# AeroSpace Technology of Korea (067390 KS)

Solid growth

## BUY (MAINTAIN)

| Price (Feb. 14) | W14,650 |
|-----------------|---------|
| Target Price    | W20,000 |
| % variance      | 36.5%   |

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| KOSPI                    |                | 2,225.85p  |
|--------------------------|----------------|------------|
| KOSDAQ                   |                | 742.27p    |
| Market Cap.              | W230.2bn/ L    | JS202.0mn  |
| Par Value                |                | W500       |
| Outstanding Shares       |                | 15.7mn     |
| Free Floating Shares     | 12 <b>.</b> 2m | nn(77.6%)  |
| 52-Week High/Low         | W21,60         | 00/W9,490  |
| 60-Day Avg. Trading Volu | me 18          | 30,470shrs |
| 60-Day. Avg. Trading T/0 |                | W2,170mn   |
| Foreign Ownership        |                | 1.06%      |
| Major Shareholders       |                |            |
| Hui-Won Kim              | and 1 other    | 22.16%     |
| KAY                      | lnvestment     | 11.73%     |
| Absolute Performance     | 3M             | 45.0%      |
|                          | 6M             | 3.9%       |
|                          | 12M            | -31.9%     |
| Relative performance     | 3M             | 31.2%      |
| to KOSDAQ                | 6M             | 6.7%       |
|                          | 12M            | -22.2%     |

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- 4Q18 operating profit of W3.8bn (+135.3% YoY) beats consensus by 34.6%
  - 2019 outlook: Sales of W154.3bn (+31.9% YoY), operating profit of W15.7bn (+43.8% YoY)
- Retain BUY and raise target price by 25% to W20,000 ٠

## 4Q18 operating profit of W3.8bn (+135.3% YoY) beats consensus by 34.6%

AeroSpace Technology of Korea posted sales of W33bn (+15.8% YoY) in 4Q18. Operating profit came in at W3.8bn (+135.3% YoY), beating the W2.8bn consensus by 34.6%. Increased shipments of section 48 for B737 MAX (+6 units/month) propelled sales growth. Section 48 sales amounted to an estimated W12.4bn (+97.5% YoY). Operating profit margin reached the post-IPO high of 11.4% (+5.8%p YoY). Strong earnings were attributable to increased output of section 48 and greater production efficiency.

## 2019 outlook: Sales of W154.3bn (+31.9% YoY), operating profit of W15.7bn (+43.8% YoY)

We forecast sales of W154.3bn (+31.9% YoY) and operating profit of W15.7bn (+43.8% YoY) for 2019, based on the following: 1) increase in monthly production of Boeing 737 jets (52 units in 4Q18  $\rightarrow$  57 units in 4Q19), which account for 60.9% of sales as of 2017; 2) sales recognition of orders for new products; and 3) continuing growth of section 48 production. Embraer's E2 fuselage order should generate sales of W20bn in 2019. The monthly production of B737 MAX section 48 is expected to increase from 10 units in 4Q18 to 19 units in 4Q19.

Full-year order intake is projected at US\$400mn (-37.3% YoY). The company is working on winning fuselage and section 48 orders from European clients.

## Retain BUY and raise target price by 25% to W20,000

We raise our target price for AeroSpace Technology of Korea to W20,000, based on 2021F EPS of W1,007 and a target PER of 20x (6% discount to average PER of 21.2x of aircraft parts suppliers). Investment points are: 1) ramp-up of shipments of newly ordered products; 2) increased number of B737 deliveries; and 3) share price of Boeing, the largest client, hitting new highs on the back of brisk earnings. A possible EPS dilution (19.3%) after the conversion of CBs poses a concern.

| Year to Dec. | Sales  | OP     | Pre-tax | NP     | EPS   | Growth | BPS   | PER   | EV/EBITDA | PBR | ROE  | Net Debt to      |
|--------------|--------|--------|---------|--------|-------|--------|-------|-------|-----------|-----|------|------------------|
|              | (W bn) | (W bn) | (W bn)  | (W bn) | (Won) | (%)    | (Won) | (X)   | (X)       | (X) | (%)  | Equity Ratio (%) |
| 2016         | 87.9   | 7.3    | 5.1     | 7.3    | 512   | N/A    | 5,284 | 34.2  | 28.5      | 3.3 | 9.5  | 96.2             |
| 2017         | 97.2   | 8.1    | 1.1     | 1.4    | 99    | (80.7) | 6,715 | 195.4 | 29.3      | 2.9 | 1.7  | 113.0            |
| 2018F        | 117.0  | 10.9   | 6.7     | 4.9    | 318   | 221.0  | 6,773 | 32.4  | 20.9      | 1.5 | 4.8  | 166.7            |
| 2019F        | 154.3  | 15.7   | 12.2    | 8.8    | 559   | 75.9   | 7,332 | 26.2  | 19.6      | 2.0 | 7.9  | 166.3            |
| 2020F        | 191.3  | 20.8   | 17.3    | 12.5   | 796   | 42.3   | 8,128 | 18.4  | 16.1      | 1.8 | 10.3 | 147.3            |

| 4Q18 preli     | iminary res | ults |         |       |         |      |           |
|----------------|-------------|------|---------|-------|---------|------|-----------|
|                | 4Q18P       | 3Q18 | QoQ (%) | 4Q17  | YoY (%) | SHIC | Consensus |
| Sales (bn KRW) | 33.0        | 32.5 | 1.6     | 28.5  | 15.8    | 33.4 | 34.1      |
| OP             | 3.8         | 3.0  | 24.7    | 1.6   | 135.3   | 3.2  | 2.8       |
| Pre-tax profit | 1.7         | 1.0  | 75.4    | (2.1) | TP      | 2.4  | 1.4       |
| NP             | 1.0         | 0.7  | 36.4    | (1.3) | TP      | 1.7  | 1.0       |
| OPM (%)        | 11.4        | 9.3  | -       | 5.6   | -       | 9.5  | 8.2       |
| Pre-tax margin | 5.3         | 3.0  | -       | (7.4) | -       | 7.2  | 4.1       |
| NPM            | 2.9         | 2.1  | -       | (4.7) | -       | 5.2  | 2.8       |

Source: QuantiWise, company data, Shinhan Investment Corp.

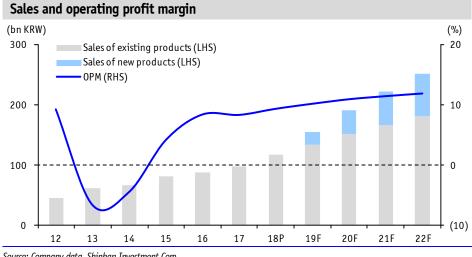
## Earnings forecast revision

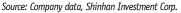
|                |       | After |       |       | Before |       | C      | hange (%) |       | C     | onsensus |       |
|----------------|-------|-------|-------|-------|--------|-------|--------|-----------|-------|-------|----------|-------|
|                | 2018P | 2019F | 2020F | 2018F | 2019F  | 2020F | 2018F  | 2019F     | 2020F | 2018F | 2019F    | 2020F |
| Sales (bn KRW) | 117.0 | 154.3 | 191.3 | 117.4 | 154.3  | 191.3 | (0.3)  | 0.0       | 0.0   | 118.2 | 153.2    | 191.7 |
| OP             | 10.9  | 15.7  | 20.8  | 10.3  | 15.6   | 20.8  | 5.9    | 0.3       | 0.3   | 10.2  | 15.8     | 20.4  |
| Pre-tax profit | 6.7   | 12.2  | 17.3  | 7.4   | 12.1   | 17.3  | (8.9)  | 0.3       | 0.3   | 6.2   | 12.1     | 17.2  |
| NP             | 4.9   | 8.8   | 12.5  | 5.7   | 8.8    | 12.5  | (13.6) | 0.3       | 0.3   | 4.9   | 8.9      | 12.3  |
| EPS (KRW)      | 318.0 | 559.3 | 796.1 | 368.1 | 557.6  | 793.9 | (13.6) | 0.3       | 0.3   | -     | -        | -     |
| OPM (%)        | 9.3   | 10.1  | 10.9  | 8.8   | 10.1   | 10.9  | -      | -         | -     | 8.6   | 10.3     | 10.6  |
| Pre-tax margin | 5.8   | 7.9   | 9.1   | 6.3   | 7.9    | 9.0   | -      | -         | -     | 5.2   | 7.9      | 8.9   |
| NPM            | 4.2   | 5.7   | 6.5   | 4.9   | 5.7    | 6.5   | -      | -         | -     | 4.1   | 5.8      | 6.4   |

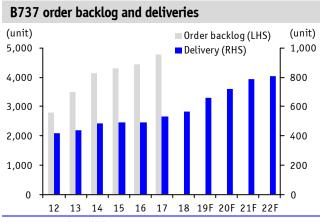
Source: Company data, QuantiWise, Shinhan Investment Corp.

## Earnings trend and outlook

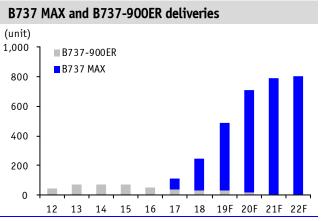
| Earnings ciena an           | u vulloon         |        |       |       |       |        |       |       |       |       |       |       |       |       |       |
|-----------------------------|-------------------|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                             |                   | 1018   | 2Q18  | 3Q18  | 4Q18P | 1Q19F  | 2Q19F | 3Q19F | 4Q19F | 2017  | 2018P | 2019F | 2020F | 2021F | 2022F |
| Total order intake (mn USD) | Total             | 2,971  | 2,953 | 2,953 | 2,953 | 3,053  | 3,153 | 3,253 | 3,353 | 2,315 | 2,953 | 3,353 | 3,753 | 4,153 | 4,553 |
| New order intake            |                   | 656    | (18)  | 0     | 0     | 100    | 100   | 100   | 100   | 385   | 637   | 400   | 400   | 400   | 400   |
| Sales (bn KRW)              | Total             | 25.2   | 26.4  | 32.5  | 33.0  | 30.8   | 39.6  | 40.8  | 43.1  | 97.2  | 117.0 | 154.3 | 191.3 | 221.9 | 252.3 |
|                             | Existing products | 25.2   | 26.4  | 32.5  | 33.0  | 30.8   | 33.2  | 34.4  | 35.8  | 97.2  | 117.0 | 134.2 | 151.8 | 166.4 | 180.8 |
|                             | Section 48        | 3.9    | 10.2  | 12.6  | 12.4  | 13.0   | 15.1  | 16.1  | 17.0  | 17.5  | 39.1  | 61.2  | 71.7  | 78.0  | 84.9  |
|                             | Bulkhead          | 4.5    | 4.3   | 4.7   | 6.4   | 6.5    | 6.6   | 6.6   | 6.8   | 19.0  | 20.0  | 26.6  | 29.4  | 32.7  | 35.6  |
|                             | U/L Deck          | 1.8    | 2.3   | 3.2   | 2.4   | 2.4    | 2.5   | 2.5   | 2.5   | 7.3   | 9.7   | 9.9   | 10.9  | 12.2  | 13.2  |
|                             | Stringer, etc.    | 1.9    | 1.8   | 1.6   | 1.6   | 1.7    | 1.7   | 1.8   | 1.8   | 5.8   | 6.9   | 7.0   | 7.6   | 8.3   | 9.1   |
|                             | Others            | 23.4   | 24.1  | 26.2  | 26.8  | 27.3   | 27.8  | 28.3  | 29.0  | 69.8  | 100.5 | 112.4 | 122.7 | 134.9 | 145.9 |
|                             | New products      | 0.0    | 0.0   | 0.0   | 0.0   | 0.0    | 6.4   | 6.4   | 7.4   | 0.0   | 0.0   | 20.1  | 39.5  | 55.5  | 71.5  |
| COGS                        | Total             | 21.1   | 22.3  | 26.2  | 26.8  | 25.7   | 32.6  | 33.6  | 35.5  | 82.2  | 96.3  | 127.4 | 156.7 | 180.9 | 204.7 |
| COGS ratio (%)              |                   | 83.8   | 84.3  | 80.7  | 81.2  | 83.3   | 82.5  | 82.4  | 82.2  | 84.5  | 82.3  | 82.6  | 81.9  | 81.5  | 81.2  |
| SG&A                        | Total             | 2.1    | 2.0   | 3.2   | 2.4   | 2.3    | 2.9   | 3.0   | 3.1   | 7.0   | 9.8   | 11.2  | 13.7  | 15.7  | 17.6  |
| SG&A ratio (%)              |                   | 8.4    | 7.6   | 10.0  | 7.4   | 7.5    | 7.3   | 7.3   | 7.2   | 7.2   | 8.4   | 7.3   | 7.2   | 7.1   | 7.0   |
| OP (bn KRW)                 | Total             | 2.0    | 2.1   | 3.0   | 3.8   | 2.8    | 4.0   | 4.2   | 4.5   | 8.1   | 10.9  | 15.7  | 20.8  | 25.3  | 29.9  |
| Pre-tax profit              |                   | 0.7    | 3.3   | 1.0   | 1.7   | 2.0    | 3.2   | 3.3   | 3.7   | 1.1   | 6.7   | 12.2  | 17.3  | 21.9  | 26.7  |
| NP                          |                   | 0.6    | 2.7   | 0.7   | 1.0   | 1.4    | 2.3   | 2.4   | 2.6   | 1.4   | 4.9   | 8.8   | 12.5  | 15.8  | 19.3  |
| Sales growth (%)            | YoY               | 16.9   | 19.9  | 29.0  | 15.8  | 22.4   | 49.9  | 25.7  | 30.8  | 10.6  | 20.4  | 31.9  | 24.0  | 16.0  | 13.7  |
|                             | QoQ               | (11.6) | 4.8   | 23.1  | 1.6   | (6.6)  | 28.4  | 3.2   | 5.7   | -     | -     | -     | -     | -     | -     |
| OP growth                   | YoY               | 9.6    | (1.6) | 21.2  | 135.3 | 45.0   | 89.7  | 39.6  | 20.5  | 9.7   | 35.2  | 43.8  | 33.2  | 21.5  | 18.1  |
|                             | QoQ               | 22.4   | 8.7   | 41.7  | 24.7  | (24.5) | 42.2  | 4.3   | 7.7   | -     | -     | -     | -     | -     | -     |
| OPM (%)                     | Total             | 7.8    | 8.1   | 9.3   | 11.4  | 9.2    | 10.2  | 10.3  | 10.5  | 8.3   | 9.3   | 10.1  | 10.9  | 11.4  | 11.9  |
| Pre-tax margin              |                   | 2.7    | 12.6  | 3.0   | 5.3   | 6.5    | 8.0   | 8.2   | 8.5   | 1.1   | 5.8   | 7.9   | 9.1   | 9.9   | 10.6  |
| NPM                         |                   | 2.3    | 10.3  | 2.1   | 2.9   | 4.7    | 5.8   | 5.9   | 6.1   | 1.5   | 4.2   | 5.7   | 6.5   | 7.1   | 7.6   |





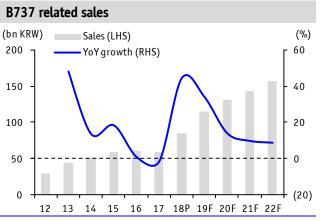


Source: Company data, Shinhan Investment Corp.

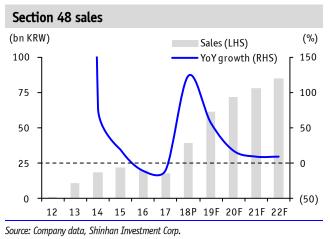


Source: Company data, Shinhan Investment Corp.

Note: Section 48 for B737 MAX makes up 30-50% of total deliveries



Source: Company data, Shinhan Investment Corp. Note: Estimated sales



Note: Growth of 2,546.2% in 2013, 78.1% in 2014

|           | Product                                   | Year of  | Contract  |       |       |       |       | To    | tal order | s     |       |       |       |       | Estimated |
|-----------|---|----------|-----------|-------|-------|-------|-------|-------|-----------|-------|-------|-------|-------|-------|-----------|
| (mn USD)  |   | contract | expiry    | 1Q16  | 2Q16  | 3Q16  | 4Q16  | 1Q17  | 2Q17      | 3Q17  | 4Q17  | 1Q18  | 2Q18  | 3Q18  | sales     |
| SPIRIT    | B737 NG SEC. 48                           | 2012     | 2020      | 423   | 423   | 423   | 423   | 423   | 423       | 423   | 423   | 423   | 423   | 423   | 52.8      |
|           | B737 MAX SECTION 48                       | 2017     | 2024      | -     | -     | -     | -     | -     | -         | 259   | 259   | 259   | 259   | 259   | 37.0      |
|           | B737 Door Detail                          | 2017     | 2023      | -     | -     | -     | 103   | 103   | 103       | 103   | 103   | 103   | 103   | 103   | 17.2      |
|           | LCC Package                               | 2018     | 2026      | -     | -     | -     | 55    | 104   | 104       | 104   | 104   | 104   | 104   | 104   | 13.0      |
|           | B737 NG Stringer                          | 2016     | 2018      | -     | -     | 24    | 24    | 24    | 24        | 24    | 24    | 24    | 24    | 24    | 11.8      |
|           | B737 BKHD 1088                            | 2007     | 2020      | 144   | 144   | 144   | 144   | 144   | 144       | 144   | 144   | 144   | 144   | 144   | 11.1      |
|           | B737 UPR/LWR DECK                         | 2011     | 2020      | 87    | 87    | 87    | 87    | 87    | 87        | 87    | 87    | 87    | 87    | 87    | 9.7       |
|           | B738 BKHD 1156, 1042                      | 2007     | 2020      | 65    | 65    | 65    | 65    | 65    | 65        | 65    | 65    | 65    | 65    | 65    | 5.0       |
|           | SA  | 2009     | 2020      | 53    | 53    | 53    | 53    | 53    | 53        | 53    | 53    | 53    | 53    | 53    | 4.8       |
|           | B737 APU Door                             | 2011     | 2020      | 37    | 37    | 37    | 37    | 37    | 37        | 37    | 37    | 37    | 37    | 37    | 4.2       |
|           | B737MAX Frame Assembly                    | 2016     | 2019      | -     | -     | 2     | 2     | 2     | 2         | 2     | 2     | 2     | 2     | 2     | 0.6       |
|           | MAX Stringer                              | 2015     | 2020      | 2     | 2     | 2     | 2     | 2     | 2         | 2     | 2     | 2     | 2     | 2     | 0.4       |
|           | B777X V-BLADE                             | 2016     | 2021      | -     | -     | 2     | 2     | 2     | 2         | 2     | 2     | 2     | 2     | 2     | 0.3       |
|           | B737MAX Frame & Frame Support             | 2016     | 2021      | -     | -     | 0     | 0     | 0     | 0         | 0     | 0     | 0     | 0     | 0     | 0.1       |
|           | B777X Seal Retainer                       | 2016     | 2019      | -     | -     | 0     | 0     | 0     | 0         | 0     | 0     | 0     | 0     | 0     | 0.0       |
| BOEING    | B747 BCF MDCD & SS                        | 2011     | 250 units | 326   | 326   | 326   | 326   | 326   | 326       | 326   | 326   | 326   | 326   | 326   | -         |
| SAC       | C Series Stringer (66 items)              | 2012     | 100 units | 6     | 6     | 6     | 6     | 6     | 6         | 6     | 6     | 6     | 6     | 6     | -         |
|           | C Series Stringer (156 items)             | 2015     | 100 units | 4     | 4     | 4     | 4     | 4     | 4         | 4     | 4     | 4     | 4     | 4     | -         |
|           | C Series Stringer (45 items)              | 2015     | 100 units | 1     | 1     | 1     | 1     | 1     | 1         | 1     | 1     | 1     | 1     | 1     | -         |
| STAIS     | B757 MDCD & CED                           | 2005     | 150 units | 22    | 22    | 22    | 22    | 22    | 22        | 22    | 22    | 22    | 22    | 22    | -         |
| TA-VAD    | E2 Skin Panel                             | 2015     | 2034      | 350   | 350   | 350   | 350   | 350   | 350       | 350   | 350   | 350   | 350   | 350   | 18.4      |
|           | B747 Empennage                            | 2015     | 2019      | 32    | 32    | 32    | 32    | 32    | 32        | 32    | 32    | 32    | 32    | 32    | 8.1       |
|           | E2 Floor Grid Assy                        | 2017     | 2027      | -     | -     | -     | -     | -     | -         | 60    | 60    | 60    | 60    | 60    | 6.0       |
|           | B747 AFT Body                             | 2011     | 2021      | 50    | 44    | 50    | 50    | 50    | 50        | 50    | 50    | 50    | 50    | 50    | 5.0       |
|           | E2 Pressure Dome BKHD                     | 2016     | 2034      | 56    | 56    | 56    | 56    | 56    | 56        | 56    | 56    | 56    | 56    | 56    | 3.1       |
|           | E2 Sheet Metal                            | 2017     | 2027      | -     | -     | -     | -     | -     | -         | 9     | 9     | 9     | 9     | 9     | 0.9       |
|           | 747-8 BKHD Skin Panel Assy                | 2015     | 38 units  | 6     | 56    | 6     | 6     | 6     | 6         | 6     | 6     | 6     | 6     | 6     | -         |
|           | E2 Fuselage Integration                   | 2017     | 2034      | -     | -     | -     | -     | -     | -         | -     | -     | 615   | 615   | 615   | 36.2      |
|           | Other parts (B747)                        | 2017     | 100 units | -     | -     | -     | -     | -     | -         | 0     | 0     | 37    | 37    | 0     | -         |
|           | Bombardier G7000, G8000                   | 2017     | 2027      | -     | -     | -     | -     | -     | -         | -     | -     | -     | -     | 37    | 3.7       |
|           | B767 Sheet Metal                          | 2018     | 2022      | -     | -     | -     | -     | -     | -         | -     | -     | 1     | 1     | 1     | 0.3       |
| SACC      | Q400 Skin                                 | 2015     | 2020      | 4     | 4     | 4     | 4     | 4     | 6         | 6     | 6     | 6     | 6     | 6     | 1.3       |
|           | B737 Sec 48 Skin                          | 2015     | 2020      | 3     | 3     | 3     | 3     | 3     | 3         | 3     | 3     | 3     | 3     | 3     | 0.7       |
|           | B737 BKHD Web 1088                        | 2015     | 2020      | 2     | 2     | 2     | 2     | 2     | 2         | 2     | 2     | 2     | 2     | 2     | 0.5       |
|           | B737 APU Skin                             | 2015     | 2020      | 2     | 2     | 2     | 2     | 2     | 2         | 2     | 2     | 2     | 2     | 2     | 0.4       |
|           | B737 Stringer                             | 2015     | 2020      | 2     | 2     | 2     | 2     | 2     | 2         | 2     | 2     | 2     | 2     | 2     | 0.3       |
| LATECOERE | A350 Norse Fairing Skin                   | 2018     | 2023      | -     | -     | -     | -     | -     | -         | 17    | 17    | 17    | 17    | 17    | 3.4       |
| RUAG      | CRJ Skin                                  | 2016     | 2036      | 32    | 32    | 32    | 32    | 32    | 32        | 32    | 32    | 32    | 32    | 32    | 1.6       |
|           | CRJ STR                                   | 2018     | 2021      | -     | -     | -     | -     | -     | -         | -     | -     | -     | 1     | 1     | 0.5       |
|           | CRJ Mid Skin                              | 2018     | 2021      | -     | -     | -     | -     | -     | -         | -     | -     | -     | 0     | 0     | 0.0       |
| ADS       | A320NEO Fan Cowl<br>Doors Machining Parts | 2016     | 2025      | -     | -     | -     | 9     | 9     | 9         | 9     | 9     | 9     | 9     | 9     | 1.0       |
| KAL       | 737/777/787 sheet metal, E1 Panel         | 2016     | 2024      | -     | -     | 7     | 9     | 9     | 8         | 7     | 7     | 7     | 7     | 7     | 0.9       |
| Total     |   |          |           | 1,726 | 1,721 | 1,763 | 1,930 | 1,979 | 1,979     | 2,308 | 2,315 | 2,959 | 2,960 | 2,960 | 260.0     |

| PER valuatio        | n: Target | price of W20,000               |         |                                     |  |  |  |
|---------------------|-----------|--------------------------------|---------|-------------------------------------|--|--|--|
|                     |           | Previous                       | Revised |                                     |  |  |  |
| Target price (KRW)  | 16,000    | Global peer average PER of 20x | 20,000  | 6% discount to average PER of 21.2x |  |  |  |
| Target PER (x)      | 20        | Global peer average FER OF 20X | 20      | of aircraft parts suppliers         |  |  |  |
| Current price (KRW) | 14,650    |                                | 14,650  |                                     |  |  |  |
| Upside (%)          | 9.2       |                                | 36.5    |                                     |  |  |  |
| EPS (KRW)           | 794       |                                | 1,007   | 2021F EPS                           |  |  |  |

Source: Company data, Shinhan Investment Corp

Note: Target price calculation based on 2021 when delivery of newly ordered products begin and production yields normalize

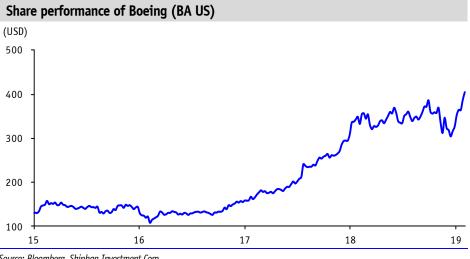
| Valuation          |        |        |        |        |        |        |        |        |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                    | 2014   | 2015   | 2016   | 2017   | 2018P  | 2019F  | 2020F  | 2021F  | 2022F  |
| Target price (KRW) | -      | -      | -      | -      | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| Target PER (x)     | -      | -      | -      | -      | 62.9   | 35.8   | 25.1   | 19.9   | 16.3   |
| Share price (KRW)  | 8,370  | 23,500 | 17,500 | 19,350 | 10,300 | 14,650 | 14,650 | 14,650 | 14,650 |
| Upside (%)         | -      | -      | -      | -      | -      | -      | -      | 36.5   | -      |
| PER (end, x)       | (8.8)  | 128.0  | 34.2   | 195.4  | 32.4   | 26.2   | 18.4   | 14.5   | 11.9   |
| PER (high, x)      | (10.2) | 204.7  | 49.4   | 210.0  | 76.9   | 26.5   | 18.6   | 14.7   | 12.1   |
| PER (low, x)       | (7.5)  | 42.1   | 29.5   | 155.0  | 28.6   | 18.1   | 12.7   | 10.1   | 8.3    |
| PER (average, x)   | (8.6)  | 125.8  | 37.9   | 175.1  | 50.1   | 22.0   | 15.5   | 12.2   | 10.0   |
| PBR (end, x)       | 2.3    | 5.6    | 3.3    | 2.9    | 1.5    | 2.0    | 1.8    | 1.6    | 1.4    |
| EPS (KRW)          | (953)  | 184    | 512    | 99     | 318    | 559    | 796    | 1,007  | 1,227  |
| YoY (%)            | -      | TP     | 179.0  | (80.7) | 221.0  | 75.9   | 42.3   | 26.5   | 21.8   |
| BPS (KRW)          | 3,720  | 4,190  | 5,284  | 6,715  | 6,773  | 7,332  | 8,128  | 9,136  | 10,363 |
| ROE (%)            | (21.4) | 4.8    | 10.8   | 1.7    | 4.8    | 7.9    | 10.3   | 11.7   | 12.6   |

Source: Company data, Shinhan Investment Corp.

## Global peer valuation

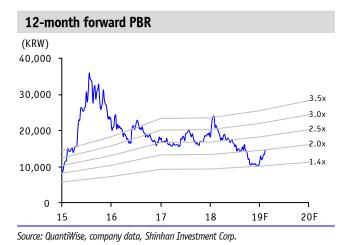
| Country | Company                                | Market cap. | Share pric | e gains | PE    | R     | PB    | R     | EV/EB | ITDA  | RO     | )E      | EPS gr | owth  |
|---------|--|-------------|------------|---------|-------|-------|-------|-------|-------|-------|--------|---------|--------|-------|
|         |  | (tr KRW)    | 1M         | YTD     | 2019F | 2020F | 2019F | 2020F | 2019F | 2020F | 2019F  | 2020F   | 2019F  | 2020F |
| Asia    | Korea Aerospace Industries             | 3.4         | 4.9        | 10.3    | 24.9  | 24.5  | 2.9   | 2.6   | 12.3  | 11.5  | 12.6   | 11.3    | 187.6  | 1.5   |
|         | AeroSpace Technology of Korea          | 0.2         | 17.2       | 42.2    | 26.2  | 18.4  | 2.0   | 1.8   | 19.6  | 16.1  | 7.9    | 10.3    | 75.9   | 42.3  |
|         | ST Engineering                         | 9.8         | 5.3        | 8.0     | 18.9  | 17.7  | 4.9   | 4.6   | 12.6  | 11.7  | 26.1   | 26.8    | 14.0   | 7.5   |
|         | AVIC Aircraft                          | 6.9         | 6.3        | 12.5    | 53.0  | 43.7  | 2.4   | 2.3   | 24.6  | 21.3  | 4.6    | 5.4     | 27.2   | 21.8  |
|         | Aviation Industry Corporation of China | 4.8         | 11.7       | 8.3     | 17.4  | 14.9  | 1.6   | 1.4   | 9.8   | 8.7   | 9.4    | 9.9     | 17.3   | 16.8  |
|         | Average                                |             |            |         | 28.1  | 23.8  | 2.8   | 2.6   | 15.8  | 13.9  | 12.1   | 12.7    | 64.4   | 18.0  |
| U.S.    | TransDigm                              | 25.7        | 24.1       | 27.1    | 25.4  | 22.7  | -     | -     | 16.0  | 14.8  | (61.0) | (128.2) | (3.4)  | 12.4  |
|         | Spirit                                 | 11.1        | 21.5       | 29.9    | 12.4  | 11.0  | 7.5   | 6.0   | 8.4   | 7.9   | 60.1   | 56.2    | 19.3   | 7.3   |
|         | Triumph                                | 1.3         | 67.9       | 100.3   | 9.5   | 6.8   | 2.6   | 2.8   | 8.7   | 7.4   | 3.2    | 2,436.3 | 79.6   | 36.3  |
|         | Average                                |             |            |         | 15.8  | 13.5  | 5.1   | 4.4   | 11.0  | 10.0  | 0.8    | 788.1   | 31.8   | 18.7  |
| Europe  | Safran                                 | 63.6        | 8.6        | 9.0     | 20.1  | 17.2  | 4.3   | 3.8   | 12.5  | 11.1  | 22.9   | 25.1    | 18.8   | 19.4  |
|         | Thales                                 | 27.4        | 0.3        | (0.6)   | 16.3  | 14.0  | 3.4   | 3.0   | 7.9   | 6.9   | 22.0   | 24.3    | 17.6   | 19.0  |
|         | Dassault                               | 14.0        | 8.0        | 9.3     | 17.2  | 15.3  | 2.2   | 2.0   | 14.5  | 12.9  | 12.8   | 13.1    | 10.4   | 12.0  |
|         | Average                                |             |            |         | 17.9  | 15.5  | 3.3   | 2.9   | 11.6  | 10.3  | 19.2   | 20.8    | 15.6   | 16.8  |
| Average |  |             |            |         | 22.0  | 18.7  | 3.4   | 3.0   | 13.3  | 11.8  | 11.0   | 226.4   | 42.2   | 17.8  |

Source: Bloomberg, Shinhan Investment Corp.









## Total shares outstanding

| Issuance             | Conversion period | Conversion amount<br>(KRW) | Number of convertible shares<br>(1,000 shares) | Percentage of issued shares<br>(common shares + CBs) (%) |
|----------------------|-------------------|----------------------------|--|--|
| 4th issuance         | 02/18-02/22       | 12,390                     | 1,243  | 6.4  |
| 5th issuance         | 10/19-10/23       | 10,332                     | 2,516  | 12.9   |
| Total                | -                 | -                          | 3,759  | 19.3   |
| No. of common shares | -                 | -                          | 15,715   | 80.7   |
| Total                | -                 | -                          | 19,474   | 100.0  |

Source: QuantiWise, company data, Shinhan Investment Corp.

## **Result** Comment

## **Balance Sheet**

| Year to Dec. (W bn)                 | 2016  | 2017  | 2018F | 2019F | 2020F |
|-------------------------------------|-------|-------|-------|-------|-------|
| Assets                              | 224.1 | 310.5 | 405.4 | 419.7 | 435.8 |
| Total Current Assets                | 97.3  | 143.2 | 197.6 | 200.0 | 216.0 |
| Cash and Cash Equivalents           | 9.1   | 23.1  | 26.3  | 11.2  | 16.8  |
| Accounts Receivables                | 25.8  | 26.5  | 47.9  | 52.8  | 55.7  |
| Inventories                         | 46.0  | 71.5  | 102.6 | 113.1 | 119.2 |
| Non-Current Assets                  | 126.8 | 167.3 | 207.8 | 219.7 | 219.9 |
| Tangible Assets                     | 89.3  | 113.3 | 150.9 | 164.3 | 165.7 |
| Intangible Assets                   | 4.7   | 5.2   | 5.8   | 4.3   | 3.2   |
| Investment Assets                   | 18.2  | 23.8  | 24.2  | 24.2  | 24.2  |
| Other Financial Institutions Assets | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Liabilities                         | 131.8 | 195.4 | 282.7 | 287.7 | 290.7 |
| Current Liabilities                 | 75.4  | 101.7 | 152.0 | 156.3 | 158.8 |
| ST Borrowings                       | 38.3  | 44.3  | 89.6  | 89.6  | 89.6  |
| Account Payables                    | 8.2   | 23.7  | 28.5  | 31.4  | 33.2  |
| Current Portion of LT Debt          | 3.4   | 10.0  | 11.2  | 11.2  | 11.2  |
| Non-Current Liabilities             | 56.4  | 93.7  | 130.7 | 131.4 | 131.9 |
| Bonds                               | 25.2  | 25.3  | 28.6  | 28.6  | 28.6  |
| LT Borrowings(incl. LT Fin. Liab.)  | 25.7  | 62.2  | 95.0  | 95.0  | 95.0  |
| Other Financial Institutions Liab.  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Shareholders' Equity                | 92.3  | 115.1 | 122.7 | 132.0 | 145.2 |
| Capital Stock                       | 7.2   | 7.4   | 7.9   | 7.9   | 7.9   |
| Capital Surplus                     | 66.2  | 67.9  | 77.6  | 77.6  | 77.6  |
| Other Reserves                      | 1.9   | 21.7  | 15.2  | 15.2  | 15.2  |
| Accu. Other Comp. Income            | 0.5   | 0.3   | 0.1   | 0.1   | 0.1   |
| Retained Earnings                   | 0.4   | 1.7   | 5.7   | 14.5  | 27.0  |
| Owners of Parent Equity             | 76.2  | 99.0  | 106.4 | 115.2 | 127.8 |
| Non-Controlling Interests Equity    | 16.1  | 16.1  | 16.3  | 16.8  | 17.4  |
| *Total Debt                         | 110.9 | 160.1 | 236.7 | 237.0 | 237.2 |
| *Net Debts(Cash)                    | 88.8  | 130.1 | 204.6 | 219.5 | 213.7 |

## **Cash Flow**

| 2016   | 2017  | 2018F   | 2019F  | 2020F  |  |  |  |
|--------|---|---|--|--|--|--|--|
| (13.7) | (11.8)  | (28.2)  | 10.3   | 18.9   |  |  |  |
| 6.2    | 1.5   | 5.1   | 9.3  | 13.2   |  |  |  |
| 4.2    | 4.9   | 5.9   | 6.6  | 6.7  |  |  |  |
| 1.0    | 1.7   | 1.5   | 1.5  | 1.1  |  |  |  |
| (0.8)  | 2.3   | (0.0)   | 0.0  | 0.0  |  |  |  |
| (0.0)  | 0.0   | 0.0   | 0.0  | 0.0  |  |  |  |
| 0.1    | (0.1)   | (1.3)   | (2.8)  | (2.8)  |  |  |  |
| (28.5) | (27.1)  | (43.7)  | (4.3)  | 0.8  |  |  |  |
| (0.0)  | (0.2)   | (1.0)   | (2.9)  | (4.2)  |  |  |  |
| 4.1    | 5.2   | 5.3   | 2.9  | 4.1  |  |  |  |
| (63.5) | (42.0)  | (42.6)  | (17.8)   | (5.5)  |  |  |  |
| (48.5) | (40.6)  | (42.7)  | (20.0)   | (8.0)  |  |  |  |
| 4.5    | 0.3   | 0.0   | 0.0  | 0.0  |  |  |  |
| (1.7)  | (2.3)   | (2.1)   | 0.0  | 0.0  |  |  |  |
| (5.9)  | (5.6)   | 0.7   | 2.8  | 2.8  |  |  |  |
| (11.9) | 6.2   | 1.5   | (0.6)  | (0.3)  |  |  |  |
| N/A    | (47.2)  | (69.6)  | (13.0)   | 8.0  |  |  |  |
| 78.1   | 67.9  | 76.0  | 0.3  | 0.2  |  |  |  |
| 41.1   | 46.2  | 70.8  | 0.3  | 0.2  |  |  |  |
| 0.0    | 0.0   | 0.0   | 0.0  | 0.0  |  |  |  |
| 0.0    | 0.0   | 0.0   | 0.0  | 0.0  |  |  |  |
| 37.0   | 21.7  | 5.2   | 0.0  | 0.0  |  |  |  |
| 0.0    | 0.0   | (2.0)   | (8.0)  | (8.0)  |  |  |  |
| 0.0    | 0.0   | 0.0   | 0.0  | 0.0  |  |  |  |
| 0.0    | (0.2)   | 0.0   | 0.0  | 0.0  |  |  |  |
| 0.8    | 13.9  | 3.3   | (15.2)   | 5.6  |  |  |  |
| 8.3    | 9.1   | 23.1  | 26.3   | 11.1   |  |  |  |
| 9.1    | 23.1  | 26.3  | 11.1   | 16.8   |  |  |  |
|        | (13.7)<br>6.2<br>4.2<br>1.0<br>(0.8)<br>(0.0)<br>0.1<br>(28.5)<br>(0.0)<br>4.1<br>(63.5)<br>(48.5)<br>4.5<br>(1.7)<br>(5.9)<br>(11.9)<br>N/A<br>78.1<br>41.1<br>0.0<br>0.0<br>37.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0 | (13.7)         (11.8)           6.2         1.5           4.2         4.9           1.0         1.7           (0.8)         2.3           (0.0)         0.0           0.1         (0.1)           (28.5)         (27.1)           (0.0)         (0.2)           4.1         5.2           (63.5)         (42.0)           (48.5)         (40.6)           4.5         0.3           (1.7)         (2.3)           (5.9)         (5.6)           (11.9)         6.2           N/A         (47.2)           78.1         67.9           41.1         46.2           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         0.0           0.0         0.0           0.0         0.0           0.0         0.0           0.0         0.0           0.0         0.0           0.0 <t< td=""><td>(13.7)         (11.8)         (28.2)           6.2         1.5         5.1           4.2         4.9         5.9           1.0         1.7         1.5           (0.8)         2.3         (0.0)           (0.0)         0.0         0.0           0.1         (0.1)         (1.3)           (28.5)         (27.1)         (43.7)           (0.0)         (0.2)         (1.0)           4.1         5.2         5.3           (63.5)         (42.0)         (42.6)           (48.5)         (40.6)         (42.7)           4.5         0.3         0.0           (1.7)         (2.3)         (2.1)           (5.9)         (5.6)         0.7           (11.9)         6.2         1.5           N/A         (47.2)         (69.6)           78.1         67.9         76.0           4.1         44.2         7.8           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</td><td>(13.7)         (11.8)         (28.2)         10.3           6.2         1.5         5.1         9.3           4.2         4.9         5.9         6.6           1.0         1.7         1.5         1.5           (0.8)         2.3         (0.0)         0.0           (0.0)         0.0         0.0         0.0           (0.1)         (1.3)         (2.8)           (28.5)         (27.1)         (43.7)         (4.3)           (0.0)         (0.2)         (1.0)         (2.9)           4.1         5.2         5.3         2.9           (63.5)         (42.0)         (42.6)         (17.8)           (48.5)         (40.6)         (42.7)         (20.0)           4.5         0.3         0.0         0.0           (11.7)         (2.3)         (2.1)         0.0           (5.9)         (5.6)         0.7         2.8           (11.9)         6.2         1.5         (0.6)           N/A         (47.2)         (69.6)         (13.0)           78.1         67.9         76.0         0.3           0.0         0.0         0.0         0.0</td></t<> | (13.7)         (11.8)         (28.2)           6.2         1.5         5.1           4.2         4.9         5.9           1.0         1.7         1.5           (0.8)         2.3         (0.0)           (0.0)         0.0         0.0           0.1         (0.1)         (1.3)           (28.5)         (27.1)         (43.7)           (0.0)         (0.2)         (1.0)           4.1         5.2         5.3           (63.5)         (42.0)         (42.6)           (48.5)         (40.6)         (42.7)           4.5         0.3         0.0           (1.7)         (2.3)         (2.1)           (5.9)         (5.6)         0.7           (11.9)         6.2         1.5           N/A         (47.2)         (69.6)           78.1         67.9         76.0           4.1         44.2         7.8           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 | (13.7)         (11.8)         (28.2)         10.3           6.2         1.5         5.1         9.3           4.2         4.9         5.9         6.6           1.0         1.7         1.5         1.5           (0.8)         2.3         (0.0)         0.0           (0.0)         0.0         0.0         0.0           (0.1)         (1.3)         (2.8)           (28.5)         (27.1)         (43.7)         (4.3)           (0.0)         (0.2)         (1.0)         (2.9)           4.1         5.2         5.3         2.9           (63.5)         (42.0)         (42.6)         (17.8)           (48.5)         (40.6)         (42.7)         (20.0)           4.5         0.3         0.0         0.0           (11.7)         (2.3)         (2.1)         0.0           (5.9)         (5.6)         0.7         2.8           (11.9)         6.2         1.5         (0.6)           N/A         (47.2)         (69.6)         (13.0)           78.1         67.9         76.0         0.3           0.0         0.0         0.0         0.0 |  |  |  |

Source: Company data, Shinhan Investment Corp.

## **Profit and Loss**

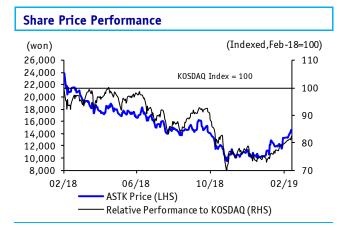
| Year to Dec. (W bn)                | 2016  | 2017   | 2018F | 2019F | 2020F |
|------------------------------------|-------|--------|-------|-------|-------|
| Sales                              | 87.9  | 97.2   | 117.0 | 154.3 | 191.3 |
| Growth (%)                         | N/A   | 10.6   | 20.4  | 31.9  | 24.0  |
| COGS                               | 73.7  | 82.2   | 96.3  | 127.4 | 156.7 |
| Gross Profit                       | 14.2  | 15.0   | 20.7  | 26.9  | 34.5  |
| Gross margin (%)                   | 16.2  | 15.5   | 17.7  | 17.4  | 18.1  |
| SG&A                               | 6.9   | 7.0    | 9.8   | 11.2  | 13.7  |
| Operating Income                   | 7.3   | 8.1    | 10.9  | 15.7  | 20.8  |
| Growth (%)                         | N/A   | 9.7    | 35.2  | 43.8  | 33.2  |
| Operating margin (%)               | 8.4   | 8.3    | 9.3   | 10.1  | 10.9  |
| Other Net Non-Operating Profits    | (2.2) | (7.0)  | (4.1) | (3.5) | (3.5) |
| Financial Income(Expenses)         | (2.3) | (3.2)  | (7.8) | (6.3) | (6.3) |
| Net Other Non-Operating Profits    | 0.2   | (3.8)  | 2.9   | 0.0   | 0.0   |
| Net Gains in Asso., Subs., and JVs | (0.1) | 0.1    | 0.8   | 2.8   | 2.8   |
| Pre-tax Profit from Cont. Op.      | 5.1   | 1.1    | 6.7   | 12.2  | 17.3  |
| Income Taxes                       | (1.1) | (0.4)  | 1.6   | 2.9   | 4.2   |
| Profit from Continuing Op.         | 6.2   | 1.5    | 5.1   | 9.3   | 13.2  |
| Profit from Discontinued Op.       | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   |
| Net Profit                         | 6.2   | 1.5    | 5.1   | 9.3   | 13.2  |
| Growth (%)                         | N/A   | (76.3) | 248.7 | 81.0  | 42.3  |
| Net Profit margin (%)              | 7.0   | 1.5    | 4.4   | 6.0   | 6.9   |
| Net Profit of Parent               | 7.3   | 1.4    | 4.9   | 8.8   | 12.5  |
| Net Profit to Non-Controlling      | (1.1) | 0.0    | 0.2   | 0.5   | 0.7   |
| Total Comprehensive Income         | 6.2   | 1.2    | 4.9   | 9.3   | 13.2  |
| Total Comp. Income of Parent       | 7.3   | 1.2    | 4.9   | 10.7  | 15.2  |
| Total Comp. Income to Non-Cont.    | (1.1) | 0.0    | (0.0) | (1.4) | (2.0) |
| EBITDA                             | 12.5  | 14.7   | 18.3  | 23.7  | 28.6  |
| Growth (%)                         | N/A   | 17.5   | 24.4  | 29.6  | 20.7  |
| EBITDA Margin (%)                  | 14.3  | 15.2   | 15.7  | 15.4  | 15.0  |

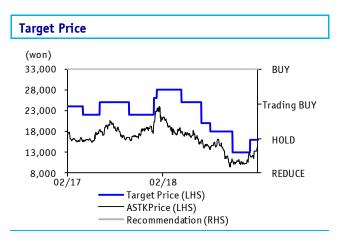
Note: Operating profit is based on 2012 K-IFRS (gross profit - SG&A costs)

## Key Ratios

| Year to Dec.                 | 2016  | 2017  | 2018F | 2019F | 2020F |
|------------------------------|-------|-------|-------|-------|-------|
| EPS_C (won)                  | 437   | 100   | 330   | 589   | 838   |
| EPS_P (won)                  | 512   | 99    | 318   | 559   | 796   |
| BPS_C (won)                  | 6,399 | 7,809 | 7,810 | 8,399 | 9,237 |
| BPS_P (won)                  | 5,284 | 6,715 | 6,773 | 7,332 | 8,128 |
| DPS (won)                    | 0     | 0     | 0     | 0     | 0     |
| PER_C (x)                    | 40.1  | 192.7 | 31.3  | 24.9  | 17.5  |
| PER_P (x)                    | 34.2  | 195.4 | 32.4  | 26.2  | 18.4  |
| PBR_C (x)                    | 2.7   | 2.5   | 1.3   | 1.7   | 1.6   |
| PBR_P (x)                    | 3.3   | 2.9   | 1.5   | 2.0   | 1.8   |
| EV/EBITDA (x)                | 28.5  | 29.3  | 20.9  | 19.6  | 16.1  |
| Payout Ratio (%)             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Dividend Yield (%)           | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Profitability                |       |       |       |       |       |
| EBITDA Margin (%)            | 14.3  | 15.2  | 15.7  | 15.4  | 15.0  |
| OP Margin (%)                | 8.4   | 8.3   | 9.3   | 10.1  | 10.9  |
| NP Margin (%)                | 7.0   | 1.5   | 4.4   | 6.0   | 6.9   |
| ROA (%)                      | 2.8   | 0.5   | 1.4   | 2.2   | 3.1   |
| ROE (%)                      | 9.5   | 1.7   | 4.8   | 7.9   | 10.3  |
| ROIC (%)                     | N/A   | 5.8   | 3.4   | 4.0   | 5.1   |
| Stability                    |       |       |       |       |       |
| D/E Ratio (%)                | 142.8 | 169.8 | 230.3 | 218.0 | 200.3 |
| Net Debt to Equity (%)       | 96.2  | 113.0 | 166.7 | 166.3 | 147.3 |
| Cash Ratio (%)               | 12.1  | 22.7  | 17.3  | 7.1   | 10.6  |
| Interest Coverage (x)        | 2.3   | 1.8   | 1.3   | 2.4   | 3.1   |
| Activity (%)                 |       |       |       |       |       |
| Working Capital Turnover (t) | 1.5   | 1.4   | 1.1   | 1.2   | 1.3   |
| Inventory Turnover (d)       | 191.0 | 220.5 | 271.4 | 255.0 | 221.7 |
| Receivable Turnover (d)      | 107.3 | 98.2  | 116.0 | 119.1 | 103.5 |

## AeroSpace Technology of Korea (067390 KS)





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| Date       | Recommendation | Target Price | Target Price Gap (%) |         |  |
|------------|----------------|--------------|----------------------|---------|--|
|            |                | (won)        | Average              | Max/Mir |  |
| 2017.04.16 | BUY            | 22,000       | (25.1)               | (16.4   |  |
| 2017.06.19 | BUY            | 25,000       | (26.7)               | (17.0   |  |
| 2017.10.09 | BUY            | 22,000       | (19.4)               | (10.0   |  |
| 2018.01.12 | BUY            | 26,000       | (14.2)               | (11.5   |  |
| 2018.01.23 | BUY            | 28,000       | (29.5)               | (13.8   |  |
| 2018.04.27 | BUY            | 25,000       | (32.6)               | (26.8   |  |
| 2018.07.12 | BUY            | 20,000       | (26.2)               | (19.8   |  |
| 2018.08.15 | BUY            | 18,000       | (25.6)               | (9.7    |  |
| 2018.11.08 | BUY            | 13,000       | (17.6)               | (0.8    |  |
| 2019.01.14 | BUY            | 16,000       | -                    |         |  |
|            |                |              |                      |         |  |
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|            |                |              |                      |         |  |

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| SHIC Rating Classifications (As of Apr. 1, 2017)  |   |  |  |  |  |
|---|---|--|--|--|--|
| Stock   | Sector  |  |  |  |  |
| <ul> <li>BUY: Expected return of over +10% in the next 6 months</li> <li>Trading BUY: Expected return of -10% ~ +10% in the next 6 months</li> <li>HOLD: Expected return of -20% ~ -10% in the next 6 months</li> <li>REDUCE: Expected return of below -20% in the next 6 months</li> </ul> | <ul> <li>OVERWEIGHT: Prevalence of BUY rating for stocks in our sector coverage universe based on market cap</li> <li>NEUTRAL: Prevalence of HOLD rating for stocks in our sector coverage universe based on market cap</li> <li>UNDERWEIGHT: Prevalence of REDUCE rating for stocks in our sector coverage universe based on market cap</li> </ul> |  |  |  |  |

| SHIC Universe Rating Classification Ratio (as of Feb. 12, 2019) |        |                    |       |             |       |               |    |
|---|--------|--------------------|-------|-------------|-------|---------------|----|
| BUY (BUY)   | 94.01% | Trading BUY (HOLD) | 3.23% | HOLD (HOLD) | 2.76% | REDUCE (SELL) | 0% |