Company Note

October 15, 2019

Samsung SDI (006400.KS)

BUY / TP KRW310,000

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Growing EV battery margin merits more attention

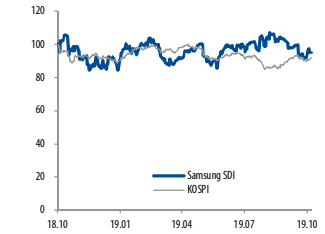
Share price (KRW, Oct 14)	226,500
Upside (%)	36.9
Market cap (KRW bn)	15.575
Shares outstanding ('000)	68,765
Paid-in capital (KRW bn)/ Face value (KRW)	357/5,000
52-week high/low (KRW)	255,500/201,000
60-day avg. daily T/O (KRW bn)	56
Foreign ownership (%)	43.71
Major shareholders (%)	Samsung Electronics & 8 others 20.57

Price performance	1M	3M	6M
Absolute (%)	-3.0	-4.8	-1.1
Relative (%p)	-3.9	-3.9	6.9

K-IFRS, consolidated

(KRW)	19F EPS	20F EPS	TP
Previous	8,933	14,609	310,000
Revised	7,287	14,513	310,000
Consensus	10,502	14,867	304,571
Difference (%)	-30.6	-2.4	1.8

12-month price performance



Source: WiseFn, Hyundai Motor Securities

1) Investment highlights

- 3Q19 earnings are expected to miss consensus due to a string of fires at energy storage systems (ESS) across the country. 4Q19 will likely recognize the cost of implementing preemptive measures to strengthen ESS safety, which is approximately KRW150-200bn. Our assumption, reflected into our forecast, is KRW170bn.
- The ESS fires should to lead to a YoY sales decline, and increased provisions as well as the cost of safety measures will likely dampen margins. However, robust growth in overseas businesses means lower dependence on the domestic business.
- Meanwhile, EV batteries are expected to reach BEP in 4Q19. Earnings visibility is high as the company strategically focuses on profitability and safety. We expect the EV battery margin to reach the low single digits in 2020.
- The domestic ESS fires are a short-term negative issue. We are more focused on the structural growth of the EV battery business and brighter margin outlook.

2) Major issues and earnings outlook

- We expect 3Q19 results to miss consensus, with sales coming in at KRW2.8tn (+9.8% YoY, +15% QoQ) and operating profit at KRW196.6bn (-19% YoY). It was believed that the domestic business would rapidly normalize after the ESS safety measures were introduced but additional fires have hindered the rapid normalization.
- SDI introduced preemptive measures to strengthen the safety of the domestic ESS industry. Special fire extinguishing systems will be deployed to some 1,000 ESS sites currently in operation nationwide.
- We expect this to incur a one-off cost of about KRW150-200bn in 4Q19. The cost increase, although burdensome in the short term, is positive as it helps build confidence in the business in the longer term.
- EV batteries are expected to reach BEP in 4Q19 as major clients BMW and Volkswagen ramp up their production of BEV batteries. In 2020, the EV battery margin should reach the low single digits.
- SDI's EV battery business has relatively greater earnings visibility as the business is solid enough to be selective about high-margin orders and manage top-line growth.
- The continuous ESS fires are regrettable but have been confined to domestic sites, meaning they have little to do with the company's cell technology. By any means, the incidents are a short-term cost issue. Additionally, ESS demand is rapidly growing in the US and Europe, and the dependence on the domestic market should decrease gradually.

3) Share price outlook and valuation

- Lingering uncertainties over the domestic ESS business are burdensome, but the structural growth of EV battery margins should help boost valuation multiples.

Earnings forecasts and valuations

	Sales (KRW bn)	OP (KRW bn)	NP (KRW bn)	EBITDA (KRW bn)	EPS (KRW)	Growth (%YoY)	P/E (x)	P/B (x)	EV/EBITDA (x)	ROE (%)	Div. yield (%)
2017	6,347	117	657	577	9,536	201.0	21.4	1.3	25.2	6.0	0.5
2018	9,158	715	701	1,297	10,175	6.7	21.5	1.3	13.2	6.0	0.5
2019F	10,321	544	503	1,418	7,287	-28.4	31.1	1.3	13.2	4.1	0.4
2020F	12,468	1,134	999	2,183	14,513	99.2	15.6	1.2	8.9	7.7	0.4
2021F	14,204	1,371	1,144	2,498	16,614	14.5	13.6	1.1	7.9	8.2	0.4

Note: K-IFRS, consolidated

HYUNDAI MOTOR SECURITIES

Fig 1. 3Q19 earnings preview (KRW bn)

	Quarterly results			Change		Consensus	
	3Q19F	3Q18	2Q19	%YoY	%QoQ	3Q19F	%diff
Revenue	2,771.0	2,522.8	2,404.5	9.8	15.2	2,798.3	-1.0
Operating profit	196.6	241.5	157.3	-18.6	25.0	224.1	-12.3
Operating margin (%)	7.1	9.6	6.5	-2.5p	0.6p	8.0	-0.9p
Pretax profit	298.0	306.3	217.0	-2.7	37.4	317.5	-6.1
Net profit (CI)	201.7	214.9	148.6	-6.1	35.8	259.2	-22.2

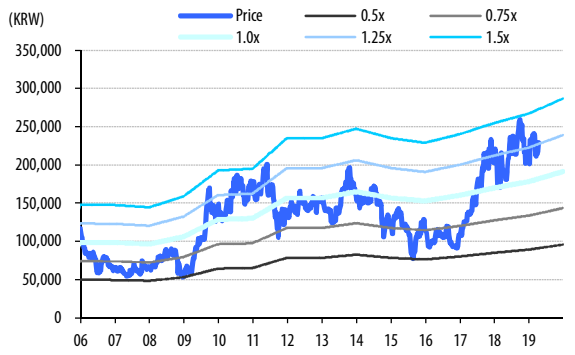
Note: K-IFRS, consolidated
Source: Company data , DataGuide, Hyundai Motor Securities

Fig 2. Earnings revisions (KRW bn)

	2019F					2020F				
	Revised	Previous	%change	Consensus	%difference	Revised	Previous	%change	Consensus	%difference
Revenue	10,320.7	11,010.5	-6.3	10,564.1	-2.3	12,467.8	14,190.6	-12.1	12,761.3	-2.3
Operating profit	544.1	771.6	-29.5	774.7	-29.8	1,133.6	1,263.0	-10.2	1,104.8	2.6
OPM (%)	5.3	7.0	-1.7p	7.3	-2.1p	9.1	8.9	0.2p	8.7	0.4p
Net profit (CI)	502.6	615.8	-18.4	739.2	-32.0	999.5	1,006.1	-0.7	1,046.4	-4.5

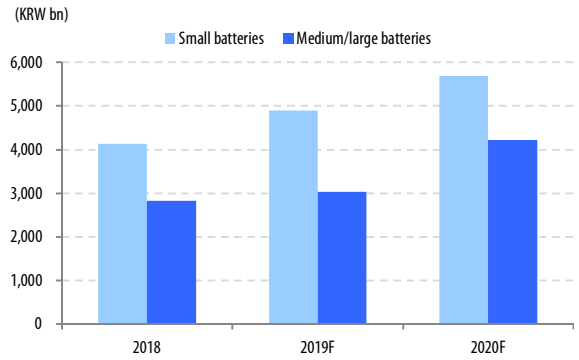
Source: Company data, FnGuide, Hyundai Motor Securities

Fig 3. P/B bands



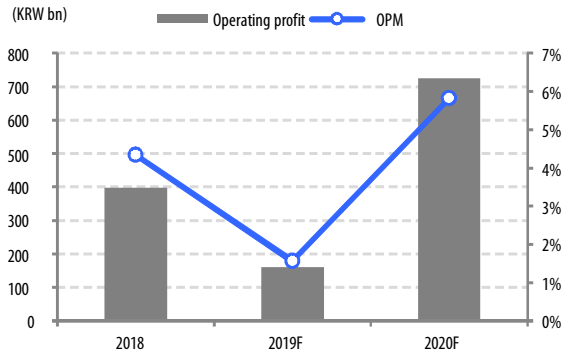
Source: FnGuide, Hyundai Motor Securities

Fig 4. Battery sales outlook



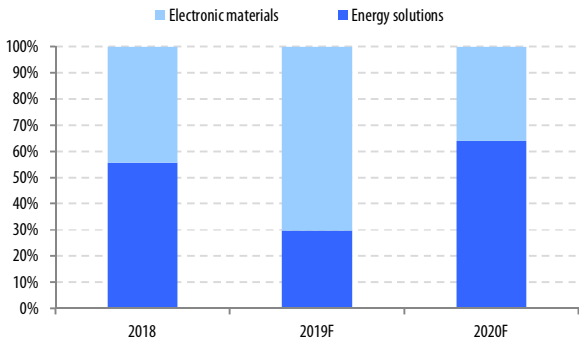
Source: Company data, Hyundai Motor Securities

Fig 5. Rechargeable battery OP trend and outlook



Source: Company data, Hyundai Motor Securities

Fig 6. Share of OP: electronic materials vs. batteries



Source: Company data, Hyundai Motor Securities

Fig 7. Earnings forecasts

(KRW bn)

	2018	2019F	2020F	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19F	4Q19F
Sales	**9,158**	**10,321**	**12,468**	**1,909**	**2,248**	**2,523**	**2,479**	**2,304**	**2,405**	**2,771**	**2,841**
%YoY	44.3	1.7	20.8	46.3	54.6	47.7	31.9	20.7	7.0	9.8	14.6
Energy solutions	**6,954**	**7,930**	**9,898**	**1,419**	**1,729**	**1,922**	**1,884**	**1,732**	**1,823**	**2,149**	**2,226**
Medium/large batteries	2,829	3,038	4,214	540	793	825	672	616	626	872	924
Small batteries	4,125	4,892	5,683	879	936	1,098	1,212	1,116	1,197	1,276	1,302
%YoY											
Energy solutions	61.6	14.0	24.8	72.2	74.8	64.3	42.6	22.1	5.4	11.8	18.2
Medium/large batteries	105.7	7.4	38.7	76.4	167.7	147.9	52.5	14.1	-21.1	5.8	37.5
Small batteries	40.8	18.6	16.2	69.7	35.1	31.1	37.6	26.9	27.9	16.3	7.5
Electronic materials	**2,204**	**2,391**	**2,570**	**490**	**519**	**598**	**597**	**572**	**581**	**622**	**615**
%YoY	9.3	8.5	7.5	2.1	11.3	11.2	12.1	16.8	12.0	4.0	3.0
Operating profit	**715**	**544**	**1,134**	**72**	**153**	**242**	**249**	**119**	**157**	**197**	**71**
%YoY	511.6	-23.9	108.4	TB	2696.4	301.5	109.7	65.1	2.9	-18.6	-71.3
(OPM)	7.8	5.3	9.1	3.8	6.8	9.6	10.0	5.2	6.5	7.1	2.5
Energy solutions	**397**	**162**	**726**	**24**	**90**	**139**	**144**	**32**	**62**	**97**	**-30**
Medium/large batteries	-104	-342	128	-55	4	-16	-38	-90	-48	-43	-160
Small batteries	502	504	597	79	86	155	182	123	110	140	130
%YoY											
Energy solutions	TB	-59.3	348.2	TB	TB	TB	128.2	33.3	-30.8	-30.2	TR
Medium/large batteries	RR	RR	TB	RR	TB	RR	RR	RR	TR	RR	RR
Small batteries	239.2	0.3	18.6	TB	336.2	131.0	115.0	55.1	27.9	-9.3	-8.4
(OPM)	4.3	1.6	5.8	1.3	4.0	5.5	5.8	1.4	2.6	3.5	-1.1
Electronic materials	**318**	**382**	**408**	**48**	**63**	**103**	**105**	**86**	**95**	**100**	**102**
%YoY	41.2	20.3	6.8	-2.9	6.0	62.9	94.2	81.3	51.7	-3.0	-3.2
(OPM)	14.4	16.0	15.9	9.7	12.1	17.2	17.6	15.1	16.3	16.0	16.5
Pretax profit	**1,06**	**736**	**1,476**	**197**	**141**	**306**	**391**	**70**	**217**	**298**	**151**
%YoY	25.7	-28.9	100.5	134.0	-39.0	75.2	17.4	-64.3	53.7	-2.7	-61.4
Net profit (CI)	**701**	**503**	**999**	**125**	**107**	**215**	**254**	**50**	**149**	**202**	**102**
%YoY	6.7	-28.3	98.9	55.0	-44.8	47.4	7.0	-60.0	39.3	-6.1	-59.8
(NPM)	7.7	4.9	8.0	6.6	4.7	8.5	10.3	2.2	6.2	7.3	3.6

Source: Company data, Hyundai Motor Securities

Income statement

(KRW bn)	2017	2018	2019F	2020F	2021F
Sales	6,347	9,158	10,321	12,468	14,204
Change (%)	22.0	44.3	12.7	20.8	13.9
Cost of goods sold	5,181	7,118	8,218	9,440	10,672
% of sales	81.6	77.7	79.6	75.7	75.1
Gross profit	1,166	2,040	2,103	3,028	3,533
Gross margin (%)	18.4	22.3	20.4	24.3	24.9
Change (%)	55.3	75.0	3.1	44.0	16.7
SG&A expenses	1,049	1,325	1,559	1,894	2,162
% of sales	16.5	14.5	15.1	15.2	15.2
EBITDA	577	1,297	1,418	2,183	2,498
EBITDA margin (%)	9.1	14.2	13.7	17.5	17.6
Change (%)	TB	124.9	9.3	53.9	14.5
Operating profit	117	715	544	1,134	1,371
Operating margin (%)	1.8	7.8	5.3	9.1	9.6
Change (%)	TB	511.6	-23.9	108.4	20.9
Non-operating profit	12	-21	-57	-97	-121
Interest income	250	382	177	24	32
Interest expenses	251	339	247	121	152
Other non-operating income	13	-64	13	0	0
Subsidiaries/affiliate income	695	342	249	440	440
Pretax profit from cont ops	824	1,036	736	1,476	1,690
Pretax margin (%)	13.0	11.3	7.1	11.8	11.9
Change (%)	TB	25.7	-28.9	100.5	14.5
Income tax	181	291	191	399	456
Profit from continuing ops	643	745	546	1,078	1,234
Profit from discontinuing ops	0	0	0	0	0
Net profit	643	745	546	1,078	1,234
Net margin (%)	10.1	8.1	5.3	8.6	8.7
Change (%)	204.7	15.8	-26.7	97.5	14.5
NP from controlling interest	657	701	503	999	1,144
NP from non-controlling interest	-14	44	43	78	90
Other comprehensive income	-6	51	149	0	0
Total comprehensive income	637	796	695	1,078	1,234

Balance sheet

(KRW bn)	2017	2018	2019F	2020F	2021F
Current assets	3,585	5,519	5,724	6,419	7,500
Cash and cash equivalents	1,209	1,517	1,526	1,643	2,399
Short-term investment assets	115	151	115	120	125
Accounts receivable	1,000	1,496	1,768	2,049	2,189
Inventory assets	967	1,746	1,853	2,147	2,295
Other current assets	294	609	463	461	493
Non-current assets	12,157	13,830	15,208	16,436	17,795
Tangible assets	2,930	4,608	5,787	6,824	7,749
Intangible assets	897	866	802	716	664
Investment assets	8,009	8,073	8,307	8,583	9,070
Other non-current assets	321	282	313	313	313
Other financial assets	0	0	0	0	0
Total assets	15,742	19,350	20,933	22,855	25,295
Current liabilities	2,664	4,013	3,663	3,830	3,950
Short-term debt	768	1,490	1,308	1,308	1,308
Accounts payable	461	639	728	844	902
Current portion of long-term debt	311	250	256	256	256
Other current debt	1,123	1,635	1,370	1,422	1,484
Non-current liabilities	1,626	3,112	4,425	5,169	6,322
Bonds	100	688	1,189	1,689	2,189
Long-term debt	246	826	1,497	1,697	2,297
LT financial debt (incl. lease)	20	30	60	60	60
Other non-current debt	1,260	1,568	1,679	1,724	1,777
Other financial liabilities	0	0	0	0	0
Total liabilities	4,290	7,125	8,088	8,999	10,273
Owners of parent equity	11,257	11,934	12,509	13,442	14,519
Paid-in capital	357	357	357	357	357
Capital surplus	5,043	5,038	5,038	5,038	5,038
Capital adjustment, etc.	-345	-345	-345	-345	-345
Other accumul earnings and comp income	602	272	411	411	411
Retained earnings	5,601	6,613	7,048	7,981	9,058
Non-controlling interest	195	291	336	414	504
Total equity	11,452	12,225	12,845	13,856	15,023

Cash flow

(KRW bn)	2017	2018	2019F	2020F	2021F
Operating cash flow	-250	261	852	1,325	1,775
Net profit	643	745	546	1,078	1,234
Depreciation on tangible assets	369	491	778	963	1,076
Amortization on intangible assets	91	91	96	86	52
FX-related profit	-35	39	2	0	0
Dec (inc) in working capital	-841	-979	-355	-362	-146
Others	-477	-126	-215	-440	-440
Investing cash flow	89	-1,705	-1,789	-1,841	-2,051
Dec (inc) in investment assets	-156	277	16	163	-47
Decrease in tangible assets	34	4	7	0	0
Increase in tangible assets	-991	-2,146	-1,923	-2,000	-2,000
Others	1,202	160	111	-5	-5
Financing cash flow	353	1,756	915	633	1,033
Increase (decrease) in debt	563	1,327	519	200	600
Increase (decrease) in bond	-199	588	500	500	500
Increase in capital	11	-5	0	0	0
Dividend	-70	-72	-67	-67	-67
Others	48	-83	-38	0	0
Other cash flow	5	-4	32	0	0
Increase (decrease) in cash	197	308	9	117	757
Beginning cash	1,012	1,209	1,517	1,526	1,643
Ending cash	1,209	1,517	1,526	1,643	2,399

Note: K-IFRS, consolidated

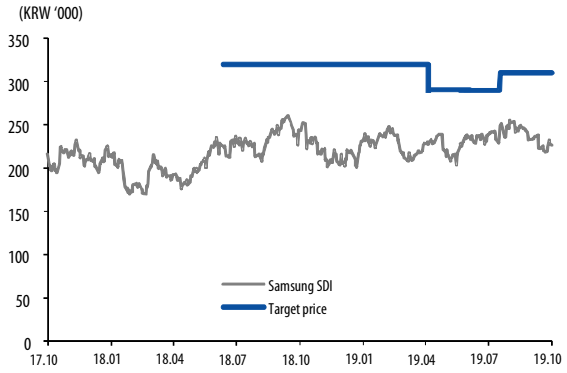
Key financial data

(KRW, x, %)	2017	2018	2019F	2020F	2021F
EPS (based on net profit)	9,332	10,813	7,915	15,652	17,918
EPS (based on parent net profit)	9,536	10,175	7,287	14,513	16,614
BPS (based on total equity)	162,711	173,697	182,502	196,865	213,441
BPS (based on owners of parent equity)	159,945	169,560	177,731	190,980	206,282
DPS	1,000	1,000	1,000	1,000	1,000
P/E (based on net profit)	21.9	20.3	28.6	14.5	12.6
P/E (based on parent net profit)	21.4	21.5	31.1	15.6	13.6
P/B (based on total equity)	1.3	1.3	1.2	1.2	1.1
P/B (based on owners of parent equity)	1.3	1.3	1.3	1.2	1.1
EV/EBITDA (reported)	25.2	13.2	13.2	8.9	7.9
Dividend yield	0.5	0.5	0.4	0.4	0.4
Growth (%)					
EPS (based on net profit)	206.2	15.9	-26.8	97.7	14.5
EPS (based on parent net profit)	201.0	6.7	-28.4	99.2	14.5
Profitability (%)					
ROE (based on net profit)	5.7	6.3	4.4	8.1	8.5
ROE (based on parent net profit)	6.0	6.0	4.1	7.7	8.2
ROA	4.2	4.2	2.7	4.9	5.1
Stability (%)					
Total liabilities/equity	37.5	58.3	63.0	64.9	68.4
Net debt/equity	1.1	13.3	20.9	23.5	24.0
Interest coverage	5.1	13.8	5.6	9.4	9.0

Investment rating and target price history

Date	Rating	TP	Difference (%)	
			Average	High/Low
18/08/21	BUY	320,000	-26.0	-22.0
18/09/17	BUY	320,000	-24.3	-18.4
18/10/11	BUY	320,000	-24.3	-18.4
18/10/26	BUY	320,000	-24.4	-18.4
18/10/29	BUY	320,000	-28.6	-18.4
19/01/28	BUY	320,000	-28.8	-18.4
19/04/22	BUY	290,000	-20.2	-18.4
19/05/02	BUY	290,000	-23.4	-17.6
19/05/31	BUY	290,000	-20.8	-16.4
19/07/31	BUY	310,000	-23.0	-17.6
19/10/15	BUY	310,000	-	-

Two-year price chart



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Hyundai Motor Securities offers three sector investment ratings based on six-month forward fundamentals and share price outlook.

- OVERWEIGHT: Sector-wide fundamentals and share prices are expected to turn up.
- NEUTRAL: No meaningful fundamental improvement is expected.
- UNDERWEIGHT: Sector-wide fundamentals and share prices are expected to turn down.

Hyundai Motor Securities offers three company investment ratings based on the relative return expected in the following six months, based on the closing price on the date of rating declaration.

- BUY: Excess return of +15%p or more
- MARKETPERFORM (M.PERFORM): Excess return of between -15%p and +15%p
- SELL: Excess return of -15%p or less

Stock ratings distribution (October 1, 2018-September 30, 2019)

Rating	Count	% of rating category
BUY	143	87.73
MARKETPERFORM	20	12.27
SELL	0	0.0

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