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051910 KS · Chemicals

LG Chem

Resilient cathode margins

(Maint Bu		Target pri W620,000		Upside 39.3%		Current price (10/30, W445,000	
KOSPI	2,310.55	Market cap (Wbn)	31,414	Shares outstanding (mn)	71	Foreign ownership (%)	43.8

Report summary

Recommendation

We maintain our Buy rating on LG Chem but cut our target price by 22.5% to W620,000, reflecting our downward earnings forecast revisions for the advanced materials unit and LG Energy Solution (LGES) and increased net debt.

Market status and outlook

LG Chem's 3Q23 operating profit jumped 40% QoQ to W860.4bn, beating the consensus by 11.5%. The biggest highlight of the report was better-than-expected cathode materials margin delivery. For 4Q23, we expect operating profit to fall 32% QoQ to W581bn due to profit declines across businesses (chemicals, advanced materials, and LGES).

Key data

Price performance 160 I G Chem - KOSPI 140 120 100 80 60 🖵 10.22 2.23 6.23 10.23 (%) 1M 6M 12M Absolute -10.4 -39.9 -27.6 -4.4 -34.9 -29.0 Relative

Earnings and valuation metrics

Lamings and valuation metrics								
(Dec.)	2021	2022	2023F	2024F	2025F			
Revenue (Wbn)	42,599	51,865	57,857	69,772	91,966			
OP (Wbn)	5,026	2,996	2,636	5,416	7,510			
OP margin (%)	11.8	5.8	4.6	7.8	8.2			
NP (Wbn)	3,670	1,845	1,631	3,945	5,490			
EPS (W)	46,880	23,574	20,839	50,401	70,129			
ROE (%)	18.5	6.9	5.1	11.5	14.4			
P/E (x)	13.1	25.5	21.4	8.8	6.3			
P/B (x)	2.2	1.5	1.1	1.0	0.9			
Dividend yield (%)	2.0	1.7	2.2	2.2	2.2			
Notes: Under consolidated K-IFR	S; NP is attributable to owr	ners of the parer	nt					

Notes: Under consolidated K-IFRS; NP is attributable to owners of the parent Source: Company data, Mirae Asset Securities Research estimates

Market status and outlook

3Q23 review: Cathode materials margins exceed expectations

LG Chem's 3Q23 operating profit jumped 40% QoQ to W860.4bn, beating the consensus by 11.5%. The consensus beat was driven by better-than-expected profits at LGES; other results were largely in line with expectations.

The biggest highlight of the report was better-than-expected cathode materials margin delivery. Lithium prices fell more than 20% QoQ, which we believe led to a more than 20% decrease in cathode materials ASP. Despite this, the business showed resilience amid tough conditions by keeping margins above breakeven. Overall, advanced materials operating profit fell 30% QoQ to W129bn.

Meanwhile, the chemicals division delivered operating profit of W37bn (turning to profit QoQ), backed by the positive impact of oil price moves (higher input costs are reflected with a time lag), cost reductions, and solid margins for value-added products (POE and CNT).

4Q23 preview: Earnings to decline across all businesses

For 4Q23, we forecast operating profit to slide 32% QoQ to W581bn due to profit declines across major businesses (chemicals, advanced materials, and LGES). The chemicals division returned to a profit of W37bn in 3Q23 but will likely see operating profit slide to W0.3bn in 4Q23, as product spreads should come under pressure amid lingering macro uncertainties. Seasonal demand is also expected to slow in 4Q23 following inventory stockpiling in 3Q23 (in preparation for the fourth quarter). As for advanced materials, we forecast operating profit of W76.5bn (vs. W129bn in 3Q23) due to continued deterioration in cathode materials margins. Weaker lithium prices continue to weigh on earnings, but we still expect the division to remain profitable. That said, shipments are expected to decline slightly due to slower European demand.

Table I.	Table 1. LG Chem: Quarterly and annual earnings										(navv)	
		1Q23	2Q23	3Q23P	4Q23F	1Q24F	2Q24F	3Q24F	4Q24F	2022	2023F	2024F
Revenue	Total	14,486.0	14,541.0	13,495.0	15,334.2	14,748.1	15,689.4	18,148.6	21,185.4	51,864.7	57,856.2	69,771.5
	Petrochemicals	4,579.0	4,559.0	4,411.0	4,838.1	4,921.5	5,191.9	5,506.1	5,748.9	21,724.0	18,387.1	21,368.5
	LGES	8,747.0	8,774.0	8,224.0	8,579.7	7,852.8	8,409.1	10,493.1	13,056.5	25,598.0	34,324.7	39,811.4
	Advanced materials	2,561.0	2,220.0	1,714.0	1,476.3	1,538.0	1,599.7	1,697.3	1,896.0	8,051.0	7,971.3	6,731.0
	Life sciences	278.0	317.0	291.0	320.1	305.8	348.7	320.1	352.1	909.0	1,206.1	1,326.7
	Farm Hannong	265.0	247.0	120.0	120.0	130.0	140.0	132.0	132.0	794.0	752.0	534.0
OP	Total	791.0	615.6	860.0	581.0	722.9	1,044.5	1,621.6	2,026.9	2,994.2	2,847.6	5,415.8
	Petrochemicals	-51.0	-13.0	37.0	0.3	105.7	191.8	316.5	314.1	1,075.0	-26.7	928.1
	LGES	633.0	461.0	731.0	549.2	508.3	747.2	1,221.5	1,690.3	1,114.0	2,374.2	4,167.3
	Advanced materials	203.0	185.0	129.0	76.5	78.0	100.2	126.9	165.5	923.0	593.5	470.6
	Life sciences	16.0	-9.0	15.0	16.0	45.9	34.9	16.0	17.6	73.0	38.0	114.4
	Farm Hannong	34.0	27.3	-15.0	-11.0	35.0	20.4	-9.3	-10.7	41.0	35.3	35.4
Pretax pro	fit	915.9	779.4	575.7	501.8	646.6	966.3	1,526.3	1,919.1	2,842.3	2,772.8	5,058.3
NP		474.2	524.9	585.0	294.5	504.4	753.7	1,190.5	1,496.9	1,845.4	1,878.5	3,945.5

Table 1. LG Chem: Quarterly and annual earnings

Source: Company data, Mirae Asset Securities Research

(M/bp)

Recommendation

Cut TP to W620,000; retain Buy rating

We maintain our Buy rating on LG Chem but cut our target price by 22.5% to W620,000 (38.7% upside potential), reflecting our downward earnings forecast revisions for the advanced materials unit/LGES and increased net debt.

Advanced materials profitability remains more resilient than feared, but a sharp rebound still looks unlikely given the sustained fall in metal prices. Moreover, borrowings increased faster than cash holdings in 3Q23, causing net debt to grow by W700bn. We revised down our earnings estimates for LGES to reflect soft demand in Europe.

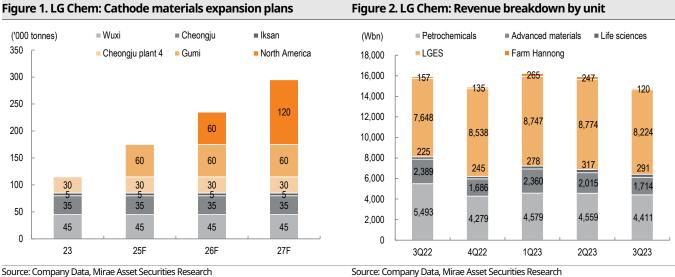
That said, we retain our Buy rating on the stock, as: 1) chemicals market conditions are likely to recover gradually in 2024, backed by China's stimulus; and 2) the company has a variety of financing options to choose from.

Table 2. LG Chem: Valuation (SOTP)

(Wbn, mn shares, %)

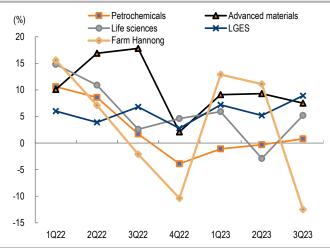
	12MF EBITDA	Target EV/EBITDA	Value	Notes
		(x)		
Petrochemicals	1,489.4	6.1	9,151.6	Avg. EV/EBITDA of domestic chemicals sector
Advanced materials	801.3	28.5	22,866.2	Weighted avg. of segment multiples
Farm Hannong			420.0	Acquisition price
Life sciences	101.5	30.0	3,745.0	2023F EV/EBITDA of 30x; Aveo valued at W700bn
LGES	7,792.0	18.0	22,581.2	2024F EBITDA; 80.5% stake; 80% conglomerate discount
Subtotal			58,763.9	
Net debt			13,000.0	W21.9tr in borrowings - W8.9tr in cash
Market value of preferred shares			2,202.8	
EV			43,561.1	
No. of shares			70.6	
Fair price (W)			617,080	TP: W620,000

Source: FnGuide, Mirae Asset Securities Research



Source: Company Data, Mirae Asset Securities Research

Figure 3. LG Chem: OP margin by business



Source: Company data, Mirae Asset Securities Research

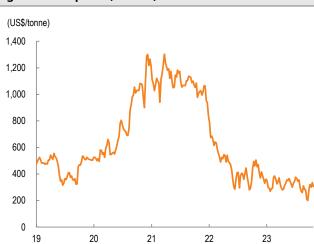
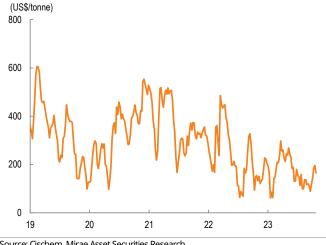


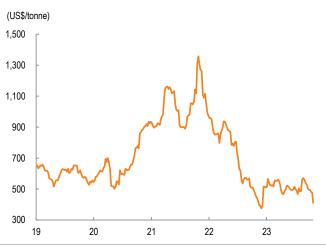
Figure 5. ABS spread (ABS-SM)

Figure 4. Ethylene spread



Source: Cischem, Mirae Asset Securities Research

Figure 6. PVC spread



Source: Cischem, Mirae Asset Securities Research

Source: Cischem, Mirae Asset Securities Research

October 31, 2023

LG Chem (051910 KS)

Income statement (summarized)

(Wbn)	2022	2023F	2024F	2025F
Revenue	51,865	57,857	69,772	91,966
Cost of revenue	41,878	47,791	56,926	77,026
GP	9,987	10,066	12,846	14,940
SG&A expenses	6,991	7,430	7,430	7,430
OP (adj.)	2,996	2,636	5,416	7,510
OP	2,996	2,636	5,416	7,510
Non-operating profit	-183	138	-358	-472
Net financial income	-38	-300	-359	-473
Net income from associates	-46	-19	0	0
Pretax profit	2,813	2,774	5,058	7,038
Income tax	641	623	1,113	1,548
Profit from continuing operations	2,171	2,151	3,945	5,490
Profit from discontinued operations	24	-3	0	0
NP	2,196	2,148	3,945	5,490
Attributable to owners	1,845	1,631	3,945	5,490
Attributable to minority interests	350	517	0	0
Total comprehensive income	2,135	2,670	3,945	5,490
Attributable to owners	1,801	1,987	2,991	4,162
Attributable to minority interests	334	683	954	1,328
EBITDA	6,392	6,503	9,435	11,687
FCF	-7,836	-2,612	-1,732	-621
EBITDA margin (%)	12.3	11.2	13.5	12.7
OP margin (%)	5.8	4.6	7.8	8.2
Net margin (%)	3.6	2.8	5.7	6.0

Cash flow statement (summarized)

(Wbn)	2022	2023F	2024F	2025F
Operating cash flow	570	5,621	3,468	5,379
NP	2,196	2,148	3,945	5,490
Non-cash income/expenses	4,824	4,810	5,472	6,180
Depreciation	3,105	3,466	3,638	3,838
Amortization	291	400	382	340
Other	1,428	944	1,452	2,002
Chg. in working capital	-5,316	-180	-4,497	-4,288
Chg. in AR & other receivables	-1,447	-1,198	-3,473	-2,709
Chg. in inventory	-3,818	162	-4,650	-3,628
Chg. in AP & other payables	1,147	318	2,097	1,636
Income tax	-1,707	-1,215	-1,113	-1,548
Cash flow from investing activities	-9,229	-8,942	-5,523	-6,252
Chg. in PP&E	-8,324	-8,232	-5,200	-6,000
Chg. in intangible assets	-143	-77	0	0
Chg. in financial assets	-18	63	-323	-252
Other	-744	-696	0	0
Cash flow from financing activities	13,332	2,646	-780	-781
Chg. in financial liabilities	1,239	3,254	3	2
Chg. in equity	8,873	3	0	0
Dividends	-1,091	-896	-783	-783
Other	4,311	285	0	0
Chg. in cash	4,737	-681	-3,236	-1,966
Beginning balance	3,761	8,498	7,817	4,581
Ending balance	8,498	7,817	4,581	2,615

Source: Company data, Mirae Asset Securities Research estimates

Balance sheet (summarized)

2022	2023F	2024F	2025F
29,674	30,753	34,888	39,452
8,498	7,817	4,581	2,615
7,938	9,749	13,469	16,371
11,881	12,187	16,838	20,466
1,357	1,000	0	0
38,299	44,345	46,249	48,636
950	1,051	1,452	1,765
29,663	34,240	35,803	37,965
2,690	3,454	3,072	2,733
67,974	75,098	81,137	88,088
16,460	18,662	20,762	22,400
4,756	5,495	7,592	9,227
3,812	5,275	5,279	5,281
7,892	7,892	7,891	7,892
14,033	16,020	16,797	17,403
12,193	13,983	13,983	13,983
1,840	2,037	2,814	3,420
30,493	34,682	37,559	39,803
31,450	32,678	35,840	40,547
391	391	391	391
11,570	11,572	11,572	11,572
19,142	19,994	23,156	27,863
6,031	7,738	7,738	7,738
37,481	40,416	43,578	48,285
	29,674 8,498 7,938 11,881 1,357 38,299 950 29,663 2,690 67,974 16,460 4,756 3,812 7,892 14,033 12,193 1,2193 1,840 30,493 31,450 31,450 391 11,570 19,142 6,031	29,674 30,753 8,498 7,817 7,938 9,749 11,881 12,187 1,357 1,000 38,299 44,345 950 1,051 29,663 34,240 2,690 3,454 67,974 75,098 16,460 18,662 4,756 5,495 3,812 5,275 7,892 7,892 14,033 16,020 12,193 13,983 1,840 2,037 30,493 34,682 31,450 32,678 391 391 11,570 11,572 19,142 19,994 6,031 7,738	29,674 30,753 34,888 8,498 7,817 4,581 7,938 9,749 13,469 11,881 12,187 16,838 1,357 1,000 0 38,299 44,345 46,249 950 1,051 1,452 29,663 34,240 35,803 2,690 3,454 3,072 67,974 75,098 81,137 16,460 18,662 20,762 4,756 5,495 7,592 3,812 5,275 5,279 3,812 5,275 5,279 7,892 7,892 7,891 14,033 16,020 16,797 12,193 13,983 13,983 1,840 2,037 2,814 30,493 34,682 37,559 31,450 32,678 35,840 391 391 391 1,840 2,037 2,814 30,493 34,682 37,559

Key valuation metrics/ratios

	2022	2023F	2024F	2025F
P/E (x)	25.5	21.4	8.8	6.3
P/CF (x)	6.7	5.0	3.7	3.0
P/B (x)	1.5	1.1	1.0	0.9
EV/EBITDA (x)	9.1	8.1	5.9	5.0
EPS (W)	23,574	20,839	50,401	70,129
CFPS (W)	89,671	88,889	120,297	149,069
BPS (W)	401,768	417,443	457,840	517,965
DPS (W)	10,000	10,000	10,000	10,000
Dividend payout ratio (%)	32.2	32.9	17.9	12.9
Dividend yield (%)	1.7	2.2	2.2	2.2
Revenue growth (%)	21.8	11.6	20.6	31.8
EBITDA growth (%)	-18.8	1.7	45.1	23.9
OP growth (%)	-40.4	-12.0	105.4	38.7
EPS growth (%)	-49.7	-11.6	141.9	39.1
AR turnover (x)	7.5	7.0	6.4	6.6
Inventory turnover (x)	5.1	4.8	4.8	4.9
AP turnover (x)	9.9	9.3	8.7	9.2
ROA (%)	3.7	3.0	5.1	6.5
ROE (%)	6.9	5.1	11.5	14.4
ROIC (%)	6.1	4.4	8.7	10.3
Debt-to-equity ratio (%)	81.4	85.8	86.2	82.4
Current ratio (%)	180.3	164.8	168.0	176.1
Net debt-to-equity ratio (%)	19.6	28.3	33.7	34.5
Interest coverage ratio (x)	9.9	4.6	9.2	12.7

Appendix 1

Important disclosures and disclaimers

<u>Two-year rating and TP history</u>				
Company	Date	Rating	TP (W)	(141)
LG Chem (051910)	10/31/23	Buy	620,000	(W) LG Chem
	07/31/23	Buy	800,000	1,000,000
	04/28/23	Buy	930,000	
	02/01/23	Buy	840,000	
	11/24/22	Buy	950,000	600,000 W PM www. www.
	11/01/22	Buy	760,000	400,000 -
	07/28/22	Buy	750,000	200,000
	04/28/22	Buy	650,000	
	02/09/22	Buy	940,000	Oct 21 Oct 22 Oct 2
	01/14/22	Buy	980,000	
	10/28/21	Buy	1,030,000	
Stock ratings			Sector ratings	

Stock	< ratings
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Buy Expected 12-month performance: +20% or greater Trading Buy Expected 12-month performance: +10% to +20% Hold Expected 12-month performance: -10% to +10% Sell

Expected 12-month performance: -10% or worse

Overweight Expected to outperform the market over 12 months

Neutral Expected to perform in line with the market over 12 months Underweight Expected to underperform the market over 12 months

Rating and TP history: Share price (−), TP (−), Not Rated (■), Buy (▲), Trading Buy (■), Hold (●), Sell (♦)

* Our investment rating is a guide to the expected return of the stock over the next 12 months.

* Outside of the official ratings of Mirae Asset Securities Co., Ltd., analysts may call trading opportunities should technical or short-term material developments arise.

* The TP was determined by the research analyst through valuation methods discussed in this report, in part based on estimates of future earnings.

* TP achievement may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

Ratings distribution and investment banking services

	Buy	Trading Buy	Hold	Sell
Ratings distribution	88.81%	7.24%	3.29%	0.66%
Investment banking services	95.65%	4.35%	0%	0%

* Based on recommendations in the last 12-months (as of September 30, 2023)

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