

Monday, September 09, 2019 | daily publication

Morning Comments

Equity Market, Poland

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DJIA	26,797.5	+0.26% FTSE 100	7,282.3	+0.15%	Copper (LME)	5,833.0	-0.21%
S&P 500	2,978.7	+0.09% WIG20	2,122.6	+0.75%	Crude Oil (Brent)	62.15	+1.49%
NA SDA Q	8,103.1	-0.17% BUX	40,312.5	+0.33%	USD/PLN	3.9319	-0.07%
DAX	12,191.7	+0.54% PX	1,032.1	-0.79%	EUR/PLN	4.3396	-0.04%
CA C 40	5,604.0	+0.19% PLBonds10	2.017	+0.033	EUR/USD	1.1029	-0.05%

Company & Sector News

Banks

No CHF ruling before polish parliament elections

According to judicial calendar there won't be ruling regarding indexed CHF loans before polish elections (13 of October). As we have expected uncertainty in polish banking sector will be present at least through the first half of October. (M. Konarski, M. Lemańczyk)

Banks

Polish state may increase its share in banking sector

According to PAP new program of PIS party states that if favorable market conditions occur, steps towards increasing polish capital in banking sector, may be taken. We believe that currently, the most probable candidate for polish market consolidation is Pekao taking into account its capital situation. We remind, that although PKO BP has expressed appetite for acquisitions, its mostly directed towards regional, not local market. (M. Konarski, M. Lemańczyk)

PKO BP

Buy - 2019-08-02 Target price: PLN 47.17

Sale of mortgage loan may exceed PLN 4bn in 3Q'19

According to PAP, bank's head of the mortgage banking products department Agnieszka Krawczyk said that the current mortgage sale run rate indicate that bank should reach or even exceed PLN 4bn mark in 3Q'19. In 2Q'19 PKO BP's mortgage loan sale reached PLN 4.2bn. We believe that the news is positive. The recent data indicates that although banks increased sale of mortgage loans, the margin on the product also increased indicating healthy demand. (M. Konarski, M. Lemańczyk)

Moneta Money Bank

Buy - 2019-08-28 Target price: CZK 94.33

Moody's assigns Baa2 rating for Tier2 subordinated debt securities

Moody's rating agency assigned long-term local-currency subordinated debt rating at Baa2 for Moneta Money Bank. The rating is positioned one notch below the bank's adjusted baseline credit assessment (BCA) of baa1, in line with Moody's standard notching guidance. We don't expect the news to have material impact. (M. Konarski, M. Lemańczyk)

Tauron

Buy - 2019-06-26 Target price: PLN 2.52

Preliminary results in Q2 in line with expectations

Tauron reported that preliminary EBITDA amounted in Q2 PLN 795m vs our estimates at PLN 769m. Company reported PLN -1m at net profit level due to PLN 269 impairment in mining segment. Results are not including any impact from power prices freeze regulations. Distribution segment was the main contributor to EBITDA at PLN 656m vs PLN 698 in Q2'18 and PLN 650 in our estimates. In generation EBITDA amounted to PLN 152m vs PLN 126 year ago and PLN 131m in our forecast. Trading EBITDA was lower than expected at PLN 57m vs 148m in Q2'18 and PLN 89m in our forecasts (losses on households' sales were covered with provisions booked in Q4). In mining EBITDA loss was close to our forecasts (PLN -99m vs PLN -97m). **Results are in line with expectations however we are still waiting for final power prices freeze regulations calculations. (K. Kliszcz)**

Alumetal

Underweight - 2019-05-28

Product spread slightly up in August

Benchmark margin on most popular aluminum alloy in August was 328 EUR/t (slightly gigher to July – 305 EUR/t). The margin stays for fifth month in row lower than the multiyear average (340 EUR/t) and lower than average for 2018 year (386 EUR/t). **Information negative. The August reboung could not be representative as scrap market remains in holiday season. We expect significant decline in results in 3Q'19. (J. Szkopek)**



Alumetal spread margin (EUR/t)



Source: Almetal, Dom Maklerski mBanku

Pozbud

Neutral - 2019-09-05

CFO Interview

In an interview for Gazeta Parkiet, Michał Ulatowski, vice president of Pozbud said that the Group plans to increase revenues from the contract for GSM-R network, development project and export of windows and doors. The GSM-R contract, which is key for the Pozbud group, should bring much more influence in 2H'19 than in 1H'19. Pozbud has completed the implementation of the first stage of a development project regarding the Zacisze Strzeszyn housing estate in Poznań. - At the end of June 19, half of the 120 appartments built under this investment was sold. The board is interested in the construction of II project stage. The vice president admits that IH'19 was not very successful for the window and door segment, which was associated with its reorganization. In 2H'19 expects an increase in sales, which will translate into an increase in exports, especially to the USA, where company has a trading partner. (J. Szkopek)

Corn

Corn hits contract lows on sluggish exports, mild U.S. weather

U.S. corn futures fell to life-of-contract lows on Friday, pressured by disappointing weekly U.S. export data and forecasts for benign weather in the heart of the Midwest crop belt, analysts said. The proce rebouds slightly on Monday early trading. The news is bad for Kernel for whom corn is key crop and Company hedged minor position from 2019 crop. For more information please visit https://tinyurl.com/y25fpwrr (J. Szkopek)

Industrial metals

Base metals fall on weaker China export data

Prices for industrial metals declined on Monday as data from China showed exports unexpectedly fell in August, pointing to further weakness in the world's second-biggest economy. China's August exports fell 1% from a year earlier as shipments to the United States slowed sharply amid an ongoing trade war between the world's two largest economies, compared to analyst expectations of a 2% rise for the period. China's August imports of unwrought copper, including anode, refined and semi-finished copper products, fell 3.8% year-on-year to 404,000 tonnes, while imports of copper concentrate rose 9.3% annually to 1.8 million tonnes. For more information please visit https://tinyurl.com/y3l67u4u (J. Szkopek)

Precious metals

Gold inches up on hopes of economic stimulus

Gold prices edged higher on Monday, after falling nearly 1% in the previous session, on expectations of monetary policy easing by the world's major economies amid soft economic data, although an uptick in equities limited gains. For more information please visit https://tinyurl.com/y6xudw5f (J. Szkopek)

Steelmaking raw materials

China, Singapore iron ore futures slip on easing supply concerns

Iron ore futures in Dalian and Singapore fell in early trade on Monday after data showed China's imports of the steelmaking raw material rose in August to a 19-month high, the latest evidence of a continued rebound from recent supply-side issues. The most-traded iron ore on the Dalian Commodity Exchange, for delivery in January 2020, slumped as much as 3.6% to 621 yuan a tonne. Other steelmaking raw materials also advanced, with coking coal up 0.3% at 1,333 yuan a tonne and coke gaining 1.3% to 1,948 yuan. For more information please visit https://tinyurl.com/yyvx39dc (J. Szkopek)

Ukraine

Fitch upgrades Ukraine's debt rating

The ratings agency Fitch on Friday upgraded Ukraine's sovereign debt to "B" from "B-," pointing to the country's increasing political and economic stability as well as falling debt levels. While the

debt remains in highly speculative status, the outlook for Kiev is also "positive," the agency said. The news is positive for Ukrainian stock, especially Kernel and Astarta which took debt in foreign currencies. For more information please visit https://tinyurl.com/y4r9jqnp (J. Szkopek)

More News

Apator, Energa Metering equipment maker Apator will cash in PLN 12.5 mln for implementation of distribution

information modules at power utility Energa in 2019-2020, Apator said in a press release.

CognorScrap metals firm Cognor is seeking anti-trust authority UOKiK nod to buy assets of freshly folded

metalworks ISD Huta Czestochowa, the regulator said on its website.

Logistics, RailwayPolish railway carriers increased the share of intermodal transports in their total operations to

7.8% in Q2 from 6.4% in Q1 in terms of cargo volumes, railway transport authority UTK said in a

statement.

MCI Capital PE funds MCI Capital posted a PLN 11.3 mln net loss in Q2 vs PLN 0.9 mln profit in the prior-year

period, the company said in H1 report. Private Equity Managers managing funds from MCI group

posted PLN 2.9 mln consolidated profit, up by 63% y/y, company's report shows.

OT LogisticsTroubled transport firm OT Logistics will have to sell operating assets aside from real estate upon

failure of the planned issue of up to 2.3 mln E-series shares, CEO Radoslaw Krawczyk told PAP.

Power, Nuclear Poland is currently examining several locations for its planned nuclear power plants, including

locations at the seaside, government pointperson for strategic energy infrastructure Piotr Naimski

told radio audience.

Selvita Biotech firm Selvita launched the first phase of clinical studies into its prospective medicine

SEL120 in the US as the company administered the substance to a patient for the first time,

Selvita said in a filing.

Stock Market Bank BNP Paribas BP and games developer Ten Square Games will replace builders Polimex

Mostostal and Trakcja in mid-cap index mWIG40 after the session on September 20, the WSE

said in a statement of the quarterly index revision.

Tauron Listed power utility Tauron likely suffered a net loss of PLN 1 mln in Q2, with EBITDA settling at

PLN 795 mln, Tauron said in a market filing of own preliminary estimates.

Tauron Power group Tauron completed 75% of the investment works at Janina mine, Tauron said in

a market filing.

Wojas Listed footwear retailer Wojas increased consolidated sales revenues by 46.7% y/y in August to

PLN 24.7 mln, bringing the 8M tally to PLN 169.4 mln, up by 22.7% y/y, the company said in

a market filing.

ZM Kania Troubled meat processor ZM Henryk Kania's board of creditors voted in favor of a processing deal

with peer Cedrob provided Kania's management is replaced with a receiver, the company said in

a market filing.



Corporate Action Calendar

Date	Time	Company	Event
9-Sep	9:30	OT Logistics	Q2'19 earnings announcement and conference (Novotel Warsaw Center Hotel, Warsaw)
10-Sep		Mangata	Investor meetings (Hotel Polonia Palace, Warsaw)
10-Sep		Atal	Investor meeting (Hotel Hilton, Grzybowska 63, Room 2, Warsaw)
10-Sep		Ciech	Q2'19 earnings announcement
10-Sep		LC Corp	Q2'19 earnings announcement
10-Sep		Mangata	Q2'19 earnings announcement
10-Sep		Trakcja	Q2'19 earnings announcement
11-Sep			mBank's European Top Picks Event (PGE Narodowy, Warsaw) - registration required
11-Sep	11:00	Ciech	Q2 2019 earnings conference (ul. Wspólna 62, Warsaw)
11-Sep	13:00	LC Corp	Investor meeting (Leonardo Royal Hotel, Grzybowska 45, Warsaw)
11-Sep		Wielton	Q2'19 earnings announcement
11-Sep		TIM	Q2'19 earnings announcement
12-Sep	11:00	TIM	Q2'19 earnings conference (Hotel Westin, ul. Jana Pawła II 21, Warsaw)
12-Sep		Atende	Q2'19 earnings announcement
12-Sep		Forte	Q2'19 earnings announcement
12-Sep		LPP	Q2'19 earnings announcement
12-Sep		Skarbiec	Q4'18/19 earnings announcement
13-Sep	12:00	Atende	Q2'19 earnings announcement (Polonia Palace Hotel, Warsaw)
13-Sep	12:00	Forte	Q2'19 earnings conference (Sheraton Hotel, Warsaw)
17-Sep	10:30	Echo Investment	Q2'19 earnings announcement & conference (Warsaw Brawery, Willa Fabrykanta)
17-Sep		Archicom	Q2'19 earnings announcement
17-Sep		Boryszew	Q2'19 earnings announcement
19-Sep		ZEPAK	Q2'19 earnings announcement
20-Sep		Kruszwica	Q2'19 earnings announcement
24-Sep		PGE	Q2'19 earnings announcement
25-Sep		Pfleiderer Group	Q2'19 earnings announcement
27-Sep		Energa	Q2'19 earnings announcement
27-Sep		Getin Noble Bank	Q2'19 earnings announcement
27-Sep		Idea Bank	Q2'19 earnings announcement
27-Sep		Monnari	Q2'19 earnings announcement
27-Sep		Tarczyński	Q2'19 earnings announcement
30-Sep		Ailleron	Q2'19 earnings announcement
30-Sep		Elektrobudowa	Q2'19 earnings announcement
30-Sep		Enea	Q2'19 earnings announcement
30-Sep		Polnord	Q2'19 earnings announcement
30-Sep		Tauron	Q2'19 earnings announcement
1-2 Oct			mBank's European Financials Conference (PGE Narodowy, Warsaw) - registration required

Economic Calendar

Monda	ay, 9 Septer	nber 2019			
Time	Region	Data	Period	Forecast	Previous
01:50	Japan	Capital Account Balance	July		-58.50bn; -58.50b
01:50	Japan	Current Account Balance	July		1211.20bn; 1211.20b
01:50	Japan	Financial Account Balance	July		3771.50bn; 3771.50b
Thurse	day, 12 Sep	tember 2019			
Time	Region	Data	Period	Forecast	Previous
08:00	Germany	CPI Harmonized (F)	August		-0.10% m/m; 1.00% y/
08:00	Germany	CPI (F)	August		-0.20% m/m; 1.40% y/
11:00	EU	Industrial Production	July		-1.60% m/m; -2.60% y/
13:45	EU	Interest Rate			0.00%
14:30	USA	Core CPI	August		0.30% m/m; 2.20% y/
14:30	USA	CPI	August		0.30% m/m; 1.80% y/
Friday	, 13 Septen	nber 2019			
Time	Region	Data	Period	Forecast	Previous
06:30	Japan	Industrial Production (F)	July		-3.30% m/m; -3.80% y/
10:00	Poland	CPI	August		0.00% m/m; 2.90% y/
11:00	EU	Exports	July		189.90b
11:00	EU	Imports	July		169.30b
11:00	EU	Labor Cost	Q2		2.40% y/
11:00	EU	Trade Balance	July		20.60bi
14:00	Poland	Capital Account Balance	July		946n
14:00	Poland	Current Account Balance	July		21n
14:00	Poland	Financial Account Balance	July		249r
14:30	USA	Exports	August		0.20% m/m; -0.90% y/
14:30	USA	Import Price Index	August		0.20% m/m; -1.80% y/
16:00	USA	Business Inventories	July		0.00% m/m; 5.20% y/
16:00	USA	Business Inventories	July		5.20% y/



Current Recommendations by Dom Maklerski mBanku

Financial Sector	2020
Allor Bank buy 2019-07-03 51.10 72.30 40.10 +80.3% 7.2 5.6 Handlowy accumulate 2019-07-03 53.60 59.45 50.70 +17.3% 12.8 10.5 ING BSK accumulate 2019-09-05 187.40 197.53 187.40 +5.4% 13.9 12.8 Millennium buy 2019-08-02 7.51 10.00 6.52 +53.5% 10.7 7.7 Pekao buy 2019-08-02 99.88 119.75 101.30 +18.2% 11.6 10.2 PKO BP buy 2019-08-02 39.34 47.17 39.58 +19.2% 11.2 10.9 Santander Bank Polska hold 2019-08-02 319.60 337.00 299.80 +12.4% 13.0 10.7 Komercni Banka buy 2019-08-28 817.00 945.02 CZK 821.00 +15.1% 10.3 10.6 Moneta Money Bank buy 2019-08-28 817.00 945.02 CZK 821.00 +15.1% 10.2 9.5 Erste Group buy 2019-08-28 30.03 40.38 EUR 29.82 +35.4% 8.4 7.7 RBI accumulate 2019-08-28 20.44 23.05 EUR 29.82 +35.4% 8.4 7.7 RBI accumulate 2019-08-28 12,000 14,681 HUF 12,550 +17.0% 8.6 7.9 PZU buy 2019-09-05 36.59 43.38 36.91 +17.5% 9.8 9.3 Kruk buy 2019-04-02 152.30 213.65 155.40 +37.5% 8.7 8.6 Skarbiec Holding buy 2019-09-05 34.00 42.03 34.80 +20.8% 7.9 8.2 Grupa Azoty hold 2019-09-05 39.98 39.77 37.52 +6.0% 6.7 23.2 Grupa Azoty hold 2019-09-05 39.98 39.77 37.52 +6.0% 6.7 23.2 Grupa Azoty hold 2019-09-05 39.98 39.77 37.52 +6.0% 6.7 23.2 Oil & Gas PKN Orlen hold 2019-09-05 44.9 6.33 44.58 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-09-05 44.9 6.33 45.88 +38.1% 11.1 7.6 PKN Orlen hold 2019-08-01 97.36 92.82 87.96 FKN Orlen hold 2019-08-01 97.36 92.82 87.96	
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PKN Orlen hold 2019-08-01 97.36 92.82 87.96 +5.5% 8.4 9.8	4.3 3.3
Power Utilities +37.7% 3.8 4.3	5.0 5.3
	3.7 3.6
CEZ accumulate 2019-06-25 544.00 597.80 CZK 515.00 +16.1% 15.4 13.3	7.4 6.8
Enea buy 2019-06-25 8.53 12.41 8.81 +40.9% 3.3 3.0	3.2 3.0
Energa buy 2019-06-25 7.33 12.67 6.75 +87.7% 3.8 4.3	3.7 4.1
PGE buy 2019-06-25 9.00 13.26 7.84 +69.2% 4.8 5.4	3.1 3.2
Tauron buy 2019-06-25 1.57 2.52 1.56 +61.5% 2.5 2.3	4.1 3.6
Telecoms, Media, IT +6.3% 19.3 15.5	5.8 5.8
Netia hold 2018-11-26 4.66 4.70 4.50 +4.4% 30.2 25.0	5.2 5.2
Orange Polska buy 2019-09-05 6.12 7.50 6.06 +23.8% 39.2 24.6	4.8 4.6
Play hold 2019-09-05 33.34 34.20 28.92 +18.3% 8.4 7.6	5.8 5.8
Agora buy 2018-11-27 9.50 16.00 10.40 +53.8% 34.5 18.4	4.7 4.4
Cyfrowy Polsat reduce 2019-05-31 26.00 24.15 28.04 -13.9% 14.7 12.5	7.1 6.9
	.0.2 9.1
Asseco Poland hold 2019-06-03 51.10 50.80 55.75 -8.9% 14.9 14.5	4.8 4.4
Comarch buy 2019-07-25 178.50 231.00 179.50 +28.7% 15.5 14.0	6.5 5.9
,	.9.2 23.8
CD Projekt accumulate 2019-09-05 251.30 272.50 255.50 +6.7% - 10.6 Industrials, Mining +8.0% 6.1 10.4	- 9.4 4.3 4.9
. •	4.3 4.9 4.3 5.1
Cognor accumulate 2019-09-05 1.65 2.00 1.70 +2.7% 6.1 11.0 Famur buy 2019-08-07 4.42 5.33 3.91 +36.5% 5.0 9.0	4.0 4.7
Grupa Kęty hold 2019-09-05 310.00 327.11 325.00 +0.6% 12.6 11.9	8.8 8.4
JSW buy 2019-09-05 26.50 39.29 28.38 +38.4% 4.8 -	0.7 2.3
Kemel reduce 2019-08-19 48.60 42.70 44.30 -3.6% 4.6 8.4	5.1 5.8
KGHM hold 2019-08-22 74.90 77.51 79.44 -2.4% 6.9 9.8	3.9 4.5
Stelmet hold 2019-09-05 6.70 6.50 6.75 -3.7% 9.1 12.5	4.7 4.9
Property Developers +7.9% 8.1 8.0	7.4 7.5
Atal accumulate 2019-07-03 36.60 41.89 34.90 +20.0% 7.5 7.8	7.1 7.4
Dom Development hold 2019-09-05 84.00 81.10 82.60 -1.8% 8.8 8.2	7.8 7.5
Retail +1.2% 36.9 21.2	9.8 8.9
	.3.5 10.8
CCC buy 2019-09-05 131.90 161.00 137.50 +17.1% 51.3 21.2	7.1 5.6
· · · · · · · · · · · · · · · · · · ·	
Eurocash reduce 2019-09-05 20.62 18.10 21.30 -15.0% 41.2 29.1	21.3 16.0
Jeronimo Martins reduce 2019-09-05 15.88 14.30 EUR 15.87 -9.9% 22.5 20.2	
LPP buy 2019-09-05 7,280.00 8,500.00 7,175.00 +18.5% 19.6 17.7	16.0
VRG buy 2019-07-26 4.20 5.20 4.32 +20.4% 13.7 11.9	21.3 16.0 8.8 7.8

Current Calls by Dom Maklerski mBanku

Campany	Relative	Rated On	Price At	Current	Change	P/I	E	EV/EB1	TDA
Company	Positioning	Kated On	Rating	Price	Change	2019	2020	2019	2020
IT						11.7	10.7	4.9	4.7
Ailleron	neutral	2019-06-28	8.40	7.42	-11.7%	9.6	8.7	3.3	2.4
Asseco BS	neutral	2019-03-29	29.50	27.20	-7.8%	13.8	12.8	9.2	8.6
Asseco SEE	overweight	2019-04-11	14.20	19.00	+33.8%	13.9	13.3	5.8	5.3
Atende	neutral	2019-01-31	4.40	3.46	-21.4%	8.7	8.1	4.1	4.0
Industrials						10.3	9.6	6.5	6.0
AC	underweight	2019-08-30	43.60	39.60	-9.2%	11.7	11.2	7.7	7.1
Alumetal	underweight	2019-08-30	51.00	34.80	-31.8%	11.1	10.8	7.6	7.6
Amica	neutral	2019-04-29	130.00	119.20	-8.3%	7.8	7.5	5.1	4.8
Apator	neutral	2019-04-29	25.80	23.50	-8.9%	11.2	10.9	7.1	6.9
Astarta	overweight	2019-09-05	23.00	23.00	+0.0%	-	4.3	7.0	4.1
Boryszew	underweight	2019-07-26	4.49	4.05	-9.8%	9.0	8.4	7.3	7.1
Ergis	neutral	2019-08-30	2.48	2.52	+1.6%	10.3	11.6	5.4	5.4
Forte	neutral	2019-04-29	40.60	25.15	-38.1%	12.6	11.0	8.6	7.9
Kruszwica	neutral	2019-04-02	43.90	40.30	-8.2%	9.6	8.8	5.0	4.6
Mangata	neutral	2019-05-29	69.50	65.50	-5.8%	8.8	10.0	6.0	6.5
Pfleiderer Group	underweight	2019-07-29	28.00	26.30	-6.1%	53.7	25.4	7.0	6.6
Pozbud	neutral	2019-09-05	2.14	2.15	+0.5%	4.2	4.4	3.1	3.8
Tarczyński	neutral	2019-05-29	15.40	15.20	-1.3%	6.6	5.5	4.8	4.4
TIM	overweight	2019-04-29	7.90	9.10	+15.2%	10.3	9.2	6.0	5.4
Retail						9.0	8.9	4.1	3.3
Monnari	neutral	2019-07-17	4.66	4.55	-2.4%	9.0	8.9	4.1	3.3



CEE bank valuations

			P/E			ROE			P/BV			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish banks													
Alior Bank	40.10	7.2	5.6	4.8	10%	12%	12%	0.7	0.6	0.6	0.0%	0.0%	0.0%
Handlowy	50.70	12.8	10.5	9.8	7%	9%	9%	0.9	0.9	0.9	7.4%	8.3%	7.1%
ING BSK	187.40	13.9	12.8	11.9	13%	13%	13%	1.7	1.6	1.5	1.9%	2.2%	2.4%
Millennium	6.52	10.7	7.7	6.9	8%	11%	11%	0.9	0.8	0.7	0.0%	0.0%	0.0%
Pekao	101.30	11.6	10.2	9.6	10%	11%	11%	1.1	1.1	1.1	6.5%	6.4%	7.4%
PKO BP	39.58	11.2	10.9	10.2	11%	11%	11%	1.2	1.1	1.1	3.4%	7.8%	9.5%
Santander BP	299.80	13.0	10.7	9.9	9%	11%	11%	1.2	1.1	1.0	6.6%	3.8%	4.7%
Median		11.6	10.5	9.8	10%	11%	11%	1.1	1.1	1.0	3.4%	3.8%	4.7%
Investors in Polish ba	anks												
BCP	0.198	6.8	6.0	5.1	7%	8%	9%	0.5	0.5	0.4	2.5%	5.5%	7.1%
Citigroup	65.970	8.6	7.7	7.0	10%	10%	10%	0.8	0.7	0.7	2.9%	3.3%	3.7%
Commerzbank	5.491	8.0	6.5	6.0	3%	4%	4%	0.2	0.2	0.2	4.0%	5.0%	5.9%
ING	9.083	6.9	7.0	6.9	10%	9%	9%	0.7	0.6	0.6	7.7%	7.8%	8.0%
UCI	10.632	5.8	5.9	5.7	8%	7%	7%	0.4	0.4	0.4	5.5%	6.7%	7.4%
Median		6.9	6.5	6.0	8%	8%	9%	0.5	0.5	0.4	4.0%	5.5%	7.1%
Foreign banks													
Erste Group	29.82	8.4	7.7	7.2	10%	11%	11%	0.9	0.8	0.8	4.4%	5.0%	5.5%
Komercni Banka	821.00	10.3	10.6	10.2	14%	14%	14%	1.5	1.4	1.4	6.2%	6.2%	6.2%
Moneta Money	75.85	10.2	9.5	9.4	15%	16%	16%	1.5	1.5	1.4	8.1%	7.4%	7.9%
OTP Bank	12,550	8.6	7.9	7.7	20%	18%	17%	1.6	1.4	1.2	1.8%	1.9%	4.4%
RBI	20.28	6.1	5.8	5.3	9%	9%	9%	0.5	0.5	0.5	5.7%	4.9%	5.2%
Akbank	7.14	6.7	4.6	3.9	12%	15%	15%	0.7	0.6	0.6	2.7%	4.6%	6.1%
Alpha Bank	1.63	16.3	10.3	7.3	2%	3%	4%	0.3	0.3	0.3	0.0%	0.0%	0.0%
Banco Santander	3.53	7.4	7.0	6.7	8%	8%	8%	0.6	0.5	0.5	6.3%	6.6%	7.0%
Deutsche Bank	7.09	118.2	17.4	9.9	-1%	1%	3%	0.3	0.3	0.3	0.0%	0.5%	2.5%
Eurobank Ergasias	0.82	9.6	7.0	5.7	5%	9%	9%	0.6	0.5	0.5	0.0%	0.0%	0.0%
National Bank of Greece	2.63	14.6	12.6	9.1	2%	4%	6%	0.5	0.5	0.4	-	0.0%	0.0%
Piraeus Bank	3.00	25.0	9.1	7.0	2%	3%	4%	0.2	0.2	0.2	-	0.0%	0.0%
Sberbank	229.02	5.7	4.9	4.5	22%	22%	21%	1.1	1.0	0.9	8.2%	9.9%	11.3%
Turkiye Garanti Bank	9.16	5.3	4.2	3.4	14%	15%	17%	0.7	0.6	0.6	5.2%	4.4%	5.2%
Turkiye Halk Bank	6.08	4.5	2.3	1.7	7%	9%	9%	0.2	0.2	0.2	1.3%	2.0%	2.0%
Turkiye Vakiflar Bankasi	4.83	3.7	2.7	2.2	10%	12%	13%	0.3	0.3	0.3	-	-	-
VTB Bank	0.04	3.5	3.5	3.2	12%	13%	13%	0.4	0.4	0.4	7.2%	7.2%	9.5%
Yapi ve Kredi Bankasi	2.44	4.8	3.6	2.9	11%	13%	13%	0.5	0.4	0.4	0.0%	1.2%	-
Median		7.9	7.0	6.2	10%	11%	12%	0.6	0.5	0.5	4.4%	4.4%	5.2%

Insurance company valuations

			P/E			ROE			P/BV			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Insurers													
PZU	36.91	9.8	9.3	9.1	22%	23%	23%	2.1	2.1	2.0	8.1%	8.1%	8.6%
Aegon	3.58	5.4	5.1	4.9	7%	8%	8%	0.3	0.3	0.3	8.5%	9.0%	9.5%
Allianz	204.00	10.8	10.1	9.5	12%	12%	12%	1.3	1.2	1.1	4.7%	5.0%	5.3%
Assicurazioni Generali	17.11	10.1	10.1	9.5	11%	10%	10%	1.0	1.0	0.9	5.6%	6.0%	6.3%
Aviva	3.64	6.0	5.9	5.7	12%	13%	14%	0.8	0.8	0.8	8.6%	8.9%	9.3%
AXA	21.56	8.4	7.5	7.3	10%	11%	11%	0.8	0.8	0.8	6.8%	7.2%	7.5%
Baloise	169.10	11.6	12.0	11.4	10%	9%	9%	1.2	1.1	1.1	3.8%	4.0%	4.3%
Helvetia	133.00	12.3	12.3	12.0	11%	10%	10%	1.2	1.2	1.1	3.8%	3.9%	4.1%
Mapfre	2.46	10.0	9.1	8.5	9%	10%	10%	0.9	0.9	0.8	6.3%	6.6%	6.9%
RSA Insurance	5.23	12.9	11.1	10.4	11%	12%	13%	1.4	1.3	1.3	4.7%	5.3%	6.0%
Uniqa	8.27	12.0	11.2	10.6	7%	7%	8%	0.9	0.9	0.9	6.7%	6.9%	7.1%
Vienna Insurance G.	22.60	9.4	9.2	8.4	6%	7%	6%	0.5	0.5	0.5	4.3%	4.9%	5.1%
Zurich Financial	367.00	13.4	12.2	11.6	13%	13%	13%	1.6	1.6	1.5	5.6%	5.9%	6.2%
Median		10.1	10.1	9.5	11%	10%	10%	1.0	1.0	0.9	5.6%	6.0%	6.3%

Gas & Oil valuations

		EV	/ EBITD	A		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Oil companies																
Lotos	86.30	6.7	5.7	4.9	0.7	0.6	0.6	13.1	12.1	11.0	10%	11%	12%	3.5%	2.3%	2.5%
MOL	2924.00	4.4	4.1	3.7	0.6	0.6	0.5	10.6	9.3	8.1	15%	15%	15%	4.9%	5.1%	5.4%
PKN Orlen	87.96	5.0	5.3	5.1	0.4	0.4	0.4	8.4	9.8	10.0	9%	8%	7%	4.0%	3.4%	3.4%
Hellenic Petroleum	9.15	6.4	5.1	5.4	0.5	0.5	0.4	11.3	7.0	7.2	7%	9%	8%	5.6%	6.3%	6.2%
HollyFrontier	48.64	5.7	5.7	6.0	0.6	0.6	0.6	9.9	9.3	10.2	10%	11%	10%	2.7%	2.8%	2.9%
Marathon Petroleum	52.47	7.4	5.6	5.6	0.6	0.5	0.5	11.9	6.9	7.4	7%	9%	9%	4.1%	4.5%	5.0%
Motor Oil	20.90	4.8	4.2	4.6	0.3	0.3	0.3	7.7	6.6	7.4	6%	7%	7%	6.5%	6.9%	7.1%
Neste Oil	28.67	10.9	10.0	9.6	1.4	1.5	1.4	17.3	15.4	14.6	13%	15%	14%	3.0%	3.4%	3.6%
OMV	46.51	3.8	3.5	3.4	0.9	0.9	0.9	8.9	8.0	7.7	25%	26%	27%	4.1%	4.6%	5.0%
Phillips 66	100.91	8.0	6.8	7.2	0.5	0.5	0.5	12.8	9.7	10.3	7%	7%	7%	3.4%	3.8%	4.1%
Saras SpA	1.44	3.9	2.5	3.4	0.2	0.1	0.1	13.9	4.9	8.2	4%	6%	4%	4.6%	9.5%	6.4%
Tupras	128.50	6.7	4.7	4.5	0.4	0.4	0.4	10.3	5.5	5.1	7%	8%	8%	9.1%	15.6%	16.6%
Valero Energy	78.13	7.5	5.2	5.7	0.4	0.4	0.4	14.9	8.1	8.7	5%	7%	7%	4.6%	5.0%	5.3%
Median		6.4	5.2	5.1	0.5	0.5	0.5	11.3	8.1	8.2	7%	9%	8%	4.1%	4.6%	5.0%
Gas companies																
PGNiG	4.58	4.3	3.3	2.7	0.8	0.7	0.6	11.1	7.6	6.3	18%	22%	22%	2.4%	3.6%	5.2%
A2A SpA	1.65	7.4	6.9	6.6	1.4	1.3	1.3	16.0	13.7	13.1	18%	19%	19%	4.7%	4.9%	5.0%
BP	501.00	4.6	4.3	4.2	0.6	0.6	0.6	11.7	10.3	9.6	14%	14%	15%	0.0%	0.0%	0.0%
Centrica	67.86	3.9	3.7	4.0	0.3	0.3	0.3	9.3	6.9	6.8	7%	8%	7%	0.0%	0.0%	0.0%
Enagas	19.55	9.6	9.4	10.2	7.7	7.8	8.5	11.0	10.2	11.2	80%	83%	83%	8.2%	8.4%	8.4%
Endesa	23.60	8.6	8.5	8.4	1.5	1.5	1.5	16.4	16.2	15.7	18%	18%	18%	6.1%	6.2%	5.2%
Engie	13.66	6.5	6.1	5.8	1.0	1.0	0.9	13.1	11.8	10.7	15%	15%	16%	5.7%	6.1%	6.6%
Eni	13.77	3.6	3.3	3.2	0.9	0.9	0.9	12.3	10.2	9.6	24%	26%	28%	6.2%	6.4%	6.5%
Equinor	163.45	3.0	2.6	2.5	1.1	1.0	1.0	11.0	9.4	8.7	36%	37%	39%	0.1%	0.1%	0.1%
Gas Natural SDG	23.19	9.3	8.9	8.7	1.6	1.6	1.6	16.7	15.6	14.6	17%	18%	18%	5.9%	6.2%	6.5%
Gazprom	234.49	3.6	3.5	3.3	1.0	1.0	1.0	3.6	3.8	3.5	28%	28%	28%	7.0%	8.0%	10.4%
Hera SpA	3.63	7.7	7.4	7.3	1.3	1.2	1.2	17.9	17.5	17.4	17%	16%	17%	2.8%	3.0%	3.1%
NovaTek	1312.00	12.0	11.5	11.4	4.6	4.4	4.1	8.7	7.6	6.5	38%	38%	36%	4.0%	4.8%	5.3%
ROMGAZ	34.10	5.5	5.2	4.9	2.7	2.5	2.3	9.9	9.0	8.3	48%	47%	47%	9.5%	10.4%	11.3%
Shell	25.15	3.3	3.1	2.9	0.5	0.5	0.5	11.4	9.4	8.8	16%	17%	18%	8.3%	8.3%	8.6%
Snam SpA	4.59	12.6	12.4	12.0	10.2	10.0	9.7	14.4	14.2	13.6	81%	81%	81%	5.3%	5.5%	5.7%
Total	45.78	5.1	4.7	4.5	0.9	0.9	0.9	11.2	9.8	9.4	18%	20%	19%	6.4%	6.7%	6.9%
Median		5.5	5.2	4.9	1.1	1.0	1.0	11.4	10.2	9.6	18%	20%	19%	5.7%	6.1%	5.7%

Power generation company valuations

rower generatio	соттра															
			//EBITD			EV/S			P/E			DA mar			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Power generation																
CEZ	515.00	7.4	6.8	6.7	2.1	1.9	1.8	15.4	13.3	13.4	29%	28%	27%	4.7%	5.9%	6.7%
Enea	8.81	3.2	3.0	2.8	0.7	0.6	0.6	3.3	3.0	2.5	20%	19%	22%	0.0%	0.0%	3.3%
Energa	6.75	3.7	4.1	4.3	0.7	0.7	0.8	3.8	4.3	4.2	18%	17%	18%	0.0%	0.0%	0.0%
PGE	7.84	3.1	3.2	2.4	0.7	0.6	0.5	4.8	5.4	3.7	21%	18%	22%	0.0%	5.2%	4.6%
Tauron	1.56	4.1	3.6	3.2	0.7	0.6	0.6	2.5	2.3	2.0	17%	17%	19%	0.0%	0.0%	0.0%
EDF	11.00	5.3	4.8	4.7	1.2	1.2	1.1	16.0	12.5	11.5	23%	24%	24%	2.9%	3.7%	3.9%
EDP	3.55	8.8	8.4	8.1	2.1	2.0	1.9	16.2	14.6	13.6	24%	24%	23%	5.4%	5.5%	5.7%
Endesa	23.60	8.6	8.5	8.4	1.5	1.5	1.5	16.4	16.2	15.7	18%	18%	18%	6.1%	6.2%	5.2%
Enel	6.62	7.3	7.0	6.7	1.6	1.6	1.5	14.1	13.0	12.3	22%	23%	23%	5.0%	5.4%	5.7%
EON	8.51	7.4	5.5	5.4	1.2	0.6	0.5	12.5	12.7	12.0	16%	11%	10%	5.4%	5.7%	5.8%
Fortum	20.55	14.3	13.3	12.7	4.4	4.2	4.1	14.8	14.0	12.9	31%	32%	32%	5.4%	5.4%	5.3%
Iberdola	9.43	10.3	9.6	9.2	2.7	2.6	2.5	17.9	16.8	16.1	27%	27%	28%	4.0%	4.2%	4.5%
National Grid	841.00	11.2	10.5	10.0	3.6	3.6	3.5	14.5	14.4	13.7	32%	34%	35%	0.0%	0.0%	0.0%
Red Electrica	18.17	9.5	9.6	9.7	7.4	7.5	7.5	13.7	14.6	14.9	78%	78%	77%	5.8%	5.6%	5.5%
RWE	26.74	9.5	5.5	4.8	1.2	0.9	0.8	24.0	15.5	11.5	12%	15%	16%	3.0%	3.5%	4.0%
SSE	1150.00	10.8	9.9	9.2	0.7	1.4	1.3	17.1	12.6	11.2	7%	14%	15%	0.0%	0.0%	0.0%
Verbund	53.10	9.5	8.0	7.5	3.4	3.1	3.0	32.7	25.6	24.2	36%	39%	40%	1.3%	1.7%	1.9%
Median		8.6	7.0	6.7	1.5	1.5	1.5	14.8	13.3	12.3	22%	23%	23%	3.0%	4.2%	4.5%

Machine and equipment manufacturers

		ΕV	//EBITD	4		EV/S			P/E		EBIT	ΓDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Industrials																
Famur	3.91	4.0	4.7	5.5	1.1	1.3	1.3	5.0	9.0	11.5	26%	27%	24%	13.6%	10.1%	8.3%
Caterpillar	122.70	7.4	7.5	7.4	1.5	1.5	1.5	10.4	9.9	9.5	21%	20%	20%	3.1%	3.4%	3.7%
Epiroc	99.62	8.0	7.5	7.2	2.0	1.9	1.8	18.4	17.2	16.2	25%	26%	26%	2.6%	2.8%	3.0%
Komatsu	2333.00	5.5	5.9	5.9	1.1	1.1	1.1	8.8	9.8	9.6	19%	18%	18%	4.5%	4.8%	4.8%
Sandvig AG	144.20	8.0	7.7	7.4	1.8	1.8	1.7	13.5	12.7	12.0	23%	23%	24%	3.2%	3.4%	3.7%
Median		7.4	7.5	7.2	1.5	1.5	1.5	10.4	9.9	11.5	23%	22%	22%	3.2%	3.4%	3.7%



Fertilizer producers and chemical companies

		EV	/EBITD	4		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Fertilizer producers																
Grupa Azoty	37.52	4.4	7.7	8.9	0.6	0.7	0.7	6.7	23.2	23.0	13%	9%	8%	0.0%	0.0%	1.3%
Acron	5014.00	7.1	6.6	6.6	2.4	2.2	2.1	9.2	8.9	8.6	34%	34%	32%	6.7%	7.0%	7.6%
CF Industries	48.64	9.5	8.7	8.3	3.6	3.4	3.4	20.3	16.6	14.3	38%	40%	41%	2.5%	2.5%	2.5%
Israel Chemicals	1643.00	6.4	6.2	6.1	1.5	1.4	1.4	11.1	10.2	10.0	23%	23%	22%	0.0%	0.0%	0.0%
K+S	14.69	7.9	6.9	6.4	1.5	1.4	1.4	13.1	10.0	8.5	19%	21%	21%	2.8%	3.9%	4.5%
Phosagro	2535.00	6.1	6.0	5.6	1.9	1.9	1.8	9.8	10.2	9.5	31%	31%	31%	6.8%	5.4%	5.5%
The Mosaic Company	19.54	6.4	5.3	4.8	1.2	1.1	1.1	16.1	9.9	7.8	19%	21%	23%	1.0%	1.1%	1.5%
Yara International	406.00	53.4	45.8	43.3	8.5	7.9	7.7	-	-	-	16%	17%	18%	0.3%	0.5%	0.6%
ZA Police	14.00	6.0	4.8	4.8	1.3	1.2	1.2	1.7	1.2	1.2	21%	24%	24%	59.4%	64.3%	71.4%
ZCh Puławy	95.00	1.9	1.9	-	0.3	0.3	0.3	7.1	7.7	-	15%	15%	-	5.3%	5.3%	-
Median		6.4	6.4	6.4	1.5	1.4	1.4	9.8	10.0	9.1	20%	22%	23%	2.6%	3.2%	2.5%
Chemical companies																
Ciech	34.80	5.3	5.2	4.9	0.9	1.0	0.9	7.9	8.2	8.0	17%	19%	18%	0.0%	0.0%	6.1%
Akzo Nobel	81.85	13.6	11.9	11.1	1.9	1.9	1.8	26.4	19.7	17.5	14%	16%	16%	2.4%	2.6%	2.9%
BASF	61.46	9.1	8.0	7.4	1.2	1.2	1.1	15.7	13.5	12.1	13%	15%	15%	5.3%	5.4%	5.5%
Croda	4808.00	16.3	15.3	14.5	4.7	4.6	4.4	25.1	23.4	22.0	29%	30%	30%	0.0%	0.0%	0.0%
Sisecam	4.46	3.5	2.9	2.5	0.7	0.6	0.5	4.8	4.3	4.1	20%	20%	21%	4.8%	5.2%	6.0%
Soda Sanayii	5.72	4.1	3.4	3.0	1.0	0.8	0.7	4.4	4.5	4.0	24%	24%	24%	5.9%	5.9%	6.8%
Solvay	93.20	5.5	5.3	5.0	1.2	1.1	1.1	11.2	10.6	9.6	21%	22%	22%	4.1%	4.3%	4.5%
Tata Chemicals	579.45	8.1	7.2	6.4	1.5	1.4	1.3	14.1	12.8	11.4	18%	19%	20%	2.0%	2.2%	2.1%
Tessenderlo Chemie	29.45	5.9	5.5	5.1	0.8	0.8	0.7	13.5	11.8	10.0	13%	14%	14%	-	-	-
Wacker Chemie	71.42	5.4	5.1	4.7	0.9	0.8	0.8	22.6	16.5	13.5	16%	17%	17%	3.3%	3.8%	4.2%
Median		5.7	5.4	5.0	1.1	1.1	1.0	13.8	12.3	10.7	18%	19%	19%	3.3%	3.8%	4.5%

Mining company valuations

		EV	/EBITD	Α		EV/S			P/E	_	EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Metals																
KGHM	79.44	3.9	4.5	3.9	0.9	0.9	0.8	6.9	9.8	8.3	23%	20%	21%	0.0%	1.9%	3.1%
Anglo American	1848.00	3.6	3.9	4.2	1.3	1.3	1.3	7.4	8.1	8.9	36%	34%	32%	0.0%	0.0%	0.0%
Antofagasta	893.00	5.6	5.6	5.1	2.7	2.7	2.6	17.5	17.9	14.9	49%	48%	50%	0.0%	0.0%	0.0%
BHP Group LTD	36.31	3.6	3.4	3.8	1.9	1.9	2.0	13.1	11.2	12.8	53%	55%	52%	4.2%	3.1%	2.5%
Boliden	234.55	5.3	5.2	5.3	1.3	1.3	1.3	11.2	10.9	11.1	24%	24%	23%	4.7%	4.7%	4.8%
First Quantum	9.05	7.6	5.3	5.0	3.1	2.3	2.2	15.2	10.0	7.7	41%	43%	44%	0.1%	0.1%	0.1%
Freeport-McMoRan	9.42	10.4	7.4	4.5	2.0	1.9	1.6	65.9	15.0	6.6	19%	26%	35%	2.1%	3.1%	3.9%
Fresnillo	719.20	9.2	7.5	6.1	3.4	3.1	2.9	37.8	29.2	19.2	36%	42%	47%	0.0%	0.0%	0.0%
Gold Fields	8014.00	4.9	4.1	4.0	2.1	2.0	1.9	22.4	15.2	15.7	44%	48%	48%	0.0%	0.0%	0.0%
Hudbay Min	4.59	3.7	3.2	2.8	1.2	1.2	1.1	-	23.1	10.4	33%	37%	41%	0.3%	0.3%	0.2%
KAZ Minerals	422.60	4.4	4.4	4.2	2.4	2.3	2.3	5.2	5.0	4.6	54%	53%	53%	0.0%	0.0%	0.0%
Lundin Min	6.58	6.4	3.9	3.4	2.3	1.7	1.6	19.6	9.1	7.5	36%	45%	47%	1.1%	1.2%	1.5%
MMC Norilsk Nickel	24.62	6.8	6.6	6.5	3.8	3.8	3.6	9.9	9.9	9.5	55%	57%	55%	9.2%	10.8%	11.1%
OZ Minerals	9.41	6.7	5.2	4.3	2.9	2.3	2.1	17.3	12.6	8.6	43%	45%	48%	2.2%	2.5%	3.0%
Polymetal Intl	1160.50	8.2	7.5	7.5	3.8	3.7	3.6	12.3	10.5	10.4	47%	49%	48%	0.0%	0.0%	0.0%
Polyus	7470.00	7.9	7.4	7.6	5.0	4.7	4.8	10.8	10.3	11.1	64%	64%	63%	4.2%	4.7%	4.4%
Sandfire Resources	6.29	2.5	2.1	2.0	1.3	1.2	1.1	8.8	6.9	5.7	51%	55%	57%	4.0%	4.4%	5.0%
Southern CC	33.11	8.5	8.0	7.7	4.3	4.1	3.8	15.5	14.3	13.8	51%	51%	50%	4.6%	4.5%	4.4%
Median		6.0	5.2	4.4	2.3	2.1	2.0	13.1	10.7	9.9	44%	46%	48%	0.7%	1.5%	2.0%
			/EBITD			EV/S			P/E			TDA mar			DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Coal																
JSW	28.38	0.7	2.3	1.7	0.1	0.3	0.3	4.8	-	24.6	19%	12%	16%	6.0%	0.0%	0.0%
Alliance Res Partners	15.95	4.1	4.8	5.2	1.3	1.3	1.4	5.4	10.0	13.6	31%	28%	27%	13.4%	12.4%	11.6%
Alliance Res Partners Arch Coal	15.95 76.64	4.1 2.6	4.8 3.1	5.2 3.1	1.3 0.5	1.3 0.5	1.4 0.5	5.4 4.8	10.0 6.1	13.6 5.8	31% 19%	28% 17%	27% 16%	13.4% 2.3%	12.4% 2.3%	11.6% 2.3%
Alliance Res Partners Arch Coal Banpu	15.95 76.64 12.70	4.1 2.6 10.8	4.8 3.1 11.2	5.2 3.1 10.6	1.3 0.5 2.1	1.3 0.5 2.2	1.4 0.5 2.3	5.4 4.8 12.5	10.0 6.1 11.2	13.6 5.8 10.6	31% 19% 19%	28% 17% 19%	27% 16% 22%	13.4% 2.3% 3.9%	12.4% 2.3% 4.0%	11.6% 2.3% 4.3%
Alliance Res Partners Arch Coal Banpu BHP Group	15.95 76.64 12.70 49.14	4.1 2.6 10.8 3.6	4.8 3.1 11.2 3.4	5.2 3.1 10.6 3.8	1.3 0.5 2.1 1.9	1.3 0.5 2.2 1.8	1.4 0.5 2.3 1.9	5.4 4.8 12.5 12.9	10.0 6.1 11.2 11.1	13.6 5.8 10.6 12.6	31% 19% 19% 53%	28% 17% 19% 55%	27% 16% 22% 52%	13.4% 2.3% 3.9% 9.0%	12.4% 2.3% 4.0% 6.7%	11.6% 2.3% 4.3% 5.5%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy	15.95 76.64 12.70 49.14 3.18	4.1 2.6 10.8 3.6 4.8	4.8 3.1 11.2 3.4 4.8	5.2 3.1 10.6 3.8 5.1	1.3 0.5 2.1 1.9 0.9	1.3 0.5 2.2 1.8 0.9	1.4 0.5 2.3 1.9 0.9	5.4 4.8 12.5	10.0 6.1 11.2 11.1 7.3	13.6 5.8 10.6 12.6 7.1	31% 19% 19%	28% 17% 19%	27% 16% 22%	13.4% 2.3% 3.9%	12.4% 2.3% 4.0%	11.6% 2.3% 4.3%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy	15.95 76.64 12.70 49.14 3.18 0.03	4.1 2.6 10.8 3.6 4.8	4.8 3.1 11.2 3.4 4.8	5.2 3.1 10.6 3.8 5.1	1.3 0.5 2.1 1.9 0.9	1.3 0.5 2.2 1.8 0.9	1.4 0.5 2.3 1.9 0.9	5.4 4.8 12.5 12.9 6.9	10.0 6.1 11.2 11.1 7.3	13.6 5.8 10.6 12.6 7.1	31% 19% 19% 53% 19%	28% 17% 19% 55% 19%	27% 16% 22% 52% 18%	13.4% 2.3% 3.9% 9.0% 3.6%	12.4% 2.3% 4.0% 6.7% 3.3%	11.6% 2.3% 4.3% 5.5% 3.1%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka	15.95 76.64 12.70 49.14 3.18 0.03 38.00	4.1 2.6 10.8 3.6 4.8	4.8 3.1 11.2 3.4 4.8 -	5.2 3.1 10.6 3.8 5.1 - 1.5	1.3 0.5 2.1 1.9 0.9	1.3 0.5 2.2 1.8 0.9	1.4 0.5 2.3 1.9 0.9	5.4 4.8 12.5 12.9 6.9	10.0 6.1 11.2 11.1 7.3 - 5.7	13.6 5.8 10.6 12.6 7.1 - 6.1	31% 19% 19% 53% 19%	28% 17% 19% 55% 19% -	27% 16% 22% 52% 18% - 32%	13.4% 2.3% 3.9% 9.0% 3.6%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7%	11.6% 2.3% 4.3% 5.5% 3.1%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7	1.3 0.5 2.1 1.9 0.9 - 0.5 1.2	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3	1.4 0.5 2.3 1.9 0.9 - 0.5 1.3	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7	31% 19% 19% 53% 19% - 35% 77%	28% 17% 19% 55% 19% - 33% 78%	27% 16% 22% 52% 18% - 32% 78%	13.4% 2.3% 3.9% 9.0% 3.6% - 1.9% 6.9%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7% 6.9%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1	1.3 0.5 2.1 1.9 0.9 - 0.5 1.2	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3	1.4 0.5 2.3 1.9 0.9 - 0.5 1.3 0.5	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3 10.8	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7	31% 19% 19% 53% 19% - 35% 77% 19%	28% 17% 19% 55% 19% - 33% 78% 16%	27% 16% 22% 52% 18% - 32% 78% 16%	13.4% 2.3% 3.9% 9.0% 3.6% - 1.9% 6.9% 13.5%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7% 6.9% 3.2%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9% 3.3%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4 4.1	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8	1.3 0.5 2.1 1.9 0.9 - 0.5 1.2 0.5 1.2	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3 0.5 1.1	1.4 0.5 2.3 1.9 0.9 - 0.5 1.3 0.5	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3 10.8 5.9	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4	31% 19% 19% 53% 19% - 35% 77% 19% 29%	28% 17% 19% 55% 19% - 33% 78% 16% 28%	27% 16% 22% 52% 18% - 32% 78% 16% 28%	13.4% 2.3% 3.9% 9.0% 3.6% - 1.9% 6.9% 13.5% 11.0%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7% 6.9% 3.2% 11.3%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9% 3.3% 11.1%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00 4237.00	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4 4.1 3.5	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0 3.8	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8 4.3	1.3 0.5 2.1 1.9 0.9 - 0.5 1.2 0.5 1.2	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3 0.5 1.1	1.4 0.5 2.3 1.9 0.9 - 0.5 1.3 0.5 1.1	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3 10.8 5.9 8.0	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5 8.9	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4 10.9	31% 19% 19% 53% 19% - 35% 77% 19% 29% 49%	28% 17% 19% 55% 19% - 33% 78% 16% 28% 47%	27% 16% 22% 52% 18% - 32% 78% 16% 28% 44%	13.4% 2.3% 3.9% 9.0% 3.6% - 1.9% 6.9% 13.5% 11.0% 0.0%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7% 6.9% 3.2% 11.3% 0.0%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9% 3.3% 11.1% 0.0%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00 4237.00 23.35	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4 4.1 3.5	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0 3.8 4.9	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8 4.3 4.6	1.3 0.5 2.1 1.9 0.9 - 0.5 1.2 0.5 1.2	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3 0.5 1.1 1.8 2.3	1.4 0.5 2.3 1.9 0.9 - 0.5 1.3 0.5 1.1	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3 10.8 5.9 8.0 8.5	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5 8.9 7.7	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4 10.9 7.7	31% 19% 19% 53% 19% - 35% 77% 19% 29% 49% 50%	28% 17% 19% 55% 19% - 33% 78% 16% 28%	27% 16% 22% 52% 18% - 32% 78% 16% 28%	13.4% 2.3% 3.9% 9.0% 3.6% - 1.9% 6.9% 13.5% 11.0%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7% 6.9% 3.2% 11.3%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9% 3.3% 11.1%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shaanxi Heimao Coking	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00 4237.00 23.35 3.61	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4 4.1 3.5 5.4	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0 3.8 4.9	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8 4.3 4.6	1.3 0.5 2.1 1.9 0.9 - 0.5 1.2 0.5 1.2 2.7	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3 0.5 1.1 1.8 2.3	1.4 0.5 2.3 1.9 0.9 - 0.5 1.3 0.5 1.1 1.9 2.2	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3 10.8 5.9 8.0 8.5 13.9	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5 8.9 7.7 12.0	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4 10.9 7.7 11.6	31% 19% 19% 53% 19% - 35% 77% 19% 29% 49% 50%	28% 17% 19% 55% 19% - 33% 78% 16% 28% 47%	27% 16% 22% 52% 18% - 32% 78% 16% 28% 44%	13.4% 2.3% 3.9% 9.0% 3.6% - 1.9% 6.9% 13.5% 11.0% 0.0% 6.5%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7% 6.9% 3.2% 11.3% 0.0% 6.8%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9% 3.3% 11.1% 0.0% 7.4%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shaanxi Heimao Coking Shanxi Xishan Coal&Ele	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00 4237.00 23.35 3.61 6.09	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4 4.1 3.5 5.4	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0 3.8 4.9	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8 4.3 4.6 - 5.4	1.3 0.5 2.1 1.9 0.9 - 0.5 1.2 0.5 1.2 1.7 2.7	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3 0.5 1.1 1.8 2.3 0.7	1.4 0.5 2.3 1.9 0.9 - 0.5 1.3 0.5 1.1 1.9 2.2 0.6 1.0	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3 10.8 5.9 8.0 8.5 13.9 9.7	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5 8.9 7.7 12.0 9.7	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4 10.9 7.7 11.6 9.5	31% 19% 19% 53% 19% - 35% 77% 19% 29% 49% 50% -	28% 17% 19% 55% 19% - 33% 78% 16% 28% 47% 47%	27% 16% 22% 52% 18% - 32% 78% 16% 28% 44% 48% -	13.4% 2.3% 3.9% 9.0% 3.6% - 1.9% 6.9% 13.5% 11.0% 0.0% 6.5%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7% 6.9% 3.2% 11.3% 0.0% 6.8% - 3.1%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9% 3.3% 11.1% 0.0% 7.4% - 2.9%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shaanxi Heimao Coking Shanxi Xishan Coal&Ele Shougang Fushan Res	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00 4237.00 23.35 3.61 6.09 1.72	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4 4.1 3.5 5.4 - 5.4 1.0	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0 3.8 4.9 - 5.5 0.9	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8 4.3 4.6 - 5.4	1.3 0.5 2.1 1.9 0.9 - 0.5 1.2 0.5 1.2 1.7 2.7 0.7 1.0 0.5	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3 0.5 1.1 1.8 2.3 0.7 1.0	1.4 0.5 2.3 1.9 0.9 - 0.5 1.3 0.5 1.1 1.9 2.2 0.6 1.0	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3 10.8 5.9 8.0 8.5 13.9 9.7 7.3	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5 8.9 7.7 12.0 9.7 6.8	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4 10.9 7.7 11.6 9.5 7.6	31% 19% 19% 53% 19% - 35% 77% 19% 29% 49% 50% - 19% 53%	28% 17% 19% 55% 19% - 33% 78% 16% 28% 47% 47% - 19% 52%	27% 16% 22% 52% 18% - 32% 78% 16% 28% 44% 44% 49%	13.4% 2.3% 3.9% 9.0% 3.6% - 1.9% 6.9% 13.5% 11.0% 0.0% 6.5% - 3.1% 8.3%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7% 6.9% 3.2% 0.0% 6.8% - 3.1% 8.4%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9% 11.1% 0.0% 7.4% - 2.9% 5.5%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shaanxi Heimao Coking Shanxi Xishan Coal&Ele Shougang Fushan Res Stanmore Coal	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00 4237.00 23.35 3.61 6.09 1.72	4.1 2.6 10.8 3.6 4.8 1.4 1.6 2.4 4.1 3.5 5.4 1.0 1.8	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0 3.8 4.9 - 5.5 0.9 2.3	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8 4.3 4.3 4.3 4.6 - 5.4 1.0 3.1	1.3 0.5 2.1 1.9 0.5 1.2 0.5 1.2 1.7 2.7 1.0 0.5 0.7	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3 0.5 1.1 1.8 2.3 0.7 1.0 0.5	1.4 0.5 2.3 1.9 0.5 1.3 0.5 1.1 1.9 2.2 0.6 1.0 0.5	5.4 4.8 12.5 12.9 6.9 4.8 5.3 10.8 5.9 8.0 8.5 13.9 9.7 7.3 4.2	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5 8.9 7.7 12.0 9.7 6.8 5.6	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4 10.9 7.7 11.6 9.5 7.6 8.2	31% 19% 19% 53% 19% 53% 77% 19% 29% 49% 50% - 19% 53% 37%	28% 17% 19% 55% 19% 65% 19% 78% 16% 28% 47% 47% 47% 52% 31%	27% 16% 22% 52% 18% - 32% 78% 16% 28% 44% 49% 24%	13.4% 2.3% 3.9% 9.0% 3.6% 6.9% 13.5% 11.0% 0.0% 6.5% 8.3% 5.8%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7% 6.9% 3.2% 11.3% 6.8% - 3.1% 8.4% 5.3%	11.6% 2.3% 4.3% 5.5% 3.1% 6.4% 6.9% 3.3% 11.1% 0.0% 7.4% 5.5% 4.8%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shaanxi Heimao Coking Shanxi Xishan Coal&Ele Shougang Fushan Res Stanmore Coal Teck Resources	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00 4237.00 23.35 3.61 6.09 1.72 1.41	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4 4.1 3.5 5.4 - 5.4 1.0 1.8 3.2	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0 3.8 4.9 - 5.5 0.9 2.3 3.4	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8 4.3 4.6 - 5.4 1.0 3.1 3.5	1.3 0.5 2.1 1.9 0.9 - 0.5 1.2 0.5 1.2 1.7 2.7 0.7 1.0 0.5 1.2	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3 0.5 1.1 1.8 2.3 0.7 1.0 0.5 0.5	1.4 0.5 2.3 1.9 0.9 - 0.5 1.3 0.5 1.1 1.9 2.2 0.6 1.0 0.5 0.8	5.4 4.8 12.5 12.9 6.9 4.8 5.3 10.8 5.9 8.0 8.5 13.9 9.7 7.3 4.2 6.5	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5 8.9 7.7 12.0 9.7 6.8 5.6 6.9	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4 10.9 7.7 11.6 9.5 7.6 8.2 7.3	31% 19% 19% 53% 19% 537% 77% 19% 29% 49% 50% 	28% 17% 19% 55% 19% 6 33% 78% 16% 28% 47% 47% 52% 31% 39%	27% 16% 22% 52% 18% - 32% 78% 16% 28% 44% 49% 48% - 19% 24% 38%	13.4% 2.3% 3.9% 9.0% 3.6% - 1.9% 6.9% 13.5% 11.0% 0.0% 6.5% - 3.1% 8.3%	12.4% 2.3% 4.0% 6.7% 3.3% 5.7% 6.9% 3.2% 11.3% 0.0% 6.8% - 3.1% 8.4% 5.3% 2.0%	11.6% 2.3% 4.3% 5.5% 3.1% 6.4% 6.9% 3.3% 11.1% 0.0% 7.4% 5.5% 4.8% 4.0%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shaanxi Heimao Coking Shanxi Xishan Coal&Ele Shougang Fushan Res Stanmore Coal Teck Resources Terracom	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00 4237.00 23.35 3.61 6.09 1.72 1.41 17.51 0.44	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4 4.1 3.5 5.4 - 5.4 1.0 1.8 3.2	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0 3.8 4.9 - 5.5 0.9 2.3 3.4 1.5	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8 4.3 4.6 - 5.4 1.0 3.1 3.5 1.6	1.3 0.5 2.1 1.9 0.9 0.5 1.2 0.5 1.2 1.7 2.7 0.7 1.0 0.5 0.5	1.3 0.5 2.2 1.8 0.9 0.5 1.3 0.5 1.1 1.8 2.3 0.7 1.0 0.5 0.7	1.4 0.5 2.3 1.9 0.9 	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3 10.8 5.9 8.0 8.5 13.9 9.7 7.3 4.2 6.5 3.4	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5 8.9 7.7 12.0 9.7 6.8 5.6 6.9 2.2	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4 10.9 7.7 11.6 9.5 7.6 8.2 7.3 2.9	31% 19% 19% 53% 19% - 35% 19% 29% 49% 50% - 19% 53% 37% 40% 30%	28% 17% 19% 55% 19% - 33% 78% 16% 28% 47% 47% - 19% 52% 31% 39% 28%	27% 16% 22% 52% 18% - 32% 78% 16% 28% 44% 49% 49% 49% 38% 26%	13.4% 2.3% 3.9% 9.0% 3.6% 1.9% 6.9% 13.5% 11.0% 0.0% 6.5% 3.1% 8.3% 5.8% 1.6%	12.4% 2.3% 4.0% 6.7% 3.3% 5.7% 6.9% 3.2% 11.3% 0.0% 6.8% - 3.1% 8.4% 5.3% 2.0% 6.8%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9% 3.3% 11.1% 0.0% 7.4% - 2.9% 4.8% 4.0% 11.4%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shaanxi Heimao Coking Shanxi Xishan Coal&Ele Shougang Fushan Res Stanmore Coal Teck Resources Terracom Warrior Met Coal	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00 4237.00 23.35 3.61 6.09 1.72 1.41 17.51 0.44 20.45	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4 4.1 3.5 5.4 - 5.4 1.0 8 3.2 1.8 2.0	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0 3.8 4.9 - 5.5 0.9 2.3 3.4 1.5 2.9	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8 4.3 4.6 - 5.4 1.0 3.5 1.6 3.1	1.3 0.5 2.1 1.9 0.9 - 0.5 1.2 0.5 1.2 1.7 2.7 0.7 1.0 0.5 0.5 0.5	1.3 0.5 2.2 1.8 0.9 - 0.5 1.3 0.5 1.1 1.8 2.3 0.7 1.0 0.5 0.7 1.0 0.5	1.4 0.5 2.3 1.9 0.9 - 0.5 1.3 0.5 1.1 1.9 2.2 0.6 1.0 0.5 0.8	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3 10.8 5.9 8.0 8.5 13.9 9.7 7.3 4.2 6.5 3.4 3.1	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5 8.9 7.7 12.0 9.7 6.8 6.6 6.9 2.2 4.7	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4 10.9 7.7 11.6 9.5 7.6 8.2 7.3 2.9 4.8	31% 19% 19% 53% 19% - 35% 19% 29% 49% 50% - 19% 53% 37% 40% 30% 41%	28% 17% 19% 55% 19% - 33% 16% 28% 47% 47% 52% 31% 39% 28% 33%	27% 16% 22% 52% 18% - 32% 66% 28% 44% 48% - 19% 49% 24% 38% 26% 33%	13.4% 2.3% 3.9% 9.0% 3.6% - 1.9% 6.9% 11.0% 0.0% 6.5% - 3.1% 8.3% 5.8% 1.6% - 17.2%	12.4% 2.3% 4.0% 6.7% 3.3% - 5.7% 6.9% 3.2% 11.3% 0.0% 6.8% - 3.1% 8.4% 5.3% 6.8% 9.3%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9% 3.3% 11.1% 0.0% 7.4% - 2.9% 4.8% 4.0% 11.4% 12.4%
Alliance Res Partners Arch Coal Banpu BHP Group China Coal Energy Cloud Peak Energy LW Bogdanka Natural Res Partners Peabody Energy Corp PT Bukit Asam Tbk Rio Tinto Semirara Mining&Power Shaanxi Heimao Coking Shanxi Xishan Coal&Ele Shougang Fushan Res Stanmore Coal Teck Resources Terracom	15.95 76.64 12.70 49.14 3.18 0.03 38.00 26.21 16.91 2600.00 4237.00 23.35 3.61 6.09 1.72 1.41 17.51 0.44	4.1 2.6 10.8 3.6 4.8 - 1.4 1.6 2.4 4.1 3.5 5.4 - 5.4 1.0 1.8 3.2	4.8 3.1 11.2 3.4 4.8 - 1.5 1.7 2.9 4.0 3.8 4.9 - 5.5 0.9 2.3 3.4 1.5	5.2 3.1 10.6 3.8 5.1 - 1.5 1.7 3.1 3.8 4.3 4.6 - 5.4 1.0 3.1 3.5 1.6	1.3 0.5 2.1 1.9 0.9 0.5 1.2 0.5 1.2 1.7 2.7 0.7 1.0 0.5 0.5	1.3 0.5 2.2 1.8 0.9 0.5 1.3 0.5 1.1 1.8 2.3 0.7 1.0 0.5 0.7	1.4 0.5 2.3 1.9 0.9 	5.4 4.8 12.5 12.9 6.9 - 4.8 5.3 10.8 5.9 8.0 8.5 13.9 9.7 7.3 4.2 6.5 3.4	10.0 6.1 11.2 11.1 7.3 - 5.7 4.9 - 6.5 8.9 7.7 12.0 9.7 6.8 5.6 6.9 2.2	13.6 5.8 10.6 12.6 7.1 - 6.1 4.7 - 6.4 10.9 7.7 11.6 9.5 7.6 8.2 7.3 2.9	31% 19% 19% 53% 19% - 35% 19% 29% 49% 50% - 19% 53% 37% 40% 30%	28% 17% 19% 55% 19% - 33% 78% 16% 28% 47% 47% - 19% 52% 31% 39% 28%	27% 16% 22% 52% 18% - 32% 78% 16% 28% 44% 49% 49% 49% 38% 26%	13.4% 2.3% 3.9% 9.0% 3.6% 1.9% 6.9% 13.5% 11.0% 0.0% 6.5% 3.1% 8.3% 5.8% 1.6%	12.4% 2.3% 4.0% 6.7% 3.3% 5.7% 6.9% 3.2% 11.3% 0.0% 6.8% - 3.11% 8.4% 5.3% 2.0% 6.8%	11.6% 2.3% 4.3% 5.5% 3.1% - 6.4% 6.9% 3.3% 11.1% 0.0% 7.4% - 2.9% 4.8% 4.0% 11.4%

European telecom valuations

		E۱	//EBITD	A		EV/S			P/E		EBI	TDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
Netia	4.50	5.2	5.2	5.1	1.3	1.4	1.4	30.2	25.0	21.3	26%	26%	27%	0.0%	0.0%	8.9%
Orange Polska	6.06	4.8	4.6	4.3	1.4	1.3	1.3	39.2	24.6	17.6	29%	29%	29%	0.0%	0.0%	4.1%
Play	28.92	5.8	5.8	5.4	1.9	2.0	1.9	8.4	7.6	7.5	33%	34%	35%	5.0%	4.5%	5.0%
Median		5.2	5.2	5.1	1.4	1.4	1.4	30.2	24.6	17.6	29%	29%	29%	0%	0.0%	5.0%
Mid Caps																
Proximus	25.75	5.9	5.9	5.9	1.9	1.9	2.0	15.1	15.0	15.1	33%	33%	33%	5.9%	6.0%	6.1%
Telefonica CP	215.00	6.8	6.9	6.9	2.1	2.1	2.0	12.9	13.4	13.4	30%	30%	30%	9.7%	9.7%	9.7%
Hellenic Telekom	12.33	5.1	5.0	4.9	1.8	1.8	1.8	17.8	14.0	12.3	36%	36%	36%	4.7%	5.1%	5.5%
Matav	423.00	4.1	4.1	4.2	1.3	1.3	1.3	9.3	9.0	9.1	31%	31%	30%	6.2%	6.6%	7.2%
Telecom Austria	6.69	5.1	5.0	4.8	1.7	1.7	1.7	10.6	10.0	9.6	34%	34%	35%	3.2%	3.8%	4.2%
Median		5.1	5.0	4.9	1.8	1.8	1.8	12.9	13.4	12.3	33%	33%	33%	5.9%	6.0%	6.1%
Big Caps																
BT	167.64	3.7	3.5	3.5	1.2	1.2	1.2	6.4	6.9	6.7	32%	34%	35%	0.0%	0.0%	0.0%
DT	15.08	5.7	5.4	5.1	1.8	1.7	1.7	15.0	13.6	12.1	32%	33%	33%	4.8%	5.1%	5.4%
KPN	2.82	7.6	7.4	7.0	3.2	3.3	3.3	24.3	21.0	17.9	43%	44%	47%	4.7%	4.9%	5.2%
Orange France	13.69	5.0	4.9	4.8	1.6	1.5	1.5	13.1	12.2	11.3	31%	31%	32%	5.2%	5.5%	5.8%
Swisscom	489.40	7.7	7.8	7.7	2.9	2.9	2.9	17.0	17.2	17.1	38%	38%	38%	4.5%	4.5%	4.5%
Telefonica S.A.	6.58	5.3	5.2	5.1	1.8	1.8	1.8	9.6	8.9	8.4	34%	34%	35%	6.1%	6.2%	6.2%
Telia Company	42.98	8.7	8.5	8.4	3.0	3.0	3.0	17.7	16.6	15.4	35%	35%	36%	5.7%	5.8%	6.0%
TI	0.50	4.6	4.6	4.5	1.9	1.9	1.9	8.0	7.6	7.4	42%	42%	42%	0.0%	0.0%	0.0%
Median		5.5	5.3	5.1	1.9	1.9	1.8	14.1	12.9	11.7	35%	35%	36%	4.8%	5.0%	5.3%

Media company valuations

		ΕV	//EBITD	A		EV/S			P/E		EBI	ΓDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
Agora	10.40	4.7	4.4	3.9	0.4	0.4	0.4	34.5	18.4	11.4	9%	10%	11%	4.8%	4.8%	4.8%
Wirtualna Polska	61.60	10.2	9.1	8.2	3.2	2.9	2.6	19.3	16.5	15.1	31%	32%	32%	1.6%	2.7%	3.2%
Median		7.5	6.7	6.0	1.8	1.7	1.5	26.9	17.4	13.2	20%	21%	21%	3.2%	3.8%	4.0%
Daily Mail																
Arnolgo Mondadori	1.40	5.4	4.9	4.9	0.5	0.5	0.5	10.1	9.3	9.3	10%	11%	11%	4.2%	5.1%	3.4%
Axel Springer	63.00	9.1	9.2	8.2	2.1	2.0	1.9	24.1	24.6	21.5	23%	22%	24%	3.4%	3.5%	3.7%
Daily Mail	825.00	9.4	9.9	9.2	1.3	1.3	1.3	21.9	20.0	18.6	13%	13%	14%	0.0%	0.0%	0.0%
Gruppo Editorial	0.26	4.5	4.3	4.4	0.4	0.4	0.4	-	11.3	8.4	8%	9%	9%	1.9%	3.5%	4.6%
New York Times	30.35	20.9	19.0	15.4	2.7	2.5	2.4	40.0	36.0	28.0	13%	13%	15%	0.7%	0.7%	0.7%
Promotora de Inform	1.34	8.3	7.1	6.5	1.7	1.7	1.6	20.6	14.3	9.1	21%	24%	25%	0.0%	0.0%	-
Median		8.7	8.1	7.4	1.5	1.5	1.4	21.9	17.1	14.0	13%	13%	15%	1.3%	2.1%	3.4%
TV																
Atresmedia Corp	3.48	5.4	5.5	5.7	1.0	1.0	1.0	6.3	6.4	6.7	18%	17%	17%	13.0%	12.5%	12.2%
Gestevision Telecinco	6.19	7.5	8.2	8.5	2.0	2.0	2.0	10.2	10.4	10.5	27%	25%	24%	6.8%	7.6%	7.2%
ITV PLC	120.55	8.2	8.0	7.6	1.8	1.8	1.7	9.3	9.1	8.7	22%	22%	22%	0.0%	0.0%	0.0%
M6-Metropole Tel	16.05	5.4	5.3	5.2	1.4	1.3	1.3	11.6	11.2	10.7	25%	25%	26%	6.1%	6.3%	6.6%
Mediaset SPA	2.78	4.4	4.5	4.0	1.5	1.5	1.5	13.5	11.4	10.4	33%	33%	37%	4.2%	5.6%	5.9%
Prosieben	12.33	5.7	5.5	5.2	1.3	1.2	1.2	6.3	6.0	5.6	23%	22%	23%	8.2%	8.5%	8.1%
RTL Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TF1-TV Francaise	8.24	3.5	3.4	3.3	0.7	0.7	0.7	9.8	9.0	8.0	20%	21%	21%	5.5%	5.9%	6.1%
Median		5.6	5.4	5.2	1.4	1.4	1.4	10.0	9.7	9.5	24%	23%	23%	5.8%	6.1%	6.3%
Pay TV																
Cogeco	103.83	5.9	5.8	5.7	2.8	2.8	2.7	15.1	13.7	14.0	48%	48%	48%	2.0%	2.2%	2.4%
Comcast	46.35	9.0	8.5	8.2	2.8	2.7	2.7	15.2	13.7	12.7	31%	32%	32%	1.8%	2.0%	2.2%
Dish Network	35.70	9.2	10.1	10.9	1.7	1.8	1.8	14.7	19.7	22.0	19%	18%	16%	0.0%	0.0%	0.0%
Liberty Global	27.26	5.1	5.0	4.9	2.1	2.1	2.1	-	-	-	41%	42%	42%	0.0%	0.0%	-
Shaw Communications	19.86	7.9	7.5	7.2	3.2	3.1	3.0	19.5	19.1	18.3	41%	41%	42%	7.9%	8.0%	8.0%
Median		7.9	7.5	7.2	2.8	2.7	2.7	15.2	16.4	16.1	41%	41%	42%	1.8%	2.0%	2.3%

IT company valuations

		ΕV	//EBITD	A		EV/S			P/E		EBIT	TDA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
Asseco Poland	55.75	4.8	4.4	4.2	0.7	0.7	0.6	14.9	14.5	14.4	15%	15%	15%	5.5%	4.1%	4.1%
Comarch	179.50	6.5	5.9	5.5	1.0	0.9	0.8	15.5	14.0	13.2	15%	15%	15%	0.8%	0.8%	0.8%
Median		5.7	5.2	4.9	0.9	0.8	0.7	15.2	14.3	13.8	15%	15%	15%	3.2%	2.5%	2.5%
Foreign companies																
Atos Origin	69.74	7.5	7.1	6.7	1.0	1.0	1.0	8.3	7.7	7.3	14%	14%	15%	2.3%	2.5%	2.8%
CapGemini	113.60	9.1	8.6	8.2	1.4	1.3	1.3	17.4	15.9	14.7	15%	15%	15%	1.6%	1.8%	1.9%
IBM	140.57	9.8	9.2	8.7	2.2	2.1	2.1	10.9	10.4	9.7	23%	23%	24%	4.6%	4.8%	5.0%
Indra Sistemas	8.15	5.4	5.1	4.8	0.6	0.6	0.6	10.8	9.3	8.4	11%	11%	12%	1.3%	2.1%	2.4%
Microsoft	139.10	18.7	16.3	14.7	8.0	7.1	6.4	30.3	26.5	23.4	43%	44%	44%	1.3%	1.4%	1.5%
Oracle	53.16	10.4	9.8	9.5	4.9	4.7	4.6	15.4	13.7	12.8	47%	48%	48%	1.6%	1.7%	1.7%
SAP	110.80	18.0	15.3	13.6	5.3	4.9	4.6	22.7	20.4	18.1	30%	32%	34%	1.4%	1.6%	1.7%
TietoEnator	23.26	8.1	7.7	7.4	1.2	1.2	1.1	12.7	12.3	11.8	15%	15%	15%	6.4%	6.6%	6.8%
Median		9.4	8.9	8.4	1.8	1.7	1.7	14.1	13.0	12.3	19%	19%	20%	1.6%	1.9%	2.2%



Gaming company valuations

		EV	/EBITD	A		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Gaming																
11 bit studios	408.50	19.2	23.8	6.1	11.1	9.9	4.0	27.4	39.0	9.7	58%	42%	66%	0.0%	0.0%	0.0%
CD Projekt	255.50	-	9.4	10.4	64.0	7.1	8.3	-	10.6	11.9	21%	76%	80%	0.4%	0.0%	0.0%
PlayWay	178.00	14.1	12.4	11.1	9.2	8.3	7.4	21.3	19.5	18.2	66%	67%	67%	1.4%	3.5%	3.8%
Activision Blizzars	54.58	17.1	14.5	13.3	6.1	5.6	5.1	25.0	21.8	18.9	36%	38%	38%	0.7%	0.7%	0.8%
Capcom	2854.00	14.4	13.2	11.7	3.5	3.8	3.4	23.3	19.7	18.8	24%	29%	29%	1.2%	1.4%	1.5%
Take Two	130.76	18.0	18.6	17.4	4.4	4.6	4.5	27.7	27.6	26.5	24%	25%	26%	-	-	-
Ubisoft	72.04	8.1	8.7	8.2	4.0	3.8	3.5	24.3	25.2	22.3	50%	43%	43%	0.0%	0.0%	0.0%
Electronic Arts	98.53	16.8	14.7	13.0	5.4	5.0	4.7	25.1	21.4	19.3	32%	34%	36%	-	0.0%	0.0%
Paradox Interactive	132.40	17.9	13.7	11.5	9.9	8.0	7.0	42.8	33.0	22.4	55%	59%	61%	1.4%	1.8%	1.4%
Mediana		17.0	13.7	11.5	6.1	5.6	4.7	25.0	21.8	18.9	36%	42%	43%	0.7%	0.4%	0.4%

Source: Dom Maklerski mBanku (stocks marked with bold), Bloomberg

Steam Global Top Sellers

2019-09-09	Company	Position	D/D	W/W	1-week	Price (PLN)	D/D	W/W	1-week
			change	change	average	<u> </u>	change	change	average
Frostpunk	11 bit studios	144	+53	-114	155	110.00	0%	+100%	110.00
Frostpunk: SP	11 bit studios	112	-17	-103	57	88.00	0%	0%	88.00
Children of Morta	11 bit studios	20	+7	+114	33	80.00	0%	+11%	76.57
Blair Witch	Bloober Team	195	-106	-187	70	110.00	+11%	+11%	100.57
Cyberpunk 2077	CD Projekt	62	-50	-49	30	199.00	0%	0%	199.00
The Witcher 3: WH	CD Projekt	58	+7	+86	62	30.00	0%	-70%	41.67
The Witcher 3: WH (GOTY)	CD Projekt	6	+3	+77	24	45.00	0%	-70%	75.00
Green Hell	Creepy Jar	26	-4	-	81	90.00	0%	-	81.00
Dying Light	Techland	200+	-	-	75	-	-	-	56.00

Steam Wishlist

ottain minint						
2019-09-09	Company	Position	D/D change	W/W change	1-week average	Release date
Cyberpunk 2077	CD Projekt	1	-	-	1	2020-04-16
Alaskan Truck Simulator	Movie Games	65	+1	+2	66	2020
Bum Simulator	PlayWay	50	+1	-	51	2019
I am Your President	PlayWay	63	-1	+1	63	TBA
Junkyard Simulator	PlayWay	59	-	-	59	2019
Ship Builder Simulator	PlayWay	86	-	-	85	TBA
Tank Mechanic Simulator	PlayWay	77	-4	-3	73	2019
Dying Light 2	Techland	10	-	-	10	Spring 2020
Chernobylite	The Farm 51	51	+1	-	52	2019

Source: Steam (Valve Corporation), Dom Maklerski mBanku

Construction company valuations

		EV	/EBITD	A		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Construction																
Acciona	97.70	8.3	8.1	7.8	1.4	1.4	1.4	18.9	18.3	17.2	17%	17%	17%	3.8%	4.0%	4.2%
Astaldi	0.65	4.5	4.4	4.4	0.5	0.5	0.5	1.1	1.0	0.8	10%	10%	11%	-	-	-
Budimex	144.00	8.6	8.4	9.7	0.4	0.4	0.4	20.8	18.4	21.2	4%	5%	4%	8.6%	4.3%	4.6%
Ferrovial	26.43	-	40.8	36.0	4.2	4.1	4.0	-	44.3	38.5	3%	10%	11%	2.8%	2.9%	3.0%
Hochtief	99.75	3.7	3.6	3.3	0.2	0.2	0.2	10.6	9.8	9.6	6%	6%	7%	6.1%	6.5%	6.7%
Mota Engil	1.95	4.1	3.8	3.6	0.6	0.6	0.5	15.0	9.7	8.3	15%	15%	15%	2.6%	5.1%	6.2%
NCC	159.35	6.8	5.4	5.2	0.3	0.3	0.3	16.1	11.1	10.6	4%	5%	5%	3.9%	4.7%	4.9%
Skanska	190.70	8.7	8.6	8.1	0.5	0.5	0.5	14.3	14.3	13.5	5%	5%	6%	3.5%	3.7%	4.1%
Strabag	29.05	2.4	2.4	2.3	0.1	0.1	0.1	9.1	9.3	9.0	6%	6%	6%	4.5%	4.6%	4.8%
Median		5.6	5.4	5.2	0.5	0.5	0.5	14.6	11.1	10.6	6%	6%	7%	3.9%	4.4%	4.7%

Real-estate developers

		EV	/ EBITD	A		P/BV			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
RE Developers																
Atal	34.90	7.1	7.4	6.7	1.6	1.6	1.5	7.5	7.8	7.1	24%	23%	23%	13.5%	12.2%	11.6%
Dom Development	82.60	7.8	7.5	8.5	2.0	1.9	2.0	8.8	8.2	9.1	18%	18%	17%	11.0%	11.4%	12.1%
Echo Investment	4.69	13.0	15.1	13.2	1.2	1.1	1.2	7.0	8.7	11.0	36%	31%	30%	9.4%	9.5%	6.2%
GTC	9.49	15.4	14.6	13.6	1.0	0.9	0.9	10.9	10.6	10.1	84%	81%	80%	0.2%	0.2%	0.3%
LC Corp	2.40	4.4	8.6	7.1	-	-	-	-	-	-	31%	24%	23%	11.3%	12.9%	6.3%
CA Immobilien Anlagen	31.50	25.9	22.7	20.7	1.1	1.0	1.0	25.1	22.1	20.0	78%	69%	67%	3.0%	3.4%	3.6%
Deutsche Euroshop AG	23.74	15.1	15.1	15.1	0.7	0.7	0.7	11.0	11.8	12.0	88%	88%	88%	6.5%	6.6%	6.7%
Immofinanz AG	25.25	30.1	27.0	26.5	0.9	0.9	0.9	16.4	17.4	15.5	46%	54%	53%	3.5%	3.8%	4.0%
Klepierre	27.89	18.9	18.4	18.2	0.8	0.8	0.8	10.4	10.0	9.8	84%	85%	85%	7.8%	8.1%	8.2%
Segro	789.80	35.2	31.6	28.8	1.1	1.0	1.0	32.1	29.6	28.6	77%	81%	83%	0.0%	0.0%	0.0%
Median		15.2	15.1	14.3	1.1	1.0	1.0	10.9	10.6	11.0	61%	61%	60%	7.2%	7.4%	6.2%

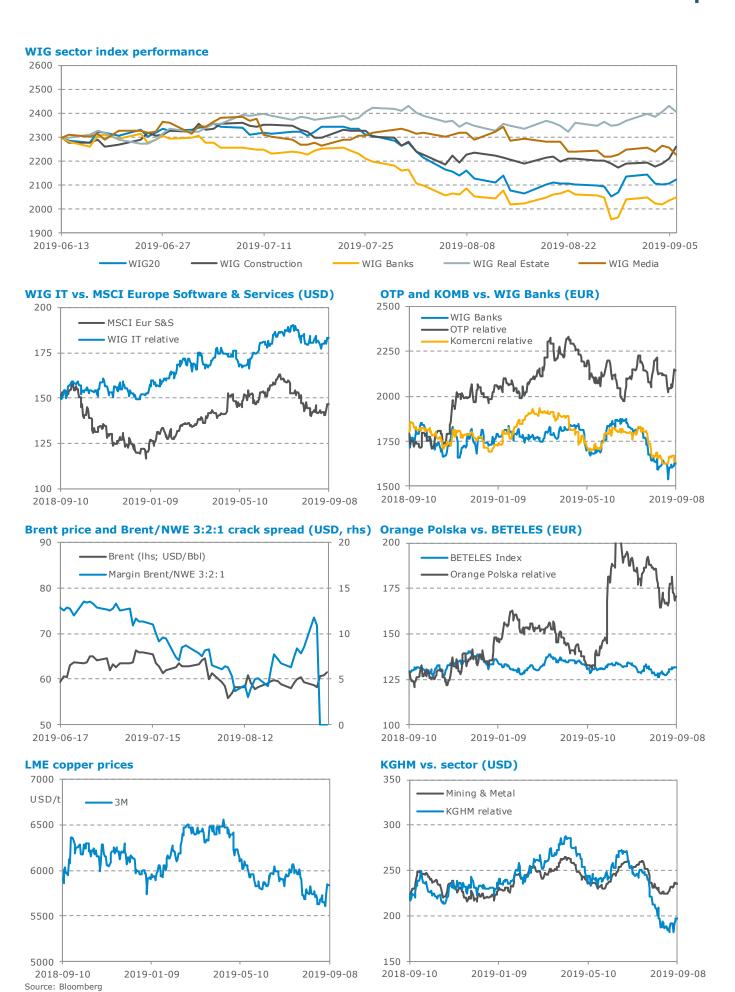


Clothing and footwear company valuations

		EV	//EBITD	A		EV/S			P/E		EBI	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Polish companies																
CCC	137.50	7.1	5.6	5.4	1.1	1.0	0.9	51.3	21.2	18.7	16%	18%	16%	0.3%	1.5%	1.5%
LPP	7175.00	9.9	8.9	7.7	1.4	1.2	1.0	19.6	17.7	16.2	14%	14%	14%	0.8%	1.1%	0.9%
Monnari	4.55	4.1	3.3	2.1	0.3	0.2	0.2	9.0	8.9	7.6	7%	7%	7%	0.0%	0.0%	0.0%
VRG	4.32	8.6	7.3	6.4	1.0	0.9	0.8	13.7	11.9	10.8	12%	12%	12%	0.0%	0.0%	0.0%
Median		7.8	6.4	5.9	1.1	0.9	0.8	16.7	14.8	13.5	13%	13%	13%	0.2%	0.5%	0.4%
Foreign companies																
ABC Mart	6810.00	9.0	8.7	8.3	1.7	1.6	1.5	18.4	17.9	17.2	18%	18%	18%	2.3%	2.5%	2.5%
Adidas	278.90	15.8	14.5	13.0	2.3	2.2	2.0	28.5	25.2	21.9	15%	15%	16%	1.4%	1.6%	1.8%
Assoc Brit Foods	2354.00	8.9	8.2	7.7	1.1	1.1	1.0	17.3	15.5	14.5	13%	13%	13%	0.0%	0.0%	0.0%
Caleries	21.81	5.0	4.7	4.5	0.3	0.3	0.3	9.6	9.1	8.0	7%	7%	7%	1.3%	1.3%	1.3%
Crocs	24.53	11.1	9.6	8.5	1.4	1.3	1.3	17.8	15.5	13.8	13%	14%	15%	-	-	-
Foot Locker	39.40	4.1	4.0	4.0	0.5	0.4	0.4	8.6	8.0	7.6	11%	11%	11%	3.5%	3.8%	4.3%
Geox	1.24	7.4	5.5	3.3	0.4	0.4	0.4	-	23.5	14.1	5%	7%	11%	1.8%	3.1%	5.5%
H&M	191.10	10.7	10.0	9.5	1.3	1.2	1.2	24.7	22.9	21.7	12%	12%	12%	4.9%	4.7%	4.8%
Hugo Boss	51.24	6.4	5.9	5.6	1.2	1.2	1.1	13.9	12.5	11.5	19%	20%	20%	5.6%	6.2%	6.7%
Inditex	28.65	14.8	11.3	10.6	3.1	2.9	2.8	25.6	23.5	22.1	21%	26%	26%	2.8%	3.7%	4.0%
KappAhl	19.91	6.9	5.7	5.7	0.4	0.4	0.4	11.4	10.9	10.8	6%	7%	7%	4.4%	5.2%	5.0%
Lululemon	203.14	29.1	24.7	21.3	7.3	6.3	5.5	54.2	43.8	36.8	25%	26%	26%	0.0%	0.0%	0.0%
Nike	88.69	19.6	17.7	15.6	2.8	2.6	2.4	34.4	30.5	26.1	15%	15%	16%	1.0%	1.0%	1.1%
Under Armour	19.56	9.1	7.5	5.9	0.7	0.7	0.6	57.7	40.8	29.2	8%	9%	11%	0.0%	0.0%	0.0%
Median		9.1	8.5	8.0	1.2	1.2	1.2	18.4	20.4	15.8	13%	13%	14%	1.8%	2.5%	2.5%

Luxury, e-commerce, and food retail company valuations

		ΕV	//EBITD	A		EV/S			P/E		EBIT	DA mar	gin		DY	
	Price	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Luxury goods																
Estee Lauder	207.03	15.0	13.3	12.1	3.1	2.9	2.7	39.5	34.7	31.1	21%	22%	22%	0.8%	0.9%	1.0%
Hermes Internetional	655.20	25.7	23.6	21.5	9.7	8.9	8.3	45.5	41.5	37.4	38%	38%	38%	0.9%	1.0%	1.1%
Kering	453.75	10.8	9.9	9.3	3.7	3.4	3.2	18.1	15.9	14.6	35%	35%	35%	2.5%	2.9%	3.2%
LVMH	379.90	14.3	13.1	12.3	3.8	3.5	3.3	26.4	23.9	21.9	26%	27%	27%	1.8%	2.0%	2.2%
Moncler	35.96	14.7	13.1	11.8	5.3	4.7	4.2	24.4	22.7	20.4	36%	36%	36%	1.3%	1.4%	1.7%
Median		14.7	13.1	12.1	3.8	3.5	3.3	26.4	23.9	21.9	35%	35%	35%	1.3%	1.4%	1.7%
E-commerce																
Asos	2508.00	18.9	13.2	10.3	0.8	0.7	0.6	-	41.0	28.3	4%	5%	6%	0.0%	0.0%	0.0%
boohoo.com	282.80	38.7	28.5	23.1	3.7	2.8	2.2	-	57.7	44.9	10%	10%	10%	0.0%	0.0%	0.0%
Zalando	46.75	32.1	26.0	20.0	1.7	1.4	1.2	-	-	68.3	5%	6%	6%	0.0%	0.0%	0.0%
Median		32.1	26.0	20.0	1.7	1.4	1.2	####	49.4	44.9	5%	6%	6%	0.0%	0.0%	0.0%
Retail																
Dino	153.20	21.3	16.0	12.5	2.0	1.5	1.2	36.9	26.8	20.6	10%	10%	10%	0.0%	0.0%	0.0%
Eurocash	21.30	8.8	7.8	6.6	0.1	0.1	0.1	41.2	29.1	20.6	2%	2%	2%	4.7%	1.2%	1.7%
Jeronimo Martins	15.87	9.8	9.0	8.4	0.6	0.5	0.5	22.5	20.2	19.3	6%	6%	6%	1.7%	1.8%	1.9%
Carrefour	16.16	5.1	4.8	4.5	0.2	0.2	0.2	13.9	12.1	11.3	5%	5%	5%	3.2%	3.6%	3.7%
AXFood	202.40	10.3	10.1	9.9	0.9	0.9	0.8	26.2	25.5	25.2	9%	9%	9%	3.5%	3.5%	3.3%
Tesco	232.50	7.4	5.8	5.6	0.4	0.4	0.4	16.4	13.8	12.6	5%	7%	7%	0.0%	0.0%	0.0%
Ahold	21.78	6.1	5.9	5.9	0.5	0.5	0.5	13.5	12.6	12.1	8%	8%	8%	3.4%	3.7%	3.9%
X 5 Retail	2287.00	6.8	6.2	5.7	0.5	0.4	0.4	15.5	14.0	12.6	7%	7%	7%	4.2%	5.1%	6.3%
Magnit	3574.50	5.6	5.0	4.4	0.4	0.4	0.3	12.5	9.8	8.5	8%	8%	8%	6.2%	6.6%	7.4%
Sonae	0.85	9.6	9.0	6.9	0.8	0.7	0.7	11.7	10.1	8.1	8%	8%	10%	5.1%	5.6%	5.7%
Median		8.1	7.0	6.2	0.5	0.5	0.4	15.9	13.9	12.6	7%	7%	7%	3.5%	3.5%	3.5%

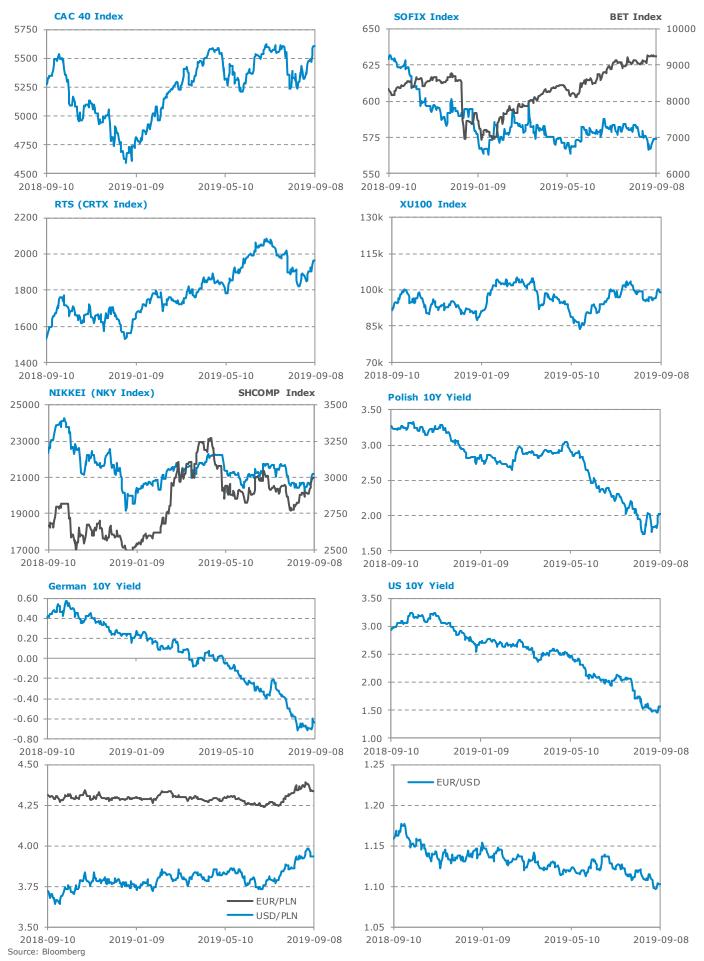




Global Market Overview

Index	Date	Open	Maximum	Minimum	Close	Change
DJIA	2019-09-06	26,790.25	26,860.87	26,708.39	26,797.46	+0.26%
S&P 500	2019-09-06	2,980.33	2,985.03	2,972.51	2,978.71	+0.09%
NASDAQ	2019-09-06	8,125.58	8,134.39	8,098.52	8,103.07	-0.17%
DAX	2019-09-06	12,146.00	12,205.10	12,131.29	12,191.73	+0.54%
CAC 40	2019-09-06	5,592.07	5,610.70	5,581.54	5,603.99	+0.19%
FTSE 100	2019-09-06	7,271.17	7,284.11	7,244.13	7,282.34	+0.15%
WIG20	2019-09-06	2,111.05	2,129.97	2,108.64	2,122.60	+0.75%
BUX	2019-09-06	40,186.75	40,313.75	39,943.36	40,312.46	+0.33%
PX	2019-09-06	1,039.81	1,039.81	1,030.20	1,032.06	-0.79%
RTS	2019-09-06	1,962.41	1,967.30	1,947.04	1,964.94	+0.05%
SOFIX	2019-09-05	573.23	575.02	573.23	574.17	+0.16%
BET	2019-09-06	9,251.32	9,282.40	9,226.71	9,245.30	-0.07%
XU100	2019-09-06	100,165.70	100,402.30	98,935.97	98,987.48	-1.29%
BETELES	2019-09-06	131.47	131.80	130.32	131.76	+0.24%
NIKKEI	2019-09-06	21,201.83	21,241.29	21,145.81	21,199.57	+0.54%
SHCOMP	2019-09-06	2,996.62	2,999.94	2,981.60	2,999.60	+0.46%
Copper (LME)	2019-09-06	5,840.00	5,864.50	5,803.00	5,833.00	-0.21%
Crude Oil (Brent)	2019-09-06	61.28	62.32	59.86	62.15	+1.49%
USD/PLN	2019-09-06	3.9346	3.9392	3.9241	3.9319	-0.07%
EUR/PLN	2019-09-06	4.3412	4.3455	4.3344	4.3396	-0.04%
EUR/USD	2019-09-06	1.1035	1.1057	1.1020	1.1029	-0.05%
USBonds10	2019-09-06	1.5586	1.6045	1.5381	1.5602	+0.0016
GRBonds10	2019-09-06	-0.5930	-0.5750	-0.6390	-0.6380	-0.0440
PLBonds10	2019-09-06	1.9760	2.0280	1.9650	2.0170	+0.0330







List of abbreviations and ratios contained in the report.

List or abbreviations and ratios contained in the EV – net debt + market value (EV – conomic value).
EBIT – Earnings Before Interest and Taxes
EBITDA – EBIT + Depreciation and Amortisation
PBA – Profit on Banking Activity
P/CE – price to earnings with amortisation
MC/S – market capitalisation to sales

BETT/EV – operating profit to economic value

P/E - (Price/Earnings) – price divided by annual net profit per share

ROE – (Return on Equity) – annual net profit divided by average equity

P/BV – (Price/Book Value) – price divided by book value per share

Net debt – credits + debt papers + interest bearing loans – cash and cash equivalents

EBITDA margin – EBITDA/Sales

OVERWEIGHT (OW) – a rating which indicates that we expect a stock to outperform the broad market NEUTRAL (N) – a rating which indicates that we expect the stock to perform in line with the broad market UNDERWEIGHT (UW) – a rating which indicates that we expect the stock to underperform the broad market

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ACCUMULATE — we expect that the rate of return from an investment will range from 5% to 15%

HOLD — we expect that the rate of return from an investment will range from -5% to +5%

REDUCE — we expect that the rate of return from an investment will range from -5% to -15%

SELL — we expect that the rate of return from an investment will range from -5% to -15%

SELL — we expect that an investment will bear a loss greater than 15%

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Strong and weak points of valuation methods used in recommendations:

DCF - acknowledged as the most methodologically correct method of valuation; it consists in discounting financial flows generated by a company; its weak point is the significant susceptibility to a change of forecast assumptions in the model.

assumptions in the model.

Relative – based on a comparison of valuation multipliers of companies from a given sector; simple in construction, reflects the current state of the market better than DCF; weak points include substantial variability (fluctuations together with market indices) as well as difficulty in the selection of the group of comparable companies.

Economic profits – discounting of future economic profits; the weak point is high sensitivity to changes in the assumptions made in the valuation model.

Discounted Dividends (DDM) – discounting of future dividends; the weak point is high sensitivity to changes in the assumptions as to future dividends made in the valuation model.

NAV - valuation based on equity value, one of the most frequently used method in case of developing companies; the weak point of the method is that it does not factor in future changes in revenue/profits of a company.

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