

## Coverage initiated with BUY and TP of W56,000

- For Soulbrain, we suggest a target price of W56,000, which is based on a 2019E EPS and a target P/E ratio of 8.8, a $15 \%$ discount to the 2015-18 average of 10.1. The valuation discount reflects potential new competition the chemical company may face. (The company supplies etchants and other chemical solutions for display and semiconductor makers.)
- Fetching a P/E ratio of 7.4, a $10 \%$ discount to the bottom end of the five-year trading range, the stock looks grossly undervalued.

2019 preview: revenue up 8\%; OP up 9\%

- Soulbrain's first-quarter OP fell slightly short of the market's expectation at W43.1bn (up $19 \%$ qoq; up $14 \%$ yoy). Semiconductor etchant sales slid $5 \%$ qoq, reflecting lower plant utilization at customers. Thin-glass sales, on the other hand, jumped $40 \%$, buoyed by increased sales of rigid OLED panels.
- Heading into the second half, sales of semiconductor etchants will likely recover as chip makers finish up facility revamps and boost production. Thin glass sales should also continue to grow well into the third quarter.
- For all of 2019, we expect the company to report revenue of W1tn and OP of W179.6bn.


## 2020 should be a better year than last year

- Demand for high-selective nitride (HSN) etchants is rising as chip makers move to 5th gen 3-D NAND technology. Despite that, Soulbrain shares are under pressure due to worries over potential new competition. We believe the concern is excessive, given that it takes time for new entrants, if any, to pass the customers' quality tests.
- Display makers are stepping up plant utilization (over 90\%) to meet the growing demand for rigid OLEDs from Chinese handset makers. That raises the company's growth outlook
- The company will also benefit as major local semiconductor and display makers begin operation at their new facilities-Samsung Electronics' Pyeongtaek fab, SK Hynix' M15, Samsung Display's A5, and LG Display's Guangzhou fab-as early as 2H19-and boost investment starting from 2020.

| Operating results and major financial data |  |  |  | (Wbn, W, x, \%) |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 2017 A | 2018A | 2019 F | 2020 F | 2021F |
| Revenue | 776 | 963 | 1,044 | 1,126 | 1,238 |
| OP | 106 | 164 | 180 | 196 | 215 |
| Pretax profit | 67 | 147 | 162 | 178 | 198 |
| NP | 43 | 103 | 114 | 125 | 139 |
| NP (controlling int.) | 41 | 100 | 112 | 123 | 136 |
| EPS | 2,467 | 5,722 | 6,409 | 7,043 | 7,822 |
| PER | 27.4 | 8.3 | 7.1 | 6.5 | 5.8 |
| BPS | 38,616 | 41,701 | 47,426 | 53,742 | 60,836 |
| PBR | 1.7 | 1.1 | 0.9 | 0.8 | 0.7 |
| ROE | 6.8 | 14.5 | 14.4 | 13.9 | 13.7 |

Note: EPS, BPS, and ROE are based only on the controlling interest.
Source: Soulbrain, Daishin Securities Research Center

Tab 1. Earnings trend and forecast (consolidated)
(Wbn)

|  | 1Q18 | 2Q18 | 3Q18 | 4Q18 | 1Q19E | 2Q19F | 3Q19F | 4Q19F | 2018 | 2019F | 2020F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales |  |  |  |  |  |  |  |  |  |  |  |
| 1) Semiconductor |  |  |  |  |  |  |  |  |  |  |  |
| Etching | 113 | 120 | 128 | 136 | 129 | 133 | 138 | 141 | 496 | 540 | 587 |
| Precursors | 8 | 8 | 9 | 8 | 8 | 8 | 9 | 9 | 33 | 34 | 36 |
| CMP Slury | 11 | 11 | 12 | 12 | 11 | 10 | 11 | 11 | 45 | 43 | 45 |
| Total | 131 | 138 | 149 | 156 | 148 | 151 | 158 | 160 | 575 | 617 | 669 |
| 2) Display |  |  |  |  |  |  |  |  |  |  |  |
| Chemical | 30 | 33 | 33 | 34 | 30 | 28 | 30 | 30 | 130 | 119 | 122 |
| Thin Glass \& Others | 37 | 43 | 46 | 34 | 44 | 52 | 54 | 48 | 160 | 198 | 219 |
| Total | 67 | 75 | 80 | 68 | 74 | 80 | 84 | 78 | 290 | 317 | 341 |
| 3) Battery electrolyte \& Lead Tab | 16 | 20 | 20 | 17 | 16 | 18 | 18 | 17 | 73 | 70 | 80 |
| 4) Others | 3 | 5 | 6 | 11 | 9 | 10 | 11 | 12 | 25 | 40 | 36 |
| Total | 218 | 238 | 255 | 253 | 247 | 259 | 271 | 267 | 963 | 1,044 | 1,126 |
| QoQ growth |  |  |  |  |  |  |  |  |  |  |  |
| 1) Semiconductor |  |  |  |  |  |  |  |  |  |  |  |
| Etching | 8\% | 6\% | 7\% | 6\% | -5\% | 3\% | 4\% | 2\% | 34\% | 9\% | 9\% |
| Precursors | 0\% | -3\% | 18\% | -8\% | -2\% | 1\% | 12\% | -7\% | 10\% | 4\% | 7\% |
| CMP Slurry | 7\% | 4\% | 8\% | 0\% | -8\% | -5\% | 4\% | 2\% | 20\% | -5\% | 5\% |
| Total | 8\% | 5\% | 7\% | 5\% | -5\% | 2\% | 4\% | 1\% | 31\% | 7\% | 8\% |
| 2) Display |  |  |  |  |  |  |  |  |  |  |  |
| Chemical | -5\% | 8\% | 2\% | 3\% | -12\% | -6\% | 5\% | 2\% | 1\% | -9\% | 2\% |
| Thin Glass \& Others | 13\% | 15\% | 9\% | -27\% | 30\% | 18\% | 5\% | -12\% | 12\% | 24\% | 11\% |
| Total | 4\% | 12\% | 6\% | -15\% | 9\% | 2\% | 1\% | -7\% | 7\% | 9\% | 8\% |
| 3) Battery electrolyte \& Lead Tab | 19\% | 20\% | 1\% | -13\% | -7\% | 10\% | 3\% | -6\% | 33\% | -5\% | 15\% |
| 4) Others | -44\% | 82\% | 33\% | 73\% | -22\% | 10\% | 10\% | 10\% | 139\% | 61\% | -11\% |
| Total | 6\% | 9\% | 7\% | -1\% | -2\% | 5\% | 8\% | 0\% | 24\% | 8\% | 8\% |
| Sales share |  |  |  |  |  |  |  |  |  |  |  |
| 1) Semiconductor |  |  |  |  |  |  |  |  |  |  |  |
| Etching | 52\% | 50\% | 50\% | 54\% | 52\% | 51\% | 51\% | 53\% | 52\% | 52\% | 52\% |
| Precursors | 4\% | 3\% | 4\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% |
| CMP Slurry | 5\% | 5\% | 5\% | 5\% | 4\% | 4\% | 4\% | 4\% | 5\% | 4\% | 4\% |
| Total | 60\% | 58\% | 58\% | 62\% | 60\% | 58\% | 58\% | 60\% | 60\% | 59\% | 59\% |
| 2) Display |  |  |  |  |  |  |  |  |  |  |  |
| Chemical | 14\% | 14\% | 13\% | 14\% | 12\% | 11\% | 11\% | 11\% | 14\% | 11\% | 11\% |
| Thin Glass \& Others | 17\% | 18\% | 18\% | 13\% | 18\% | 20\% | 20\% | 18\% | 17\% | 19\% | 19\% |
| Total | 31\% | 32\% | 31\% | 27\% | 30\% | 31\% | 31\% | 29\% | 30\% | 30\% | 30\% |
| 3) Battery electrolyte \& Lead Tab | 8\% | 8\% | 8\% | 7\% | 7\% | 7\% | 7\% | 6\% | 8\% | 7\% | 7\% |
| 4) Others | 1\% | 2\% | 3\% | 4\% | 4\% | 4\% | 4\% | 4\% | 3\% | 4\% | 3\% |
| Total | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |
| OP |  |  |  |  |  |  |  |  |  |  |  |
| OP | 38 | 43 | 47 | 36 | 43 | 45 | 46 | 46 | 164 | 180 | 196 |
| QoQ | 44\% | 75\% | 58\% | 43\% | 14\% | 3\% | -2\% | 27\% | 55\% | 9\% | 9\% |
| OP margin | 17\% | 18\% | 18\% | 14\% | 17\% | 17\% | 17\% | 17\% | 17\% | 17\% | 17\% |

Source: Soulbrain, Daishin Securities Research Center

Tab 2. Valuation table
(Wbn, 1 K shares, W, $\mathrm{x}, \%$ )

|  | 2019F | 12-month forward |
| :--- | ---: | ---: |
| NP (controlling interest) | 112 | 98 |
| Floating shares | 17,398 | 5,658 |
| EPS | 6,409 | 8.8 |
| Target P/E | 8.8 |  |
| Fair value | 56,399 |  |
| Target price | 56,000 |  |
| CP | 45,550 | 98 |
| P/E | 7.4 |  |
| Upside potential | $23 \%$ |  |
| Note: As of June 3, 2019 |  |  |
| Source: Soulbrain, Quantiwise, Daishin Securities Research Center |  |  |

Tab 3. Historical valuation
(W, x)

|  | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9 F}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| EPS (includes treasury shares) | 4,878 | 4,514 | 2,467 | 5,722 | 6,409 |
| PER (End) | 8.3 | 13.4 | 27.4 | 8.3 | 7.4 |
| PER (High) | 10.8 | 15.4 | 31.5 | 13.1 | 8.7 |
| PER (Low) | 6.3 | 7.6 | 18.4 | 8.1 | 6.9 |
| PER (Avg) | 8.6 | 11.6 | 25.3 | 10.4 | 8.0 |
| BPS | 29,865 | 33,711 | 37,072 | 41,701 | 47,426 |
| PBR (End) | 1.4 | 1.8 | 1.8 | 1.1 | 1.0 |
| PBR (High) | 1.8 | 2.1 | 2.1 | 1.8 | 1.2 |
| PBR (Low) | 1.0 | 1.0 | 1.2 | 1.1 | 0.9 |
| PBR (Avg) | 1.4 | 1.6 | 1.7 | 1.4 | 1.1 |
| EV/EBITDA (End) | 5.1 | 6.6 | 6.9 | 3.5 | 3.0 |
| EV/EBITDA (High) | 6.4 | 7.3 | 8.0 | 5.6 | 3.5 |
| EV/EBITDA (Low) | 4.0 | 3.9 | 4.3 | 3.4 | 2.7 |
| EV/EBITDA (Avg) | 5.3 | 5.7 | 6.0 | 4.4 | 3.2 |

Note: Based on NP contributable to controlling interest
Source: Soulbrain, Quantiwise, Daishin Securities Research Center

Tab 4. Peer comparison

|  | Year | Soulbrain | $\begin{array}{r} \text { SK } \\ \text { Materials } \end{array}$ | ENF Technology | Mecaro | Foosung | Entegris | Ube Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Settlement month |  | December | December | December | December | December | December | March |
| Currency |  | KRW | KRW | KRW | KRW | KRW | USD | JPY |
| Share price (local currency) |  | 45,550 | 152,300 | 21,500 | 13,400 | 7,190 | 34 | 2,081 |
| Market cap (local currency) |  | 792 | 1,606 | 306 | 135 | 666 | 4,654 | 221 |
| Market cap (USD mn) |  | 665 | 1,350 | 257 | 113 | 560 | 4,654 | 2,037 |
| Stock Exchange |  | KOSDAQ | KOSDAQ | KOSDAQ | KOSDAQ | KOSPI | SDAQ GS | Tokyo |
| Revenue | 2018 | 963 | 687 | 425 | 101 | 275 | 1,550 | 69,557 |
| (Wbn, \$mn, ¥"00mn) | 2019F | 1,044 | 800 | 488 |  | 306 | 1,601 | 75,549 |
|  | 2020F | 1,126 | 909 | 548 |  | 387 | 1,708 | 78,173 |
| OP <br> (Wbn, \$mn, ¥"00mn) | 2018 | 164 | 183 | 36 | 34 | 40 | 293 | 5,025 |
|  | 2019F | 180 | 228 | 53 |  | 46 | 369 | 4,812 |
|  | 2020F | 196 | 263 | 62 |  | 70 | 429 | 5,023 |
| OPM <br> (\%) | 2018 | 17.0 | 26.6 | 8.4 | 33.7 | 14.4 | 18.9 | 7.2 |
|  | 2019F | 17.2 | 28.5 | 10.8 |  | 15.0 | 23.0 | 6.4 |
|  | 2020F | 17.4 | 29.0 | 11.3 |  | 18.1 | 25.1 | 6.4 |
| NP <br> (Wbn, \$mn, ¥"00mn) | 2018 | 100 | 123 | 29 | 29 | 28 | 241 | 31,680 |
|  | 2019F | 112 | 153 | 41 |  | 37 | 267 | 32,816 |
|  | 2020F | 123 | 179 | 49 |  | 57 | 307 | 34,368 |
| PER <br> (x) | 2018 | 8.3 | 15.8 | 7.8 | 9.7 | 29.8 | 18.4 | 10.3 |
|  | 2019F | 7.4 | 11.3 | 7.1 |  | 16.8 | 17.6 | 6.4 |
|  | 2020F | 6.8 | 9.6 | 6.1 |  | 11.5 | 15.4 | 6.1 |
| PBR(x) | 2018 | 1.1 | 4.2 | 1.0 | 2.0 | 4.4 | 3.8 | 1.0 |
|  | 2019F | 1.0 | 3.0 | 1.2 |  | 2.7 | 4.1 | 0.6 |
|  | 2020F | 0.9 | 2.4 | 1.0 |  | 2.2 | 3.6 | 0.6 |
| $\begin{aligned} & \text { ROE } \\ & \text { (\%) } \end{aligned}$ | 2018 | 14.5 | 30.4 | 14.0 |  | 12.4 | 24.0 | 10.5 |
|  | 2019F | 14.4 | 33.4 | 16.9 |  | 13.9 | 26.7 | 10.0 |
|  | 2020F | 13.9 | 30.9 | 17.0 |  | 18.3 | 21.3 | 9.8 |
| EV/EBITDA(x) | 2018 | 3.5 | 8.8 | 3.9 | 1.5 | 13.1 | 9.9 | 5.8 |
|  | 2019F | 3.0 | 7.2 |  |  | 6.1 | 11.6 | 4.7 |
|  | 2020F | 2.6 | 6.3 |  |  | 4.4 | 10.4 | 4.5 |
| Dividend payout(\%) | 2018 | 12.3 | 31.6 | 4.9 | 19.6 | 0.0 | 16.5 | 24.9 |
|  | 2019F | 11.1 |  |  |  |  | 16.5 | 24.9 |
|  | 2020F | 10.1 |  |  |  |  | 16.5 | 24.9 |
| EPS <br> (local currency) | 2018 | 5,722 | 11,703 | 2,041 | 2,885 | 303 | 2 | 302 |
|  | 2019F | 6,409 | 14,494 | 2,910 |  | 397 | 2 | 325 |
|  | 2020F | 7,043 | 16,989 | 3,444 |  | 619 | 2 | 343 |
| BPS <br> (local currency) | 2018 | 41,701 | 42,508 | 15,758 | 14,165 | 2,651 | 7 | 3,009 |
|  | 2019F | 47,426 | 54,031 | 18,625 |  | 3,065 | 8 | 3,501 |
|  | 2020F | 53,742 | 68,430 | 21,929 |  | 3,702 | 10 | 3,765 |
| $\begin{aligned} & \text { DPS } \\ & \text { (local currency) } \end{aligned}$ | 2018 | 750 | 3,750 | 100 | 575 |  | 0.3 | 75 |
|  | 2019F | 750 | 3,945 | 100 |  |  | 0.3 | 80 |
|  | 2020F | 750 | 4,212 | 100 |  |  |  |  |

Note: As of June 3 for domestic companies/ As of May 31 for foreign companies
Source: Bloomberg, Quantiwise, Daishin Securities Research Center

Fig 1. Annual sales


Source: Soulbrain, Daishin Securities Research Center

Fig 3. Revenue mix (1)

## - Others <br> -Thin Glass \& Others <br> CMP Slurry

-Etching

Source: Soulbrain, Daishin Securities Research Center

Fig 5. Semiconductor revenue breakdown


[^0]Fig 2. Quarterly sales


Source: Soulbrain, Daishin Secunities Research Center

Fig 4. Revenue mix (2)


Source: Soulbrain, Daishin Securities Research Center

Fig 6. Display revenue breakdown


Source: Soulbrain, Daishin Securities Research Center

Fig 7. Annual OP


Source: Soulbrain, Daishin Securities Research Center

Fig 9.Annual EBITDA


Source: Soullbrain, Daishin Securities Research Center

Fig 11. Capex


[^1]Fig 8. Quarterly OP


Source: Soulbrain, Daishin Securities Research Center

Fig 10. Quarterly EBITDA


Source: Soulbrain, Daishin Securities Research Center

Fig 12. Inventory assets


Source: Soulbrain, Daishin Securities Research Center

Fig 13. Cash and cash equivalents (1)


Source: Soulbrain, Daishin Securities Research Center

Fig 15. Dividends


Source: Soulbrain, Daishin Securities Research Center

Fig 17. P/E band


[^2]Fig 14. Cash and cash equivalents (2)


Source: Soulbrain, Daishin Securities Research Center

Fig 16. R\&D expense


Source: Soulbrain, Daishin Securities Research Center

Fig 18. P/B band


[^3]Company profile
Oveniew

- Finances (as of Mar. 2019): Assets W1tn; liabilities W276.5bn, equity capital W766.9bn
- Major shareholders : Jeong Ji-wan 29.64\%, Lim Hye-ok 6.11\%
- Outstanding shares (common+preferred): 17,398,271 (treasury shares 526,253 )
Dividend payout ratio: 12.29\% (as of 2018)


## Share price catalysts

-Production capacity and plant utilization at domestic semiconductor and display companies

Source: Soulbrain, Daishin Securities Research Center

Earnings drivers
Fig 19. Domestic memory chip capacity


Source: Soulbrain, Daishin Securities Research Center

Fig 21. Utilization: Samsung Display's rigid OLED fabs


[^4]2019E revenue mix


Source: Soulbrain, Daishin Securities Research Center

Fig 20. SK Hynix' DRAM capacity


Source: Soulbrain, Daishin Securities Research Center

Fig 22. Utilization: LG Display's LCD fabs


[^5]Financial statements

| Income statement | (Wbn) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017A | 2018A | 2019F | 2020F | 2021F |
| Revenue | 776 | 963 | 1,044 | 1,126 | 1,238 |
| Cost of goods sold | 604 | 726 | 800 | 869 | 956 |
| Gross profit | 171 | 238 | 244 | 257 | 283 |
| SG\&A expenses | 66 | 74 | 64 | 61 | 68 |
| OP | 106 | 164 | 180 | 196 | 215 |
| OP margin | 13.6 | 17.0 | 17.2 | 17.4 | 17.4 |
| EBITDA | 157 | 213 | 230 | 250 | 273 |
| Non-OP | -39 | -17 | -18 | -18 | -17 |
| Income from affiliates | -7 | -19 | -19 | -19 | -19 |
| Financial revenue | 6 | 10 | 7 | 7 | 7 |
| FX related gains | 6 | 13 | 12 | 12 | 12 |
| Financial expense | -20 | -6 | -5 | -5 | -5 |
| FX related losses | 15 | 2 | 1 | 1 | 1 |
| Others | -18 | -2 | 0 | 0 | 0 |
| Income before taxes | 67 | 147 | 162 | 178 | 198 |
| Income tax expense | 24 | 44 | 48 | 53 | 59 |
| Income from cont. op. | 43 | 103 | 114 | 125 | 139 |
| Income from discont. op. | 0 | 0 | 0 | 0 | 0 |
| NP | 43 | 103 | 114 | 125 | 139 |
| NP margin | 5.6 | 10.7 | 10.9 | 11.1 | 11.2 |
| NP for non-contr interest | 2 | 3 | 2 | 2 | 3 |
| NP for contr. interest | 41 | 100 | 112 | 123 | 136 |
| Valuation of AFS fin. assets | 0 | 0 | 0 | 0 | 0 |
| Other compreh. income | 0 | 0 | 0 | 0 | 0 |
| Comprehensive income | 43 | 102 | 113 | 124 | 138 |
| Comp. income for non-conts. Int. | 2 | 3 | 2 | 2 | 3 |
| Comp. income for contr. int. | 41 | 98 | 110 | 121 | 135 |


| Valuationmetrics |  |  |  | $(W, x, \%)$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 2017A | 2018A | 2019F | 2020F | 2021F |
| EPS | 2,467 | 5,722 | 6,409 | 7,043 | 7,822 |
| PER | 27.4 | 8.3 | 7.1 | 6.5 | 5.8 |
| BPS | 38,616 | 41,701 | 47,426 | 53,742 | 60,836 |
| PBR | 1.7 | 1.1 | 0.9 | 0.8 | 0.7 |
| EBITDAPS | 9,375 | 12,223 | 13,226 | 14,386 | 15,718 |
| EVIEBITDA | 6.9 | 3.5 | 2.8 | 2.5 | 2.1 |
| SPS | 46,435 | 55,375 | 60,018 | 64,704 | 71,174 |
| PSR | 1.5 | 0.9 | 0.8 | 0.7 | 0.7 |
| CFPS | 7,481 | 10,295 | 13,479 | 14,639 | 15,971 |
| DPS | 700 | 750 | 750 | 750 | 750 |


| Financial ratios |  |  |  |  |  |  | (W, x, \%) |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | 2017A | 2018A | 2019F | 2020F | 2021F |  |  |
| Growth potential |  |  |  |  |  |  |  |
| Sales growth | 7.3 | 24.2 | 8.4 | 7.8 | 10.0 |  |  |
| OP growth | 0.5 | 55.2 | 9.5 | 8.9 | 10.0 |  |  |
| NP growth | -42.2 | 139.0 | 10.5 | 9.9 | 11.1 |  |  |
| Profitability |  |  |  |  |  |  |  |
| ROIC | 16.6 | 26.9 | 26.7 | 27.1 | 28.0 |  |  |
| ROA | 12.3 | 17.3 | 17.0 | 16.8 | 16.7 |  |  |
| ROE | 6.8 | 14.5 | 14.4 | 13.9 | 13.7 |  |  |
| Stability |  |  |  |  |  |  |  |
| Debt ratio | 37.9 | 37.1 | 33.1 | 29.5 | 26.1 |  |  |
| Net borrowings ratio | -15.1 | -13.7 | -18.5 | -19.8 | -21.8 |  |  |
| Interest coverage ratio | 25.8 | 44.1 | 43.6 | 48.2 | 55.1 |  |  |
| Sol |  |  |  |  |  |  |  |


| Balance sheet |  |  |  |  | (Wbn) |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 2017A | 2018A | 2019F | 2020F | 2021F |
| Current assets | 377 | 413 | 477 | 520 | 579 |
| Cash \& cash equiv. | 210 | 184 | 267 | 297 | 338 |
| Trade \& other receive. | 78 | 95 | 101 | 109 | 119 |
| Inventories | 48 | 62 | 66 | 71 | 78 |
| Other current assets | 42 | 72 | 43 | 43 | 43 |
| Long-term assets | 518 | 593 | 634 | 705 | 771 |
| Tangible assets | 309 | 355 | 386 | 412 | 434 |
| Investmentsinaffiliates | 120 | 137 | 183 | 228 | 274 |
| Otherlong-term assets | 89 | 101 | 66 | 65 | 64 |
| Total assets | 896 | 1,006 | 1,111 | 1,224 | 1,350 |
| Current liabilities | 233 | 253 | 258 | 262 | 268 |
| Payables \& other liab. | 85 | 100 | 104 | 108 | 114 |
| Borrowings | 129 | 121 | 121 | 121 | 121 |
| Currentportion of LT debts | 0 | 1 | 1 | 1 | 1 |
| Other current liabilities | 18 | 32 | 32 | 32 | 32 |
| Long-term liabilities | 13 | 19 | 19 | 17 | 12 |
| Borrowings | 6 | 15 | 15 | 13 | 8 |
| Convertible securities | 0 | 0 | 0 | 0 | 0 |
| Other long-term liab. | 7 | 4 | 4 | 4 | 4 |
| Total liabilities | 246 | 272 | 276 | 279 | 279 |
| Controlling interest | 645 | 726 | 825 | 935 | 1,058 |
| Capital stock | 9 | 9 | 9 | 9 | 9 |
| Capital surplus | 132 | 132 | 132 | 132 | 132 |
| Retained earnings | 514 | 602 | 701 | 811 | 935 |
| Other capital changes | -10 | -18 | -17 | -17 | -17 |
| Non-controlling interest | 5 | 8 | 9 | 11 | 12 |
| Total shareholder's equity | 650 | 734 | 835 | 946 | 1,071 |
| Net borrowings | -98 | -101 | -155 | -187 | -233 |
|  |  |  |  |  |  |


| Cashflowstatement |  |  |  | (Wbn) |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 2017A | 2018A | 2019F | 2020F | 2021F |
| Operating cash flows | 113 | 186 | 191 | 205 | 219 |
| NP | 0 | 0 | 114 | 125 | 139 |
| Non-cash items | 82 | 76 | 121 | 130 | 139 |
| $\quad$ Depreciation | 51 | 49 | 50 | 55 | 58 |
| FX gains | 10 | -1 | -7 | -7 | -7 |
| $\quad$ Equity method gain | -6 | -3 | -3 | -3 | -3 |
| $\quad$ Others | 27 | 32 | 81 | 86 | 91 |
| Chg in assets \& liab. | -13 | -13 | 5 | 3 | 0 |
| Other cash flows | 43 | 123 | -48 | -53 | -59 |
| Investing cash flow | -47 | -202 | -125 | -188 | -188 |
| Investment assets | -10 | -56 | -12 | -45 | -45 |
| Tangible assets |  |  |  |  |  |
| Others | -4 | -69 | -33 | -62 | -62 |
| Financing cash flows | 18 | -12 | -13 | -15 | -18 |
| Short-term borrowings | 0 | 0 | 0 | 0 | 0 |
| Bonds payable | 0 | 0 | 0 | 0 | 0 |
| Long-term borrowings | -28 | 5 | 0 | -2 | -5 |
| Rights offering | 56 | 0 | 0 | 0 | 0 |
| Cash dividends | -10 | -12 | -13 | -13 | -13 |
| Others | 0 | -5 | 0 | 0 | 0 |
| Net chg in cash | 72 | -26 | 83 | 30 | 41 |
| Beginning cash balance | 138 | 210 | 184 | 267 | 297 |
| Ending cash balance | 210 | 184 | 267 | 297 | 338 |
| NOPLAT | 68 | 115 | 126 | 137 | 151 |
| FCF | 85 | 82 | 97 | 112 | 129 |

[^6]- Daishin Securities assigns safety ratings to individual sectors and companies based on analyses and discussions by our analysts.
- Depending on whether Industry 4.0 will have a positive, neutral, or negative impact, each industry and company is assigned one of three safety ratings:



## [Compliance Notice]

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## [Investment rating \& Target price history]



| Date | 19.06.04 |
| :---: | :---: |
| Rating | Buy |
| Target price | 56,000 |
| Difi. (av. \%) |  |
| Difi. (max/min., \%) |  |
| Date |  |
| Rating |  |
| Target price |  |
| Difi. (aur. \%) |  |
| Diff. (max/min., \%) |  |
| Date |  |
| Rating |  |
| Target price |  |
| Diff. (av. \%) |  |
| Difi. (max/min., \%) |  |
| Date |  |
| Rating |  |
| Targetprice |  |
| Diff. (avi. \%) |  |
| Difi. (max./min. \%) |  |

Investment rating breakdown and framework (Jun. 1, 2019)

|  | BUY | MARKETPERFORM | UNDERPERFORM |
| :---: | :---: | :---: | :---: |
| Ratio | $88.4 \%$ | $11.1 \%$ | $0.0 \%$ |

Sector ratings breakdown

- Overweight: industry indicators are expected to outperform the market over the next six months.
- Neutral: industry indicators are expected to be in line with the market over the next six months.
- Underweight: industry indicators are expected to underperform the market over the next six months.


## Company ratings breakdown

- Buy: the stock is expected to outperform the market by at least $10 \%$ p over the next six months.
- Marketperform: the stock is expected to either outperform or underperform the market by less than 10\%p over the next six months.
- Underperform: the stock is expected to underperform the market by at least $10 \%$ p over the next six months.


[^0]:    Source: Soulbrain, Daishin Securities Research Center

[^1]:    Source: Soulbrain, Daishin Securities Research Center

[^2]:    Source: Soulbrain, Daishin Securities Research Center

[^3]:    Source: Soulbrain, Daishin Securities Research Center

[^4]:    Source: Soulbrain, Daishin Securities Research Center

[^5]:    Source: Soulbrain, Daishin Securities Research Center

[^6]:    Source: Soulbrain, Daishin Securities Research Center

