MIRAE ASSET
Building on principles

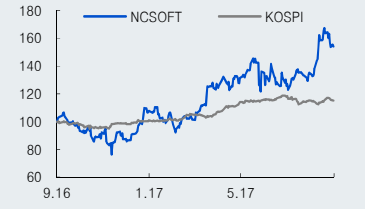
Game

Company Update
September 27, 2017

(Maintain)	**Buy**
Target Price(12M, W)	▲ **640,000**
Share Price (09/26/17, W)	440,500
Expected Return	45%

OP (17F, Wbn)	776
Consensus OP (17F, Wbn)	635
EPS Growth (17F, %)	107.9
Market EPS Growth (17F, %)	44.7
P/E (17F, x)	17.1
Market P/E (17F, x)	9.9
KOSPI	2,374.32
Market Cap (Wbn)	9,664
Shares Outstanding (mn)	22
Free Float (%)	84.9
Foreign Ownership (%)	42.6
Beta (12M)	-0.03
52-Week Low	218,000
52-Week High	478,500

(%)	1M	6M	12M
Absolute	14.0	51.9	55.1
Relative	14.2	38.8	33.7



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NCSOFT

(036570 KS)

Lineage M's lead remains unchallenged

Lineage M remains top-grossing mobile game, despite competition

NCsoft's mobile game *Lineage M* has been doing a good job defending its lead against the competition. The title remains the top-grossing game on both iOS (App Store) and Android (Google Play).

During September, there were two instances in which *Lineage M* briefly gave up its top spot on the iOS charts. The first was due to Netmarble Games' content update for *Lineage II: Revolution (L2R)* on September 5th, and the other was prompted by the release of Nexon GT's new title, *AxE*, on September 13th. In both instances, however, *Lineage M* quickly reclaimed its leading position and has held onto it ever since. We note that iOS charts may be less relevant, as the platform's share in Korea is believed to be in the teens, well below that of Android.

We think upcoming large-scale mobile MMORPGs are the ones that NCsoft needs to keep a close eye on. Potential contenders include Gamevil's *Royal Blood*, Netmarble Games' *Tera M*, *Blade & Soul Mobile*, and *Seven Knights MMORPG*, and Webzen's *Archlord Awake*; that said, most of these titles are likely to be released from November. As such, we think *Lineage M* will benefit from the void in new releases through October. As rival games proliferate, we believe the company will be able to fend off competition with massive content updates (e.g., castle sieges) and the introduction of player-to-player (P2P) trading.

Record-long Chuseok holiday provide ample playing time

This year's Chuseok holiday in Korea will last a full 10 days, from September 30th to October 9th, the longest on record. We think NCsoft stands to benefit from the long holiday, which should provide gamers with ample time to fully immerse themselves in their favorite games. Indeed, during previous Chuseok holidays in 2014-16, the internet café playtime of NCsoft's major online titles tended to increase by more than 10% (see Figure 1).

This year's holiday should also coincide with the "early-month effect" (the tendency of revenue to increase after the first day of the month, when mobile payment limits are refreshed). In order to take full advantage of this opportunity, the company is planning to hold a special Chuseok event for its entire PC and mobile lineup (including *Lineage M*) starting September 27th.

Maintain Buy; raise TP to W640,000 from W600,000

We remain Buy on NCsoft and raise our target price to W640,000 (from W600,000). We raised our *Lineage M* revenue estimates for 4Q17 and 2018 in light of the mobile title's firm footing against increasing competition. We see additional upside catalysts ahead, including the launch of *Guild Wars 2*'s second expansion pack on September 22nd, the overseas rollout of *Lineage M*, and further domestic releases. In our view, the recent increase in labor expenses (including bonus payouts) will be offset by the strong revenue growth of mobile titles.

FY (12)	12/14	12/15	12/16	12/17F	12/18F	12/19F
Revenue (Wbn)	839	838	984	2,036	2,349	2,382
OP (Wbn)	278	237	329	776	875	878
OP margin (%)	33.1	28.3	33.4	38.1	37.2	36.9
NP (Wbn)	230	165	272	566	637	638
EPS (W)	10,486	7,542	12,416	25,808	29,040	29,090
ROE (%)	18.4	10.6	14.9	25.0	22.0	18.9
P/E (x)	17.4	28.2	19.9	17.1	15.2	15.1
P/B (x)	2.7	2.6	2.7	3.4	2.9	2.6
Dividend yield (%)	1.9	1.3	1.5	1.6	1.8	1.8

Note: All figures are based on consolidated K-IFRS; NP refers to net profit attributable to controlling interests
Source: Company data, Mirae Asset Daewoo Research estimates

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Earnings trends and forecasts

Lineage M has been doing a good job defending its lead against the competition. Since its Korean release on June 21st, the title has remained the top-grossing game on both iOS (App Store) and Android (Google Play). In light of these recent trends, we are raising our *Lineage M* daily average revenue estimates to W5.5bn (from W5bn) for 4Q17 and W4.1bn (from W4bn) for 2018.

We see additional upside catalysts ahead, including the launch of the second *Guild Wars 2* expansion pack on September 22nd, the potential rollout of *Lineage M* overseas (including Taiwan) in 4Q17, and further domestic releases (including *Blade & Soul Mobile*). In our view, the recent increase in labor expenses (including bonus payouts) will be offset by the strong revenue growth of mobile titles.

Table 1. Quarterly and annual earnings and forecasts (Wbn, %)

	1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17F	4Q17F	2015	2016	2017F
Revenue	**241**	**241**	**218**	**285**	**240**	**259**	**817**	**721**	**838**	**984**	**2,036**
Lineage	79	94	84	118	51	34	35	48	313	375	169
Lineage II	17	19	21	20	18	17	18	20	63	77	73
Aion: Upheaval	20	18	16	18	13	11	12	14	74	72	50
Blade & Soul	54	49	40	39	45	39	41	43	114	182	168
Guild Wars 2	31	16	15	15	14	14	18	32	101	77	77
Mobile	0	0	0	19	23	94	639	504	0	20	1,260
Other	11	18	17	13	11	15	16	15	76	58	56
Royalties	29	27	24	42	64	36	38	45	99	122	183
Operating profit	**76**	**86**	**65**	**102**	**30**	**38**	**394**	**313**	**237**	**329**	**776**
OP margin	31.5	35.8	29.9	35.7	12.7	14.5	48.3	43.5	28.3	33.4	38.1
Net profit	**66**	**90**	**48**	**67**	**17**	**31**	**288**	**228**	**166**	**271**	**565**
Net margin	27.5	37.6	22.0	23.5	7.3	11.9	35.3	31.7	19.8	27.6	27.7
YoY											
Revenue	28.0	10.6	11.2	20.1	-0.6	7.5	275.5	153.5	-0.1	17.3	107.0
Lineage	19.5	10.5	7.1	42.4	-34.8	-64.2	-57.6	-59.3	18.9	20.0	-55.0
Lineage II	55.1	17.1	31.8	1.7	7.7	-12.6	-12.6	-1.0	5.8	22.5	-5.0
Aion: Upheaval	10.2	-12.4	-4.2	-3.6	-33.9	-38.5	-25.9	-21.0	-21.9	-2.7	-30.0
Blade & Soul	101.8	64.1	60.8	21.5	-17.5	-20.2	2.2	9.8	37.7	60.1	-8.0
Guild Wars 2	52.6	-29.3	-26.0	-60.2	-53.4	-14.7	15.0	115.3	17.4	-23.8	1.0
Mobile						51,113.1	128,471.4	2,540.5			6,274.9
Other	-47.0	-22.1	3.3	-20.0	-1.5	-14.9	-8.3	14.5	13.0	-22.8	-3.9
Royalties	14.7	28.7	5.5	42.5	116.1	33.8	58.0	7.6	-27.9	23.7	49.5
Operating profit	68.9	28.4	28.7	35.8	-59.8	-56.4	505.5	208.1	-14.6	38.5	135.9
Net profit	86.1	56.3	56.3	58.1	-73.7	-65.9	501.7	241.8	-26.9	63.1	108.1

Note: All figures are based on consolidated K-IFRS; Lineage M, which was released on June 21st, 2017, is included in Mobile, net profit is attributable to controlling and non-controlling interests; we assumed *Lineage M*'s daily average revenue at W7bn for 3Q17 and W5.5bn for 4Q17; royalties from outside developers using the company's IP (e.g., Netmarble Games' L2R) are included in royalty revenue; Source: Company data, Mirae Asset Daewoo Research estimates

Table 2. Earnings forecast revisions (Wbn, W, %)

	Previous		Revised		% chg.		Notes
	17F	18F	17F	18F	17F	18F	
Revenue	1,991	2,313	2,036	2,349	2.3	1.6	- Revised *Lineage M* daily average revenue estimates upward
Operating profit	760	865	776	875	2.1	1.1	- Revised labor expenses upward
Net profit	553	629	565	636	2.1	1.1	
EPS (W)	25,256	28,712	25,808	29,040	2.2	1.1	
OP margin	38.2	37.4	38.1	37.2			
Net margin	27.8	27.2	27.7	27.1			

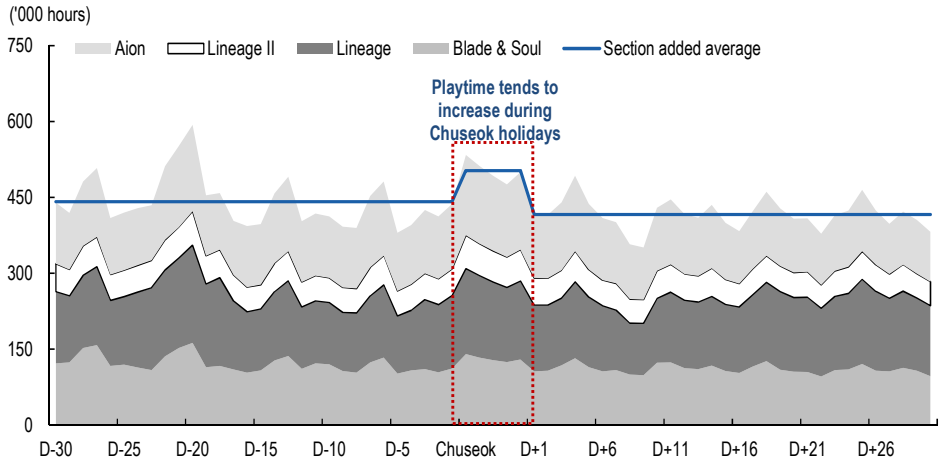
Note: All figures are based on consolidated K-IFRS; net profit is attributable to controlling and non-controlling interests; EPS is based on net profit attributable to controlling interests
Source: Mirae Asset Daewoo Research estimates

Chuseok holiday effects

This year's Chuseok holiday will be the longest in history, lasting from September 30th to October 9th. We think NCsoft stands to benefit from the long holiday, which should provide gamers with ample time to fully immerse themselves in their favorite games. Indeed, during previous Chuseok holidays in 2014-16, the internet café playtime of NCsoft's major online titles tended to increase by more than 10%.

In order to take full advantage of this opportunity, NCsoft is planning to hold a special Chuseok event for its entire PC and mobile lineup (including *Lineage M*) starting September 27th. It is also worth noting that this year's holidays fall at the beginning of the month, when the "early-month effect" (the tendency of revenue to increase after the first day of the month, when mobile payment limits are refreshed) typically kicks in.

Figure 1. During previous Chuseok holidays in 2014-16, internet café playtime of NCsoft's major online titles tended to increase



Note: Based on assumption that past Chuseok holidays lasted for five days
Source: Gametrics, Mirae Asset Daewoo Research

Figure 2. NCsoft is planning to hold a special Chuseok event for its entire PC and mobile lineup starting September 27th



Source: Company data, Mirae Asset Daewoo Research

Content updates

NCsoft released the second expansion pack of its PC title *Guild Wars 2* on September 22nd, which should contribute to revenue growth. *Guild Wars 2* is a PC title developed by NCsoft's subsidiary ArenaNet. It debuted in North America and Europe in 2012. The upcoming expansion pack "Path of Fire" is a massive content update that will introduce mounts and five new maps. The game's first expansion pack came out in late October 2015. Following its release, revenue from *Guild Wars 2* jumped 94% QoQ in 4Q15. Last year, the title generated W77bn in revenue, which is above the 2016 revenue of the recently listed online game developer PearlAbyss, which derives most of its revenue from overseas markets, including North America and Europe.

As for *Lineage M*, the company is planning a special promotion on October 11th to mark the 100th day of the game's release. While details are not yet known, we believe it will be either a large-scale content update (castle siege) or large-scale event.

Figure 3. NCsoft released second expansion pack of its PC title *Guild Wars 2* on September 22nd



Source: NCsoft ArenaNet, Mirae Asset Daewoo Research

Figure 4. NCsoft plans special promotion on October 11th to mark 100th day of Lineage M's release



Source: Company data, Mirae Asset Daewoo Research

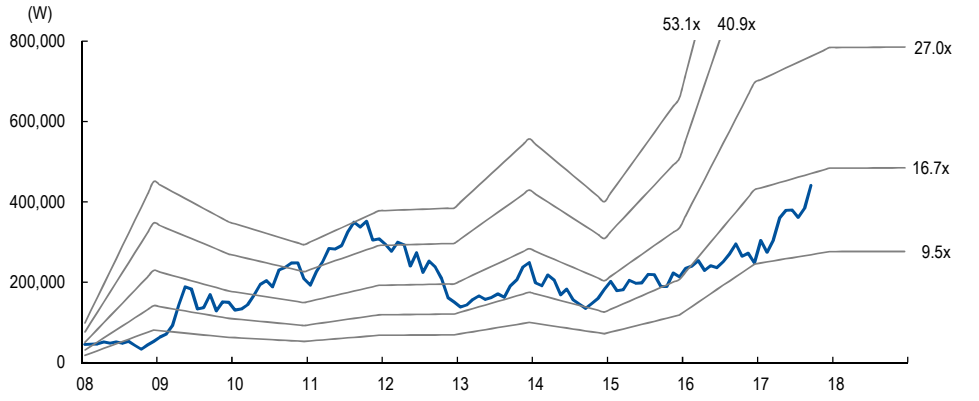
Valuation

Table 3. 12-month target price calculation (Wbn, x, W)

Category			Value	Notes
Operating value			14,132	
	12MF net profit attributable to controlling interests	P/E multiple		
Consolidated	601	23.5	14,132	Reflecting peer average 2017F P/E multiple
No. of shares ('000)			21,939	Total shares issued, including 688,583 treasury shares
Target price			640,000	Rounded

Note: Target P/E based on valuations of peers, including Activision Blizzard and NetEase
Source: Bloomberg, Mirae Asset Daewoo Research estimates

Figure 5. 12 month-forward P/E band



Source: Mirae Asset Daewoo Research

Table 4. Earnings projection and valuation comparison of major global game companies (Wbn, x, %)

Company	Market cap	Revenue		Operating profit		Net profit		P/E		EV/EBITDA		P/B		ROE	
		17F	18F	17F	18F	17F	18F	17F	18F	17F	18F	17F	18F	17F	18F
NCsoft	9,664	2,036	2,349	776	875	565	636	17.1	15.2	9.7	8.1	3.4	2.9	25.0	22.0
Netmarble Games	12,753	2,484	2,505	591	595	443	449	32.1	31.6	16.2	15.4	3.0	2.8	14.6	9.1
Com2us	1,589	566	628	213	235	166	183	9.6	8.7	4.0	3.0	2.0	1.6	23.4	21.1
Activision Blizzard	53,302	7,685	8,259	2,582	3,073	1,833	2,213	29.3	24.6	18.7	16.0	4.5	4.0	16.4	17.1
Electronic Arts	40,060	5,890	6,400	1,916	2,295	1,510	1,802	26.7	22.6	16.9	14.6	7.3	6.0	32.5	34.9
Take-Two	11,744	1,984	3,092	359	762	303	601	44.7	22.8	24.5	13.1	8.1	6.0	19.0	25.4
Zynga	3,747	944	1,032	118	133	95	126	41.0	30.2	20.7	15.1	2.1	2.0	5.1	6.8
Ubisoft	8,735	2,324	2,791	358	563	236	392	38.9	23.8	8.9	7.3	5.2	4.4	13.7	18.1
NINTENDO	58,260	9,522	11,964	1,300	2,356	1,044	1,753	46.8	28.6	31.9	18.6	3.7	3.4	8.5	13.1
Nexon	12,872	2,259	2,423	886	956	664	753	19.4	17.2	10.1	9.8	2.9	2.5	15.8	15.4
Square Enix	5,136	2,610	2,732	385	417	253	279	20.2	18.5	8.3	7.5	2.5	2.3	12.9	12.9
DeNA	3,771	1,527	1,589	289	349	194	228	19.0	16.3	7.9	6.8	1.4	1.4	7.7	8.3
Tencent	466,328	39,737	53,605	13,083	16,571	10,929	14,075	42.9	33.4	30.3	23.7	11.3	8.6	29.7	28.9
NetEase	39,328	9,249	11,579	2,542	3,033	2,401	2,862	16.6	14.1	12.5	10.5	4.6	3.7	29.9	28.0
Kingsoft	3,461	948	1,455	196	306	214	310	16.8	11.5	10.3	7.2	2.3	2.0	12.5	16.6
Youzu Interactive	3,530	614	791	130	181	142	196	24.4	17.9	22.9	16.9	6.1	4.8	25.1	27.0
Average								27.8	21.1	15.9	12.1	4.4	3.7	18.2	19.0

Note: Mirae Asset Daewoo Research estimates for the domestic companies, consensus for the overseas companies
Source: Bloomberg, Mirae Asset Daewoo Research estimates

NCSOFT (036570 KS/Buy/TP: W640,000)

Comprehensive Income Statement (Summarized)

(Wbn)	12/16	12/17F	12/18F	12/19F
Revenue	**984**	**2,036**	**2,349**	**2,382**
Cost of Sales	**188**	**186**	**215**	**218**
Gross Profit	**796**	**1,850**	**2,134**	**2,164**
SG&A Expenses	**467**	**1,074**	**1,259**	**1,286**
Operating Profit (Adj)	**329**	**776**	**875**	**878**
Operating Profit	**329**	**776**	**875**	**878**
Non-Operating Profit	**17**	**8**	**9**	**8**
Net Financial Income	19	7	0	0
Net Gain from Inv in Associates	7	1	0	0
Pretax Profit	346	784	884	886
Income Tax	75	219	248	248
Profit from Continuing Operations	271	565	636	638
Profit from Discontinued Operations	0	0	0	0
Net Profit	271	565	636	638
Controlling Interests	272	566	637	638
Non-Controlling Interests	-1	-1	-1	-1
Total Comprehensive Profit	**329**	**899**	**636**	**638**
Controlling Interests	329	899	636	637
Non-Controlling Interests	0	0	0	0
EBITDA	361	806	905	908
FCF (Free Cash Flow)	95	105	627	663
EBITDA Margin (%)	36.7	39.6	38.5	38.1
Operating Profit Margin (%)	33.4	38.1	37.2	36.9
Net Profit Margin (%)	27.6	27.8	27.1	26.8

Statement of Financial Condition (Summarized)

(Wbn)	12/16	12/17F	12/18F	12/19F
Current Assets	**1,192**	**2,372**	**2,905**	**3,404**
Cash and Cash Equivalents	145	2,017	2,495	2,989
AR & Other Receivables	161	353	408	414
Inventories	1	2	2	2
Other Current Assets	885	0	0	-1
Non-Current Assets	**1,169**	**532**	**502**	**472**
Investments in Associates	71	0	0	0
Property, Plant and Equipment	225	217	190	164
Intangible Assets	53	52	49	46
Total Assets	**2,361**	**2,904**	**3,408**	**3,877**
Current Liabilities	**284**	**100**	**115**	**117**
AP & Other Payables	28	100	115	117
Short-Term Financial Liabilities	0	0	0	0
Other Current Liabilities	256	0	0	0
Non-Current Liabilities	**181**	**150**	**150**	**150**
Long-Term Financial Liabilities	150	150	0	0
Other Non-Current Liabilities	31	0	150	150
Total Liabilities	**465**	**249**	**265**	**266**
Controlling Interests	**1,886**	**2,647**	**3,135**	**3,603**
Capital Stock	11	11	11	11
Capital Surplus	432	434	434	434
Retained Earnings	1,544	1,966	2,454	2,922
Non-Controlling Interests	**10**	**8**	**8**	**7**
Stockholders' Equity	**1,896**	**2,655**	**3,143**	**3,610**

Cash Flows (Summarized)

(Wbn)	12/16	12/17F	12/18F	12/19F
Cash Flows from Op Activities	112	121	627	663
Net Profit	271	565	636	638
Non-Cash Income and Expense	115	254	277	277
Depreciation	27	27	27	27
Amortization	6	3	3	3
Others	82	224	247	247
Chg in Working Capital	-154	-461	-39	-4
Chg in AR & Other Receivables	-71	-189	-53	-6
Chg in Inventories	0	-1	0	0
Chg in AP & Other Payables	-5	1	1	0
Income Tax Paid	**-136**	**-244**	**-248**	**-248**
Cash Flows from Inv Activities	-139	1,865	0	0
Chg in PP&E	-15	-16	0	0
Chg in Intangible Assets	-2	-3	0	0
Chg in Financial Assets	-170	1,397	0	0
Others	**48**	**487**	**0**	**0**
Cash Flows from Fin Activities	-74	-140	-149	-170
Chg in Financial Liabilities	-	-	-	-
Chg in Equity	-9	2	0	0
Dividends Paid	-60	-141	-149	-170
Others	**-**	**-**	**-**	**-**
Increase (Decrease) in Cash	-103	1,872	478	493
Beginning Balance	248	145	2,017	2,495
Ending Balance	**145**	**2,017**	**2,495**	**2,989**

Forecasts/Valuations (Summarized)

	12/16	12/17F	12/18F	12/19F
P/E (x)	19.9	17.1	15.2	15.1
P/CF (x)	14.1	11.8	10.6	10.6
P/B (x)	2.7	3.4	2.9	2.6
EV/EBITDA (x)	12.7	9.7	8.1	7.5
EPS (W)	12,416	25,808	29,040	29,090
CFPS (W)	17,610	37,334	41,628	41,696
BPS (W)	93,096	127,742	150,002	171,343
DPS (W)	3,820	7,000	8,000	8,000
Payout ratio (%)	29.9	26.3	26.7	26.7
Dividend Yield (%)	1.5	1.6	1.8	1.8
Revenue Growth (%)	17.4	106.9	15.4	1.4
EBITDA Growth (%)	32.7	123.3	12.3	0.3
Operating Profit Growth (%)	38.8	135.9	12.8	0.3
EPS Growth (%)	64.6	107.9	12.5	0.2
Accounts Receivable Turnover (x)	8.0	8.1	6.3	5.9
Inventory Turnover (x)	1,455.7	1,818.6	1,386.5	1,303.1
Accounts Payable Turnover (x)	21.0	25.8	25.5	24.0
ROA (%)	11.9	21.5	20.2	17.5
ROE (%)	14.9	25.0	22.0	18.9
ROIC (%)	61.8	89.3	79.5	80.6
Liability to Equity Ratio (%)	24.5	9.4	8.4	7.4
Current Ratio (%)	419.1	2,381.6	2,527.7	2,921.0
Net Debt to Equity Ratio (%)	-44.0	-70.3	-74.6	-78.6
Interest Coverage Ratio (x)	110.4	486.5	0.0	0.0

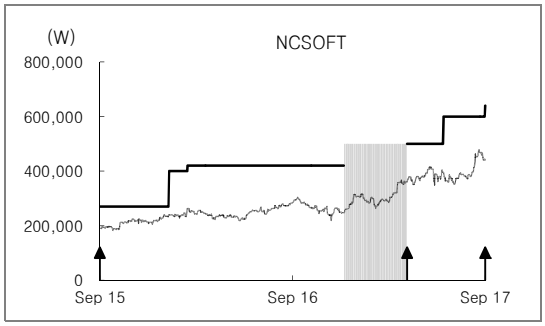
Source: Company data, Mirae Asset Daewoo Research estimates

APPENDIX 1

Important Disclosures & Disclaimers

2-Year Rating and Target Price History

Company (Code)	Date	Rating	Target Price
NCSOFT (036570)	09/26/2017	Buy	640,000
	07/09/2017	Buy	600,000
	05/01/2017	Buy	500,000
	01/02/2017	No Coverage	
	03/11/2016	Buy	420,000
	02/05/2016	Buy	400,000
	05/13/2015	Buy	270,000



Stock Ratings		Industry Ratings	
Buy	: Relative performance of 20% or greater	Overweight	: Fundamentals are favorable or improving
Trading Buy	: Relative performance of 10% or greater, but with volatility	Neutral	: Fundamentals are steady without any material changes
Hold	: Relative performance of -10% and 10%	Underweight	: Fundamentals are unfavorable or worsening
Sell	: Relative performance of -10%		

Ratings and Target Price History (Share price (—), Target price (▬), Not covered (■), Buy (▲), Trading Buy (■), Hold (●), Sell (◆))

* Our investment rating is a guide to the relative return of the stock versus the market over the next 12 months.
* Although it is not part of the official ratings at Mirae Asset Daewoo Co., Ltd., we may call a trading opportunity in case there is a technical or short-term material development.
* The target price was determined by the research analyst through valuation methods discussed in this report, in part based on the analyst's estimate of future earnings.
* The achievement of the target price may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

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	Buy	Trading Buy	Hold	Sell
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