

SK Materials (036490 KS)

Rock bottom in the long-term perspective

BUY (MAINTAIN)

Price (Jan. 30)	W156,600
Target Price	W204,000
% variance	30.3%

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KOSPI	2,206.20p
KOSDAQ	715.30p
Market Cap.	W1,651.8bn/ US1,448.9mn
Par Value	W500
Outstanding Shares	10.5mn
Free Floating Shares	4.3mn(40.8%)
52-Week High/Low	W193,800/W135,600
60-Day Avg. Trading Volume	38,259shrs
60-Day. Avg. Trading T/O	W5,969mn
Foreign Ownership	12.84%
Major Shareholders	
SK Holdings and 1 other	49.11%
Absolute Performance	3M -13.7%
	6M -12.5%
	12M -8.7%
Relative performance	3M -22.3%
to KOSDAQ	6M -5.8%
	12M 17.6%

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- ◆ 4Q18 earnings surprise
- ◆ 2019 operating profit estimated at W242.3bn (+32.4% YoY)
- ◆ Retain BUY for a target price of W204,000

4Q18 operating profit beats consensus at W57.3bn

SK Materials reported an earnings surprise in 4Q. Operating profit came in at W57.3bn (+11.9% QoQ, +56.9% YoY) on sales of W201.4bn (+8.3% QoQ, +43.6% YoY), beating the market consensus (W54.9bn).

Despite sharp declines in memory chip and LCD TV panel prices, earnings growth was driven by: 1) continuing price hike for the cash cow, NF3 (nitrogen trifluoride), on supply shortage; and 2) sales of the high value-added precursor increasing 22.9% QoQ to W21.5bn.

2019 operating profit estimated at W242.3bn (+32.4% YoY)

Operating profit is expected to decrease 4.2% QoQ to W54.9bn in 1Q19 due to unfavorable seasonality in memory chips and displays. Although the memory chip market outlook for 2019 is marred by uncertainties, NF3 sales should grow with the ramp-up of new 10.5G LCD lines in China. Operating profit is projected to rise 5.9% YoY to W58.1bn in 2Q. Earnings improvement will likely continue toward the second half in view of the ramp-up of LG Display's OLED TV panel line in Guangzhou, China. For 2019, we forecast sales of W837.7bn (+21.9% YoY) and operating profit of W242.3bn (+32.4% YoY).

Retain BUY for a target price of W204,000

SK Materials shares declined 13.7% following a 10% MoM drop in DRAM contract price in October. Amid the blurry memory chip market outlook for 1H19, the upward momentum has been limited despite the cheapest valuations (2019F PER of 10.7x). Looking at the stock trend of the past 12 years, investors who bought SK Materials shares when the sentiment was low saw handsome returns. The earnings risk should be reduced significantly with the sales share of NF3 expected to drop from 75% in 2015 to 52% in 2019. The dividend yield estimate for 2018 is 2.5%. The stock should generate a rate of return higher than EPS growth for long-term investors.

Year to Dec.	Sales (W bn)	OP (W bn)	Pre-tax (W bn)	NP (W bn)	EPS (Won)	Growth (%)	BPS (Won)	PER (X)	EV/EBITDA (X)	PBR (X)	ROE (%)	Net Debt to Equity Ratio (%)
2016	461.4	154.1	140.3	108.6	10,299	64.3	39,945	17.4	9.8	4.5	27.2	58.6
2017	512.3	147.7	134.5	101.9	9,660	(6.2)	36,567	18.6	10.9	4.9	25.3	125.6
2018F	687.2	183.0	159.2	119.0	11,282	16.8	42,930	13.9	8.0	3.6	28.4	106.4
2019F	837.7	242.3	212.4	154.0	14,597	29.4	54,574	11.0	6.5	3.0	29.9	73.3
2020F	974.3	295.3	269.3	195.2	18,504	26.8	67,681	8.7	5.4	2.4	30.3	48.7

Source: Company data, Shinhan Investment Corp.

Target price calculation

2019F EPS	14,597
2019F ROE	29.9
Target PER (x)	14.0
Target PER (KRW)	204,358

Source: Shinhan Investment Corp.

Note: 30% discount applied to 20x 2019F PER of Air Products & Chemicals (NF3 and NF3 materials producer)

PER and ROE

(x, %)	2012	2013	2014	2015	2016	2017	2018	2019F	Average
PER (high)	34.1	1,230.5	44.1	23.0	18.2	21.7	17.3	11.2	24.2
PER (low)	11.3	854.3	22.6	8.2	9.1	15.9	12.2	9.1	12.6
PER (average)	19.2	1,024.7	32.1	16.0	12.9	18.9	14.9	10.3	17.8
ROE	8.6	0.1	4.3	18.9	27.2	25.3	28.4	29.9	20.4

Source: QuantiWise, Shinhan Investment Corp.

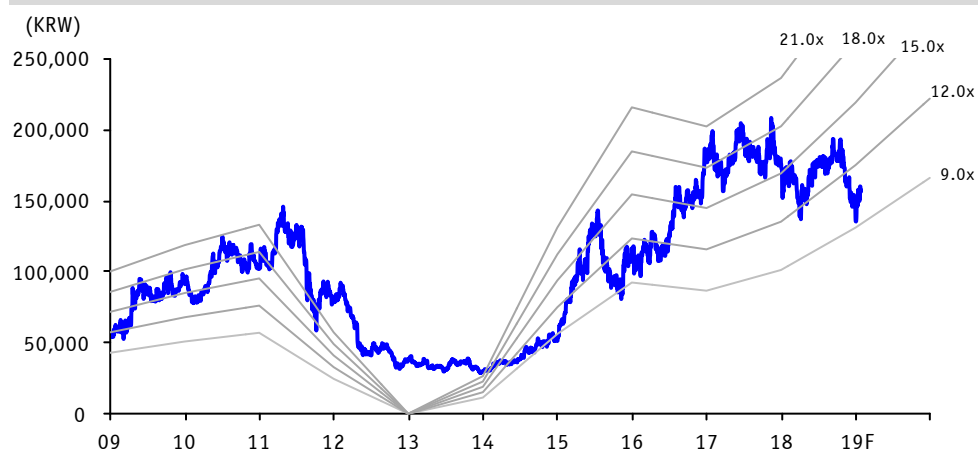
Note: 2013 excluded from calculation of average

Peer group valuation

	Company	Market cap. (bn KRW)	2019F				2020F			
			PER (x)	PBR (x)	EV/EBITDA (x)	ROE (%)	PER (x)	PBR (x)	EV/EBITDA (x)	ROE (%)
Specialty gas	Air Products & Chemicals	35.9	20.0	3.1	10.8	16.0	17.6	2.8	9.8	16.8
	Mitsui Chemicals	5.1	6.4	0.9	6.1	14.3	6.2	0.8	5.8	13.1
	SK Materials	1.5	10.5	2.8	7.4	31.9	8.8	2.2	6.5	30.0
	Wonik Materials	0.3	7.2	0.9	3.7	13.3	6.6	0.8	3.4	12.9
IT materials	Soulbrain	0.8	6.8	1.0	3.8	16.2	6.3	0.9	3.5	15.1
	Innox Advanced Materials	0.4	11.3	2.3	9.4	22.5	10.2	1.9	8.1	20.4
	Duk San Neolux	0.4	21.6	2.5	13.6	12.1	16.2	2.1	9.8	14.1

Source: Bloomberg, QuantiWise, Shinhan Investment Corp.

12-month forward PER band



Source: QuantiWise, Shinhan Investment Corp.

4Q18 preliminary results

(bn KRW)	4Q18P	3Q18	% QoQ	4Q17	% YoY	Consensus	Gap (%)	SHIC	Gap (%)
Sales	201.4	186.0	8.3	140.2	43.6	193.5	4.1	195.8	2.8
OP	57.3	51.2	11.9	36.5	56.9	54.9	4.3	55.7	2.8
Pre-tax profit	47.9	43.9	9.1	31.9	49.9			48.4	(1.0)
NP	39.0	34.5	12.9	27.0	44.4	39.8	(2.1)	40.7	(4.3)
OPM (%)	28.4	27.5		26.0		28.4		28.4	
Pre-tax margin (%)	23.8	23.6		22.8				24.7	
NPM (%)	19.3	18.6		19.2		20.6		20.8	

Source: QuantiWise, Shinhan Investment Corp.

Earnings trend and outlook

(bn KRW)	1Q18	2Q18	3Q18	4Q18P	1Q19F	2Q19F	3Q19F	4Q19F	2017	2018	2019F	2020F
Sales	142.3	157.5	186.0	201.4	193.6	201.5	218.2	224.3	512.3	687.2	837.7	974.3
1) NF3	86.0	91.0	101.4	108.2	102.3	104.7	115.3	115.2	304.6	386.6	437.4	480.8
2) SiH4	12.0	11.8	13.1	13.7	13.2	13.6	13.7	14.3	45.6	50.6	54.8	57.4
3) SK Airgas	24.1	26.5	28.5	29.6	28.0	29.1	30.5	31.0	92.1	108.7	118.6	131.0
4) SK Tri Chem	3.4	8.3	17.5	21.5	22.0	24.5	26.0	29.0	7.2	50.6	101.5	130.0
5) Others	16.8	20.0	25.5	28.4	28.1	29.7	32.8	34.7	62.9	90.8	125.3	175.0
OP	33.8	40.8	51.2	57.3	54.9	58.1	63.8	65.6	147.6	183.0	242.3	295.3
Pre-tax profit	31.3	36.1	43.9	47.9	49.9	53.1	58.8	50.6	134.5	159.2	212.4	269.3
NP	21.6	23.9	34.5	39.0	35.4	38.5	43.0	37.0	101.9	119.0	154.0	195.2
EBITDA	53.8	63.8	74.2	80.3	77.9	81.1	86.8	88.6	221.9	272.0	334.3	388.3
OPM (%)	23.7	25.9	27.5	28.4	28.3	28.8	29.2	29.3	28.8	26.6	28.9	30.3
Pre-tax margin (%)	22.0	22.9	23.6	23.8	25.8	26.4	26.9	22.6	26.3	23.2	25.4	27.6
NPM (%)	15.2	15.2	18.6	19.3	18.3	19.1	19.7	16.5	19.9	17.3	18.4	20.0
EBITDA margin (%)	37.8	40.5	39.9	39.9	40.2	40.2	39.8	39.5	43.3	39.6	39.9	39.9

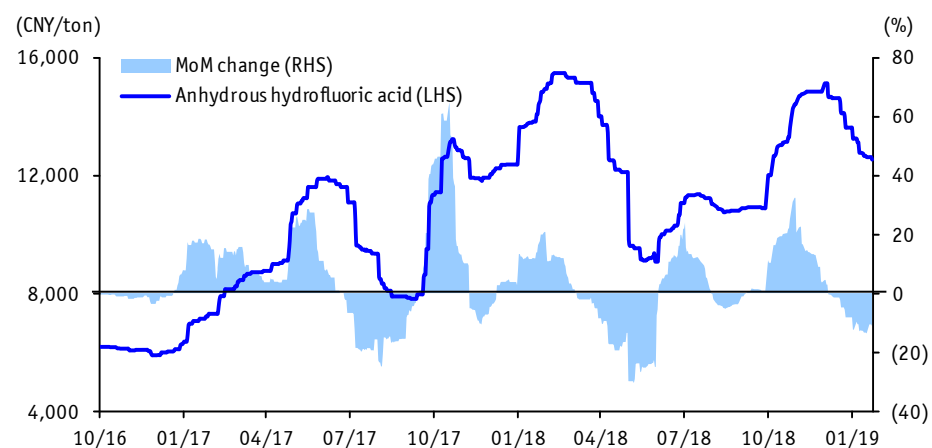
Source: Company data, Shinhan Investment Corp.

Earnings forecast revision

(bn KRW)	2018F			2019F		
	Before	After	Change (%)	Before	After	Change (%)
Sales	681.7	687.2	0.8	831.4	837.7	0.8
OP	181.4	183.0	0.9	240.9	242.3	0.6
Pre-tax profit	159.7	159.2	(0.3)	217.2	212.4	(2.2)
NP	120.7	119.0	(1.4)	163.4	154.0	(5.8)
EBITDA	270.4	272.0	0.6	332.9	334.3	0.4
OPM (%)	26.6	26.6		29.0	28.9	
Pre-tax margin (%)	23.4	23.2		26.1	25.4	
NPM (%)	17.7	17.3		19.7	18.4	
EBITDA margin (%)	39.7	39.6		40.0	39.9	

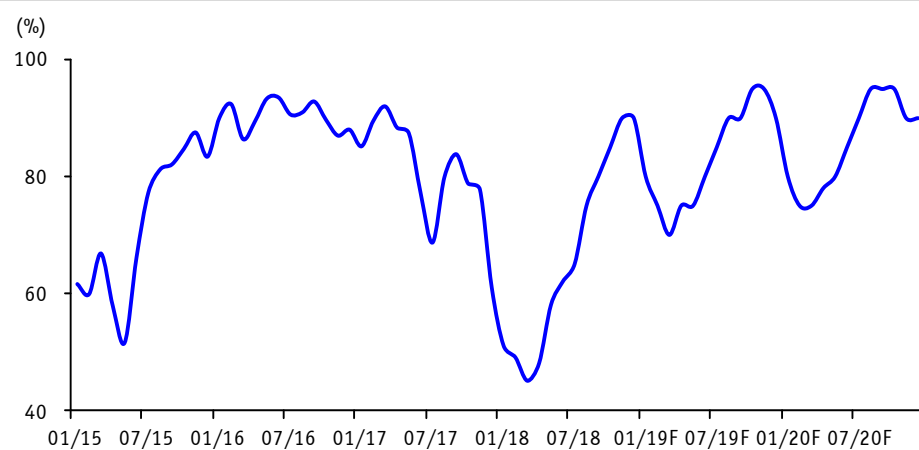
Source: Shinhan Investment Corp.

China's anhydrous hydrofluoric acid spot price



Source: Sunsisr, Shinhan Investment Corp.

Samsung Display's OLED line utilization rate



Source: IHS, Shinhan Investment Corp.

Balance Sheet

Year to Dec. (W bn)	2016	2017	2018F	2019F	2020F
Assets	903.1	1,118.0	1,283.6	1,418.3	1,575.2
Total Current Assets	217.3	201.8	263.4	337.5	435.1
Cash and Cash Equivalents	60.3	18.7	80.3	144.2	222.8
Accounts Receivables	72.1	82.6	90.0	95.0	98.0
Inventories	74.3	86.2	74.0	75.0	87.2
Non-Current Assets	685.8	916.2	1,020.2	1,080.8	1,140.1
Tangible Assets	661.5	885.1	986.1	1,044.1	1,101.1
Intangible Assets	6.9	6.6	5.6	4.8	4.1
Investment Assets	0.7	11.5	15.4	18.7	21.8
Other Financial Institutions Assets	0.0	0.0	0.0	0.0	0.0
Liabilities	466.0	709.9	803.4	808.8	819.4
Current Liabilities	283.6	336.5	387.4	400.5	413.5
ST Borrowings	51.3	148.8	148.8	148.8	148.8
Account Payables	21.9	26.7	28.0	29.0	31.0
Current Portion of LT Debt	115.9	30.5	70.5	80.5	90.5
Non-Current Liabilities	182.4	373.3	415.9	408.4	405.9
Bonds	49.8	199.4	219.4	209.4	199.4
LT Borrowings(incl. LT Fin. Liab.)	100.4	152.6	152.6	152.6	152.6
Other Financial Institutions Liab.	0.0	0.0	0.0	0.0	0.0
Shareholders' Equity	437.1	408.1	480.2	609.4	755.8
Capital Stock	5.3	5.3	5.3	5.3	5.3
Capital Surplus	34.2	34.2	34.2	34.2	34.2
Other Reserves	(1.4)	(96.2)	(96.2)	(96.2)	(96.2)
Accu. Other Comp. Income	0.7	(3.7)	(20.0)	(3.7)	(3.7)
Retained Earnings	382.6	446.1	529.5	636.1	774.3
Owners of Parent Equity	421.3	385.7	452.8	575.6	713.9
Non-Controlling Interests Equity	15.8	22.4	27.4	33.8	41.9
*Total Debt	317.8	531.4	591.4	591.4	591.4
*Net Debts(Cash)	256.2	512.5	510.8	446.8	368.2

Cash Flow

Year to Dec. (W bn)	2016	2017	2018F	2019F	2020F
Operating Cash Flow	207.9	136.7	247.4	236.6	279.1
Net Profit	110.5	104.1	124.0	160.4	203.3
Depreciation	66.7	74.1	89.0	92.0	93.0
Amortization	0.8	1.0	0.9	0.8	0.7
Losses(Gains) on F/X Translation	3.2	(1.8)	0.0	0.0	0.0
Losses(Gains) on Disp. of Assets	1.3	0.3	(0.0)	(0.0)	(0.0)
Losses(Gains) in Asso., Subs., JVs	5.0	0.1	0.0	0.0	0.0
Chg. in A/L from Op. Activities	17.0	(45.8)	33.5	(16.5)	(17.9)
(Payments of Income Taxes)	(28.3)	(29.5)	(35.3)	(52.0)	(66.0)
Others	31.7	34.2	35.3	51.9	66.0
Investing Cash Flow	(208.7)	(268.5)	(194.0)	(153.4)	(153.1)
Incr. in Tangible Assets(CAPEX)	(125.4)	(260.7)	(190.0)	(150.0)	(150.0)
Decr. in Tangible Assets	0.8	0.1	0.0	0.0	0.0
Decr.(Incr.) in Intangible Assets	(4.0)	0.4	0.0	0.0	0.0
Decr.(Incr.) in Investment Assets	(4.9)	(10.3)	(3.9)	(3.4)	(3.1)
Others	(75.2)	2.0	(0.1)	(0.0)	0.0
Free Cash Flow	74.8	(57.2)	53.4	118.7	150.7
Financing Cash Flow	19.1	91.6	24.5	(35.6)	(47.4)
Incr.(Decr.) in Borrowing	46.8	219.4	60.0	0.0	0.0
Decr.(Incr.) of Treasury Stock	1.4	94.8	0.0	0.0	0.0
Dividend	(29.8)	(37.4)	(35.6)	(35.6)	(47.4)
Others	0.7	(185.2)	0.1	0.0	0.0
Other Cash Flows	0.0	0.0	(16.3)	16.3	0.0
Change of Consolidated Scope	0.0	0.0	0.0	0.0	0.0
Difference by Chg. in F/X Rates	0.6	(1.5)	0.0	0.0	0.0
Incr.(Decr.) in Cash	18.8	(41.6)	61.6	64.0	78.6
Beginning Cash	41.4	60.3	18.7	80.3	144.2
Ending Cash	60.3	18.7	80.3	144.2	222.8

Source: Company data, Shinhan Investment Corp.

Profit and Loss

Year to Dec. (W bn)	2016	2017	2018F	2019F	2020F
Sales	461.4	512.3	687.2	837.7	974.3
Growth (%)	36.5	11.0	34.1	21.9	16.3
COGS	268.7	314.7	427.0	501.4	570.0
Gross Profit	192.7	197.6	260.2	336.3	404.3
Gross margin (%)	41.8	38.6	37.9	40.1	41.5
SG&A	38.7	49.9	77.2	93.9	109.0
Operating Income	154.1	147.7	183.0	242.3	295.3
Growth (%)	36.6	(4.2)	23.9	32.4	21.9
Operating margin (%)	33.4	28.8	26.6	28.9	30.3
Other Net Non-Operating Profits	(13.7)	(13.1)	(23.8)	(29.9)	(26.1)
Financial Income(Expenses)	(3.7)	(11.5)	(23.8)	(23.9)	(23.0)
Net Other Non-Operating Profits	(10.0)	(1.5)	0.0	(6.0)	(3.0)
Net Gains in Asso., Subs., and JVs	0.0	(0.1)	(0.1)	(0.1)	(0.1)
Pre-tax Profit from Cont. Op.	140.3	134.5	159.2	212.4	269.3
Income Taxes	29.9	30.5	35.3	52.0	66.0
Profit from Continuing Op.	110.5	104.1	124.0	160.4	203.3
Profit from Discontinued Op.	0.0	0.0	0.0	0.0	0.0
Net Profit	110.5	104.1	124.0	160.4	203.3
Growth (%)	67.0	(5.8)	19.1	29.4	26.8
Net Profit margin (%)	23.9	20.3	18.0	19.1	20.9
Net Profit of Parent	108.6	101.9	119.0	154.0	195.2
Net Profit to Non-Controlling	1.8	2.2	5.0	6.4	8.1
Total Comprehensive Income	108.8	98.8	124.0	160.4	203.3
Total Comp. Income of Parent	107.0	96.6	121.3	156.9	198.9
Total Comp. Income to Non-Cont.	1.8	2.1	2.7	3.5	4.4
EBITDA	221.5	222.8	272.9	335.2	389.0
Growth (%)	31.5	0.6	22.5	22.8	16.1
EBITDA Margin (%)	48.0	43.5	39.7	40.0	39.9

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

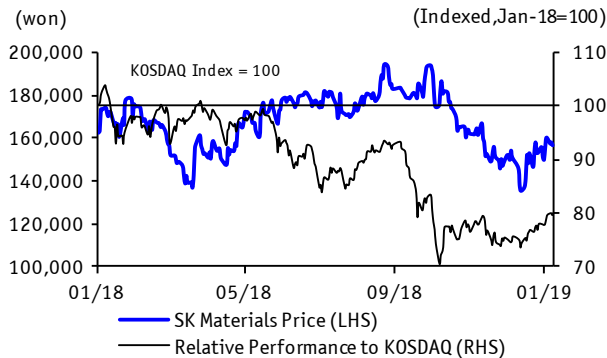
Key Ratios

Year to Dec.	2016	2017	2018F	2019F	2020F
EPS_C (won)	10,472	9,866	11,752	15,205	19,275
EPS_P (won)	10,299	9,660	11,282	14,597	18,504
BPS_C (won)	41,444	38,695	45,527	57,780	71,658
BPS_P (won)	39,945	36,567	42,930	54,574	67,681
DPS (won)	3,550	3,550	3,750	5,000	6,000
PER_C (x)	17.1	18.2	13.3	10.6	8.4
PER_P (x)	17.4	18.6	13.9	11.0	8.7
PBR_C (x)	4.3	4.7	3.4	2.8	2.2
PBR_P (x)	4.5	4.9	3.6	3.0	2.4
EV/EBITDA (x)	9.8	10.9	8.0	6.5	5.4
Payout Ratio (%)	34.4	34.9	29.9	30.8	29.2
Dividend Yield (%)	2.0	2.0	2.4	3.1	3.7
Profitability					
EBITDA Margin (%)	48.0	43.5	39.7	40.0	39.9
OP Margin (%)	33.4	28.8	26.6	28.9	30.3
NP Margin (%)	23.9	20.3	18.0	19.1	20.9
ROA (%)	14.1	10.3	10.3	11.9	13.6
ROE (%)	27.2	25.3	28.4	29.9	30.3
ROIC (%)	19.6	14.6	14.8	17.6	20.1
Stability					
D/E Ratio (%)	106.6	173.9	167.3	132.7	108.4
Net Debt to Equity (%)	58.6	125.6	106.4	73.3	48.7
Cash Ratio (%)	21.3	5.5	20.7	36.0	53.9
Interest Coverage (x)	15.4	11.4	10.7	13.4	16.4
Activity (%)					
Working Capital Turnover (t)	10.1	15.6	33.9	45.7	32.6
Inventory Turnover (d)	52.4	57.2	42.5	32.5	30.4
Receivable Turnover (d)	49.8	55.1	45.8	40.3	36.2

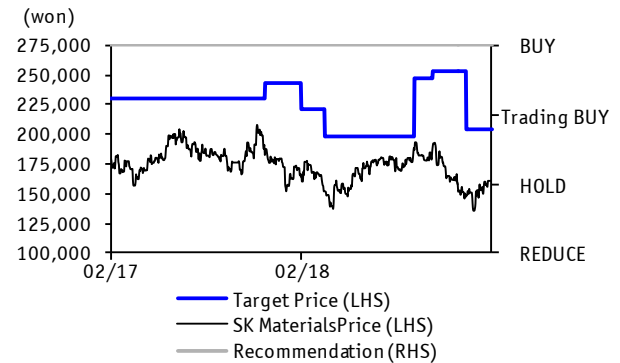
Source: Company data, Shinhan Investment Corp.

SK Materials (036490 KS)

Share Price Performance



Target Price



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Date	Recommendation	Target Price (won)	Target Price Gap (%)	
			Average	Max/Min
2017.08.07		6M later	(20.0)	(9.3)
2017.12.01	BUY	243,000	(29.5)	(23.9)
2018.02.08	BUY	221,000	(24.5)	(19.4)
2018.03.25	BUY	198,000	(15.4)	(6.2)
2018.09.12	BUY	247,000	(25.9)	(21.5)
2018.10.17	BUY	253,000	(33.7)	(23.5)
2018.12.20	BUY	204,000	-	-

Note: Calculation of target price gap based on the past 6 months

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SHIC Rating Classifications (As of Apr. 1, 2017)

Stock	Sector
<ul style="list-style-type: none"> ◆ BUY: Expected return of over +10% in the next 6 months ◆ Trading BUY: Expected return of -10% ~ +10% in the next 6 months ◆ HOLD: Expected return of -20% ~ -10% in the next 6 months ◆ REDUCE: Expected return of below -20% in the next 6 months 	<ul style="list-style-type: none"> ◆ OVERWEIGHT: Prevalence of BUY rating for stocks in our sector coverage universe based on market cap ◆ NEUTRAL: Prevalence of HOLD rating for stocks in our sector coverage universe based on market cap ◆ UNDERWEIGHT: Prevalence of REDUCE rating for stocks in our sector coverage universe based on market cap

SHIC Universe Rating Classification Ratio (as of Feb. 6, 2019)

BUY (BUY)	94.44%	Trading BUY (HOLD)	3.24%	HOLD (HOLD)	2.31%	REDUCE (SELL)	0%
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