

# Studio Dragon (253450 KS)

## Expectations for market cap. of W2tr

### BUY (Initiate)

Offer Price	W35,000
Target Price (Initiate)	W53,000
% variance	51.4%

SeJong Hong	☎ (82-2) 3772-1584
	✉ sejonghong@shinhan.com
Hyunji Ku	☎ (82-2) 3772-1508
	✉ hyunji.ku@shinhan.com

KOSPI	2,527.67p
KOSDAQ	785.32p
Face Value	W500
Offered shares	6,000,000
IPO Date	November 24
IPO shares	28,037,240
Lockup(%)	79.03%
Major Shareholders	CJ E&M 71.33%
	Others 7.27%
Absolute Performance	3M n.a
	6M n.a
	12M n.a
Relative performance	3M n.a
to KOSPI	6M n.a
	12M n.a

◆ Analysts who prepared this report are registered as research analysts in Korea but not in any other jurisdiction, including the U.S.

◆ Please see Analyst certification and important disclosures & disclaimers at the end of this report.

- ◆ 2018 consolidated operating profit estimated at W66.1bn (+76.5% YoY)
- ◆ Market cap. to range between W1.25tr and W2.1tr
- ◆ Initiate coverage with BUY rating and target price of W53,000

### 2018 consolidated operating profit estimated at W66.1bn (+76.5% YoY)

Studio Dragon is expected to post 2018 consolidated sales of W377.9bn (+33.5% YoY) and operating profit of W66.1bn (+76.5% YoY). The company should continue to benefit from increased drama production (from 22 to 26 dramas). Revenues from distribution rights, a primary revenue source, are projected to jump 48.7% YoY to W180.2bn. Earnings growth may be stagnant in 4Q17 due to the timing of revenue recognition of a flagship drama series (Hwayuki, to be aired in December), but growth should gain momentum in 1Q18.

### Market cap. to range between W1.25tr and W2.1tr

Profit forecasts and the target multiple will likely be revised substantially going forward. Studio Dragon's market cap. will be determined by selling prices of dramas to China and sales volume. The lower end of the market cap. range is estimated to be W1.25tr. We applied a target PER of 25x to 2018F net profit (assuming about W20bn in revenues from China). The target multiple (25x) is a 10% premium to the lower end of Showbox's past-two year band and the median of Jcontentree's peak and average multiples. The upper end of the market cap. range is estimated to be W2.1tr, based on W50bn in revenues from China and a target PER of 30x. The target multiple (30x) is the upper end of the past two-year band of Jcontentree and SBS.

Investors should consider other media stocks worth buying given a possible re-rating of the sector. Promising stocks are Showbox, Jcontentree and SBS. Showbox is an attractive alternative in view of strong profitability of domestic operations and high visibility of the China business. The shares are also trading in the lower end of the band. Jcontentree is expected to post solid returns upon revaluation of its broadcasting unit. Its market cap. should come to W630bn (excluding net debt) if the broadcasting unit is valued at W600bn (about W300bn based on stake). SBS is seeking both approval of commercial break and relaunch of the Chinese version of Running Man. If the two issues are resolved, a PBR of over 1x looks possible.

### Initiate coverage with BUY rating and target price of W53,000

We initiate our coverage on Studio Dragon with a BUY rating and target price of W53,000. Investment points are: 1) sales growth of more than 30%; 2) prospect for surging profits via booking of revenues from China; and 3) ideal revenue structure based on production and distribution. Now is the time to focus on growth prospects instead of valuation. Studio Dragon is an attractive media stock.

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 Ratio (%)
2015												
2016	154.4	16.6	10.5	8.1	289	n.a	10.8	5.3	25.1	3.4	6.0	12.1
2017F	283.2	37.3	36.2	26.9	959	231.8	13.2	9.5	30.5	10.2	18.0	(6.5)
2018F	377.9	66.1	65.6	49.6	1,768	84.4	17.6	13.1	32.2	16.0	26.4	(23.3)
2019F	447.8	90.5	87.7	66.2	2,363	33.7	20.2	14.8	33.7	17.8	27.0	(38.6)

Source: Company data, Shinhan Investment Corp.

## Earnings trend and outlook [K-IFRS consolidated]

(bn KRW)	1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17F	1Q18F	2Q18F	3Q18F	4Q18F	2015	2016	2017F	2018F
<b>&lt;Assumptions for production&gt;</b>																
Drama (number)	5.0	4.0	5.0	5.0	5.0	5.0	6.0	6.0	7.0	7.0	6.0	6.0	16.0	19.0	22.0	26.0
<b>&lt;Earnings estimates&gt;</b>																
Total revenue	49.5	47.0	46.5	52.5	73.5	63.3	77.5	68.9	97.0	87.8	101.3	91.8	97.4	195.5	283.2	377.9
Production revenue	22.5	22.0	21.0	22.3	24.5	22.0	29.6	30.2	29.1	26.2	35.9	36.4	54.8	87.8	106.3	127.6
Distribution revenue	18.0	18.0	18.5	20.9	34.0	29.0	33.3	24.9	50.1	45.9	47.9	36.3	39.0	75.4	121.2	180.2
Other (PPL) revenue	9.0	7.0	7.0	9.3	15.0	12.3	14.6	13.8	17.8	15.7	17.6	19.1	3.6	32.3	55.7	70.2
<b>&lt;Assumptions for overseas operations&gt;</b>																
Overseas revenue	12.8	13.0	9.3	9.3	23.0	15.7	11.7	11.8	26.7	20.3	17.2	17.6	23.9	44.2	62.2	81.9
Overseas revenue share (%)	25.8	27.6	19.9	17.6	31.3	24.8	15.2	17.1	27.5	23.2	17.0	19.2	24.5	22.6	22.0	21.7
Japan	2.3	2.3	2.4	2.1	7.5	4.5	2.7	2.3	8.6	5.2	3.3	3.9	8.9	9.1	17.0	21.0
Asia including china	9.8	10.0	6.2	6.3	12.2	9.0	7.5	7.8	16.2	13.0	12.0	11.9	11.0	32.3	36.5	53.1
China	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	7.0	5.0	7.0	6.0	6.0	0.0	22.0
U.S.	0.6	0.6	0.6	0.8	3.2	2.1	1.5	1.6	1.8	2.0	1.8	1.8	3.6	2.6	8.4	7.5
Others	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.2	0.3	0.3
COGS	41.3	40.4	38.8	41.3	57.6	50.2	66.5	56.4	72.4	63.9	81.5	73.8	85.7	161.8	230.7	291.6
SG&A costs	2.8	3.3	3.2	3.3	2.8	3.3	4.4	4.5	4.6	4.2	5.6	5.7	9.1	12.6	15.0	20.1
OP	5.4	3.3	4.6	7.8	13.1	9.8	6.6	8.0	19.9	19.7	14.1	12.3	2.6	21.2	37.5	66.1
Pre-tax profit	4.3	2.3	3.8	6.6	13.0	9.3	6.2	7.6	19.9	19.6	13.8	12.2	1.9	17.1	36.2	65.6
NP	3.3	1.8	2.9	5.1	9.6	6.7	4.8	5.9	15.0	14.8	10.5	9.2	1.4	13.0	26.9	49.6
<b>&lt;% YoY growth&gt;</b>																
Sales	100.8	98.3	96.2	107.1	48.5	34.7	66.6	31.2	31.9	38.7	30.8	33.3	(5.5)	100.7	44.8	33.5
OP	4,721.5	TP	325.5	266.9	142.0	193.4	42.9	1.3	51.6	101.3	115.4	55.1	(37.8)	717.1	76.6	76.5
NP	TP	TP	386.5	184.3	190.2	275.0	66.3	16.1	57.5	122.1	117.9	57.4	9.8	802.7	106.7	84.3
<b>&lt;OPM, %&gt;</b>																
OPM	11.0	7.1	9.9	15.0	17.9	15.5	8.5	11.5	20.5	22.5	14.0	13.4	2.7	10.8	13.2	17.5
NPM	6.6	3.8	6.2	9.6	13.0	10.5	6.2	8.5	15.5	16.9	10.3	10.1	1.5	6.6	9.5	13.1

Source: Company data, Shinhan Investment Corp.

Note: 1) Quarterly earnings are SHIC estimates based on annual figures (quarterly data not available)

2) Sales details based on SHIC estimates

## Earnings forecast revision [K-IFRS consolidated]

(bn KRW)	2017F			2018F		
	Before	After	Change (%)	Before	After	Change (%)
Sales	239.9	283.2	18.0	312.1	377.9	21.1
OP	38.8	37.5	(3.4)	66.7	66.1	(0.8)
NP	27.8	26.9	(3.3)	50.0	49.6	(0.9)

Source: Shinhan Investment Corp.

Note: Annual guidance and our forecasts were upgraded to reflect stronger-than-expected top-line growth in 3Q17

**PBR valuation based on 2018F EPS: Target price of ₩53,000**

(bn KRW)	Value	(bn KRW)	Value	(bn KRW)	Value
2017F NP	26.9	2018F NP	49.6	2019F NP	66.2
EPS (KRW)	959	EPS (KRW)	1,768	EPS (KRW)	2,362
Target price (KRW)	29,000	Target price (KRW)	53,000	Target price (KRW)	71,000
Target PER (x)	30	Target PER (x)	30	Target PER (x)	30
		Offering price	35,000		
		PER estimate	19.8		

Source: Shinhan Investment Corp.

**IPO summary**

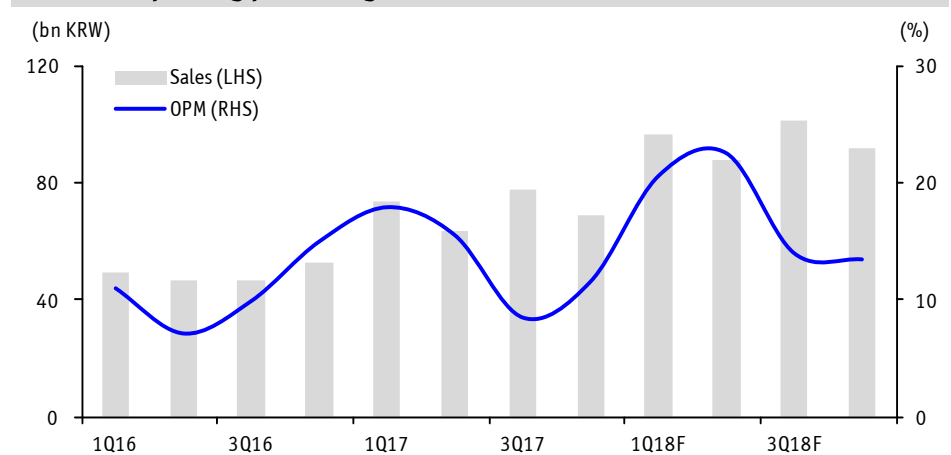
	Details
No. of shares	6,000,000 shares
Face value	₩500
No. of shares to be listed	28,037,240 shares
Expected date of IPO	November 24

Source: DART, Shinhan Investment Corp.

**Distribution rights of major dramas sold in China**

Drama title	Selling price : (100mn KRW)	Producer	Broadcasting
My Love from the Star	6	HB Entertainment	2H13
The Heirs	6	Hwa & Dam Pictures	2H13
Fated to Love You	24	Number Three Pictures, Page One Films	2H14
Pinocchio	62	iHQ	2H14
Descendants of the Sun	50+RS	Hwa & Dam Pictures	1H16
Moon Lovers: Scarlet Heart Ryeo	91	BaramiBunda	2H16
The Legend of the Blue Sea	Over ₩10bn	Culture Depot	2H16
The History of Saimdang	62	Group Eight	1H17

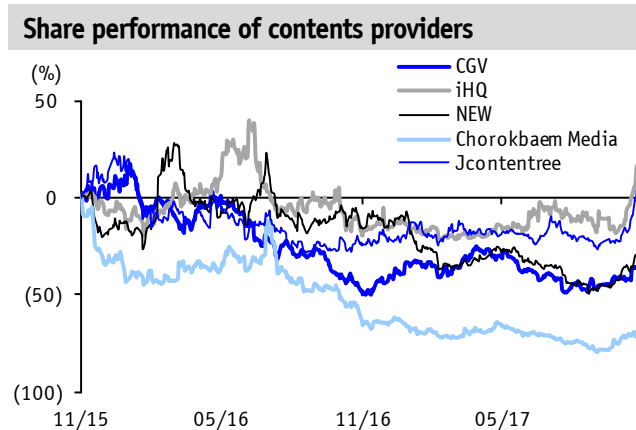
Source: Media reports, Shinhan Investment Corp.

**Sales and operating profit margin**

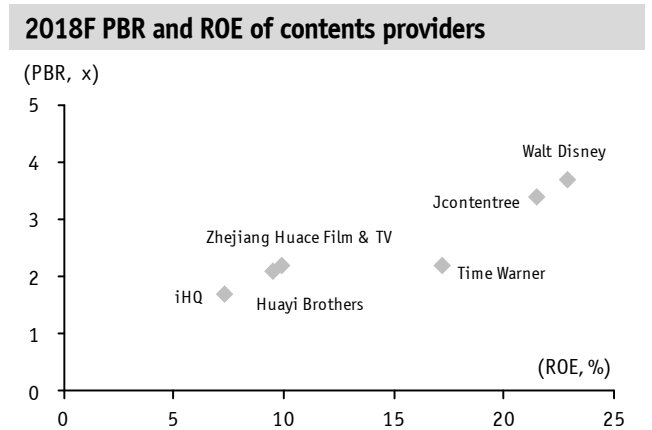
Source: Company data, Shinhan Investment Corp.

Global peers									
Ticker		036420 KS	003560 KS	160550 KS	047820 KS	DIS US	TWX US	300027 CH	300133 CH
Company		Jcontentree	iHQ	NEW	Chorokbaem Media	Walt Disney	Time Warner	Huayi Brothers	Zhejiang Huace Film & TV
Market cap. (bn KRW)		578.3	429.7	243.9	93.0	173,378.8	76,050.5	3,727.5	2,856.0
Sales	2016	335.2	109.4	125.7	105.9	64,550.7	34,030.8	608.9	774.0
(bn KRW)	2017F	404.4	118.6	-	-	61,877.4	34,024.6	645.0	891.8
	2018F	473.9	134.0	-	-	64,445.5	35,628.5	792.7	1,072.1
OP	2016	28.9	11.3	6.6	7.7	16,424.3	8,958.7	59.2	87.0
(bn KRW)	2017F	36.6	14.7	-	-	16,196.5	8,866.7	162.8	117.7
	2018F	47.1	22.2	-	-	16,853.6	9,367.6	211.7	147.6
OP margin	2016	8.6	10.3	5.3	7.3	25.4	26.3	9.7	11.2
(%)	2017F	9.0	12.4	-	-	26.2	26.1	25.2	13.2
	2018F	9.9	16.5	-	-	26.2	26.3	26.7	13.8
NP	2016	19.2	4.4	4.4	4.9	10,879.1	5,336.5	5.0	79.6
(bn KRW)	2017F	16.8	11.6	-	-	10,110.5	5,384.1	146.3	103.2
	2018F	31.7	17.7	-	-	10,361.4	5,652.6	168.8	124.5
Sales growth	2016	(4.2)	3.0	52.2	326.3	10.3	6.9	(12.2)	62.6
(% YoY)	2017F	20.7	8.4	-	-	(4.1)	(0.0)	5.9	15.2
	2018F	17.2	13.0	-	-	4.2	4.7	22.9	20.2
EPS growth	2016	9.7	29.8	309.4	(298.2)	15.1	24.4	(95.3)	(15.8)
(% YoY)	2017F	(21.5)	55.0	-	-	(4.0)	(0.4)	2,725.9	30.9
	2018F	95.6	50.1	-	-	7.3	5.0	21.9	26.1
P/E	2016	19.2	60.2	69.7	19.6	16.2	16.6	37.9	42.0
(x)	2017F	37.0	36.9	-	-	17.9	14.4	26.6	27.1
	2018F	18.9	24.6	-	-	16.4	13.7	21.8	21.5
P/B	2016	5.2	1.2	2.3	1.3	3.4	3.1	3.4	3.1
(x)	2017F	4.2	1.9	-	-	4.0	2.5	2.3	2.5
	2018F	3.4	1.7	-	-	3.7	2.2	2.1	2.2
EV/EBITDA	2016	16.2	4.4	32.1	9.8	10.1	11.6	80.8	40.8
(x)	2017F	14.9	7.4	-	-	10.7	10.2	22.9	24.8
	2018F	12.9	8.2	-	-	10.2	9.7	18.2	19.6
ROE	2016	26.3	2.0	3.3	7.2	21.4	19.2	0.3	7.4
(%)	2017F	14.4	5.1	-	-	21.6	18.7	8.4	9.0
	2018F	21.5	7.3	-	-	22.9	17.2	9.5	9.9

Source: Bloomberg, Shinhan Investment Corp.



Source: Bloomberg, Shinhan Investment Corp.



Source: Bloomberg, Shinhan Investment Corp.

## Balance Sheet

Year to Dec. (W bn)	2015	2016	2017F	2018F	2019F
<b>Assets</b>	<b>242.0</b>	<b>283.0</b>	<b>336.4</b>	<b>406.2</b>	
Total Current Assets	81.4	120.3	163.3	225.1	
Cash and Cash Equivalents	11.5	46.4	85.2	143.4	
Accounts Receivables	37.0	38.9	40.8	42.8	
Inventories	0.0	1.8	2.4	2.8	
Non-Current Assets	160.6	162.7	173.0	181.1	
Tangible Assets	1.2	1.4	1.9	2.2	
Intangible Assets	123.9	125.5	135.1	142.7	
Investment Assets	2.3	2.6	2.8	3.0	
Other Financial Institutions Assets	0.0	0.0	0.0	0.0	
<b>Liabilities</b>	<b>105.9</b>	<b>120.0</b>	<b>123.8</b>	<b>127.4</b>	
Current Liabilities	84.5	107.4	110.2	113.1	
ST Borrowings	8.1	6.1	6.1	6.1	
Account Payables	5.8	4.3	5.2	6.3	
Current Portion of LT Debt	0.0	20.0	20.0	20.0	
Non-Current Liabilities	21.4	12.7	13.6	14.3	
Bonds	19.9	9.9	9.9	9.9	
LT Borrowings(incl. LT Fin. Liab.)	0.0	0.0	0.0	0.0	
Other Financial Institutions Liab.	0.0	0.0	0.0	0.0	
<b>Shareholders' Equity</b>	<b>136.1</b>	<b>163.0</b>	<b>212.6</b>	<b>278.8</b>	
Capital Stock	11.0	11.0	11.0	11.0	
Capital Surplus	114.7	114.7	114.7	114.7	
Other Reserves	2.0	2.0	2.0	2.0	
Accu. Other Comp. Income	0.0	0.0	0.0	0.0	
Retained Earnings	8.3	35.2	84.8	151.0	
Owners of Parent Equity	136.1	163.0	212.6	278.8	
Non-Controlling Interests Equity	0.0	0.0	0.0	0.0	
*Total Debt	28.1	36.0	36.0	36.0	
*Net Debts(Cash)	16.4	(10.6)	(49.5)	(107.7)	

## Cash Flow

Year to Dec. (W bn)	2015	2016	2017F	2018F	2019F
<b>Operating Cash Flow</b>	<b>(12.4)</b>	<b>79.7</b>	<b>105.9</b>	<b>127.4</b>	
Net Profit	8.1	26.9	49.6	66.2	
Depreciation	0.2	0.0	0.0	0.0	
Amortization	22.0	49.0	55.4	60.4	
Losses(Gains) on F/X Translation	0.3	0.0	0.0	0.0	
Losses(Gains) on Disp. of Assets	0.0	0.0	0.0	0.0	
Losses(Gains) in Asso., Subs., JVs	0.0	0.0	0.0	0.0	
Chg. in A/L from Op. Activities	(46.1)	2.3	(0.4)	(0.0)	
(Payments of Income Taxes)	(1.7)	(9.3)	(16.1)	(21.5)	
Others	4.8	10.8	17.4	22.3	
<b>Investing Cash Flow</b>	<b>(69.5)</b>	<b>(50.8)</b>	<b>(65.0)</b>	<b>(67.1)</b>	
Incr. in Tangible Assets(CAPEX)	(1.1)	(0.2)	(0.5)	(0.3)	
Decr. in Tangible Assets	0.0	0.0	0.0	0.0	
Decr.(Incr.) in Intangible Assets	(0.1)	(50.6)	(65.0)	(68.0)	
Decr.(Incr.) in Investment Assets	(0.3)	(0.3)	(0.2)	(0.2)	
Others	(68.0)	0.3	0.7	1.4	
<b>Free Cash Flow</b>	<b>N/A</b>	<b>77.6</b>	<b>103.7</b>	<b>127.7</b>	
<b>Financing Cash Flow</b>	<b>93.5</b>	<b>6.0</b>	<b>(2.2)</b>	<b>(2.2)</b>	
Incr.(Decr.) in Borrowing	27.2	8.0	0.0	0.0	
Decr.(Incr.) of Treasury Stock	0.0	0.0	0.0	0.0	
Dividend	0.0	0.0	0.0	0.0	
Others	66.3	(2.0)	(2.2)	(2.2)	
Other Cash Flows	0.0	0.0	0.0	0.0	
Change of Consolidated Scope	0.0	0.0	0.0	0.0	
Difference by Chg. in F/X Rates	(0.0)	0.0	0.0	0.0	
<b>Incr.(Decr.) in Cash</b>	<b>11.5</b>	<b>34.9</b>	<b>38.8</b>	<b>58.1</b>	
Beginning Cash	0.0	11.5	46.4	85.2	
Ending Cash	11.5	46.4	85.2	143.4	

Source: Company data, Shinhan Investment Corp.

## Profit and Loss

Year to Dec. (W bn)	2015	2016	2017F	2018F	2019F
<b>Sales</b>	<b>154.4</b>	<b>283.2</b>	<b>377.9</b>	<b>447.8</b>	
Growth (%)	N/A	83.3	33.5	18.5	
<b>COGS</b>	<b>132.8</b>	<b>230.7</b>	<b>291.6</b>	<b>333.6</b>	
<b>Gross Profit</b>	<b>21.6</b>	<b>52.5</b>	<b>86.2</b>	<b>114.2</b>	
Gross margin (%)	14.0	18.5	22.8	25.5	
<b>SG&amp;A</b>	<b>5.0</b>	<b>15.2</b>	<b>19.9</b>	<b>23.7</b>	
<b>Operating Income</b>	<b>16.6</b>	<b>37.3</b>	<b>66.4</b>	<b>90.5</b>	
Growth (%)	N/A	124.4	77.9	36.2	
Operating margin (%)	10.8	13.2	17.6	20.2	
<b>Other Net Non-Operating Profits</b>	<b>(6.1)</b>	<b>(1.2)</b>	<b>(0.8)</b>	<b>(2.7)</b>	
Financial Income(Expenses)	(1.1)	(2.5)	(1.1)	(0.6)	
Net Other Non-Operating Profits	(5.0)	1.3	0.4	(2.1)	
Net Gains in Asso., Subs., and JVs	0.0	0.0	0.0	0.0	
<b>Pre-tax Profit from Cont. Op.</b>	<b>10.5</b>	<b>36.2</b>	<b>65.6</b>	<b>87.7</b>	
Income Taxes	2.4	9.3	16.1	21.5	
Profit from Continuing Op.	8.1	26.9	49.6	66.2	
Profit from Discontinued Op.	0.0	0.0	0.0	0.0	
<b>Net Profit</b>	<b>8.1</b>	<b>26.9</b>	<b>49.6</b>	<b>66.2</b>	
Growth (%)	N/A	230.2	84.3	33.7	
Net Profit margin (%)	5.3	9.5	13.1	14.8	
Net Profit of Parent	8.1	26.9	49.6	66.2	
Net Profit to Non-Controlling	0.0	0.0	0.0	0.0	
<b>Total Comprehensive Income</b>	<b>8.3</b>	<b>26.9</b>	<b>49.6</b>	<b>66.2</b>	
Total Comp. Income of Parent	8.3	26.9	49.6	66.2	
Total Comp. Income to Non-Cont.	0.0	0.0	0.0	0.0	
<b>EBITDA</b>	<b>38.8</b>	<b>86.3</b>	<b>121.8</b>	<b>150.9</b>	
Growth (%)	N/A	122.4	41.1	23.9	
EBITDA Margin (%)	25.1	30.5	32.2	33.7	

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

## Key Ratios

Year to Dec.	2015	2016	2017F	2018F	2019F
EPS_C (won)	289	959	1,768	2,363	
EPS_P (won)	289	959	1,768	2,363	
BPS_C (won)	844	1,011	1,319	1,730	
BPS_P (won)	844	1,011	1,319	1,730	
DPS (won)					
PER_C (x)					
PER_P (x)					
PBR_C (x)					
PBR_P (x)					
EV/EBITDA (x)					
Payout Ratio (%)					
Dividend Yield (%)					
<b>Profitability</b>					
EBITDA Margin (%)	25.1	30.5	32.2	33.7	
OP Margin (%)	10.8	13.2	17.6	20.2	
NP Margin (%)	5.3	9.5	13.1	14.8	
ROA (%)	3.4	10.2	16.0	17.8	
ROE (%)	6.0	18.0	26.4	27.0	
ROIC (%)	N/A	24.0	40.6	50.9	
<b>Stability</b>					
D/E Ratio (%)	77.8	73.6	58.2	45.7	
Net Debt to Equity (%)	12.1	(6.5)	(23.3)	(38.6)	
Cash Ratio (%)	13.6	43.2	77.3	126.8	
Interest Coverage (x)	19.5	19.2	30.3	41.3	
<b>Activity (%)</b>					
Working Capital Turnover (t)			(40.0)	(54.3)	(75.1)
Inventory Turnover (d)			1.2	2.0	2.1
Receivable Turnover (d)			48.9	38.5	34.1

Source: Company data, Shinhan Investment Corp.

## Studio Dragon (253450 KS)

### Share Price Performance

### Target Price

### Compliance Notice

- ◆ Analyst Certification: The following analysts hereby certify the information and material presented in this report are accurate expressions of their views, and that they have not received wrongful pressure to express such views: SeJong Hong, Hyunji Ku.
- ◆ As of the date of this report's publication, Shinhan Investment Corp.'s shareholdings in the company mentioned in this report (Studio Dragon) do not exceed 1% of outstanding shares of the company.
- ◆ As of this date, Shinhan Investment Corp. has not participated as the lead underwriter or advisor in issuance of the securities of the company during the past 1 year.
- ◆ As of this date, the covering analyst does not possess any financial interest in the securities or debt instruments convertible into such shares of the company, which is required to be disclosed by law, and has not and will not receive any compensation of any kind whatsoever in exchange for expressing specific recommendations.
- ◆ All opinions and estimates regarding the company and its securities are accurate representations of the covering analyst's judgments as of this date, and may differ from actual results.
- ◆ This report is intended to provide information to assist investment decisions only and should not be used or considered an offer or the solicitation of an offer to sell or to buy any securities. Stock selection and final investment decisions should be made at the client's own discretion.
- ◆ This report is distributed to our clients only, and any unauthorized use, duplication, or redistribution of this report is strictly prohibited.

Date	Recommendation	Target Price (won)	Target Price Gap (%)	
			Average	Max/Min

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

### Distribution

- ◆ **United States:** This report is distributed in the U.S. by Shinhan Investment America, Inc., a member of FINRA/SIPC, and is only intended for major U.S. institutional investors as defined in Rule 15a-6(a)(2) under the U.S. Securities Exchange Act of 1934. All U.S. persons that receive this document by their acceptance thereof represent and warrant that they are a major U.S. institutional investor and have not received this report under any express or implied understanding that they will direct commission income to Shinhan Investment Corp. or its affiliates. Pursuant to Rule 15a-6(a)(3), any U.S. recipient of this document wishing to effect a transaction in any securities discussed herein should contact and place orders with Shinhan Investment America, Inc., which accepts responsibility for the contents of this report in the U.S. The securities described in this report may not have been registered under the U.S. Securities Act of 1933, as amended, and, in such case, may not be offered or sold in the U.S. or to U.S. person absent registration or an applicable exemption from the registration requirement.
- ◆ **All Other Jurisdictions:** Customers in all other countries who wish to effect a transaction in any securities referenced in this report should contact Shinhan or its affiliates only if distribution to or use by such customer of this report would not violate applicable laws and regulations and not subject Shinhan and its affiliates to any registration or licensing requirement within such jurisdiction.

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

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

### SHIC Universe Rating Classification Ratio (as of Nov. 21, 2017)

BUY (BUY)	92.38%	Trading BUY (HOLD)	3.59%	HOLD (HOLD)	4.04%	REDUCE (SELL)	0%
-----------	--------	--------------------	-------	-------------	-------	---------------	----