka's future 500MW PV project (~0.2TWh higher to LWB's own needs) would further lower JSW's electricity exposure;

Methane. Zero-methane pollution Bogdanka would be a perfect match to JSW's high-methane polluting operations. JSW's methane emission might be reduced to some 11t/1,000t coal, we estimate, which compares poorly to the EU's threshold at 5t/1,000t coal. The EU has agreed on calculation of methane pollution on Group level instead of separate mines, and following LWB takeover JSW Group's methane pollution would fall to 6.5t/1,000t coal;

Fig. 6. Coal production [mt]

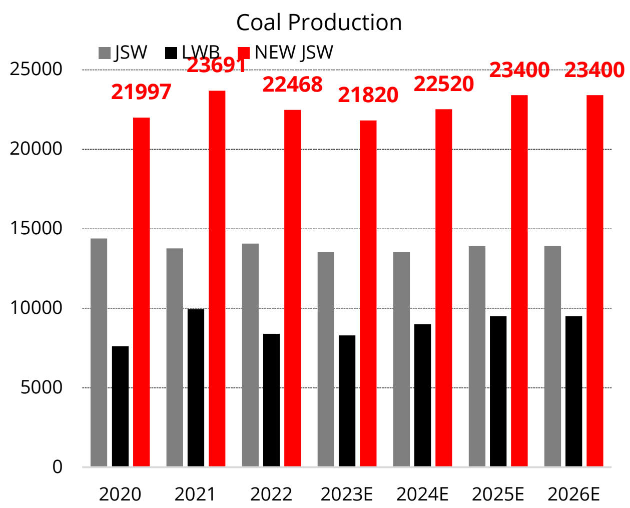
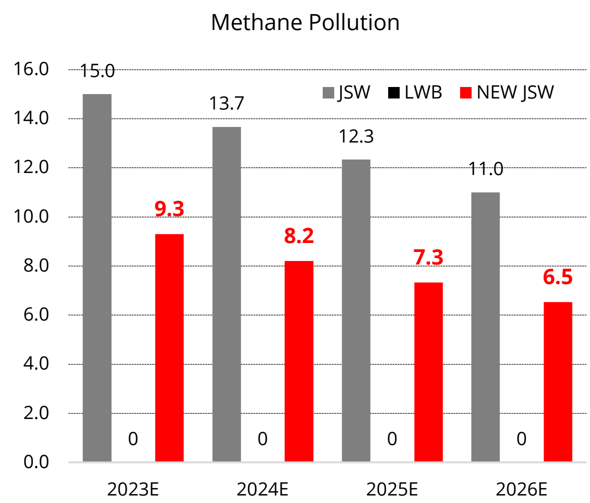


Fig. 7. Methane pollution [t / 1,000t coal]



Source: companies' data, Santander Brokerage Poland estimates

Fig. 8. Unit MCC [PLN/t]

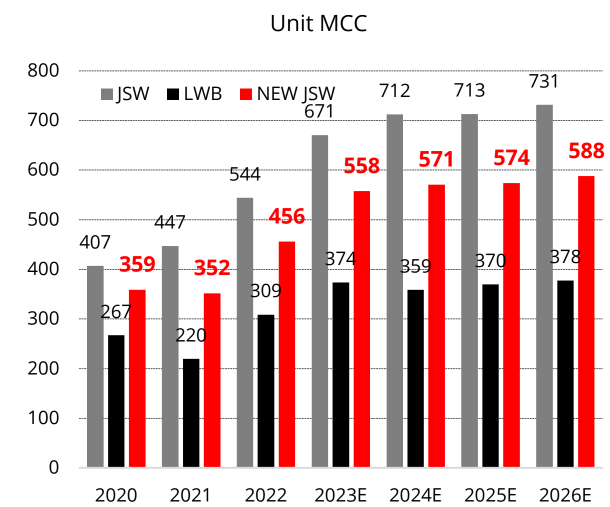
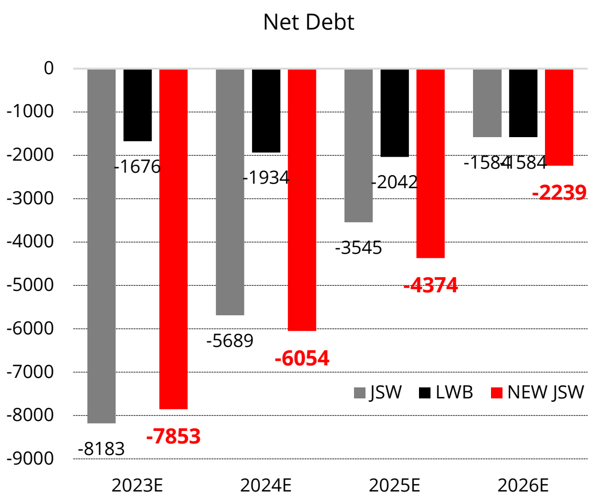


Fig. 9. Net Debt [PLNmn]



Source: companies' data, Santander Brokerage Poland estimates

Fig. 10. EBITDA [PLNmn]

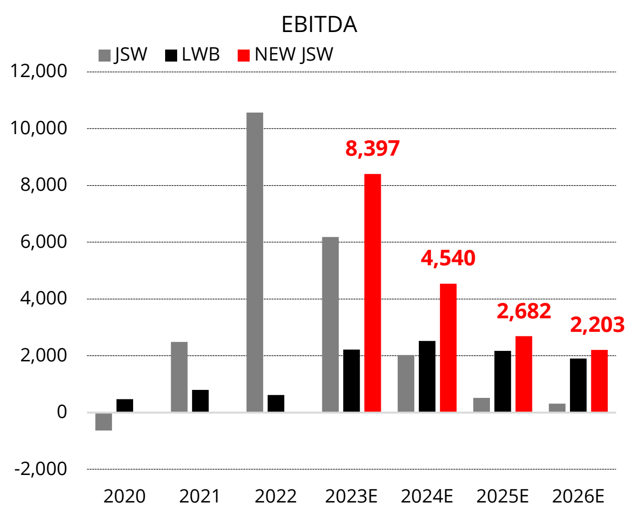
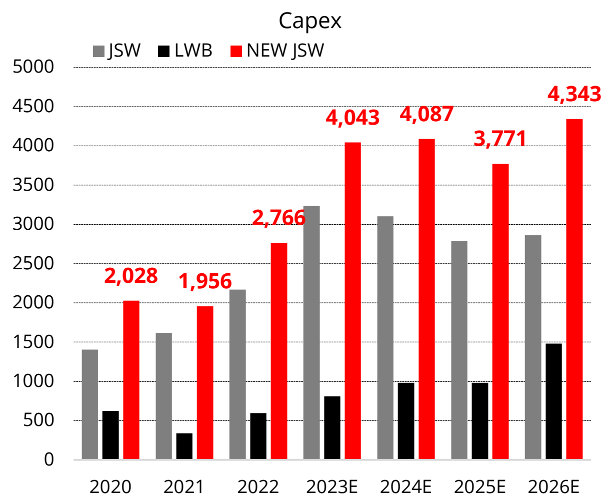


Fig. 11. Capex [PLNmn]



Source: companies' data, Santander Brokerage Poland estimates

Fig. 12. Free Cash Flow [PLNmn]

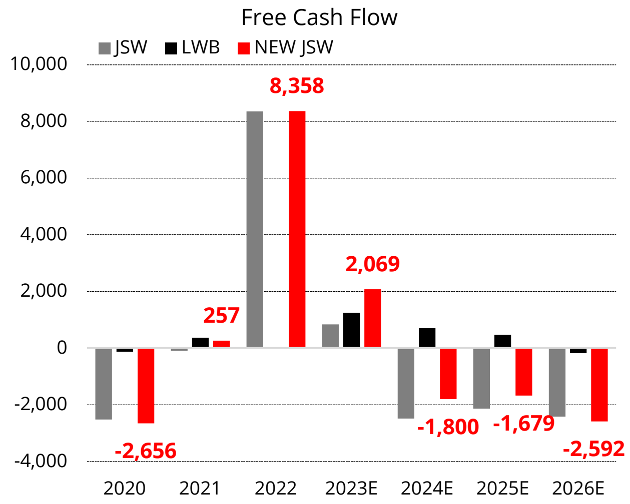
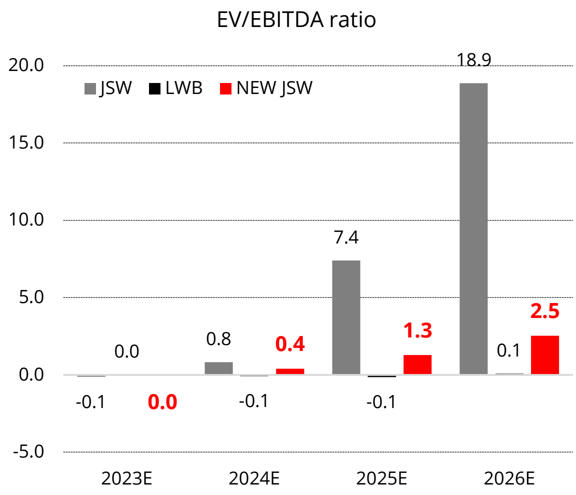


Fig. 13. EV/EBITDA ratio



Source: companies' data, Santander Brokerage Poland estimates

What could go wrong / deal-breakers (SAN estimates):

Trade Unions. Firstly, JSW has accumulated over PLN5bn in rainy-day fund, and its total net cash (after PLN1.3bn overdue tax payment in 2Q2023E) settles at PLN7.7bn presently (PLN248k per employee), while Bogdanka has got no rainy-day fund, and its total net cash settles at PLN0.6bn (PLN101k per employee). Additionally, in 2022 average monthly payment per employee settled at PLN15.4k in JSW (or PLN14.1k per month adjusted for one-off PLN0.5bn bonus), and at PLN11.9k in Bogdanka. We expect JSW unionists would dislike their rainy-day fund expanded into new employees who did not contribute to it. Additionally, we believe JSW employees' payroll settles 18% higher to Bogdanka average salary, which could 1) make new Group employees' asking for pay rise and 2) stalling old JSW employees' salary growth;

ESG Issues. JSW has always been very proud of its coking coal skew, underlining its importance in energy transformation process and/or its listing as critical raw material by the EU. Bogdanka is and will be pure-thermal coal for the next decade, and acquisition of Bogdanka would throw JSW into ESG-doubtful area for good. Aside of weakened ESG rating, it could substantially limit JSW's access to external financing, we assume;

Thermal Coal Outlook. As insiders, JSW management might potentially have its own opinion on long-term outlook on the Polish thermal coal mining in general, and on Bogdanka in detail. If this opinion was substantially less optimistic than the one presented by the Bogdanka's management, it would make JSW management unwilling to take over LWB's hypothetical future problems.

Fig. 14. JSW: Hypothetical post-transaction financial summary**

PLNmn	2020	2021	2022	2023E	2024E	2025E
Sales	6,989	10,629	20,199	22,800	20,038	18,285
EBITDA	-638	2,483	10,564	8,397	4,540	2,682
EBIT	-1,743	1,263	9,336	6,682	2,699	705
Net profit	-1,537	904	7,561	5,225	360	-61
P/E (x)	Neg.	5.0	0.8	0.9	13.5	-79.9
EV/EBITDA* (x)	-8.6	3.2	0.1	0.0	0.4	1.3
DY	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FCF Yield	-114.8%	-2.2%	133.5%	42.6%	-37.0%	-34.6%

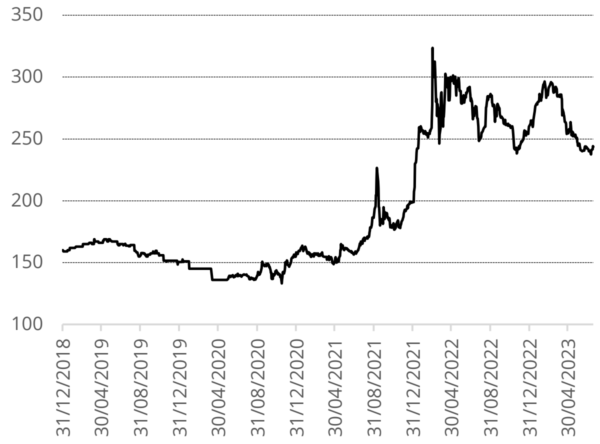
*Source: Company Data, Santander Brokerage Poland estimates, 2020-22 valuation ratios based on historical average prices, * includes provisions, ** takeover of a 100% stake in Bogdanka assumed on January 01, 2023*

Other stories

Fig. 15. August 2023 coking coal contract [USD/t]

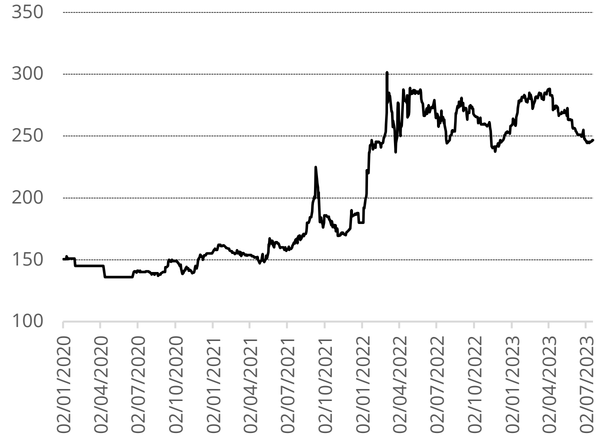
Source: Bloomberg

Fig. 16. November 2023 coking coal contract [USD/t]



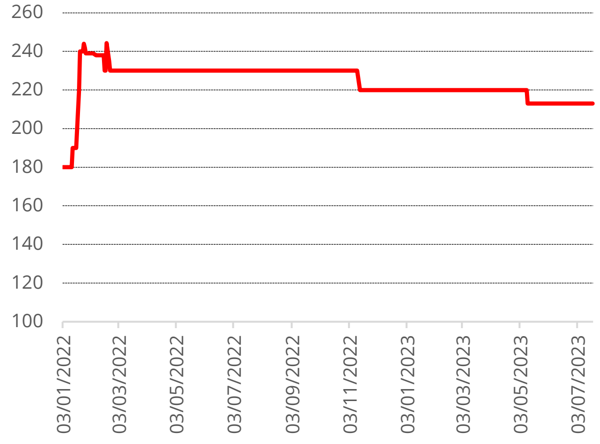
Source: Bloomberg

Fig. 17. November 2024 coking coal contract [USD/t]



Source: Bloomberg

Fig. 18. January 2026 coking coal contract [USD/t]

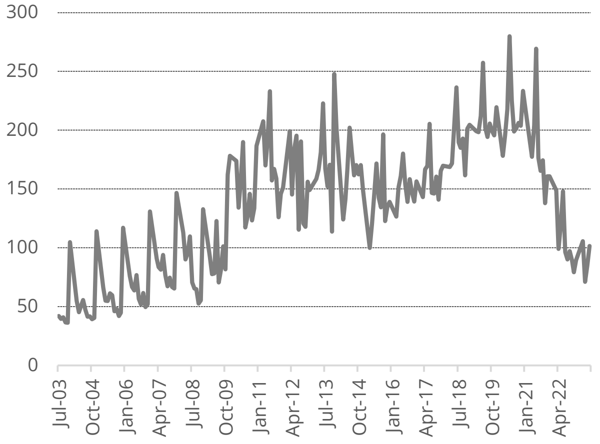


Source: Bloomberg

Fig. 19. Active coke contract [USD/t]

Source: Bloomberg

Fig. 20. Chinese floor space of houses newly started [mn sqm]

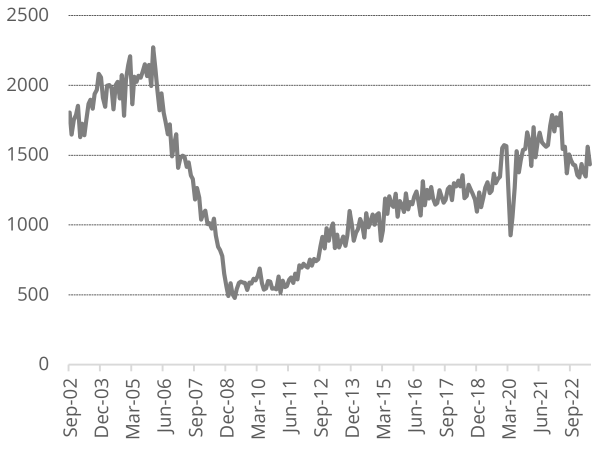


Source: Bloomberg

Fig. 21. US new one family houses sold annual total [k]

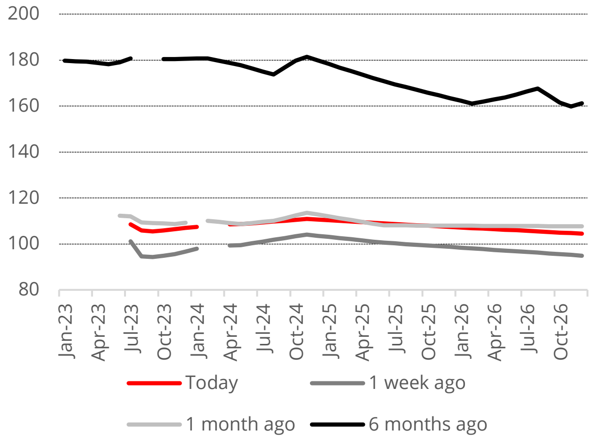
Source: Bloomberg

Fig. 22. US new privately owned housing units started [k]



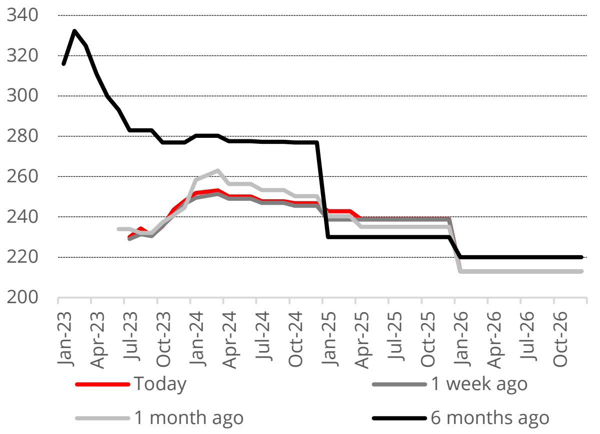
Source: Bloomberg

Fig. 23. Thermal coal – changes in forward prices [USD/t]



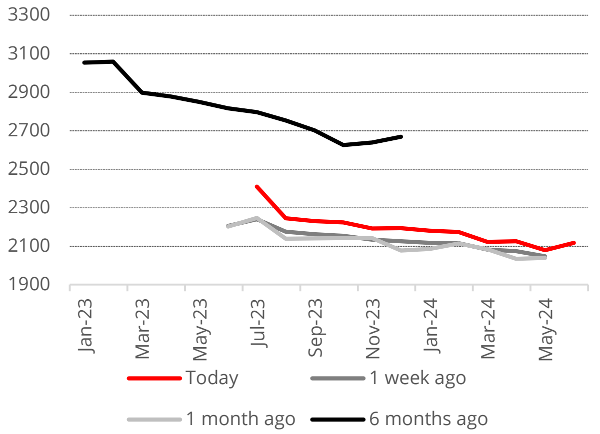
Source: Bloomberg

Fig. 24. Metcoal – changes in forward prices [USD/t]



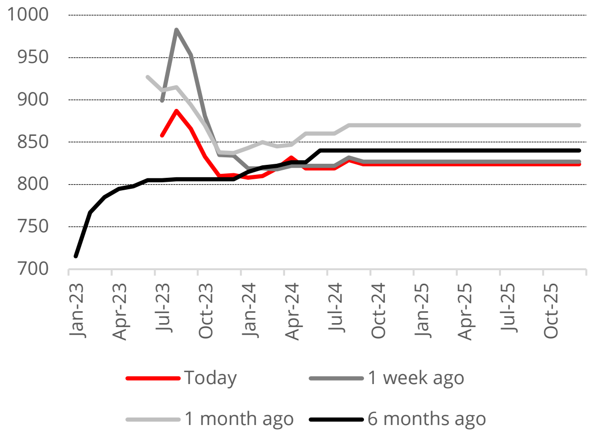
Source: Bloomberg

Fig. 25. Coke – changes in forward prices [CNY/t]



Source: Bloomberg

Fig. 26. Steel – changes in forward prices [USD/t]



Source: Bloomberg

Teck's 2Q23 steelmaking coal volume at 6.2mt, at the bottom of guidance

Teck sees its 2Q2023 steelmaking coal production at 6.2mt, vs 6.2-6.6mt range guidance. The realized steelmaking coal price settled at USD264/t. The company also expects negative steelmaking coal provisional pricing adjustment at USD105mn in 2Q2023. The results are to be published on July 27, 2023.

[-] Australian metcoal forecasting

In its quarterly industrial commodities' review, the Australian Chief Economist presented its mid- to long-term outlook for key industrial commodities' volumes and prices.

With respect to metallurgical coal, Chief Economist's key takeaways are:

- Australia's exports volumes are forecast to lift from an estimated 157 Mt in 2022–23 to 175 Mt in 2024–25, as several new mines open;
- Metallurgical coal prices remain volatile, but are holding well above their pre-2019 level. The Australian premium hard coking coal price is estimated to average USD273 a tonne in 2023, but is forecast to fall to around USD200 a tonne by 2025 as supply conditions improve;
- Prices of metcoal are expected to decline to USD193/t in Jun2025 acc. to the Australian Chief Economist. It represents a 4% cut vs official forecasts as of March 2023.

Santander

Key assumptions and forecast changes

In our research we rely on metcoal prices settling at USD220/t as of 1Q2025E. Current coking coal prices remain negligibly above these levels, but long-term coking coal price contracts have already fallen to USD213/t, and the Australian Chief economist Office sees Jun2025 metcoal prices at USD193/t.

Fig. 27. JSW: Key assumptions – core scenario

	unit	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	...	2030E
USDPLN exchange rate		3.16	3.77	3.94	3.78	3.61	3.84	3.92	3.87	4.46	4.19	4.20		4.20
Realized Prices														
Thermal coal	USD/t	74	57	48	55	69	71	64	58	102	171	155		108
Coking coal (incl. discount)	USD/t	131	100	98	173	183	165	112	162	341	254	202		198
Coke	USD/t	213	173	149	250	303	276	186	329	491	381	322		352
Thermal coal	PLN/t	234	214	188	207	248	273	250	224	457	718	650		452
Coking coal (incl. discount)	PLN/t	412	376	389	656	658	634	440	631	1,513	1,069	847		832
Coke	PLN/t	669	650	586	943	1,094	1,058	762	1,280	2,184	1,596	1,353		1,478
Volumes - Production														
Thermal coal	kt	4,065	5,162	5,255	4,093	4,670	4,554	3,323	2,750	3,082	2,728	2,776		2,100
Coking coal	kt	9,882	11,152	11,580	10,676	10,349	10,208	11,062	11,006	10,985	10,912	11,104		11,900
Total coal	kt	13,947	16,313	16,835	14,768	15,020	14,762	14,385	13,756	14,067	13,640	13,880		14,000
Coke	kt	4,015	4,222	4,144	3,458	3,563	3,169	3,331	3,659	3,221	3,160	3,080		3,080
Volumes - Sales														
Thermal coal	kt	3,542	5,497	5,289	4,167	4,366	3,882	3,196	3,332	3,563	2,608	2,776		2,100
Coking coal	kt	5,186	5,801	6,364	5,901	6,001	5,807	6,313	6,938	6,451	6,757	6,973		7,769
Total coal	kt	8,728	11,297	11,653	10,068	10,366	9,688	9,509	10,270	10,014	9,365	9,749		9,869
Coke	kt	4,162	4,015	4,133	3,460	3,538	2,929	3,642	3,611	3,228	3,260	3,080		3,080
Costs														
Mining Cash Costs	PLNmn	4,926	5,009	4,232	4,616	5,954	6,314	5,860	6,150	7,652	8,575	9,455		10,760
Unit Mining Cash Costs	PLN/t	361	309	251	314	399	429	407	447	544	629	681		769
Cash Conversion Cost	PLNmn	609	610	553	515	575	608	593	633	812	1,010	1,077		1,291
Unit Cash Conversion Cost	PLN/t	152	144	133	149	162	194	178	173	252	319	350		419

Sources: Company data, Santander Brokerage Poland estimates

Fig. 28. JSW: Forecasts' change

PLNmn	2023E			2024E			2025E		
	New	Previous	*Change*	New	Previous	*Change*	New	Previous	*Change*
Sales	16,039	18,156	*-12%*	13,560	15,007	*-10%*	13,654	13,489	*1%*
EBITDA	5,235	6,177	*-15%*	1,318	2,025	*-35%*	1,314	515	*155%*
EBIT	3,709	4,875	*-24%*	-308	623	*n.m.*	-412	-987	*n.m.*
Net profit	625	3,846	*-84%*	-370	-746	*n.m.*	-468	-923	*n.m.*

Source: Santander Brokerage Poland estimates

Fig. 29. JSW: Santander vs. market consensus

PLNmn	2023E			2024E			2025E		
	SANe	Cons.	*Diff.*	SANe	Cons.	*Diff.*	SANe	Cons.	*Diff.*
Sales	16,039	15,945	*1%*	13,560	15,007	*-10%*	13,654	13,489	*1%*
EBITDA	5,235	5,159	*1%*	1,318	2,025	*-35%*	1,314	515	*155%*
EBIT	3,709	3,828	*-3%*	-308	623	*n.m.*	-412	-987	*n.m.*
Net profit	625	3,020	*-79%*	-370	-746	*n.m.*	-468	-923	*n.m.*

Source: Bloomberg, Santander Brokerage Poland estimates

Santander

Valuation

DCF valuation

In this report we maintain our short-term 2023-25E RFR at 6.0%, and long-term assumptions at 5.0%.

Fig. 30. JSW: WACC calculation

	Years 2023-25E	Years 2026E onwards
Risk-free rate	6.0%	5.0%
Unlevered beta	1.20	1.20
Levered beta	1.66	1.66
Equity risk premium	6.0%	6.0%
Cost of equity	**16.0%**	**15.0%**
Risk-free rate	6.0%	5.0%
Debt risk premium	1.0%	1.0%
Tax rate	19%	19%
After tax cost of debt	5.7%	4.9%
%D	32%	32%
%E	68%	68%
WACC	**12.7%**	**11.7%**

Source: Santander Brokerage Poland estimates

Fig. 31. JSW: DCF valuation

PLNmn	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Revenues	**16,039**	**13,560**	**13,654**	**13,697**	**13,716**	**13,736**	**13,755**	**13,776**	**13,796**	**13,817**
EBIT	3,709	-308	-412	-803	-1,158	-1,530	-1,765	-2,013	-2,274	-2,548
Cash taxes on EBIT	2,951	0	0	0	0	0	0	0	0	0
NOPAT	**758**	**-308**	**-412**	**-803**	**-1,158**	**-1,530**	**-1,765**	**-2,013**	**-2,274**	**-2,548**
Depreciation	1,526	1,626	1,726	1,826	1,926	2,026	2,026	2,026	2,026	2,026
Change in operating WC	-255	85	-162	4	-46	-17	-17	-17	10	0
Capital expenditure	**3,235**	**3,104**	**2,788**	**2,862**	**2,939**	**3,018**	**3,100**	**3,184**	**3,184**	**3,184**
	1,453	1,563	899	1,040	967	975	1,057	1,141	1,167	1,158
Free cash flow	**-695**	**-1,871**	**-1,311**	**-1,843**	**-2,125**	**-2,505**	**-2,822**	**-3,154**	**-3,442**	**-3,707**
WACC	12.7%	12.7%	12.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%
PV FCF 2023-2032E	-11,579									
Terminal growth	-2.0%									
Terminal Value (TV)	-14,491									
PV TV	-4,668									
Total EV	**-16,247**									
Net debt*	-7,213									
Necessary external financing	**9,150**									
Equity value	**116**									
Number of shares (mn)	117.4									
Value per share (PLN, Jan 2023)	1.1									
Target Price (Dec 2024, PLN)	**1.3**									

Source: Santander Brokerage Poland estimates, assumed coking coal price at USD220/t as of 1Q2025E,
** 2022 net debt, adjusted for 1) minorities, 2) PLN175mn of potentially non-refundable loan from PFR, 3) positive value of coke / coal inventories, not adjusted for provisions, 4) methane risk (at PLN130mn presently, as we lowered methane risk likelihood to 5% from 50% previously)*

In our comparative valuation approach, we compare JSW to Warrior Met Coal separately, due to two companies businesses' similarity (focus on metallurgical coal). We keep applying 40% weight to Warrior Met Coal and 30% to Developed / Emerging peers each.

Fig. 32. JSW: Comparable valuation

Company	P/E			EV/EBITDA			P/CE		
	2022	2023E	2024E	2022	2023E	2024E	2022	2023E	2024E
Warrior Met Coal	**4.5**	**7.5**	**8.8**	**2.2**	**3.2**	**3.5**	**3.4**	**5.2**	**5.6**
Mines in Developed Countries									
CNX Resources Corp	10.9	10.6	8.5	5.5	5.0	4.6	3.3	3.6	3.7
Anglo American PLC	10.1	9.6	9.4	4.3	4.2	4.2	4.0	3.9	4.2
SunCoke Energy Inc	10.6	13.1	13.4	4.5	4.9	4.9	3.4	3.7	3.7
Teck Resources Ltd	9.4	9.6	9.8	5.1	4.8	4.9	4.6	4.2	4.3
BHP Group Ltd	11.1	12.1	12.6	5.7	5.9	6.1	6.2	6.4	6.7
Median	***10.6***	***10.6***	***9.8***	***5.1***	***4.9***	***4.9***	***4.0***	***3.9***	***4.2***
Mines in Emerging Markets									
China Coal Energy	3.4	3.5	4.0	2.7	2.9	3.1	3.7	3.5	3.6
Bukit Asam	5.4	6.1	7.5	1.8	1.9	3.0	4.2	4.1	5.4
Banpu	5.5	7.8	10.8	4.3	5.4	6.1	1.9	2.2	2.4
China Shenhua Energy	8.2	8.3	8.2	4.2	4.3	4.3	6.2	6.2	6.3
Adaro Energy	3.4	4.8	6.3	1.5	2.0	2.5			
Indo Tambangraya	2.8	4.6	8.1	0.4	0.8	1.1			
Median	***3.4***	***4.8***	***7.5***	***1.8***	***2.0***	***3.0***	***3.7***	***3.5***	***3.6***

Source: Bloomberg consensus estimates, Santander Brokerage Poland, share prices as of July 20, 2023

Fig. 33. JSW: Multiple-based valuation implications (PLN/share) – core scenario

	P/E 2023-25E	EV/EBITDA 2023-25E	P/CE 2023-25E	Average 2023-25E
Warrior Met	-12	87	59	**45**
Developed	-5	141	53	**63**
Emerging	-9	75	48	**38**
Total	**-9**	**100**	**54**	**48**

Source: Bloomberg, Santander Brokerage Poland estimates

DDM valuation

We assume the company will not be paying dividends in the short or long term, thus our DDM valuation settles at nil. However, we believe dividends are of minor importance in valuing mining companies and to remain consistent with our other mining names, we do not include DDM valuation in our blended TP approach.

DCF remains our preferred valuation tool, as it relies more on the company's long-term outlook. While changes in financial results or changes in investors' preferences drive the comparable valuation, which we see as supportive to the DCF valuation methodology. Hence, we assign 70% weight to DCF valuation and 30% weight to comparable valuation.

Valuation summary

Fig. 34. JSW: Valuation changes**

PLN per share	New	Previous	Change
DCF valuation	1	1	*0%*
Comparable valuation * (based on 2023-25E)	48	103	*-53%*
Blended valuation *	**15**	**32**	***-52%***

*Source: Santander Brokerage Poland estimates, * 70% DCF / 30% comparable, ** rounded values*

Santander

Financials

Fig. 35. JSW: Income statement

PLNmn (year to December)	2019	2020	2021	2022	2023E	2024E	2025E
Net sales	8,672	6,989	10,629	20,199	16,039	13,560	13,654
COGS, ex. Depreciation	5,810	6,705	7,223	8,712	9,881	11,320	11,418
Depreciation	1,034	1,105	1,220	1,228	1,526	1,626	1,726
EBITDA	**1,939**	**-638**	**2,483**	**10,564**	**5,235**	**1,318**	**1,314**
Operating profit	905	-1,743	1,263	9,336	3,709	-308	-412
Net financial income (costs)	-1	-76	-126	-116	-118	-137	-152
Profit before tax	904	-1,819	1,137	9,221	3,591	-445	-565
Income tax	172	-324	216	1,752	2,951	-79	-100
Net profit	**650**	**-1,537**	**904**	**7,561**	**625**	**-370**	**-468**
Gross margin	*21.1%*	*-11.7%*	*20.6%*	*50.8%*	*28.9%*	*4.5%*	*3.7%*
EBITDA margin	*22.4%*	*-9.1%*	*23.4%*	*52.3%*	*32.6%*	*9.7%*	*9.6%*
Operating margin	*10.4%*	*-24.9%*	*11.9%*	*46.2%*	*23.1%*	*-2.3%*	*-3.0%*
Net profit margin	*7.5%*	*-22.0%*	*8.5%*	*37.4%*	*3.9%*	*-2.7%*	*-3.4%*

Source: Company data, Santander Brokerage Poland estimates

Fig. 36. JSW: Balance sheet

PLNmn (year to December)	2019	2020	2021	2022	2023E	2024E	2025E
Current assets	**5,153**	**4,004**	**4,659**	**14,984**	**12,322**	**10,304**	**8,785**
cash and equivalents	2,933	2,215	2,094	11,969	9,856	7,928	6,564
other short term investments	0	0	0	0	0	0	0
accounts receivable	629	659	1,596	1,800	1,429	1,208	1,217
inventories	1,131	880	653	990	**812**	**943**	**779**
prepaid expenses / other	461	250	316	224	224	224	224
Fixed assets	**9,773**	**11,027**	**11,303**	**11,980**	**14,988**	**16,466**	**17,528**
PPE	8,672	8,996	9,383	10,374	12,083	13,561	14,623
long-term investments	0	0	0	0	0	0	0
intangibles	198	175	186	139	139	139	139
goodwill	0	0	0	0	0	0	0
other	378	979	883	971	971	971	971
deferred taxes	525	877	850	496	1,796	1,796	1,796
Total assets	**14,926**	**15,031**	**15,962**	**26,963**	**27,311**	**26,770**	**26,313**
Current liabilities	**3,494**	**3,580**	**3,849**	**7,734**	**7,441**	**7,266**	**7,273**
bank debt	234	679	1,014	3,018	3,018	3,018	3,018
accounts payable	1,120	903	964	1,423	1,130	956	962
other current liabilities	1,668	1,524	1,428	2,845	2,845	2,845	2,845
provisions	473	475	443	448	448	448	448
Long-term liabilities	**2,581**	**4,134**	**3,815**	**3,292**	**3,292**	**3,292**	**3,292**
bank debt	740	2,093	1,658	1,096	1,096	1,096	1,096
other long-term liabilities	141	144	142	142	142	142	142
provisions	1,699	1,897	2,015	2,053	2,053	2,053	2,053
Equity	**8,463**	**6,920**	**7,852**	**15,437**	**16,061**	**15,691**	**15,223**
share capital	1,252	1,252	1,252	1,252	1,252	1,252	1,252
reserve capital	6,562	7,206	5,696	6,623	14,185	14,809	14,439
net income	650	-1,537	904	7,561	625	-370	-468
Minority Interest	388	397	446	501	517	521	525
Total liabilities and equity	**14,926**	**15,031**	**15,962**	**26,963**	**27,311**	**26,770**	**26,313**
Net debt*	**-1,571**	**953**	**1,024**	**-7,354**	**-5,225**	**-3,293**	**-1,925**

*Source: Company data, Santander Brokerage Poland estimates, * includes minorities*

Santander

Fig. 37. JSW: Cash flow statement

PLNmn (year to December)	2019	2020	2021	2022	2023E	2024E	2025E
Cash flow from operations	**1,978**	**1,386**	**1,497**	**8,842**	**2,406**	**1,171**	**1,420**
Net profit	1,736	650	904	7,561	625	-370	-468
Provisions	-402	180	118	38	0	0	0
Depreciation and amortization	766	1,034	1,220	1,228	1,526	1,626	1,726
Changes in WC, o/w	-256	-243	-647	-83	255	-85	162
inventories	-157	-474	228	-337	178	-131	164
receivables	-289	348	-937	-204	371	221	-8
payables	190	-117	62	459	-293	-175	7
Other, net	133	-235	-98	97	0	0	0
Cash flow from investments	**-421**	**-2,468**	**-1,595**	**-487**	**-4,535**	**-3,104**	**-2,788**
Additions to PPE and intangibles	-1,247	-2,450	-1,619	-2,171	-3,235	-3,104	-2,788
Change in long-term investments	0	0	0	0	0	0	0
Other, net	826	-19	23	1,684	-1,300	0	0
Cash flow from financing	**-700**	**539**	**-22**	**1,520**	**16**	**4**	**4**
Change in long-term borrowing	-827	704	-435	-562	0	0	0
Change in short-term borrowing	40	79	336	2,004	0	0	0
Change in equity and profit distribution	-44	-67	28	24	0	0	0
Dividends paid	0	-201	0	0	0	0	0
Other, net	132	24	50	55	16	4	4
Net change in cash and equivalents	**857**	**-544**	**-120**	**9,875**	**-2,113**	**-1,929**	**-1,364**
Beginning cash and equivalents	2,620	3,477	2,215	2,094	11,969	9,856	7,928
Ending cash and equivalents	3,477	2,933	2,094	11,969	9,856	7,928	6,564

Source: Company data, Santander Brokerage Poland estimates

Santander Brokerage Poland

Jana Pawla II Avenue 17
00-854 Warszawa
fax. (+48) 22 586 81 09

Equity Research

Kamil Stolarski, PhD, CFA, *Head of Equity Research* *Banks, Insurers, Strategy*	tel. (+48) 22 586 81 00	kamil.stolarski@santander.pl
Paweł Puchalski, CFA, *Equity Analyst* *Telecommunications, Metals & Mining, Power*	tel. (+48) 22 586 80 95	pawel.puchalski@santander.pl
Tomasz Krukowski, CFA, *Equity Analyst* *Oil&Gas, Pharma & Biotech, CEE Non-Financials*	tel. (+48) 22 586 81 55	tomasz.krukowski@santander.pl
Adrian Kyrcz, *Equity Analyst* *Construction, Real Estate, IT*	tel. (+48) 22 586 81 59	adrian.kyrcz@santander.pl
Tomasz Sokołowski, *Equity Analyst* *Consumer, E-commerce*	tel. (+48) 22 586 82 36	tomasz.sokolowski@santander.pl
Michał Sopiel, *Equity Analyst* *Industrials, Chemicals, Quantitative Analysis*	tel. (+48) 22 586 82 33	michal.sopiel@santander.pl
Piotr Zielonka, CFA, *Equity Analyst* *Gaming, Strategy*	tel. (+48) 22 534 16 10	piotr.zielonka@santander.pl
Marcin Działek, *Analyst* *Technical Analysis*	tel. (+48) 22 782 93 09	marcin.dzialek@santander.pl

Sales & Trading

Kamil Kalemba, *Head of Institutional Equities*	tel. (+48) 22 586 80 84	kamil.kalemba@santander.pl
Mateusz Choromański, CFA, Head of Sales *Securities Broker, Investment Advisor*	tel. (+48) 22 586 80 82	mateusz.choromanski@santander.pl
Alex Kamiński	tel. (+48) 22 586 80 63	alex.kaminski@santander.pl
Błażej Leśków, *Securities Broker*	tel. (+48) 22 586 80 83	blazej.leskow@santander.pl
Michał Stępkowski, *Securities Broker*	tel. (+48) 22 586 85 15	michal.stepkowski@santander.pl
Marek Wardzyński, *Securities Broker*	tel. (+48) 22 586 80 87	marek.wardzynski@santander.pl
Adam Mizera, *ACCA, CFA, Securities Broker*	tel. (+48) 22 586 85 14	adam.mizera@santander.pl

Santander

DISCLOSURES

All of the views expressed in this report accurately reflect the personal views of the Analyst of Equity Research Team in Santander Brokerage Poland which is a separate organizational unit of Santander Bank Polska S.A. ("Santander Bank Polska"), who is the author of this report.
Santander Brokerage Poland emphasizes that this document is going to be updated at least once a year.

Santander Brokerage Poland acts as a market maker / liquidity provider, on principles specified in the Regulations of the Warsaw Stock Exchange (WSE), for the shares of **Jastrzębska Spółka Węglowa SA, Lubelski Węgiel Bogdanka SA,** and therefore holds financial instruments issued by this issuer / these issuers.

Over the last 12 months Santander Bank Polska has received remuneration for providing non-investment banking services for: **Jastrzębska Spółka Węglowa SA.**

The issuer / issuers this report relates to, may hold shares of Santander Bank Polska in the amount of less than 5% of the total issued capital.
Santander Bank Polska Group, its affiliates, representatives or employees may occasionally undertake transactions or may be interested in acquiring securities of companies directly or indirectly related to those being analysed.
Santander Bank Polska or its affiliates may, from time to time, to the extent permitted by law, participate or invest in financing transactions with issuer / issuers this report relates to, perform services for or solicit business from such issuers and/or have a position or effect transactions in the financial instruments issued by these issuers(especially in relation to the services provided by PTE Santander Allianz SA), ad as a result Santander Bank Polska may be indirectly connected with these issuers.
Santander Bank Polska does not rule out that in the period of preparing this report any Affiliate of Santander Bank Polska might purchase shares of the Issuer or any financial instruments being the subject of this report which may cause reaching at least 0,5% of the share capital.
Subject to the above, the Issuer is not bound by any contractual relationship with Santander Bank Polska, which might influence the objectivity of the recommendations contained in this report.
However, it cannot be ruled out that, in the period in which this report is in force, Santander Bank Polska will submit an offer to provide services for the issuer / issuers this report relates to, or will purchase or dispose of financial instruments issued by these issuers or whose value depends on the value of financial instruments issued by these issuers.
With the exception of remuneration from the Santander Brokerage Poland Analysts do not receive any other form of compensation for recommendations made. Remuneration received by the persons who prepare this report may be dependent, in an indirect way, from financial results gained from investment banking transactions, related to financial instruments issued by the Issuer, made by Santander Brokerage Poland or its Affiliates.

Global statistics presenting the rating of the covered companies and the share of companies provided with investment banking in the past 12M are available at: https://www.santander.pl/inwestor/global-statistics
A list of all recommendations on any financial instrument or issuer that were disseminated by Santander Brokerage Poland during the preceding 12 month period can be found on: http://centruminformacji.santander.pl/_fileserver/item/1501616

LIMITATION OF LIABILITY

This report was produced by Santander Brokerage Poland which is a separate organizational unit of Santander Bank Polska S.A. (Santander Bank Polska) with its registered office in Warsaw. Santander Brokerage Poland and brokerage activity conducted by Santander Brokerage Poland is subject to the supervision of the Financial Supervision Commission with its headquarters in Warsaw.
Santander Brokerage Poland is subject to the regulations of the Act on Trading in Financial Instruments dated July 29th 2005 (Journal of Laws of 2018, item 2286 - consolidated text, further amended), Act on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organised Trading, and Public Companies dated July 29th 2005 (Journal of Laws of 2019 item 623 - consolidated text, further amended), Act on Capital Market Supervision dated July 29th 2005 (Journal of Laws of 2019, item 1871 – consolidated text, further amended). This report is addressed to qualified investors and professional clients as defined under the above indicated regulations and to Clients of Santander Brokerage Poland entitled to gain research reports based on the brokerage services agreements.
Santander Brokerage Poland may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. The investments and services contained or referred to in this report may not be suitable for particular investor and it is recommended to consult an independent investment advisor in case of doubts about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to investor's individual circumstances, or otherwise constitutes a personal recommendation to particular investor.
Affiliates of Santander Bank Polska may, from time to time, to the extent permitted by law, participate or invest in financing transactions with the issuer / issuers this report relates to, perform services for or solicit business from such issuers and/or have a position or effect transactions in the financial instruments issued by these issuers. Santander Brokerage Poland may, to the extent permitted by applicable Polish law, UK law and other applicable law or regulation, effect transactions in the Financial instruments before this report is published to recipients.
Santander Brokerage Poland may have issued, and may in the future issue, other research reports that may be inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and Santander Brokerage Poland is under no obligation to ensure that such other reports are brought to the attention of any recipient of this report.
Santander Brokerage Poland informs that success in past recommendations is not a guarantee of success in future ones.
Information and opinions contained herein have been compiled or gathered, with due care and diligence, by Santander Brokerage Poland from sources believed to be reliable, however Santander Brokerage Poland cannot ensure their accuracy or completeness. Investor shall be responsible for conducting their own investigation and analysis of the information contained or referred to in this report and of evaluating the merits and risks involved in the Financial instruments forming the subject matter of this report. The information and opinions contained herein are subject to change without any notice.
Santander Brokerage Poland is not responsible for any losses incurred by Investors which were result of investment decisions based on recommendations issued by Santander Brokerage Poland, on condition that they were prepared with due care and diligence.
This report does not constitute an offer or invitation to subscribe for or purchase or carry out transactions in any financial instruments and shall not be considered as an offer to sell or to buy any securities. This report is furnished and presented to you solely for your information and shall not be reproduced or redistributed to any other person. This report nor any copy hereof shall not be disseminated, published or distributed directly or indirectly in the United States of America, Canada, Australia or Japan. Disseminating, publishing or distributing of this report directly or indirectly in the above countries or to any citizen or resident of these countries may be considered breach of the law or regulations related to the financial instruments in force in these countries. Dissemination, publishing or distribution of this report may be restricted by law in other countries. Persons who distribute this report shall make themselves aware of and adhere to any such restrictions. This report may be distributed in the United Kingdom to persons who have professional knowledge about investing in accordance with relevant regulations.
Opinions in this report must not be relied upon as having been authorised or approved by issuer. Santander Brokerage Poland informs that investing assets in financial instruments implies the risk of losing part or all the invested assets.
Santander Brokerage Poland indicates that the price of the financial instruments is influenced by lots of different factors, which are not or cannot be dependent from issuer and its business results. These are factors such as changing economical, law, political or tax condition. More information on financial instruments and risk connected with them can be found on www.santander.pl/inwestor section disclaimers and risk.
The decision to purchase any of the financial instruments should be made only on the basis of the prospectus, offering circular or other documents and materials which are published on general release on the basis of polish law.

Ratings definitions:

Outperform – Total return 10% above benchmark. Upside of approximately ≥15%.
Neutral - Total return 0%-10% above benchmark. Upside of approximately 5%-15%.
Underperform - Total return below benchmark. Upside of approximately <5%.
NOTE: The relevant benchmark for European Equities (including CEE Equities) is the 1Y German Bund rate +ERP (5.5%).

The definition of ratings are indicative. Recommendations may differ from these guidelines when justified due to the market factors, industry trends, company specific event, etc. In such cases, a pertinent clarification for the discrepancy is included in the report.
Target prices set from January to June are for December 31st of the current year. Target prices set from July to December are for December 31st of the following year.
Periodicity: our recommendations/ target prices for each issuer are going to be reviewed at least once a year and whenever market events so warrant.

In the Technical Analysis reports (TA reports), Santander Brokerage Poland does not apply direct investment ratings, and all opinions and elements of analysts' assessment are included in a descriptive form in the study itself.
The period of validity of the TA report is a maximum of 30 days, while the publication of a new TA report for a given financial instrument means that the previously published study is no longer valid.
Due to the short time horizon of the Technical Analysis reports, Santander Brokerage Poland is not going to update them on a regular basis.

In preparing this report Santander Brokerage Poland applied at least one of the following valuation methods: discounted cash flows (DCF), comparative, mid-cycle, dividend discount model (DDM), residual income, warranted equity method (WEV), SOTP valuation, liquidation value.
The discounted cash flows (DCF) valuation method is based on expected future discounted cash flows. One advantage of the DCF valuation method is that it takes into account all cash streams reaching Issuer and the cost of money over time. Some disadvantages of the DCF valuation method are that a large number of parameters and assumptions need to be estimated; and the valuation is sensitive to changes in those parameters.
The comparative valuation method is based on the economic rule of "one price". Some advantages of the comparative valuation method are that the analyst need only estimate a small number of parameters; the valuation is based on current market conditions; the relatively large accessibility of indicators for companies being compared; and that there is an extensive knowledge of the comparative method among investors. Some disadvantages of valuation by the comparative method are the considerable sensitivity of the results of the valuation on the choice of companies to the comparative group; the method can lead to a simplification of the picture of the company which in turn can lead to omitting certain important factors (e.g. growth dynamics, extra-operational assets, corporate governance, the repeatability of results, differences in applied accounting standards); and the uncertainty of the effectiveness of a market valuation of companies being compared.
The mid-cycle multiple valuation is based on long-term average valuation multiples of a sector or a peer group. The methodology aims to calculate a fair, through the cycle value of the company. Among its shortfalls is that at peaks and/or troughs of the cycle, the implied fair value may deviate substantially from the market's value of an analysed stock as well as the methods' reliance on the quality of external data (we usually use Bloomberg or Damodaran databases). Simplicity and average through-cycle value allowing to capture over- as well as under-valuation of a given stock are the main advantages of this methodology.
The dividend discount model (DDM) valuation is based on the net present value of the future dividends that are expected to be paid out by the company. Some advantages of the DDM valuation method are that it takes into account real cash flows to equity-owners and that the methodology is used in respect to companies with long dividend payout history. Main disadvantage of the DDM valuation method is that dividend payouts are based on a large number of parameters and assumptions, including dividend payout ratio.
Residual income method is conceptually close to the discounted cash flows method (DCF) for non-financial stocks, the difference being that it is based on expected residual income (returns over COE) rather than expected future cash flows. One advantage of this valuation method is that it captures the excess of profit potentially available to shareholders and the cost of money over time. Main disadvantage of the valuation method is that a large number of parameters and assumptions need to be estimated; and the valuation is sensitive to changes in those parameters.
The warranted equity method (WEV) is based on the formula P/BV = (two year forward ROE less sustainable growth rate)/(Cost of equity less sustainable growth rate) which allows estimating a fair value (FV) of a given stock in two years' time. Subsequently the FV is discounted back to today. The main advantage of the WEV method is that it is a transparent one and based on relatively short term forecasts, hence substantially reducing the margin of forecasting error. The main disadvantage in our view is that the model is based on the principle that stock price should converge towards its fair value implied by company's ROE and COE.
SOTP valuation - different assets of a company are being valued according to different valuation methods, and the sum of these valuations represents the final valuation of the company. SOTP valuation advantages / disadvantages are identical to advantages and disadvantages of the specific valuation methods used.
Liquidation value method – liquidation value is the estimated amount of money that an asset or company could be quickly sold for, such as if it were to go out of business. Then, the estimated assets value is adjusted for liabilities and liquidation expenses. One advantage of this valuation method is its simplicity. This method does not account for intangible assets as goodwill, which is the main disadvantage.

In the opinion of Santander Brokerage Poland, this report has been prepared with all due diligence and excludes any conflict of interests which could influence its content. In Santander Bank Polska there are implemented internal regulations, which are designed to prevent conflicts of interest concerning recommendations. Physical and logic barriers are established, and the principles of documentation adequate to the type of Santander Bank Polska operations are implemented. Additionally, Santander Bank Polska introduced a number of obligations and restrictions relating to the protection of confidential information flow between organizational units.
The date and time on the first page of this report indicates the date of the production of the recommendation, and the dissemination of the recommendation takes place on the same day before the start of the session.

ANY PERSON WHO ACCEPTS THIS REPORT AGREES TO BE BOUND BY THE FOREGOING DISCLAIMER AND LIMITATIONS.