

Software/Finland, April 18, 2019 Spot comment

Strategy proceeding but painfully slow

SSH's Q1 result missed our expectations due to lackluster software fees in the period. Q1 net sales were 2.7 MEUR and operating loss was -1.3 MEUR vs. our expectation of 3.6 MEUR net sales and -0.9 MEUR operating loss. We maintain SELL recommendation with revised target price of 1.10 euros (previously 1.60).

Q1 miss puts pressure on closing licensing deals

Q1 net sales missed our estimates due to the lack of larger licensing deals in the period. Software fees were EUR 0.5 million (1.1m Evli), Professional services were EUR 0.1 million (0.3m Evli), and Recurring revenue was EUR 2.1 million (2.2m Evli). Although there is still plenty of time left to catch up for the miss, this puts pressure on closing several larger licensing deals in the coming quarters to reach the guided 10% growth for 2019E. According to management UKM pipeline looks good.

Strategy proceeding but painfully slow

No material new news was provided in conjunction with result regarding sales ramp up of PrivX and NQX. PrivX remains at the heart of SSH's growth strategy, but revenue is not expected to be material yet. We have made small downward changes to our estimates after the Q1 result. We estimate SSH's 2019E net sales to decline -7% to 17.1 MEUR (reaching guidance though) and 2019E EBIT to be 0.2 MEUR. Our estimates for the coming years are also broadly intact, with net sales growth expectations at 12% for 2020E and 2021E and EBIT improving towards 2021E.

Risk/reward still not attractive, SELL maintained

/EV FIGURE

On our estimates, SSH is trading at 2019-20 EV/Sales multiples of 3.0x and 2.6x. Given the slow growth pace, lack of profitability and uncertainty to our sales estimates, we see valuation still challenging from a risk/reward perspective. We maintain SELL recommendation with revised target price of 1.10 euros (previously 1.60). Our target price is based on EV/Sales multiples of 2.5x and 2.2x on our 2019 and 2020 estimates.



■ BUY □ HOLD ■ SELL

| KEY FIGU | RES | | | | | | | | | |
|-------------|---------------|--------------|-----------|--------------------|---------------------------------------|------------|-----------------|-------------|----------------|------------|
| | Sales EURm | EBIT EURm | EBIT % | Ptx profit EURm | EPS EUR | P/E (x) | EV/Sales (x) | P/CF (x) | EV/EBIT (x) | DPS EUR |
| 2017 | 16 | -2 | -10.5% | -2 | -0.08 | -21.9 | 4.1 | 93.2 | -39.1 | 0.00 |
| 2018 | 18 | 1 | 2.7% | 1 | -0.01 | -163.0 | 5.5 | 68.3 | 202.5 | 0.00 |
| 2019E | 17 | 0 | 1.2% | 0 | -0.02 | -55.7 | 2.9 | 33.1 | 251.1 | 0.00 |
| 2020E | 19 | 0 | 2.1% | 0 | 0.00 | -762.5 | 2.6 | 20.1 | 123.0 | 0.00 |
| 2021E | 21 | 2 | 7.0% | 1 | 0.03 | 43.7 | 2.2 | 15.3 | 31.4 | 0.00 |
| Market cap | o, EURm | | 50 E | 3V per share 201 | 9E, EUR | | 0.0 CAGR | EPS 2018-2 | 1,% | 0.0 |
| Net debt* 2 | 2019E, EURm | | -1 F | Price/book* 2019 | E | | 35.7 CAGR 9 | sales 2018- | 21, % | 5.4 |
| Enterprise | value, EURm | | 50 E | Dividend yield 20 | idend yield 2019E, % 0.0 ROE 2019E, % | | | | | -64.2 |
| Total asset | s 2019E, EURn | n | 23 T | ax rate 2019E, o | /o | | | 1.4 | | |
| | 019E, EURm | n debt | 0 E | equity ratio 2019 | 9E, % | | 9.4 PEG, P | /E 19/CAGR | | 0.0 |

Telephone

All the important disclosures can be found on the last pages of this report

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We maintain SELL recommendation with revised target price of 1.10 euros (previously 1.60)

Our target price is based on EV/Sales multiples of 2.5x and 2.2x on our 2019 and 2020 estimates. These multiples are lower than the average multiples for cyber security and PAM peers due to execution misses, relatively low revenue growth expectations, low profitability expectations and current uncertainty to our estimates.

| | MCAP | | EV/EBIT | | E | V/SALES | | | P/E | |
|---------------------------|-------|--------|---------|-------|------|---------|------|--------|---------|-------|
| Cybersecurity | MEUR | 19 | 20 | 21 | 19 | 20 | 21 | 19 | 20 | 21 |
| Check Point Software Tech | 17903 | 15.8x | 14.8x | 15.9x | 8.0x | 7.6x | 8.1x | 21.4x | 20.0x | 18.2x |
| F-Secure | 419 | 63.8x | 24.1x | 16.4x | 1.9x | 1.7x | 1.5x | 127.6x | 33.3x | 23.1x |
| Palo Alto Networks | 20225 | 28.2x | 21.2x | 13.8x | 6.5x | 5.2x | 3.9x | 40.8x | 34.2x | 28.3x |
| Sophos Group | 2022 | 31.4x | 24.3x | | 3.1x | 2.7x | | 31.5x | 26.6x | 28.5x |
| Symantec | 13839 | 11.0x | 9.6x | | 3.6x | 3.2x | | 14.2x | 12.8x | 12.4x |
| Fortinet Inc | 13945 | 28.4x | 22.8x | 19.3x | 6.5x | 5.4x | 4.8x | 44.4x | 39.2x | 35.9x |
| Peer Group Average | 10882 | 29.8x | 19.5x | 16.3x | 4.9x | 4.3x | 4.6x | 46.7x | 27.7x | 24.4x |
| Peer Group Median | 13839 | 28.3x | 22.0x | 16.1x | 5.0x | 4.2x | 4.3x | 36.1x | 29.9x | 25.7x |
| SSH (Evli est.) | 50 | 252.3x | 123.6x | 31.5x | 3.0x | 2.6x | 2.2x | -43.9x | -725.4x | 43.8x |

SSH prem./disc. to peer median

-41% -38% -49%

| Source FactSet, | Evli Research |
|-----------------|---------------|
| | |

| | Sales | | Sales growt | | | EBIT-% | |
|---------------------------|-------|-----|-------------|-----|--------|--------|--------|
| Cybersecurity | 18 | 19 | 20 | 21 | 19 | 20 | 21 |
| Check Point Software Tech | 1677 | 5% | 4% | 5% | 50.6 % | 51.0 % | 51.1 % |
| F-Secure | 191 | 16% | 9% | 8% | 3.0 % | 7.2 % | 9.4 % |
| Palo Alto Networks | 1962 | 39% | 19% | 15% | 23.2 % | 24.3 % | 28.1 % |
| Sophos Group | 604 | 10% | 10% | 7% | 9.8 % | 11.0 % | |
| Symantec | 4209 | 3% | 4% | -1% | 32.3 % | 33.8 % | 34.0 % |
| Fortinet Inc | 1586 | 16% | 13% | 11% | 22.9 % | 23.9 % | 24.7 % |
| Peer Group Average | 1705 | 15% | 10% | 8% | 23.6 % | 25.2 % | 29.5 % |
| Peer Group Median | 1632 | 13% | 9% | 8% | 23.1 % | 24.1 % | 28.1 % |
| SSH (Evli est.) | 18 | -7% | 12% | 12% | 1.2 % | 2.1 % | 7.0 % |

Source FactSet, Evli Research

| | MCAP | | EV/EBIT | | E | V/SALES | | | P/E | |
|--------------------|------|--------|---------|-------|------|---------|------|--------|---------|-------|
| PAM vendors | MEUR | 19 | 20 | 21 | 19 | 20 | 21 | 19 | 20 | 21 |
| CyberArk Software | 3990 | 41.9x | 32.4x | 24.4x | 9.6x | 7.7x | 6.1x | 60.8x | 50.0x | 41.9x |
| Wallix Group | 76 | | 32.7x | | 2.3x | 1.5x | | | 65.9x | |
| Peer Group Average | 2033 | 41.9x | 32.6x | 24.4x | 6.0x | 4.6x | 6.1x | 60.8x | 57.9x | 41.9x |
| Peer Group Median | 2033 | 41.9x | 32.6x | 24.4x | 6.0x | 4.6x | 6.1x | 60.8x | 57.9x | 41.9x |
| SSH (Evli est.) | 50 | 252.3x | 123.6x | 31.5x | 3.0x | 2.6x | 2.2x | -43.9x | -725.4x | 43.8x |

SSH prem./disc. to peer median Source FactSet. Evli Research

| | Sales | Sales growth | | | | EBIT-% | | | |
|--------------------|-------|--------------|-----|-----|---------|--------|--------|--|--|
| PAM vendors | 18 | 19 | 20 | 21 | 19 | 20 | 21 | | |
| CyberArk Software | 304 | 20% | 19% | 19% | 22.8 % | 23.9 % | 25.2 % | | |
| Wallix Group | 13 | 52% | 55% | | -13.9 % | 4.6 % | | | |
| Peer Group Average | 158 | 36% | 37% | 19% | 4.5 % | 14.2 % | 25.2 % | | |
| Peer Group Median | 158 | 36% | 37% | 19% | 4.5 % | 14.2 % | 25.2 % | | |
| SSH (Evli est.) | 18 | -7% | 12% | 12% | 1.2 % | 2 % | 7 % | | |

Source FactSet, Evli Research

| | MCAP | | EV/EBIT | | | EV/SALES | | | P/E | |
|--------------------------------|------|--------|---------|-------|------|----------|------|--------|---------|--------|
| Nordic software companies | MEUR | 19 | 20 | 21 | 19 | 20 | 21 | 19 | 20 | 21 |
| Basware | 311 | | | | 2.4x | 2.2x | 2.0x | | | |
| Efecte | 28 | | | | 1.7x | 1.4x | | | | 204.4x |
| Enea | 264 | 15.6x | 12.3x | 10.6x | 3.3x | 2.8x | 2.5x | 18.0x | 15.3x | 14.1x |
| Infront | 54 | 12.9x | 10.0x | 7.8x | 1.1x | 1.0x | 0.9x | 15.6x | 13.1x | 11.0x |
| Qt Group | 252 | | 23.6x | | 4.4x | 3.2x | | | 30.7x | 14.3x |
| Peer Group Average | 182 | 14.2x | 15.3x | 9.2x | 2.6x | 2.1x | 1.8x | 16.8x | 19.7x | 60.9x |
| Peer Group Median | 252 | 14.2x | 12.3x | 9.2x | 2.4x | 2.2x | 2.0x | 16.8x | 15.3x | 14.2x |
| SSH (Evli est.) | 50 | 252.3x | 123.6x | 31.5x | 3.0x | 2.6x | 2.2x | -43.9x | -725.4x | 43.8x |
| SSH prem./disc. to peer median | | 1672% | 903% | 242% | 24% | 17% | 10% | -361% | -4855% | 209% |

Source FactSet, Evli Research

| | Sales | | Sales grov | vth | | EBIT-% | |
|---------------------------|-------|-----|------------|-----|--------|--------|--------|
| Nordic software companies | 18 | 19 | 20 | 21 | 19 | 20 | 21 |
| Basware | 141 | 5% | 10% | 12% | -7.9 % | -4.6 % | -2.4 % |
| Efecte | 12 | 21% | 25% | 21% | -9.7 % | -5.5 % | 0.6 % |
| Enea | 80 | 19% | 9% | 7% | 21.0 % | 22.7 % | 23.2 % |
| Infront | 28 | 54% | 6% | 6% | 8.6 % | 10.0 % | 11.3 % |
| Qt Group | 46 | 20% | 28% | 26% | -1.0 % | 13.6 % | 23.5 % |
| Peer Group Average | 62 | 24% | 15% | 14% | 2.2 % | 7.2 % | 11.2 % |
| Peer Group Median | 46 | 20% | 10% | 12% | -1.0 % | 10.0 % | 11.3 % |
| SSH (Evli est.) | 18 | -7% | 12% | 12% | 1.2 % | 2.1 % | 7.0 % |

Source FactSet, Evli Research

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| VALUATION RESULTS | BASE CASE DETAILS | VALUATION ASSUMPTIONS | ASSUMPTIONS FOR WACC | |
|--------------------------|----------------------------|------------------------|--------------------------------|------|
| Current share price | 1.29 PV of Free Cash Flow | 23 Long-term growth, % | 3.5 Risk-free interest rate, % | 2.25 |
| DCF share value | 1.60 PV of Horizon value | 38 WACC, % | 11.0 Market risk premium, % | 5.8 |
| Share price potential, % | 24.2 Unconsolidated equity | -1 Spread, % | 0.5 Debt risk premium, % | 2.8 |
| Maximum value | 1.7 Marketable securities | 14 Minimum WACC, % | 10.5 Equity beta coefficient | 1.38 |
| Minimum value | 1.5 Debt - dividend | -12 Maximum WACC, % | 11.5 Target debt ratio, % | 15 |
| Horizon value, % | 62.0 Value of stock | 62 Nr of shares, Mn | 38.8 Effective tax rate, % | 20 |

| DCF valuation, EURm | 2018 | 2019E | 2020E | 2021E | 2022E | 2023E | 2024E | 2025E | 2026E | 2027E | 2028E | Horizon |
|---------------------------|-------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| Net sales | 18 | 17 | 19 | 21 | 25 | 28 | 33 | 37 | 42 | 47 | 49 | 50 |
| Sales growth, % | 13.0 | -6.6 | <i>11.7</i> | 12.0 | 15.0 | 15.0 | 15.0 | 15.0 | 12.0 | 12.0 | 3.5 | 3.5 |
| Operating income (EBIT) | 1 | 0 | 0 | 2 | 2 | 6 | 7 | 7 | 8 | 9 | 10 | 10 |
| EBIT margin, % | 2.7 | 1.2 | 2.1 | 7.0 | 10.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| + Depreciation+amort. | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| - Income taxes | 0 | 0 | 0 | 0 | 0 | -1 | -1 | -1 | -2 | -2 | -2 | |
| - Change in NWC | -1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | |
| NWC / Sales, % | -23.9 | -23.9 | -23.9 | -23.9 | -23.9 | -23.9 | -23.9 | -23.9 | -23.9 | -23.9 | -23.9 | |
| + Change in other liabs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| - Capital Expenditure | -2 | -2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -2 | -2 | -2 |
| Investments / Sales, % | 11.3 | 10.9 | 5.6 | 5.1 | 4.7 | 4.3 | 4.0 | 3.7 | 3.5 | 3.3 | 4.1 | 4.1 |
| - Other items | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| = Unlevered Free CF (FCF) | -2 | -1 | 1 | 2 | 3 | 6 | 6 | 7 | 8 | 9 | 8 | 105 |
| = Discounted FCF (DFCF) | | -1 | 1 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 38 |
| | • | | • | • | | | • | | | • | | |
| = DFCF min WACC | | -1 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 43 |
| = DFCF max WACC | • | -1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 34 |

SSH COMMUNICATIONS SECURITY

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INTERIM FIGURES

| EVLI ESTIMATES, EURm | 2018Q1 | 2018Q2 | 2018Q3 | 2018Q4 | 2018 | 2019Q1 | 2019Q2E | 2019Q3E | 2019Q4E | 2019E | 2020E | 2021E |
|--------------------------------------|--------|--------|--------|--------|-------|--------|---------|---------|---------|-------|-------|-------|
| Net sales | 5 | 4 | 3 | 6 | 18 | 3 | 4 | 5 | 5 | 17 | 19 | 21 |
| EBITDA | 0 | 0 | 0 | 2 | 2 | -1 | 1 | 1 | 1 | 2 | 2 | 3 |
| EBITDA margin (%) | 10.3 | 8.0 | -11.9 | 26.5 | 11.3 | -33.3 | 18.2 | 15.2 | 22.2 | 10.5 | 11.0 | 14.1 |
| EBIT | 0 | 0 | -1 | 1 | 1 | -1 | 0 | 0 | 1 | 0 | 0 | 2 |
| EBIT margin (%) | 2.1 | -2.7 | -23.5 | 20.3 | 2.7 | -48.1 | 9.1 | 6.5 | 14.8 | 1.2 | 2.1 | 7.0 |
| Net financial items | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pre-tax profit | 0 | 0 | -1 | 1 | 1 | -1 | 0 | 0 | 1 | 0 | 0 | 1 |
| Tax | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tax rate (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20.0 | 20.0 | 20.0 | 0.0 | 20.0 | 20.0 |
| Net profit | 0 | 0 | -1 | 1 | 0 | -1 | 0 | 0 | 0 | -1 | 0 | 1 |
| EPS | -0.01 | -0.01 | -0.03 | 0.03 | -0.01 | -0.04 | 0.00 | 0.00 | 0.01 | -0.02 | 0.00 | 0.03 |
| EPS adjusted (diluted no. of shares) | -0.01 | -0.01 | -0.03 | 0.03 | -0.01 | -0.04 | 0.00 | 0.00 | 0.01 | -0.02 | 0.00 | 0.03 |
| Dividend per share | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| SALES, EURm | | | | | | | | | | | | |
| Software fees | 2 | 1 | 1 | 2 | 6 | 1 | 2 | 2 | 3 | 7 | 8 | 10 |
| Professional services | 1 | 1 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 1 | 2 | 2 |
| Recurring revenue | 2 | 2 | 2 | 2 | 9 | 2 | 2 | 2 | 2 | 9 | 9 | 9 |
| Total | 5 | 4 | 3 | 6 | 18 | 3 | 4 | 5 | 5 | 17 | 19 | 21 |
| SALES GROWTH, Y/Y % | | | | | | | | | | | | |
| Software fees | 183.3 | -30.0 | 42.9 | 23.5 | 37.5 | -70.6 | 171.4 | 110.0 | 33.3 | 32.7 | 13.7 | 22.9 |
| Professional services | 150.0 | 50.0 | -50.0 | -16.0 | 7.7 | -90.0 | -66.7 | 50.0 | -85.7 | -76.2 | 60.0 | 12.5 |
| Recurring revenue | 0.0 | 0.0 | 10.0 | 4.8 | 3.6 | 0.0 | 4.8 | 0.0 | 4.5 | 2.3 | 4.5 | 2.2 |
| Total | 54.8 | 0.0 | 9.7 | 1.6 | 13.0 | -43.7 | 18.9 | 35.3 | -15.6 | -6.6 | 11.7 | 12.0 |
| EBIT, EURm | | | | | | | | | | | | |
| | 0 | 0 | -1 | 1 | 1 | -1 | 0 | 0 | 1 | 0 | 0 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | -1 | 1 | 1 | -1 | 0 | 0 | 1 | 0 | 0 | 2 |
| EBIT margin, % | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Total | 2.1 | -2.7 | -23.5 | 20.3 | 2.7 | -48.1 | 9.1 | 6.5 | 14.8 | 1.2 | 2.1 | 7.0 |

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| INCOME STATEMENT, EURm | 2014 | 2015 | 2016 | 2017 | 2018 | 2019E | 2020E | 2021E |
|--|------|-------|---------------|---------------|---------------|-----------|-----------|-------|
| Sales | 16 | 19 | 15 | 16 | 18 | 17 | 19 | 21 |
| Sales growth (%) | 22.7 | 16.6 | -20.1 | 7.3 | 13.0 | -6.6 | 11.7 | 12.0 |
| Costs | -15 | -22 | -24 | -16 | -16 | -15 | -17 | -18 |
| Reported EBITDA | 1 | -3 | -9 | 0 | 2 | 2 | 2 | 3 |
| Extraordinary items in EBITDA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBITDA margin (%) | 8.7 | -14.7 | -58.8 | 1.8 | 11.3 | 10.5 | 11.0 | 14.1 |
| Depreciation | -1 | -2 | -2 | -2 | -2 | -2 | -2 | -2 |
| EBITA | 0 | -4 | -11 | -2 | 1 | 0 | 0 | 2 |
| Goodwill amortization / writedown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reported EBIT | 0 | -4 | -11 | -2 | 1 | 0 | 0 | 2 |
| EBIT margin (%) | 1.2 | -23.3 | -71.5 | -10.5 | 2.7 | 1.2 | 2.1 | 7.0 |
| Net financials | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pre-tax profit | 0 | -4 | -11 | -2 | 1 | 0 | 0 | 1 |
| Extraordinary items | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Taxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Minority shares | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Net profit | 0 | -4 | -12 | -3 | 0 | -1 | 0 | 1 |
| BALANCE SHEET, EURm | | | | | | | | - |
| Assets | | | | | | | | |
| Fixed assets | 4 | 5 | 5 | 5 | 5 | 6 | 5 | 5 |
| % of sales | 25 | 26 | 36 | 30 | 30 | 33 | <i>26</i> | 22 |
| Goodwill | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % of sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inventory | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ' | | | | | | | | |
| % of sales | 0 | 0 | <i>0</i> 9 | <i>0</i> 5 | <i>0</i> 5 | 0 | 0 | 0 |
| Receivables | 8 | 6 | | | | 5 | 6 | 6 |
| % of sales | 46 | 29 | <i>57</i> | <i>30</i> | <i>30</i> | <i>30</i> | <i>30</i> | 30 |
| Liquid funds | 6 | 11 | 8 | 14 | 14 | 13 | 6 | 6 |
| % of sales | 38 | 60 | 52 | 83 | 74 | 74 | 30 | 30 |
| Total assets Liabilities | 18 | 22 | 22 | 23 | 24 | 23 | 16 | 17 |
| Equity | 8 | -1 | -4 | 1 | 2 | 2 | 2 | 3 |
| % of sales | 48 | -3 | -25 | 6 | 12 | 13 | 11 | 15 |
| Deferred taxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % of sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Interest bearing debt* | 0 | 12 | 12 | 12 | 12 | 12 | 4 | 3 |
| % of sales | 0 | 64 | 79 | 74 | 67 | 70 | 21 | 12 |
| Non-interest bearing current liabilities | 10 | 10 | 14 | 10 | 10 | 9 | 10 | 11 |
| % of sales | 60 | 55 | 90 | 64 | 54 | 54 | 54 | 54 |
| Other interest free debt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % of sales | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total liabilities | 18 | 22 | 22 | 23 | 24 | 23 | 16 | 17 |
| CASH FLOW, EURm | | | | | | | | |
| + EBITDA | 1 | -3 | -9 | 0 | 2 | 2 | 2 | 3 |
| - Net financial items | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| - Taxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| - Increase in Net Working Capital | 0 | 3 | 0 | 0 | -1 | 0 | 0 | 1 |
| +/- Other | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 0 |
| = Cash flow from operations | 2 | 0 | -10 | -1 | 0 | 0 | 2 | 3 |
| - Capex | -2 | -3 | -2 | -1 | -2 | -2 | -1 | -1 |
| - Acquisitions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| + Divestments | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| = Net cash flow | 0 | -2 | -12 | -2 | -2 | -1 | 1 | 2 |
| +/- Change in interest-bearing debt | -4 | 12 | 0 | 0 | 0 | 0 | -8 | -1 |
| +/- New issues/buybacks | 4 | -5 | 9 | 8 | 2 | 1 | 0 | 0 |
| - Paid dividend | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +/- Change in loan receivables | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Change in cash | 0 | 5 | -3 | 6 | 0 | -1 | -7 | 1 |
| Change III cash | U | J | -5 | U | U | -1 | -, | 1 |

*EUR 12m hybrid included in debt

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| M-cap 95 | KEY FIGURES | 2015 | 2016 | 2017 | 2018 | 2019E | 2020E | 2021E |
|--|-------------------------------------|----------|----------|---------|---------|-------|---------------------------------------|-------------|
| Pitterpixe value | M-cap | 95 | 67 | 68 | 65 | 50 | 50 | 50 |
| Sales 198 115 116 188 17 199 2 2 2 3 3 3 9 0 0 2 2 2 3 3 188 1 1 1 1 0 | Net debt* | 1 | 4 | -1 | -1 | -1 | -2 | -4 |
| FBITD | Enterprise value | 95 | 71 | 67 | 101 | 50 | 49 | 47 |
| FBIT | Sales | 19 | 15 | 16 | 18 | 17 | 19 | 21 |
| Pe-tax Famings Fami | EBITDA | -3 | -9 | 0 | 2 | 2 | 2 | 3 |
| Per-tax Famings Fam | EBIT | -4 | -11 | -2 | 1 | 0 | 0 | 2 |
| Parmings | Pre-tax | -4 | -11 | -2 | 1 | 0 | 0 | |
| | | -4 | -12 | | 0 | -1 | 0 | |
| Valuation multiples | _ | -1 | | | 1 | 1 | 1 | |
| Formation Form | | <u> </u> | <u> </u> | | | · · · | · · · · · · · · · · · · · · · · · · · | <u>=_</u> _ |
| PUBBIDA 3-34 3-80 229.5 48.8 27.9 23.4 15.6 | | 5.1 | 4 7 | 4 1 | 5.5 | 29 | 2.6 | 22 |
| PVEBITA | • | | | | | | | |
| PURBIT -21,7 -6,6 -39,1 -20,5 -25,1 -123,0 -13,4 | · | | | | | | | |
| Pubmer of shares Pubmer of s | | | | | | | | |
| Pick | • | | | | | | | |
| P/E -24.1 -5.6 -21.9 -163.0 -55.7 -762.5 43.7 P/E excl. goodwill -24.1 -5.6 -21.9 -163.0 -55.7 -762.5 43.7 P/B -160.6 -17.6 75.6 -21.9 -163.0 -55.7 -762.5 43.7 P/Sales 5.0 4.4 4.2 3.6 2.9 2.6 2.3 P/CF 419.7 -7.7 93.2 68.3 33.1 20.1 15.3 Iarget P/F 0.0 0.0 0.0 0.0 2.0 27.2 27.2 Iarget P/B 0.0 0.0 0.0 0.0 2.0 2.7 2.0 32.2 17.2 Per share 31.370 34,561 38,411 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,802 38,8 | | | | | | | | |
| P/E excl. goodwill -24.1 -5.6 -21.9 -163.0 -55.7 -762.5 43.7 P/B -10.6 -17.6 75.6 46.6 35.7 37.5 20.2 P/Seles 5.0 4.4 4.2 3.6 2.9 2.6 2.3 P/CF -419.7 -7.7 93.2 68.3 33.1 20.1 15.3 Target P/E 0.0 0.0 0.0 0.0 -47.5 -650.2 37.2 Target P/B 0.0 0.0 0.0 0.0 30.5 32.0 17.2 Fer share measures | | | | | | | | |
| P/B -160.6 -17.6 75.6 46.6 3.7 37.5 20.2 P/sales 5.0 4.4 4.2 3.6 2.9 2.6 2.3 P/SE -419.7 -7.7 93.2 68.3 33.1 20.1 15.3 Farget EV/EB 0.0 0.0 0.0 0.0 -47.5 -65.2 37.2 Farget EV/B 0.0 0.0 0.0 0.0 3.0 3.50 32.0 17.2 Fer share 31,370 34,561 38,441 38,802 38,802 38,802 38,802 38,802 28,802< | | | | | | | | |
| P/sales 5.0 4.4 4.2 3.6 2.9 2.6 2.3 P/CF -419.7 -7.7 93.2 68.3 33.1 20.1 15.3 Target P/E 0.0 0.0 0.0 0.0 -47.5 -660.2 37.2 Target P/E 0.0 0.0 0.0 0.0 -47.5 -660.2 37.2 Target P/E 0.0 0.0 0.0 0.0 -47.5 -660.2 37.2 Target P/E 0.0 0.0 0.0 0.0 -47.5 -660.2 37.2 Target P/E 0.0 0.0 0.0 0.0 0.0 -47.5 -660.2 37.2 Target P/E 0.0 0.0 0.0 0.0 0.0 0.0 0.0 20.2 Sands 31,370 34,561 38,441 38,802 38,802 38,802 38,802 38,802 38,802 28,802 29.8 20.0 0.0 0.0 0.0 0.0 0.0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | | | | |
| P/CF -419.7 -7.7 93.2 68.3 33.1 20.1 15.3 Target P/E 0.0 0.0 0.0 0.0 4.75 -65.02 37.2 Target P/E 0.0 0.0 0.0 0.0 30.5 32.0 17.2 Fer share measures 3.13.70 34.561 38.441 38.802 | • | | | | | | | |
| Target EV/EBIT 0.0 0.0 0.0 0.0 0.0 0.1 0.1 0.5 | | | | | | | | |
| Target P/E 0.0 0. | · | | | | | | | |
| Per share measures Same m | | | | | | | | |
| Number of shares 31,370 34,561 38,441 38,802 38,002 30,00 30 | 3 , | | | | | | | |
| Number of shares 31,370 34,561 38,441 38,802 38,002 38,002 38,002 38,002 38,002 38,002 38,002 38,002 38,002 38,002 38,002 38,002 38,002 38,002 38,002 38,002 | | 0.0 | 0.0 | 0.0 | 0.0 | 30.5 | 32.0 | 17.2 |
| Number of shares (diluted) | | 04.070 | 0.4.504 | 00.444 | | | | |
| EPS -0.13 -0.35 -0.08 -0.01 -0.02 0.00 0.03 EPS excl. goodwill -0.13 -0.35 -0.08 -0.01 -0.02 0.00 0.03 Cash EPS -0.07 -0.27 -0.01 0.05 0.04 0.05 0.07 Operating cash flow per share -0.01 -0.25 0.02 0.02 0.04 0.01 -0.01 Book value per share -0.00 0.01 -0.02 0.04 0.04 0.03 0.06 Book value excl. goodwill -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Book value excl. goodwill -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Book value excl. goodwill -0.02 -0.11 0.02 0.04 0.04 0.04 0.03 0.06 Dividend per share 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | | | | | | | | |
| EPS excl. goodwill -0.13 -0.35 -0.08 -0.01 -0.02 0.00 0.03 Cash EPS -0.07 -0.27 -0.01 0.05 0.04 0.05 0.07 Operating cash flow per share -0.01 -0.25 0.02 0.02 0.04 0.06 0.08 Capital employed per share -0.02 -0.11 0.02 0.04 0.04 0.01 -0.01 Book value per share -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Book value excl. goodwill -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Book value excl. goodwill -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Dividend per share 0.00 | | | | | | | | |
| Cash EPS -0.07 -0.27 -0.01 0.05 0.04 0.05 0.07 Operating cash flow per share -0.01 -0.25 0.02 0.02 0.04 0.06 0.08 Capital employed per share 0.00 0.01 -0.02 0.03 0.04 0.01 -0.01 Book value excl. goodwill -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Dividend per share 0.00 | | | | | | | | |
| Operating cash flow per share -0.01 -0.25 0.02 0.02 0.04 0.06 0.08 Capital employed per share 0.00 0.01 -0.02 0.03 0.04 0.01 -0.01 Book value per share -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Book value excl. goodwill -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Dividend per share 0.00 | 3 | | | | | | | |
| Capital employed per share 0.00 0.01 -0.02 0.03 0.04 0.01 -0.01 Book value per share -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Book value excl. goodwill -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Dividend per share 0.00 | | | | | | | | |
| Book value per share -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Book value excl. goodwill -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Dividend per share 0.00 | | | | | | | | |
| Book value excl. goodwill -0.02 -0.11 0.02 0.04 0.04 0.03 0.06 Dividend per share 0.00 | | | | | | | | |
| Dividend per share 0.00 <td>·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | · | | | | | | | |
| Dividend payout ratio, % 0.0 <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | _ | | | | | | | |
| Dividend yield, % 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 -64.2 -4.8 60.1 60.1 80.2 -1.0 3.6 1.4 3.9 24.8 60.1 80.2 1.3 1.0 5.6 5.1 9.2 11.3 10.9 5.6 5.1 5.1 6.2 1.3 10.9 5.6 5.1 5.2 6.0 1.3 7.2 1.3 10.9 5.6 5.1 5.2 6.0 1.3 7.2 1.2 1.2 6.3.5 7.2 <t< td=""><td>·</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | · | | | | | | | |
| Efficiency measures ROE 0.0 0.0 0.0 -34.8 -64.2 -4.8 60.1 ROCE -45.7 -110.1 -16.1 3.6 1.4 3.9 24.8 Financial ratios Capex/sales, % 13.7 15.8 9.2 11.3 10.9 5.6 5.1 Capex/depreciation excl. goodwill,% 159.2 124.5 74.9 131.7 116.2 63.5 72.0 Net debt/EBITDA, book-weighted -0.2 -0.5 -5.2 -0.6 -0.4 -0.8 -1.3 Debt/equity, market-weighted 0.1 0.2 0.2 0.2 0.2 0.1 0.1 Equity ratio, book-weighted -3.4 -29.1 3.9 9.0 9.4 13.0 18.9 Gearing* -1.14 -1.09 -1.67 -0.54 -0.29 -0.78 -1.15 Number of employees, average 109 84 80 85 0 0 0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<> | | | | | | | | |
| ROE 0.0 0.0 0.0 -34.8 -64.2 -4.8 60.1 ROCE -45.7 -110.1 -16.1 3.6 1.4 3.9 24.8 Financial ratios Capex/sales, % 13.7 15.8 9.2 11.3 10.9 5.6 5.1 Capex/depreciation excl. goodwill,% 159.2 124.5 74.9 131.7 116.2 63.5 72.0 Net debt/EBITDA, book-weighted -0.2 -0.5 -5.2 -0.6 -0.4 -0.8 -1.3 Debt/equity, market-weighted 0.1 0.2 0.2 0.2 0.2 0.1 0.1 Equity ratio, book-weighted -3.4 -29.1 3.9 9.0 9.4 13.0 18.9 Gearing* -1.14 -1.09 -1.67 -0.54 -0.29 -0.78 -1.15 Number of employees, average 109 84 80 85 0 0 0 Sales per employee, EUR 173,303 1 | Dividend yield, % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ROCE -45.7 -110.1 -16.1 3.6 1.4 3.9 24.8 Financial ratios Capex/sales, % 13.7 15.8 9.2 11.3 10.9 5.6 5.1 Capex/depreciation excl. goodwill,% 159.2 124.5 74.9 131.7 116.2 63.5 72.0 Net debt/EBITDA, book-weighted -0.2 -0.5 -5.2 -0.6 -0.4 -0.8 -1.3 Debt/equity, market-weighted 0.1 0.2 0.2 0.2 0.2 0.1 0.1 Equity ratio, book-weighted -3.4 -29.1 3.9 9.0 9.4 13.0 18.9 Gearing* -1.14 -1.09 -1.67 -0.54 -0.29 -0.78 -1.15 Number of employees, average 109 84 80 85 0 0 0 Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | | | | | | | | |
| Financial ratios Capex/sales, % 13.7 15.8 9.2 11.3 10.9 5.6 5.1 Capex/depreciation excl. goodwill,% 159.2 124.5 74.9 131.7 116.2 63.5 72.0 Net debt/EBITDA, book-weighted -0.2 -0.5 -5.2 -0.6 -0.4 -0.8 -1.3 Debt/equity, market-weighted 0.1 0.2 0.2 0.2 0.2 0.1 0.1 Equity ratio, book-weighted -3.4 -29.1 3.9 9.0 9.4 13.0 18.9 Gearing* -1.14 -1.09 -1.67 -0.54 -0.29 -0.78 -1.15 Number of employees, average 109 84 80 85 0 0 0 Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | ROE | 0.0 | 0.0 | 0.0 | -34.8 | -64.2 | -4.8 | 60.1 |
| Capex/sales, % 13.7 15.8 9.2 11.3 10.9 5.6 5.1 Capex/depreciation excl. goodwill,% 159.2 124.5 74.9 131.7 116.2 63.5 72.0 Net debt/EBITDA, book-weighted -0.2 -0.5 -5.2 -0.6 -0.4 -0.8 -1.3 Debt/equity, market-weighted 0.1 0.2 0.2 0.2 0.2 0.1 0.1 Equity ratio, book-weighted -3.4 -29.1 3.9 9.0 9.4 13.0 18.9 Gearing* -1.14 -1.09 -1.67 -0.54 -0.29 -0.78 -1.15 Number of employees, average 109 84 80 85 0 0 0 Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | ROCE | -45.7 | -110.1 | -16.1 | 3.6 | 1.4 | 3.9 | 24.8 |
| Capex/depreciation excl. goodwill,% 159.2 124.5 74.9 131.7 116.2 63.5 72.0 Net debt/EBITDA, book-weighted -0.2 -0.5 -5.2 -0.6 -0.4 -0.8 -1.3 Debt/equity, market-weighted 0.1 0.2 0.2 0.2 0.2 0.1 0.1 Equity ratio, book-weighted -3.4 -29.1 3.9 9.0 9.4 13.0 18.9 Gearing* -1.14 -1.09 -1.67 -0.54 -0.29 -0.78 -1.15 Number of employees, average 109 84 80 85 0 0 0 Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | Financial ratios | | | | | | | |
| Net debt/EBITDA, book-weighted -0.2 -0.5 -5.2 -0.6 -0.4 -0.8 -1.3 Debt/equity, market-weighted 0.1 0.2 0.2 0.2 0.2 0.1 0.1 Equity ratio, book-weighted -3.4 -29.1 3.9 9.0 9.4 13.0 18.9 Gearing* -1.14 -1.09 -1.67 -0.54 -0.29 -0.78 -1.15 Number of employees, average 109 84 80 85 0 0 0 Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | Capex/sales, % | 13.7 | 15.8 | 9.2 | 11.3 | 10.9 | 5.6 | 5.1 |
| Debt/equity, market-weighted 0.1 0.2 0.2 0.2 0.2 0.1 0.1 Equity ratio, book-weighted -3.4 -29.1 3.9 9.0 9.4 13.0 18.9 Gearing* -1.14 -1.09 -1.67 -0.54 -0.29 -0.78 -1.15 Number of employees, average 109 84 80 85 0 0 0 Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | Capex/depreciation excl. goodwill,% | 159.2 | 124.5 | 74.9 | 131.7 | 116.2 | 63.5 | 72.0 |
| Equity ratio, book-weighted -3.4 -29.1 3.9 9.0 9.4 13.0 18.9 Gearing* -1.14 -1.09 -1.67 -0.54 -0.29 -0.78 -1.15 Number of employees, average 109 84 80 85 0 0 0 Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | Net debt/EBITDA, book-weighted | -0.2 | -0.5 | -5.2 | -0.6 | -0.4 | -0.8 | -1.3 |
| Gearing* -1.14 -1.09 -1.67 -0.54 -0.29 -0.78 -1.15 Number of employees, average 109 84 80 85 0 0 0 Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | Debt/equity, market-weighted | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 |
| Number of employees, average 109 84 80 85 0 0 0 Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | Equity ratio, book-weighted | -3.4 | -29.1 | 3.9 | 9.0 | 9.4 | 13.0 | 18.9 |
| Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | Gearing* | -1.14 | -1.09 | -1.67 | -0.54 | -0.29 | -0.78 | -1.15 |
| Sales per employee, EUR 173,303 179,762 202,500 215,294 0 0 0 | Number of employees, average | 109 | 84 | 80 | 85 | 0 | 0 | 0 |
| | | 173,303 | 179,762 | | 215,294 | 0 | 0 | 0 |
| | EBIT per employee, EUR | -40,367 | -128,571 | -21,250 | 5,882 | | 0 | |

*EUR 12m hybrid included in debt

SSH COMMUNICATIONS SECURITY

Software/Finland, April 18, 2019 Spot comment

COMPANY DESCRIPTION: SSH Communications Security Corp (NASDAQ OMX Nordic: SSH1V) is the leading provider of enterprise cybersecurity solutions for securing access to servers and the cloud.

INVESTMENT CASE:

| OWNERSHIP STRUCTURE | SHARES | EURm | 0/0 |
|--|------------|--------|-------|
| Ylonen Tatu | 14,508,473 | 18.716 | 37.4% |
| Clausal Computing Oy | 3,808,650 | 4.913 | 9.8% |
| Mikkonen Juha Taneli | 2,100,000 | 2.709 | 5.4% |
| Elo Mutual Pension Insurance Company | 1,500,000 | 1.935 | 3.9% |
| Gaselli Capital Oy | 1,200,000 | 1.548 | 3.1% |
| Ilmarinen Mutual Pension Insurance Company | 1,165,300 | 1.503 | 3.0% |
| Syrjala Timo Kalevi | 835,011 | 1.077 | 2.2% |
| Varma Mutual Pension Insurance Company | 755,300 | 0.974 | 1.9% |
| Taaleritehdas Mikro Markka Fund | 623,000 | 0.804 | 1.6% |
| AC Invest Oy | 400,000 | 0.516 | 1.0% |
| Ten largest | 26,895,734 | 34.695 | 69% |
| Residual | 11,906,266 | 15.359 | 31% |
| Total | 38,802,000 | 50.055 | 100% |

| EA | ۱R۸ | IIN | 3S (| CAL | EN | DAR |
|----|-----|-----|------|-----|----|-----|
| | | | | | | |

July 17, 2019 October 23, 2019 Q2 report Q3 report

OTHER EVENTS

COMPANY MISCELLANEOUS

CEO: Kaisa Olkkonen CFO: Niklas Nordstrom

IR:

Kornetintie 3, FIN-00380 Helsinki

Tel: +358 20 500 7000

Software/Finland, April 18, 2019 Spot comment

DEFINITIONS

| DIT. | FDC |
|--|--|
| P/E | EPS |
| Price per share | Profit before extraordinary items and taxes |
| Earnings per share | – income taxes + minority interest |
| | Number of shares |
| P/Sales | DDC |
| • | DPS Dividend for the financial period per share |
| Marketcap | Dividend for the financial period per share |
| Sales | |
| P/BV | CEPS |
| Price per share | Gross cash flow from operations |
| Shareholders' equity + taxed provisions per share | Number of shares |
| Shareholdes equity - taxeaprovisionspershare | Trained or shared |
| P/CF | EV/Share |
| Price per share | Enterprise value |
| Operating cash flow per share | Number of shares |
| , , , | |
| EV (Enterprise value) | Sales/Share |
| Market cap + net debt + minority interest at market value | Sales |
| share of associated companies at market value | Number of shares |
| • | |
| Net debt | EBITDA/Share |
| Interest bearingdebt – financialassets | Earnings before interest, tax, depreciation and amortisation |
| | Number of shares |
| | |
| EV/Sales | EBIT/Share |
| Enterprise value | <u>Operating profit</u> |
| Sales | Number of shares |
| T//[FIITDA | ΓΑΓΙ/Chave |
| EV/EBITDA Enterprise value | EAFI/Share Pretax profit |
| Earnings before interest, tax, depreciation and amortisation | Number of shares |
| carnings before interest, tax, depreciation and amortisation | Number of Shares |
| EV/EBIT | Capital employed/Share |
| Enterprise value | Totalassets – non interest bearing debt |
| Operating profit | Number of shares |
| | |
| Div yield, % | Total assets |
| Dividend per share | Balancesheet total |
| Price per share | |
| | |
| Payout ratio, % | Interest coverage (x) |
| Total dividends | <u>Operatingprofit</u> |
| Earnings before extraordinary items and taxes — income taxes + minority interest | Financialitems |
| Net cash/Share | Asset turnover (x) |
| Financial assets — interest bearing debt | Asset turnover (x) Turnover |
| Number of shares | Balancesheet total(average) |
| Number of shares | Datancestiect (Otaliaverage) |
| ROA, % | Debt/Equity, % |
| Operatingprofit + financial income + extraordinary items | Interest bearing debt |
| Balancesheet total – interest free short term debt | Shareholders' equity + minority interest + taxed provisions |
| long term advances received and accounts payable (average) | 5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - |
| .ong com autoness coorea and accounts payable (a relaye) | |
| ROCE, % | Equity ratio, % |
| Profit before extraordinary items + interest expenses + other financial costs | Shareholders' equity + minority interest + taxed provisions |
| Balancesheet total – noninterest bearing debt (average) | Total assets – interest free loans |
| | Total asses Therese free fourts |
| ROE, % | CAGR, % |
| Profit before extraordinary items and taxes – income taxes | Cumulative annual growth rate = Average growth per year |
| | |

Software/Finland, April 18, 2019 Spot comment

Important Disclosures

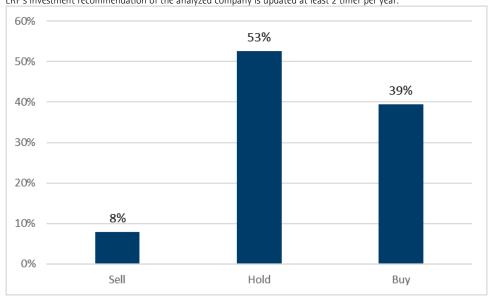
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Investment recommendations are defined as follows:

Target price compared to share price Recommendation

< -10 % SELL -10 - (+10) % HOLD > 10 % BUY

ERP's investment recommendation of the analyzed company is updated at least 2 timer per year.



The graph above shows the distribution of ERP's recommendations of companies under coverage in 1st of February 2019. If recommendation is not given, it is not mentioned here.

Name(s) of the analyst(s): Forslund

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SSH COMMUNICATIONS SECURITY

Software/Finland, April 18, 2019 Spot comment

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