COMPANY UPDATE

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EV/Mobility Team

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OCI Holdings (010060)

Polysilicon to be used in space

- While III-V compound multi-junction cells (the current mainstream for space solar cells) are optimal for the geostationary orbit, silicon-based solar cells are set to be used in the low Earth orbit (where space data centers will be located).
- SpaceX and Tesla's expansion of silicon-based solar cell production capacity within the US suggests that demand for non-Chinese polysilicon will grow.
- The expanding addressable market should present positive longer-term momentum for OCI Holdings

(§ The Korean version of this report was published on Mar 30. We initiated coverage on Mar 31 at BUY with a target price of KRW 245,000)

AT A GLANCE

Not Rated

Target price	n/a
Current price	KRW190,300
Market cap	KRW3.6t/USD2.4b
Shares (float)	18,670,232 (69.2%)
52-week high/low	KRW203,000/KRW59,000
Avg daily trading value (60-day)	KRW36.2b/ USD23.9m

ONE-YEAR PERFORMANCE

	1M	6M	12M
OCI Holdings (%)	25.2	115.3	171.1
Vs Kospi (%pts)	48.1	39.7	31.4

SAMSUNG vs THE STREET

No of estimates	7
Target price	198,571
Recommendation	4.0

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

WHAT'S THE STORY?

Company overview: OCI Holdings is a holding company with subsidiaries engaged in solar-grade polysilicon and wafer manufacturing in Malaysia (100% owned subsidiary: OCI TerraSus); solar module and power generation operations in North America (100% owned subsidiary: OCI Enterprises); eco-friendly cogeneration plant projects in Korea (100% owned subsidiary: OCI SE); urban development projects utilizing the former Incheon plant site (100% owned subsidiary: DCRE); and fine chemical business (45% owned subsidiary: OCI). The solar-grade polysilicon business, which accounts for the largest share of OCI Holdings' sales, continues to drive the firm's stock performance. Its solar-grade polysilicon production capacity is 35,000 tonnes, and US restrictions on Chinese supply mean the company enjoys a price premium on its polysilicon thanks to the fact that it is not made in China.

(Continued on the next page)

SUMMARY FINANCIAL DATA

	2022	2023	2024	2025
Revenue (KRWb)	2,769	2,650	3,577	3,380
Operating profit (KRWb)	752	531	102	(58)
Net profit (adj) (KRWb)	878	710	114	(146)
EPS (adj) (KRW)	36,910	29,917	4,095	n/a
EPS (adj) growth (% y-y)	35.9	(18.9)	(86.3)	n/a
EBITDA margin (%)	32.6	24.2	8.3	5.5
ROE (%)	25.2	18.7	2.5	(2.3)
P/E (adj) (x)	n/a	n/a	n/a	n/a
P/B (x)	n/a	n/a	n/a	n/a
EV/EBITDA (x)	0.7	0.3	4.9	8.6
Dividend yield (%)	n/a	n/a	n/a	n/a

Source: Company data, Samsung Securities estimates

Point (1) Polysilicon to be used in space, contrary to expectations: Currently, the dominant technology in space photovoltaics is III-V compound multi-junction cells which, despite its high cost, is favored for its radiation resistance and high efficiency—making it better suited for the geostationary orbit (GEO). However, the low Earth orbit (LEO), which is the primary target for space data centers, presents a different challenge: Its low altitude, short orbit, and frequent eclipses create intense thermal cycling, drastically reducing solar cell lifespans. In this environment, cost efficiency is more critical than peak efficiency. While the market has anticipated the use of perovskite or III-V compounds, silicon-based solar cells (which are far cheaper) are increasingly likely to be deployed in tandem architectures. A notable example is SpaceX which, according to international media reports, is procuring heterojunction technology (HJT) silicon and perovskite manufacturing equipment from China.

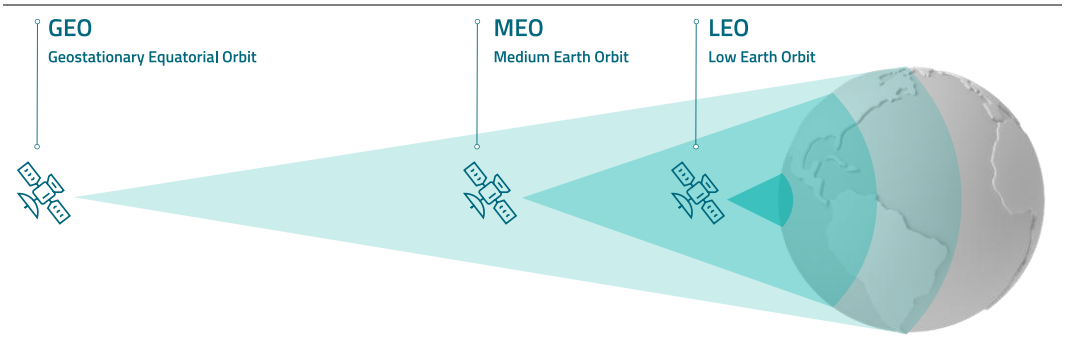
Point (2) Musk team's solar expansion to provide tailwind: The Musk team—from SpaceX and Tesla—is planning to scale up production of both space-based and terrestrial solar systems. For terrestrial applications, the company is preparing silicon-based solar cells, while for space applications, it is believed to be pursuing HJT silicon-perovskite tandem cells. To manufacture silicon-based solar cells within the US, access to non-Chinese polysilicon will be critical. As a result, OCI Holdings—one of a handful of non-Chinese polysilicon producers globally—is positioned to benefit significantly.

Space-based solar power vs terrestrial solar power

	Space-based Solar Power	Terrestrial Solar Power
Generation principle	Solar cells/arrays generate DC power from sunlight	Solar modules generate DC power from sunlight
Role as power source	Primary power source for space data centers	Supplements/replaces portion of grid power for terrestrial data centers
Power system structure	Integrated solar-battery-conversion/control (similar to spacecraft EPS)	Typically grid-linked + solar + ESS/microgrid
Generation hours	Avg. 20–24 hrs/day (capacity factor 90–99%)	Avg. 4–6 hrs/day (capacity factor 10-25%)
Intermittency / pattern	Significantly higher solar exposure; periodic orbital eclipses exist	High intermittency due to solar irradiance (night/weather)
ESS requirement	Needed for eclipses or load-source mismatches	Higher necessity than space-based due to high intermittency
Thermal management	Relies on radiation (no convection)	Relies on convection (air/liquid cooling, HVAC, outdoor air)
Environmental stress	Radiation, vacuum, and material degradation considerations	Weather, dust, temperature, and disaster risks; site location is key
Cell performance	High-efficiency cells (e.g., III-V space cells)	Cost-effective, mass-produced silicon-based cells
Transmission / load	On-board power supply to data centers	Connected via grid, power markets, or PPAs
Commercialization	Feasibility study / conceptual design phase	Fully commercialized

Source: Samsung Securities

Space market: Classification of orbits



	Low Earth Orbit (LEO)	Medium Earth Orbit (MEO)	Geostationary Orbit (GEO)
Altitude	160-2,000km	2,000-35,786km	35,786km
Characteristics	Close to Earth, high orbital speed, stable radiation environment	Increased radiation, orbital period of several hours	Synchronized with Earth's rotation
Orbital period	1-2 hours	4-12 hours	24 hours
Latency	~50ms	~150ms	~700ms
Primary use cases	Starlink, ISS, Space data centers	GPS, navigation	Communication satellites, broadcasting

Source: Samsung Securities

Solar system requirements and technological directions by orbit

	Low Earth Orbit (LEO)	Medium Earth Orbit (MEO)	Geostationary Orbit (GEO)
Environmental Characteristics	Low altitude, short orbital period, repeated eclipse/thermal cycling	Positioned between LEO and GEO, increased radiation exposure	Long lifespan, high reliability required, presence of eclipse periods
Solar Panel Requirements	Lightweighting, durability against repeated thermal cycling, ESS battery integration required, cost optimization	Radiation-hardened design, cover glass optimization, ensuring EOL power output	High efficiency, radiation-hardened design, maintaining high EOL performance, high reliability
Appropriate Technological Direction	Silicon-based possible; GaAs/high-efficiency cells adopted based on mission	Increased likelihood of preference for GaAs	Centered on Group III-V Multi-junction structures

Source: NASA, ESA, Samsung Securities

Space solar cells: Comparison by applicable materials

	Silicon	Group III-V compounds	Thin-film	Perovskite
Key materials	c-Si	GaAs, InGaP, InGaAs	CIGS, CdTe	Perovskite
Efficiency*	20-28%	28-48%	14-30%	23-36%
Manufacturing cost	Low	Very expensive	Medium	Potentially low
EOL performance	Low	Very high	Medium	Uncertain
Radiation resistance	Medium	Very high	Medium	High
Specific power	Low	Medium	High	Very high
Technical maturity	Very high	Very high	Medium	Low
Primary application	Terrestrial, LEO	MEO, GEO	LEO (Mainly CIGS)	LEO

Note: * Based on maximum values assuming multi-junction structures.
Source: NREL, Samsung Securities

Space solar cells: Comparison of applicable architectures

	Single Junction	Multi-Junction	HJT	Tandem
Definition	Single bandgap structure	Multi-bandgap stacked structure (3J–4J)	Combined crystalline (c-Si) & amorphous (a-Si) silicon	Stacking solar cells of different wavelength bands
Typical Material Combinations	Silicon, GaAs, CIGS	InGaP/GaAs/Ge (3J), InGaP/GaAs/InGaAsP/Ge (4J)	c-Si / a-Si	Perovskite/HJT, Perovskite/CIGS
Efficiency*	21-31%	33-48%	24-28%	23-36%
Specific Power	Varies by material (CIGS is high)	Medium	Low	Medium to high
Technical Maturity	High	High	Relatively high	Low to medium
LEO Suitability	Unsuitable	Suitable, but burden of cost/mass	Unsuitable as standalone	Suitable
Role in Space Solar Power	Supplementary structure	Current dominant structure	Suitable for tandem bottom cells	Next-generation structure

Note: * Based on NREL standards.
Source: NREL, Samsung Securities

Tesla: Details of job postings related to the US solar business

Job posting	Tesla's comment	Implication
Staff Manufacturing Development Engineer, Solar Manufacturing (Austin, TX)	"You will help deploy 100 GW of solar manufacturing from raw materials on American soil before the end of 2028."	- Target to secure 100 GW production capacity within 3 years by the end of 2028 - Plan for upstream integration rather than simple module assembly
Supplier Industrialization Engineer, Solar (Palo Alto, CA)	"Plan, organize, direct, and conduct industrialization related activities within the Tesla Solar supply chain team focused on Solar cell processes - Polysilicon Refining, Ingot, Wafer, Cell"	- Presumption that the focus is on supply chain management rather than direct production for some upstream parts, as the posting is for supplier industrialization
Supplier Industrialization Engineer, Solar (Palo Alto, CA)	"Provide leadership for New Product Introduction (NPI) at Suppliers; Lead supplier improvements in scalability, cost, and quality"	- Interpretation that the management of suppliers' new product development/mass production capabilities implies no plan to integrate the entire silicon value chain
Staff Manufacturing Development Engineer, Solar Manufacturing (Austin, TX)	"You will drive technical decisions for the next..." / "CVD & PVD & ALD, Furnace, Screen Printing…"	- Interpretation that the technological core from Tesla's perspective is the high-efficiency silicon cell manufacturing process - Greater focus on cell process technology rather than simple module assembly, as CVD/PVD/ALD are linked to thin-film deposition, Furnace to heat treatment/diffusion, and Screen Printing to electrode formation in particular
Staff Process Engineer, Solar Manufacturing (Brookshire, TX)	Job title itself is "Process Engineer, Solar Manufacturing" and hiring in Brookshire, Texas	- Implication of organizational expansion into solar manufacturing operations rather than simple R&D or installation/sales
Sr. Quality Manager, Solar Manufacturing (Brookshire, TX)	Job title itself is "Quality Manager, Solar Manufacturing"	- Implication of entering the stage of establishing a mass production quality system
Staff Technical Program Manager Solar Manufacturing (Brookshire, TX)	Job title itself is "Technical Program Manager, Solar Manufacturing"	- Meaning of building a large-scale expansion system through TPM hiring

Source: Tesla, Samsung Securities

Global solar facilities: Production capacity and market share by region as of end-2025

(GW)	Silicon-based				Non-silicon-based
	Polysilicon ('000 tons)	Wafer	Cell	Module	Thin-film
Production capacity					
China	**3,423**	**1,446**	**1,482**	**1,307**	**4**
US	**55**	**5**	**6**	**50**	**14**
Others	218	55	174	349	11
Global	3,696	1,506	1,662	1,706	29
Market share (%)					
China	**92.6**	**96.0**	**89.2**	**76.6**	**12.9**
US	**1.5**	**0.4**	**0.4**	**2.9**	**50.3**
Others	5.9	3.6	10.4	20.4	36.7
Global	100.0	100.0	100.0	100.0	100.0

Source: Bloomberg NEF, Samsung Securities

OCI Holdings: Results and forecasts

(KRWb)	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25	3Q25	4Q25	2023	2024	2025
KRW/USD (average)	1,329	1,371	1,358	1,400	1,453	1,401	1,387	1,449	1,306	1,365	1,422
Sales	**865**	**950**	**909**	**854**	**948**	**776**	**845**	**811**	**2,650**	**3,577**	**3,380**
Growth (% q-q)	33.9	9.8	-4.3	-6.0	11.0	-18.1	8.9	-4.1			
Growth (% y-y)	20.2	59.8	31.7	32.3	9.6	-18.3	-7.0	-5.1	-4.3	35.0	-5.5
OCI TerraSus (Polysilicon)	161	176	65	95	112	39	132	145	939	497	428
OCI Enterprises (Power generation business)	53	36	55	32	68	44	61	36	248	176	209
OCI SE (CHP plant)	91	83	98	79	88	81	72	51	393	350	292
DCRE (Urban development)	151	107	124	151	148	88	105	110	576	532	452
OCI (Fine chemicals)	540	566	589	520	539	527	476	467	1,855	2,215	2,009
Consolidation adjustment	-131	-18	-21	-23	-6	-3	-2	1	-1,361	-193	-9
EBITDA	**132**	**146**	**72**	**-55**	**105**	**-18**	**8**	**90**	**290**	**295**	**185**
Growth (% q-q)	276.1	10.9	-50.8	Turnedneg	Turnedpos	Turnedneg	Turnedpos	997.6			
Growth (% y-y)	112.6	-6.3	95.9	Turnedneg	-20.3	Turnedneg	-88.6	Turnedpos	9.4	1.8	-37.3
OCI TerraSus	47	66	17	-14	28	-56	-47	52	432	117	-23
OCI Enterprises	7	-6	11	-17	13	-8	16	-12	-13	-6	9
OCI SE	23	20	32	14	15	10	10	-4	79	89	31
DCRE	20	10	-32	-140	18	-5	13	12	56	-141	38
OCI	43	51	35	43	31	22	13	25	97	173	91
Operating profit	**99**	**90**	**21**	**-108**	**49**	**-80**	**-53**	**27**	**531**	**102**	**-58**
Growth (% q-q)	52.4	-9.8	-77.1	Turnedneg	Turnedpos	Turnedneg	Remainedneg	Turnedpos			
Growth (% y-y)	-51.2	-32.1	-84.3	Turnedneg	-50.9	Turnedneg	Turnedneg	Turnedpos	-29.4	-80.9	Turnedneg
OCI TerraSus	37	56	6	-27	12	-74	-65	33	404	72	-93
OCI Enterprises	4	-10	7	-21	9	-12	13	-16	-20	-19	-7
OCI SE	16	13	25	7	7	3	2	-12	53	60	0
DCRE	20	10	-32	-140	18	-5	13	12	55	-142	38
OCI	39	34	18	20	10	-2	-10	3	73	110	0
Pre-tax profit	210	91	-22	-103	29	-85	-115	32	533	176	-140
Growth (% q-q)	-60.6	-56.5	Turnedneg	Remainedneg	-83.6	Turnedneg	Remainedneg	Turnedpos			
Growth (% y-y)	3.4	-47.6	Turnedneg	Turnedneg	-86.3	Turnedneg	Remainedneg	Turnedpos	-29.3	-67.0	Turnedneg
Net profit	**192**	**23**	**-19**	**-82**	**-15**	**-82**	**-73**	**27**	**710**	**114**	**-146**
Growth (% q-q)	-73.0	-88.1	Turnedneg	Remainedneg	Turnedneg	Remainedneg	Remainedneg	Turnedpos			
Growth (% y-y)	-10.1	-94.1	Turnedneg	Remainedneg	Turnedneg	Turnedneg	Remainedneg	Turnedpos	-19.1	-84.0	Turnedneg
Attributable to parent	**175**	**17**	**-21**	**-73**	**-2**	**-77**	**-36**	**31**	**714**	**98**	**-90**
Margins (%)											
EBITDA	15.3	15.4	7.9	-6.5	11.1	-2.3	1.0	11.1	11.0	8.3	5.5
OCI TerraSus	29.3	37.7	26.4	-14.7	24.6	-146.2	-35.5	36.1	46.1	23.5	-5.4
OCI Enterprises	13.3	-17.9	19.3	-52.0	19.1	-18.8	26.5	-31.9	-5.2	-3.1	4.4
OCI SE	25.3	24.3	32.5	18.1	16.9	12.9	13.8	-8.0	20.0	25.5	10.7
DCRE	13.5	9.4	-25.9	-92.7	12.2	-5.2	12.2	10.9	9.7	-26.6	8.5
OCI	8.0	9.1	6.0	8.2	5.7	4.1	2.7	5.4	5.2	7.8	4.5
Operating profit	11.5	9.4	2.3	-12.6	5.1	-10.4	-6.3	3.4	20.0	2.8	-1.7
OCI TerraSus	23.2	31.5	8.7	-28.2	10.9	-190.9	-49.2	22.8	43.0	14.5	-21.7
OCI Enterprises	7.6	-27.1	12.5	-64.2	13.7	-28.1	20.7	-44.4	-8.1	-11.1	-3.1
OCI SE	17.3	15.4	25.0	8.6	8.3	3.4	3.0	-23.5	13.6	17.0	0.1
DCRE	13.4	9.2	-26.0	-92.8	12.0	-5.4	11.9	10.9	9.6	-26.7	8.3
OCI	7.2	5.9	3.0	3.9	1.9	-0.4	-2.2	0.6	3.9	5.0	0.0
Pre-tax profit	24.3	9.6	-2.4	-12.1	3.0	-10.9	-13.6	3.9	20.1	4.9	-4.1
Net profit	22.2	2.4	-2.1	-9.6	-1.6	-10.6	-8.7	3.3	26.8	3.2	-4.3

Source: Company data, Samsung Securities

Income statement

Year-end Dec 31 (KRWb)	2021	2022	2023	2024	2025
Sales	**3,244**	**2,769**	**2,650**	**3,577**	**3,380**
Cost of goods sold	2,338	1,865	1,939	3,116	3,041
Gross profit	**906**	**904**	**710**	**461**	**340**
Gross margin (%)	27.9	32.6	26.8	12.9	10.0
SG&A expenses	280	151	179	360	397
Operating profit	**626**	**752**	**531**	**102**	**(58)**
Operating margin (%)	19.3	27.2	20.0	2.8	(1.7)
Non-operating gains (losses)	**(14)**	**1**	**2**	**74**	**(82)**
Financial profit	50	60	120	182	95
Financial costs	83	63	59	161	131
Equity-method gains (losses)	17	(7)	38	20	(2)
Other	2	11	(96)	33	(44)
Pre-tax profit	**612**	**754**	**533**	**176**	**(140)**
Taxes	(40)	33	75	62	7
Effective tax rate (%)	(6.6)	4.3	14.1	35.3	(4.8)
Profit from continuing operations	652	721	458	114	(146)
Profit from discontinued operations	(0)	157	252	0	0
Net profit	**652**	**878**	**710**	**114**	**(146)**
Net margin (%)	20.1	31.7	26.8	3.2	(4.3)
Net profit (controlling interests)	648	880	714	98	(90)
Net profit (non-controlling interests)	4	(3)	(3)	16	(56)
EBITDA	762	902	641	296	186
EBITDA margin (%)	23.5	32.6	24.2	8.3	5.5
EPS (parent-based) (KRW)	27,156	36,910	29,917	4,095	n/a
EPS (consolidated) (KRW)	27,341	36,804	29,785	4,768	n/a
Adjusted EPS (KRW)*	27,156	36,910	29,917	4,095	n/a

Balance sheet

Year-end Dec 31 (KRWb)	2021	2022	2023	2024	2025
Current assets	**3,339**	**4,111**	**3,994**	**4,763**	**4,041**
Cash & equivalents	699	1,246	1,214	1,143	1,035
Accounts receivable	533	685	146	413	419
Inventories	1,605	1,893	1,732	2,345	2,295
Other current assets	503	287	903	862	291
Fixed assets	**2,365**	**2,635**	**1,962**	**3,330**	**3,830**
Investment assets	196	378	565	448	616
Tangible assets	1,618	1,708	1,176	2,374	2,653
Intangible assets	38	36	27	155	164
Other long-term assets	513	513	194	353	397
Total assets	**5,704**	**6,746**	**5,957**	**8,094**	**7,871**
Current liabilities	**1,236**	**1,578**	**880**	**1,901**	**1,376**
Accounts payable	244	321	246	411	233
Short-term debt	345	500	384	507	567
Other current liabilities	647	757	249	983	575
Long-term liabilities	**1,344**	**1,156**	**1,262**	**1,357**	**1,763**
Bonds & long-term debt	1,233	1,020	1,040	892	1,140
Other long-term liabilities	111	136	222	465	624
Total liabilities	**2,580**	**2,734**	**2,142**	**3,258**	**3,139**
Owners of parent equity	**3,071**	**3,912**	**3,721**	**3,979**	**3,932**
Capital stock	127	127	107	107	107
Capital surplus	794	794	902	906	906
Retained earnings	2,093	2,935	3,576	3,542	3,378
Other	58	56	(864)	(576)	(459)
Non-controlling interests' equity	**52**	**99**	**94**	**856**	**800**
Total equity	**3,124**	**4,011**	**3,815**	**4,836**	**4,732**
Net debt	721	551	71	603	802

Cash flow statement

Year-end Dec 31 (KRWb)	2021	2022	2023	2024	2025
Cash flow from operations	**378**	**567**	**674**	**116**	**554**
Net profit	652	878	710	114	(146)
Non-cash profit and expenses	151	279	43	241	404
Depreciation	131	145	107	164	211
Amortization	5	5	3	31	33
Other	15	129	(67)	46	160
Changes in A/L from operating activities	(402)	(558)	(38)	(250)	310
Cash flow from investments	**(284)**	**(58)**	**(535)**	**(108)**	**(401)**
Change in tangible assets	(94)	(227)	(151)	(355)	(371)
Change in financial assets	(161)	302	(83)	(77)	151
Other	(28)	(133)	(302)	324	(182)
Cash flow from financing	**137**	**25**	**(178)**	**(178)**	**(261)**
Change in debt	150	65	(421)	529	(52)
Change in equity	n/a	n/a	n/a	n/a	n/a
Dividends	(0)	(49)	(60)	(78)	(55)
Other	n/a	n/a	n/a	n/a	n/a
Change in cash	255	547	(32)	(71)	(109)
Cash at beginning of year	444	699	1,246	1,214	1,143
Cash at end of year	699	1,246	1,214	1,143	1,035
Gross cash flow	**804**	**1,157**	**753**	**354**	**258**
Free cash flow	**283**	**336**	**522**	**(240)**	**183**

Financial ratios

Year-end Dec 31	2021	2022	2023	2024	2025
Growth (%)					
Sales	62.0	(14.6)	(4.3)	35.0	(5.5)
Operating profit	nm	20.2	(29.4)	(80.9)	nm
Net profit	nm	34.6	(19.1)	(84.0)	nm
Adjusted EPS**	n/a	35.9	(18.9)	(86.3)	n/a
Per-share data (KRW)					
EPS (parent-based)	27,156	36,910	29,917	4,095	n/a
EPS (consolidated)	27,341	36,804	29,785	4,768	n/a
Adjusted EPS**	27,156	36,910	29,917	4,095	n/a
BVPS	128,783	164,046	156,025	166,847	164,864
DPS (common)	n/a	n/a	n/a	n/a	n/a
Valuations (x)					
P/E***	n/a	n/a	n/a	n/a	n/a
P/B***	n/a	n/a	n/a	n/a	n/a
EV/EBITDA	1.0	0.7	0.3	4.9	8.6
Ratios (%)					
ROE	23.9	25.2	18.7	2.5	(2.3)
ROA	12.9	14.1	11.2	1.6	(1.8)
ROIC	21.7	20.1	12.6	1.5	(1.2)
Payout ratio	n/a	n/a	n/a	n/a	n/a
Dividend yield (common)	n/a	n/a	n/a	n/a	n/a
Net debt to equity	23.1	13.7	1.9	12.5	16.9
Interest coverage (x)	17.4	46.8	27.3	2.6	(1.0)

Note: *Excluding one-off items
**Fully diluted, excluding one-off items
***From companies subject to equity-method valuation

Source: Company data, Samsung Securities estimates

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