

Platform Business Team

Minha Choi

Senior Analyst

minha22.choi@samsung.com

▶ AT A GLANCE

Recommend	BUY	
Target price	KRW135,000	(53.4%)
Current price	KRW88,000	
Market cap	KRW2.6t/USD2.2b	
Shares (float)	30,014,185 (44.1%)	
52-week high/low	KRW109,200/KRW82,300	
Avg daily trading value (60-day)	KRW16.2b/ USD13.5m	

▶ ONE-YEAR PERFORMANCE

	1M	6M	12M
Studio Dragon (%)	0.0	-7.2	-13.3
Vs Kosdaq (%pts)	4.3	-1.6	-12.7

▶ KEY CHANGES

(KRW)	New	Old	Diff
Recommend.	BUY	BUY	
Target price	135,000	135,000	0.0%
2018E EPS	1,515	1,699	-10.8%
2019E EPS	2,179	2,200	-0.9%

▶ SAMSUNG vs THE STREET

No of estimates	16
Target price	128,375
Recommendation	4.0
BUY★★★: 5 / BUY: 4 / HOLD: 3 / SELL: 2 / SELL★★★: 1	

Studio Dragon (253450)

Business environment set to improve

- We suggest tempering expectations towards Studio Dragon's 4Q operating results—its distribution sales likely shrank y-y though its programming sales likely rose y-y.
- The company is set to produce 30 dramas in 2022 (5 more than in 2021) amid improving industry conditions, further diversification of its distribution channels, and the unveiling of its first drama in English.
- In light of its strong top- and bottom-line growth prospects, we maintain our 12-month target price of KRW135,000.

WHAT'S THE STORY?

4Q preview: We believe Studio Dragon recorded 4Q sales of KRW139b (up 0.9% y-y) and an operating profit of KRW7.1b (up 53.1% y-y), with the latter missing consensus of KRW13.4b. We attribute the probable soft results to: 1) fewer dramas being aired y-y on tvN and Netflix; and 2) an absence of Netflix Original dramas (although programming sales likely grew y-y as more dramas were aired y-y). Two dramas—*Hometown Cha-Cha-Cha* (six episodes) and *Bulgasal: The Immortal Souls* (four episodes)—were broadcast in 4Q, and both were aired on tvN and on Netflix. Original content aired in 4Q included *Bad and Crazy* (five episodes were broadcast; the second original Korean series aired by iQiyi) and *Yumi's Cells* (ten episodes were broadcast; a Tving original drama).

Positives in store for 2022: Studio Dragon will likely produce 30 dramas in 2022 (5 more than in 2021) amid improving market conditions. Considering its program lineup and production schedule, we expect the company to supply more dramas to OTT platform operators—in addition to tvN, its captive TV channel—this year including two original dramas to Netflix, at least six to Tving, and one to Apple TV+. Earnings from subsidiary Tving should expand y-y because Studio Dragon should provide the OTT with more dramas and as per-episode production costs of such dramas will likely climb. Studio Dragon aims to unveil *Big Door Prize* (a drama series co-produced with US company Skydance Television for Apple TV+) this year, giving it a chance to gain experience in the production in of English-language dramas. Meanwhile, Studio Dragon signed a deal in 2019 to produce at least 21 original series for Netflix (along with their distribution rights) over three years from 2020. The contract is set to be renewed this year, though with better terms and conditions for the Korean drama producer thanks to its strong quality content and growing global presence.

(Continued on the next page)

SUMMARY OF FINANCIAL DATA

	2020	2021E	2022E	2023E
Revenue (KRWb)	526	478	613	692
Operating profit (KRWb)	49	53	79	104
Net profit (adj) (KRWb)	30	45	65	85
EPS (adj) (KRW)	1,044	1,515	2,179	2,840
EPS (adj) growth (% y-y)	10.9	45.1	43.8	30.3
EBITDA margin (%)	31.4	38.4	36.1	37.3
ROE (%)	5.7	7.2	9.5	11.1
P/E (adj) (x)	88.7	60.1	40.4	31.0
P/B (x)	4.6	4.2	3.7	3.3
EV/EBITDA (x)	16.5	13.5	10.6	8.8
Dividend yield (%)	0.0	0.0	0.0	0.0

Source: Company data, Samsung Securities estimates

Maintaining BUY: Although the number of dramas produced for its captive clients (tvN and Tving) declined last year due to adverse business conditions, Studio Dragon achieved earnings growth thanks to its competitive content. In 2022, its top- and bottom-line growth should accelerate on: 1) an increase in the number of dramas produced for tvN; and 2) a hike in the production of original content for OTT platforms. We maintain our target of KRW135,000 (based on 16x 12-month forward EV/EBITDA).

Table 1. Quarterly results and forecasts

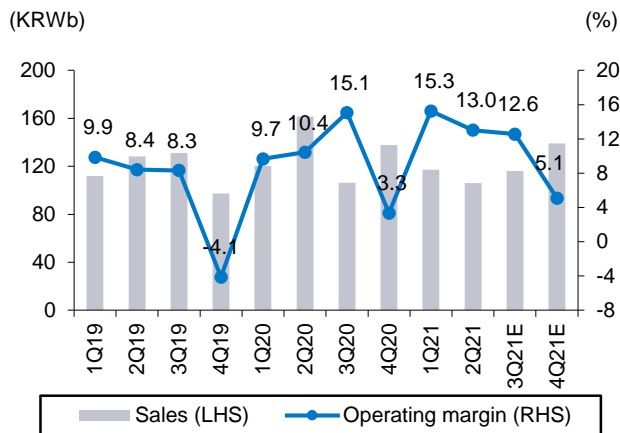
(KRWb)	4Q20	3Q21	4Q21E	Chg (% q-q)	Chg (% y-y)	Consensus	Diff (%)
Sales	137.7	116.1	139.0	19.7	0.9	144.6	-3.9
Operating profit	4.6	14.6	7.1	-51.6	53.1	13.4	-47.2
Operating margin (%)	3.3	12.6	5.1	-7.5	1.7	9.3	-4.2
Pre-tax profit	-2.9	18.5	7.3	-60.2	To turn pos	12.1	-39.2
Net profit (controlling)	-2.8	14.8	5.6	-62.0	To turn pos	9.7	-42.2

Source: Company data, WiseFn, Samsung Securities

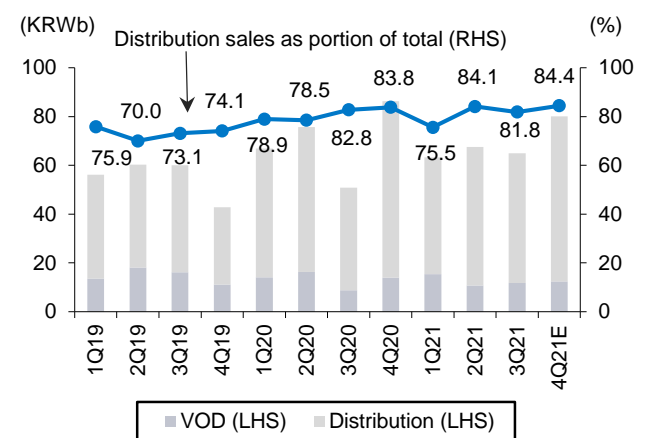
Table 2. Results and forecasts

(KRWb)	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21E	2019	2020	2021E	2022E
Sales	111.8	128.2	131.2	97.4	120.3	161.4	106.3	137.7	117.1	106.0	116.1	139.0	468.7	525.7	478.2	613.0
Programing	44.1	58.1	60.8	45.7	45.2	65.4	45.7	40.7	43.8	28.2	36.2	44.4	208.7	197.0	152.5	181.9
Distribution	56.2	60.3	60.0	42.8	66.9	75.7	50.9	86.3	63.2	67.5	64.9	80.1	219.3	279.7	275.8	374.2
Other	11.5	9.8	10.4	8.9	8.2	20.3	9.7	10.7	10.1	10.3	15.0	14.5	40.6	48.9	49.9	56.9
Gross profit	15.0	15.4	15.3	2.2	16.7	21.8	21.3	15.0	23.7	20.3	21.0	19.3	47.9	74.8	84.3	112.6
SG&A costs	4.0	4.6	4.4	6.2	5.1	4.9	5.3	10.4	5.8	6.5	6.4	12.2	19.2	25.7	31.0	33.5
Operating profit	11.0	10.8	10.9	-4.0	11.6	16.9	16.0	4.6	17.9	13.8	14.6	7.1	28.7	49.1	53.3	79.1
Non-operating profit	2.1	1.1	2.2	-1.1	0.4	0.3	-0.8	-7.5	3.2	0.3	3.9	0.3	4.3	-7.6	7.6	7.4
Pre-tax profit	13.2	11.9	13.1	-5.1	12.0	17.2	15.2	-2.9	21.1	14.0	18.5	7.3	33.1	41.5	60.9	86.5
Net profit (controlling)	9.2	7.3	11.5	-1.6	8.5	13.4	10.6	-2.8	15.6	9.5	14.8	5.6	26.4	29.7	45.5	65.4
Gross margin	13.4	12.0	11.7	2.2	13.8	13.5	20.0	10.9	20.2	19.2	18.1	13.9	10.2	14.2	17.6	18.4
Operating margin	9.9	8.4	8.3	-4.1	9.7	10.4	15.1	3.3	15.3	13.0	12.6	5.1	6.1	9.3	11.1	12.9
Net margin (controlling)	8.2	5.7	8.8	-1.7	7.1	8.3	10.0	-2.1	13.3	8.9	12.8	4.1	5.6	5.6	9.5	10.7
Chg (% y-y)																
Sales	40.0	72.6	6.0	-4.2	7.6	25.9	-19.0	41.3	-2.7	-34.3	9.2	0.9	23.5	12.2	-9.0	28.2
Programing	8.4	70.5	24.4	-16.1	2.5	12.6	-24.9	-10.9	-3.2	-56.9	-20.8	9.0	17.2	-5.6	-22.6	19.3
Distribution	75.1	109.2	-5.4	13.3	19.1	25.5	-15.2	101.6	-5.5	-10.8	27.7	-7.2	35.3	27.6	-1.4	35.7
Other	63.1	-14.1	-9.0	-6.7	-29.2	107.1	-6.4	20.2	24.0	-49.3	54.0	35.7	3.0	20.4	2.1	14.0
Gross profit	9.9	45.1	-38.4	-66.2	11.1	41.7	39.2	585.3	42.2	-6.9	-1.3	28.3	-13.8	56.2	12.7	33.6
SG&A costs	33.1	40.2	31.0	2.7	28.4	5.8	21.3	67.6	14.0	33.6	21.0	17.2	22.4	34.0	20.5	8.1
Operating profit	3.5	47.3	-49.2	nm	5.5	56.3	46.8	nm	53.6	-18.2	-9.0	53.1	-28.1	71.1	8.5	48.4
Non-operating profit	1,160.7	-71.7	290.9	nm	-79.7	-69.4	nm	nm	642.7	-20.7	nm	nm	-24.3	nm	nm	-2.3
Pre-tax profit	22.2	7.6	-40.8	nm	-9.2	44.5	16.2	nm	75.3	-18.2	21.3	nm	-27.5	25.4	46.6	42.1
Net profit (controlling)	17.2	-17.4	-33.5	nm	-7.3	82.1	-8.0	nm	82.2	-29.1	39.6	nm	-26.3	12.3	53.3	43.9
Gross margin	-3.7	-2.3	-8.4	-4.1	0.4	1.5	8.4	8.7	6.4	5.7	-1.9	3.0	-4.4	4.0	3.4	0.7
Operating margin	-3.5	-1.4	-9.0	-4.6	-0.2	2.0	6.8	7.5	5.6	2.6	-2.5	1.7	-4.4	3.2	1.8	1.8
Net margin (controlling)	-1.6	-6.2	-5.2	-3.4	-1.1	2.6	1.2	-0.4	6.2	0.7	2.8	6.1	-3.8	0.0	3.9	1.2

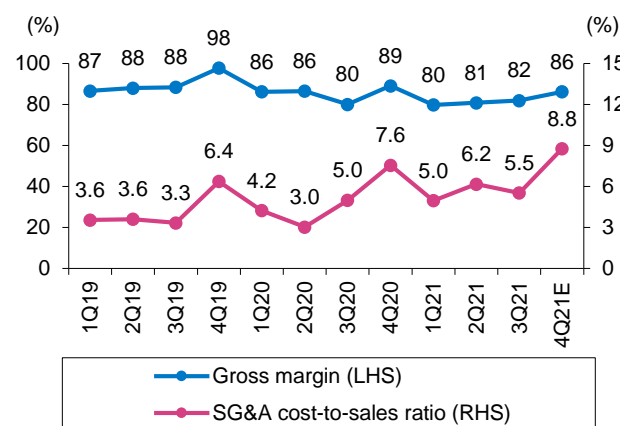
Source: Company data, Samsung Securities

Chart 1. Quarterly sales and operating margin

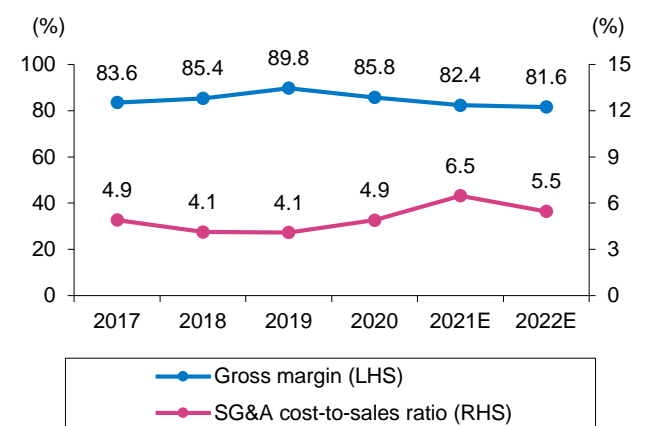
Source: Company data, Samsung Securities

Chart 2. VOD vs distribution sales

Source: Company data, Samsung Securities

Chart 3. Quarterly gross margin and SG&A cost-to-sales ratio

Source: Company data, Samsung Securities

Chart 4. Annual gross margin and SG&A cost-to-sales ratio

Source: Company data, Samsung Securities

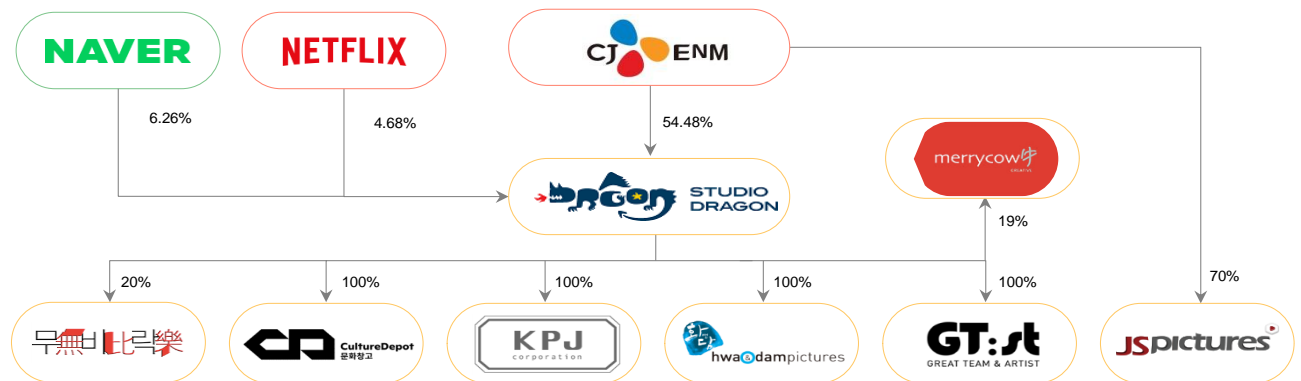
Table 3. 2H21–2022 drama line-up

Year	No.	Channel	Title	Dates to be aired	Episodes	Writers	Director	Cast	Days
2021	1		Devilish Judge	Jul 3-Aug 22	16	Moon Yoo Suk	Choi Jung Kyu	Ji Sung, Park Jin Young	Sat, Sun
	2		You Are My Spring	Jul 5-Aug 24	16	Lee Mi-na	Jung Ji-hyun	Kim Dong-wook, Seo Hyun-jin	Mon, Tue
	3		The Road: Tragedy of One	Aug 4-Sep 9	12	Yoon Hee-jung	Kim No-won	Ji Jin-hee, Yoon Se-ah	Wed, Thu
	4		Hometown Cha-Cha-Cha	Aug 28-Oct 17	16	Shin Ha-eun	Yoo Je-won	Shin Min-ah, Kim Seon-ho	Sat, Sun
	5		High Class	Sep 6-Oct 26	16	Hyun Jung	Choi Byung-gil	Cho Yeo-jeong, Kim Ji-soo	Mon, Tue
	6		Yumi's Cells	Sep 17-Oct 30	14	Song Jae-jung, Kim Yoon-joo	Lee Sang-yeop	Kim Go-eun, Ahn Bo-hyun	Fri, Sat
	7	tvN	Hometown	Sep 22-Oct 28	12	Joo Jin	Park Hyun-seok	Uhm Tae-goo, Yu Jae-myung	Wed, Thu
	8		Jirisan	Oct 23-Dec 12	16	Kim Eun-hee	Lee Eung-bok	Jeon Ji-hyun, Joo Ji-hoon	Sat, Sun
	9		Melancholia	Nov 3-Dec 23	16	Kim Ji-woon	Kim sang-hyub	Lim Soo-jeong, Lee Do-hyun	Wed, Thu
	10		Happiness	Nov 5-Dec 11	12	Han Sang-woon	Ahn Gil-ho	Han Hyo-joo, Park Hyung-sik	Fri, Sat
	11		Tale of the Secret Royal Inspector and Jo Yi	Nov 8-Dec 28	16	Lee Jae-yoon	Yoo Jong-seon	Kim Hye-yoon, Ok Taec-yeon	Mon, Tue
	12		Bad and Crazy	Dec 17-Jan 29, 2022	12	Kim Sae-bom	Yoo Seon-dong	Lee Dong-wook, Wi Ha-joon	Fri, Sat
	13		Bulgasal: The Immortal Souls	Dec 18-Feb 6, 2022	16	Kwon So-ra	Jang Yeong-woo	Lee Jin-wook, Kwon Na-ra	Sat, Sun
	14	OCN	Times	Feb 20-Mar 28	12	Lee Sae-bom	Yoon Jong-ho	Lee Seo-jin, Lee Joo-young	Sat, Sun
	15		Love Alarm 2	Mar 12	6	You Bo-ra, Cha Yeon-su	Kim Jin-woo	Kim So-hyun, Song Kang	-
	16	Netflix	Kingdom: Ashin of the North	Jul 23	1	Kim Eun-hee	Kim Seong-hoon	Jeon Ji-Hyun, Park Byung-eun	-
	17		Script Your Destiny	Mar 26	10 (5)	Kim Byung-soo	Eun Seon-woo	Jeon So-nee, Ki Do-hoon	-
	18	Tving	The Witch's Diner	Jul 16	8 (4)	Lee Young-sook	So Jae-hyun,	Song Ji-hyo, Nam Ji-hyun	-
2022	1		Ghost Doctor	Jan 3-Feb 22	16	Kim Sun-soo	Boo Seong-cheol	Jung Ji-hoon, Kim Beom	Mon, Tue
	2		Twenty-Five Twenty-One	Feb 12-Apr 3	16	Kwon Do-eun	Jung Ji-hyun	Kim Tar-ri, Nam Joo-hyuk	Sat, Sun
	3		Military Prosecutor Doberman	Feb 28-Apr 19	16	Yoon Hyeon-ho	Jin Chang-gyoo	Ahn Bo-hyun, Jo Bo-ah	Mon, Tue
	4		The Murderer's Shopping List	Mar 30-Apr 21	8	Han Ji-wan	Lee Eon-hee	Lee Kwang-soo, Seolhyun	Wed, Thu
	5	tvN	Our Blues	Apr 9-Jun 12	20	Noh Hee-kyung	Kim Kyu-tae	Lee Byung-hun, Han Ji-min	Sat, Sun
	6		Link: Eat, Love, Die	Apr 25-Jun 14	16	Kwon Ki-yeong	Hong Jong-chan	Yeo Jin-goo, Moon Ga-young	Mon, Tue
	7		Eve	Apr 27-Jun 16	16	Yoon Young-mi	Park Bong-seob	Seo Ye-ji, Park Byung-eun	Wed, Thu
	8		Soul Marriage	Jun 18-Aug 7	16	Hong sisters	Park Joon-hwa	Lee Jae-wook, Hwang Min-hyeon	Sat, Sun
	9		Shooting Stars	Jun 20-Jul 26	12	Choi Young-woo	Lee Soo-hyun	Lee Sung-kyung, Kim Young-dae	Fri, Sat
	10		Little Women	2022	12	Jeong Seo-kyeong	Kim Hee-won	Kim Go-eun, Nam Ji-hyun	-
	11	OCN	A Superior Day	Mar 2022	8	Lee Ji-hyun	Jo Nam-hyung	Jin-goo, Ha Do-kwon	Sat, Sun
	12		Island	2022	20	Jang Yoon-mi	Park Bae-jong	Kim Nam-gil, Lee Da-hee	
	13	Netflix	Juvenile Judgement	Feb 2022	10	Kim Min-seok	Hong Jong-chan	Kim Hye-soo, Kim Mu-yeol	
	14		Celebrity	2H22	12	Kim I-yeong	Kim Cheol-gyoo	Lee Chung-ah, Park Gyu-young	
	15	Tving	The King of Pigs	2022	20	Tak Jae-young	Kim Dae-jin	Kim Dong-wook, Chae Jeong-ahn	
	16		Strange	2022	6	Yeon Sang-ho	Jang Geon-jae	Shin Hyun-bin, Koo Kyo-hwan	
	17		Duty After School	2022	10	Lee Nam-gyu	Seong Yong-il	Shin Hyun-soo	
	18		Yumi's Cells 2	2022		Kim Yoon-joo	Lee Sang-yeob	Kim Go-eun, Jinyoung	
	19		Ants are Riding	2022		Lim Yeon-soo	Choi Ji-young	Hong Jong-hyun, Han Ji-eun	
	20		Call My Agent	2022		Park So-young	Paik Seung-ryong	Lee Seo-jin, Kwak Sun-young	
	21	Apple TV+	The Big Door Prize	2022	10	-	-	-	
2023	1	Netflix	Sweet Home 2	TBD				Park Gyu-young, Lee Si-young	
	2		The Glory 1 & 2	TBD	16	Kim Eun-sook	Ahn Gil-ho	Song Hye-kyo, Lee Do-hyun	

Note: Titles highlighted are streaming through Netflix (green), iQiyi Global (grey), and Tving (light blue)

Source: Company data, Samsung Securities

Chart 5. Ownership structure



Source: Company data, Samsung Securities

Table 4. Earnings revisions

(KRWb)	2021E			2022E		
	Old	New	Chg %	Old	New	Chg %
Sales	489.4	478.2	-2.3	615.0	613.0	-0.3
Operating profit	60.4	53.3	-11.8	79.9	79.1	-1.0
Operating margin (% , %pts)	12.4	11.1	-1.2	13.0	12.9	-0.1
Pre-tax profit	68.1	60.9	-10.5	87.3	86.5	-0.9
Net profit (controlling)	51.0	45.5	-10.8	66.0	65.4	-0.9

Source: Samsung Securities

Income statement

Year-end Dec 31 (KRWb)	2019	2020	2021E	2022E	2023E
Sales	469	526	478	613	692
Cost of goods sold	421	451	394	500	552
Gross profit	48	75	84	113	140
Gross margin (%)	10.2	14.2	17.6	18.4	20.2
SG&A expenses	19	26	31	33	36
Operating profit	29	49	53	79	104
Operating margin (%)	6.1	9.3	11.1	12.9	15.0
Non-operating gains (losses)	4	-8	8	7	9
Financial profit	10	10	13	13	14
Financial costs	6	14	4	4	3
Equity-method gains (losses)	0	0	0	0	0
Other	0	-4	-1	-2	-2
Pre-tax profit	33	42	61	87	113
Taxes	7	12	15	21	28
Effective tax rate (%)	20.1	28.7	25.3	24.4	24.4
Profit from continuing operations	26	30	45	65	85
Profit from discontinued operations	0	0	0	0	0
Net profit	26	30	45	65	85
Net margin (%)	5.6	5.6	9.5	10.7	12.3
Net profit (controlling interests)	26	30	45	65	85
Net profit (non-controlling interests)	0	0	0	0	0
EBITDA	146	165	183	221	258
EBITDA margin (%)	31.1	31.4	38.4	36.1	37.3
EPS (parent-based) (KRW)	941	1,044	1,515	2,179	2,840
EPS (consolidated) (KRW)	941	1,044	1,515	2,179	2,840
Adjusted EPS (KRW)*	941	1,044	1,515	2,179	2,840

Cash flow statement

Year-end Dec 31 (KRWb)	2019	2020	2021E	2022E	2023E
Cash flow from operations	-12	5	176	203	238
Net profit	26	30	45	65	85
Non-cash profit and expenses	124	135	142	157	175
Depreciation	2	3	2	1	1
Amortization	115	113	128	141	154
Other	7	19	12	15	20
Changes in A/L from operating activities	-143	-144	4	2	5
Cash flow from investments	-81	-16	-140	-158	-168
Change in tangible assets	-0	-7	0	0	0
Change in financial assets	-42	31	-10	5	-4
Other	-39	-41	-130	-163	-164
Cash flow from financing	-0	0	-7	-0	-0
Change in debt	8	1	-7	0	0
Change in equity	2	149	0	0	0
Dividends	0	0	0	0	0
Other	-9	-150	-0	-0	-0
Change in cash	-93	-11	194	42	69
Cash at beginning of year	153	60	49	243	284
Cash at end of year	60	49	243	284	354
Gross cash flow	150	165	187	223	260
Free cash flow	-13	-2	176	203	238

Note: * Excluding one-off items

** Fully diluted, excluding one-off items

*** From companies subject to equity-method valuation

Source: Company data, Samsung Securities estimates

Balance sheet

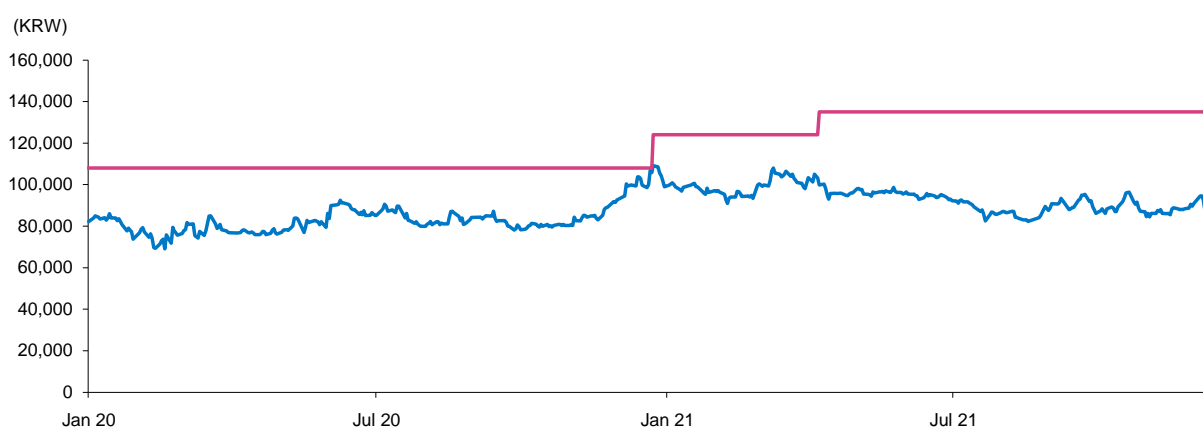
Year-end Dec 31 (KRWb)	2019	2020	2021E	2022E	2023E
Current assets	244	228	408	456	527
Cash & equivalents	60	49	243	284	354
Accounts receivable	84	107	74	89	85
Inventories	0	0	0	0	0
Other current assets	101	73	91	82	89
Fixed assets	337	529	368	400	417
Investment assets	13	180	15	19	19
Tangible assets	1	8	6	4	3
Intangible assets	233	230	243	260	277
Other long-term assets	89	111	104	116	118
Total assets	582	757	776	855	944
Current liabilities	145	132	107	120	122
Accounts payable	18	6	10	10	14
Short-term debt	0	0	0	0	0
Other current liabilities	127	126	98	110	108
Long-term liabilities	8	16	11	13	13
Bonds & long-term debt	0	0	0	0	0
Other long-term liabilities	8	16	11	13	13
Total liabilities	153	148	118	132	135
Owners of parent equity	428	609	658	723	808
Capital stock	14	15	15	15	15
Capital surplus	322	470	470	470	470
Retained earnings	94	123	168	234	319
Other	-1	1	4	4	4
Non-controlling interests' equity	0	0	0	0	0
Total equity	428	609	658	723	808
Net debt	-91	-45	-258	-294	-367

Financial ratios

Year-end Dec 31	2019	2020	2021E	2022E	2023E
Growth (%)					
Sales	23.5	12.2	-9.0	28.2	12.9
Operating profit	-28.1	71.1	8.5	48.4	31.2
Net profit	-26.3	12.1	53.5	43.9	30.3
Adjusted EPS**	-26.3	10.9	45.1	43.8	30.3
Per-share data (KRW)					
EPS (parent-based)	941	1,044	1,515	2,179	2,840
EPS (consolidated)	941	1,044	1,515	2,179	2,840
Adjusted EPS**	941	1,044	1,515	2,179	2,840
BVPS	15,242	20,309	21,910	24,089	26,929
DPS (common)	0	0	0	0	0
Valuations (x)					
P/E***	85.9	88.7	60.1	40.4	31.0
P/B***	5.3	4.6	4.2	3.7	3.3
EV/EBITDA	15.0	16.5	13.5	10.6	8.8
Ratios (%)					
ROE	6.4	5.7	7.2	9.5	11.1
ROA	4.8	4.4	5.9	8.0	9.5
ROIC	8.7	11.2	12.0	17.3	21.4
Payout ratio	0.0	0.0	0.0	0.0	0.0
Dividend yield (common)	0.0	0.0	0.0	0.0	0.0
Net debt to equity	-21.2	-7.5	-39.3	-40.6	-45.4
Interest coverage (x)	58.1	84.8	128.3	341.9	448.5

Compliance notice

- As of 1/11 2022, the covering analyst(s) did not own any shares, or debt instruments convertible into shares, of any company covered in this report.
- As of 1/11 2022, Samsung Securities' holdings of shares and debt instruments convertible into shares of each company covered in this report would not, if such debt instruments were converted, exceed 1% of each company's outstanding shares.
- This report has been prepared without any undue external influence or interference, and accurately reflects the views of the analyst(s) covering the company or companies herein.
- All material presented in this report, unless specifically indicated otherwise, is under copyright to Samsung Securities.
- Neither the material nor its content (including copies) may be altered in any form, or by any means transmitted, copied, or distributed to another party, without prior express written permission from Samsung Securities.
- This memorandum is based upon information available to the public. While we have taken all reasonable care to ensure its reliability, we do not guarantee its accuracy or completeness. This memorandum is not intended to be an offer, or a solicitation of any offer, to buy or sell the securities mentioned herein. Samsung Securities shall not be liable whatsoever for any loss, direct or consequential, arising from the use of this memorandum or its contents. Statements made regarding affiliates of Samsung Securities are also based upon publicly available information and do not necessarily represent the views of management at such affiliates.
- This material has not been distributed to institutional investors or other third parties prior to its publication.

Target price changes in past two years**Rating changes over past two years (adjusted share prices)**

Date	2019/11/8	2020/1/14	2021/1/14	2021/1/22	5/7
Recommendation	BUY	BUY	BUY	BUY	BUY
Target price (KRW)	94,000	108,000	108,000	124,000	135,000
Gap* (average)	-16.65	-23.70	-5.37	-19.74	
(max or min)**	-7.45	-3.98	-1.02	-12.50	

Note: * $\frac{[(\text{average, maximum, or minimum share price over duration of target price} - \text{target price}) / \text{target price}] \times 100\%}{}$

** Maximum/minimum share price if new target is higher/lower than market close on the business day prior to target price change

Samsung Securities uses the following investment ratings.**Company**

BUY	Expected to increase in value by 10% or more within 12 months and is highly attractive within sector
HOLD	Expected to increase/decrease in value by less than 10% within 12 months
SELL	Expected to decrease in value by 10% or more within 12 months

Industry

OVERWEIGHT	Expected to outperform market by 5% or more within 12 months
NEUTRAL	Expected to outperform/underperform market by less than 5% within 12 months
UNDERWEIGHT	Expected to underperform market by 5% or more within 12 months

Percentage of ratings in 12 months prior to 2021.12.31

BUY (89.3%)-HOLD (10.7%)-SELL (0%)

Global Disclosures & Disclaimers

General

This research report is for information purposes only. It is not and should not be construed as an offer or solicitation of an offer to purchase or sell any securities or other financial instruments or to participate in any trading strategy. This report does not provide individually tailored investment advice. This report does not take into account individual client circumstances, objectives, or needs and is not intended as recommendations of particular securities, financial instruments or strategies to any particular client. The securities and other financial instruments discussed in this report may not be suitable for all investors. The recipient of this report must make its own independent decisions regarding any securities or financial instruments mentioned herein and investors should seek the advice of a financial adviser.

This report may not be altered, reproduced, distributed, transmitted or published in whole or in part for any purpose. References to "Samsung Securities" are references to any company in the Samsung Securities, Co., Ltd. group of companies.

Samsung Securities and/or other affiliated companies, its and their directors, officers, representatives, or employees may have long or short positions in any of the securities or other financial instruments mentioned in this report or of issuers described herein and may purchase and/or sell, or offer to purchase and/or sell, at any time, such securities or other financial instruments in the open market or otherwise, as either a principal or agent. Any pricing of securities or other financial instrument contained herein is as of the close of market for such day, unless otherwise stated. Opinions and estimates contained herein constitute our judgment as of the date of this report and are subject to change without notice.

The information provided in this report is provided "AS IS". Although the information contained herein has been obtained from sources believed to be reliable, no representation or warranty, either expressed or implied, is provided by Samsung Securities in relation to the accuracy, completeness or reliability of such information or that such information was provided for any particular purpose and Samsung Securities expressly disclaims any warranties of merchantability or fitness for a particular purpose. Furthermore, this report is not intended to be a complete statement or summary of the securities, markets or developments referred to herein.

Samsung Securities does not undertake that investors will obtain any profits, nor will it share with investors any investment profits. Samsung Securities, its affiliates, or any of its and their affiliates, directors, officers, employees or agents disclaim any and all responsibility or liability whatsoever for any loss (direct or consequential) or damage arising out of the use of all or any part of this report or its contents or otherwise arising in connection therewith. Information and opinions contained herein are subject to change without notice. Past performance is not indicative of future results. Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. For investment advice, trade execution or other enquiries, clients should contact their local sales representative. Any opinions expressed in this report are subject to change without notice and may differ or be contrary to opinions expressed by other business areas or groups of Samsung Securities. Any analysis contained herein is based on numerous assumptions. Different assumptions may result in materially different results. Samsung Securities is under no obligation to update or keep current the information contained herein. Samsung Securities relies on information barriers to control the flow of information contained in one or more areas or groups within Samsung Securities into other areas or groups of Samsung Securities. Any prices stated in this report are for information purposes only and do not represent valuations for individual securities or other financial instruments. Samsung Securities makes no representation that any transaction can or could have been effected at those prices and any prices contained herein may not reflect Samsung Securities' internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions by Samsung Securities or any other source may yield substantially different results. Additional information is available upon request.

For reports to be distributed to US:

Securities research is prepared, issued and exclusively distributed by Samsung Securities Co., Ltd., an organization licensed with the Financial Supervisory Service of South Korea. This research may be distributed in the United States only to major institutional investors as defined in Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended, and may not be circulated to any other person otherwise. All transactions by U.S. investors involving securities discussed in this report must be effected through Samsung Securities (America) Inc., a broker-dealer registered with the U.S. Securities & Exchange Commission and a member of the Financial Industry Regulatory Authority/SIPC, and not through any non-U.S. affiliate thereof. The analysts listed [on the front of this report] are employees of Samsung Securities Co., Ltd., or a non-U.S. affiliate thereof, and are not registered/qualified as research analysts under applicable U.S. rules and regulations and may not be subject to U.S. restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

For reports to be distributed to UK:

This report is not an invitation nor is it intended to be an inducement to engage in investment activity for the purpose of section 21 of the Financial Services and Markets Act 2000 of the United Kingdom ("FSMA"). To the extent that this report does constitute such an invitation or inducement, it is directed only at (i) persons who are investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 (as amended) of the United Kingdom (the "Financial Promotion Order"); (ii) persons who fall within Articles 49(2)(a) to (d) ("high-net-worth companies, unincorporated associations etc.") of the Financial Promotion Order; and (iii) any other persons to whom this report can, for the purposes of section 21 of FSMA, otherwise lawfully be made (all such persons together being referred to as "relevant persons").

Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons. Persons who are not relevant persons must not act or rely on this report.

For reports to be distributed to Korea:

This report is for private circulation only, not for sale, and is issued and distributed only to persons permitted under the laws and regulations of Korea.

For reports to be distributed to Singapore:

This report is provided pursuant to the financial advisory licensing exemption under Regulation 27(1)(e) of the Financial Advisers Regulation of Singapore and accordingly may only be provided to persons in Singapore who are "institutional investors" as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore. This report is intended only for the person to whom Samsung Securities has provided this report and such person may not send, forward or transmit in any way this report or any copy of this report to any other person.

Analyst certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of such analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views in this research report. The analyst(s) principally responsible for the preparation of this research report receives compensation based on determination by research management and senior management (not including investment banking), based on the overall revenues, including investment banking revenues of Samsung Securities Co., Ltd. and its related entities and has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations.

Copyright © 2010 Samsung Securities Co., Ltd. All rights reserved. This report or any portion hereof may not be reprinted, sold or redistributed without the prior written consent of Samsung Securities America Inc

SAMSUNG SECURITIES



SAMSUNG SECURITIES

Samsung Electronics Bldg., 11, 74-gil,
Seochodae-ro, Seocho-gu, Seoul, Korea 06620
Tel: 02 2020 8000 / www.samsungpop.com

Family Center: 1588 2323

Voice Of Customer: 080 911 0900

**For more information,
please call our sales representatives:**

LONDON

Samsung Securities Europe Limited
1st Floor, 30 Gresham Street, London EC2V 7PG UK
Tel. 44-207-776-4311
Fax. 44-203-837-9219

NEW YORK

Samsung Securities America Limited
1330 Avenue of the Americas. 10th Floor. New York,
NY 10019
Tel: 1-212-972-2454
Fax: 1-212-972-2704

HONG KONG

Samsung Securities Europe Limited
Suite 4511, Two International Finance Center,
8 Finance Street, Central, Hong Kong
Tel: 852-3411-3608
Fax: 852-2114-0290

BEIJING

Samsung Securities Beijing Representative Office
Rm. 910, The Exchange Building No 118 JianGuo Lu, Chao
Yang District, Beijing, China
Tel: 86-10-6522-1855 (extension 7891)
Fax: 86-10-6522-1855 (extension 7889)

TOKYO

Samsung Securities Tokyo Representative Office
#106-8532 19F, Roppongi T-Cube 3-1-1,
Roppongi Minato-ku Tokyo, Japan
Tel: 81-3-6333-2952
Fax: 81-3-6333-2953



MEMBER OF
**Dow Jones
Sustainability Indices**
In Collaboration with RobecoSAM