

## Korean Corporate Credit Trends:

An Uphill Climb In 2025



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Corporate Ratings, Asia-Pacific Dec. 2, 2024

## 2025 Credit Outlook For Korean Corporates

#### • Credit trends are more unfavorable heading into 2025, with a skew toward a negative outlook.

- Soft domestic demand, unfavorable demand-supply for cyclical sectors, and policy uncertainties are causing an unfavorable operational backdrop for many companies.
- EV battery makers, steel, and chemical companies are under most downward pressure.

#### • Operating performance by sector will differ and affect rating headroom.

- EV battery makers will face challenges, with a slowdown in EV demand growth persisting into 2025.
- Steel and chemical companies are exposed to weaker prices, due to increasing supply from China.
- Auto original equipment manufacturers (OEMs) will likely show resilience, despite tougher operating conditions.
- AI demand will likely continue to fuel strong demand for HBM semiconductors.

#### • Some key credit-monitoring factors over next 12 months:

- Supply and demand conditions from China could affect prices and margins for chemical and steel players.
- The ability to flexibly cut investments could affect credit metrics, amid weaker demand.
- Policy-related uncertainties will be another important swing factor.

## **Table Of Contents**



## Korean Corporate Credit Trends

- 2024 Credit Trends
- 2025 Credit Outlook



## Fueled By Structural Growth

• Semiconductor



## Directly Hit By Weaker Demand

- EV Battery
- Petrochemical
- Steel



## Facing A Broader Market Slowdown

• Auto OEMs



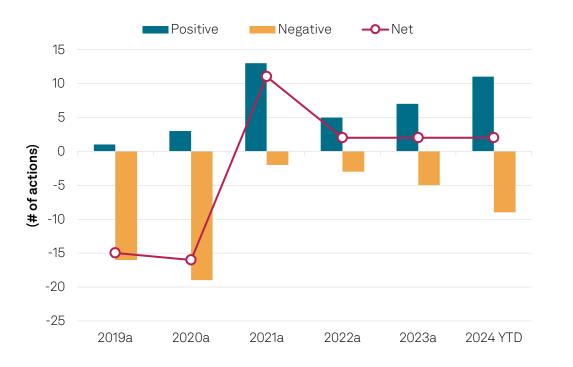
## Appendix

# I. Korean Corporate Credit Trends

## More Rating Actions In 2024 Than In The Past Two Years

- Higher number of rating actions in Korean corporate year-to-date, with a slight skew toward positive.
- Several positive rating actions on auto and semiconductor, and negative actions on chemical, EV battery, and steel.

#### Mixed rating action trend for Korean corporates\*



#### Major rating actions YTD in 2024\*

●↓ ●↑

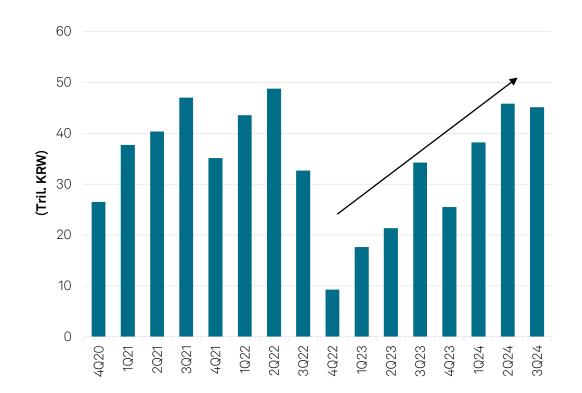
Company	Date	ICR changed to	From
SK Innovation Co. Ltd.	Nov 2024	BBB-/Negative/	BB+/Watch Pos/
SK Geo Centric	Nov 2024	BBB-/Negative/	BB+/Watch Pos/
PT. Krakatau Posco	Sep 2024	BBB-/Negative/	BBB-/Stable/
Hyundai Motor Co.	Aug 2024	A-/Stable/	BBB+/Positive/
Kia Corp	Aug 2024	A-/Stable/	BBB+/Positive/
SK Hynix Inc.	Aug 2024	BBB/Stable/	BBB-/Stable/
SK E&S Co., Ltd.	Jul 2024	BBB-/Watch Neg/	BBB-/Stable/
SK Innovation Co. Ltd.	Jul 2024	BB+/Watch Pos/	BB+/Stable/
SK Geo Centric	Jul 2024	BB+/Watch Pos/	BB+/Stable/
Doosan Bobcat Inc.	Jul 2024	BB+/Watch Neg/	BB+/Stable/
LG Chem Ltd.	May 2024	BBB+/Negative/	BBB+/Stable/
LG Energy Solution Ltd.	May 2024	BBB+/Negative/	BBB+/Stable/
Hanwha TotalEnergies Petrochemical Co. Ltd.	Apr 2024	BBB/Negative/	BBB/Stable/
Doosan Bobcat Inc.	Apr 2024	BB+/Stable/	BB/Stable/
GS Caltex Corp.	Mar 2024	BBB+/Stable/A-2	BBB/Positive/A-2
SK Innovation Co. Ltd.	Mar 2024	BB+/Stable/	BBB-/Stable/
SK Geo Centric	Mar 2024	BB+/Stable/	BBB-/Stable/
Hyundai Motors Co.	Jan 2024	BBB+/Positive/	BBB+/Stable/
Kia Corp	Jan 2024	BBB+/Positive/	BBB+/Stable/

\*As of Nov. 28, 2024. YTD-Year to date. ICR-Issuer credit rating. Source: S&P Global Ratings.

\*As of Nov. 28, 2024. a—Actual. YTD—Year to date. Source: S&P Global Ratings

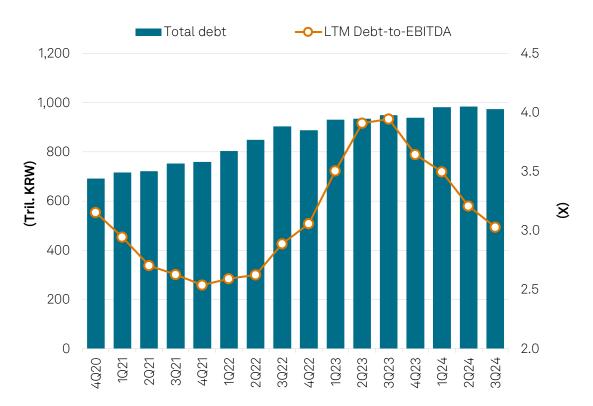
## Korean Corporates' Debt Leverage Remains Elevated

Top-100 corporates' operating profit is recovering...



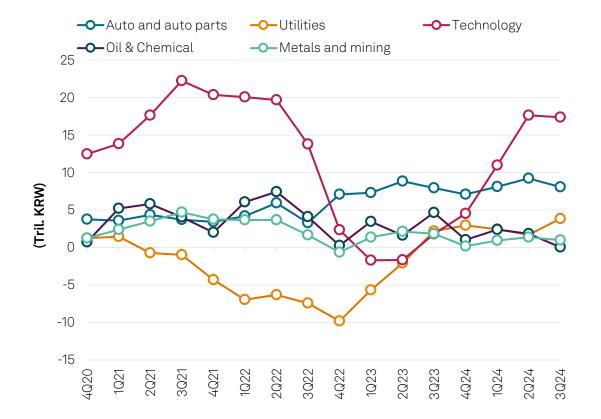
Top 100 listed corporates by asset size (excluding financial institutions); list as of 3Q24. Tril.—Trillion. KRW—Korean won. Sources: Bloomberg, S&P Global Ratings.

...but leverage is still elevated, albeit lower than 2023



Top 100 listed corporates by asset size (excluding financial institutions); list as of 3Q24. Annualized EBITDA (sum of last four quarter's EBITDA used for debt-to-EBITDA calculation). LTM—Last twelve months. Tril.—Trillion. KRW—Korean won. Sources: Bloomberg, S&P Global Ratings.

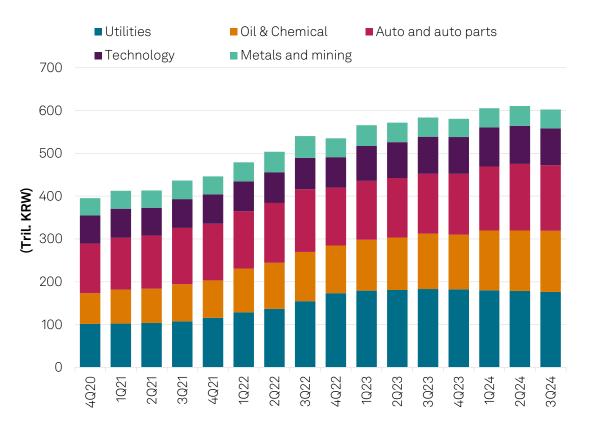
## Some Divergence In Performance



Tech and utilities OP recover, while auto OP remains steady

Top 100 listed corporates by asset size (excluding financial institutions); list as of 3Q24. Tril.—Trillion. KRW—Korean won. OP—Operating profit. Sources: Bloomberg, S&P Global Ratings.

#### Debts are rising across sectors particularly EV batteries

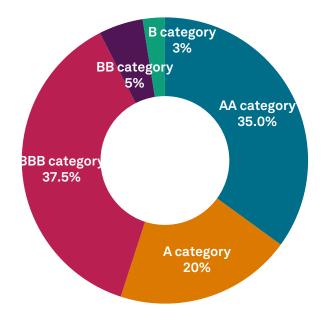


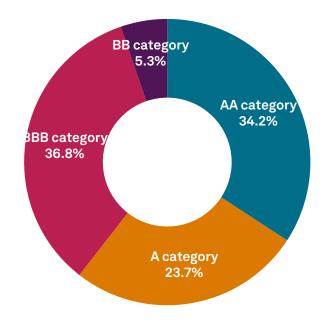
Top 100 listed corporates by asset size (excluding financial institutions); list as of 3Q24. Tril.—Trillion. KRW—Korean won. Sources: Bloomberg, S&P Global Ratings.

## Rating Distribution Of Korean Firms In 2024 Versus 2023

Rating distribution as of December 2023

Rating distribution as of November 2024





As of Dec. 31, 2023. S&P Global Ratings rates 40 Korean companies, including 14 government-related entities.

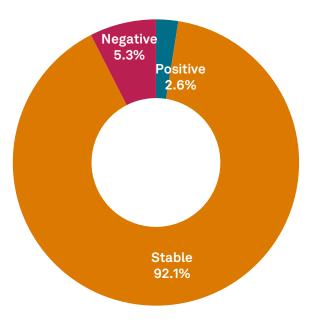
As of Nov. 28, 2024. S&P Global Ratings rates 38 Korean companies, including 13 government-related entities.

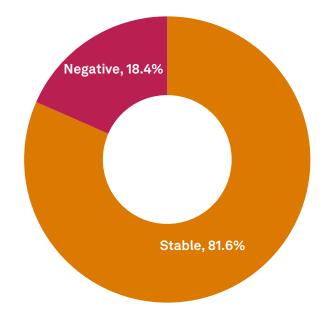


## Outlook Distribution Of Korean Firms In 2024 versus 2023

Outlook distribution as of December 2023

Outlook distribution as of November 2024





As of Dec. 31, 2023. S&P Global Ratings rates 40 Korean companies, including 14 government-related entities.

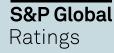
As of Nov. 28, 2024. S&P Global Ratings rates 38 Korean companies, including 13 government-related entities.



# II. Directly Hit By Weaker Demand

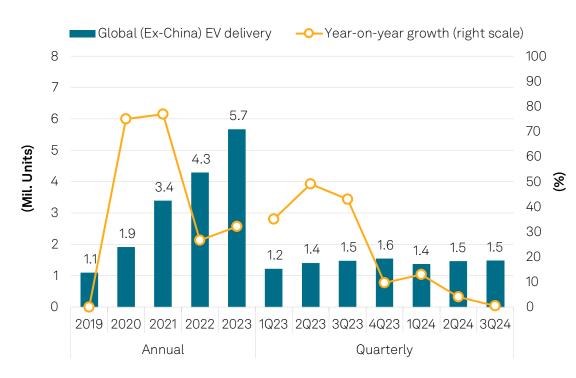
- EV Battery
- Petrochemical
- Steel

## EV Battery: Capacity Additions Amid Market Slowdown Will Increase Leverage Burden



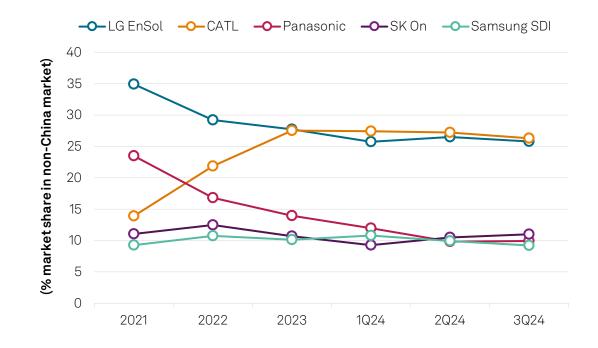
## **Slower EV Demand Growth Pressures EV Battery Makers**

- Global EV sales growth are moderating, notably in non-China markets.
- Potential further slowdown in North America adds burden to Korean players, given heavy investments in the region.



#### Non-China EV demand growth is slowing

Competition is increasing from CATL in non-China market



LG EnSol--LG Energy Solution, Ltd. CATL--Contemporary Amperex Technology Co., Limited. SK On--SK On Co., Ltd. Based on EV battery market share in terms of volume, excluding China. Source: SNE Research, S&P Global Ratings.

Mil.--Million. Source: SNE Research, S&P Global Ratings.

S&P Global

Ratings

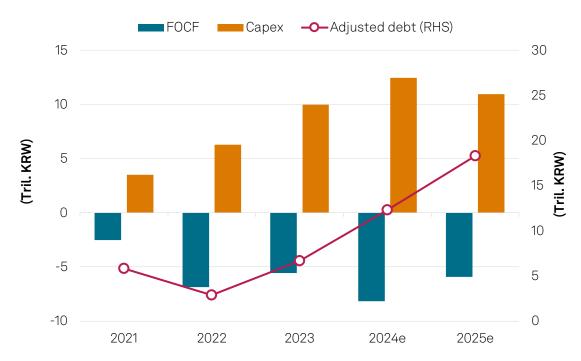
## Korean Battery Makers' Debt On The Rise Due To Aggressive Investments

- Aggressive capex, amid weakening demand, will likely drive up LG EnSol's debt burden.
- We expect CATL, its Chinese peer, to generate strong FOCF and add to net cash.

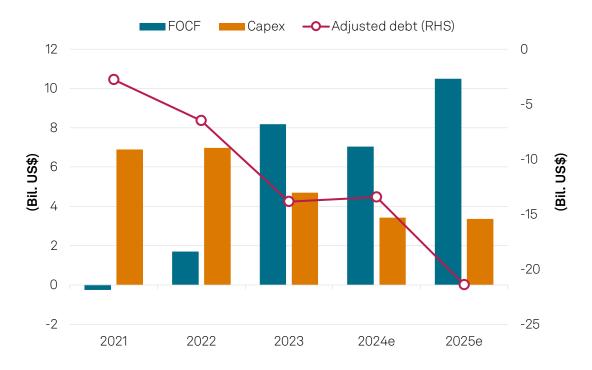
#### LG EnSol's FOCF will be negative

S&P Global

Ratings



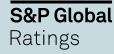
#### While CATL generates positive FOCF and add to net cash



Bil.--Billion. e--estimate. RHS--Right hand scale. Sources: Company filings, S&P Global Ratings.

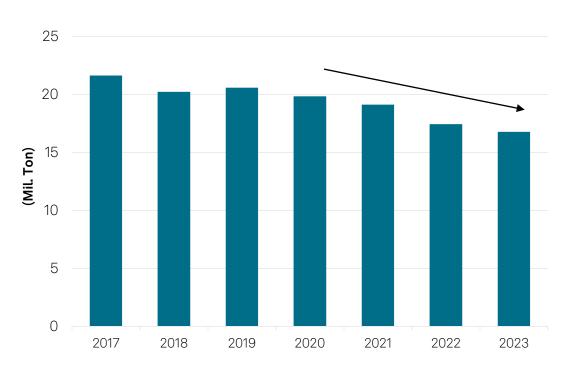
### FOCF--Free operating cash flow. Tril.--Trillion. KRW--Korean won. e--estimate. RHS--Right hand scale. Sources: Company filings, S&P Global Ratings.

## Petrochemical: Weaker Demand, Increased Supply Will Squeeze Margins



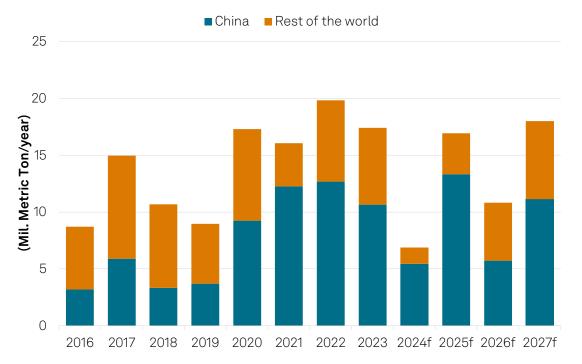
## **Chemical Industry Faces Hurdles From Increasing Supply From China**

- Korea's petrochemical exports to China have declined since 2019 amid China's push for self-sufficiency.
- Petrochemical industry outlook will remain tough, with persistent oversupply.



Korea's petrochemical exports to China have been falling

#### China leads the globe in capacity expansion



Global net capacity additions of Propylene and Ethylene. Data excludes speculative capacity normalization. Mil.—Million. f— Forecast. Sources: Global Polyolefins Outlook (April 2024) and S&P Global Commodity Insights.

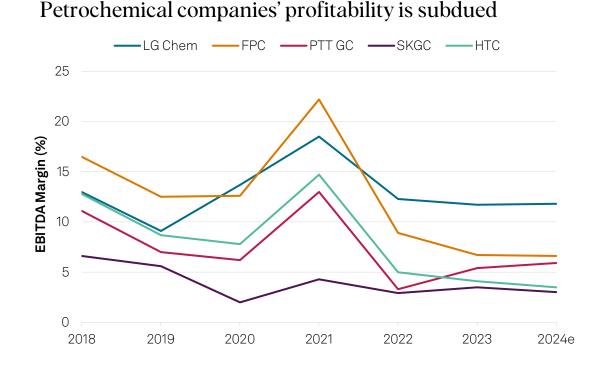
Mil.-Million. Source: Korea International Trade Association, S&P Global Ratings.

S&P Global

Ratings

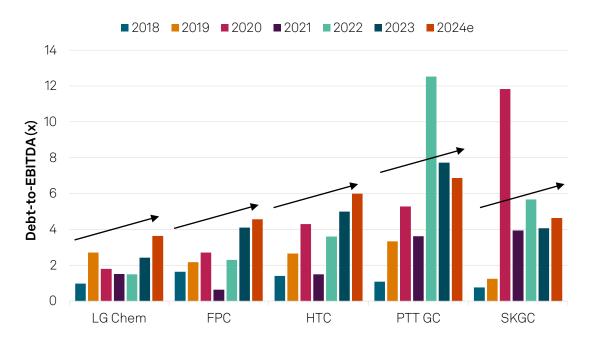
## Asian Petrochemical Companies Have Been Doing It Tough

- Petrochemical product spreads have declined in recent years amid weak demand.
- Significant capacity additions and weak demand in China limit recovery prospects.



FPC--Formosa Plastics Corp. PTT GC--PTT Global Chemical. SKGC--SK Geo Centric. HTC--Hanwha Total Petrochemical. e--estimate. Sources: Company filings, S&P Global Ratings.

#### Debt leverage ratio has been increasing



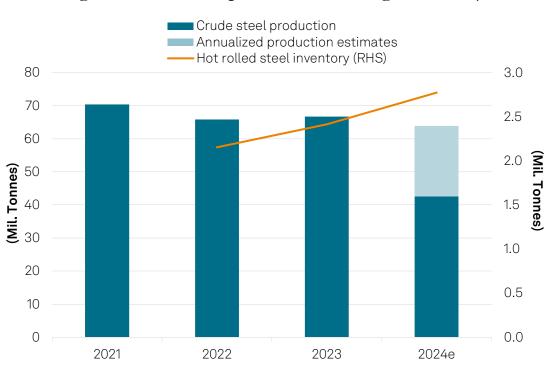
FPC--Formosa Plastics Corp. PTT GC--PTT Global Chemical. SKGC--SK Geo Centric. HTC--Hanwha Total Petrochemical. e--estimate. Sources: Company filings, S&P Global Ratings.

## Steel: China Export Surge Will Depress Prices



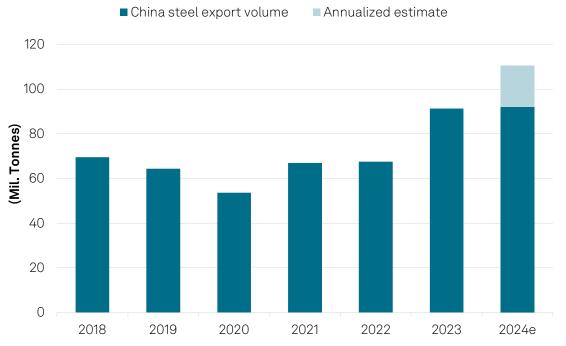
## **Steel Industry Facing Similar Oversupply**

- The global steel industry faces dampened market conditions with increased supply from China.
- Korean steel production volumes are declining and inventories rising.



Reducing domestic steel production, rising inventory

#### China steel export volume has been increasing



Note: production volumes for 2024 are annualized figures based on January to August productions. Hot rolled steel inventory is based on figures as of end of August. Mil.--Million. RHS--Right hand scale. e—Estimate. Source: Korea Iron & Steel Association, S&P Global Ratings.

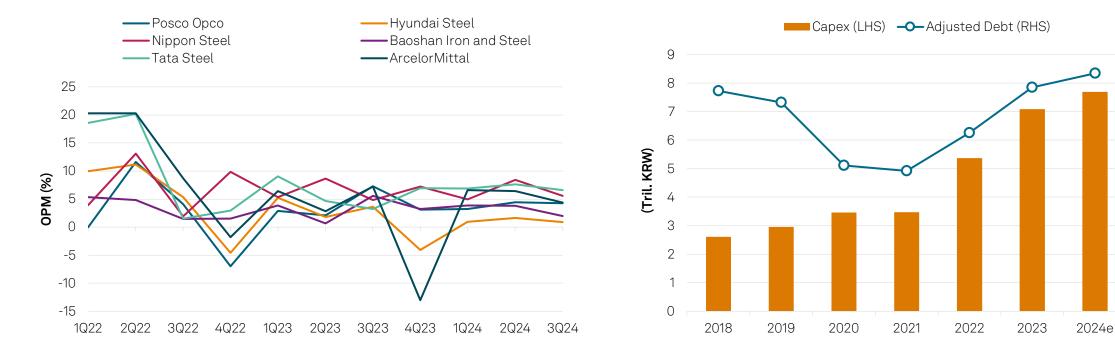
S&P Global

Ratings

Note: export volumes for 2024 are annualized figures based on January to October exports. Mil.--Million. e--Estimate. Source: Wind, S&P Global Ratings.

## Korean Steel Companies Are Under Margin Pressure

- Increased supply from Chinese steel has led to pricing and margin pressure on global steel makers.
- Weak steel profitability and high EV battery material investments has led to pressure on Posco Holdings' credit profile.



#### Posco Holdings' rising capex drives debt increase

OPM--Operating profit margin. Source: Company reports, S&P Global Ratings.

Global steelmakers' margins under pressure

Tril.--Trillion. KRW--Korean won. LHS--Left hand scale. RHS--Right hand scale. Source: Company reports, S&P Global Ratings.

#### **S&P Global** Ratings

14

12

10

8

6

4

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0

(Tril. KRW)

## III. Facing A Broader Market Slowdown

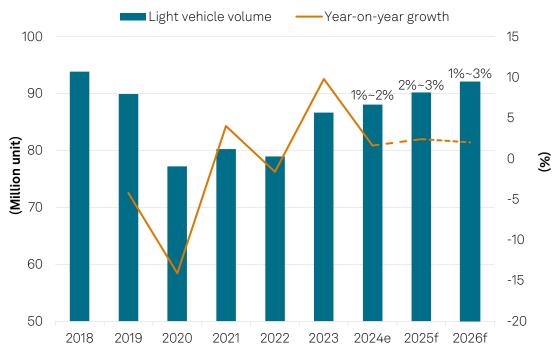
• Auto OEMs

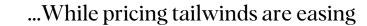


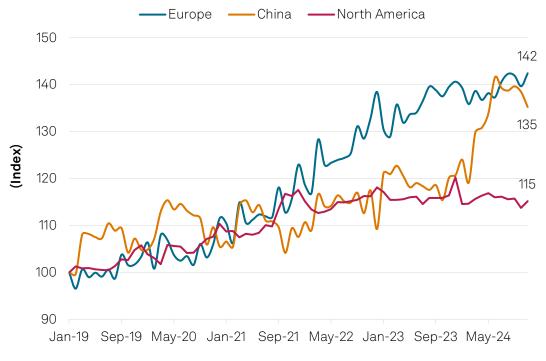
## Market Demand To Weaken Over Next Couple Of Years

- Global light vehicles sales volume growth will likely slow to 1%-3% in 2024-2026, compared with 9.8% in 2023.
- Pricing tailwind is weakening in the U.S. and European market as inventory builds.

Global light vehicle sales growth to moderate...





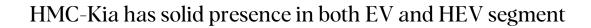


Note: January 2019 rebased at 100. Source: S&P Global Mobility.

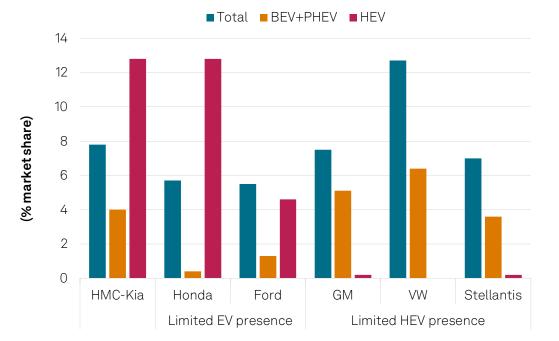
#### Source: S&P Global Ratings. S&P Global Mobility.

## HMC-Kia Is Positioned To Weather The Market Slowdown

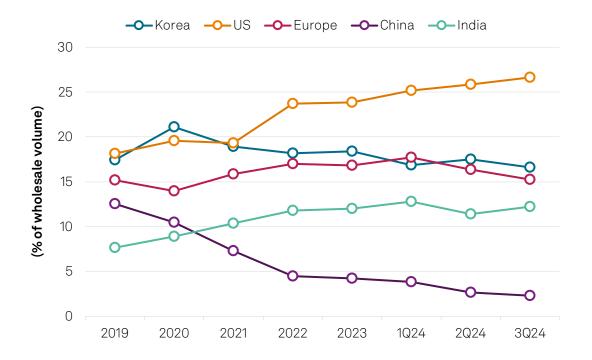
- HMC-Kia has very competitive product offerings in hybrids and BEV.
- Market share gain in the U.S. aids profitability, while exposure to China has dwindled to about 5% of volume.



Geographical mix shifts toward higher U.S./Europe



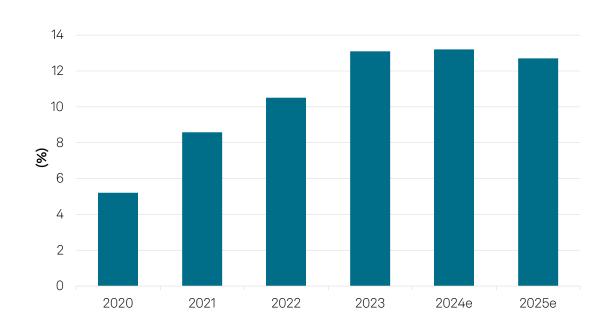
Note: The global market share is based on cumulative data from Jan to Aug 2024. BEV--Battery electric vehicle. PHEV--Plug-in hybrid electric vehicle. HEV--Hybrid electric vehicle. GM--General Motors. VW--Volkswagen. General Motors include SAIC-General Motors-Wuling. Sources: EV Volumes, S&P Global Ratings.



Note: Based on % contribution by region to total global wholesale volume. Sources: Company filing, S&P Global Ratings.

## **HMC-Kia Should Maintain Solid Margins**

- Wide product offerings, new model launches, and market share gain underpin HMC-Kia's competitive position.
- HMC-Kia's EBITDA margin should stay healthy between 12%-13% in 2024-2025.



#### HMC-Kia's EBITDA margin should stay solid



#### Positive discretionary cash flow will add to net cash

Data based on HMC-Kia excluding finance. CFO--Cash flow from operations. Capex--Capital expenditure. Shareholder returns—Dividends + share repurchases. Tril.--Trillion. KRW--Korean won. e--estimate. Sources: Company reports, S&P Global Ratings.

HMC--Hyundai Motor Company. e--estimate. Sources: Company reports, S&P Global Ratings.

S&P Global

Ratings

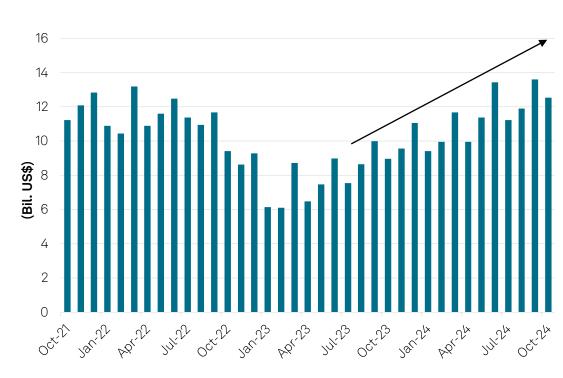
# IV. Fueled By Structural Growth

• Semiconductors



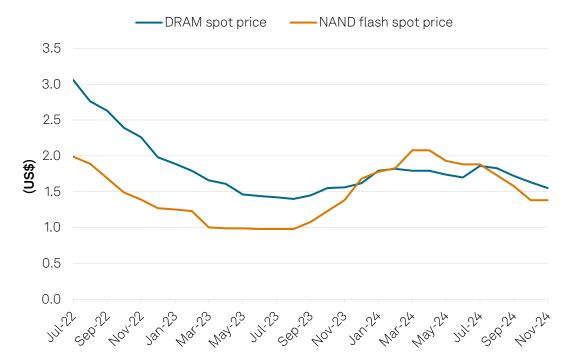
## Semiconductor Industry Upcycle To Continue

- Al-related demand to drive current upcycle in memory
- Semiconductor export revenue continues to strengthen after the first-half 2023 trough



Korea's semiconductor exports are rebounding

Conventional non-AI memory recovery is dwindling

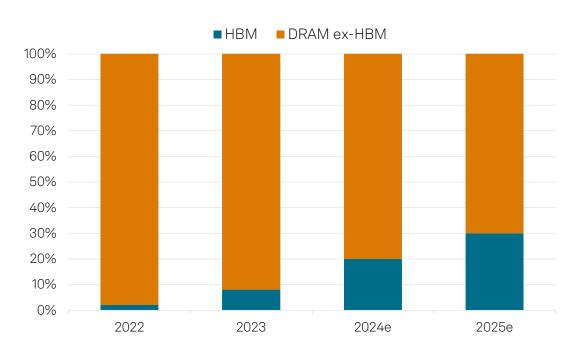


Indicated DRAM prices are based on monthly average spot price of DDR4 8Gb 1Gx8 3200 MHz, and the NAND Flash prices based on weekly average spot price of TLC Flash 256Gb. Sources: Bloomberg, inSpectrum Tech Inc., S&P Global Ratings.

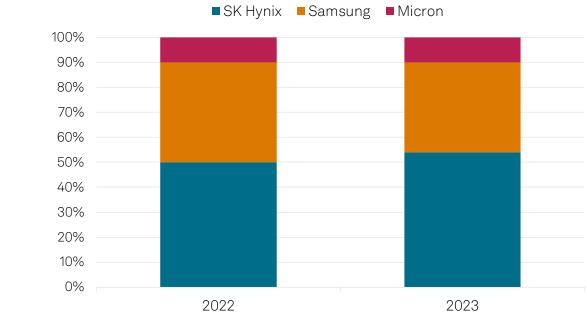
Bil.--Billion. Sources: Korea Statistical Information Services, S&P Global Ratings.

## AI Related Demand Drives Semiconductor Industry Upcycle

- We expect HBM growth, spurred by AI-related demand, to drive the memory industry upcycle.
- HBMs are by far the most profitable segment within DRAM; SK Hynix leads the HBM segment.



Proportion of HBM to grow strongly within DRAM market



#### Note: Share estimates based on revenue. HBM--High bandwidth memory. e--Estimate. Source: Trendforce, S&P Global Ratings.

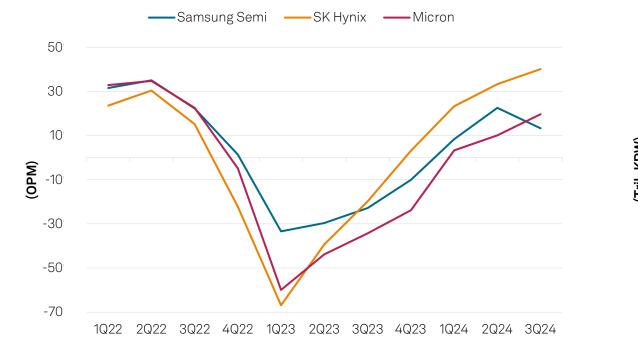
Note: Share estimates based on capacity. HBM--High bandwidth memory. Sources: Trendforce, S&P Global Ratings.

#### SK Hynix is the market leader in HBM

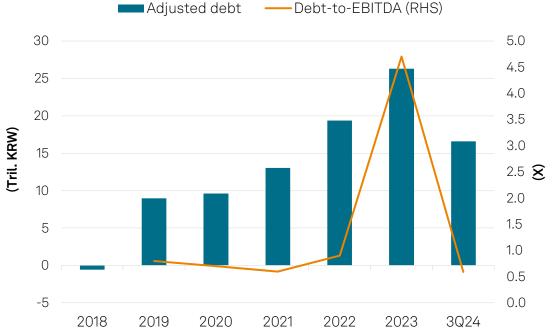
## SK Hynix Is Leading The AI-Driven Memory Cycle Rebound

- Memory players are likely to see further margin expansion over the next 12 months with strong AI chip demand.
- SK Hynix is likely to outperform its peers Samsung and Micron through its strong positioning within HBMs

Memory cycle is in the upswing – SK Hynix outperforming



#### SK Hynix adjusted debt and leverage trend



 ${\sf OPM--Operating}\ {\sf profit}\ {\sf margin}.\ {\sf Sources}: {\sf Company\ reports},\ {\sf S\&P\ Global\ Ratings}.$ 

S&P Global

Ratings

RHS--Right hand scale. Tril.-Trillion. Sources: Company reports, S&P Global Ratings.

27

# V. Appendix



## Appendix: Rating and Outlook For Korean Corporates

	S&P Issuer Credit Rating		
Issuer	LT	Outlook	
Samsung Electronics Co. Ltd.	AA-	Stable	
KT Corp.	A-	Stable	
SK Telecom Co. Ltd.	A-	Stable	
Naver Corp.	A-	Stable	
POSCO Holdings Inc.	A-	Stable	
POSCO	A-	Stable	
Samsung C&T	A-	Stable	
Hyundai Motor Co.	A-	Stable	
Kia Corp.	A-	Stable	
LG Chem Ltd.	BBB+	Negative	
LG Energy Solution, Ltd.	BBB+	Negative	
Hyundai Mobis Co. Ltd.	BBB+	Stable	
Hyundai Glovis Co. Ltd.	BBB+	Stable	

	S&P Issuer Credit Rating		
Issuer	LT	Outlook	
GS Caltex Corp.	BBB+	Stable	
Posco International Corporation	BBB+	Stable	
Hanwha Total Petrochemical Co. Ltd.	BBB	Negative	
LG Electronics Inc.	BBB	Stable	
S-Oil Corp.	BBB	Stable	
Hyundai Steel Co.	BBB	Stable	
SK Hynix Co. Ltd.	BBB	Stable	
PT. Krakatau Posco	BBB-	Negative	
SK Innovation Co. Ltd.	BBB-	Negative	
SK Geo Centric Co. Ltd.	BBB-	Negative	
KCC Corp.	BB+	Stable	
Doosan Bobcat Inc.	BB+	CreditWatch Negative	

As of Nov. 28, 2024. Excluding the government-related entities. LT--Long-term. Source: S&P Global Ratings.

## Appendix: Corporate Rating And Outlook For Korean GREs\*

	S&P Global Ratings issuer credit rating		Stand-alone credit profile	
Issuer	LT	Outlook	SACP	
Korea Land and Housing Corp.	AA	Stable	N/A	
Incheon International Airport Corporation	AA	Stable	bbb+	
Korea Expressway Corporation	AA	Stable	bbb	
Korea Gas Corp.	AA	Stable	bbb-	
Korea Water Resources Corporation	AA	Stable	bbb-	
Korea Electric Power Corp.	AA	Stable	bb+	
Korea Hydro & Nuclear Power Co. Ltd.	AA	Stable	bbb-	
Korea East-West Power Co. Ltd.	AA	Stable	bb+	
Korea Midland Power Co. Ltd.	AA	Stable	bb+	
Korea South-East Power Co. Ltd.	AA	Stable	bb+	
Korea Western Power Co. Ltd.	AA	Stable	bb+	
Korea National Oil Corp.	AA	Stable	bb-	
Korea Mine Rehabilitation and Mineral Resources Corporation	A+	Stable	b-	

As of Nov. 28, 2024. \*GRE--Government-related entities. SACP--Stand-alone credit profile. LT--Long-term. Source: S&P Global Ratings.

## **Related Research**

- SK Innovation, SK Geo Centric Upgraded To 'BBB-' On Merger With SK E&S; Outlook Negative; SK E&S Ratings Withdrawn (Nov. 1, 2024)
- Steelmaker PT Krakatau Posco Outlook Revised To Negative On Weak Performance In 2024; 'BBB-' Ratings Affirmed (Sept. 23, 2024)
- Posco International Assigned 'BBB+' Rating With Stable Outlook (Aug. 27, 2024)
- Hyundai Motor Co. And Kia Corp. Ratings Upgraded To 'A-' On Improved Market Position And Profitability; Outlook Stable (Aug. 21, 2024)
- SK Hynix Upgraded To 'BBB' From 'BBB-' On Strong Rebound In High-Bandwidth Memory Sales, Lower Leverage; Outlook Stable (Aug. 7, 2024)
- Samsung Electronics 'AA-/A-1+' Ratings Affirmed On Rebounding Operating Performance; Outlook Stable (Jul 30, 2024)
- SK Innovation, SK Geo Centric Ratings Put On CreditWatch Positive, SK E&S Rating On CreditWatch Negative On Merger Plan (July 23, 2024)
- Doosan Bobcat Ratings Placed On CreditWatch Negative On Planned Group Reorganization (July 17, 2024)
- From Bust To Boom: How AI Is Uplifting The Korean Memory Makers (Jul 2, 2024)
- Posco Holdings And Posco 'A-' Ratings Affirmed On Likelihood Of Disciplined Financial Policy; Outlook Stable (June 24, 2024)
- LG Chem, LG Energy Solution Outlook Revised To Negative On Aggressive Expansion Investments; 'BBB+' Ratings Affirmed (May 28, 2024)
- Krakatau Posco Assigned 'BBB-' Rating With Stable Outlook (May 17, 2024)
- Hanwha TotalEnergies Petrochemical Outlook Revised To Negative On Weak Profitability; 'BBB' Ratings Affirmed (April 30, 2024)
- Doosan Bobcat Upgraded To 'BB+' From 'BB' On Robust Profitability And Solid Financial Metrics; Outlook Stable (April 29, 2024)
- GS Caltex Upgraded To 'BBB+' On Ongoing Debt Reduction With Disciplined Investment; Outlook Stable (March 25, 2024)
- SK Innovation And SK Geo Centric Downgraded To 'BB+' On High Investments Amid Slack Battery Demand; Outlook Stable (March 19, 2024)
- KCC Corp. 'BB+' Rating Affirmed Despite Narrow Headroom; Outlook Stable (Feb. 28, 2024)
- Hyundai Motor Co. And Kia Corp. Outlook Revised To Positive On Strong Profitability; Ratings Affirmed (Jan. 24, 2024)

List as of Nov. 28, 2024.

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