COMPANY UPDATE

2026. 7. 30

Tech Team

Donghwan Oh
Senior Analyst
dh1.oh@samsung.com

Hyerim Yu
Research Associate
hyerim0705.yu@samsung.com

▶ AT A GLANCE

HOLD

Target price	KRW28,000	-6.5%
Current price	**KRW29,950**	
Market cap	KRW1.8t/USD1.2b	
Shares (float)	58,741,890 (55.5%)	
52-week high/low	KRW44,000/KRW28,200	
Avg daily trading value (60-day)	KRW3.7b/ USD2.6m	

▶ ONE-YEAR PERFORMANCE

	1M	6M	12M
Shift Up (%)	-8.7	-16.9	-29.1
Vs Kospi (%pts)	35.4	-23.4	-59.6

▶ KEY CHANGES

(KRW)	New	Old	Diff
Recommend.	HOLD	HOLD	
Target price	28,000	32,000	-12.5%
2026E EPS	1,379	1,685	-18.2%
2027E EPS	1,102	1,346	-18.1%

▶ SAMSUNG vs THE STREET

No of estimates	9
Target price	45,556
Recommendation	3.8

※ Rating: 4 < → BUY, 3 = HOLD, 2 > → SELL

Samsung Securities

Scan to go to
Research Center report database

Shift Up (462870)

Nikke to rebound in 2Q, stock to recover in 2027

- We believe Shift Up's 2Q operating profit climbed 38% q-q (meeting consensus) on a strong recovery in *Nikke* sales.
- Its next potential blockbusters are set to be launched from 2028. While the company plans to sustain user anticipation through trailers and promotional content, its shares are only likely to rebound meaningfully from 2027.

WHAT'S THE STORY?

2Q preview—*Nikke* revenue recovery to drive earnings turnaround: We believe Shift Up's 2Q revenue declined 45% y-y due to lower sales of *Stellar Blade* but climbed 31% q-q on a strong recovery in *Nikke* sales. *Nikke*'s revenue likely expanded 11% y-y and 53% q-q in 2Q, supported by promotions relating to its 3.5-year anniversary. *Stellar Blade* sales likely fell 22% q-q. Though operating expenses likely grew KRW3b (due to the April acquisition of Unbound—a Japanese game developer), the projected *Nikke* sales rebound likely lifted the firm's 2Q operating profit to KRW29.6b (up 38% q-q; in line with FnGuide consensus).

***Nikke*—stable revenue stream:** Since its launch, *Nikke* has consistently generated quarterly revenue in the KRW40b range thanks to regular content updates tied to semi-annual, annual, and seasonal events. This trend is expected to continue in 3Q, with a summer-themed swimsuit update likely to boost its sales ranking on both Google Play and the App Store. The firm's proven ability to sustain live-service operations provides a solid foundation for stable operating profit.

(Continued on the next page)

SUMMARY FINANCIAL DATA

	2025	2026E	2027E	2028E
Revenue (KRWb)	295	222	215	311
Operating profit (KRWb)	181	97	72	141
Net profit (adj) (KRWb)	181	126	94	151
EPS (adj) (KRW)	2,650	1,379	1,102	2,069
EPS (adj) growth (% y-y)	10.4	-47.9	-20.1	87.7
EBITDA margin (%)	63.6	46.8	34.1	45.3
ROE (%)	21.6	13.0	8.7	12.5
P/E (adj) (x)	13.4	22.1	27.7	14.8
P/B (x)	2.3	1.7	1.6	1.4
EV/EBITDA (x)	10.9	15.7	21.1	10.5
Dividend yield (%)	0.0	0.0	0.0	0.0

Source: Company data, Samsung Securities estimates

Next major titles to be launched from 2028: Its next flagship title, *Spirit*, is expected to reach the market in 2028, with *BloodRayne* (the successor to *Stellar Blade*) potentially hitting the shelves in 2029. Unbound's new AAA titles—excluding casual games—are expected to arrive after *BloodRayne*. Shift Up is building a development system targeting the release of one major title *pa*, but meaningful revenue contributions from its new IP are not expected before 2028.

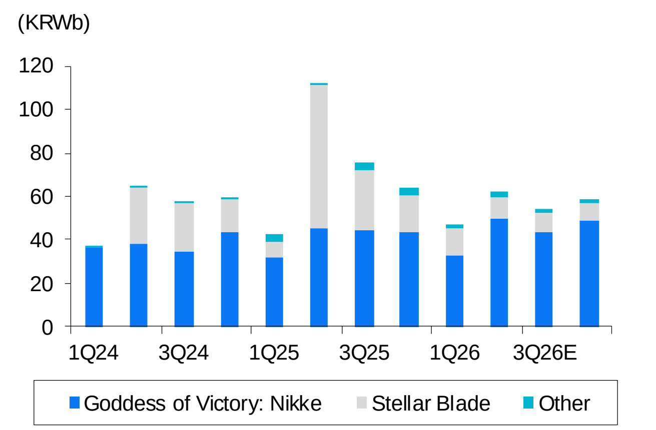
Maintaining HOLD and cutting target price: Given the projected absence of new-game releases until 2028, we maintain our HOLD rating and cut our target price from KRW32,000 to KRW28,000, which target we derived by applying the average P/E of domestic and international gaming companies (13.4x) to our estimated 2028 EPS figure (which includes projected revenue from new titles). While Shift Up plans to sustain user anticipation through the release of trailers and promotional content, a meaningful stock-price recovery is not expected until 2027.

2Q26 preview

(KRWb)	2Q26			Diff (%)		2Q25	1Q26	Chg	
	New	Old	Consensus	Old	Consensus			(% y-y)	(% q-q)
Sales	**61.8**	**58.0**	**55.1**	**6.6**	**12.3**	**112.4**	**47.3**	**-45.0**	**30.6**
Goddess of Victory: Nikke	49.9	40.7		22.7		45.1	32.7	10.7	52.8
Stellar Blade	10.0	14.7		-31.6		65.7	12.9	-84.7	-22.2
Other	1.8	2.6		-30.2		1.6	1.7	17.2	6.0
Operating expenses	**32.2**	**27.5**		**17.1**		**44.2**	**25.8**	**-27.1**	**24.8**
Labor costs	17.5	15.6		12.0		16.4	16.2	6.6	7.9
Commission paid	8.8	9.3		-4.7		25.2	4.5	-64.9	98.6
Other	5.8	2.6		126.7		2.5	5.1	132.4	14.2
Operating profit	**29.6**	**30.5**	**30.0**	**-2.9**	**-1.2**	**68.2**	**21.5**	**-56.6**	**37.7**
Pre-tax profit	40.0	34.8	40.0	15.0	0.0	62.6	47.4	-36.1	-15.6
Net profit	32.5	27.8	31.0	16.9	4.9	51.3	38.5	-36.6	-15.6
Net profit (controlling)	32.5	27.8	31.0	16.9	4.9	51.3	38.5	-36.6	-15.6
Margins (%)									
Operating profit	47.9	52.6	54.4			60.7	45.5		
Pre-tax profit	64.7	60.0	72.7			55.7	100.1		
Net profit	52.6	48.0	56.3			45.7	81.4		
Net profit (controlling)	52.6	48.0	56.3			45.7	81.4		

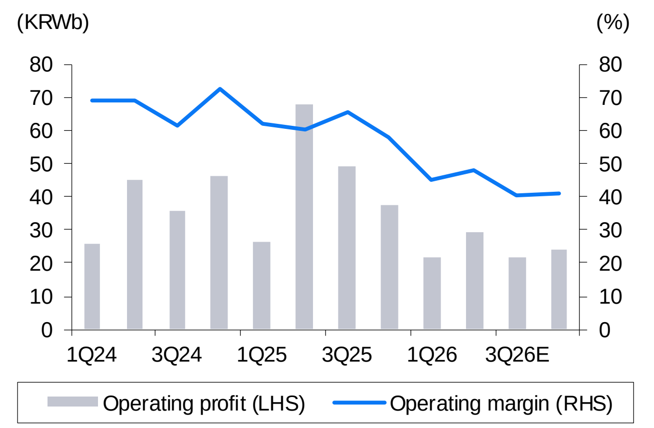
Source: Company data, FnGuide, Samsung Securities estimates

Quarterly sales, by game



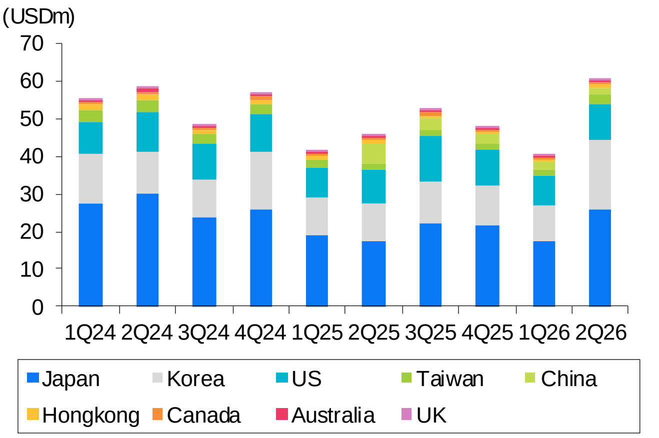
Source: Company data, Samsung Securities estimates

Quarterly operating profit



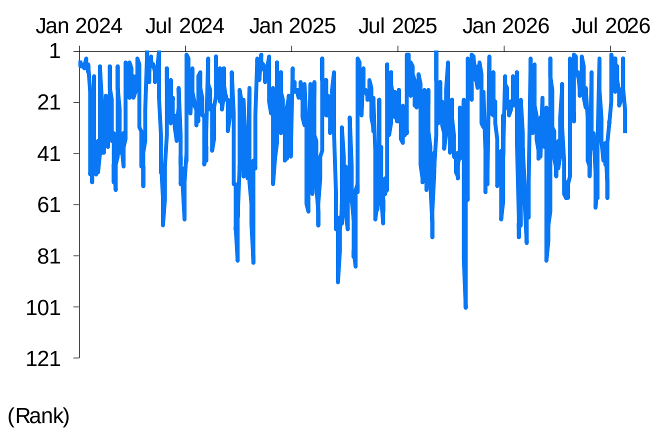
Source: Company data, Samsung Securities estimates

Nikke: Quarterly sales estimates



Source: Sensor Tower

Nikke: Japan iOS game sales ranking



Source: Sensor Tower

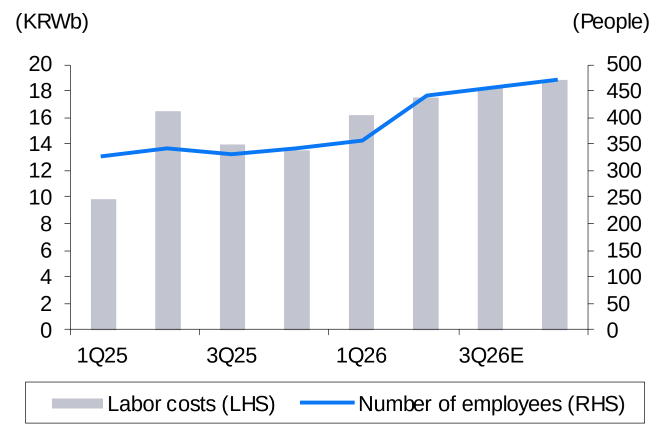
Nikke's 3.5-year anniversary event with an idol concept

Source: Company data

'Stellar Blade: Blood Rain' video released in June

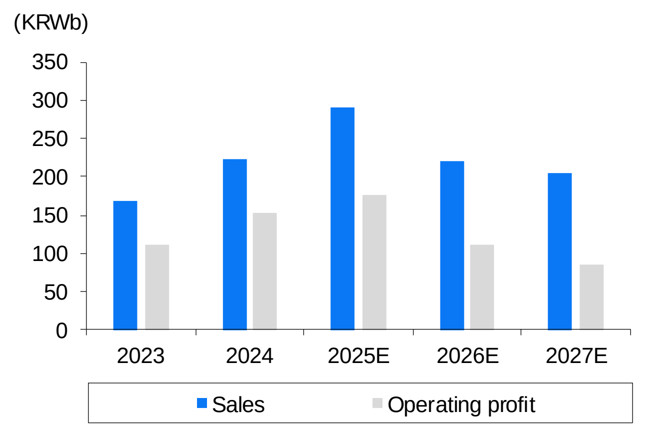
Source: Company data

Labor costs vs headcount



Source: Company data, Samsung Securities estimates

Annual sales and operating profit



Source: Samsung Securities estimates

Upcoming titles

Game Title	Genre	Platform	Release Date
Project Spirit	Subculture RPG	PC/Mobile	2028
Stellar Blade: Blood Rain	AAA Action Adventure	PC/Console	2029
Unbound new title (Casual)	TBD	TBD	2027
Unbound new title (AAA)	TBD	PC/Console	2030

Source: Company data, media reports

Shift Up: P/E valuation

	(KRW)
2028 EPS	2,069
Target P/E* (x)	13.4
Fair price per share	27,707
Target price	**28,000**
Current price	30,550
Upside (%)	(8.3)

Note: *Average of 2026 P/E multiples at which peer group is trading; Based on Jul 27 closing prices
Source: Samsung Securities estimates

Peer P/E valuations

(x)	2026E
NCsoft	11.4
Netmarble	7.0
Pearl Abyss	7.0
Nexon	17.8
EA	24.2
NetEase	12.9
Average	**13.4**

Note: Based on Jul 27 closing prices
Source: Bloomberg

Quarterly results and forecasts

(KRWb)	1Q25	2Q25	3Q25	4Q25	1Q26	2Q26E	3Q26E	4Q26E	1Q27E	2Q27E	3Q27E	4Q27E
Sales	**42.2**	**112.4**	**75.5**	**64.4**	**47.3**	**61.8**	**53.9**	**58.5**	**44.4**	**59.2**	**51.8**	**59.3**
Goddess of Victory: Nikke	32.3	45.1	44.5	43.4	32.7	49.9	43.6	48.8	36.4	51.8	45.2	52.4
Stellar Blade	7.0	65.7	27.7	17.2	12.9	10.0	8.5	7.8	6.0	5.4	4.6	4.8
Spirit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	2.9	1.6	3.3	3.8	1.7	1.8	1.9	1.9	1.9	2.0	2.0	2.1
Operating expenses	**16.0**	**44.2**	**26.0**	**27.0**	**25.8**	**32.2**	**32.0**	**34.5**	**33.1**	**36.1**	**35.8**	**37.8**
Labor costs	9.8	16.4	14.0	13.6	16.2	17.5	18.2	18.8	19.4	20.0	20.7	21.3
Commission paid	2.2	25.2	9.2	5.3	4.5	8.8	7.8	9.5	7.4	9.6	8.5	9.6
Other	3.9	2.5	2.7	8.2	5.1	5.8	6.0	6.1	6.3	6.5	6.7	6.9
Operating profit	**26.3**	**68.2**	**49.5**	**37.4**	**21.5**	**29.6**	**22.0**	**24.0**	**11.3**	**23.1**	**15.9**	**21.5**
Pre-tax profit	31.6	62.6	68.1	56.7	47.4	40.0	33.0	34.6	21.9	34.0	27.2	32.5
Net profit	26.8	51.3	54.6	48.2	38.5	32.5	26.8	28.1	17.8	27.7	22.1	26.4
Net profit (controlling)	26.8	51.3	54.6	48.2	38.5	32.5	26.8	28.1	17.8	27.7	22.1	26.4
Adjusted EPS (KRW)	416	1,012	663	558	261	433	330	356	178	347	252	326
Margins (%)												
Operating profit	62.2	60.7	65.6	58.1	45.5	47.9	40.7	41.0	25.5	39.0	30.8	36.3
Pre-tax profit	74.9	55.7	90.1	88.0	100.1	64.7	61.1	59.1	49.2	57.5	52.6	54.8
Net profit	63.6	45.7	72.4	74.9	81.4	52.6	49.7	48.1	40.0	46.8	42.7	44.6
Net profit (controlling)	63.6	45.7	72.4	74.9	81.4	52.6	49.7	48.1	40.0	46.8	42.7	44.6

Source: Company data, Samsung Securities estimates

Revisions to full-year forecasts

(KRWb)	2026E			2027E			2028E		
	Old	New	Diff (%)	Old	New	Diff (%)	Old	New	Diff (%)
Sales	**221**	**222**	**0.2**	**206**	**215**	**4.2**	**198**	**311**	**57.2**
Goddess of Victory: Nikke	154	175	13.7	148	186	25.2	151	193	27.9
Stellar Blade	57	39	(30.8)	30	21	(31.6)	19	13	(31.6)
Project Spirit	0	0	n/a	16	0	(100.0)	16	96	512.4
Other	10	7	(30.2)	12	8	(30.2)	13	9	(30.2)
Operating expenses	**110**	**125**	**13.1**	**121**	**143**	**17.8**	**132**	**170**	**29.1**
Labor costs	64	71	10.5	74	81	9.2	85	91	7.3
Commission paid	36	31	(13.9)	35	35	(0.0)	34	50	46.2
Other	10	23	121.2	12	26	126.8	13	29	127.0
Operating profit	**111**	**97**	**(12.6)**	**85**	**72**	**(15.3)**	**66**	**141**	**113.4**
Pre-tax profit	126	155	23.2	102	116	12.8	267	185	(30.6)
Net profit	101	126	25.3	82	94	14.7	214	151	(29.4)
Net profit (controlling)	101	126	25.3	82	94	14.7	214	151	(29.4)
Adjusted EPS (KRW)	1,685	1,379	(18.1)	1,346	1,102	(18.1)	3,624	2,069	(42.9)
Margins (%)									
Operating profit	50.2	43.8		41.2	33.5		33.3	45.2	
Pre-tax profit	56.8	69.9		49.7	53.9		135.0	59.6	
Net profit	45.5	56.8		39.8	43.8		108.0	48.5	
Net profit (controlling)	45.5	56.8		39.8	43.8		108.0	48.5	

Source: Company data, Samsung Securities estimates

Income statement

Year-end Dec 31 (KRWb)	2024	2025	2026E	2027E	2028E
Sales	**224**	**295**	**222**	**215**	**311**
Cost of goods sold	0	0	0	0	0
Gross profit	**224**	**295**	**222**	**215**	**311**
Gross margin (%)	100.0	100.0	100.0	100.0	100.0
SG&A expenses	71	113	125	143	170
Operating profit	**153**	**181**	**97**	**72**	**141**
Operating margin (%)	68.1	61.6	43.8	33.5	45.2
Non-operating gains (losses)	**26**	**38**	**58**	**44**	**45**
Financial profit	21	49	53	41	42
Financial costs	2	9	20	16	17
Equity-method gains (losses)	0	0	0	0	0
Other	7	-2	25	19	19
Pre-tax profit	**179**	**219**	**155**	**116**	**185**
Taxes	31	38	29	22	35
Effective tax rate (%)	17.2	17.3	18.7	18.7	18.7
Profit from continuing operations	148	181	126	94	151
Profit from discontinued operations	0	0	0	0	0
Net profit	**148**	**181**	**126**	**94**	**151**
Net margin (%)	66.0	61.5	56.8	43.8	48.5
Net profit (controlling interests)	148	181	126	94	151
Net profit (non-controlling interests)	0	0	0	0	0
EBITDA	157	187	104	73	141
EBITDA margin (%)	70.1	63.6	46.8	34.1	45.3
EPS (parent-based) (KRW)	2,717	3,084	2,143	1,600	2,567
EPS (consolidated) (KRW)	2,717	3,084	2,143	1,600	2,567
Adjusted EPS (KRW)*	2,400	2,650	1,379	1,102	2,069

Balance sheet

Year-end Dec 31 (KRWb)	2024	2025	2026E	2027E	2028E
Current assets	**768**	**759**	**888**	**982**	**1,110**
Cash & equivalents	289	110	224	317	379
Accounts receivable	102	130	118	120	165
Inventories	0	0	0	0	0
Other current assets	377	519	545	546	565
Fixed assets	**36**	**312**	**295**	**295**	**354**
Investment assets	16	231	219	221	280
Tangible assets	3	4	3	3	2
Intangible assets	3	2	1	0	0
Other long-term assets	14	75	72	72	72
Total assets	**804**	**1,071**	**1,183**	**1,278**	**1,464**
Current liabilities	**29**	**95**	**87**	**88**	**121**
Accounts payable	0	0	0	0	0
Short-term debt	0	0	0	0	0
Other current liabilities	29	95	87	88	121
Long-term liabilities	**11**	**65**	**63**	**63**	**65**
Bonds & long-term debt	0	0	0	0	0
Other long-term liabilities	11	65	63	63	65
Total liabilities	**39**	**160**	**149**	**151**	**186**
Owners of parent equity	**764**	**911**	**1,033**	**1,127**	**1,278**
Capital stock	12	12	12	12	12
Capital surplus	527	532	533	533	533
Retained earnings	219	400	509	603	754
Other	6	-33	-20	-20	-20
Non-controlling interests' equity	**0**	**0**	**0**	**0**	**0**
Total equity	**764**	**911**	**1,033**	**1,127**	**1,278**
Net debt	-278	-47	-163	-256	-317

Cash flow statement

Year-end Dec 31 (KRWb)	2024	2025	2026E	2027E	2028E
Cash flow from operations	**114**	**157**	**128**	**94**	**120**
Net profit	148	181	126	94	151
Non-cash profit and expenses	16	6	7	8	19
Depreciation	3	4	6	1	0
Amortization	1	1	1	0	0
Other	12	0	1	7	19
Changes in A/L from operating activities	-44	-13	11	-1	-31
Cash flow from investments	**-368**	**-283**	**-19**	**-0**	**-3**
Change in tangible assets	-3	-3	-3	0	0
Change in financial assets	-0	-5	1	-0	-3
Other	-366	-276	-17	0	0
Cash flow from financing	**427**	**-52**	**-6**	**0**	**1**
Change in debt	-1	52	-2	0	1
Change in equity	433	5	0	0	0
Dividends	0	0	0	0	0
Other	-5	-109	-4	0	0
Change in cash	173	-179	115	92	62
Cash at beginning of year	116	289	110	224	317
Cash at end of year	289	110	224	317	379
Gross cash flow	**164**	**187**	**133**	**102**	**170**
Free cash flow	**111**	**154**	**126**	**94**	**120**

Note: *Excluding one-off items
**Fully diluted, excluding one-off items
***From companies subject to equity-method valuation
Source: Company data, Samsung Securities estimates

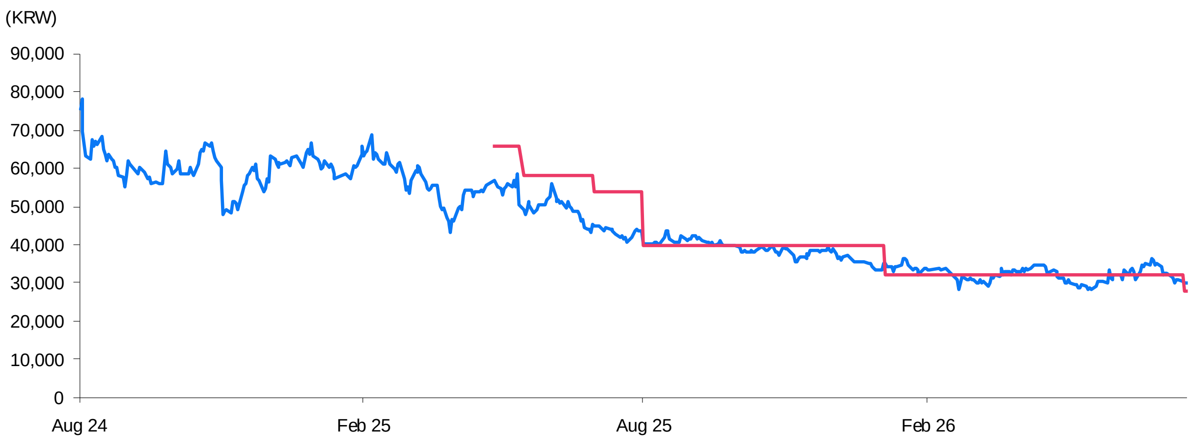
Financial ratios

Year-end Dec 31	2024	2025	2026E	2027E	2028E
Growth (%)					
Sales	32.9	31.4	-24.8	-3.1	44.9
Operating profit	37.5	18.8	-46.5	-26.0	95.8
Net profit	38.7	22.3	-30.4	-25.4	60.4
Adjusted EPS**	12.5	10.4	-47.9	-20.1	87.7
Per-share data (KRW)					
EPS (parent-based)	2,717	3,084	2,143	1,600	2,567
EPS (consolidated)	2,717	3,084	2,143	1,600	2,567
Adjusted EPS**	2,400	2,650	1,379	1,102	2,069
BVPS	13,104	15,702	17,972	19,607	22,230
DPS (common)	0	0	0	0	0
Valuations (x)					
P/E***	26.4	13.4	21.7	27.2	14.5
P/B***	4.8	2.3	1.7	1.5	1.3
EV/EBITDA	21.8	10.9	15.4	20.6	10.2
Ratios (%)					
ROE	31.3	21.6	13.0	8.7	12.5
ROA	29.4	19.3	11.2	7.6	11.0
ROIC	144.3	105.4	47.3	36.3	64.5
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	-36.4	-5.1	-15.8	-22.7	-24.8
Interest coverage (x)	130.5	138.2	24.1	17.9	34.4

Compliance notice

- As of 7/28 2026, the covering analyst(s) did not own any shares, or debt instruments convertible into shares, of any company covered in this report.
- As of 7/28 2026, 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	2025/5/7	5/26	7/11	8/12	2026/1/15	7/28
Recommendation	BUY	BUY	BUY	HOLD	HOLD	HOLD
Target price (KRW)	66000	58000	54000	40000	32000	28000
Gap* (average)	-16.62	-15.05	-19.98	-3.15	1.11	
(max or min)**	-11.36	-3.28	-17.04	-16.88	-11.88	

Note: * [(average, maximum, or minimum share price over duration of target price minus target price) / target price] x 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 15% or more within 12 months and is highly attractive within sector

HOLD Expected to increase/decrease in value by less than 15% within 12 months

SELL Expected to decrease in value by 15% 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

* Note: Effective Jul 27, 2023, BUY, HOLD, and SELL criteria are based on expectations of share-price moves of 15% or more within 12 months

Percentage of ratings in 12 months prior to 2026.06.30

BUY (85.5%)·HOLD (14.5%)·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.

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 (Asia) 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