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## **Morning Comments**

## **Equity Market, Poland**

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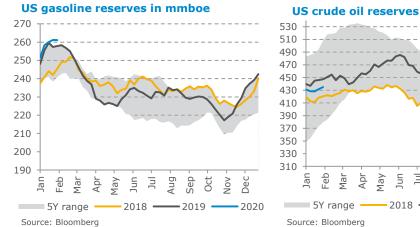
| DJIA    | 29,290.9 | +1.68% FTSE 100  | 7,482.5  | +0.57% Copper (LME)      | 5,722.0 | +1.85% |
|---------|----------|------------------|----------|--------------------------|---------|--------|
| S&P 500 | 3,334.7  | +1.13% WIG20     | 2,122.9  | +0.77% Crude Oil (Brent) | 55.02   | +3.71% |
| NASDAQ  | 9,508.7  | +0.43% BUX       | 44,020.0 | +0.35% USD/PLN           | 3.8598  | -0.30% |
| DAX     | 13,478.3 | +1.48% <b>PX</b> | 1,103.4  | +1.21% EUR/PLN           | 4.2453  | -0.71% |
| CA C 40 | 5,985,4  | +0.85% PLBonds10 | 2.195    | +0.004 EUR/USD           | 1.0999  | -0.41% |

## **Company & Sector News**

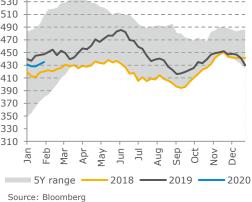
Oil&Gas

## US gasoline demand -3% yoy

EIA report showed that US domestic crude inventories increased by 3.4 mmboe, whereas market consensus stood at +3.0 mmboe. Net import rose by 2% and refineries' utilization rate further increased slightly to 87.4% from 87.2%. Gasoline stocks decreased marginally (-0.09 mmboe vs +1.8 mmboe expected) after rising 12 week in a row. Diesel inventories decreased by 1.5 mmboe vs -0.2 mmboe expected. Gasoline consumption 4-weeks moving average dynamics yoy stood at -3.1% with last week deliveries increasing by 1.6%. (K. Kliszcz)







## **PKN Orlen**

Reduce- 2020-02-03 Target price: PLN 68.03

### Agora

Buy - 2019-10-30 Target price: PLN 17.00

## contribution at PLN 250m. (K. Kliszcz)

Visbreaking project kicked off

### Press circulation in Dec'19 (=/-)

Listed media group Agora's flagship daily suffers a 14.2% y/y decline in average copy sales in December'19 to 95k copies, while in m/m terms sales edged down by 0.1%, data from the press market monitor ZKDP showed. Data for Agora's daily is worse than for the entire market (-6.3% y/y) so we consider the news as slightly negative. However, please bear in mind that the ongoing cost cutting actions in Press&Print segment should be visible in financial results. (P. Szpigiel)

PKN signed an agreement for design and building "in turn key" formula of the Visbreaking installation for a total amount PLN 950m (incl. supporting units). Company expects that after

project completion (end-2022), its EBITDA will increase by PLN 340-415m annually (by increasing the yield of high-margin products as a result of in-depth conversion of vacuum residue). We include visbreaking project in our model with capex at PLN 1 bn and EBITDA

## Anti-trust investigation

Anti-trust office UOKiK will investigate whether listed media group Agora's outdoor advertising unit AMS created a monopoly and possibly eliminated many other advertising firms from the industry, UOKiK said in a statement. The investigation is carried after the introduction of so called 'Lanscape Act'. One of the few permitted forms of advertising in Warsaw will be outdoor at public transport stops, currently controlled by one content provider (AMS in Warsaw). Therefore, the act may result in strengthening the competitive environment, leading to the creation of a monopoly by AMS on advertising space available at public shelters. (P. Szpigiel)



JSW

Hold - 2020-02-05 Target price: PLN 18.41

Grupa Kety

Hold - 2019-12-05

Target price: PLN 335.44

## JSW Prolongs Coal Extraction Concessions

JSW mining company renewed or prolonged contracts with the mines where its concessions have ended or were close to an end. The concession with the Borynia deposit, which ends in 5 years, still needs to be changed. Spokesperson for JSW Slawomir Starzynski said that the new concessions were for the Pniowek deposit until 2051, Szyglowice until 2040, Jas-Mos 1 until 2025 and Bzie-Debina 1 West until 2051. Moreover, the prolonged concessions were for the Budryk deposit until 2043 and Knurow until 2044. The mines of JSW have been extracting coal on the basis of concessions from the years 1993-1994. As of now, the company owns 11 concessions with the total area of nearly 210 sq km and the deposits estimated at over 1.2bn tonnes of coking coal. **The information expected. (J. Szkopek)** 

### 2020 Management forecast

Grupa Kęty forecasts that in 2020 it will achieve PLN 294 million net profit, i.e. the same as the estimates for 2019 - the company said in a statement. The group's revenue forecast for 2020 is an increase of 3%. up to PLN 3.314 billion - Kęty estimates sales revenues in 2019 at PLN 3.205 billion. The results and slightly above current consensus and significantly higher it terms of our forecasts. We believed the company will struggle this year with much more pressure on cost site, and there could be some headwinds on site of demand – especially in extrudend aluminum segment. The highest difference to our forecast take place in extruded aluminum and higher capex. Overall the forecast is a bit better the marked assumed, but the pace of improvement in 2020 year is rather low (slow growing company). We would need to decrease our aluminum forecast and increase the projected results. We still believe that the environment in 2020 will be more difficult for Grupa Kęty and it will be rather difficult to improve y/y results. (J. Szkopek)

|                   | 2020<br>Management<br>forecast | 2019  | Change | 2020 mBank<br>forecast | Diff. | Consensus | Diff. |
|-------------------|--------------------------------|-------|--------|------------------------|-------|-----------|-------|
| Revenues          | 3 314                          | 3 205 | 3%     | 3 074                  | 8%    | 3476      | -5%   |
| EBITDA            | 535                            | 524   | 2%     | 473                    | 13%   | 515       | 4%    |
| EBIT              | 389                            | 385   | 1%     | 329                    | 18%   |           |       |
| Net profit        | 294                            | 294   | 0%     | 244                    | 20%   | 279       | 6%    |
| Aluminium (PLN/t) | 6 845                          | 6 879 | 0%     | 7 430                  | -8%   |           |       |
| SWW rev.          | 1 231                          | 1 256 | -2%    | 1 416                  | -13%  |           |       |
| SSA rev.          | 1 511                          | 1 466 | 3%     | 1 174                  | 29%   |           |       |
| SOG rev.          | 864                            | 786   | 10%    | 807                    | 7%    |           |       |
| SWW EBITDA        | 153                            | 151   | 1%     | 131                    | 17%   |           |       |
| SSA EBITDA        | 245                            | 238   | 3%     | 206                    | 19%   |           |       |
| SOG EBITDA        | 155                            | 147   | 5%     | 144                    | 7%    |           |       |
| Capex             | 213                            | 244   | -13%   | 150                    | 42%   |           |       |
| Net debt          | 748                            | 703   | 6%     | 860                    | -13%  |           |       |
| Net debt / EBITDA | 1.4                            | 1.3   |        | 1.8                    |       |           |       |

**Coking coal** 

## Argus: Buying interest returns in Europe

Improving sentiment in Europe and the need to replenish stocks from April onwards have supported market sentiment this week for US coking coal, despite the ongoing uncertainty in China weighing on the Asia-Pacific market. The coking coal prices rebounded from bottom in January. Unfortunately the coke prices were still under pressure in Europe in January. There is a risk that due to coronavirus prices will sink again in Q1'20. For more information please visit <u>https://tinyurl.com/rlu75xk</u> (J. Szkopek)

Copper

### China ask mines to delay cargos

Yesterday the Cochilco (Chine copper association) informed that China clients asked mines to delay cargos due to virus. **The information is negative regarding copper rising stocks.** (J. Szkopek)



## Steel

## China steel group calls for industry stability amid coronavirus

The China Iron and Steel Association (CISA) on Thursday asked steel firms to maintain stability amid fluctuations in steel prices caused by slumping demand as the coronavirus outbreak disrupts transport and industrial activity. The industry association appealed to mills to "reasonably adjust their production rhythms" on downstream demand dynamics and avoid overstock and ensure ample cash flow. The newsflow shows that the demand for steel products in China decreases and could have impact on prices and stocks. For more information please visit <a href="https://tinyurl.com/tbz7koy">https://tinyurl.com/tbz7koy</a> (J. Szkopek)

## Trade, China-USA China to cut tariffs on some goods imported from the US by half

Reuters reports key headlines on the US-China trade war, citing that China is said to cut tariffs on some goods imported from the US by half. Tariffs on some US goods to be cut to 5% from 10% previously, some US goods to see tariffs reduced to 2.5% from 5% previously. China hopes it and the US can abide by the agreed trade deal and implement it well. **For more information please visit** <u>https://tinyurl.com/uvxnnx3</u> (J. Szkopek)

## **Quarterly Earnings Results**

## Komercni Banka

Buy - 2019-12-05 Target price: CZK 928.20

## Weak bottom-line offset by high DPS proposal

- Komercni Banka net profit came in at CZK 3,840m, down 0.2% Q/Q and 1.2% Y/Y, below the consensus estimate at CZK 4,086m and our estimate at CZK 4,231m.
- Worse-than-expected results came in due to the lower met provisioning release (CZK 243m) than expected by the market (CZK 376m). The bank was also slightly below the expectations on net fee income line and in line on net interest income and costs line.
- NIM came in at 2,2%, up 10bps Q/Q. NIM was supported by the seasonal balance sheet decline in the 4Q.
- Management proposed DPS of CZK 58/share versus our own expectations of CZK 51/share (CZK 51,7/share expected by the consensus). Going forward management will propose a 65% net profit distribution.
- We expect results announcement to have slightly positive impact. On one hand bottom-line performance disappoints but on the other DPS proposed by the management is stronger than the expectations whilst NIM advanced by 10 bps in the quarter. Finally, DPS guidance is in line with our expectations. (M. Konarski, M. Lemańczyk)

## **Overview of 2019 Q4 results**

| (CZK m)                                     | Q4'18  | Q3'19  | Q4'19  | Y/Y   | Q/Q   |
|---|--------|--------|--------|-------|-------|
| Net interest income                         | 5,981  | 5,911  | 5,921  | -1.0  | 0.2   |
| Net fees and commissions                    | 1,628  | 1,480  | 1,543  | -5.2  | 4.3   |
| Net profit / (loss) on financial operations | 791    | 839    | 627    | -20.7 | -25.3 |
| Other income                                | 71     | 36     | 45     | -36.6 | 25.0  |
| Net banking income                          | 8,471  | 8,265  | 8,136  | -4.0  | -1.6  |
| Total operating expenses                    | -3,619 | -3,512 | -3,708 | 2.5   | 5.6   |
| Gross operating income                      | 4,853  | 4,753  | 4,428  | -8.8  | -6.8  |
| Cost of risk                                | -17    | -26    | 243    | n.m.  | n.m.  |
| Net operating income                        | 4,835  | 4,726  | 4,671  | -3.4  | -1.2  |
| Net profit / (loss) from subsidiaries       | 36     | 74     | 91     | 152.8 | 23.0  |
| Other items                                 | 0      | 1      | 2      | n.m.  | 100.0 |
| Profit/(loss) before income taxes           | 4,872  | 4,801  | 4,764  | -2.2  | -0.8  |
| Income taxes                                | -921   | -883   | -889   | -3.5  | 0.7   |
| Minority profit / (loss)                    | 63     | 70     | 35     | -44.4 | -50.0 |
| Profit/loss for the period                  | 3,888  | 3,848  | 3,840  | -1.2  | -0.2  |

Source: Komercni Banka, mBank

## 2019 Q4 actuals vs. expectations

| (CZK mln)                  | Q4'19  | Konsensus | Różnica | mDm    | Różnica |
|----------------------------|--------|-----------|---------|--------|---------|
| Net interest income        | 5,921  | 5,958     | -0.6%   | 6,073  | -3%     |
| Net fees and commissions   | 1,543  | 1,595     | -3.3%   | 1,536  | 0%      |
| Total operating expenses   | -3,708 | -3,722    | -0.4%   | -3,773 | -2%     |
| Cost of risk               | 243    | 376       | -35.4%  | 470    | -48%    |
| Profit/loss for the period | 3,840  | 4,086     | -6.0%   | 4,231  | -9%     |

Source: Komercni Banka, mBank

## ING BSK

Sell - 2020-02-04 Target price: PLN 170.0

## ING BSK shows slightly worse than expected results in Q4'19

- Net profit came in at PLN 450.3m and misses expectations (PLN 463.5m) by 2.8% and our own estimates by 1.2%. The biggest miss was on NII (-2.3%)
- Bank set PLN 8.9 provisions for legal risk related to CHF portfolio.
- Net interest income was flat Q/Q and increased 12.1% Y/Y to PLN 1115.7m. NII was lower by PLN 21m due to reimbursement of fees in early paid loans. NII was mainly driven by gross volumes in retail segment (+4% Q/Q). NIM narrowed by 9bps Q/Q to 2.84%.
- Non-interest income jumped by 5.1%, Q/Q, driven by rising fee income (1.2% Q/Q) and positive result on other income.
- Operating costs decreased by 2.3% Q/Q to PLN 590.8m.
  Net provisioning came in at PLN 164.4m, down 8.8% Q/Q, below our estimates (-11.9%). This translates into CoR at 56bps, which is 8bsp rise/decrease.
- Board recommended dividend payout ratio at 30% level, which was widely expected.
- · We find results slightly negative, mainly due to higher than expected impact of fees reimbursement on NII. On the other hand, we are surprised by discipline in net provisioning line. (M. Konarski, M. Lemańczyk)

## **Overview of 2019 Q4 results**

| (PLN m)                           | Q4'18   | Q3'19   | Q4'19   | Y/Y   | Q/Q   |
|-----------------------------------|---------|---------|---------|-------|-------|
| Net interest income               | 995.1   | 1 120.0 | 1 115.7 | 12.1  | -0.4  |
| Net fee income                    | 330.7   | 340.4   | 344.6   | 4.2   | 1.2   |
| Financial operations and FX gains | 29.6    | 23.5    | 20.2    | -31.8 | -14.0 |
| Other income                      | 4.1     | -14.6   | 2.3     | -43.9 | n.m.  |
| Non-interest income               | 364.4   | 349.3   | 367.1   | 0.7   | 5.1   |
| Total income                      | 1 359.5 | 1 469.3 | 1 482.8 | 9.1   | 0.9   |
| Operating costs                   | 566.3   | 604.4   | 590.8   | 4.3   | -2.3  |
| Operating profit                  | 793.2   | 864.9   | 892.0   | 12.5  | 3.1   |
| Net provisioning                  | 98.5    | 180.2   | 164.4   | 66.9  | -8.8  |
| Share in. companies profit        | -0.1    | 2.8     | 4.0     | n.m.  | 42.9  |
| Pre-tax profit                    | 694.6   | 687.5   | 731.6   | 5.3   | 6.4   |
| Income tax                        | 143.5   | 161.2   | 167.7   | 16.9  | 4.0   |
| Minority interests                | 0.0     | 0.0     | 0.0     | n.m.  | n.m.  |
| Net profit before banking tax     | 551.1   | 526.3   | 563.9   | 2.3   | 7.1   |
| Bank tax                          | 98.9    | 111.5   | 113.6   | 14.9  | 1.9   |
| Net income                        | 452.2   | 414.8   | 450.3   | -0.4  | 8.6   |

Source: ING BSK, mBank

## 2019 O4 actuals vs. expectations

| (PLN m)             | Q4′19   | Consensus | differ. | Q4′19E  | differ. |
|---------------------|---------|-----------|---------|---------|---------|
| Net interest income | 1 115.7 | 1 142.0   | -2.3%   | 1 134.7 | -1.7%   |
| Fee income          | 344.6   | 341.4     | 0.9%    | 347.0   | -0.7%   |
| Operating costs     | -590.8  | -598.4    | -1.3%   | -590.2  | 0.1%    |
| Provisioning        | -164.4  | -167.4    | -1.8%   | -186.5  | -11.9%  |
| Net profit          | 450.3   | 463.5     | -2.8%   | 455.6   | -1.2%   |

Source: ING BSK, E - estimates by mBank, Consensus estimates provided by PAP



## Moneta Money Bank

Buy – 2019-02-04 Target price: CZK 94.33

## Results in line with management guidance

- Moneta Money Bank net profit came in at CZK 949m, down 10% Q/Q but up 13% Y/Y.
- Results are 8% above our expectations and somewhat lower than quarterly BBG consensus.
  - The bank delivered flattish performance on NII and net fee income.
  - Bank also posted increase in net provisioning line (+29% Q/Q) however from a very low point in 3Q'19.
  - Management expects to reach CZK 4.5bn net profit in 2020, total operating income above CZK 12.5bn, cost below CZK 5.9bn and CoR between 50-60bps.
  - All-in-all we find 4Q results as neutral. Bank met its guidance from 3Q for the full-year profit, costs, CoR and is already paying out dividends (1st interim dividend paid out in December). The guidance for current and next year is much higher than our expectations (CZK 4.1bn) as we still don't include Wustenrot in our forecast. We believe management gave strong message about future profitability arising from merger and the consensus will advance in coming weeks. (M. Konarski, M. Lemańczyk)

## **Overview of 2019 Q4 results**

|                        |        |        |        |       | 0.40  |
|------------------------|--------|--------|--------|-------|-------|
| (CZK m)                | 4Q'18  | 3Q'19  | 4Q'19  | Y/Y   | Q/Q   |
| Net interest income    | 1,972  | 2,009  | 2,014  | 2.1   | 0.2   |
| Net fee income         | 540    | 499    | 501    | -7.2  | 0.4   |
| Trading income         | 99     | 109    | 148    | 49.5  | 35.8  |
| Other operating income | 26     | 28     | 22     | -15.4 | -21.4 |
| Non-interest income    | 665    | 636    | 671    | 0.9   | 5.5   |
| Total income           | 2,637  | 2,645  | 2,685  | 1.8   | 1.5   |
| operating costs        | -1,216 | -1,109 | -1,217 | 0.1   | 9.7   |
| Other operating costs  | -171   | -53    | -84    | -50.9 | 58.5  |
| Total costs            | -1,387 | -1,162 | -1,301 | -6.2  | 12.0  |
| Operating profit       | 1,250  | 1,483  | 1,384  | 10.7  | -6.7  |
| Net provisioning       | -274   | -168   | -216   | -21.2 | 28.6  |
| Pre-tax profit         | 976    | 1,315  | 1,168  | 19.7  | -11.2 |
| Income tax             | -139   | -257   | -219   | 57.6  | -14.8 |
| Minorities             | 0      | 0      | 0      | n.m.  | n.m.  |
| Net profit             | 837    | 1,058  | 949    | 13.4  | -10.3 |

Source: Moneta Money Bank, mBank

### 2019 Q4 actuals vs. expectations

| mln CZK    | 4Q'19 | Consensus | differ. | mBank | differ. |
|------------|-------|-----------|---------|-------|---------|
| Net profit | 949   | 988.0     | -3.9%   | 882   | 7.6%    |

Source: Moneta Money Bank, mBank

| More News       |   |
|-----------------|---|
| Ambra           | Ambra wants to keep increasing dividend payments each year, company's CEO Robert Ogor told PAP. Ambra expects Poland's wine market to slow down in 2020, but still grow by 5% on a yearly average in the coming years, Ogor opined.         |
| Apator          | Apator signed a PLN 75.2 mln deal on delivery of gas meters for PGNiG's unit PSG, Apator said in a market filing.   |
| Car Rental      | Poland's long-term car rentals increased by over 10% in 2019 annually, Polish association for vehicle rental and leasing PZWLP report shows.  |
| Coal, Mining    | State coal group PGG's unions will organize a two-hour warning strike on February 17 to be followed by a strike referendum over a week later in the frame of the ongoing dispute over wage hikes, PGG union leaders announced on Wednesday. |
| Grodno          | Electrical equipment distributor Grodno enjoyed a 32% y/y increase in f9M 2019/2020 net profit to PLN 9.1 mln, the company said in a market filing.   |
| ING BSK         | Bank ING BSK faces a group MREL requirement at 11.679% of TLOF and 21.280% of total risk exposure to be met by end-2022, the bank said in a market filing of a notification from the banking guarantee fund BFG.                            |
| M&A / Pkn Orlen | PKN Orlen needs to persistently think about further acquisitions in order to build a multi-energy conglomerate, CEO Daniel Obajtek told reporters.  |
| Telecom, 5G     | Poland's asking price in the 5G auction is not "excessive" taking into consideration current requirements for the 5G operators, Digitization Minister Marek Zagorski opined.  |
| Video Games     | Listed video games producer Bloober Team eyes publishing one larger game every 1.5-2 years, the company said in a market filing.  |
| ZUE             | Listed railway infrastructure builder ZUE sported PLN 3.8 mln net profit in 2019 versus PLN 62.6 mln net loss in the year-prior on revenues rising to PLN 996.2 mln from PLN 832.7 in 2018, the company said in a market filing.            |



## **Corporate Action Calendar**

| Date   | Time  | Company        | Event   |
|--------|-------|----------------|---|
| 6-Feb  |       | ING BSK        | Q4'19 earnings announcement (preliminary)         |
| 6-Feb  |       | Komercni Banka | Q4'19 earnings announcement                       |
| 6-Feb  | 12:00 | Grupa Kęty     | Management meetings (Regent Hotel, Warsaw)        |
| 6-Feb  |       | mBank          | Q4'19 earnings announcement (preliminary)         |
| 6-Feb  |       | Moneta Money   | Q4'19 earnings announcement                       |
| 6-Feb  |       | RBI            | Q4'19 earnings announcement (preliminary)         |
| 10-Feb | 9:30  | Famur          | Management meetings (GPW, ul. Książęca 4, Warsaw) |
| 12-Feb |       | Orange Polska  | Q4'19 earnings announcement                       |
| 12-Feb |       | РКО ВР         | Q4'19 earnings announcement                       |
| 13-Feb |       | Citi Handlowy  | Q4'19 earnings announcement (preliminary)         |
| 14-Feb |       | Millennium     | Q4'19 earnings announcement                       |
| 14-Feb |       | Skarbiec       | Q4'19 earnings announcement                       |

## **Economic Calendar**

| Thursd | lay, 6 Febi | ruary 2020                         |            |                      |                        |
|--------|-------------|------------------------------------|------------|----------------------|------------------------|
| Time   | Region      | Data                               | Period     | Forecast             | Previous               |
| 00:50  | Japan       | Foreigners Buying Japan Bonds (F)  |            |                      | 277.40bn               |
| 00:50  | Japan       | Foreigners Buying Japan Stocks (F) |            |                      | -284.30bn              |
| 00:50  | Japan       | Japan Buying Foreign Bonds (F)     |            |                      | 551.90bn               |
| 00:50  | Japan       | Japan Buying Foreign Stocks (F)    |            |                      | -167.10bn              |
| 08:00  | Germany     | Factory Goods Orders               | December   | 0.80% m/m;-6.70% y/y | -1.30% m/m; -6.50% y/y |
| 14:30  | USA         | Continuing Claims                  | 25 January |                      | 1,703,000              |
| 14:30  | USA         | Initial Jobless Claims             | 1 February | 215,000              | 216,00                 |
| 14:30  | USA         | Unit Labor Cost (P)                | Q4         | 2.05% q/q;           | 2.50% q/q; 2.20% y/y   |
| 16:30  | USA         | Natural Gas Inventory              | 31 January |                      | 2748bn                 |
|        | China       | Exports                            | January    | 7.50%                | 7.60%                  |
|        | China       | Imports                            | January    | 10.00%               | 16.30%                 |
|        | China       | Trade Balance                      | January    | 37.00bn              | 46.79bn                |
| Friday | , 7 Februa  | ry 2020                            |            |                      |                        |
| Time   | Region      | Data                               | Period     | Forecast             | Previous               |
| 00:30  | Japan       | Household Spending                 | January    | -1.65% y/y           | -2.00% y/y             |
| 00:50  | Japan       | Foreign Reserves                   | January    |                      | 1323.80bn              |
| 08:00  | Germany     | Current Account Balance            | December   |                      | 24.90bn                |
| 08:00  | Germany     | Exports                            | December   |                      | 112.90bn               |
| 08:00  | Germany     | Imports                            | December   |                      | 94.60bn                |
| 08:00  | Germany     | Industrial Production              | December   | -0.10% m/m;-3.60%y/y | 1.10% m/m; -2.60% y/y  |
| 08:00  | Germany     | Trade Balance                      | December   | 14.00bn              | 18.30bn                |
| 08:45  | France      | Exports                            | December   |                      | 42.00bn                |
| 08:45  | France      | Imports                            | December   |                      | 47.60bn                |
| 08:45  | France      | Industrial Production              | December   | -0.10% m/m;0.90% y/y | 0.30% m/m; 1.30% y/y   |
| 08:45  | France      | Manufacturing Production           | December   |                      | -0.10% m/m; 1.20% y/y  |
| 08:45  | France      | Trade Balance                      | December   |                      | -5.60bn                |
| 14:30  | USA         | Average Hourly Earnings            | January    |                      | 28.32                  |
| 14:30  | USA         | Average Workweek Hours             | January    | 34.30                | 34.30                  |
| 14:30  | USA         | Manufacturing Payrolls Change      | January    |                      | -12,000 m/m            |
| 14:30  | USA         | Nonfarm Payrolls Change            | January    | 173,330 m/m          | 145,000 m/m            |
| 14:30  | USA         | Unemployment Rate                  | January    | 3.50%                | 3.50%                  |
| 16:00  | USA         | Wholesale Inventories              | December   |                      | -0.10% m/m; 3.30% y/y  |
| 16:00  | USA         | Wholesale Sales                    | December   | -0.30% m/m;          | 1.50% m/m; 0.80% y/y   |
| 21:00  | USA         | Consumer Credit                    | December   |                      | 12.50bn                |
|        | France      | Capital Account Balance            | December   |                      | -0.10bn                |
|        | France      | Current Account Balance            | December   |                      | 0.50bn                 |
|        | France      | Financial Account Balance          | December   |                      | 6.10bn                 |
|        | Germany     | Foreign Reserves                   | January    |                      | 199.30bn               |
|        | France      | Foreign Reserves                   | January    |                      | 168.18bn               |
|        | Poland      | Foreign Reserves                   | January    |                      | 128.41bn               |
|        | Japan       | Leading Indicators Index (P)       | December   | 91.30                | 90.80                  |

| Monda | ay, 10 Feb | ruary 2020                |          |          |                       |
|-------|------------|---------------------------|----------|----------|-----------------------|
| Time  | Region     | Data                      | Period   | Forecast | Previous              |
| 00:50 | Japan      | Capital Account Balance   | December |          | -22.10bn              |
| 00:50 | Japan      | Current Account Balance   | December |          | 1437.80bn             |
| 00:50 | Japan      | Financial Account Balance | December |          | 572.80bn              |
| 02:30 | China      | CPI                       | January  |          | 4.50% y/y             |
| 02:30 | China      | PPI                       | January  |          | -0.50% y/y            |
| 10:30 | EU         | Sentix Index              | January  |          | 7.60                  |
|       | France     | Business Sentiment        | January  |          | 97                    |
| Tuesd | ay, 11 Feb | ruary 2020                |          |          |                       |
| Time  | Region     | Data                      | Period   | Forecast | Previous              |
| 10:30 | UK         | Business Investment       | Q4       |          | 0.00% q/q; 0.50% y/y  |
| 10:30 | UK         | Exports                   | December |          | 59.84bn               |
| 10:30 | UK         | GDP                       | Q4       |          | 0.40% q/q; 1.10% y/y  |
| 10:30 | UK         | Imports                   | December |          | 55.80bn               |
| 10:30 | UK         | Industrial Production     | December | -        | 1.20% m/m; -1.60% y/y |
| 10:30 | UK         | Manufacturing Production  | December | -        | 1.70% m/m; -2.00% y/y |
| 10:30 | UK         | Trade Balance             | December |          | 4.03bn                |
| Wedn  | esday, 12  | February 2020             |          |          |                       |
| Time  | Region     | Data                      | Period   | Forecast | Previous              |
| 00:50 | Japan      | M3 Money Supply           | January  |          | 2.30% y/y             |
| 08:00 | USA        | Government Budget         | January  |          | -13.30bn              |
| 11:00 | EU         | Industrial Production     | December |          | 0.20% m/m; -1.50% y/y |

## **Current Recommendations by mBank**

| Company F           | Recommendation    | Issued On                | Price At       | Target         | Current        | Upside/         | P/E          |              | EV/EBI |      |
|---------------------|-------------------|--------------------------|----------------|----------------|----------------|-----------------|--------------|--------------|--------|------|
|                     |                   |                          | Reco.          | Price          | Price          | Downside        | 2019         | 2020         | 2019   | 2020 |
| Financial Sector    |                   |                          |                |                |                | +5.7%           | 10.6         | 10.4         |        |      |
|                     | hold              | 2019-11-06               | 29.34          | 31.00          | 27.82          | +11.4%          | 8.7          | 8.1          |        |      |
| ,                   | accumulate        | 2019-12-05               | 51.70          | 57.44          | 56.50          | +1.7%           | 16.4         | 11.9         |        |      |
|                     | ell<br>educe      | 2020-02-04<br>2020-02-05 | 202.00<br>5.91 | 170.00<br>5.47 | 204.00<br>5.94 | -16.7%<br>-7.8% | 15.9<br>10.3 | 15.0<br>13.0 |        |      |
|                     |                   | 2019-12-05               | 96.34          | 115.20         | 99.00          | +16.4%          | 11.5         | 10.5         |        |      |
|                     | ouy<br>accumulate | 2019-12-05               | 96.34<br>36.00 | 39.69          | 35.66          | +10.4%          | 10.8         | 10.5         |        |      |
|                     | nold              | 2020-02-05               | 304.00         | 287.90         | 307.40         | -6.3%           | 10.0         | 12.8         |        |      |
|                     | buy               | 2019-12-05               | 792.00         | 928.20 CZK     | 805.00         | +15.3%          | 10.0         | 10.7         |        |      |
|                     | buy               | 2019-08-28               | 75.95          | 94.33 CZK      | 86.90          | +8.6%           | 11.7         | 10.8         |        |      |
| ,                   | accumulate        | 2019-12-05               | 32.20          | 36.61 EUR      | 33.63          | +8.9%           | 9.3          | 9.0          |        |      |
|                     | accumulate        | 2019-12-05               | 21.24          | 23.05 EUR      | 21.55          | +7.0%           | 6.1          | 5.8          |        |      |
|                     | nold              | 2019-12-05               | 14,870         | 14,681 HUF     | 14,720         | -0.3%           | 10.1         | 9.3          |        |      |
|                     | nold              | 2020-02-05               | 40.54          | 41.91          | 39.97          | +4.9%           | 10.9         | 10.4         |        |      |
|                     | buy               | 2019-12-05               | 150.90         | 210.31         | 164.00         | +28.2%          | 9.3          | 9.2          |        |      |
|                     | buy               | 2019-12-05               | 17.20          | 29.34          | 22.00          | +33.4%          | 6.9          | 6.5          |        |      |
|                     | buy               | 2020-01-16               | 40.85          | 47.82          | 42.00          | +13.9%          | 13.8         | 15.8         |        |      |
| Chemicals           | /                 |                          |                |                |                | +10.5%          | 11.1         | 11.0         | 5.5    | 5.7  |
| Ciech b             | buy               | 2019-12-05               | 36.40          | 44.41          | 40.05          | +10.9%          | 15.4         | 9.5          | 6.7    | 5.7  |
|                     | buy               | 2020-02-05               | 26.10          | 30.31          | 27.50          | +10.2%          | 6.8          | 12.5         | 4.3    | 5.7  |
| Oil & Gas           |                   |                          |                |                |                | -0.5%           | 10.4         | 10.6         | 4.5    | 5.1  |
|                     | educe             | 2020-02-05               | 76.78          | 68.47          | 77.30          | -11.4%          | 12.2         | 9.9          | 5.9    | 5.2  |
|                     | accumulate        | 2020-02-05               | 2,618          | 2,816 HUF      | 2,618          | +7.6%           | 8.6          | 9.2          | 4.1    | 5.0  |
|                     | nold              | 2020-01-28               | 3.86           | 4.06           | 3.71           | +9.3%           | 12.3         | 14.4         | 4.6    | 4.5  |
|                     | educe             | 2020-02-03               | 75.66          | 68.03          | 76.62          | -11.2%          | 7.3          | 11.3         | 4.3    | 5.2  |
| Power Utilities     |                   |                          |                |                |                | +41.1%          | 4.4          | 5.4          | 3.6    | 3.7  |
| CEZ b               | buy               | 2019-12-05               | 502.00         | 597.80 CZK     | 505.50         | +18.3%          | 15.1         | 13.1         | 7.3    | 6.8  |
|                     | buy               | 2019-11-06               | 8.59           | 11.53          | 7.49           | +54.0%          | 3.1          | 3.1          | 3.1    | 3.1  |
|                     | buy               | 2019-11-06               | 6.37           | 11.67          | 7.15           | +63.3%          | 5.6          | 5.4          | 3.6    | 4.2  |
| -                   | buy               | 2019-10-24               | 8.42           | 12.20          | 6.64           | +83.7%          | 4.4          | 5.7          | 3.0    | 3.4  |
| Tauron b            | buy               | 2019-11-06               | 1.73           | 2.45           | 1.49           | +65.0%          | 2.9          | 2.4          | 4.0    | 3.7  |
| Telecoms, Media, IT |                   |                          |                |                |                | -2.4%           | 31.4         | 19.9         | 6.5    | 6.6  |
| Netia h             | nold              | 2019-12-05               | 4.44           | 4.70           | 4.50           | +4.4%           | 31.4         | 32.2         | 4.6    | 4.7  |
| Orange Polska a     | accumulate        | 2019-11-29               | 6.46           | 7.40           | 6.82           | +8.5%           | 32.1         | 35.2         | 5.3    | 5.5  |
| Play a              | accumulate        | 2020-02-05               | 34.80          | 36.00          | 34.24          | +5.1%           | 9.9          | 9.0          | 6.4    | 6.2  |
| Agora b             | buy               | 2019-10-30               | 9.50           | 17.00          | 12.85          | +32.3%          | 61.3         | 32.7         | 7.5    | 7.1  |
| Cyfrowy Polsat r    | educe             | 2019-11-14               | 28.86          | 26.10          | 27.60          | -5.4%           | 15.7         | 13.3         | 7.1    | 6.9  |
| Wirtualna Polska    | nold              | 2020-02-05               | 82.20          | 79.70          | 86.40          | -7.8%           | 37.3         | 23.4         | 14.2   | 11.4 |
| Asseco Poland       | nold              | 2019-12-05               | 57.35          | 59.20          | 67.05          | -11.7%          | 16.9         | 16.4         | 5.4    | 5.2  |
| Comarch b           | buy               | 2019-11-25               | 189.50         | 250.00         | 207.00         | +20.8%          | 15.0         | 14.4         | 6.5    | 6.3  |
| 11 bit studios      | nold              | 2020-02-05               | 440.00         | 439.00         | 441.00         | -0.5%           | 57.1         | 45.6         | 34.3   | 28.8 |
| CD Projekt          | nold              | 2020-02-05               | 305.00         | 284.20         | 308.00         | -7.7%           | -            | 13.2         | -      | 11.5 |
| Industrials, Mining |                   |                          |                |                |                | -1.8%           | 6.8          | 9.5          | 4.6    | 4.6  |
| Cognor h            | nold              | 2019-12-06               | 1.20           | 1.25           | 1.27           | -1.2%           | 6.8          | 39.3         | 4.4    | 6.1  |
| Famur b             | buy               | 2019-12-05               | 2.98           | 5.18           | 3.03           | +71.2%          | 4.7          | 7.1          | 3.7    | 3.8  |
| Grupa Kęty h        | nold              | 2019-12-05               | 338.50         | 335.44         | 393.50         | -14.8%          | 13.4         | 15.4         | 9.0    | 9.8  |
| JSW                 | nold              | 2020-02-05               | 19.78          | 18.41          | 19.24          | -4.3%           | 4.8          | -            | 0.8    | 3.2  |
| Kernel h            | nold              | 2020-02-05               | 47.20          | 47.25          | 47.25          | +0.0%           | 5.4          | 7.9          | 4.9    | 6.5  |
| KGHM r              | educe             | 2020-02-05               | 96.44          | 86.33          | 98.08          | -12.0%          | 8.8          | 8.7          | 4.8    | 4.8  |
| PKP Cargo r         | educe             | 2020-02-05               | 17.50          | 16.40          | 18.40          | -10.9%          | 15.6         | -            | 3.1    | 3.7  |
| Stelmet a           | accumulate        | 2020-02-05               | 7.85           | 8.92           | 7.85           | +13.6%          | -            | 10.3         | 5.2    | 4.4  |
| Property Developers |                   |                          |                |                |                | +0.4%           | 11.8         | 8.1          | 10.8   | 7.4  |
|                     | accumulate        | 2020-02-05               | 39.80          | 44.28          | 39.90          | +11.0%          | 14.0         | 7.4          | 13.8   | 7.0  |
| ,                   | nold              | 2019-12-05               | 93.00          | 88.92          | 96.40          | -7.8%           | 9.6          | 8.9          | 7.8    | 7.8  |
| Retail              |                   |                          |                |                |                | +6.5%           | 39.8         | 20.4         | 9.9    | 8.7  |
|                     | nold              | 2019-12-05               | 46.35          | 47.00          | 48.75          | -3.6%           | 39.8         | 38.3         | 13.0   | 12.1 |
| CCC b               | buy               | 2019-12-05               | 108.10         | 157.00         | 97.05          | +61.8%          | 91.4         | 20.4         | 5.5    | 4.3  |
|                     | reduce            | 2020-02-05               | 164.70         | 149.70         | 168.00         | -10.9%          | 40.8         | 30.1         | 24.0   | 18.1 |
|                     | hold              | 2020-02-05               | 19.94          | 19.80          | 20.40          | -2.9%           | 69.2         | 41.2         | 7.5    | 7.1  |
|                     | old               | 2020-02-05               | 15.78          | 16.30 EUR      | 15.88          | +2.6%           | 18.7         | 18.5         | 9.9    | 8.7  |
|                     | buy               | 2020-02-05               | 8,610.00       | 10,100.00      | 8,680.00       | +16.4%          | 28.4         | 19.8         | 11.8   | 9.7  |
| VRG b               | buy               | 2020-02-05               | 3.93           | 4.50           | 3.90           | +15.4%          | 15.1         | 12.5         | 4.8    | 4.3  |

## **Current Calls by mBank**

| Co          | Relative    | Rated On   | Price At | Current | Change | P/1  | E    | EV/EBI | TDA  |
|-------------|-------------|------------|----------|---------|--------|------|------|--------|------|
| Company     | Positioning | Rated On   | Rating   | Price   | Change | 2019 | 2020 | 2019   | 2020 |
| IT          |             |            |          |         |        | 16.4 | 13.7 | 7.3    | 6.0  |
| Ailleron    | neutral     | 2019-10-31 | 7.16     | 8.86    | +23.7% | 16.0 | 12.1 | 6.3    | 4.9  |
| Asseco BS   | overweight  | 2020-01-30 | 32.60    | 34.80   | +6.7%  | 17.1 | 16.0 | 11.1   | 10.3 |
| Asseco SEE  | overweight  | 2019-12-05 | 25.60    | 27.40   | +7.0%  | 16.9 | 15.2 | 8.3    | 7.1  |
| Atende      | neutral     | 2019-12-05 | 3.06     | 3.50    | +14.4% | 12.4 | 11.6 | 5.2    | 4.9  |
| Industrials |             |            |          |         |        | 12.8 | 11.7 | 6.9    | 6.9  |
| AC          | neutral     | 2019-12-05 | 43.20    | 48.60   | +12.5% | 12.2 | 12.3 | 8.5    | 8.1  |
| Alumetal    | neutral     | 2020-01-30 | 42.80    | 45.40   | +6.1%  | 14.2 | 14.7 | 8.1    | 8.3  |
| Amica       | neutral     | 2019-12-05 | 133.20   | 149.00  | +11.9% | 10.1 | 9.4  | 6.4    | 6.4  |
| Apator      | neutral     | 2020-01-30 | 20.70    | 21.40   | +3.4%  | 13.4 | 12.3 | 7.3    | 7.2  |
| Astarta     | overweight  | 2020-01-30 | 15.90    | 16.30   | +2.5%  | -    | 3.0  | 7.1    | 3.0  |
| Boryszew    | underweight | 2020-01-30 | 4.54     | 4.44    | -2.2%  | 14.7 | 11.6 | 6.9    | 7.0  |
| Forte       | underweight | 2020-01-30 | 32.30    | 37.00   | +14.6% | 22.6 | 15.9 | 10.1   | 9.1  |
| Kruszwica   | overweight  | 2020-01-30 | 52.20    | 56.00   | +7.3%  | 12.3 | 11.7 | 6.5    | 6.3  |
| Mangata     | neutral     | 2019-12-05 | 72.00    | 74.50   | +3.5%  | 9.0  | 10.6 | 6.4    | 6.9  |
| Pozbud      | neutral     | 2019-12-05 | 1.80     | 1.64    | -8.9%  | 3.9  | 3.7  | 4.4    | 5.4  |
| TIM         | overweight  | 2019-12-05 | 10.90    | 11.75   | +7.8%  | 13.2 | 11.7 | 6.9    | 6.3  |

## **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               | 27.82  | 8.7  | 8.1  | 7.6  | 6%   | 6%   | 6%   | 0.5  | 0.5  | 0.5  | 0.0% | 0.0% | 0.0%  |
| Handlowy                 | 56.50  | 16.4 | 11.9 | 11.4 | 6%   | 9%   | 9%   | 1.1  | 1.0  | 1.0  | 6.6% | 6.8% | 6.3%  |
| ING BSK                  | 204.00 | 15.9 | 15.0 | 13.8 | 12%  | 12%  | 12%  | 1.9  | 1.8  | 1.6  | 1.7% | 1.9% | 2.0%  |
| Millennium               | 5.94   | 10.3 | 13.0 | 15.9 | 8%   | 6%   | 5%   | 0.8  | 0.8  | 0.7  | 0.0% | 0.0% | 0.0%  |
| Pekao                    | 99.00  | 11.5 | 10.5 | 9.8  | 10%  | 10%  | 11%  | 1.1  | 1.1  | 1.0  | 6.7% | 6.5% | 7.2%  |
| РКО ВР                   | 35.66  | 10.8 | 10.3 | 9.8  | 10%  | 10%  | 10%  | 1.1  | 1.0  | 1.0  | 3.7% | 8.4% | 10.0% |
| Santander BP             | 307.40 | 14.7 | 12.8 | 11.8 | 9%   | 9%   | 9%   | 1.3  | 1.2  | 1.1  | 6.4% | 1.7% | 2.0%  |
| Median                   |        | 11.5 | 11.9 | 11.4 | 9%   | 9%   | 9%   | 1.1  | 1.0  | 1.0  | 3.7% | 1.9% | 2.0%  |
| Investors in Polish ba   | inks   |      |      |      |      |      |      |      |      |      |      |      |       |
| BCP                      | 0.199  | 7.1  | 6.4  | 5.4  | 6%   | 7%   | 8%   | 0.5  | 0.5  | 0.4  | 2.0% | 4.5% | 6.5%  |
| Citigroup                | 78.850 | 10.4 | 9.3  | 8.8  | 10%  | 10%  | 9%   | 1.0  | 0.9  | 0.8  | 2.4% | 2.8% | 3.1%  |
| Commerzbank              | 5.521  | 8.4  | 7.1  | 6.8  | 3%   | 3%   | 3%   | 0.2  | 0.2  | 0.2  | 3.8% | 4.4% | 5.1%  |
| ING                      | 10.294 | 7.9  | 8.1  | 8.0  | 10%  | 9%   | 9%   | 0.7  | 0.7  | 0.7  | 6.7% | 6.8% | 6.9%  |
| UCI                      | 12.832 | 7.1  | 7.3  | 7.0  | 8%   | 7%   | 6%   | 0.5  | 0.5  | 0.5  | 4.6% | 5.4% | 6.0%  |
| Median                   |        | 7.9  | 7.3  | 7.0  | 8%   | 7%   | 8%   | 0.5  | 0.5  | 0.5  | 3.8% | 4.5% | 6.0%  |
| Foreign banks            |        |      |      |      |      |      |      |      |      |      |      |      |       |
| Erste Group              | 33.63  | 9.3  | 9.0  | 8.9  | 11%  | 11%  | 10%  | 1.0  | 0.9  | 0.9  | 3.9% | 4.5% | 4.7%  |
| Komercni Banka           | 805.00 | 10.0 | 10.7 | 10.2 | 15%  | 13%  | 13%  | 1.4  | 1.4  | 1.3  | 6.3% | 6.3% | 6.3%  |
| Moneta Money             | 86.90  | 11.7 | 10.8 | 10.7 | 15%  | 16%  | 16%  | 1.7  | 1.7  | 1.6  | 7.1% | 6.4% | 6.9%  |
| OTP Bank                 | 14,720 | 10.1 | 9.3  | 9.0  | 20%  | 18%  | 17%  | 1.8  | 1.6  | 1.4  | 1.6% | 1.6% | 3.7%  |
| RBI                      | 21.55  | 6.1  | 5.8  | 5.8  | 10%  | 9%   | 9%   | 0.6  | 0.5  | 0.5  | 5.4% | 4.9% | 5.1%  |
| Akbank                   | 8.67   | 8.2  | 5.2  | 4.3  | 11%  | 16%  | 16%  | 0.9  | 0.8  | 0.7  | 2.3% | 3.6% | 5.3%  |
| Alpha Bank               | 1.75   | 15.8 | 12.0 | 8.3  | 2%   | 3%   | 4%   | 0.3  | 0.3  | 0.3  | 0.0% | 0.0% | 0.0%  |
| Banco Santander          | 3.79   | 7.9  | 7.4  | 7.2  | 8%   | 8%   | 8%   | 0.6  | 0.6  | 0.6  | 5.9% | 6.2% | 6.5%  |
| Deutsche Bank            | 8.26   | 29.3 | 17.7 | 11.3 | -1%  | 1%   | 3%   | 0.3  | 0.3  | 0.3  | 0.0% | 0.6% | 2.0%  |
| Eurobank Ergasias        | 0.83   | 11.7 | 7.3  | 6.3  | 4%   | 8%   | 9%   | 0.6  | 0.5  | 0.5  | 0.0% | 0.0% | 0.0%  |
| National Bank of Greece  | 2.94   | 12.0 | 12.4 | 9.1  | 5%   | 4%   | 6%   | 0.5  | 0.5  | 0.5  | -    | 0.0% | 0.0%  |
| Piraeus Bank             | 3.26   | 16.0 | 11.0 | 7.5  | 2%   | 3%   | 4%   | 0.3  | 0.3  | 0.3  | -    | 0.0% | 0.0%  |
| Sberbank                 | 255.20 | 6.5  | 5.7  | 5.2  | 21%  | 21%  | 21%  | 1.3  | 1.1  | 1.0  | 7.4% | 8.8% | 9.8%  |
| Turkiye Garanti Bank     | 12.38  | 7.5  | 5.6  | 4.5  | 13%  | 15%  | 16%  | 1.0  | 0.8  | 0.7  | 1.2% | 1.6% | 1.6%  |
| Turkiye Halk Bank        | 7.21   | 5.8  | 3.1  | 2.2  | 5%   | 7%   | 10%  | 0.3  | 0.3  | 0.2  | 0.7% | 1.2% | 1.8%  |
| Turkiye Vakiflar Bankasi | 6.77   | 6.1  | 3.7  | 2.9  | 9%   | 13%  | 13%  | 0.5  | 0.4  | 0.4  | -    | -    | -     |
| VTB Bank                 | 0.05   | 3.4  | 3.4  | 3.0  | 12%  | 12%  | 12%  | 0.4  | 0.4  | 0.3  | 6.3% | 6.3% | 8.4%  |
| Yapi ve Kredi Bankasi    | 3.00   | 6.1  | 4.5  | 3.6  | 10%  | 13%  | 13%  | 0.6  | 0.5  | 0.5  | 0.0% | 0.0% | 0.0%  |
| Median                   |        | 8.8  | 7.3  | 6.8  | 10%  | 11%  | 11%  | 0.6  | 0.5  | 0.5  | 2.3% | 1.6% | 3.7%  |

## **Insurance company valuations**

|                        |        |      | P/E  |      |      | ROE  |      |      | P/BV |      |      | DY   |      |
|------------------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|
|                        | Price  | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 |
| Insurers               |        |      |      |      |      |      |      |      |      |      |      |      |      |
| PZU                    | 39.97  | 10.9 | 10.4 | 10.2 | 21%  | 22%  | 22%  | 2.3  | 2.3  | 2.2  | 7.4% | 7.3% | 7.7% |
| Aegon                  | 3.87   | 6.1  | 5.6  | 5.5  | 7%   | 8%   | 7%   | 0.4  | 0.4  | 0.4  | 7.9% | 8.3% | 8.7% |
| Allianz                | 224.00 | 11.8 | 11.1 | 10.5 | 12%  | 12%  | 12%  | 1.4  | 1.3  | 1.2  | 4.3% | 4.5% | 4.8% |
| Assicurazioni Generali | 18.14  | 11.6 | 10.5 | 10.1 | 11%  | 10%  | 10%  | 1.1  | 1.0  | 1.0  | 5.3% | 5.6% | 6.0% |
| Aviva                  | 4.08   | 6.8  | 6.8  | 6.5  | 13%  | 13%  | 14%  | 0.9  | 0.9  | 0.9  | 7.7% | 8.0% | 8.3% |
| AXA                    | 24.71  | 9.3  | 8.6  | 8.3  | 10%  | 11%  | 11%  | 0.9  | 0.9  | 0.9  | 6.0% | 6.3% | 6.7% |
| Baloise                | 180.20 | 12.5 | 12.9 | 12.8 | 10%  | 9%   | 9%   | 1.2  | 1.2  | 1.1  | 3.5% | 3.7% | 3.9% |
| Helvetia               | 142.10 | 13.9 | 14.0 | 13.5 | 11%  | 10%  | 10%  | 1.2  | 1.1  | 1.1  | 3.5% | 3.6% | 3.7% |
| Mapfre                 | 2.39   | 9.6  | 8.9  | 8.5  | 9%   | 10%  | 10%  | 0.9  | 0.8  | 0.8  | 6.4% | 6.7% | 6.9% |
| RSA Insurance          | 5.60   | 13.8 | 11.9 | 11.1 | 11%  | 12%  | 13%  | 1.5  | 1.4  | 1.4  | 4.4% | 5.0% | 5.7% |
| Uniqa                  | 8.66   | 12.3 | 11.5 | 11.0 | 7%   | 7%   | 7%   | 0.9  | 0.9  | 1.0  | 6.3% | 6.6% | 6.8% |
| Vienna Insurance G.    | 24.80  | 10.1 | 9.5  | 8.9  | 6%   | 7%   | 7%   | 0.6  | 0.6  | 0.6  | 4.2% | 4.5% | 4.7% |
| Zurich Financial       | 415.60 | 15.1 | 13.7 | 13.0 | 13%  | 13%  | 13%  | 1.8  | 1.8  | 1.7  | 4.9% | 5.2% | 5.5% |
| Median                 |        | 11.6 | 10.5 | 10.2 | 11%  | 10%  | 10%  | 1.1  | 1.0  | 1.0  | 5.3% | 5.6% | 6.0% |

Source: mBank (stocks marked with bold), Bloomberg

## Gas & Oil valuations

|                    |         | EV   | /EBITD | A    |      | EV/S |      |      | P/E  |      | EBIT | DA mare | gin  |      | DY    |       |
|--------------------|---------|------|--------|------|------|------|------|------|------|------|------|---------|------|------|-------|-------|
|                    | Price   | 2019 | 2020   | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020    | 2021 | 2019 | 2020  | 2021  |
| Oil companies      |         |      |        |      |      |      |      |      |      |      |      |         |      |      |       |       |
| Lotos              | 77.30   | 5.9  | 5.2    | 4.9  | 0.6  | 0.6  | 0.5  | 12.2 | 9.9  | 10.3 | 10%  | 11%     | 11%  | 3.9% | 3.9%  | 3.9%  |
| MOL                | 2618.00 | 4.1  | 5.0    | 4.4  | 0.5  | 0.7  | 0.6  | 8.6  | 9.2  | 7.8  | 13%  | 13%     | 15%  | 5.4% | 5.7%  | 6.0%  |
| PKN Orlen          | 76.62   | 4.3  | 5.2    | 5.4  | 0.4  | 0.4  | 0.4  | 7.3  | 11.3 | 11.6 | 8%   | 7%      | 7%   | 4.6% | 4.6%  | 4.6%  |
| Hellenic Petroleum | 8.00    | 6.1  | 4.7    | 5.0  | 0.4  | 0.4  | 0.4  | 10.5 | 6.2  | 6.5  | 7%   | 9%      | 8%   | 6.3% | 7.1%  | 6.9%  |
| HollyFrontier      | 44.31   | 5.4  | 5.3    | 5.7  | 0.6  | 0.6  | 0.6  | 9.2  | 8.6  | 9.4  | 10%  | 10%     | 10%  | 3.0% | 3.1%  | 3.1%  |
| Marathon Petroleum | 55.54   | 7.7  | 5.9    | 6.2  | 0.6  | 0.5  | 0.5  | 13.5 | 7.4  | 8.0  | 7%   | 9%      | 9%   | 3.8% | 4.3%  | 4.7%  |
| Motor Oil          | 19.17   | 4.5  | 3.8    | 4.3  | 0.3  | 0.3  | 0.3  | 7.3  | 5.9  | 6.8  | 6%   | 7%      | 7%   | 7.1% | 7.4%  | 7.5%  |
| Neste Oil          | 36.77   | 14.1 | 12.8   | 12.3 | 1.8  | 1.9  | 1.8  | 22.5 | 19.8 | 18.8 | 13%  | 15%     | 15%  | 2.3% | 2.7%  | 2.8%  |
| OMV                | 45.53   | 3.8  | 3.5    | 3.4  | 1.0  | 0.9  | 0.9  | 8.6  | 8.0  | 7.5  | 25%  | 26%     | 27%  | 4.3% | 4.8%  | 5.2%  |
| Phillips 66        | 92.64   | 7.3  | 6.3    | 6.6  | 0.5  | 0.5  | 0.5  | 11.7 | 8.9  | 9.2  | 7%   | 7%      | 7%   | 3.7% | 4.1%  | 4.4%  |
| Saras SpA          | 1.27    | 3.5  | 2.2    | 3.0  | 0.1  | 0.1  | 0.1  | 12.1 | 4.3  | 7.1  | 4%   | 6%      | 4%   | 5.3% | 10.9% | 7.2%  |
| Tupras             | 114.10  | 6.7  | 4.4    | 4.7  | 0.4  | 0.4  | 0.4  | 11.1 | 5.1  | 5.0  | 6%   | 8%      | 8%   | 8.9% | 16.5% | 17.2% |
| Valero Energy      | 83.78   | 8.1  | 5.6    | 6.1  | 0.4  | 0.4  | 0.4  | 17.4 | 8.8  | 9.6  | 5%   | 7%      | 7%   | 4.3% | 4.7%  | 4.9%  |
| Median             |         | 5.9  | 5.2    | 5.0  | 0.5  | 0.5  | 0.5  | 11.1 | 8.6  | 8.0  | 7%   | 9%      | 8%   | 4.3% | 4.7%  | 4.9%  |
| Gas companies      |         |      |        |      |      |      |      |      |      |      |      |         |      |      |       |       |
| PGNiG              | 3.71    | 4.6  | 4.5    | 3.6  | 0.6  | 0.6  | 0.6  | 12.3 | 14.4 | 9.5  | 12%  | 13%     | 16%  | 3.0% | 3.2%  | 2.8%  |
| A2A SpA            | 1.85    | 8.0  | 7.4    | 7.1  | 1.5  | 1.4  | 1.4  | 17.9 | 15.3 | 14.5 | 18%  | 19%     | 19%  | 4.2% | 4.3%  | 4.4%  |
| BP                 | 484.30  | 4.7  | 4.5    | 4.4  | 0.6  | 0.6  | 0.6  | 12.3 | 11.0 | 10.4 | 14%  | 14%     | 14%  | 0.0% | 0.0%  | 0.0%  |
| Centrica           | 84.20   | 4.4  | 4.1    | 4.6  | 0.3  | 0.3  | 0.3  | 12.2 | 8.9  | 8.6  | 7%   | 7%      | 7%   | 0.0% | 0.0%  | 0.0%  |
| Enagas             | 24.54   | 10.8 | 10.5   | 11.6 | 8.7  | 8.8  | 9.5  | 13.8 | 12.9 | 14.0 | 80%  | 84%     | 82%  | 6.5% | 6.7%  | 6.7%  |
| Endesa             | 24.84   | 9.0  | 8.9    | 8.8  | 1.6  | 1.6  | 1.6  | 17.3 | 17.0 | 16.6 | 18%  | 18%     | 18%  | 5.8% | 5.9%  | 5.0%  |
| Engie              | 15.54   | 7.0  | 6.6    | 6.3  | 1.1  | 1.0  | 1.0  | 15.1 | 13.4 | 12.2 | 16%  | 16%     | 16%  | 5.0% | 5.4%  | 5.8%  |
| Eni                | 13.03   | 3.5  | 3.3    | 3.2  | 0.8  | 0.9  | 0.9  | 12.2 | 10.1 | 9.2  | 24%  | 26%     | 28%  | 6.6% | 6.7%  | 6.9%  |
| Equinor            | 172.25  | 3.2  | 2.9    | 2.7  | 1.1  | 1.0  | 1.0  | 11.7 | 10.3 | 9.4  | 35%  | 36%     | 37%  | 0.1% | 0.1%  | 0.1%  |
| Gas Natural SDG    | 24.13   | 9.4  | 9.0    | 8.9  | 1.6  | 1.5  | 1.6  | 17.4 | 16.0 | 15.2 | 17%  | 17%     | 18%  | 5.7% | 6.0%  | 6.2%  |
| Gazprom            | 232.56  | 3.7  | 3.6    | 3.5  | 1.0  | 1.0  | 1.0  | 3.7  | 4.0  | 3.8  | 28%  | 28%     | 28%  | 7.1% | 7.8%  | 10.2% |
| Hera SpA           | 4.18    | 8.4  | 8.1    | 7.9  | 1.5  | 1.3  | 1.3  | 20.5 | 19.9 | 19.8 | 17%  | 17%     | 17%  | 2.5% | 2.6%  | 2.7%  |
| NovaTek            | 1153.80 | 10.9 | 10.9   | 11.3 | 4.1  | 4.0  | 3.7  | 8.2  | 11.5 | 10.3 | 38%  | 37%     | 32%  | 2.5% | 3.1%  | 3.4%  |
| ROMGAZ             | 35.15   | 5.3  | 5.4    | 5.1  | 2.6  | 2.5  | 2.5  | 9.2  | 9.2  | 8.7  | 49%  | 47%     | 48%  | 9.4% | 9.5%  | 10.8% |
| Shell              | 24.00   | 3.3  | 3.1    | 2.9  | 0.5  | 0.5  | 0.5  | 11.4 | 9.4  | 8.9  | 16%  | 17%     | 17%  | 8.6% | 8.7%  | 8.9%  |
| Snam SpA           | 5.01    | 13.3 | 13.0   | 12.7 | 10.8 | 10.5 | 10.2 | 15.7 | 15.5 | 14.8 | 81%  | 81%     | 81%  | 4.8% | 5.0%  | 5.2%  |
| Total              | 45.44   | 5.2  | 4.8    | 4.6  | 0.9  | 0.9  | 0.9  | 11.5 | 10.1 | 9.7  | 17%  | 19%     | 19%  | 6.5% | 6.8%  | 7.1%  |
| Median             |         | 5.3  | 5.4    | 5.1  | 1.1  | 1.0  | 1.0  | 12.3 | 11.5 | 10.3 | 18%  | 19%     | 19%  | 5.0% | 5.4%  | 5.2%  |

## Power generation 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 |
| Power generation |         |      |         |      |      |      |      |      |      |      |      |        |      |      |      |      |
| CEZ              | 505.50  | 7.3  | 6.8     | 6.6  | 2.1  | 1.9  | 1.8  | 15.1 | 13.1 | 13.2 | 29%  | 28%    | 27%  | 4.7% | 6.0% | 6.9% |
| Enea             | 7.49    | 3.1  | 3.1     | 2.8  | 0.6  | 0.5  | 0.6  | 3.1  | 3.1  | 2.4  | 20%  | 18%    | 21%  | 0.0% | 0.0% | 3.3% |
| Energa           | 7.15    | 3.6  | 4.2     | 4.5  | 0.7  | 0.7  | 0.8  | 5.6  | 5.4  | 4.9  | 19%  | 17%    | 17%  | 0.0% | 0.0% | 0.0% |
| PGE              | 6.64    | 3.0  | 3.4     | 2.7  | 0.6  | 0.6  | 0.6  | 4.4  | 5.7  | 3.9  | 21%  | 17%    | 21%  | 0.0% | 5.6% | 4.3% |
| Tauron           | 1.49    | 4.0  | 3.7     | 3.2  | 0.7  | 0.6  | 0.6  | 2.9  | 2.4  | 1.9  | 18%  | 17%    | 19%  | 0.0% | 0.0% | 0.0% |
| EDF              | 11.50   | 5.5  | 5.0     | 4.9  | 1.3  | 1.2  | 1.2  | 17.0 | 13.7 | 13.0 | 23%  | 24%    | 24%  | 2.9% | 3.4% | 3.6% |
| EDP              | 4.51    | 9.8  | 9.4     | 9.0  | 2.2  | 2.1  | 2.1  | 20.4 | 18.6 | 17.3 | 22%  | 23%    | 23%  | 4.2% | 4.3% | 4.5% |
| Endesa           | 24.84   | 9.0  | 8.9     | 8.8  | 1.6  | 1.6  | 1.6  | 17.3 | 17.0 | 16.6 | 18%  | 18%    | 18%  | 5.8% | 5.9% | 5.0% |
| Enel             | 8.07    | 8.1  | 7.7     | 7.4  | 1.8  | 1.8  | 1.7  | 17.1 | 15.7 | 14.8 | 22%  | 23%    | 23%  | 4.1% | 4.4% | 4.7% |
| EON              | 10.56   | 10.0 | 7.4     | 7.3  | 1.6  | 0.8  | 0.8  | 15.5 | 16.6 | 15.4 | 16%  | 11%    | 10%  | 4.4% | 4.6% | 4.7% |
| Fortum           | 22.05   | 14.8 | 13.7    | 13.2 | 4.6  | 4.5  | 4.4  | 15.4 | 14.7 | 13.7 | 31%  | 33%    | 33%  | 5.0% | 5.0% | 5.0% |
| Iberdola         | 10.20   | 10.8 | 10.1    | 9.6  | 2.9  | 2.7  | 2.7  | 19.3 | 18.1 | 17.3 | 27%  | 27%    | 28%  | 3.7% | 3.9% | 4.1% |
| National Grid    | 1021.00 | 12.4 | 11.8    | 11.1 | 4.0  | 4.0  | 3.9  | 17.5 | 17.5 | 16.5 | 32%  | 34%    | 35%  | 0.0% | 0.0% | 0.0% |
| Red Electrica    | 18.09   | 9.4  | 9.6     | 9.6  | 7.4  | 7.4  | 7.4  | 13.6 | 14.5 | 14.9 | 78%  | 78%    | 77%  | 5.8% | 5.7% | 5.5% |
| RWE              | 31.48   | 11.3 | 6.4     | 5.4  | 1.4  | 1.0  | 0.9  | 28.5 | 18.3 | 13.6 | 12%  | 15%    | 16%  | 2.5% | 3.0% | 3.5% |
| SSE              | 1566.50 | 13.0 | 12.5    | 11.5 | 0.9  | 3.5  | 3.4  | 23.3 | 17.8 | 15.4 | 7%   | 28%    | 29%  | 0.0% | 0.0% | 0.0% |
| Verbund          | 47.20   | 8.7  | 7.3     | 6.9  | 3.1  | 2.8  | 2.7  | 29.0 | 22.6 | 21.3 | 36%  | 38%    | 39%  | 1.5% | 2.0% | 2.5% |
| Median           |         | 9.0  | 7.4     | 7.3  | 1.6  | 1.8  | 1.7  | 17.0 | 15.7 | 14.8 | 22%  | 23%    | 23%  | 2.9% | 3.9% | 4.1% |

## Machine and equipment manufacturers

|             |         | E\   | //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  |
| Industrials |         |      |          |      |      |      |      |      |      |      |      |        |      |       |       |       |
| Famur       | 3.03    | 3.7  | 3.8      | 4.1  | 0.9  | 1.1  | 1.1  | 4.7  | 7.1  | 8.2  | 25%  | 28%    | 26%  | 17.5% | 13.0% | 10.8% |
| Caterpillar | 137.44  | 8.2  | 8.5      | 8.4  | 1.7  | 1.7  | 1.7  | 11.7 | 11.5 | 11.0 | 21%  | 20%    | 20%  | 2.7%  | 3.0%  | 3.3%  |
| Epiroc      | 117.65  | 9.4  | 8.8      | 8.4  | 2.3  | 2.2  | 2.2  | 21.6 | 20.2 | 19.1 | 25%  | 25%    | 25%  | 2.2%  | 2.4%  | 2.5%  |
| Komatsu     | 2413.00 | 5.7  | 6.1      | 6.1  | 1.1  | 1.1  | 1.1  | 9.1  | 10.4 | 10.2 | 19%  | 18%    | 19%  | 4.4%  | 4.6%  | 4.7%  |
| Sandvig AG  | 187.35  | 10.4 | 10.0     | 9.6  | 2.3  | 2.3  | 2.2  | 17.6 | 16.8 | 15.8 | 23%  | 23%    | 23%  | 2.5%  | 2.6%  | 2.8%  |
| Median      |         | 8.2  | 8.5      | 8.4  | 1.7  | 1.7  | 1.7  | 11.7 | 11.5 | 11.0 | 23%  | 21%    | 22%  | 2.7%  | 3.0%  | 3.3%  |

Source: mBank (stocks marked with bold), Bloomberg

## Fertilizer producers and chemical companies

|                      |         | 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  |
| Fertilizer producers |         |      |         |      |      |      |      |      |      |      |      |        |      |       |       |       |
| Grupa Azoty          | 27.50   | 4.3  | 5.7     | 7.7  | 0.5  | 0.6  | 0.8  | 6.8  | 12.5 | 52.4 | 13%  | 11%    | 10%  | 0.0%  | 0.0%  | 0.0%  |
| Acron                | 4838.00 | 7.2  | 6.6     | 6.6  | 2.4  | 2.2  | 2.0  | 9.2  | 8.7  | 8.9  | 33%  | 33%    | 31%  | 6.9%  | 7.2%  | 7.9%  |
| CF Industries        | 42.71   | 9.1  | 8.3     | 7.9  | 3.3  | 3.2  | 3.1  | 18.0 | 14.9 | 13.3 | 37%  | 39%    | 40%  | 2.8%  | 2.8%  | 2.9%  |
| Israel Chemicals     | 1419.00 | 5.9  | 5.7     | 5.6  | 1.4  | 1.3  | 1.3  | 9.8  | 9.0  | 8.7  | 23%  | 23%    | 22%  | 0.0%  | 0.0%  | 0.0%  |
| K+S                  | 9.23    | 7.2  | 6.3     | 5.7  | 1.3  | 1.2  | 1.2  | 10.0 | 7.4  | 6.0  | 17%  | 19%    | 20%  | 3.8%  | 5.3%  | 6.4%  |
| Phosagro             | 2432.00 | 6.0  | 5.7     | 5.3  | 1.8  | 1.8  | 1.7  | 8.8  | 8.8  | 8.6  | 31%  | 31%    | 31%  | 7.5%  | 6.2%  | 6.4%  |
| The Mosaic Company   | 21.36   | 7.1  | 6.0     | 5.3  | 1.3  | 1.3  | 1.2  | 19.7 | 12.0 | 9.2  | 19%  | 21%    | 23%  | 0.9%  | 1.0%  | 1.3%  |
| Yara International   | 347.80  | 45.8 | 39.7    | 37.5 | 7.4  | 6.8  | 6.7  | -    | -    | -    | 16%  | 17%    | 18%  | 0.6%  | 0.7%  | 0.6%  |
| ZA Police            | 10.20   | 5.1  | 4.1     | 4.1  | 1.1  | 1.0  | 1.0  | 1.2  | 0.9  | 0.9  | 21%  | 24%    | 24%  | 81.5% | 88.2% | 98.0% |
| ZCh Puławy           | 87.80   | 1.2  | 1.6     | 1.6  | 0.3  | 0.3  | 0.3  | 4.0  | 6.6  | 6.8  | 21%  | 16%    | 16%  | 5.7%  | 5.7%  | 5.7%  |
| Median               |         | 6.5  | 5.8     | 5.6  | 1.3  | 1.3  | 1.2  | 9.2  | 8.8  | 8.7  | 21%  | 22%    | 22%  | 3.3%  | 4.1%  | 4.3%  |
| Chemical companies   |         |      |         |      |      |      |      |      |      |      |      |        |      |       |       |       |
| Ciech                | 40.05   | 6.7  | 5.7     | 5.6  | 1.1  | 1.1  | 1.1  | 15.4 | 9.5  | 9.4  | 16%  | 20%    | 19%  | 0.0%  | 0.0%  | 5.3%  |
| Akzo Nobel           | 87.79   | 14.6 | 12.8    | 12.0 | 2.1  | 2.0  | 1.9  | 27.4 | 21.2 | 19.0 | 14%  | 16%    | 16%  | 2.1%  | 2.4%  | 2.7%  |
| BASF                 | 62.89   | 9.4  | 8.3     | 7.7  | 1.3  | 1.2  | 1.2  | 16.4 | 14.0 | 12.5 | 13%  | 15%    | 15%  | 5.0%  | 5.1%  | 5.4%  |
| Croda                | 5085.00 | 17.2 | 16.2    | 15.4 | 5.0  | 4.8  | 4.7  | 26.6 | 24.9 | 23.3 | 29%  | 30%    | 30%  | 0.0%  | 0.0%  | 0.0%  |
| Sisecam              | 5.51    | 4.2  | 3.6     | 3.1  | 0.8  | 0.7  | 0.6  | 6.5  | 6.3  | 5.7  | 20%  | 20%    | 20%  | 4.3%  | 4.6%  | 5.0%  |
| Soda Sanayii         | 6.33    | 4.7  | 3.9     | 3.4  | 1.1  | 1.0  | 0.8  | 4.9  | 5.0  | 4.4  | 24%  | 25%    | 24%  | 5.4%  | 5.4%  | 6.2%  |
| Solvay               | 97.74   | 5.5  | 5.3     | 5.0  | 1.2  | 1.1  | 1.1  | 11.2 | 11.4 | 10.2 | 22%  | 22%    | 22%  | 3.9%  | 4.1%  | 4.2%  |
| Tata Chemicals       | 750.45  | 10.2 | 9.0     | 8.1  | 1.9  | 1.8  | 1.6  | 18.2 | 16.4 | 14.5 | 18%  | 20%    | 20%  | 1.6%  | 2.0%  | 1.7%  |
| Tessenderlo Chemie   | 31.45   | 6.3  | 5.8     | 5.5  | 0.8  | 0.8  | 0.8  | 16.2 | 12.8 | 11.2 | 13%  | 14%    | 14%  | -     | -     | -     |
| Wacker Chemie        | 66.96   | 5.6  | 5.0     | 4.7  | 0.8  | 0.8  | 0.8  | 24.0 | 16.9 | 13.5 | 15%  | 16%    | 17%  | 3.2%  | 3.7%  | 4.2%  |
| Median               |         | 6.5  | 5.8     | 5.5  | 1.2  | 1.1  | 1.1  | 16.3 | 13.4 | 11.9 | 17%  | 20%    | 20%  | 3.2%  | 3.7%  | 4.2%  |

## **Mining company valuations**

|   |  | EV   | / EBITD  | 4  |   | EV/S   |  |   | P/E   |   | EBIT  | DA marg  | gin _   |  | DY  | _  |
|---|--|--|--|--|---|--|--|---|---|---|---|--|---|--|---|--|
|   | Price  | 2019   | 2020   | 2021   | 2019  | 2020   | 2021   | 2019  | 2020  | 2021  | 2019  | 2020   | 2021  | 2019   | 2020  | 2021   |
| Metals  |  |  |  |  |   |  |  |   |   |   |   |  |   |  |   |  |
| KGHM  | 98.08  | 4.8  | 4.8  | 5.6  | 1.2   | 1.1  | 1.1  | 8.8   | 8.7   | 12.5  | 24%   | 24%  | 20%   | 0.0%   | 1.5%  | 3.4%   |
| Anglo American  | 2072.50  | 4.3  | 4.5  | 4.9  | 1.5   | 1.5  | 1.5  | 8.9   | 9.7   | 10.6  | 36%   | 34%  | 31%   | 0.0%   | 0.0%  | 0.0%   |
| Antofagasta   | 881.80   | 5.8  | 6.0  | 5.4  | 2.8   | 2.8  | 2.7  | 19.0  | 20.4  | 16.7  | 49%   | 47%  | 50%   | 0.0%   | 0.0%  | 0.0%   |
| BHP Group LTD   | 38.89  | 3.8  | 3.7  | 4.1  | 2.0   | 2.0  | 2.1  | 13.8  | 12.6  | 14.2  | 53%   | 53%  | 51%   | 3.8%   | 2.9%  | 2.4%   |
| Boliden   | 245.40   | 5.6  | 5.3  | 5.4  | 1.3   | 1.3  | 1.3  | 11.7  | 10.8  | 11.0  | 24%   | 25%  | 24%   | 4.5%   | 4.8%  | 4.9%   |
| First Quantum   | 11.80  | 8.7  | 6.0  | 5.6  | 3.5   | 2.5  | 2.5  | 21.5  | 15.3  | 10.6  | 40%   | 42%  | 44%   | 0.1%   | 0.1%  | 0.1%   |
| Freeport-McMoRan  | 12.41  | 12.7   | 9.0  | 5.3  | 2.3   | 2.2  | 1.8  | -   | 22.2  | 9.0   | 18%   | 25%  | 35%   | 1.6%   | 2.4%  | 2.9%   |
| Fresnillo   | 623.60   | 8.1  | 6.4  | 5.3  | 3.0   | 2.8  | 2.6  | 30.7  | 21.8  | 15.4  | 37%   | 44%  | 49%   | 0.0%   | 0.0%  | 0.0%   |
| Gold Fields   | 9180.00  | 5.2  | 4.4  | 4.2  | 2.4   | 2.2  | 2.1  | 24.5  | 15.3  | 14.1  | 45%   | 49%  | 49%   | 0.0%   | 0.0%  | 0.0%   |
| Hudbay Min  | 4.50   | 3.7  | 3.3  | 2.7  | 1.2   | 1.2  | 1.1  | -   | 36.8  | 10.3  | 32%   | 35%  | 40%   | 0.3%   | 0.3%  | 0.2%   |
| KAZ Minerals  | 490.60   | 5.0  | 5.1  | 4.8  | 2.7   | 2.6  | 2.6  | 6.6   | 6.5   | 5.9   | 55%   | 52%  | 53%   | 0.0%   | 0.0%  | 0.0%   |
| Lundin Min  | 7.49   | 7.2  | 4.4  | 3.8  | 2.5   | 1.9  | 1.8  | 23.3  | 10.5  | 8.6   | 35%   | 43%  | 46%   | 1.0%   | 1.0%  | 1.3%   |
| MMC Norilsk Nickel  | 34.20  | 8.6  | 8.2  | 8.1  | 4.8   | 4.8  | 4.6  | 15.5  | 15.2  | 14.9  | 56%   | 59%  | 57%   | 7.0%   | 8.1%  | 8.5%   |
| OZ Minerals   | 9.97   | 7.2  | 5.8  | 4.7  | 3.1   | 2.5  | 2.3  | 19.8  | 16.2  | 9.4   | 43%   | 44%  | 48%   | 2.1%   | 2.3%  | 2.9%   |
| Polymetal Intl  | 1233.50  | 8.9  | 7.6  | 7.7  | 4.2   | 3.8  | 3.8  | 14.1  | 11.0  | 11.0  | 47%   | 50%  | 49%   | 0.0%   | 0.0%  | 0.0%   |
| Polyus  | 7481.00  | 7.6  | 6.9  | 6.8  | 4.9   | 4.5  | 4.5  | 10.2  | 9.3   | 9.3   | 65%   | 66%  | 66%   | 4.3%   | 4.9%  | 4.9%   |
| Sandfire Resources  | 5.34   | 2.0  | 1.7  | 1.6  | 1.0   | 0.9  | 0.9  | 7.5   | 6.3   | 5.2   | 51%   | 54%  | 56%   | 4.7%   | 5.1%  | 5.8%   |
| Southern CC   | 40.14  | 10.3   | 10.2   | 9.4  | 5.1   | 4.9  | 4.6  | 19.4  | 18.7  | 17.9  | 49%   | 49%  | 49%   | 3.8%   | 3.7%  | 3.5%   |
| Median  |  | 6.5  | 5.5  | 5.3  | 2.6   | 2.4  | 2.2  | 14.8  | 13.9  | 10.8  | 44%   | 46%  | 49%   | 0.6%   | 1.3%  | 1.8%   |
|   |  |  | /EBITD/  |  |   | EV/S   |  |   | P/E   |   |   | DA marg  |   |  | DY  |  |
|   | Price  | 2019   | 2020   | 2021   | 2019  | 2020   | 2021   | 2019  | 2020  | 2021  | 2019  | 2020   | 2021  | 2019   | 2020  | 2021   |
| Coal  |  |  |  |  |   |  |  |   |   |   |   |  |   |  |   |  |
| JSW   | 19.24  | 0.8  | 3.2  | 3.3  | 0.2   | 0.2  | 0.3  | 4.8   | -   | -   | 19%   | 8%   | 10%   | 8.9%   | 0.0%  | 0.0%   |
| Alliance Dee Deutres  |  |  |  |  |   |  |  |   |   |   |   |  | 28%   |  |   |  |
| Alliance Res Partners   | 9.62   | 1.9  | 2.3  | 2.4  | 0.6   | 0.6  | 0.7  | 3.1   | 6.6   | 8.4   | 30%   | 27%  |   | 22.1%  | 16.1%   | 16.1%  |
| Alliance Res Partners<br>Arch Coal  | 58.60  | 2.2  | 2.6  | 2.5  | 0.6<br>0.4  | 0.4  | 0.4  | 4.0   | 4.8   | 4.7   | 18%   | 17%  | 17%   | 3.1%   | 3.1%  | 3.1%   |
| Arch Coal<br>Banpu  | 58.60<br>10.30   | 2.2<br>10.3  | 2.6<br>10.8  | 2.5<br>10.0  | 0.4<br>1.9  | 0.4<br>2.0   | 0.4<br>2.2   | 4.0<br>10.6   | 4.8<br>9.8  | 4.7<br>9.0  | 18%<br>19%  | 17%<br>19%   | 22%   | 3.1%<br>4.7%   | 3.1%<br>4.9%  | 3.1%<br>5.4%   |
| Arch Coal   | 58.60  | 2.2<br>10.3<br>3.8   | 2.6  | 2.5<br>10.0<br>4.1   | 0.4<br>1.9<br>2.0   | 0.4<br>2.0<br>2.0  | 0.4<br>2.2<br>2.1  | 4.0<br>10.6<br>13.9   | 4.8<br>9.8<br>12.7  | 4.7<br>9.0<br>14.3  | 18%<br>19%<br>53%   | 17%<br>19%<br>53%  | 22%<br>51%  | 3.1%<br>4.7%<br>8.4%   | 3.1%<br>4.9%<br>6.4%  | 3.1%<br>5.4%<br>5.2%   |
| Arch Coal<br>Banpu  | 58.60<br>10.30<br>52.87<br>2.69  | 2.2<br>10.3<br>3.8<br>4.7  | 2.6<br>10.8<br>3.8<br>4.7  | 2.5<br>10.0  | 0.4<br>1.9<br>2.0<br>0.9  | 0.4<br>2.0<br>2.0<br>0.9   | 0.4<br>2.2<br>2.1<br>1.0   | 4.0<br>10.6<br>13.9<br>5.6  | 4.8<br>9.8<br>12.7<br>6.0   | 4.7<br>9.0<br>14.3<br>5.8   | 18%<br>19%<br>53%<br>20%  | 17%<br>19%<br>53%<br>20%   | 22%<br>51%<br>19%   | 3.1%<br>4.7%<br>8.4%<br>4.3%   | 3.1%<br>4.9%<br>6.4%<br>3.9%  | 3.1%<br>5.4%<br>5.2%<br>3.6%   |
| Arch Coal<br>Banpu<br>BHP Group   | 58.60<br>10.30<br>52.87<br>2.69<br>29.60   | 2.2<br>10.3<br>3.8<br>4.7<br>1.0   | 2.6<br>10.8<br>3.8<br>4.7<br>1.0   | 2.5<br>10.0<br>4.1<br>5.1<br>1.1   | 0.4<br>1.9<br>2.0<br>0.9<br>0.3   | 0.4<br>2.0<br>2.0<br>0.9<br>0.3  | 0.4<br>2.2<br>2.1  | 4.0<br>10.6<br>13.9<br>5.6<br>3.5   | 4.8<br>9.8<br>12.7<br>6.0<br>4.3  | 4.7<br>9.0<br>14.3<br>5.8<br>4.9  | 18%<br>19%<br>53%<br>20%<br>35%   | 17%<br>19%<br>53%<br>20%<br>33%  | 22%<br>51%<br>19%<br>31%  | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%   | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%  | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%   |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners   | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26  | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2  | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3  | 2.5<br>10.0<br>4.1<br>5.1<br>1.1<br>1.3  | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>0.9  | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0   | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0   | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1  | 4.8<br>9.8<br>12.7<br>6.0   | 4.7<br>9.0<br>14.3<br>5.8   | 18%<br>19%<br>53%<br>20%<br>35%<br>77%  | 17%<br>19%<br>53%<br>20%<br>33%<br>78%   | 22%<br>51%<br>19%<br>31%<br>78%   | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%   | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>8.9%  | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%   |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka   | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26<br>9.31  | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2<br>1.6   | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3<br>1.9   | 2.5<br>10.0<br>4.1<br>5.1<br>1.1<br>1.3<br>1.9   | 0.4<br>1.9<br>2.0<br>0.9<br>0.3   | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0<br>0.3  | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0<br>0.3  | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1<br>9.9   | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8   | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7   | 18%<br>19%<br>53%<br>20%<br>35%<br>77%<br>18%   | 17%<br>19%<br>53%<br>20%<br>33%<br>78%<br>16%  | 22%<br>51%<br>19%<br>31%<br>78%<br>16%  | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%<br>23.4%  | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>8.9%<br>5.9%  | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%<br>6.1%   |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners   | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26  | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2  | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3  | 2.5<br>10.0<br>4.1<br>5.1<br>1.1<br>1.3  | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>0.9  | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0   | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0   | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1  | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8   | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7   | 18%<br>19%<br>53%<br>20%<br>35%<br>77%  | 17%<br>19%<br>53%<br>20%<br>33%<br>78%   | 22%<br>51%<br>19%<br>31%<br>78%   | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%   | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>8.9%  | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%   |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners<br>Peabody Energy Corp<br>PT Bukit Asam Tbk<br>Rio Tinto  | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26<br>9.31<br>2320.00<br>4273.00  | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2<br>1.6<br>3.5<br>3.7   | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3<br>1.9<br>3.6<br>4.1   | 2.5<br>10.0<br>4.1<br>5.1<br>1.1<br>1.3<br>1.9<br>3.4<br>4.7   | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>0.9<br>0.3<br>1.0<br>1.8                             | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0<br>0.3<br>0.9<br>1.9  | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0<br>0.3<br>0.9<br>2.0  | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1<br>9.9<br>6.0<br>8.7   | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8<br>-<br>6.4<br>10.0   | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7<br>-<br>6.2<br>12.1   | 18%<br>19%<br>53%<br>20%<br>35%<br>77%<br>18%<br>28%<br>49%   | 17%<br>19%<br>53%<br>20%<br>33%<br>78%<br>16%<br>26%<br>46%  | 22%<br>51%<br>19%<br>31%<br>78%<br>16%<br>26%<br>43%                                    | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%<br>23.4%<br>12.0%<br>0.0%   | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>8.9%<br>5.9%<br>11.3%<br>0.0%   | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%<br>6.1%<br>10.7%<br>0.0%  |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners<br>Peabody Energy Corp<br>PT Bukit Asam Tbk<br>Rio Tinto<br>Semirara Mining&Power   | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26<br>9.31<br>2320.00<br>4273.00<br>20.25   | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2<br>1.6<br>3.5<br>3.7<br>5.1                                    | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3<br>1.9<br>3.6<br>4.1<br>4.6                                    | 2.5<br>10.0<br>4.1<br>5.1<br>1.1<br>1.3<br>1.9<br>3.4<br>4.7<br>4.4  | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>0.9<br>0.3<br>1.0<br>1.8<br>2.4                      | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0<br>0.3<br>0.9<br>1.9<br>2.1   | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0<br>0.3<br>0.9<br>2.0<br>2.1   | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1<br>9.9<br>6.0<br>8.7<br>7.6                                    | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8<br>-<br>6.4<br>10.0<br>7.0                                    | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7<br>-<br>6.2<br>12.1<br>6.8                                    | 18%<br>19%<br>53%<br>20%<br>35%<br>77%<br>18%<br>28%<br>49%<br>46%                                    | 17%<br>19%<br>53%<br>20%<br>33%<br>78%<br>16%<br>26%<br>46%<br>46%   | 22%<br>51%<br>19%<br>31%<br>78%<br>16%<br>26%<br>43%<br>47%                             | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%<br>23.4%<br>12.0%<br>0.0%<br>8.0%                                 | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>8.9%<br>5.9%<br>11.3%<br>0.0%<br>8.4%                                 | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%<br>6.1%<br>10.7%<br>0.0%<br>8.6%                                  |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners<br>Peabody Energy Corp<br>PT Bukit Asam Tbk<br>Rio Tinto  | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26<br>9.31<br>2320.00<br>4273.00<br>20.25<br>5.01   | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2<br>1.6<br>3.5<br>3.7<br>5.1<br>4.8                             | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3<br>1.9<br>3.6<br>4.1   | 2.5<br>10.0<br>4.1<br>5.1<br>1.1<br>1.3<br>1.9<br>3.4<br>4.7   | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>0.9<br>0.3<br>1.0<br>1.8<br>2.4<br>0.9               | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0<br>0.3<br>0.9<br>1.9  | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0<br>0.3<br>0.9<br>2.0  | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1<br>9.9<br>6.0<br>8.7<br>7.6<br>8.0                             | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8<br>-<br>6.4<br>10.0<br>7.0<br>8.0                             | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7<br>-<br>6.2<br>12.1<br>6.8<br>7.8                             | 18%<br>19%<br>53%<br>20%<br>35%<br>77%<br>18%<br>28%<br>49%<br>46%<br>19%                             | 17%<br>19%<br>53%<br>20%<br>33%<br>78%<br>16%<br>26%<br>46%<br>46%<br>19%                                    | 22%<br>51%<br>19%<br>31%<br>78%<br>16%<br>26%<br>43%<br>47%<br>19%                      | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%<br>23.4%<br>12.0%<br>0.0%<br>8.0%<br>3.9%                         | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>8.9%<br>1.3%<br>0.0%<br>8.4%<br>3.9%                                  | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%<br>6.1%<br>10.7%<br>0.0%<br>8.6%<br>3.8%                          |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners<br>Peabody Energy Corp<br>PT Bukit Asam Tbk<br>Rio Tinto<br>Semirara Mining&Power<br>Shanxi Xishan Coal&Ele<br>Shougang Fushan Res  | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26<br>9.31<br>2320.00<br>4273.00<br>20.25<br>5.01<br>1.57                                     | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2<br>1.6<br>3.5<br>3.7<br>5.1<br>4.8<br>0.6                      | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3<br>1.9<br>3.6<br>4.1<br>4.6<br>4.9<br>0.6                      | 2.5<br>10.0<br>4.1<br>5.1<br>1.3<br>1.9<br>3.4<br>4.7<br>4.4<br>4.9<br>0.6                                       | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>1.0<br>1.8<br>2.4<br>0.9<br>0.3                      | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0<br>0.3<br>0.9<br>1.9<br>2.1<br>0.9<br>0.3                             | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0<br>0.3<br>0.9<br>2.0<br>2.1<br>0.9<br>0.3                             | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1<br>9.9<br>6.0<br>8.7<br>7.6<br>8.0<br>6.7                      | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8<br>-<br>6.4<br>10.0<br>7.0<br>8.0<br>6.3                      | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7<br>-<br>6.2<br>12.1<br>6.8<br>7.8<br>6.9                      | 18%<br>19%<br>53%<br>20%<br>35%<br>77%<br>18%<br>28%<br>49%<br>46%<br>19%<br>54%                      | 17%<br>19%<br>53%<br>20%<br>33%<br>78%<br>16%<br>26%<br>46%<br>46%<br>19%<br>54%                             | 22%<br>51%<br>19%<br>31%<br>78%<br>16%<br>26%<br>43%<br>47%<br>19%<br>49%               | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%<br>23.4%<br>12.0%<br>0.0%<br>8.0%<br>3.9%<br>7.6%                 | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>5.9%<br>11.3%<br>0.0%<br>8.4%<br>3.9%<br>7.5%                         | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%<br>6.1%<br>10.7%<br>0.0%<br>8.6%<br>3.8%<br>6.0%                  |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners<br>Peabody Energy Corp<br>PT Bukit Asam Tbk<br>Rio Tinto<br>Semirara Mining&Power<br>Shanxi Xishan Coal&Ele<br>Shougang Fushan Res<br>Stanmore Coal                               | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26<br>9.31<br>2320.00<br>4273.00<br>20.25<br>5.01<br>1.57<br>0.98                             | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2<br>1.6<br>3.5<br>3.7<br>5.1<br>4.8<br>0.6<br>1.1               | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3<br>1.9<br>3.6<br>4.1<br>4.6<br>4.9<br>0.6<br>1.6               | 2.5<br>10.0<br>4.1<br>5.1<br>1.3<br>1.9<br>3.4<br>4.7<br>4.4<br>4.9<br>0.6<br>2.2                                | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>1.0<br>1.8<br>2.4<br>0.9<br>0.3<br>0.4               | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0<br>0.3<br>0.9<br>1.9<br>2.1<br>0.9<br>0.3<br>0.4                      | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0<br>0.3<br>0.9<br>2.0<br>2.1<br>0.9<br>0.3<br>0.5                      | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1<br>9.9<br>6.0<br>8.7<br>7.6<br>8.0<br>6.7<br>2.6               | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8<br>-<br>6.4<br>10.0<br>7.0<br>8.0<br>6.3<br>3.9               | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7<br>-<br>6.2<br>12.1<br>6.8<br>7.8<br>6.9<br>5.9               | 18%<br>19%<br>53%<br>20%<br>35%<br>77%<br>18%<br>28%<br>49%<br>46%<br>19%<br>54%<br>38%               | 17%<br>19%<br>53%<br>20%<br>33%<br>78%<br>16%<br>26%<br>46%<br>46%<br>19%<br>54%<br>28%                      | 22%<br>51%<br>19%<br>31%<br>78%<br>16%<br>26%<br>43%<br>47%<br>19%<br>49%<br>21%        | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%<br>23.4%<br>12.0%<br>0.0%<br>8.0%<br>3.9%<br>7.6%<br>9.0%         | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>8.9%<br>5.9%<br>11.3%<br>0.0%<br>8.4%<br>3.9%<br>7.5%<br>6.8%         | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%<br>6.1%<br>10.7%<br>0.0%<br>8.6%<br>3.8%<br>6.0%<br>6.5%          |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners<br>Peabody Energy Corp<br>PT Bukit Asam Tbk<br>Rio Tinto<br>Semirara Mining&Power<br>Shanxi Xishan Coal&Ele<br>Shougang Fushan Res  | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26<br>9.31<br>2320.00<br>4273.00<br>20.25<br>5.01<br>1.57<br>0.98<br>14.29                    | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2<br>1.6<br>3.5<br>3.7<br>5.1<br>4.8<br>0.6<br>1.1<br>2.9        | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3<br>1.9<br>3.6<br>4.1<br>4.6<br>4.9<br>0.6<br>1.6<br>3.0        | 2.5<br>10.0<br>4.1<br>5.1<br>1.3<br>1.9<br>3.4<br>4.7<br>4.4<br>4.9<br>0.6<br>2.2<br>3.0                         | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>1.0<br>1.8<br>2.4<br>0.9<br>0.3<br>0.4<br>1.1        | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0<br>0.3<br>0.9<br>1.9<br>2.1<br>0.9<br>0.3<br>0.4<br>1.2               | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0<br>0.3<br>0.9<br>2.0<br>2.1<br>0.9<br>0.3<br>0.5<br>1.2               | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1<br>9.9<br>6.0<br>8.7<br>7.6<br>8.0<br>6.7<br>2.6<br>5.7        | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8<br>-<br>6.4<br>10.0<br>7.0<br>8.0<br>6.3<br>3.9<br>6.1        | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7<br>-<br>6.2<br>12.1<br>6.8<br>7.8<br>6.9<br>5.9<br>6.3        | 18%<br>19%<br>53%<br>20%<br>35%<br>77%<br>18%<br>28%<br>49%<br>46%<br>19%<br>54%<br>38%<br>39%        | 17%<br>19%<br>53%<br>20%<br>33%<br>78%<br>16%<br>26%<br>46%<br>46%<br>46%<br>19%<br>54%<br>28%<br>39%        | 22%<br>51%<br>19%<br>31%<br>78%<br>26%<br>43%<br>47%<br>19%<br>49%<br>21%<br>38%        | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%<br>23.4%<br>12.0%<br>0.0%<br>8.0%<br>3.9%<br>7.6%                 | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>5.9%<br>11.3%<br>0.0%<br>8.4%<br>3.9%<br>7.5%<br>6.8%<br>2.4%         | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%<br>6.1%<br>0.0%<br>8.6%<br>3.8%<br>6.0%<br>5.0%                   |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners<br>Peabody Energy Corp<br>PT Bukit Asam Tbk<br>Rio Tinto<br>Semirara Mining&Power<br>Shanxi Xishan Coal&Ele<br>Shougang Fushan Res<br>Stanmore Coal                               | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26<br>9.31<br>2320.00<br>4273.00<br>20.25<br>5.01<br>1.57<br>0.98                             | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2<br>1.6<br>3.5<br>3.7<br>5.1<br>4.8<br>0.6<br>1.1               | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3<br>1.9<br>3.6<br>4.1<br>4.6<br>4.9<br>0.6<br>1.6               | 2.5<br>10.0<br>4.1<br>5.1<br>1.3<br>1.9<br>3.4<br>4.7<br>4.4<br>4.9<br>0.6<br>2.2                                | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>1.0<br>1.8<br>2.4<br>0.9<br>0.3<br>0.4               | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0<br>0.3<br>0.9<br>1.9<br>2.1<br>0.9<br>0.3<br>0.4                      | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0<br>0.3<br>0.9<br>2.0<br>2.1<br>0.9<br>0.3<br>0.5                      | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1<br>9.9<br>6.0<br>8.7<br>7.6<br>8.0<br>6.7<br>2.6               | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8<br>-<br>6.4<br>10.0<br>7.0<br>8.0<br>6.3<br>3.9               | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7<br>-<br>6.2<br>12.1<br>6.8<br>7.8<br>6.9<br>5.9               | 18%<br>19%<br>53%<br>20%<br>35%<br>77%<br>18%<br>28%<br>49%<br>46%<br>19%<br>54%<br>38%               | 17%<br>19%<br>53%<br>20%<br>33%<br>78%<br>16%<br>26%<br>46%<br>46%<br>19%<br>54%<br>28%                      | 22%<br>51%<br>19%<br>31%<br>78%<br>16%<br>26%<br>43%<br>47%<br>19%<br>49%<br>21%        | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%<br>23.4%<br>12.0%<br>0.0%<br>8.0%<br>3.9%<br>7.6%<br>9.0%         | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>8.9%<br>5.9%<br>11.3%<br>0.0%<br>8.4%<br>3.9%<br>7.5%<br>6.8%         | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%<br>6.1%<br>10.7%<br>8.6%<br>3.8%<br>6.0%<br>6.5%<br>5.0%<br>10.0% |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners<br>Peabody Energy Corp<br>PT Bukit Asam Tbk<br>Rio Tinto<br>Semirara Mining&Power<br>Shanxi Xishan Coal&Ele<br>Shougang Fushan Res<br>Stanmore Coal<br>Teck Resources             | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26<br>9.31<br>2320.00<br>4273.00<br>20.25<br>5.01<br>1.57<br>0.98<br>14.29                    | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2<br>1.6<br>3.5<br>3.7<br>5.1<br>4.8<br>0.6<br>1.1<br>2.9        | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3<br>1.9<br>3.6<br>4.1<br>4.6<br>4.9<br>0.6<br>1.6<br>3.0        | 2.5<br>10.0<br>4.1<br>5.1<br>1.3<br>1.9<br>3.4<br>4.7<br>4.4<br>4.9<br>0.6<br>2.2<br>3.0                         | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>1.0<br>1.8<br>2.4<br>0.9<br>0.3<br>0.4<br>1.1        | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0<br>0.3<br>0.9<br>1.9<br>2.1<br>0.9<br>0.3<br>0.4<br>1.2               | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0<br>0.3<br>0.9<br>2.0<br>2.1<br>0.9<br>0.3<br>0.5<br>1.2               | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1<br>9.9<br>6.0<br>8.7<br>7.6<br>8.0<br>6.7<br>2.6<br>5.7        | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8<br>-<br>6.4<br>10.0<br>7.0<br>8.0<br>6.3<br>3.9<br>6.1        | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7<br>-<br>6.2<br>12.1<br>6.8<br>7.8<br>6.9<br>5.9<br>6.3        | 18%<br>19%<br>53%<br>20%<br>35%<br>77%<br>18%<br>28%<br>49%<br>46%<br>19%<br>54%<br>38%<br>39%        | 17%<br>19%<br>53%<br>20%<br>33%<br>78%<br>16%<br>26%<br>46%<br>46%<br>46%<br>19%<br>54%<br>28%<br>39%        | 22%<br>51%<br>19%<br>31%<br>78%<br>26%<br>43%<br>47%<br>19%<br>49%<br>21%<br>38%        | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%<br>23.4%<br>12.0%<br>0.0%<br>8.0%<br>3.9%<br>7.6%<br>9.0%         | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>8.9%<br>5.9%<br>11.3%<br>0.0%<br>8.4%<br>3.9%<br>7.5%<br>6.8%<br>2.4% | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%<br>6.1%<br>0.0%<br>8.6%<br>3.8%<br>6.0%<br>5.0%                   |
| Arch Coal<br>Banpu<br>BHP Group<br>China Coal Energy<br>LW Bogdanka<br>Natural Res Partners<br>Peabody Energy Corp<br>PT Bukit Asam Tbk<br>Rio Tinto<br>Semirara Mining&Power<br>Shanxi Xishan Coal&Ele<br>Shougang Fushan Res<br>Stanmore Coal<br>Teck Resources<br>Terracom | 58.60<br>10.30<br>52.87<br>2.69<br>29.60<br>20.26<br>9.31<br>2320.00<br>4273.00<br>4273.00<br>20.25<br>5.01<br>1.57<br>0.98<br>14.29<br>0.30 | 2.2<br>10.3<br>3.8<br>4.7<br>1.0<br>1.2<br>1.6<br>3.5<br>3.7<br>5.1<br>4.8<br>0.6<br>1.1<br>2.9<br>1.2 | 2.6<br>10.8<br>3.8<br>4.7<br>1.0<br>1.3<br>1.9<br>3.6<br>4.1<br>4.6<br>4.9<br>0.6<br>1.6<br>3.0<br>1.8 | $\begin{array}{c} 2.5\\ 10.0\\ 4.1\\ 5.1\\ 1.3\\ 1.9\\ 3.4\\ 4.7\\ 4.4\\ 4.9\\ 0.6\\ 2.2\\ 3.0\\ 1.6\end{array}$ | 0.4<br>1.9<br>2.0<br>0.9<br>0.3<br>1.0<br>1.8<br>2.4<br>0.9<br>0.3<br>0.4<br>1.1<br>0.4 | 0.4<br>2.0<br>2.0<br>0.9<br>0.3<br>1.0<br>0.3<br>0.9<br>2.1<br>0.9<br>0.3<br>0.9<br>0.3<br>0.4<br>1.2<br>0.4 | 0.4<br>2.2<br>2.1<br>1.0<br>0.3<br>1.0<br>0.3<br>0.9<br>2.0<br>2.0<br>2.0<br>0.9<br>0.3<br>0.5<br>1.2<br>0.4 | 4.0<br>10.6<br>13.9<br>5.6<br>3.5<br>4.1<br>9.9<br>6.0<br>8.7<br>7.6<br>8.0<br>6.7<br>2.6<br>5.7<br>2.3 | 4.8<br>9.8<br>12.7<br>6.0<br>4.3<br>3.8<br>-<br>6.4<br>10.0<br>7.0<br>8.0<br>6.3<br>3.9<br>6.1<br>4.3 | 4.7<br>9.0<br>14.3<br>5.8<br>4.9<br>3.7<br>-<br>6.2<br>12.1<br>6.8<br>7.8<br>6.9<br>5.9<br>6.3<br>3.0 | 18%<br>19%<br>53%<br>20%<br>35%<br>77%<br>18%<br>28%<br>49%<br>46%<br>19%<br>54%<br>38%<br>39%<br>30% | 17%<br>19%<br>53%<br>20%<br>33%<br>78%<br>16%<br>26%<br>46%<br>46%<br>46%<br>19%<br>54%<br>28%<br>39%<br>22% | 22%<br>51%<br>19%<br>31%<br>78%<br>26%<br>43%<br>47%<br>19%<br>49%<br>21%<br>38%<br>23% | 3.1%<br>4.7%<br>8.4%<br>4.3%<br>3.7%<br>8.9%<br>23.4%<br>12.0%<br>0.0%<br>8.0%<br>3.9%<br>7.6%<br>9.0%<br>1.9% | 3.1%<br>4.9%<br>6.4%<br>3.9%<br>6.3%<br>8.9%<br>5.9%<br>11.3%<br>8.4%<br>3.9%<br>7.5%<br>6.8%<br>2.4%<br>6.7% | 3.1%<br>5.4%<br>5.2%<br>3.6%<br>6.7%<br>8.9%<br>6.1%<br>10.7%<br>8.6%<br>3.8%<br>6.0%<br>6.5%<br>5.0%<br>10.0% |

Source: mBank (stocks marked with bold), Bloomberg

## **European telecom 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 |
| Polish companies |        |      |         |      |      |      |      |      |      |      |      |        |      |      |      |      |
| Netia            | 4.50   | 4.6  | 4.7     | 4.7  | 1.5  | 1.6  | 1.6  | 31.4 | 32.2 | 29.0 | 34%  | 34%    | 34%  | 0.0% | 0.0% | 8.9% |
| Orange Polska    | 6.82   | 5.3  | 5.5     | 5.0  | 1.5  | 1.5  | 1.4  | 32.1 | 35.2 | 19.3 | 29%  | 28%    | 29%  | 0.0% | 0.0% | 3.7% |
| Play             | 34.24  | 6.4  | 6.2     | 5.7  | 2.2  | 2.2  | 2.1  | 9.9  | 9.0  | 9.0  | 34%  | 36%    | 36%  | 4.2% | 4.2% | 4.2% |
| Median           |        | 5.3  | 5.5     | 5.0  | 1.5  | 1.6  | 1.6  | 31.4 | 32.2 | 19.3 | 34%  | 34%    | 34%  | 0%   | 0.0% | 4.2% |
| Mid Caps         |        |      |         |      |      |      |      |      |      |      |      |        |      |      |      |      |
| Proximus         | 25.79  | 5.9  | 5.9     | 5.9  | 1.9  | 1.9  | 2.0  | 15.2 | 15.1 | 15.3 | 33%  | 33%    | 33%  | 5.9% | 6.0% | 6.1% |
| Telefonica CP    | 238.50 | 7.2  | 7.2     | 7.3  | 2.3  | 2.3  | 2.2  | 14.3 | 14.8 | 14.9 | 31%  | 31%    | 31%  | 8.7% | 8.8% | 8.7% |
| Hellenic Telekom | 13.89  | 5.7  | 5.6     | 5.4  | 2.0  | 2.0  | 2.0  | 19.3 | 15.7 | 13.8 | 35%  | 35%    | 36%  | 4.1% | 4.4% | 4.7% |
| Matav            | 450.00 | 4.2  | 4.2     | 4.3  | 1.3  | 1.3  | 1.3  | 10.0 | 9.4  | 9.0  | 31%  | 31%    | 31%  | 5.8% | 6.2% | 6.8% |
| Telecom Austria  | 7.33   | 5.3  | 5.2     | 5.1  | 1.8  | 1.8  | 1.8  | 11.7 | 11.0 | 10.5 | 34%  | 34%    | 35%  | 2.9% | 3.2% | 3.8% |
| Median           |        | 5.7  | 5.6     | 5.4  | 1.9  | 1.9  | 2.0  | 14.3 | 14.8 | 13.8 | 33%  | 33%    | 33%  | 5.8% | 6.0% | 6.1% |
| Big Caps         |        |      |         |      |      |      |      |      |      |      |      |        |      |      |      |      |
| BT               | 158.30 | 3.6  | 3.4     | 3.4  | 1.1  | 1.2  | 1.2  | 6.1  | 6.5  | 6.4  | 32%  | 34%    | 34%  | 0.0% | 0.0% | 0.0% |
| DT               | 14.74  | 5.3  | 5.0     | 4.8  | 1.7  | 1.7  | 1.6  | 14.7 | 13.4 | 11.9 | 32%  | 33%    | 33%  | 5.0% | 5.2% | 5.5% |
| KPN              | 2.48   | 6.9  | 6.8     | 6.5  | 3.0  | 3.0  | 3.0  | 21.4 | 18.4 | 15.6 | 43%  | 44%    | 47%  | 5.3% | 5.6% | 5.9% |
| Orange France    | 12.61  | 4.9  | 4.8     | 4.7  | 1.5  | 1.5  | 1.5  | 12.2 | 11.4 | 10.6 | 31%  | 31%    | 31%  | 5.7% | 6.0% | 6.2% |
| Swisscom         | 533.60 | 8.3  | 8.4     | 8.3  | 3.1  | 3.2  | 3.2  | 18.6 | 18.9 | 18.9 | 38%  | 38%    | 38%  | 4.1% | 4.1% | 4.2% |
| Telefonica S.A.  | 6.16   | 5.1  | 5.1     | 5.0  | 1.8  | 1.8  | 1.8  | 9.1  | 8.6  | 7.9  | 34%  | 34%    | 35%  | 6.6% | 6.6% | 6.7% |
| Telia Company    | 40.84  | 8.5  | 8.3     | 8.2  | 3.0  | 2.9  | 2.9  | 17.4 | 15.8 | 14.6 | 35%  | 35%    | 36%  | 6.0% | 6.1% | 6.2% |
| TI               | 0.49   | 4.6  | 4.6     | 4.5  | 1.9  | 1.9  | 1.9  | 7.9  | 7.6  | 7.4  | 42%  | 42%    | 42%  | 0.0% | 0.0% | 0.0% |
| Median           |        | 5.2  | 5.1     | 4.9  | 1.8  | 1.8  | 1.8  | 13.4 | 12.4 | 11.2 | 35%  | 35%    | 35%  | 5.1% | 5.4% | 5.7% |

## Media company valuations

|                       |        | 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  |
| Polish companies      |        |      |         |      |      |      |      |      |      |      |      |        |      |       |       |       |
| Agora                 | 12.85  | 7.5  | 7.1     | 6.7  | 1.0  | 1.0  | 1.0  | 61.3 | 32.7 | 21.6 | 14%  | 14%    | 15%  | 3.9%  | 3.9%  | 3.9%  |
| Wirtualna Polska      | 86.40  | 14.2 | 11.4    | 10.2 | 4.0  | 3.4  | 3.0  | 37.3 | 23.4 | 20.3 | 28%  | 29%    | 29%  | 1.2%  | 1.2%  | 2.2%  |
| Median                |        | 10.8 | 9.3     | 8.5  | 2.5  | 2.2  | 2.0  | 49.3 | 28.1 | 21.0 | 21%  | 22%    | 22%  | 2.5%  | 2.5%  | 3.1%  |
| Daily Mail            |        |      |         |      |      |      |      |      |      |      |      |        |      |       |       |       |
| Arnolgo Mondadori     | 1.85   | 6.6  | 6.1     | 6.0  | 0.7  | 0.7  | 0.7  | 13.2 | 12.0 | 12.1 | 10%  | 11%    | 11%  | 2.5%  | 3.1%  | 2.7%  |
| Axel Springer         | 63.05  | 7.9  | 8.2     | 7.3  | 1.8  | 1.7  | 1.7  | 24.3 | 25.2 | 21.6 | 23%  | 21%    | 23%  | 3.4%  | 3.5%  | 3.7%  |
| Daily Mail            | 823.00 | 9.3  | 10.2    | 9.6  | 1.3  | 1.3  | 1.3  | 21.8 | 20.3 | 19.1 | 13%  | 13%    | 13%  | 0.0%  | 0.0%  | 0.0%  |
| Gruppo Editorial      | 0.46   | 6.5  | 6.2     | 5.7  | 0.5  | 0.6  | 0.6  | -    | 19.8 | 14.7 | 8%   | 9%     | 10%  | 1.1%  | 2.0%  | 3.9%  |
| New York Times        | 34.20  | 24.7 | 22.3    | 18.8 | 3.1  | 2.9  | 2.8  | 45.4 | 41.3 | 32.9 | 12%  | 13%    | 15%  | 0.6%  | 0.6%  | 0.6%  |
| Promotora de Inform   | 1.32   | 8.5  | 7.3     | 6.7  | 1.7  | 1.7  | 1.6  | 22.4 | 15.0 | 9.2  | 21%  | 23%    | 24%  | 0.0%  | 0.0%  | -     |
| Median                |        | 8.2  | 7.7     | 7.0  | 1.5  | 1.5  | 1.4  | 22.4 | 20.1 | 16.9 | 13%  | 13%    | 14%  | 0.8%  | 1.3%  | 2.7%  |
| тv                    |        |      |         |      |      |      |      |      |      |      |      |        |      |       |       |       |
| Atresmedia Corp       | 3.09   | 5.0  | 5.1     | 5.3  | 0.9  | 0.9  | 0.9  | 5.7  | 5.9  | 6.0  | 18%  | 17%    | 17%  | 14.1% | 13.8% | 13.0% |
| Gestevision Telecinco | 5.07   | 6.1  | 6.7     | 7.0  | 1.6  | 1.6  | 1.6  | 8.5  | 8.8  | 8.9  | 26%  | 24%    | 23%  | 8.0%  | 9.0%  | 8.5%  |
| ITV PLC               | 136.60 | 9.1  | 8.9     | 8.5  | 2.0  | 2.0  | 1.9  | 10.7 | 10.3 | 9.9  | 22%  | 22%    | 22%  | 0.0%  | 0.0%  | 0.0%  |
| M6-Metropole Tel      | 14.90  | 5.1  | 5.0     | 4.8  | 1.3  | 1.2  | 1.2  | 10.8 | 10.4 | 10.0 | 25%  | 25%    | 26%  | 6.6%  | 6.7%  | 7.0%  |
| Mediaset SPA          | 2.39   | 4.0  | 3.9     | 3.6  | 1.3  | 1.3  | 1.3  | 11.6 | 9.9  | 9.5  | 33%  | 35%    | 37%  | 4.8%  | 6.6%  | 6.9%  |
| Prosieben             | 12.02  | 5.6  | 5.4     | 5.2  | 1.3  | 1.2  | 1.2  | 6.2  | 5.9  | 5.6  | 23%  | 22%    | 22%  | 8.5%  | 8.7%  | 8.3%  |
| TF1-TV Francaise      | 6.83   | 2.9  | 2.9     | 2.8  | 0.6  | 0.6  | 0.6  | 8.1  | 7.5  | 6.7  | 20%  | 20%    | 21%  | 6.6%  | 7.2%  | 7.9%  |
| Median                |        | 5.3  | 5.2     | 5.0  | 1.3  | 1.3  | 1.3  | 9.6  | 9.4  | 9.2  | 24%  | 23%    | 23%  | 6.6%  | 6.9%  | 7.5%  |
| Pay TV                |        |      |         |      |      |      |      |      |      |      |      |        |      |       |       |       |
| Cogeco                | 107.10 | 6.0  | 5.9     | 5.7  | 2.9  | 2.8  | 2.8  | 15.4 | 14.0 | 14.0 | 48%  | 48%    | 48%  | 2.0%  | 2.2%  | 2.4%  |
| Comcast               | 44.59  | 8.9  | 8.3     | 8.0  | 2.8  | 2.6  | 2.6  | 14.7 | 13.2 | 12.2 | 31%  | 32%    | 32%  | 1.9%  | 2.0%  | 2.2%  |
| Dish Network          | 37.94  | 9.8  | 10.8    | 11.7 | 1.8  | 1.9  | 1.9  | 15.6 | 21.2 | 23.1 | 19%  | 18%    | 16%  | 0.0%  | 0.0%  | 0.0%  |
| Liberty Global        | 21.07  | 4.3  | 4.2     | 4.2  | 1.8  | 1.8  | 1.8  | -    | -    | -    | 41%  | 42%    | 43%  | 0.0%  | 0.0%  | 0.0%  |
| Shaw Communications   | 19.73  | 7.8  | 7.5     | 7.1  | 3.2  | 3.1  | 3.0  | 18.9 | 19.3 | 17.9 | 41%  | 41%    | 42%  | 8.0%  | 8.1%  | 8.1%  |
| Median                |        | 7.8  | 7.5     | 7.1  | 2.8  | 2.6  | 2.6  | 15.5 | 16.6 | 15.9 | 41%  | 41%    | 42%  | 1.9%  | 2.0%  | 2.2%  |

## **IT company valuations**

|                   |        | 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 |
| Polish companies  |        |      |        |      |      |      |      |      |      |      |      |        |      |      |      |      |
| Asseco Poland     | 67.05  | 5.4  | 5.2    | 4.9  | 0.8  | 0.8  | 0.7  | 16.9 | 16.4 | 16.0 | 15%  | 15%    | 15%  | 4.6% | 4.6% | 3.4% |
| Comarch           | 207.00 | 6.5  | 6.3    | 5.9  | 1.1  | 1.0  | 0.9  | 15.0 | 14.4 | 13.8 | 18%  | 16%    | 16%  | 0.7% | 0.7% | 0.7% |
| Median            |        | 6.0  | 5.7    | 5.4  | 1.0  | 0.9  | 0.8  | 16.0 | 15.4 | 14.9 | 16%  | 16%    | 15%  | 2.6% | 2.7% | 2.0% |
| Foreign companies |        |      |        |      |      |      |      |      |      |      |      |        |      |      |      |      |
| Atos Origin       | 79.04  | 7.9  | 7.6    | 7.0  | 1.1  | 1.1  | 1.1  | 9.5  | 8.8  | 8.2  | 14%  | 15%    | 15%  | 2.0% | 2.3% | 2.5% |
| CapGemini         | 116.15 | 9.3  | 8.8    | 8.3  | 1.4  | 1.3  | 1.3  | 17.7 | 16.2 | 15.0 | 15%  | 15%    | 15%  | 1.6% | 1.8% | 1.9% |
| IBM               | 156.33 | 10.4 | 9.8    | 9.3  | 2.4  | 2.3  | 2.2  | 12.2 | 11.6 | 10.8 | 23%  | 24%    | 24%  | 4.1% | 4.3% | 4.5% |
| Indra Sistemas    | 10.93  | 6.8  | 6.4    | 6.1  | 0.7  | 0.7  | 0.7  | 14.6 | 12.6 | 11.4 | 11%  | 11%    | 11%  | 0.8% | 1.4% | 1.9% |
| Microsoft         | 179.90 | 24.5 | 21.3   | 19.1 | 10.5 | 9.4  | 8.4  | 39.2 | 34.2 | 30.3 | 43%  | 44%    | 44%  | 1.0% | 1.1% | 1.2% |
| Oracle            | 54.74  | 10.6 | 10.2   | 10.0 | 4.9  | 4.8  | 4.7  | 15.9 | 14.1 | 13.0 | 47%  | 47%    | 47%  | 1.5% | 1.7% | 1.8% |
| SAP               | 124.60 | 19.3 | 16.7   | 14.8 | 5.9  | 5.5  | 5.1  | 25.5 | 22.9 | 20.4 | 31%  | 33%    | 34%  | 1.2% | 1.4% | 1.5% |
| TietoEnator       | 30.42  | 10.7 | 9.5    | 9.2  | 1.5  | 1.4  | 1.3  | 16.4 | 15.9 | 15.2 | 14%  | 14%    | 14%  | 4.5% | 4.9% | 5.1% |
| Median            |        | 10.5 | 9.7    | 9.3  | 2.0  | 1.8  | 1.8  | 16.2 | 15.0 | 14.0 | 19%  | 19%    | 20%  | 1.6% | 1.7% | 1.9% |

Source: mBank (stocks marked with bold), Bloomberg

## Gaming company valuations

|                     | EV/EBITDA |      |      |      |      | EV/S |      |      | P/E  |      |      | DA mar | gin  |      | DY   |      |
|---------------------|-----------|------|------|------|------|------|------|------|------|------|------|--------|------|------|------|------|
|                     | Price     | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020   | 2021 | 2019 | 2020 | 2021 |
| Gaming              |           |      |      |      |      |      |      |      |      |      |      |        |      |      |      |      |
| 11 bit studios      | 441.00    | 34.3 | 28.8 | 7.3  | 14.3 | 11.9 | 4.5  | 57.1 | 45.6 | 10.8 | 42%  | 41%    | 62%  | 0.0% | 0.0% | 0.0% |
| CD Projekt          | 308.00    | -    | 11.5 | 12.7 | 61.8 | 8.7  | 10.3 | -    | 13.2 | 14.6 | 29%  | 76%    | 81%  | 0.3% | 0.0% | 0.0% |
| PlayWay             | 323.00    | 26.3 | 23.3 | 20.7 | 17.2 | 15.5 | 13.9 | 38.6 | 35.4 | 33.0 | 65%  | 67%    | 67%  | 0.8% | 1.9% | 2.1% |
| Activision Blizzars | 58.85     | 18.9 | 16.0 | 14.8 | 6.6  | 6.0  | 5.5  | 26.8 | 23.1 | 20.4 | 35%  | 37%    | 37%  | 0.6% | 0.7% | 0.7% |
| Capcom              | 3355.00   | 17.3 | 15.7 | 14.0 | 4.2  | 4.5  | 4.1  | 27.4 | 23.1 | 21.7 | 24%  | 29%    | 29%  | 1.1% | 1.2% | 1.2% |
| Take Two            | 120.76    | 16.4 | 17.0 | 15.9 | 4.0  | 4.2  | 4.2  | 25.5 | 25.6 | 24.5 | 24%  | 25%    | 26%  | -    | -    | -    |
| Ubisoft             | 70.96     | 8.3  | 8.8  | 7.9  | 4.1  | 3.8  | 3.5  | 24.0 | 25.4 | 22.4 | 50%  | 44%    | 45%  | 0.0% | 0.0% | 0.0% |
| Electronic Arts     | 107.82    | 18.6 | 16.3 | 14.4 | 5.9  | 5.5  | 5.2  | 27.5 | 23.4 | 21.2 | 32%  | 34%    | 36%  | -    | 0.0% | 0.0% |
| Paradox Interactive | 138.40    | 18.8 | 14.3 | 12.0 | 10.4 | 8.4  | 7.4  | 44.7 | 34.5 | 23.4 | 55%  | 59%    | 61%  | 1.4% | 1.7% | 1.3% |
| Mediana             |           | 18.7 | 16.0 | 14.0 | 6.6  | 6.0  | 5.2  | 27.4 | 25.4 | 21.7 | 35%  | 41%    | 45%  | 0.6% | 0.3% | 0.4% |

Source: mBank (stocks marked with bold), Bloomberg

## **Construction company valuations**

|              |        | EV/EBITDA |      |      |      | EV/S |      |      | P/E  |      |      | DA mar | gin  |      | DY   |      |
|--------------|--------|-----------|------|------|------|------|------|------|------|------|------|--------|------|------|------|------|
|              | Price  | 2019      | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020   | 2021 | 2019 | 2020 | 2021 |
| Construction |        |           |      |      |      |      |      |      |      |      |      |        |      |      |      |      |
| Acciona      | 104.60 | 8.6       | 8.4  | 8.2  | 1.5  | 1.4  | 1.4  | 19.9 | 19.8 | 18.5 | 17%  | 17%    | 17%  | 3.6% | 3.7% | 4.0% |
| Astaldi      | 0.57   | 0.4       | 0.4  | 0.5  | 0.0  | 0.0  | 0.0  | 0.7  | 0.7  | 0.7  | 9%   | 9%     | 6%   | -    | -    | 175% |
| Budimex      | 188.80 | 12.1      | 11.8 | 13.7 | 0.5  | 0.5  | 0.5  | 29.0 | 28.2 | 26.0 | 4%   | 5%     | 4%   | 5.2% | 3.3% | 3.1% |
| Ferrovial    | 29.11  | -         | 43.1 | 39.5 | 4.5  | 4.5  | 4.4  | -    | 47.4 | 41.6 | 3%   | 10%    | 11%  | 2.5% | 2.6% | 2.7% |
| Hochtief     | 107.30 | 4.0       | 3.9  | 3.6  | 0.3  | 0.3  | 0.2  | 11.4 | 10.8 | 10.4 | 6%   | 6%     | 7%   | 5.6% | 6.0% | 6.2% |
| Mota Engil   | 1.71   | 4.1       | 3.7  | -    | 0.6  | 0.6  | 0.5  | 13.2 | 8.6  | 6.1  | 15%  | 15%    | -    | 2.7% | 6.4% | -    |
| NCC          | 188.50 | 7.9       | 6.5  | 6.2  | 0.3  | 0.3  | 0.3  | 19.9 | 13.7 | 12.9 | 4%   | 5%     | 5%   | 3.3% | 4.0% | 4.1% |
| Skanska      | 230.20 | 9.5       | 10.1 | 9.5  | 0.5  | 0.5  | 0.5  | 17.0 | 17.2 | 16.2 | 6%   | 5%     | 6%   | 2.9% | 3.1% | 3.4% |
| Strabag      | 29.90  | 2.8       | 2.8  | 2.7  | 0.2  | 0.2  | 0.2  | 9.4  | 9.5  | 9.1  | 6%   | 6%     | 6%   | 4.3% | 4.5% | 4.8% |
| Median       |        | 6.0       | 6.5  | 7.2  | 0.5  | 0.5  | 0.5  | 15.1 | 13.7 | 12.9 | 6%   | 6%     | 6%   | 3.4% | 3.9% | 4.1% |

## **Real-estate developers**

|                       |        |      | P/BV |      |      | P/E  |      | EBIT | DA mare | EBITDA margin |      |      |      |       |       |       |
|-----------------------|--------|------|------|------|------|------|------|------|---------|---------------|------|------|------|-------|-------|-------|
|                       | Price  | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020    | 2021          | 2019 | 2020 | 2021 | 2019  | 2020  | 2021  |
| RE Developers         |        |      |      |      |      |      |      |      |         |               |      |      |      |       |       |       |
| Atal                  | 39.90  | 13.8 | 7.0  | 6.7  | 2.0  | 1.7  | 1.7  | 14.0 | 7.4     | 6.8           | 23%  | 23%  | 23%  | 11.8% | 6.6%  | 12.3% |
| Dom Development       | 96.40  | 7.8  | 7.8  | 7.7  | 2.2  | 2.2  | 2.2  | 9.6  | 8.9     | 8.4           | 19%  | 20%  | 20%  | 9.4%  | 10.4% | 11.2% |
| Develia               | 2.82   | 6.9  | 12.1 | 12.7 | -    | -    | -    | -    | -       | -             | 30%  | 28%  | 16%  | 13.5% | 15.6% | 11.5% |
| Echo Investment       | 5.14   | 9.5  | 12.0 | 12.6 | 1.4  | 1.3  | 1.2  | 8.1  | 8.1     | 11.2          | 55%  | 43%  | 36%  | 8.5%  | 8.4%  | 6.2%  |
| GTC                   | 9.35   | 16.0 | 14.8 | 14.2 | 1.0  | 1.0  | 0.9  | 11.2 | 10.3    | 9.9           | 83%  | 82%  | 79%  | 0.2%  | 0.2%  | 0.3%  |
| CA Immobilien Anlagen | 39.50  | 30.4 | 26.6 | 24.4 | 1.3  | 1.3  | 1.2  | 31.5 | 27.7    | 25.0          | 70%  | 65%  | 62%  | 2.4%  | 2.7%  | 2.8%  |
| Deutsche Euroshop AG  | 24.78  | 15.2 | 15.2 | 15.3 | 0.7  | 0.7  | 0.7  | 13.9 | 13.4    | 12.9          | 88%  | 88%  | 88%  | 6.2%  | 6.4%  | 6.5%  |
| Immofinanz AG         | 25.10  | 28.9 | 25.9 | 25.2 | 0.9  | 0.9  | 0.9  | 15.6 | 17.4    | 16.3          | 48%  | 56%  | 56%  | 3.6%  | 3.9%  | 4.2%  |
| Klepierre             | 30.74  | 20.4 | 19.6 | 19.3 | 0.8  | 0.9  | 0.9  | 11.4 | 11.1    | 10.8          | 83%  | 86%  | 86%  | 7.1%  | 7.3%  | 7.5%  |
| Segro                 | 903.00 | 39.4 | 35.4 | 32.4 | 1.3  | 1.2  | 1.1  | 36.7 | 33.8    | 31.5          | 77%  | 80%  | 82%  | 0.0%  | 0.0%  | 0.0%  |
| Median                |        | 15.6 | 15.0 | 14.8 | 1.3  | 1.2  | 1.1  | 13.9 | 11.1    | 11.2          | 62%  | 61%  | 59%  | 6.7%  | 6.5%  | 6.4%  |

Source: mBank (stocks marked with bold), Bloomberg

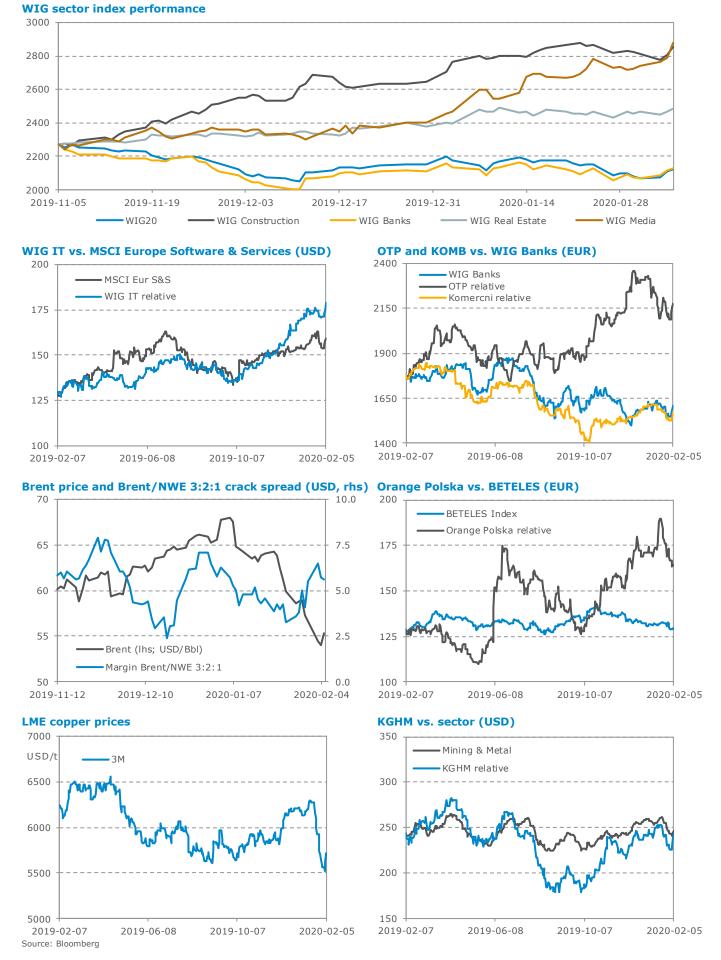
## **Clothing and footwear company valuations**

|                   |         | EV/EBITDA |      |      |      | EV/S |      |      | P/E  |      | EBI1 | DA mar | gin  | DY   |      |      |
|-------------------|---------|-----------|------|------|------|------|------|------|------|------|------|--------|------|------|------|------|
|                   | Price   | 2019      | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020   | 2021 | 2019 | 2020 | 2021 |
| Polish companies  |         |           |      |      |      |      |      |      |      |      |      |        |      |      |      |      |
| CCC               | 97.05   | 5.5       | 4.3  | 3.7  | 0.8  | 0.7  | 0.6  | -    | 20.4 | 13.5 | 15%  | 17%    | 17%  | 0.5% | 2.1% | 2.1% |
| LPP               | 8680.00 | 11.8      | 9.7  | 8.4  | 1.7  | 1.4  | 1.2  | 28.4 | 19.8 | 16.1 | 14%  | 15%    | 14%  | 0.7% | 0.5% | 0.8% |
| VRG               | 3.90    | 4.8       | 4.3  | 3.9  | 0.9  | 0.8  | 0.7  | 15.1 | 12.5 | 11.2 | 19%  | 19%    | 19%  | 0.0% | 0.0% | 0.0% |
| Median            |         | 5.5       | 4.3  | 3.9  | 0.9  | 0.8  | 0.7  | 21.7 | 19.8 | 13.5 | 15%  | 17%    | 17%  | 0.5% | 0.5% | 0.8% |
| Foreign companies |         |           |      |      |      |      |      |      |      |      |      |        |      |      |      |      |
| ABC Mart          | 7120.00 | 9.5       | 9.3  | 8.9  | 1.7  | 1.7  | 1.6  | 19.3 | 18.9 | 18.1 | 18%  | 18%    | 18%  | 2.2% | 2.4% | 2.4% |
| Adidas            | 290.45  | 16.5      | 15.1 | 13.6 | 2.4  | 2.3  | 2.1  | 29.6 | 26.2 | 22.8 | 15%  | 15%    | 16%  | 1.3% | 1.5% | 1.8% |
| Assoc Brit Foods  | 2672.00 | 10.2      | 9.6  | 9.1  | 1.3  | 1.2  | 1.2  | 19.7 | 18.2 | 16.9 | 13%  | 13%    | 13%  | 0.0% | 0.0% | 0.0% |
| Caleries          | 18.40   | 4.1       | 3.8  | 3.5  | 0.3  | 0.3  | 0.3  | 8.1  | 7.6  | 6.9  | 7%   | 7%     | 8%   | 1.5% | 1.5% | 1.5% |
| Crocs             | 39.41   | 17.8      | 15.4 | 14.4 | 2.3  | 2.2  | 2.0  | 28.4 | 24.8 | 20.9 | 13%  | 14%    | 14%  | -    | -    | -    |
| Foot Locker       | 41.22   | 4.2       | 4.1  | 4.1  | 0.5  | 0.5  | 0.4  | 9.0  | 8.3  | 7.9  | 11%  | 11%    | 11%  | 3.3% | 3.7% | 4.1% |
| Geox              | 1.10    | 5.2       | 4.2  | 2.8  | 0.4  | 0.3  | 0.3  | -    | 20.8 | 13.8 | 7%   | 8%     | 11%  | 1.8% | 3.0% | 5.5% |
| H&M               | 207.60  | 11.2      | 10.5 | 10.0 | 1.3  | 1.3  | 1.2  | 26.3 | 24.1 | 22.6 | 12%  | 12%    | 12%  | 4.7% | 4.6% | 4.6% |
| Hugo Boss         | 43.06   | 5.5       | 5.2  | 4.9  | 1.1  | 1.0  | 1.0  | 12.2 | 11.1 | 10.2 | 19%  | 19%    | 20%  | 6.4% | 7.0% | 7.5% |
| Inditex           | 31.43   | 16.3      | 12.2 | 11.6 | 3.4  | 3.2  | 3.0  | 28.1 | 25.7 | 24.0 | 21%  | 27%    | 26%  | 2.5% | 3.3% | 3.6% |
| KappAhl           | 20.02   | 6.0       | 5.6  | 5.7  | 0.4  | 0.4  | 0.4  | 10.6 | 10.4 | 10.8 | 7%   | 7%     | 7%   | 5.2% | 5.0% | 5.0% |
| Lululemon         | 243.90  | 35.2      | 29.4 | 25.3 | 8.9  | 7.5  | 6.5  | 65.1 | 51.4 | 43.4 | 25%  | 26%    | 26%  | 0.0% | 0.0% | 0.0% |
| Nike              | 100.54  | 22.1      | 19.9 | 17.5 | 3.2  | 3.0  | 2.7  | 39.0 | 33.9 | 29.2 | 15%  | 15%    | 16%  | 0.8% | 0.9% | 1.0% |
| Under Armour      | 20.73   | 9.6       | 7.9  | 6.3  | 0.8  | 0.7  | 0.7  | 61.3 | 43.5 | 32.1 | 8%   | 9%     | 11%  | 0.0% | 0.0% | 0.0% |
| Median            |         | 9.9       | 9.5  | 9.0  | 1.3  | 1.3  | 1.2  | 26.3 | 22.5 | 19.5 | 13%  | 13%    | 13%  | 1.8% | 2.4% | 2.4% |

## Luxury, e-commerce, and food retail company valuations

|                      | EV/EBITDA |      |      |      |      | EV/S |      |      | P/E  |      | EBI1 | DA mar | gin  |      | DY   |      |
|----------------------|-----------|------|------|------|------|------|------|------|------|------|------|--------|------|------|------|------|
|                      | Price     | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020   | 2021 | 2019 | 2020 | 2021 |
| Luxury goods         |           |      |      |      |      |      |      |      |      |      |      |        |      |      |      |      |
| Estee Lauder         | 201.32    | 14.6 | 13.0 | 11.8 | 3.1  | 2.8  | 2.7  | 38.4 | 33.6 | 30.2 | 21%  | 22%    | 22%  | 0.8% | 0.9% | 1.0% |
| Hermes Internetional | 700.20    | 26.9 | 24.6 | 22.6 | 10.3 | 9.5  | 8.8  | 48.7 | 44.0 | 39.9 | 39%  | 39%    | 39%  | 0.8% | 0.9% | 1.0% |
| Kering               | 573.60    | 13.6 | 12.5 | 11.8 | 4.7  | 4.4  | 4.1  | 23.0 | 20.2 | 18.7 | 35%  | 35%    | 35%  | 2.0% | 2.3% | 2.5% |
| LVMH                 | 415.00    | 15.2 | 13.9 | 13.0 | 4.1  | 3.8  | 3.5  | 28.6 | 25.9 | 23.7 | 27%  | 27%    | 27%  | 1.6% | 1.8% | 2.0% |
| Moncler              | 40.41     | 16.9 | 15.0 | 13.5 | 6.0  | 5.4  | 4.8  | 27.8 | 25.8 | 23.2 | 36%  | 36%    | 36%  | 1.1% | 1.3% | 1.5% |
| Median               |           | 15.2 | 13.9 | 13.0 | 4.7  | 4.4  | 4.1  | 28.6 | 25.9 | 23.7 | 35%  | 35%    | 35%  | 1.1% | 1.3% | 1.5% |
| E-commerce           |           |      |      |      |      |      |      |      |      |      |      |        |      |      |      |      |
| Asos                 | 3288.00   | 24.8 | 17.4 | 13.4 | 1.0  | 0.9  | 0.8  | -    | 54.6 | 37.0 | 4%   | 5%     | 6%   | 0.0% | 0.0% | 0.0% |
| boohoo.com           | 324.80    | 44.7 | 31.6 | 25.3 | 4.3  | 3.1  | 2.5  | -    | 62.5 | 48.5 | 10%  | 10%    | 10%  | 0.0% | 0.0% | 0.0% |
| Zalando              | 44.82     | 29.7 | 24.1 | 18.9 | 1.6  | 1.4  | 1.2  | -    | -    | 66.1 | 6%   | 6%     | 6%   | 0.0% | 0.0% | 0.0% |
| Median               |           | 29.7 | 24.1 | 18.9 | 1.6  | 1.4  | 1.2  | -    | 58.5 | 48.5 | 6%   | 6%     | 6%   | 0.0% | 0.0% | 0.0% |
| Retail               |           |      |      |      |      |      |      |      |      |      |      |        |      |      |      |      |
| Dino                 | 168.00    | 24.0 | 18.1 | 14.0 | 2.2  | 1.7  | 1.3  | 40.8 | 30.1 | 22.6 | 9%   | 9%     | 10%  | 0.0% | 0.0% | 0.0% |
| Eurocash             | 20.40     | 7.5  | 7.1  | 6.7  | 0.1  | 0.1  | 0.1  | 69.2 | 41.2 | 28.6 | 2%   | 2%     | 2%   | 5.1% | 2.9% | 3.7% |
| Jeronimo Martins     | 15.88     | 9.9  | 8.7  | 8.1  | 0.6  | 0.5  | 0.5  | 18.7 | 18.5 | 17.4 | 6%   | 6%     | 6%   | 2.1% | 2.0% | 2.1% |
| Carrefour            | 15.56     | 5.0  | 4.5  | 4.2  | 0.2  | 0.2  | 0.2  | 13.6 | 11.7 | 10.9 | 5%   | 5%     | 5%   | 3.3% | 3.7% | 3.8% |
| AXFood               | 207.20    | 10.6 | 10.3 | 10.1 | 0.9  | 0.9  | 0.9  | 26.5 | 25.9 | 25.5 | 9%   | 9%     | 9%   | 3.4% | 3.4% | 3.2% |
| Tesco                | 248.30    | 7.9  | 5.5  | 5.3  | 0.4  | 0.4  | 0.4  | 17.5 | 14.6 | 13.6 | 5%   | 8%     | 8%   | 0.0% | 0.0% | 0.0% |
| Ahold                | 22.25     | 6.6  | 6.3  | 6.3  | 0.5  | 0.5  | 0.5  | 13.8 | 12.8 | 12.2 | 8%   | 8%     | 8%   | 3.4% | 3.7% | 3.9% |
| X 5 Retail           | 2283.50   | 6.3  | 5.7  | 5.3  | 0.5  | 0.4  | 0.4  | 15.7 | 13.9 | 12.7 | 7%   | 7%     | 7%   | 4.7% | 5.6% | 6.5% |
| Magnit               | 3783.50   | 5.7  | 5.0  | 4.5  | 0.4  | 0.4  | 0.3  | 14.7 | 11.4 | 8.5  | 7%   | 7%     | 7%   | 5.8% | 6.1% | 7.1% |
| Sonae                | 0.85      | 9.5  | 9.0  | 6.9  | 0.8  | 0.7  | 0.7  | 11.7 | 10.0 | 10.2 | 8%   | 8%     | 10%  | 5.2% | 5.6% | 5.8% |
| Median               |           | 7.7  | 6.7  | 6.5  | 0.5  | 0.5  | 0.4  | 16.6 | 14.2 | 13.1 | 7%   | 7%     | 7%   | 3.4% | 3.5% | 3.8% |

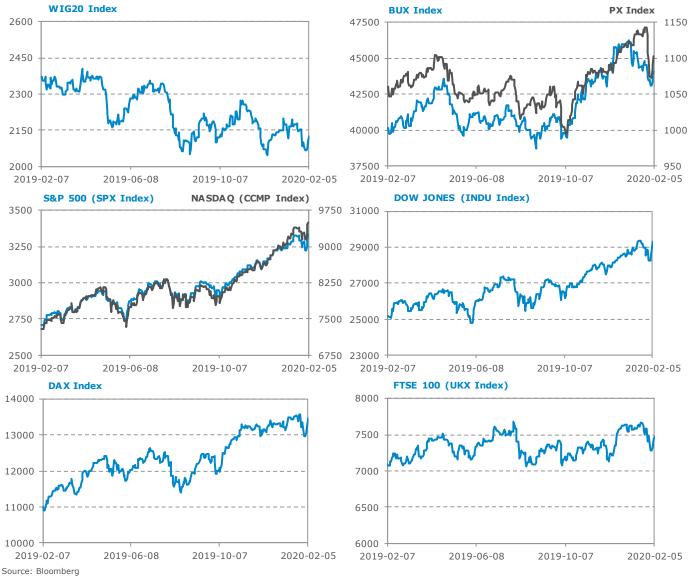
Source: mBank (stocks marked with bold), Bloomberg

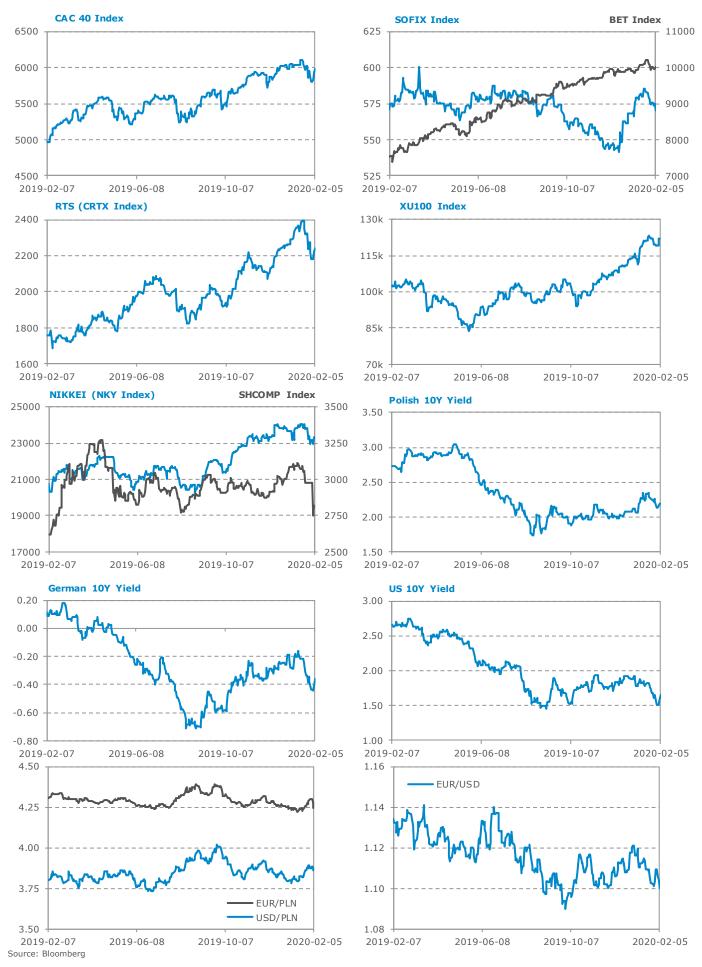




## **Global Market Overview**

| Index             | Date       | Open       | Maximum    | Minimum    | Close      | Change  |
|-------------------|------------|------------|------------|------------|------------|---------|
| DJIA              | 2020-02-05 | 29,048.73  | 29,308.89  | 29,000.85  | 29,290.85  | +1.68%  |
| S&P 500           | 2020-02-05 | 3,324.91   | 3,337.58   | 3,313.75   | 3,334.69   | +1.13%  |
| NASDAQ            | 2020-02-05 | 9,574.10   | 9,574.94   | 9,454.93   | 9,508.68   | +0.43%  |
| DAX               | 2020-02-05 | 13,224.27  | 13,488.58  | 13,223.14  | 13,478.33  | +1.48%  |
| CAC 40            | 2020-02-05 | 5,919.06   | 6,004.33   | 5,912.49   | 5,985.40   | +0.85%  |
| FTSE 100          | 2020-02-05 | 7,439.82   | 7,512.41   | 7,408.45   | 7,482.48   | +0.57%  |
| WIG20             | 2020-02-05 | 2,106.64   | 2,133.91   | 2,102.45   | 2,122.91   | +0.77%  |
| BUX               | 2020-02-05 | 43,865.15  | 44,288.06  | 43,804.34  | 44,020.03  | +0.35%  |
| ΡX                | 2020-02-05 | 1,092.58   | 1,103.65   | 1,091.33   | 1,103.37   | +1.21%  |
| RTS               | 2020-02-05 | 2,216.91   | 2,267.25   | 2,203.08   | 2,239.79   | +0.70%  |
| SOFIX             | 2020-02-05 | 575.15     | 575.15     | 570.36     | 570.36     | -0.83%  |
| BET               | 2020-02-05 | 9,967.11   | 10,035.73  | 9,961.70   | 10,035.73  | +0.70%  |
| XU100             | 2020-02-05 | 122,416.60 | 123,629.30 | 121,906.40 | 122,320.80 | +0.15%  |
| BETELES           | 2020-02-05 | 129.37     | 129.81     | 128.56     | 128.76     | -0.52%  |
| NIKKEI            | 2020-02-05 | 23,351.47  | 23,414.69  | 23,241.64  | 23,319.56  | +1.02%  |
| SHCOMP            | 2020-02-05 | 2,792.37   | 2,842.74   | 2,778.86   | 2,818.09   | +1.25%  |
| Copper (LME)      | 2020-02-05 | 5,633.00   | 5,769.00   | 5,633.00   | 5,722.00   | +1.85%  |
| Crude Oil (Brent) | 2020-02-05 | 53.45      | 55.66      | 53.33      | 55.02      | +3.71%  |
| USD/PLN           | 2020-02-05 | 3.8712     | 3.8765     | 3.8498     | 3.8598     | -0.30%  |
| EUR/PLN           | 2020-02-05 | 4.2756     | 4.2778     | 4.2362     | 4.2453     | -0.71%  |
| EUR/USD           | 2020-02-05 | 1.1044     | 1.1048     | 1.0994     | 1.0999     | -0.41%  |
| USBonds10         | 2020-02-05 | 1.6008     | 1.6595     | 1.5733     | 1.6508     | +0.0517 |
| GRBonds10         | 2020-02-05 | -0.4090    | -0.3550    | -0.4160    | -0.3590    | +0.0400 |
| PLBonds10         | 2020-02-05 | 2.1900     | 2.2130     | 2.1890     | 2.1950     | +0.0040 |







List of abbreviations and ratios contained in the report: EV – net debt + market value (EV – economic 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 MC/S - market capitalisation to sales EBIT/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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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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