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## IT Recap: May 2018

### IT, Poland

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- The **WIG-INFO** index **dropped 2.4% in May**, and it is **down 2.7% ytd** (compared to a rise of **0.3%** and a drop of **-7%**, respectively, logged by the broad-market WIG benchmark). The **median 12M fwd P/E ratio** for IT stocks at **15.4x** is currently 0.3% higher than its three-year average, with the premium narrowed by nearly 6% over the course of three months.
- Polish IT companies had a **neutral 2018 Q1 earnings season**, with the sector's aggregate EBITDA showing a 1.7% rebound from the comparable year-ago period (median growth was 11.3%), while net profit declined 3.7% (median +12.0%).
- When it comes to 2018 first-quarter earnings, **Asseco Poland** delivered better-than-expected results in the period, with adjusted net profit showing a 16.2% beat over the consensus estimate at PLN 63.9m. On a standalone basis, cash flow in Q1 was modest, but a rebound in orders for banking solutions and the Social Insurance Institution makes for positive outlook for Q2. At the current level, **ACP stock** trades close to our PLN 41.20 target, indicating upside potential for June. At **14.5/15.2x 2018/19E P/E**, the stock shows a discount of **22%/10%** to foreign IT companies.
- Comarch** delivered **solid first-quarter results as well**, with the adjusted EBITDA and EBIT figures at PLN 23.3m and PLN 7.2m, respectively, coming in far ahead of the respective consensus expectations of PLN 10.3m and PLN -6.9m. The reason behind the positive surprise was a rebound in revenues.
- After **worse-than-expected first-quarter results**, we are forced to cut our 2018 revenue, EBITDA, and net profit forecasts for **Wasko** by 13%/9%/15%, respectively. The Q1 slump aside from higher expenses related to preparation for broadband contracts was due to **8% y/y contraction in revenue**. Accordingly, we **downgrade WAS to neutral**.
- Asseco South Eastern Europe** delivered **strong 2018 Q1 results**, with adjusted **EBITDA up 20%** on the year-ago figure despite problems with a major contract. The payments segment, which is ASEE's most interesting business line, enjoyed strong performance in the period. ASE is currently trading at an attractive **P/E of 10.7x** after a 7% pullback over the past month, and it is expected to gain in price in the month ahead.
- The 2018 Q1 results of **Atende** were consistent with a seasonal slowdown, with OCF decreasing to a low level due to public contracts. Nevertheless we stand by our 2018 FY net profit forecast of PLN 15.6m, implying an **attractive P/E ratio of 9.8x**.
- TOP PICKS – OVERWEIGHT: ASE, ATD**

### Performance

| Poland       | 1M*    | YTD  |
|--------------|--------|------|
| Comarch      | +2.7%  | -21% |
| Asseco PL    | +2.7%  | +4%  |
| Asseco SEE   | +0.4%  | -10% |
| Atende       | -5.2%  | +3%  |
| Ailleron     | -8.5%  | -9%  |
| Asseco BS    | -10.5% | -10% |
| Wasko        | -18.8% | -29% |
| WIG INFO     | -0.1%  | -3%  |
| WIG          | -2.3%  | -9%  |
| World        | 1M*    | YTD  |
| Computacentr | +9.8%  | +17% |
| Capgemini    | +9.4%  | +16% |
| SAP          | +8.5%  | +4%  |
| Sage Group   | +6.7%  | -16% |
| Tieto        | +4.3%  | +19% |
| Atos         | +2.3%  | -6%  |
| Fiserv       | +2.1%  | +9%  |
| Oracle       | +1.1%  | -2%  |
| Software AG  | +1.0%  | -13% |
| Indra Sistem | -1.4%  | -4%  |
| Europe IT**  | +8.1%  | +8%  |
| World IT**   | +6.9%  | +9%  |
| World Ind    | 1M*    | YTD  |
| MSCI EU      | +1.1%  | -1%  |
| EU Equity    | -4.0%  | -5%  |

\*Apr. 25 - May 29

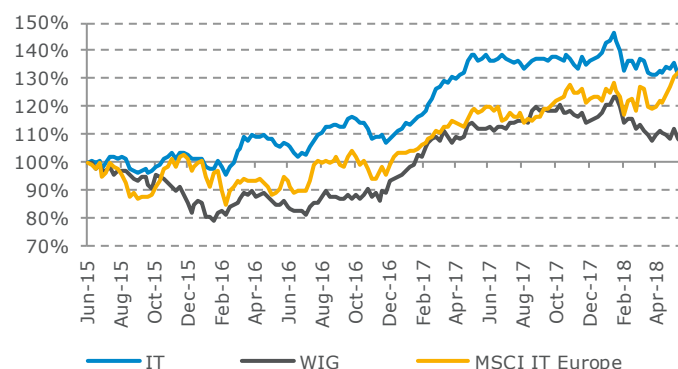
\*\*MSCI EU/World IT

### Actual 2018 Q1 earnings of listed IT companies vs. our forecasts

| (PLN m)    | ABS  | Beat/Miss | ACP   | Beat/Miss | ASE   | Beat/Miss | ATD  | Beat/Miss | WAS  | Beat/Miss |
|------------|------|-----------|-------|-----------|-------|-----------|------|-----------|------|-----------|
| Revenue    | 61,7 | +2,5%     | 2149  | +2,9%     | 138,6 | -7,7%     | 89,9 | +17,9%    | 53,5 | -18,1%    |
| EBITDA     | 22,5 | +2,5%     | 284,5 | +16,6%    | 23,9  | +5,0%     | 18,6 | -9,6%     | 1,2  | -69,8%    |
| EBIT       | 17,8 | +1,7%     | 167,3 | +26,0%    | 13,1  | +11,8%    | 17,1 | -         | -2,1 | -         |
| Net profit | 14,7 | +3,9%     | 68,9  | +14,5%    | 11,2  | +24,8%    | 12,4 | -         | -1,7 | -         |

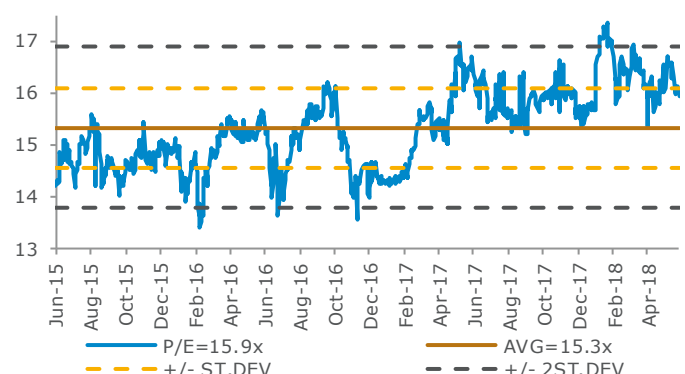
Source: Companies, Dom Maklerski mBanku

### IT Stocks vs. WIG & MSCI IT Europe Indices



Source: Bloomberg, Dom Maklerski mBanku

### Median 12M Forward P/E for IT Stocks

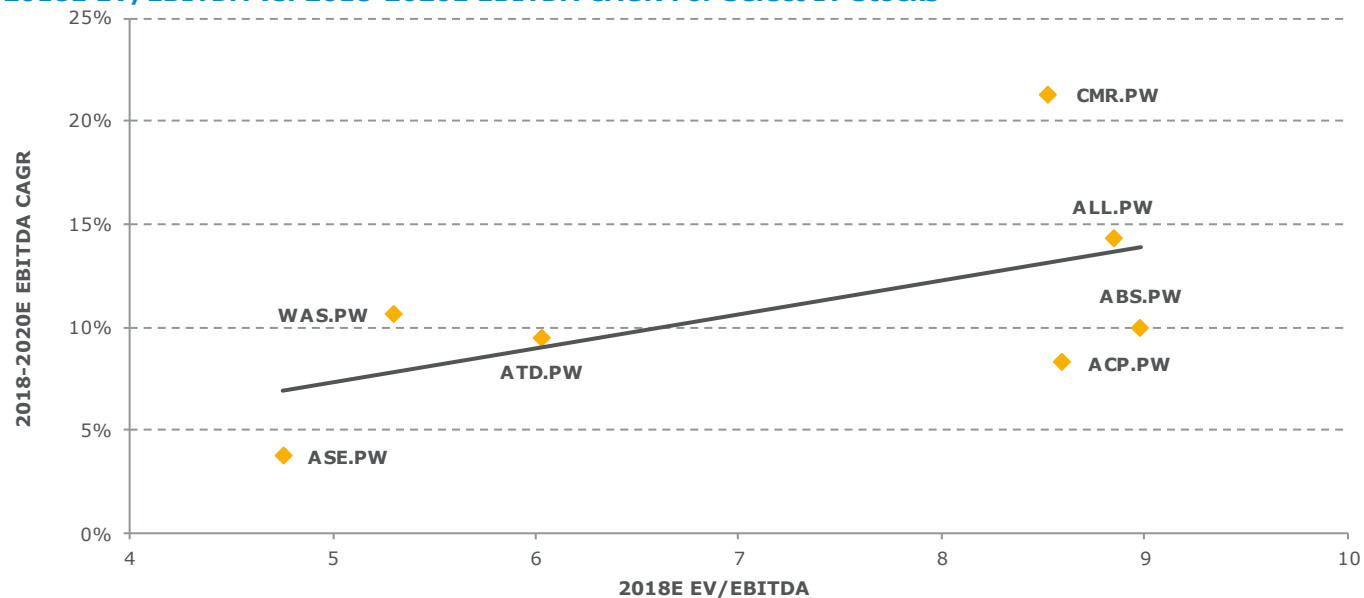


## 2018-2020 Financial Projections (PLN m) and Recommended Portfolio Positioning for IT Stocks

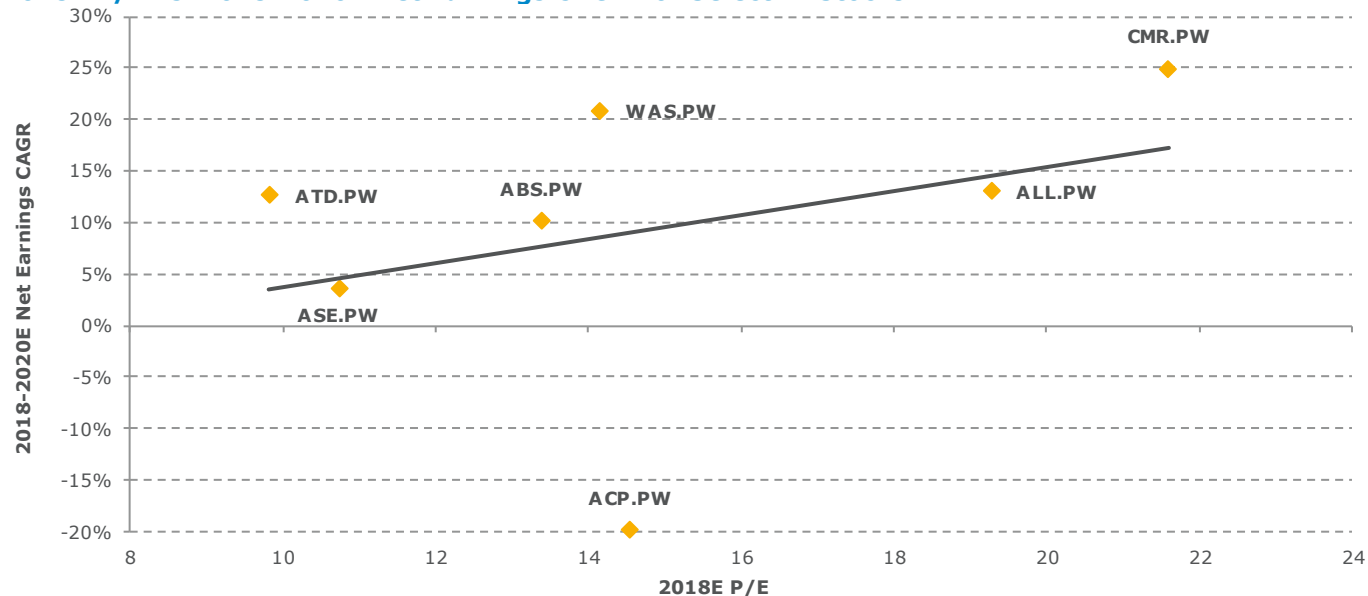
| Company    | MCap    | EV     | Net Debt     | D/E*          | Revenue |       |       | EBITDA  |           |         | EBIT  |          |       | Net Profit |           |       |      |
|------------|---------|--------|--------------|---------------|---------|-------|-------|---------|-----------|---------|-------|----------|-------|------------|-----------|-------|------|
|            |         |        |              |               | 2018    | 2019  | 2020  | 2018    | 2019      | 2020    | 2018  | 2019     | 2020  | 2018       | 2019      | 2020  |      |
| Ailleron   | 200     | 183    | 5.9          | 0.3           | 117     | 126   | 134   | 20.7    | 23.4      | 25.8    | 12.3  | 14.3     | 16.1  | 10.4       | 11.9      | 13.1  |      |
| Asseco BS  | 772     | 797    | 23.5         | 0.3           | 254     | 264   | 273   | 88.7    | 96.4      | 101.5   | 71.1  | 78.1     | 82.8  | 57.7       | 63.3      | 67.0  |      |
| Asseco PL  | 3,544   | 9,228  | 359.8        | 0.4           | 8,834   | 9,024 | 9,253 | 1,073.9 | 1,127.8   | 1,170.1 | 705.0 | 764.1    | 810.3 | 243.7      | 233.0     | 240.8 |      |
| Asseco SEE | 610     | 529    | -71.5        | -0.7          | 638     | 660   | 681   | 111.1   | 115.5     | 118.9   | 69.8  | 72.7     | 74.8  | 56.8       | 59.3      | 61.0  |      |
| Atende     | 153     | 180    | 12.0         | 0.5           | 300     | 300   | 300   | 29.8    | 33.0      | 34.5    | 23.0  | 26.2     | 27.7  | 15.6       | 17.3      | 18.2  |      |
| Comarch    | 1,220   | 1,225  | 18.6         | 0.2           | 1,219   | 1,334 | 1,397 | 143.7   | 168.6     | 176.0   | 79.2  | 103.8    | 110.9 | 56.5       | 76.7      | 84.0  |      |
| Wasko      | 153     | 151    | -7.2         | -0.3          | 272     | 345   | 355   | 28.4    | 34.9      | 35.3    | 14.9  | 21.4     | 21.8  | 10.8       | 16.5      | 16.7  |      |
| Company    | Rating  |        | Target Price | Current Price | 1M Chng | P/E   |       |         | EV/EBITDA |         |       | EV/Sales |       |            | PEG Ratio |       |      |
|            | Current | Change |              |               |         | 2018  | 2019  | 2020    | 2018      | 2019    | 2020  | 2018     | 2019  | 2020       | 2018      | 2019  | 2020 |
| Ailleron   | N       | -      | -            | 16.20         | -8.5%   | 19.3  | 16.8  | 15.3    | 8.8       | 7.3     | 6.1   | 1.6      | 1.4   | 1.2        | 1.5       | 1.3   | 1.2  |
| Asseco BS  | N       | -      | -            | 23.10         | -10.5%  | 13.4  | 12.2  | 11.5    | 9.0       | 8.2     | 7.8   | 3.1      | 3.0   | 2.9        | 1.3       | 1.2   | 1.1  |
| Asseco PL  | UW      | -      | 41.20        | 42.70         | +2.7%   | 14.5  | 15.2  | 14.7    | 8.6       | 8.1     | 7.7   | 1.0      | 1.0   | 1.0        | -0.7      | -0.8  | -0.7 |
| Asseco SEE | OW      | -      | -            | 11.75         | +0.4%   | 10.7  | 10.3  | 10.0    | 4.8       | 4.4     | 4.0   | 0.8      | 0.8   | 0.7        | 3.1       | 2.9   | 2.9  |
| Atende     | OW      | -      | -            | 4.22          | -5.2%   | 9.8   | 8.9   | 8.4     | 6.0       | 5.7     | 5.6   | 0.6      | 0.6   | 0.6        | 0.8       | 0.7   | 0.7  |
| Comarch    | OW      | -      | 166.50       | 150.00        | +2.7%   | 21.6  | 15.9  | 14.5    | 8.5       | 7.4     | 7.1   | 1.0      | 0.9   | 0.9        | 0.9       | 0.6   | 0.6  |
| Wasko      | N       | ▼      | -            | 1.68          | -18.8%  | 14.2  | 9.3   | 9.2     | 5.3       | 4.5     | 4.3   | 0.6      | 0.5   | 0.4        | 0.7       | 0.4   | 0.4  |
| Median     |         |        |              |               |         | 14.2  | 12.2  | 11.5    | 8.5       | 7.3     | 6.1   | 1.0      | 0.9   | 0.9        | 0.9       | 0.7   | 0.7  |

Source: Dom Maklerski mBanku; OW – overweight, N – neutral, UW – underweight; \*Net debt/Equity

## 2018E EV/EBITDA vs. 2018-2020E EBITDA CAGR For Select IT Stocks



## 2018E P/E vs. 2018-2020E Net Earnings CAGR For Select IT Stocks

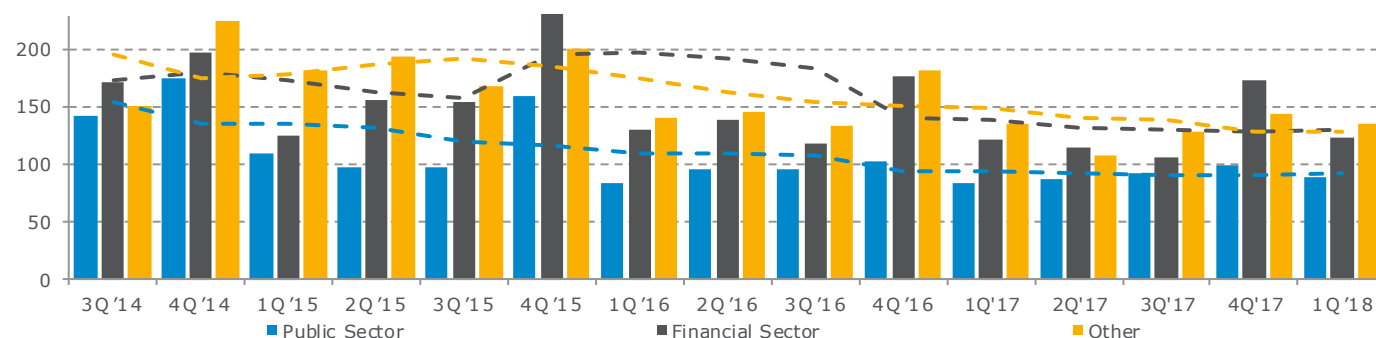


## Quarterly Financial Highlights\*

| Company                           | 1Q'15  | 2Q'15 | 3Q'15  | 4Q'15  | 1Q'16  | 2Q'16  | 3Q'16  | 4Q'16  | 1Q'17 | 2Q'17 | 3Q'17  | 4Q'17  | 1Q'18  |
|-----------------------------------|--------|-------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|
| <b>YoY pct. Change In Revenue</b> |        |       |        |        |        |        |        |        |       |       |        |        |        |
| Ailleron                          | 388.3% | 15.9% | -13.4% | 11.6%  | 12.0%  | 2.9%   | 112.0% | 31.3%  | 19.0% | 20.2% | 7.3%   | 11.9%  | 0.0%   |
| Asseco BS                         | -5.2%  | 12.6% | 10.8%  | 3.3%   | 11.4%  | 12.4%  | 15.6%  | 6.2%   | 16.1% | 5.6%  | 30.5%  | 48.6%  | 28.7%  |
| Asseco PL                         | 12.6%  | 14.3% | 18.1%  | 19.8%  | 15.9%  | 12.4%  | 8.4%   | 2.9%   | 12.1% | 8.7%  | -34.2% | 2.7%   | 3.9%   |
| Asseco SEE                        | -0.7%  | 0.7%  | 10.4%  | -15.6% | 21.6%  | 15.0%  | 3.2%   | 28.4%  | 11.1% | 6.7%  | -2.6%  | -10.7% | -22.8% |
| Atende                            | 16.5%  | 41.2% | 98.1%  | -2.3%  | -28.3% | 8.8%   | -47.3% | -11.5% | 34.5% | -9.6% | 9.5%   | 93.6%  | 33.7%  |
| Comarch                           | 18.0%  | 17.3% | -8.7%  | 10.7%  | -1.3%  | 5.5%   | -0.3%  | -7.9%  | -0.4% | -8.9% | 17.0%  | -5.6%  | 12.3%  |
| Wasko                             | 36.1%  | 2.8%  | 36.0%  | 12.0%  | -61.5% | -46.8% | -61.5% | -43.5% | 30.7% | 12.7% | 5.7%   | 22.3%  | -8.3%  |
| <b>Gross Profit Margin</b>        |        |       |        |        |        |        |        |        |       |       |        |        |        |
| Ailleron                          | 38.4%  | 48.9% | 50.9%  | 43.3%  | 31.7%  | 34.8%  | 33.8%  | 32.6%  | 28.6% | 33.7% | 25.6%  | 32.6%  | 26.6%  |
| Asseco BS                         | 39.8%  | 36.7% | 39.5%  | 41.9%  | 43.4%  | 39.9%  | 44.8%  | 44.1%  | 45.8% | 42.4% | 40.8%  | 47.7%  | 41.5%  |
| Asseco PL                         | 24.4%  | 24.2% | 25.0%  | 23.1%  | 24.0%  | 23.1%  | 24.6%  | 22.6%  | 21.7% | 20.3% | 23.5%  | 20.8%  | 20.4%  |
| Asseco SEE                        | 26.5%  | 26.3% | 26.9%  | 23.7%  | 23.4%  | 24.1%  | 23.6%  | 24.3%  | 22.9% | 25.1% | 25.4%  | 27.0%  | 23.2%  |
| Atende                            | 24.3%  | 24.9% | 17.8%  | 28.4%  | 34.8%  | 31.6%  | 33.0%  | 32.8%  | 33.6% | 23.3% | 28.6%  | 26.2%  | 26.3%  |
| Comarch                           | 25.8%  | 31.5% | 25.6%  | 34.2%  | 25.1%  | 32.6%  | 20.8%  | 39.5%  | 17.3% | 19.6% | 22.2%  | 34.2%  | 20.8%  |
| Wasko                             | 18.5%  | 16.7% | 14.9%  | 20.0%  | 20.7%  | 22.4%  | 21.8%  | 22.4%  | 20.9% | 23.5% | 15.8%  | 19.4%  | 14.9%  |
| <b>SG&amp;A/ Sales</b>            |        |       |        |        |        |        |        |        |       |       |        |        |        |
| Ailleron                          | 28.8%  | 28.7% | 47.4%  | 29.5%  | 28.3%  | 23.9%  | 25.3%  | 21.5%  | 24.7% | 21.9% | 22.8%  | 17.5%  | 8.0%   |
| Asseco BS                         | 13.8%  | 14.2% | 12.1%  | 12.6%  | 12.6%  | 12.8%  | 12.4%  | 12.7%  | 12.4% | 14.1% | 16.3%  | 17.2%  | 12.6%  |
| Asseco PL                         | 13.9%  | 14.0% | 13.7%  | 13.4%  | 13.8%  | 14.1%  | 13.9%  | 13.8%  | 13.5% | 13.4% | 18.2%  | 11.7%  | 12.4%  |
| Asseco SEE                        | 17.7%  | 14.7% | 15.6%  | 13.1%  | 15.2%  | 14.8%  | 14.2%  | 12.8%  | 13.2% | 13.1% | 15.1%  | 13.2%  | 13.9%  |
| Atende                            | 27.0%  | 25.8% | 13.1%  | 15.7%  | 43.2%  | 23.4%  | 26.2%  | 22.2%  | 33.9% | 26.4% | 25.8%  | 11.2%  | 27.3%  |
| Comarch                           | 17.4%  | 20.9% | 24.3%  | 17.8%  | 19.3%  | 20.8%  | 22.4%  | 21.1%  | 21.5% | 22.3% | 19.0%  | 21.4%  | 18.2%  |
| Wasko                             | 7.6%   | 11.4% | 7.9%   | 10.5%  | 21.1%  | 20.6%  | 17.9%  | 15.1%  | 15.9% | 13.8% | 21.6%  | 9.3%   | 8.6%   |
| <b>EBITDA</b>                     |        |       |        |        |        |        |        |        |       |       |        |        |        |
| Ailleron                          | 1.6    | 4.3   | 1.3    | 4.3    | 2.0    | 3.7    | 3.3    | 5.6    | 2.4   | 4.6   | 2.4    | 7.9    | 2.5    |
| Asseco BS                         | 12.4   | 10.7  | 12.6   | 15.5   | 15.5   | 13.5   | 16.4   | 17.2   | 18.8  | 14.5  | 17.6   | 25.4   | 22.5   |
| Asseco PL                         | 229.3  | 234.6 | 270.2  | 274.0  | 257.9  | 248.0  | 280.7  | 283.0  | 246.3 | 222.3 | 175.5  | 291.9  | 284.5  |
| Asseco SEE                        | 16.8   | 21.4  | 22.5   | 22.7   | 18.9   | 22.9   | 21.9   | 30.3   | 22.3  | 27.7  | 23.7   | 32.9   | 23.9   |
| Atende                            | -0.1   | 2.8   | 5.8    | 12.4   | -0.8   | 6.9    | 5.0    | 10.1   | 1.5   | 0.2   | 3.1    | 21.5   | 2.0    |
| Comarch                           | 33.0   | 36.5  | 19.1   | 78.0   | 28.3   | 39.5   | 24.1   | 83.7   | 3.9   | 23.5  | 21.9   | 49.3   | 16.2   |
| Wasko                             | 16.8   | 4.8   | 13.5   | 13.1   | 2.8    | 1.3    | 4.2    | 6.0    | 5.5   | 7.9   | 1.0    | 11.6   | 1.2    |
| <b>EBITDA Margin</b>              |        |       |        |        |        |        |        |        |       |       |        |        |        |
| Ailleron                          | 12.4%  | 22.0% | 13.5%  | 16.3%  | 13.9%  | 18.8%  | 16.8%  | 16.1%  | 13.9% | 19.0% | 11.4%  | 20.2%  | 14.0%  |
| Asseco BS                         | 33.5%  | 30.5% | 35.0%  | 35.6%  | 37.5%  | 34.2%  | 39.2%  | 37.2%  | 39.2% | 34.9% | 32.4%  | 37.0%  | 36.4%  |
| Asseco PL                         | 14.4%  | 13.7% | 15.4%  | 12.5%  | 14.0%  | 12.9%  | 14.8%  | 12.5%  | 11.9% | 10.6% | 14.0%  | 12.6%  | 13.2%  |
| Asseco SEE                        | 17.0%  | 17.6% | 17.7%  | 16.3%  | 15.8%  | 16.3%  | 16.7%  | 16.9%  | 16.7% | 18.5% | 18.5%  | 20.5%  | 17.2%  |
| Atende                            | -0.3%  | 5.5%  | 6.2%   | 14.8%  | -2.6%  | 12.3%  | 10.0%  | 13.7%  | 3.5%  | 0.4%  | 5.7%   | 15.0%  | 3.4%   |
| Comarch                           | 13.4%  | 14.1% | 8.5%   | 19.4%  | 11.6%  | 14.5%  | 10.8%  | 22.6%  | 1.6%  | 9.5%  | 8.4%   | 14.1%  | 5.9%   |
| Wasko                             | 14.5%  | 5.2%  | 11.2%  | 10.6%  | 6.2%   | 2.6%   | 9.1%   | 8.6%   | 9.4%  | 14.6% | 2.1%   | 13.5%  | 2.1%   |
| <b>Net Profit Margin</b>          |        |       |        |        |        |        |        |        |       |       |        |        |        |
| Ailleron                          | 8.3%   | 19.7% | 1.5%   | 5.8%   | 2.6%   | 11.3%  | 3.2%   | 12.6%  | 3.1%  | 10.4% | 2.7%   | 14.0%  | 0.0%   |
| Asseco BS                         | 21.7%  | 19.0% | 22.8%  | 24.3%  | 25.1%  | 22.6%  | 26.8%  | 25.9%  | 27.9% | 23.0% | 18.8%  | 24.7%  | 23.9%  |
| Asseco PL                         | 4.9%   | 3.5%  | 5.7%   | 5.7%   | 3.6%   | 4.0%   | 4.3%   | 3.4%   | 2.9%  | 2.5%  | 5.2%   | 3.3%   | 3.2%   |
| Asseco SEE                        | 8.2%   | 9.6%  | 10.0%  | 7.9%   | 6.8%   | 8.7%   | 8.3%   | 11.3%  | 7.6%  | 10.3% | 8.6%   | 11.5%  | 8.1%   |
| Atende                            | -3.4%  | 0.2%  | 3.8%   | 9.7%   | -8.0%  | 6.6%   | 5.5%   | 8.5%   | -0.3% | -3.1% | 2.0%   | 10.3%  | 6.9%   |
| Comarch                           | 7.6%   | 6.8%  | 0.1%   | 10.9%  | 3.1%   | 2.0%   | 3.2%   | 13.5%  | 2.0%  | -     | -      | 10.2%  | -2.3%  |
| Wasko                             | 9.1%   | 0.6%  | 6.1%   | 6.4%   | -1.2%  | -3.6%  | 1.2%   | 3.2%   | 2.3%  | 6.9%  | -3.6%  | 7.2%   | -3.2%  |

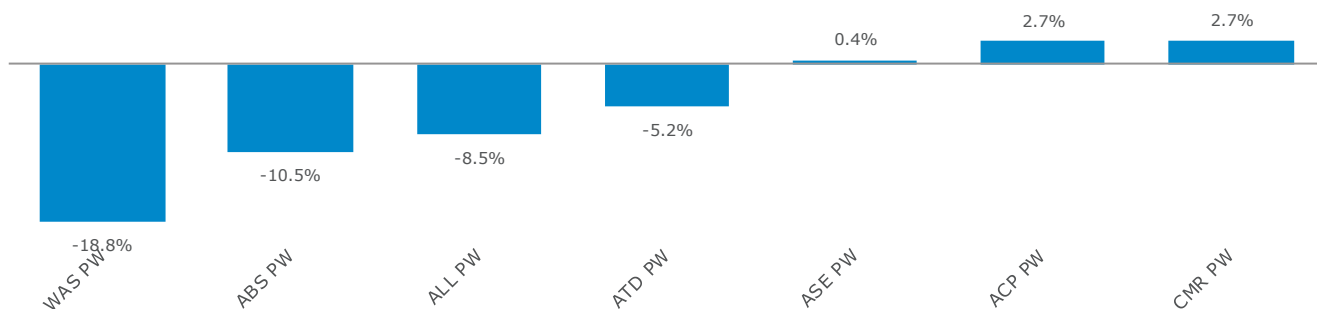
Source: Companies, Dom Maklerski mBanku; \*Figures in green indicate a positive change and figures in red indicate a negative change relative to the corresponding year -ago period, except for changes in revenues, where the colors signify an acceleration or a deceleration from the previous quarter

## Aggregated Quarterly Revenues and Avg. LTM Revenues Of Select IT Firms By End-Use Sector

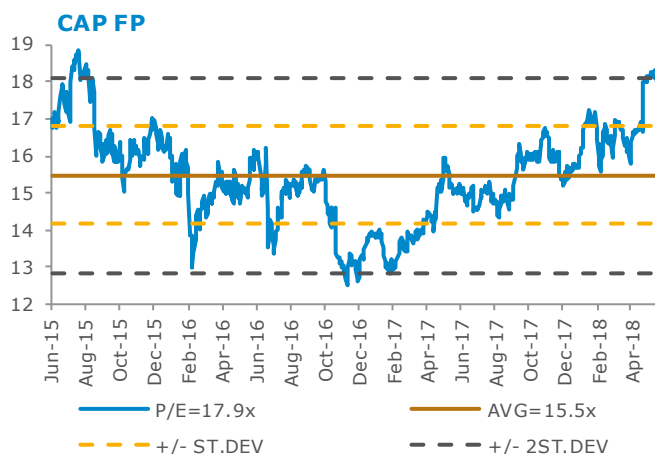
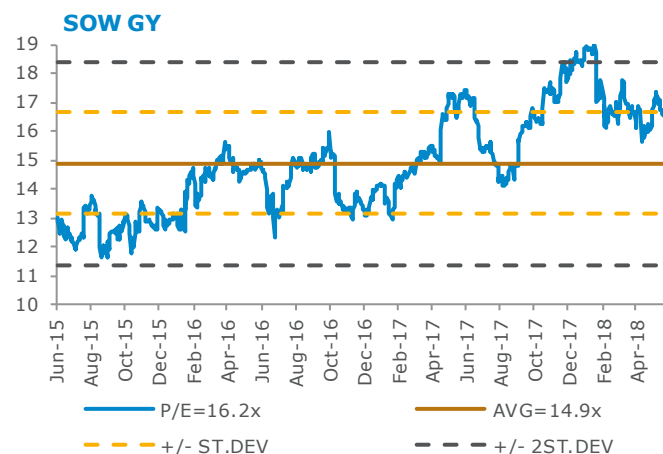
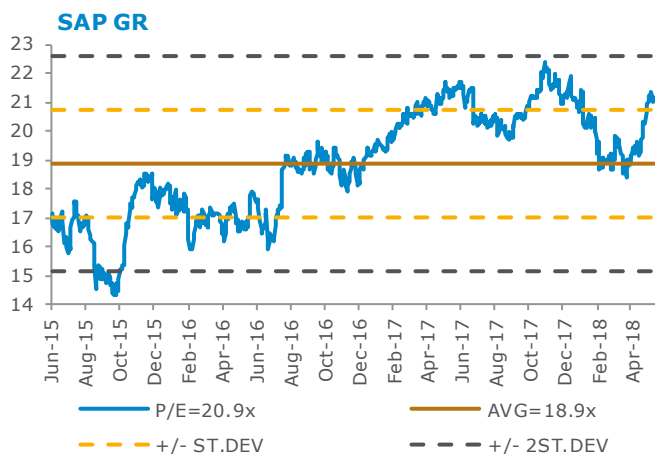
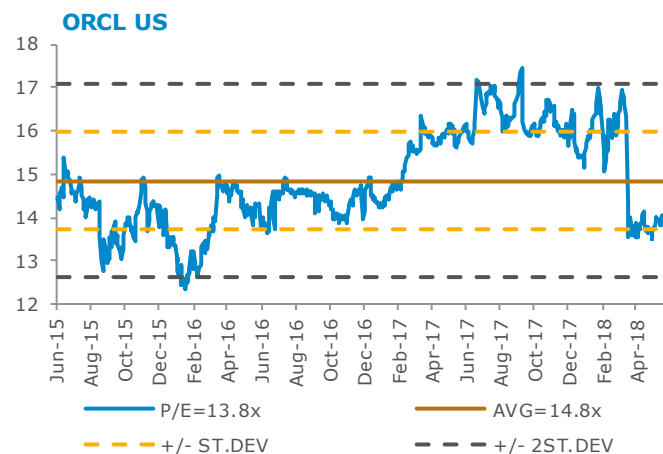
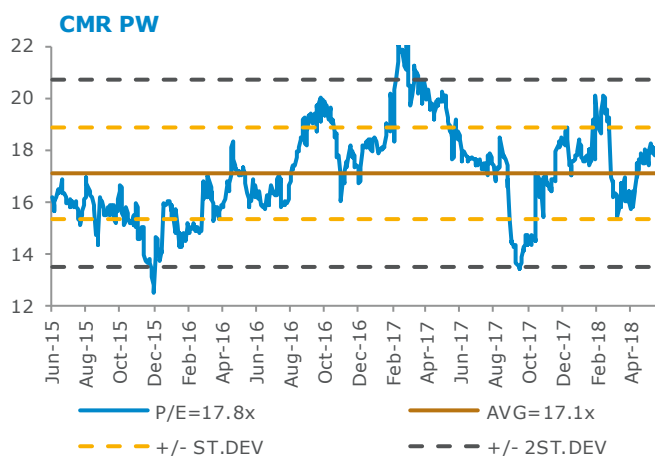
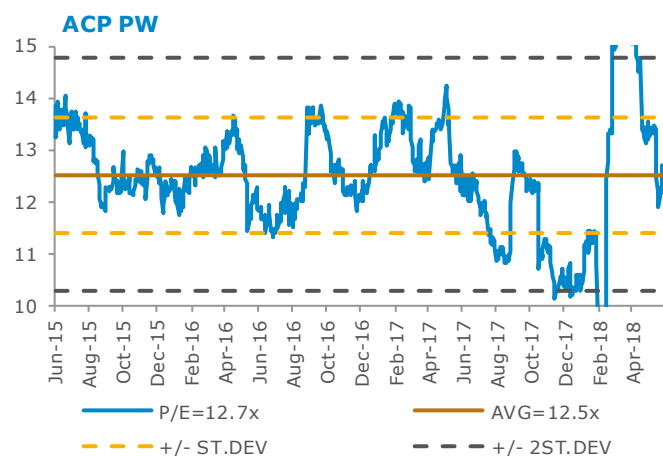


Source: Bloomberg, Dom Maklerski mBanku

## 1M Performance Of Polish IT Stocks

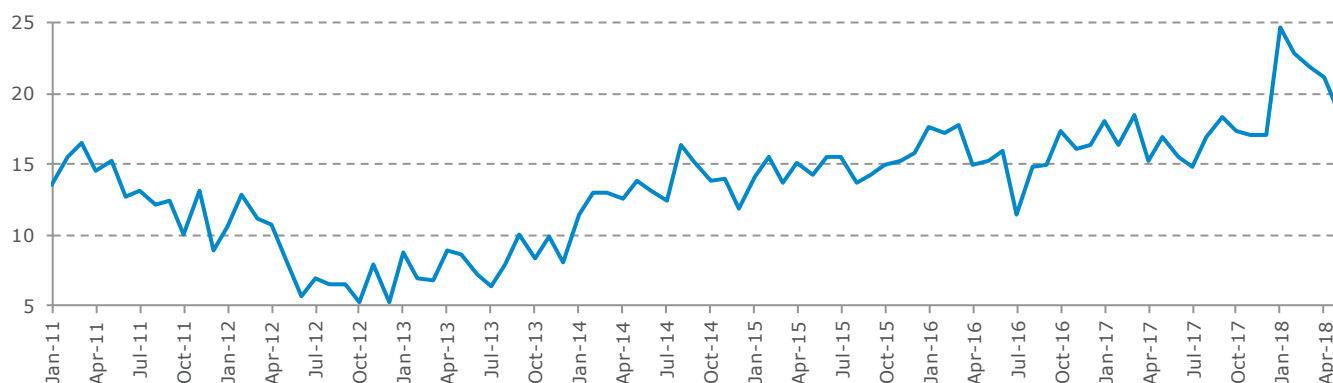


## 12M fwd P/E Ratios For Select Polish & Global IT Stocks

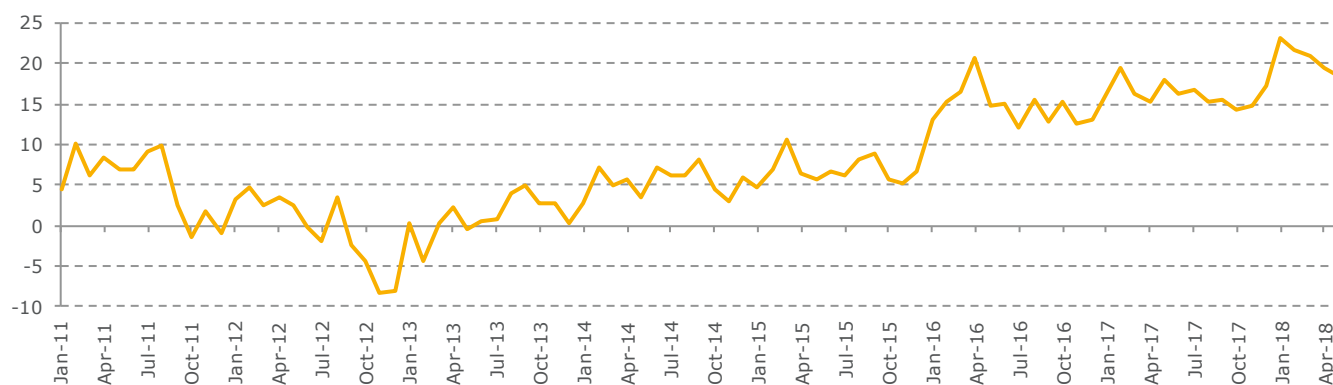


Source: Bloomberg, Dom Maklerski mBanku

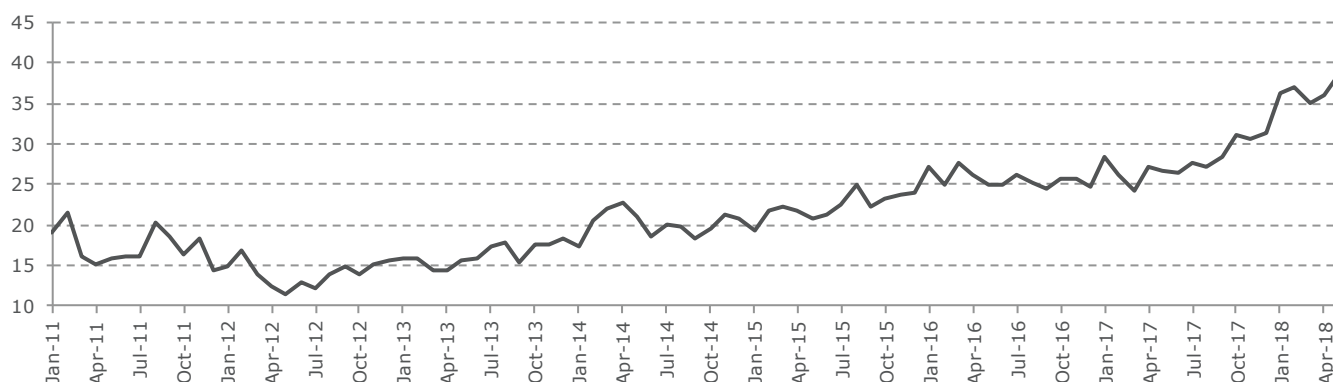
## IT Industry Business Confidence Index (ppts)



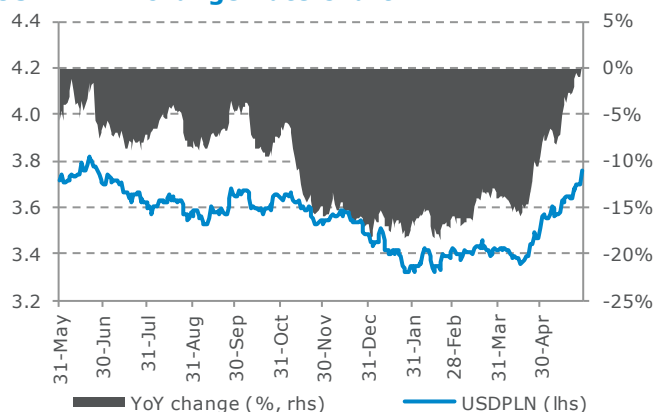
## IT Industry Hiring Expectations Index (ppts)



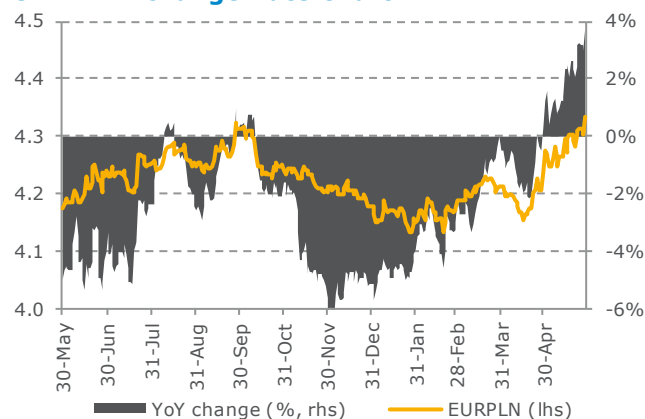
## Barriers To Growth: Shortage of Skilled Tech Workers (ppts)



## USDPLN Exchange Rate Chart



## EURPLN Exchange Rate Chart



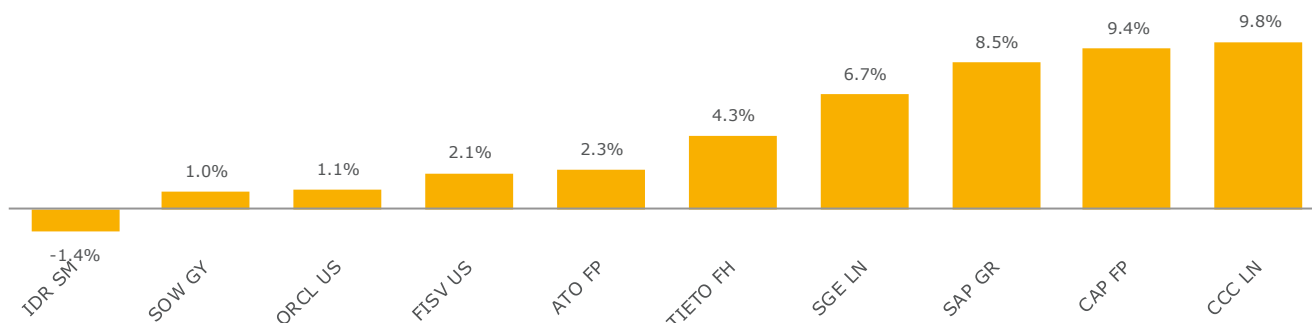
Source: GUS, Bloomberg, Dom Maklerski mBanku

## Global Peer Valuations

| Company       | Current Price | 1M Change | P/E         |             |             | EV/EBITDA   |             |            | EV/Sales   |            |            | PEG Ratio  |            |            | DYield      |             |             |
|---------------|---------------|-----------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|
|               |               |           | 2018        | 2019        | 2020        | 2018        | 2019        | 2020       | 2018       | 2019       | 2020       | 2018       | 2019       | 2020       | 2018        | 2019        | 2020        |
| Atos          | 113.80        | +2.3%     | 13.1        | 12.1        | 11.5        | 7.3         | 6.8         | 6.5        | 1.0        | 1.0        | 0.9        | 0.7        | 0.6        | 0.6        | 1.6%        | 1.8%        | 1.9%        |
| Cappgemini    | 114.40        | +9.4%     | 18.7        | 16.9        | 15.6        | 11.2        | 10.4        | 9.8        | 1.6        | 1.5        | 1.4        | 1.3        | 1.2        | 1.1        | 1.6%        | 1.7%        | 1.9%        |
| Computacentr  | 13.48         | +9.8%     | 19.2        | 18.2        | 17.3        | 10.2        | 9.6         | 9.1        | 0.3        | 0.3        | 0.3        | 3.8        | 3.6        | 3.5        | 2.1%        | 2.1%        | 2.2%        |
| Fiserv        | 71.63         | +2.1%     | 22.9        | 20.4        | 18.3        | 15.7        | 14.7        | 13.7       | 5.7        | 5.5        | 5.2        | 2.3        | 2.0        | 1.8        | -           | -           | -           |
| Indra Sistem  | 10.94         | -1.4%     | 16.0        | 13.4        | 12.0        | 8.6         | 7.8         | 7.3        | 0.8        | 0.8        | 0.8        | 2.2        | 1.9        | 1.7        | 0.5%        | 1.6%        | 1.7%        |
| Oracle        | 46.26         | +1.1%     | 15.0        | 13.7        | 12.7        | 9.6         | 9.2         | 8.6        | 4.5        | 4.4        | 4.2        | 0.9        | 0.8        | 0.7        | 1.6%        | 1.6%        | 1.7%        |
| Sage Group    | 6.63          | +6.7%     | 20.0        | 18.5        | 16.9        | 14.0        | 13.4        | 12.1       | 4.2        | 3.9        | 3.7        | 1.6        | 1.5        | 1.4        | 2.5%        | 2.7%        | 2.9%        |
| SAP           | 95.36         | +8.5%     | 21.8        | 19.6        | 17.6        | 14.7        | 13.3        | 12.1       | 4.8        | 4.5        | 4.1        | 1.3        | 1.1        | 1.0        | 1.5%        | 1.7%        | 1.8%        |
| Software AG   | 40.91         | +1.0%     | 16.7        | 15.7        | 14.4        | 11.3        | 10.6        | 9.9        | 3.5        | 3.3        | 3.2        | 1.1        | 1.1        | 1.0        | 1.7%        | 1.8%        | 2.0%        |
| Tieto         | 29.56         | +4.3%     | 16.7        | 16.0        | 15.2        | 10.8        | 10.4        | 10.0       | 1.4        | 1.4        | 1.3        | 1.7        | 1.6        | 1.5        | 4.8%        | 5.0%        | 5.1%        |
| <b>Median</b> |               |           | <b>17.7</b> | <b>16.5</b> | <b>15.4</b> | <b>11.0</b> | <b>10.4</b> | <b>9.9</b> | <b>2.5</b> | <b>2.4</b> | <b>2.3</b> | <b>1.5</b> | <b>1.3</b> | <b>1.2</b> | <b>1.6%</b> | <b>1.8%</b> | <b>1.9%</b> |

Source: Bloomberg

## 1M Performance of Global IT Stocks

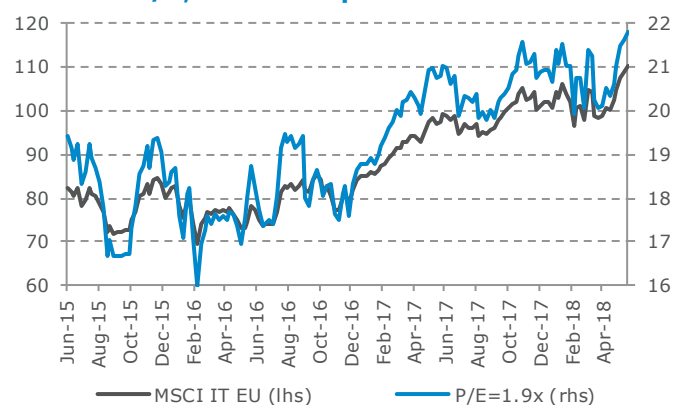


Source: Bloomberg, Dom Maklerski mBanku

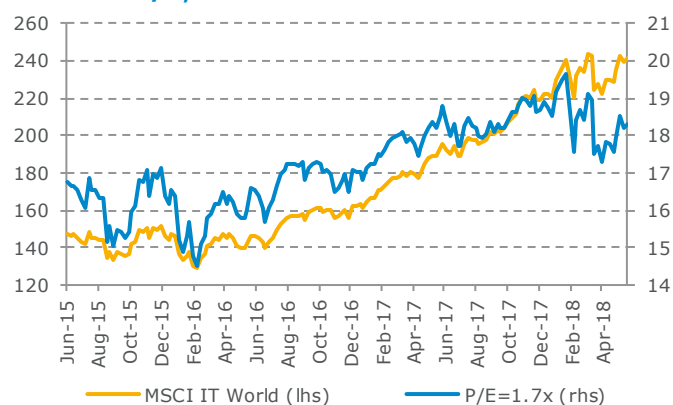
## 12M fwd P/E Ratios For Select Global IT Stocks



## 12M fwd P/E, MSCI Europe IT Index

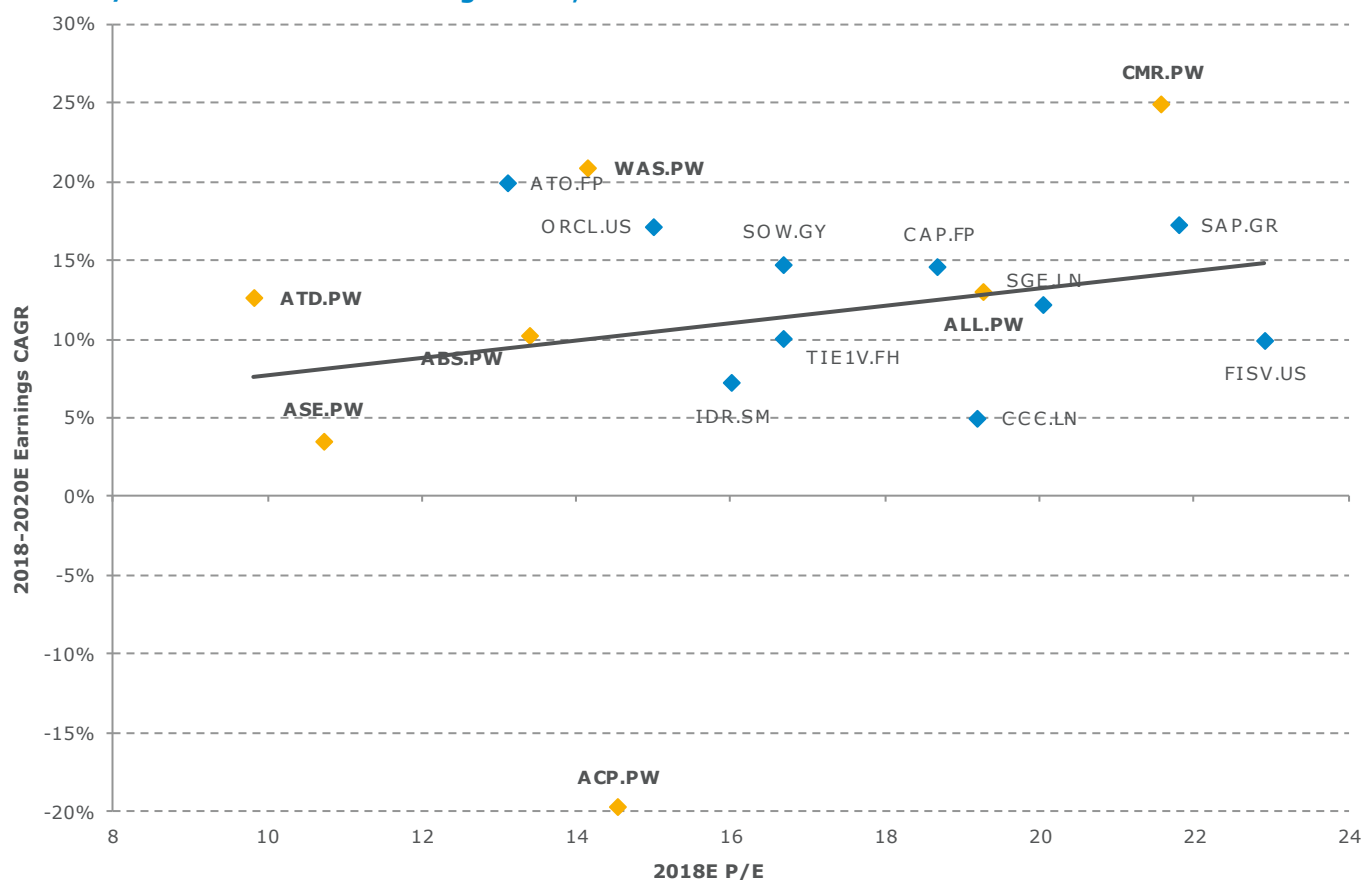


## 12M fwd P/E, MSCI World IT Index

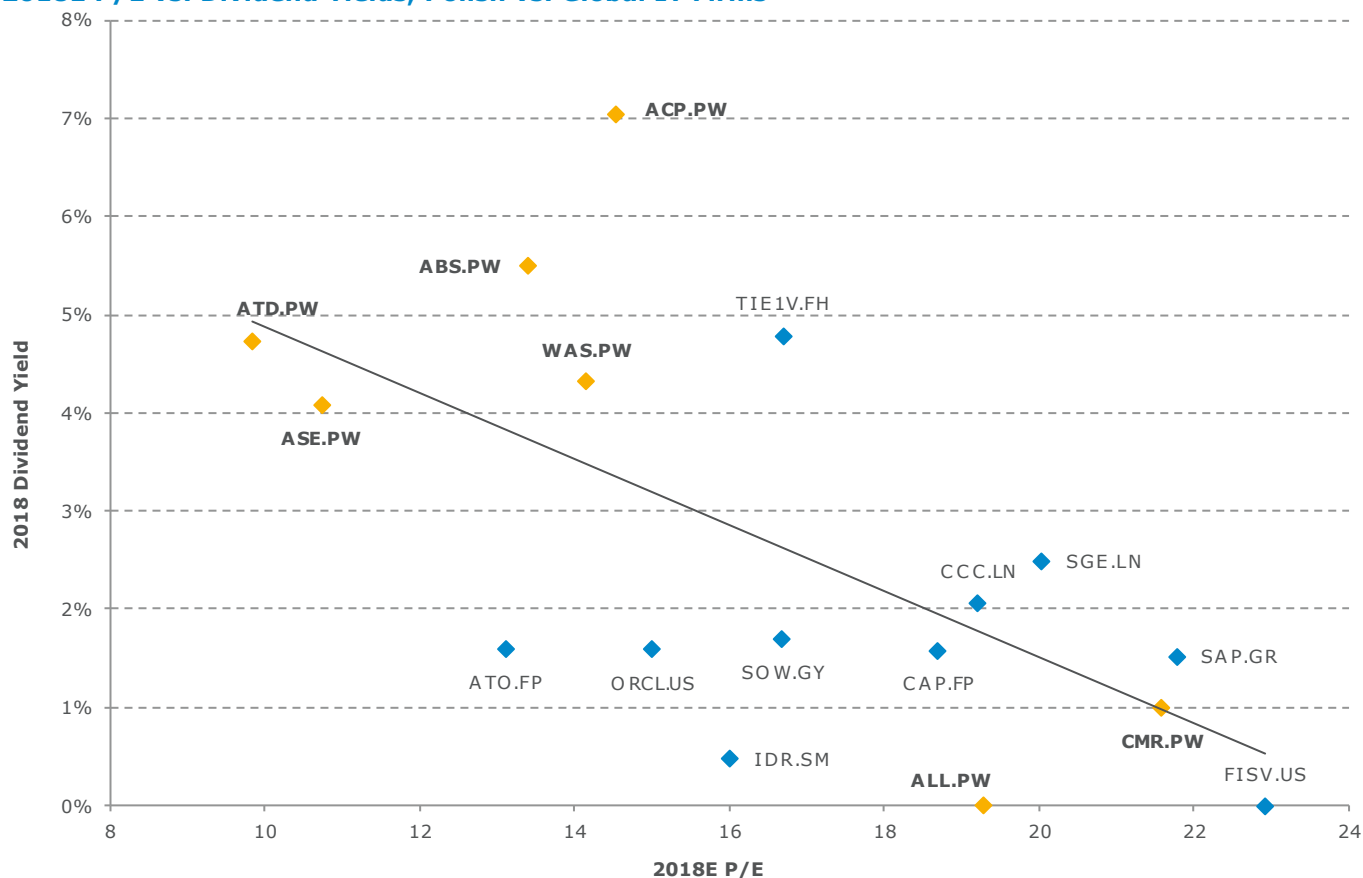


Source: Bloomberg, Dom Maklerski mBanku

## 2018E P/E vs. 2018-2020E Earnings CAGR, Polish vs. Global IT Firms



## 2018E P/E vs. Dividend Yields, Polish vs. Global IT Firms



Source: Bloomberg, Dom Maklerski mBanku



**EV** – net debt + market value (EV – economic value)  
**EBIT** – Earnings Before Interest and Taxes  
**EBITDA** – EBIT + Depreciation and Amortisation  
**EBIT/ EV** – operating profit to economic value  
**EBITDA/ EV** – EBIT + Depreciation and Amortisation to economic value  
**P/ E** – (Price/Earnings) – price divided by annual net profit per share  
**P/ BV** – (Price/Book Value) – price divided by book value per share  
**Net debt** – credits + debt papers + interest bearing loans – cash and cash equivalents  
**Mcap** – current market capitalization  
**Monthly price change (MoM price change)** – change in the price of a stock since the date of the previous publication or in the course of the past month

**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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A recommendation is valid for a period of 6-9 months, unless a subsequent recommendation is issued within this period. Expected returns from individual recommendations are as follows:

**BUY** – we expect that the rate of return from an investment will be at least 15%  
**ACCUMULATE** – we expect that the rate of return from an investment will range from 5% to 15%  
**HOLD** – we expect that the rate of return from an investment will range from -5% to +5%  
**REDUCE** – we expect that the rate of return from an investment will range from -5% to -15%  
**SELL** – we expect that an investment will bear a loss greater than 15%  
 Recommendations are updated at least once every nine months.

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The present report was not transferred to the issuers prior to its publication.

The production of new recommendations was completed on May 30, 2018, 8:55 AM.  
 New recommendations were first disseminated on May 30, 2018, 8:55 AM.

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In the last 12 months mBank S.A. has been book runner or co-book runners for Asseco SEE, Cognor Holding, Famur, GetBack, Grupa Azoty, LC Corp, PBKM, Robyng.

Asseco Poland provides IT services to mBank S.A.

mBank S.A. has a cash service agreement in place with Pekao and a phone subscription agreement in place with Orange Polska S.A.

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

**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.



mBank issued the following investment recommendations for the companies in the 12 months prior to this publication

#### Asseco BS

| Rating              | Neutral    | Neutral    | Neutral    |
|---------------------|------------|------------|------------|
| Rating date         | 2018-03-28 | 2018-01-30 | 2017-11-28 |
| Target price (PLN)  | -          | -          | -          |
| Price on rating day | 28.00      | 28.90      | 26.29      |

#### Asseco PL

| Rating              | Reduce     | Reduce     | Hold       | Reduce     | Hold       | Reduce     |
|---------------------|------------|------------|------------|------------|------------|------------|
| Rating date         | 2018-03-27 | 2018-02-02 | 2017-12-01 | 2017-11-03 | 2017-08-30 | 2017-07-20 |
| Target price (PLN)  | 41.20      | 44.00      | 44.80      | 44.80      | 44.00      | 44.80      |
| Price on rating day | 45.20      | 45.62      | 44.47      | 47.00      | 44.54      | 47.23      |

#### Ailleron

| Rating              | Neutral    | Neutral    | Neutral    |
|---------------------|------------|------------|------------|
| Rating date         | 2018-03-28 | 2018-01-30 | 2017-11-28 |
| Target price (PLN)  | -          | -          | -          |
| Price on rating day | 16.20      | 17.60      | 18.73      |

#### Asseco SEE

| Rating              | Overweight | Overweight | Overweight | Overweight |
|---------------------|------------|------------|------------|------------|
| Rating date         | 2018-04-26 | 2018-03-28 | 2018-01-30 | 2017-11-28 |
| Target price (PLN)  | -          | -          | -          | -          |
| Price on rating day | 11.70      | 12.95      | 13.25      | 11.45      |

#### Atende

| Rating              | Overweight | Overweight | Overweight |
|---------------------|------------|------------|------------|
| Rating date         | 2018-03-28 | 2018-01-30 | 2017-11-28 |
| Target price (PLN)  | -          | -          | -          |
| Price on rating day | 4.25       | 4.85       | 4.46       |

#### Comarch

| Rating              | Accumulate | Buy        | Hold       | Hold       | Buy        | Accumulate | Accumulate | Hold       | Hold       |
|---------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Rating date         | 2018-05-09 | 2018-04-06 | 2018-03-05 | 2018-02-02 | 2017-11-27 | 2017-11-03 | 2017-10-02 | 2017-09-01 | 2017-06-02 |
| Target price (PLN)  | 166.50     | 166.50     | 166.50     | 180.00     | 205.00     | 185.00     | 195.00     | 195.00     | 205.00     |
| Price on rating day | 145.00     | 131.50     | 155.00     | 177.00     | 178.30     | 163.50     | 178.50     | 195.00     | 223.00     |

#### Wasko

| Rating              | Neutral    | Overweight | Overweight | Overweight |
|---------------------|------------|------------|------------|------------|
| Rating date         | 2018-05-30 | 2018-03-28 | 2018-01-30 | 2017-11-28 |
| Target price (PLN)  | -          | -          | -          | -          |
| Price on rating day | 1.68       | 2.25       | 2.24       | 1.98       |

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