COMPANY UPDATE

2026. 4. 23

Scan to go to
Research Center report database

EV/Mobility Team

Esther Yim
Team Leader
esther.yim@samsung.com

Hyunji Kim
Research Associate
hyunzi.kim@samsung.com

Kumho Tire (073240)

Earnings rebound, valuation still at lows

- Kumho Tire is increasingly viewed as a turnaround story following the clearance of its accumulated deficit in 2025. Despite fire-related disruptions last year, the company sustained a double-digit operating margin, demonstrating its earnings power.
- Even as top-tier tire makers have paused capacity expansions, second-tier manufacturers are aggressively scaling capacity. With its first European production base under construction, Kumho Tire aims to gain market share, especially in high-value-added segments.
- The trend toward EVs and larger wheel sizes should underpin long-term ASP growth and margin expansion for Kumho Tire. The accelerating rollout of robotaxis should lift replacement tire demand, adding a new upside catalyst.

WHAT'S THE STORY?

Company overview: Kumho Tire is a global tire manufacturer with production facilities in Korea, China, Vietnam, and the US. Established in 2003 based on the tire business unit of Kumho Industrial, it listed on the Kospi in 2005. Following liquidity challenges within the Kumho Asia Group, the company entered a workout program in Dec 2009. After exiting the workout process in 2014, Kumho Tire underwent significant structural reforms and a change in largest shareholder. Today, it is in the phase of financial and operational normalization.

Investment points: We see three main investment points for Kumho Tire.

- **1. Earnings power—more important than financial normalization:** Once viewed as a distressed company due to its workout history, accumulated deficit, and high debt levels, Kumho Tire is entering a sustainable earnings regime, supported by recent operational improvements and financial normalization.

(Continued on the next page)

SUMMARY FINANCIAL DATA

(KRWb)	2022	2023	2024	2025
Revenue	3,559	4,041	4,532	4,701
Operating profit	23	411	589	576
Net profit (adj)	(77)	172	352	377
EPS (adj) (KRW)	(275)	549	1,131	1,209
EPS (adj) growth (% y-y)	Remained neg	Turned pos	105.9	6.9
EBITDA margin (%)	7.9	16.9	19.5	18.7
ROE (%)	(6.9)	13.2	21.8	18.5
P/E (adj) (x)	(10.1)	9.8	4.2	4.8
P/B (x)	0.7	1.2	0.8	0.8
EV/EBITDA (x)	11.1	5.2	3.8	3.6
Dividend yield (%)	0.0	0.0	0.0	0.0

Source: Company data, Samsung Securities

AT A GLANCE

Not rated

Target price	n/a
Current price	**KRW5,940**
Market cap	KRW1.7t / USD1.2b
Shares (float)	287,260,287 (38.0%)
52-week high/low	KRW7,530/KRW4,165
Avg daily trading value (60-day)	KRW4.9b/ USD3.3m

ONE-YEAR PERFORMANCE

	1M	6M	12M
Kumho Tire (%)	-4.8	22.6	31.9
Vs Kospi (%pts)	-14.3	-25.8	-48.9

SAMSUNG vs THE STREET

No of estimates	9
Average target price (KRW)	8,411
Average rating	4.0

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

By end-2025, its debt-to-equity ratio had fallen fell to 147.4%, and its total debt had fallen to KRW1.87t. The firm enjoyed a turn from an accumulated deficit to positive retained earnings in 2025. Notably, despite a fire at its plant in Gwangju in May 2025, which caused a temporary production shutdown, the company achieved its highest annual sales and a double-digit operating margin—demonstrating its earnings power.

- **2. Localization strategy and expansion opportunities for second-tier players:** Kumho Tire's sales in North America and Europe grew from 38% of total sales in 2020 to 61% in 2025. This shift toward higher-priced advanced markets has driven both sales growth and margin expansion. As tire quality gaps between manufacturers narrow, the dominance of the traditional top-3 players (Michelin, Bridgestone, Goodyear) has plateaued, creating room for second-tier manufacturers to gain market share.

  Establishing first production base in Europe: While Kumho Tire has been able to respond to tariff pressures in North America through local OE tire production and price pass-through, its reliance on exports from the Gwangju plant to serve the European market created inefficiencies in customer responsiveness and logistics. In response—and accelerated by the fire at the plant in Gwangju last year—the company has fast-tracked investments in two new facilities: a plant in Hampyeong, Korea, and a new plant in Poland. The Hampyeong facility is scheduled to begin mass-production in 1Q28 with a capacity of 5.3m tires (equivalent to 9% of current capacity). The plant in Poland should start operations in 4Q28 with a capacity of 6m tires (10% of current capacity).

  Meanwhile, Gwangju Plant #1, which suffered relatively minor damage from the fire, resumed operations in February at an annual rate of 3m tires (down from 12m prior to the fire). The company has also secured an additional 3m-4m tires in outsourced volume (from Double Star) for this year. By simultaneously restoring domestic production capacity and expanding overseas manufacturing bases, Kumho Tire aims to enhance its longer-term responsiveness in serving global markets.

- **3. ASP growth driven by larger tire sizes:** The tire market is undergoing structural change amid the rising adoption of EVs and increasing demand for large-diameter tires. According to Continental, the margin per tire for large-diameter tires is 3-6x that for standard-size tires. Even if volume growth is constrained, this shift enables simultaneous increases in both ASP and margin. EV tires, in particular, require additional specifications such as noise-reducing materials and high-strength cords, which raise production costs—but the price premium commanded by EV tires far exceeds these cost increases.

  Top-tier EV makers among key customers: In May 2024, Kumho Tire launched its dedicated EV tire brand EnnoV, with marketing efforts primarily focused on the Korean and Chinese markets. It has already secured top-tier EV manufacturers—including Tesla and BYD—as key customers. While short-term EV sales growth has stalled in the US and China, EV tire branding represents a strategic investment to secure early market leadership in the EV tire segment. The share of large-diameter tires in the company's passenger car and light truck (PCLT) portfolio increased from 34.3% in 2020 to 43.2% in 2025. The share of EV tires also climbed from 9.8% in 2023 to 20.4% in 2025. The company aims to further raise these shares to 47% for large-diameter tires and 30% for EV tires in 2026, signaling a continued shift toward a higher-value-added product mix.

Robotaxi market as longer-term catalyst: The global tire market is approximately 80% replacement (RE) demand. Robotaxis, which operate far more hours and accumulate significantly higher mileage than conventional vehicles, require more-frequent tire replacements. Establishing supply partnerships with major automakers and autonomous driving companies during this early market phase can help secure stable demand and improve longer-term profitability. Kumho Tire is currently in discussions to sign MOUs with autonomous driving firms in the US and Korea (SUM).

Risk factors: We see two main risk factors.

- **1. Raw material and logistics cost pressures:** Raw material costs equate to 35% of Kumho Tire's sales, representing roughly half of its cost of goods sold. Due to the war in the Middle East, butadiene prices have surged 189% ytd, while crude oil and carbon black prices have spiked a respective 132% and 22% ytd. However, the near-term impact on the company's raw materials costs should be limited given that it maintains an inventory buffer of 3-6 months. The firm should be able to offset any future cost increases with price pass-through to customers—a strategy it successfully implemented last year to offset tariff pressures. Kumho Tire's logistics costs are also unlikely to be swayed in the near term, as it signs freight rate contracts on a six-month basis in Europe and on an annual basis in the US.
- **2. Overhang from creditors' stake:** Creditors' equity stake, originally converted from debt during the 2010 workout process at an acquisition price of KRW5,000 per share, stood at approximately 23% even after Xingwei Korea became the largest shareholder. While selective lifting of sale restrictions since Jul 2024 enabled Woori Bank and state-backed financial institutions to gradually reduce their holdings, the remaining creditors' stake (15.5% as of Feb 2026), continues to threatens to exert supply-side pressure. However, as divestment progresses, the overhang will gradually ease, leading to a narrowing of the valuation discount.

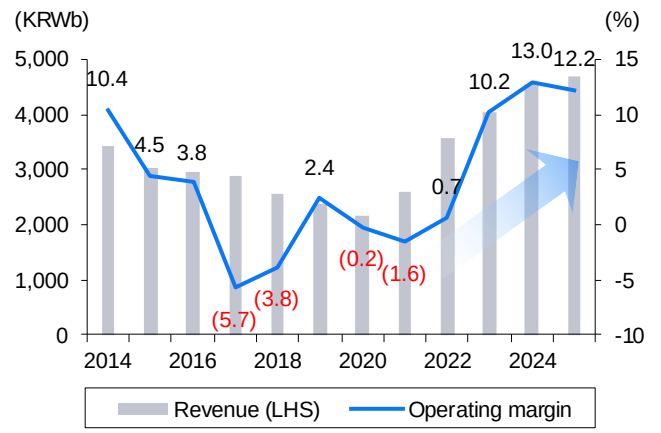
Earnings status: Kumho Tire reported 2025 sales of KRW4.7t (up 3.7% y-y) and an operating profit of KRW576b (down 2.2% y-y), for an operating margin of 12.2%. The decline in profits is attributable to the impact of tariffs (equivalent to 2.6% of sales) and production disruptions caused by the Gwangju plant shutdown.

- **Financials and governance structure:** At end-2025, Kumho Tire's ownership structure consisted of Qingdao Doublestar Group (SPC: Xingwei Korea) at 45%, Korea Development Bank at 7.43%, and Woori Bank at 3.95%. The firm's debt-to-equity ratio stood at 147.4%, with a borrowings-to-total assets ratio of 33.8%, reflecting ongoing financial restructuring. The company eliminated its accumulated deficit (which had persisted since 2017) and recorded a consolidated retained earnings surplus of KRW122.2b.

  Kumho Tire plans to issue KRW100b (and up to KRW200b) in corporate bonds on Apr 23, with 70% of proceeds allocated to debt repayment and 30% to working capital.
- **Investment plans:** Kumho Tire has announced a three-year investment plan (running through 2028) averaging KRW500b annually (10.6% of sales) and totaling KRW1.52t. The capital burden, however, should be partially offset by improved operating cash flow (which rose 76% y-y to reach KRW915b in 2025) and a potential fire insurance payout of up to KRW500b. Sale of the plant in Gwangju is also under consideration. Planned investments include KRW660b for the Hampyeong plant and KRW860b for the facility in Poland.

- **2026 guidance:** For 2026, Kumho Tire is targeting of KRW5.1t (up 8.5% y-y), in line with FnGuide consensus. Consensus puts 2026 operating profit at KRW64b (up 11.6% y-y), implying an operating margin of 12.7%. Consensus also has sales sliding 1.3% y-y to KRW119.1b in 1Q, and operating profit slipping 1.9% y-y to KRW14.37b, for an operating margin of 12.1%.
- **Valuation:** Kumho Tire is now trading at 3.9x 12-month forward P/E, its lowest level since returning to profitability in 2023, and far below the peer average of 8x. Considering reduced overhang pressure and the normalization of fundamentals, we see potential for rerating.

Kumho Tire: Sales and operating margin



Source: Company data, Samsung Securities

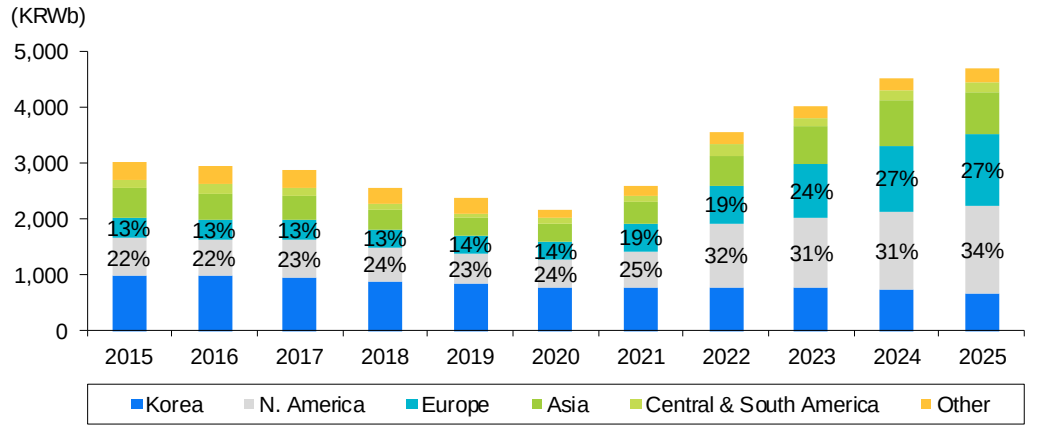
Kumho Tire: Global production base

('000 units)		Capacity (2026)	Note
Domestic	Gwangju	3,000	Pre-fire; 12,000
	Gokseong, Pyeongtaek	15,000	
	Hampyeong	5,300	To start mass-production in 1Q28
Overseas	China (Nanjing, Tianjin, Changchun)	21,200	
	US	3,300	
	Vietnam	13,500	
	Europe (Poland)	6,000	To start mass-production in 4Q28
Total capacity		**58,000***	**Pre-fire; 65,000**

Note: *Includes planned partial capacity increases in 2026; excludes Hampyeong and the new plant in Europe

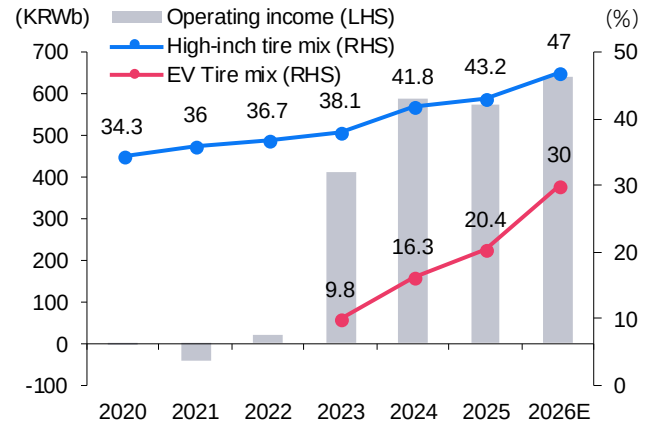
Source: Company data, Samsung Securities

Kumho Tire's sales, by region: Strong growth in N. America and Europe



Source: Company data, Samsung Securities

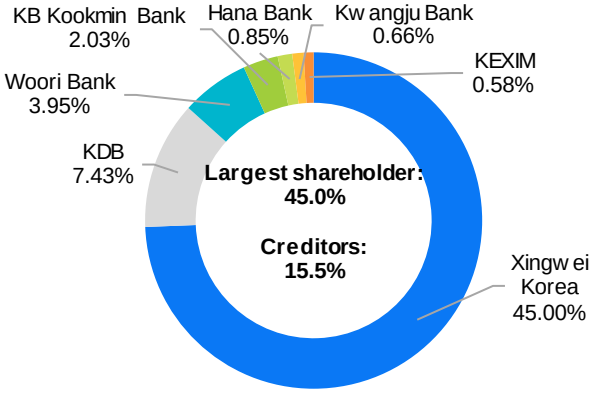
Kumho Tire: Large-diameter & EV portions of tires



Note: High-inch refers to > 18-inch tires; EV mix refers to EV tires within PC/LT OE

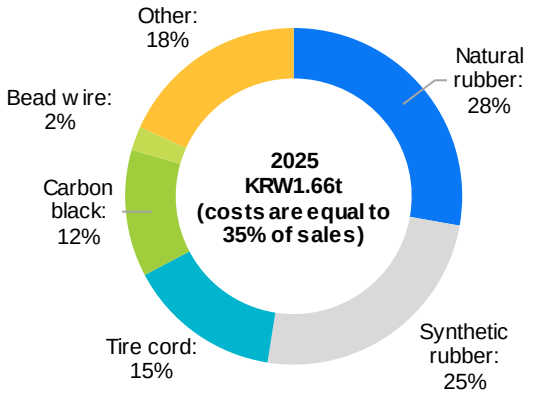
Source: Company data, Samsung Securities

Kumho Tire: Creditor's stake (as of Feb 2026)



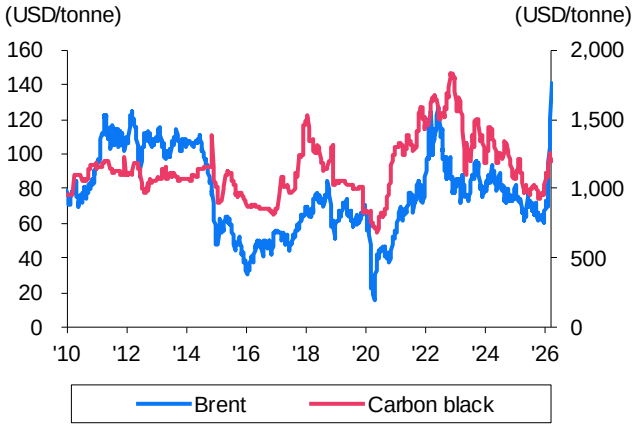
Source: Company data, Samsung Securities

Kumho Tire: Material cost breakdown



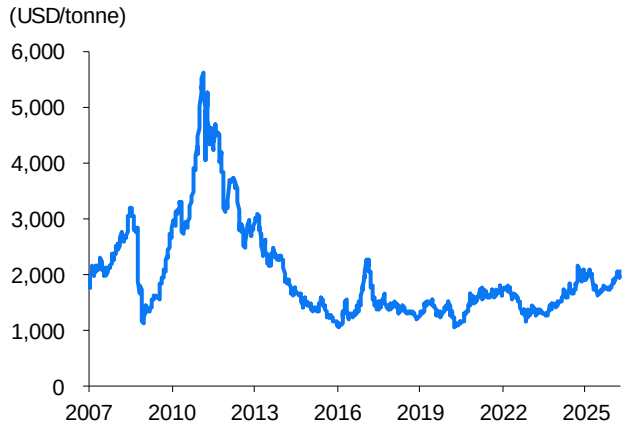
Source: Company data, Samsung Securities

Oil prices vs carbon black prices



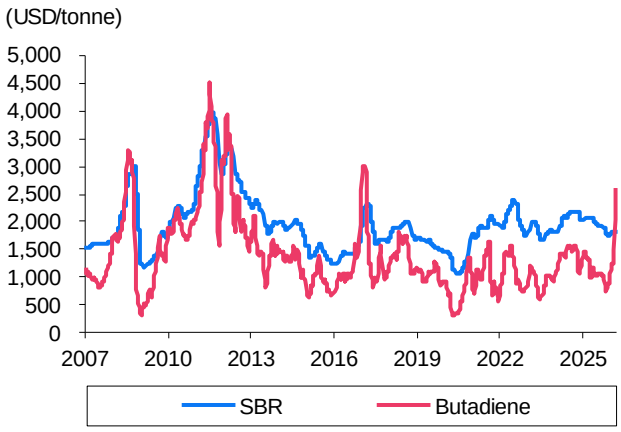
Note: Based on Brent crude
Source: Bloomberg, Samsung Securities

Natural rubber price



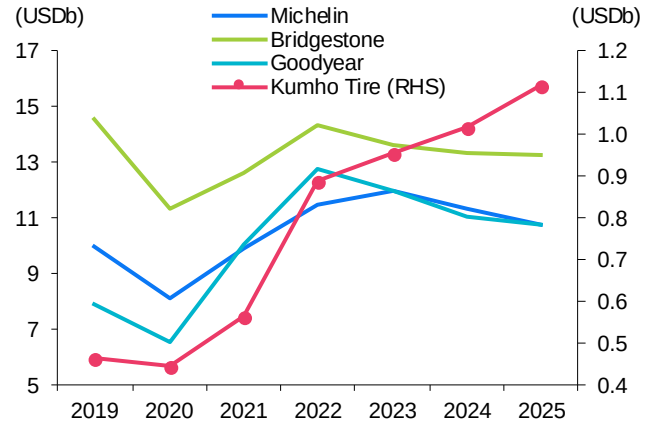
Source: Bloomberg, Samsung Securities

Synthetic rubber and butadiene prices



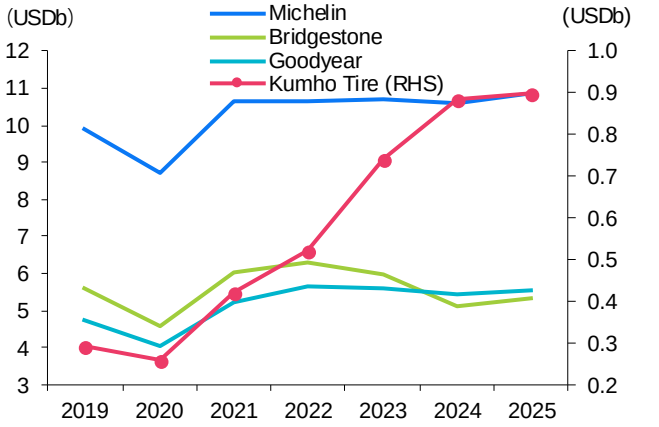
Source: Bloomberg, Samsung Securities

N. America sales: Top-3 tire firms vs Kumho Tire



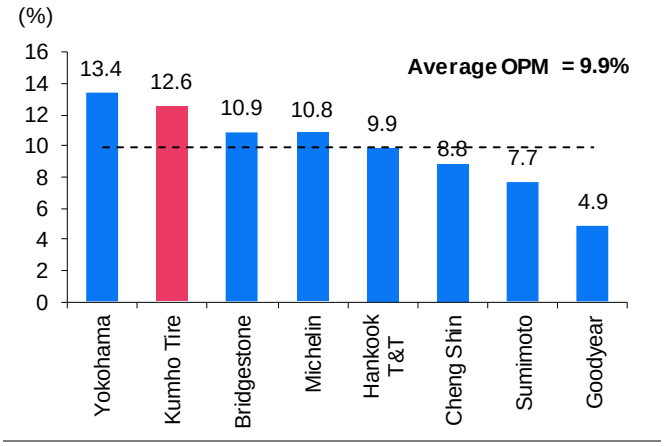
Source: Company data, Samsung Securities

Europe sales: Top-3 tire firms vs Kumho Tire



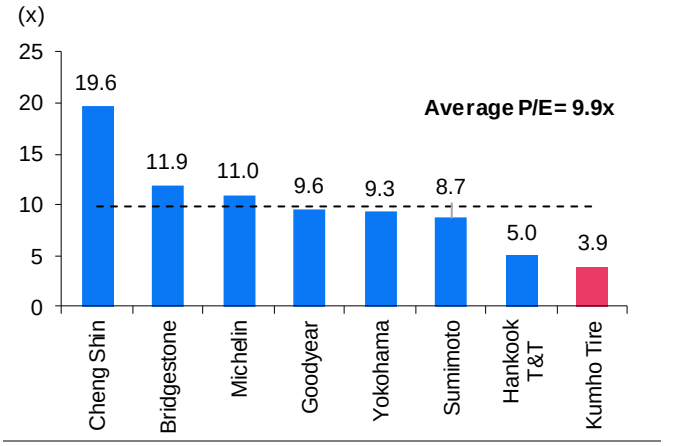
Source: Company data, Samsung Securities

Global tire makers: Operating margin (2026E)



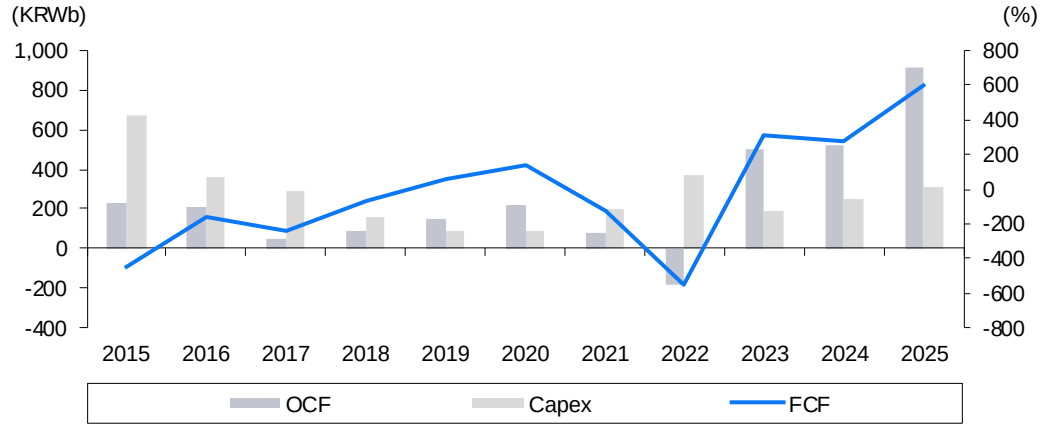
Source: Bloomberg, Samsung Securities

Global tire makers: 12m forward P/E valuation



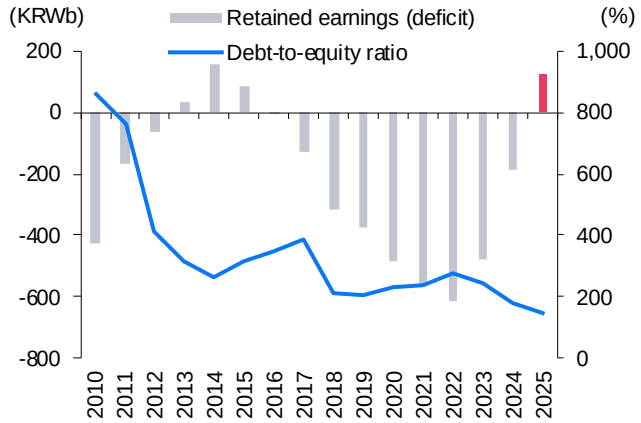
Source: Bloomberg, Samsung Securities

Kumho Tire: Operating cash flow, capex, and free cash flow



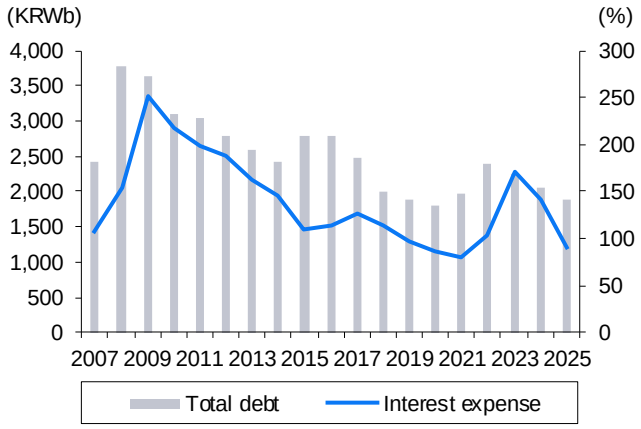
Source: Company data, Samsung Securities

Kumho Tire: Turnaround to retained earnings



Source: Company data, Samsung Securities

Kumho Tire: Decline in total debt

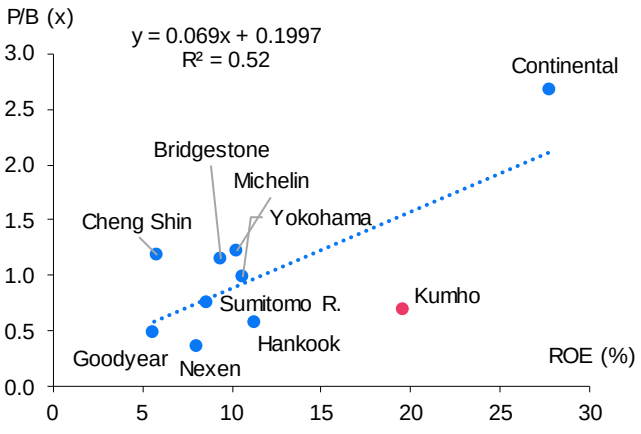


Source: Company data, Samsung Securities

Kumho Tire: 12-month forward P/E valuation

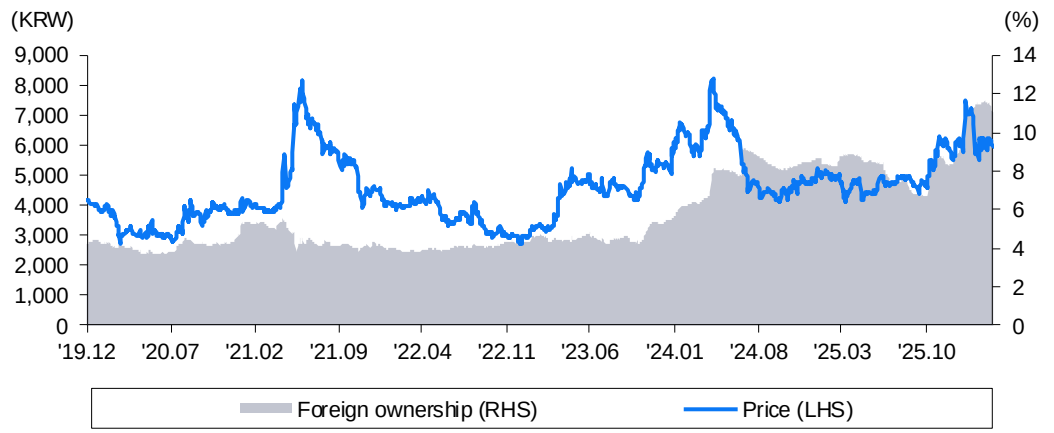
Source: Company data, Samsung Securities

Global tire makers: P/B vs ROE



Source: Company data, Samsung Securities

Kumho Tire: Share price and foreign ownership



Source: Company data, Samsung Securities

Kumho Tire: Results

(KRWb)	1Q24	2Q24	3Q24	4Q24	1Q25	2Q25	3Q25	4Q25	2023	2024	2025
Revenue	1,045	1,132	1,115	1,241	1,206	1,221	1,114	1,160	4,041	4,532	4,701
Chg (% y-y)	4.6	12.7	14.1	17	15.5	7.9	-0.1	-6.5	13.5	12.1	3.7
Chg (% q-q)	-1.5	8.4	-1.5	11.3	-2.8	1.2	-8.8	4.2			
Gross profit	318	346	326	392	352	396	322	383	1,110	1,382	1,453
Operating profit	146	152	140	151	147	175	109	146	411	589	576
Chg (% y-y)	167	72	45.7	-12.1	0.6	15.6	-22.6	-3.7	1,676.50	43.2	-2.2
Chg (% q-q)	-15.4	4	-7.4	7.8	-3.1	19.5	-38.1	34.2			
Pre-tax profit	106	119	108	100	132	0	102	225	227	433	460
Net profit	91	81	92	88	103	6	92	177	172	352	377
Controlling net profit	87	73	88	76	96	-1	83	169	158	325	347
Margins (%)											
Gross profit	13.9	13.4	12.6	12.2	12.1	14.3	9.7	12.6	10.2	13	12.2
Operating profit	10.1	10.5	9.7	8.1	11	0	9.2	19.4	5.6	9.6	9.8
Net profit	8.7	7.1	8.3	7.1	8.5	0.5	8.2	15.2	4.3	7.8	8
Controlling net profit	8.4	6.5	7.9	6.1	8	-0.1	7.4	14.6	3.9	7.2	7.4

Source: QuantiWise, Samsung Securities

Income statement

Year-end Dec 31 (KRWb)	2021	2022	2023	2024	2025
Sales	**2,601**	**3,559**	**4,041**	**4,532**	**4,701**
Cost of goods sold	2,138	2,955	2,931	3,150	3,248
Gross profit	**463**	**604**	**1,110**	**1,382**	**1,453**
Gross margin (%)	17.8	17.0	27.5	30.5	30.9
SG&A expenses	504	581	699	794	877
Operating profit	**(42)**	**23**	**411**	**589**	**576**
Operating margin (%)	(1.6)	0.7	10.2	13.0	12.2
Non-operating gains (losses)	**(34)**	**(107)**	**(184)**	**(155)**	**(116)**
Financial profit	16	19	10	26	30
Financial costs	93	152	186	163	99
Equity-method gains (losses)	0	0	0	0	0
Other	43	26	(8)	(18)	(46)
Pre-tax profit	**(75)**	**(84)**	**227**	**433**	**460**
Taxes	(3)	(7)	55	82	83
Effective tax rate (%)	4.4	7.8	24.3	18.8	18.1
Profit from continuing operations	(72)	(77)	172	352	377
Profit from discontinued operations	0	0	0	0	0
Net profit	**(72)**	**(77)**	**172**	**352**	**377**
Net margin (%)	(2.8)	(2.2)	4.3	7.8	8.0
Net profit (controlling interests)	(71)	(79)	158	325	347
Net profit (non-controlling interests)	(1)	2	14	27	29
EBITDA	203	280	685	882	881
EBITDA margin (%)	7.8	7.9	16.9	19.5	18.7
EPS (parent-based) (KRW)	(248)	(275)	549	1,131	1,209
EPS (consolidated) (KRW)	(250)	(270)	598	1,224	1,312
Adjusted EPS (KRW)*	(248)	(275)	549	1,131	1,209

Balance sheet

Year-end Dec 31 (KRWb)	2021	2022	2023	2024	2025
Current assets	**1,567**	**1,778**	**2,002**	**2,335**	**2,585**
Cash & equivalents	301	173	259	208	575
Accounts receivable	543	638	807	1,063	982
Inventories	588	815	722	969	909
Other current assets	134	152	215	95	120
Fixed assets	**2,775**	**2,917**	**2,829**	**3,028**	**2,955**
Investment assets	23	14	3	4	5
Tangible assets	2,392	2,531	2,474	2,653	2,569
Intangible assets	5	5	5	6	6
Other long-term assets	356	366	346	364	375
Total assets	**4,342**	**4,695**	**4,831**	**5,363**	**5,540**
Current liabilities	**1,501**	**2,343**	**1,886**	**2,258**	**2,263**
Accounts payable	290	281	370	406	322
Short-term debt	483	957	805	1,051	996
Other current liabilities	727	1,105	712	801	946
Long-term liabilities	**1,560**	**1,108**	**1,546**	**1,200**	**1,037**
Bonds & long-term debt	1,180	861	1,257	783	637
Other long-term liabilities	380	247	289	417	400
Total liabilities	**3,061**	**3,450**	**3,432**	**3,458**	**3,301**
Owners of parent equity	**1,173**	**1,126**	**1,264**	**1,721**	**2,029**
Capital stock	1,436	1,436	1,436	1,436	1,436
Capital surplus	225	225	225	225	225
Retained earnings	(563)	(614)	(476)	(187)	122
Other	75	79	79	246	246
Non-controlling interests' equity	**109**	**118**	**135**	**184**	**209**
Total equity	**1,282**	**1,245**	**1,399**	**1,905**	**2,239**
Net debt	1,628	2,185	1,906	1,833	1,276

Cash flow statement

Year-end Dec 31 (KRWb)	2021	2022	2023	2024	2025
Cash flow from operations	**80**	**(180)**	**505**	**520**	**915**
Net profit	(72)	(77)	172	352	377
Non-cash profit and expenses	346	369	595	651	603
Depreciation	244	256	274	293	304
Amortization	0	1	0	1	1
Other	102	112	321	358	298
Changes in A/L from operating activities	(129)	(370)	(104)	(338)	63
Cash flow from investments	**(107)**	**(332)**	**(201)**	**(158)**	**(196)**
Change in tangible assets	(136)	(346)	(188)	(242)	(305)
Change in financial assets	26	13	(27)	59	(4)
Other	4	(0)	14	24	113
Cash flow from financing	**161**	**376**	**(222)**	**(429)**	**(361)**
Change in debt	170	426	(157)	(185)	(186)
Change in equity	0	0	0	0	0
Dividends	0	0	0	0	0
Other	(9)	(50)	(65)	(244)	(175)
Change in cash	145	(128)	85	(51)	367
Cash at beginning of year	156	301	173	259	208
Cash at end of year	301	173	259	208	575
Gross cash flow	**274**	**291**	**767**	**1,003**	**980**
Free cash flow	**(124)**	**(553)**	**313**	**272**	**603**

Financial ratios

Year-end Dec 31	2023	2024	2025	2026E	2027E
Growth (%)					
Sales	19.8	36.8	13.5	12.1	3.7
Operating profit	nm	nm	1,676.5	43.2	(2.2)
Net profit	nm	nm	nm	104.6	7.2
Adjusted EPS**	nm	nm	nm	105.9	6.9
Per-share data (KRW)					
EPS (parent-based)	(248)	(275)	549	1,131	1,209
EPS (consolidated)	(250)	(270)	598	1,224	1,312
Adjusted EPS**	(248)	(275)	549	1,131	1,209
BVPS	4,083	3,920	4,401	5,990	7,065
DPS (common)	0	0	0	0	0
Valuations (x)					
P/E***	(18.6)	(10.1)	9.8	4.2	4.8
P/B***	1.1	0.7	1.2	0.8	0.8
EV/EBITDA	15.1	11.1	5.2	3.8	3.6
Ratios (%)					
ROE	(6.1)	(6.9)	13.2	21.8	18.5
ROA	(1.8)	(1.7)	3.6	6.9	6.9
ROIC	(1.3)	0.7	9.2	13.3	12.6
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	127.1	175.6	136.3	96.2	57.0
Interest coverage (x)	(0.5)	0.2	2.4	4.2	6.3

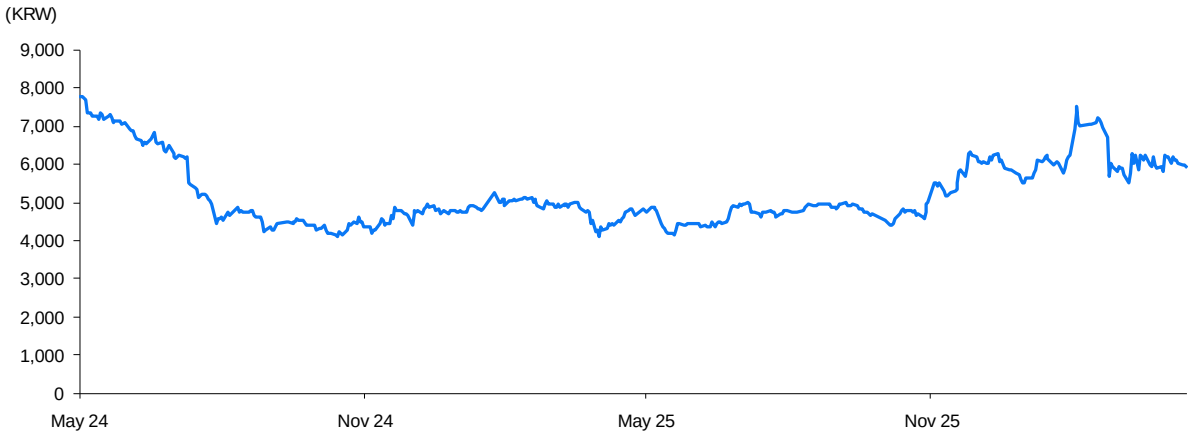
Note: *Excluding one-off items;
**Fully diluted, excluding one-off items;
***From companies subject to equity-method valuation

Source: Company data, Samsung Securities estimates

Compliance notice

- As of 4/21 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 4/21 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	2026/4/22
Recommendation	Not Rated
Target price (KRW)	n/a
Gap* (average)	
(max or min)**	

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 2026.03.31

BUY(85.2%)·HOLD(14.8%)·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.

Copyright © 2010 Samsung Securities Co., Ltd.. All rights reserved. This report or any portion hereof may not be reprinted, sold or redistributed without the prior written consent of Samsung Securities America Inc

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

Member of
Dow Jones
Sustainability Indices
Powered by the S&P Global CSA