Results Comment

JVM (054950 KQ)

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Rating

BUY

6MTP (W)

44,000 maintain

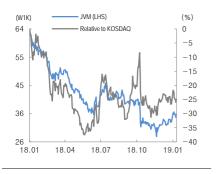
CP (W) (19.01.30)

35,150

Small caps

| Industry 4.0 safet | y rating | • | Sky I | Blue |
|----------------------|----------|---------|-----------|---------|
| | | | | |
| KOSDAQ | | | | 715.3 |
| Market cap (Wbn) | | | | 223 |
| Market cap portion | | | 0.09 | |
| Paid-in capital (con | nmon; Wb | n) | | 3 |
| 52w high/low (W) | | | 59,300 | /27,800 |
| 120d avg. trading v | olume (W | bn) | | 0.5 |
| Foreign ownership | (%) | | | 3.02 |
| Major | H | łanmi S | cience+3: | 42.58% |
| shareholders | Hanwl | ha Asse | et Manage | ment+2: |
| | | | | 9.41% |
| (0.1) | | | 21.1 | 4014 |

| (%) | 1M | ЗМ | 6M | 12M |
|-------------|------|-------|-------|-------|
| Abs. return | 4.6 | -2.4 | -17.5 | -39.7 |
| Rel. return | -1.2 | -12.1 | -11.2 | -22.4 |



A positive earnings surprise for 4Q18

BUY and 6M TP of W44,000 maintained

- Our target price is derived by applying a target P/E of 19.6x to the 2019E EPS. The target multiple is based on the 2019E P/E average of global peers (Panasonic, Tosho, and Omnicell).
- Despite the weak 2018 results stemming from sluggish exports, we keep BUY on JVM in view of a revenue turnaround in 2019 as its aggressive sales push pays off.

4Q18 OP climbs 28% yoy on seasonally high demand and strong exports

- For 4Q18, the company posted OP of W4.1bn (up 12% qoq; up 28% yoy) on revenue of W30.7bn (up 22% qoq; up 16% yoy), coming in 10% and 17% than our estimates, respectively.
- This solid performance was driven by a 22% yoy increase in exports, which carry higher margins than domestic sales and MRO (major consumables).
- 4Q18 revenue by business: Automatic prescription systems W16.7bn (up 24% yoy), MRO W10.6bn (up 16% yoy), merchandise W3.4bn (down 12% yoy)
- 4Q18 revenue by region: Korea 47%, North America 23%, Europe 23%, others 8%.
- In particular, revenue from North America grew 29% yoy to W7.2bn as JVM pushed into the long-term care market (such as nursing homes and correctional facilities).
- Revenue from Europe also increased 21% yoy to W6.9bn as New Slide Premier, a new machine that combines the existing automatic dispensing and packaging system with the inspection system VIZEN, made its way into Europe's largest pharmacy chain.

(Wbn, %)

| | | | | | 4Q18(P) | 1Q19(F) | | | | |
|---------|------|------|-------------------|--------|---------|---------|-----------|------------------|------|-------|
| | 4Q17 | 3Q18 | Previous estimate | Result | YoY | QoQ | Consensus | Daishin estimate | YoY | QoQ |
| Revenue | 26 | 25 | 28 | 31 | 16.1 | 22.2 | 28 | 26 | 13.8 | -17.0 |
| OP | 3 | 4 | 3 | 4 | 28.4 | 11.7 | 3 | 3 | 32.2 | -20.9 |
| NP | 1 | 3 | 3 | -0 | TTR | TTR | 3 | 3 | 25.7 | TTB |

| | | | 20 | Growth | | | | |
|---------|------|------|-------------------|--------|-------|-----------|------|---------|
| | 2016 | 2017 | Previous estimate | Result | Chg | Consensus | 2017 | 2018(F) |
| Revenue | 98 | 106 | 101 | 104 | 2.9 | 101 | 8.2 | -2.4 |
| OP | 15 | 19 | 13 | 13 | 5.1 | 14 | 26.7 | -29.0 |
| NP | 11 | 11 | 11 | 8 | -28.3 | 12 | 3.3 | -28.8 |

Source: JVM, FnGuide, Daishin Securities Research Center

Operating results and major financial data

(Wbn, W, x, %)

| | 2016A | 2017A | 2018P | 2019F | 2020F |
|-----------------|--------|--------|--------|--------|--------|
| Revenue | 98 | 106 | 104 | 116 | 128 |
| OP | 15 | 19 | 13 | 15 | 19 |
| Pretax profit | 12 | 15 | 11 | 16 | 20 |
| NP | 11 | 11 | 8 | 13 | 16 |
| NP (cont. int.) | 11 | 11 | 8 | 13 | 16 |
| EPS | 1,826 | 1,895 | 1,380 | 2,257 | 2,714 |
| PER | 23.5 | 30.3 | 25.5 | 15.6 | 13.0 |
| BPS | 17,717 | 19,135 | 20,137 | 21,941 | 24,169 |
| PBR | 2.4 | 3.0 | 1.7 | 1.6 | 1.5 |
| ROE | 10.2 | 9.8 | 6.6 | 9.9 | 10.9 |

Note: EPS, BPS, and ROE are based only on the controlling interest.



Yearly earnings forecast revision

(Wbn, W, %, %p)

| | Previo | Previous | | ed | C | Chg | | |
|------------------|--------|----------|-------|-------|--------------|-------|--|--|
| | 2018F | 2019F | 2018F | 2019F | 2018F | 2019F | | |
| Revenue | 101 | 106 | 104 | 116 | 2.9 | 8.6 | | |
| SG&A expenses | 27 | 28 | 27 | 29 | -0.4 | 3.2 | | |
| OP | 13 | 15 | 13 | 15 | 5.1 | 4.2 | | |
| Margin | 12.6 | 13.7 | 12.8 | 13.2 | 0.3 | -0.5 | | |
| Non-operating OP | 2 | 1 | -2 | 1 | Reduced loss | 10.9 | | |
| Pretax profit | 14 | 16 | 11 | 16 | -24.1 | 4.7 | | |
| NP (cont. int.) | 11 | 13 | 8 | 13 | -28.3 | 4.7 | | |
| Margin | 11.3 | 11.8 | 7.9 | 11.4 | -3.4 | -0.4 | | |
| EPS (cont. int.) | 1,923 | 2,146 | 1,380 | 2,257 | -28.3 | 5.2 | | |

Tab 1. JVM earnings forecast (revised)

(Wbn, %)

| | | 20 | 17 | | | 20 | 18 | | 2016 | 2017 | 2018P | 2019F |
|------------------------------|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4QP | 2016 | 2017 | 20105 | 2019F |
| Revenue | 22.9 | 28.7 | 28.1 | 26.5 | 22.4 | 25.3 | 25.2 | 30.7 | 98.1 | 106.2 | 103.6 | 115.6 |
| Automated dispensing systems | 11.2 | 15.0 | 15.4 | 13.4 | 10.6 | 12.5 | 12.0 | 16.7 | 48.2 | 55.0 | 51.9 | 62.7 |
| MRO (major consumables) | 9.0 | 10.4 | 9.4 | 9.2 | 9.4 | 9.8 | 10.3 | 10.6 | 38.1 | 37.9 | 40.1 | 40.8 |
| Merchandise | 2.7 | 3.3 | 3.3 | 3.9 | 2.4 | 3.0 | 2.8 | 3.4 | 12.3 | 13.2 | 11.7 | 12.1 |
| Revenue growth (%YoY) | | | | | | | | | | | | |
| Companywide | 9.4 | 6.3 | 25.9 | -5.1 | -1.9 | -11.9 | -10.5 | 16.1 | 11.0 | 8.2 | -2.4 | 11.5 |
| Automated dispensing systems | 25.4 | 10.0 | 58.2 | -12.8 | -4.9 | -16.4 | -22.0 | 24.1 | 8.7 | 15.3 | -5.7 | 20.8 |
| MRO (major consumables) | 0.1 | 1.8 | -1.7 | -2.1 | 4.4 | -6.0 | 9.3 | 16.2 | 14.2 | -0.5 | 5.6 | 1.7 |
| Merchandise | -10.2 | 5.3 | 9.7 | 23.5 | -10.7 | -9.8 | -13.5 | -11.9 | 9.8 | 7.2 | -11.5 | 3.9 |
| OP | 2.7 | 6.8 | 6.1 | 3.2 | 2.5 | 3.0 | 3.7 | 4.1 | 14.8 | 18.7 | 13.3 | 15.2 |
| OP margin (%) | 11.7 | 23.6 | 21.6 | 12.1 | 11.0 | 12.0 | 14.6 | 13.4 | 15.1 | 17.7 | 12.8 | 13.2 |
| OP growth (%YoY) | 1,431.4 | 7.5 | 253.6 | -51.4 | -8.3 | -55.2 | -39.3 | 28.4 | 128.6 | 26.7 | -29.0 | 14.5 |
| NP (contr. int.) | 1.9 | 4.6 | 4.0 | 0.9 | 2.3 | 2.6 | 3.3 | -0.1 | 11.1 | 11.5 | 8.2 | 13.2 |
| NP margin (%) | 8.4 | 16.2 | 14.3 | 3.3 | 10.1 | 10.4 | 13.2 | -0.2 | 11.3 | 10.8 | 7.9 | 11.4 |
| NP growth (%YoY) | 232.1 | 8.7 | 58.7 | -76.3 | 18.0 | -43.1 | -17.3 | TTR | 112.8 | 3.3 | -28.8 | 61.7 |

Source: JVM, Daishin Securities Research Center

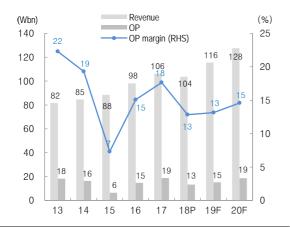
Tab 2. JVM earnings forecast (previous)

(Wbn, %)

| | | 20 ⁻ | 17 | 2017 | | 201 | 18 | | 2016 | 2047 | 20400 | 20405 |
|------------------------------|---------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4QP | 2016 | 2017 | 2018P | 2019F |
| Revenue | 22.9 | 28.7 | 28.1 | 26.5 | 22.4 | 25.3 | 25.2 | 27.9 | 98.1 | 106.2 | 100.8 | 106.5 |
| Automated dispensing systems | 11.2 | 15.0 | 15.4 | 13.4 | 10.6 | 12.5 | 12.2 | 15.2 | 48.2 | 55.0 | 50.6 | 55.9 |
| MRO (major consumables) | 9.0 | 10.4 | 9.4 | 9.2 | 9.4 | 9.8 | 10.1 | 9.6 | 38.1 | 37.9 | 38.8 | 39.0 |
| Merchandise | 2.7 | 3.3 | 3.3 | 3.9 | 2.4 | 3.0 | 2.8 | 3.0 | 12.3 | 13.2 | 11.3 | 11.6 |
| Revenue growth (%YoY) | | | | | | | | | | | | |
| Companywide | 9.4 | 6.3 | 25.9 | -5.1 | -1.9 | -11.9 | -10.5 | 5.2 | 11.0 | 8.2 | -5.1 | 5.7 |
| Automated dispensing systems | 25.4 | 10.0 | 58.2 | -12.8 | -4.9 | -16.4 | -20.7 | 13.4 | 8.7 | 15.3 | -8.0 | 10.3 |
| MRO (major consumables) | 0.1 | 1.8 | -1.7 | -2.1 | 4.4 | -6.0 | 7.1 | 4.8 | 14.2 | -0.5 | 2.3 | 0.5 |
| Merchandise | -10.2 | 5.3 | 9.7 | 23.5 | -10.7 | -9.8 | -13.5 | -22.1 | 9.8 | 7.2 | -14.5 | 2.5 |
| OP | 2.7 | 6.8 | 6.1 | 3.2 | 2.5 | 3.0 | 3.7 | 3.5 | 14.8 | 18.7 | 12.6 | 14.6 |
| OP margin (%) | 11.7 | 23.6 | 21.6 | 12.1 | 11.0 | 12.0 | 14.6 | 12.4 | 15.1 | 17.7 | 12.6 | 13.7 |
| OP growth (%YoY) | 1,431.4 | 7.5 | 253.6 | -51.4 | -8.3 | -55.2 | -39.3 | 8.1 | 128.6 | 26.7 | -32.5 | 15.5 |
| NP (contr. int.) | 1.9 | 4.6 | 4.0 | 0.9 | 2.7 | 2.6 | 3.3 | 2.7 | 11.1 | 11.5 | 11.4 | 12.6 |
| NP margin (%) | 8.4 | 16.2 | 14.3 | 3.3 | 12.0 | 10.4 | 13.2 | 9.8 | 11.3 | 10.8 | 11.3 | 11.8 |
| NP growth (%YoY) | 232.1 | 8.7 | 58.7 | -76.3 | 39.6 | -43.1 | -17.3 | 209.6 | 112.8 | 3.3 | -0.8 | 10.8 |

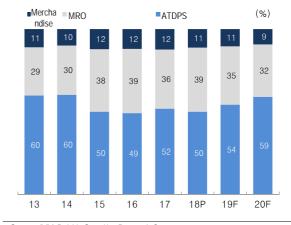
Source: JVM, Daishin Securities Research Center

Fig 1. Yearly earnings

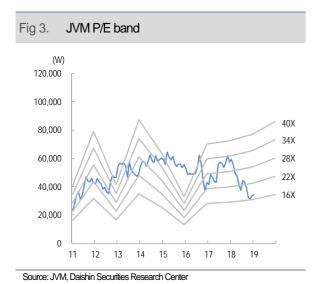


Source: JVM, Daishin Securities Research Center

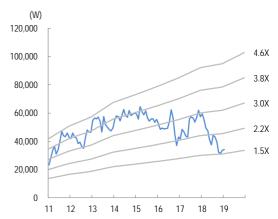
Fig 2. Revenue breakdown by business



JVM (054950 KQ)

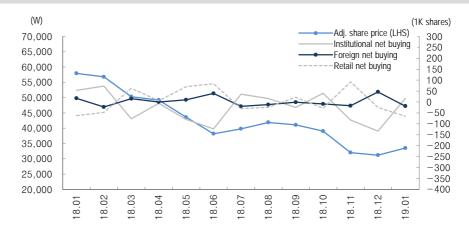






Source: JVM, Daishin Securities Research Center

Fig 5. Monthly net stock purchases by investor group



Source: JVM, Daishin Securities Research Center

Fig 6. Automated dispensing & packaging systems



Source: JVM, Daishin Securities Research Center

Fig 7. Automated dispensing cabinet (ADC)



Tab 3. Rising demand for pouch-type packaging in N. America (Bottle) and Europe (Blister)

| | Korea | Europe | North America | China |
|-------------------|--|----------------------|---------------|--------------|
| ATDPS penetration | About 85% | Less than 10% | Less than 10% | Less than 1% |
| | Pouch | Blister (Bingo card) | Bottle(vial) | Box |
| Packaging | The control of the co | | | 70.000 V |

Source: JVM, Daishin Securities Research Center

Tab 4. Global peers

| Company | | Panasonic | Tosho | Omnicell |
|----------------------|--------|-----------|-------|----------|
| Country | | Japan | Japan | US |
| Share price (Jan 30) | (\$) | 10 | 30 | 63 |
| Market cap. | (\$mn) | 23,606 | 1,138 | 2,490 |
| | 2017A | 72,046 | 218 | 716 |
| Revenue (\$mn) | 2018F | 75,927 | 253 | 791 |
| (ψ) | 2019F | 78,931 | 290 | 877 |
| | 2017A | 3,344 | 59 | 6 |
| OP (\$mn) | 2018F | 3,830 | 68 | 102 |
| (ψ) | 2019F | 3,999 | 80 | 132 |
| | 2017A | 4.6 | 27.2 | 0.8 |
| OP margin (%) | 2018F | 5.0 | 26.7 | 12.9 |
| | 2019F | 5.1 | 27.4 | 15.1 |
| | 2017A | 2,130 | 34 | 21 |
| NP (\$mn) | 2018F | 2,294 | 41 | 83 |
| (ψιτιι) | 2019F | 2,418 | 48 | 100 |
| | 2017A | 3.0 | 15.6 | 2.9 |
| NP margin (%) | 2018F | 3.0 | 16.2 | 10.4 |
| | 2019F | 3.1 | 16.6 | 11.4 |
| | 2017A | 15.0 | 41.9 | 143.6 |
| P/E (x) | 2018F | 9.8 | 27.7 | 30.8 |
| | 2019F | 9.3 | 23.6 | 26.0 |
| | 2017A | 2.1 | 6.1 | 3.6 |
| P/B (x) | 2018F | 1.3 | 4.1 | 4.0 |
| | 2019F | 1.2 | 3.6 | 3.6 |
| | 2017A | 5.7 | 20.4 | 31.3 |
| EV/EBITDA (x) | 2018F | 4.1 | 14.3 | 21.5 |
| | 2019F | 3.9 | 12.0 | 17.3 |
| | 2017A | 14.4 | 15.6 | 4.3 |
| ROE (%) | 2018F | 13.9 | 15.8 | 6.0 |
| | 2019F | 13.3 | 16.7 | 8.3 |
| | 2017A | 1.0 | 0.9 | 0.3 |
| EPS (\$) | 2018F | 1.0 | 1.1 | 2.0 |
| | 2019F | 1.0 | 1.3 | 2.4 |
| FY.M | | 3 | 3 | 12 |

Source: Bloomberg, Daishin Securities Research Center

JVM (054950 KQ)

Company profile

Overview

- Established in 1977 and listed on the KOSDAQ in 2006
- Became a subsidiary of Hanmi Science in 2016
- Develops and manufactures automation systems, for which Hanmi does the marketing
- 2018E ales breakdown: Automated systems 50%, MRO 39%, and merchandise products 11%
- Assets W174.5bn, liabilities W48.7bn, equity capital W125.8bn (3Q18)
- # of outstanding shares 6,330,908 / # of treasury shares 320,900 (3Q18)

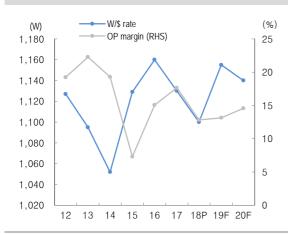
Share price catalysts

- Won/dollar
- Won/euro
- North American exports
- Performance of new products
- Issues at Hanmi Pharmaceuticals

Source: JVM. Daishin Securities Research Center

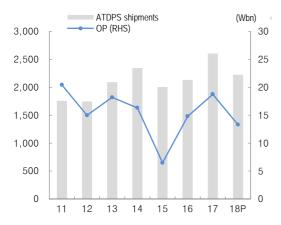
Earnings drivers

Fig 8. W/\$ rate vs. OP margin



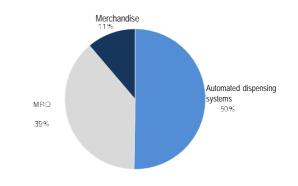
Source: JVM, Daishin Securities Research Center

Fig 10. ATDPS shipments. vs. OP



Source: JVM, Daishin Securities Research Center

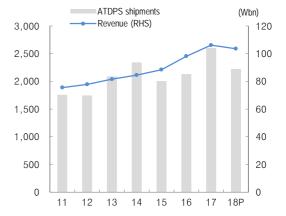
Revenue breakdown by business



Note: As of 2018.

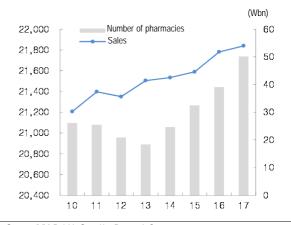
Source: JVM, Daishin Securities Research Center

Fig 9. ATDPS shipments vs. revenue



Source: JVM, Daishin Securities Research Center

Fig 11. # of pharmacies in Korea vs. domestic revenue



Financial statements

| Income statement | | | | | (Wbn) |
|----------------------------------|-------|-------|-------|-------|-------|
| | 2016A | 2017A | 2018F | 2019F | 2020F |
| Revenue | 98 | 106 | 104 | 116 | 128 |
| Cost of goods sold | 56 | 61 | 63 | 71 | 77 |
| Gross profit | 43 | 45 | 40 | 44 | 51 |
| SG&A expenses | 28 | 26 | 27 | 29 | 32 |
| OP | 15 | 19 | 13 | 15 | 19 |
| OP margin | 15.1 | 17.7 | 12.8 | 13.2 | 14.6 |
| EBITDA | 21 | 25 | 19 | 20 | 23 |
| Non-OP | -3 | -4 | -2 | 1 | 1 |
| Income from affiliates | 0 | 0 | 0 | 0 | 0 |
| Financial revenue | 2 | 1 | 2 | 2 | 2 |
| FX related gains | 1 | 1 | 0 | 0 | 0 |
| Financial expense | -1 | -2 | 0 | 0 | 0 |
| FX related losses | 1 | 1 | 0 | 0 | 0 |
| Others | -3 | -3 | -4 | 0 | 0 |
| Income before taxes | 12 | 15 | 11 | 16 | 20 |
| Income tax expense | -1 | -3 | -3 | -3 | -4 |
| Income from cont. op. | 11 | 11 | 8 | 13 | 16 |
| Income from discont. op. | 0 | 0 | 0 | 0 | 0 |
| NP | 11 | 11 | 8 | 13 | 16 |
| NP margin | 11.3 | 10.8 | 7.9 | 11.4 | 12.4 |
| NP for non-contr. interest | 0 | 0 | 0 | 0 | 0 |
| NP for contr. interest | 11 | 11 | 8 | 13 | 16 |
| Valuation of AFS fin. assets | 0 | 0 | 0 | 0 | 0 |
| Other compreh. income | 0 | 0 | 0 | 0 | 0 |
| Comprehensive income | 11 | 11 | 8 | 13 | 16 |
| Comp. income for non-contr. Int. | 0 | 0 | 0 | 0 | 0 |
| Comp. income for contr. int. | 11 | 11 | 8 | 13 | 16 |

| Balance sheet | | | | | (Wbn) |
|-----------------------------|-------|-------|-------|-------|-------|
| | 2016A | 2017A | 2018F | 2019F | 2020F |
| Current assets | 69 | 68 | 78 | 94 | 110 |
| Cash & cash equiv. | 9 | 3 | 8 | 17 | 28 |
| Trade & other receive. | 23 | 29 | 23 | 25 | 28 |
| Inventories | 18 | 20 | 26 | 29 | 32 |
| Other current assets | 20 | 15 | 22 | 22 | 22 |
| Long-term assets | 107 | 105 | 102 | 100 | 99 |
| Tangible assets | 55 | 57 | 57 | 57 | 57 |
| Investments in affiliates | 0 | 0 | 0 | 0 | 0 |
| Other long-term assets | 52 | 48 | 45 | 43 | 41 |
| Total assets | 177 | 172 | 180 | 193 | 209 |
| Current liabilities | 56 | 47 | 49 | 50 | 52 |
| Payables & other liab. | 13 | 18 | 21 | 23 | 24 |
| Borrowings | 38 | 25 | 22 | 22 | 22 |
| Current portion of LT debts | 0 | 0 | 0 | 0 | 0 |
| Other current liabilities | 5 | 4 | 6 | 6 | 6 |
| Long-term liabilities | 9 | 4 | 4 | 4 | 4 |
| Borrowings | 2 | 0 | 0 | 0 | 0 |
| Convertible securities | 0 | 0 | 0 | 0 | 0 |
| Other long-term liab. | 7 | 4 | 4 | 4 | 4 |
| Total liabilities | 64 | 51 | 53 | 54 | 56 |
| Controlling interest | 112 | 121 | 127 | 139 | 153 |
| Capital stock | 3 | 3 | 3 | 3 | 3 |
| Capital surplus | 48 | 48 | 48 | 48 | 48 |
| Retained earnings | 67 | 78 | 84 | 95 | 109 |
| Other capital changes | -6 | -8 | -8 | -8 | -8 |
| Non-controlling interest | 0 | 0 | 0 | 0 | 0 |
| Total shareholder's equity | 112 | 121 | 127 | 139 | 153 |
| Net borrowings | 14 | 8 | -6 | -16 | -26 |
| | _ | | | | |

| Valuation metrics | | | | | (W, x, %) |
|-------------------|--------|--------|--------|--------|-----------|
| | 2016A | 2017A | 2018F | 2019F | 2020F |
| EPS | 1,826 | 1,895 | 1,380 | 2,257 | 2,714 |
| PER | 23.5 | 30.3 | 25.5 | 15.6 | 13.0 |
| BPS | 17,717 | 19,135 | 20,137 | 21,941 | 24,169 |
| PBR | 2.4 | 3.0 | 1.7 | 1.6 | 1.5 |
| EBITDAPS | 3,378 | 3,954 | 2,969 | 3,210 | 3,704 |
| EV/EBITDA | 13.3 | 14.8 | 11.5 | 10.2 | 8.4 |
| SPS | 15,503 | 16,771 | 16,370 | 18,256 | 20,149 |
| PSR | 2.8 | 3.4 | 2.1 | 1.9 | 1.7 |
| CFPS | 3,646 | 4,709 | 3,762 | 4,596 | 5,090 |
| DPS | 320 | 300 | 300 | 300 | 300 |

| Financial ratios | | | | | (W, x, %) |
|-------------------------|-------|-------|--------------|-------|-----------|
| | 2016A | 2017A | 2018F | 2019F | 2020F |
| Growth potential | | | | | |
| Sales growth | 11.0 | 8.2 | -2.4 | 11.5 | 10.4 |
| OP growth | 128.6 | 26.7 | -29.0 | 14.5 | 21.9 |
| NP growth | 112.8 | 3.3 | -28.8 | 61.7 | 20.2 |
| Profitability | | | | | |
| ROIC | 13.5 | 13.8 | 9.7 | 12.2 | 14.5 |
| ROA | 8.7 | 10.7 | 7.5 | 82 | 92 |
| ROE | 10.2 | 9.8 | 6.6 | 9.9 | 10.9 |
| Stability | | | | | |
| Debt ratio | 57.5 | 42.3 | 41.5 | 39.2 | 36.6 |
| Net borrowings ratio | 12.1 | 6.7 | -4 .7 | -11.2 | -17.3 |
| Interest coverage ratio | 29.4 | 41.5 | 35.9 | 41.1 | 50.1 |

| Cash flow statement | | | | | (Wbn) |
|------------------------|-------|-------|-------|-------|-------|
| | 2016A | 2017A | 2018F | 2019F | 2020F |
| Operating cash flows | 15 | 18 | 22 | 20 | 22 |
| NP | 11 | 11 | 8 | 13 | 16 |
| Non-cash items | 12 | 18 | 16 | 16 | 16 |
| Depreciation | 7 | 6 | 5 | 5 | 5 |
| FX gains | 0 | 0 | 0 | 0 | 0 |
| Equity method gain | 0 | 0 | 0 | 0 | 0 |
| Others | 5 | 12 | 10 | 11 | 11 |
| Chg in assets & liab. | -6 | -8 | -1 | -8 | -8 |
| Other cash flows | -2 | -4 | -1 | -2 | -3 |
| Investing cash flow | -10 | -7 | -10 | -3 | -4 |
| Investment assets | 0 | 0 | -1 | 0 | 0 |
| Tangible assets | -3 | -5 | -4 | -3 | -4 |
| Others | -8 | -2 | -5 | 0 | 0 |
| Financing cash flows | 1 | -17 | -3 | -1 | -1 |
| Short-term borrowings | 6 | -14 | -2 | 0 | 0 |
| Bonds payable | 0 | 0 | 0 | 0 | 0 |
| Long-term borrowings | 0 | -2 | 0 | 0 | 0 |
| Rights offering | 0 | 0 | 0 | 0 | 0 |
| Cash dividends | -1 | -1 | -2 | -2 | -2 |
| Others | -3 | -1 | 1 | 1 | 1 |
| Net chg in cash | 7 | -6 | 4 | 10 | 11 |
| Beginning cash balance | 3 | 9 | 3 | 8 | 17 |
| Ending cash balance | 9 | 3 | 8 | 17 | 28 |
| NOPLAT | 14 | 15 | 10 | 12 | 15 |
| FCF | 12 | 9 | 11 | 14 | 16 |
| | | | | | |

Appendix

[Daishin House View: Industry 4.0 safety rating]

- · 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:

Dark Gray (negative) Neutral Green (neutral) Sky Blue (positive)

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[Investment rating & Target price history]

JVM (054950 KQ)



| Date | 19.01.31 | 19.01.11 | 18.11.15 |
|---------------------|----------|----------|----------|
| Rating | BUY | BUY | BUY |
| Target price | 44,000 | 44,000 | 44,000 |
| Diff. (avr. %) | | (26.70) | (28.35) |
| Diff. (max/min., %) | | (18.07) | (23.64) |
| Data | | | |

Date Rating

Target price Diff. (avr. %)

Diff. (avr. %)
Diff. (max/min., %)

Date Rating

Target price Diff. (avr. %)

Diff. (avr. %)
Diff. (max/min., %)

Date Rating

Target price

Diff. (avr. %)
Diff. (max/min., %)

Investment rating breakdown and framework (Jan 28, 2019)

| | BUY | MARKETPERFORM | UNDERPERFORM |
|-------|-------|---------------|--------------|
| Ratio | 85.7% | 13.2% | 1.1% |

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.