



INVESTMENT AND FINANCING STRATEGY

Pirelli vs Hankook

Sustainable Investment Analysis: A Comparative Study

Giuliano Cerullo

Nasser Kettani

José Tomás Solórzano

Niccolò Vitali

EM Normandie Business School · Financial Data Management · 2026/2027



Companies Background: a comparative study within the tyre industry

INDUSTRY & COMPETITIVE LANDSCAPE

- **Mature, automotive-linked** sector: APAC is the main hub, Europe and North America are stable and replacement-driven
- Demand split between **Original Equipment** (tyres for new vehicles) and the **Replacement Market**, which accounts for most global volumes

PLAYERS

Michelin

Bridgestone

Goodyear

Continental

Pirelli

Hankook

Sumitomo

Yokohama

Pirelli & Hankook: mid-sized, comparable scale and the closest match in strategic focus and innovation effort, both accelerating towards High Value

	PIRELLI · Milan, 1872	HANKOOK · Pangyo, 1941
Financials FY25	€6.78bn revenue (stable vs FY24), 13.2% EBIT margin	€6.42bn tyre revenue (+9.6% in KRW), 16.3% EBIT margin; €13.19bn group revenue including Hanon Systems
Business model	Pure Consumer player, 79% High Value sales; >50% of OE for top carmakers (Ferrari, Lamborghini, Porsche and BMW)	Broad mix including EV and truck/bus tyres; moving up to premium OE, supercar and EV markets to rise margins
Footprint	18 plants in 12 countries, ~30k employees; 13 R&D centres, 6,000+ patents	8 plants in 5 countries, ~20k employees, 5 R&D centres
Sustainability	Net Zero 2040, product-centred approach; 26.9% natural/recycled materials	Net Zero 2050, value-chain wide; -46.2% Scope 1+2 by 2030 vs 2019
Ownership	Controlled by industrial shareholders	Family-controlled

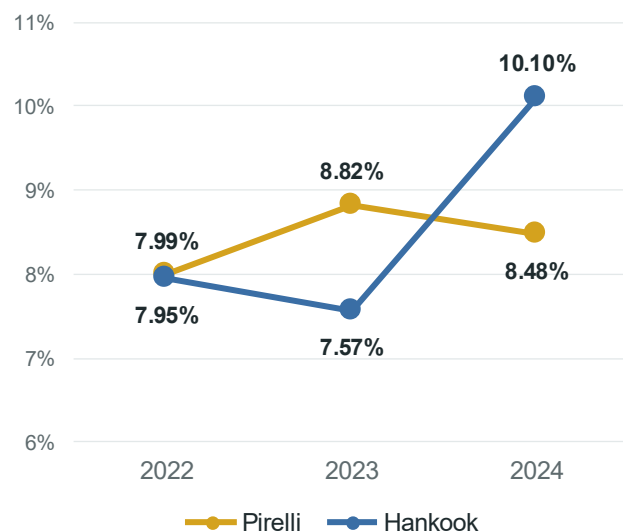
Source: Pirelli and Hankook FY2025 results and sustainability reports; group analysis.

Ratio Analysis: similar returns, opposite models

Profitability and liquidity must be read together: high returns are worth little if cash is tied up. We compare **ROE**, the return on shareholders' equity, and **CAPEX Coverage Ratio**, operating cash flow over CAPEX, which shows whether investment is funded internally. Period: **FY2022–2024**, before Hankook's 2025 Hanon Systems consolidation.

PROFITABILITY · ROE

Net profit / Equity



Capital structure

Pirelli's leverage (D/E **0.65–0.83**) lifts ROE; Hankook's equity-heavy base (D/E **0.12–0.22**) doesn't amplify returns

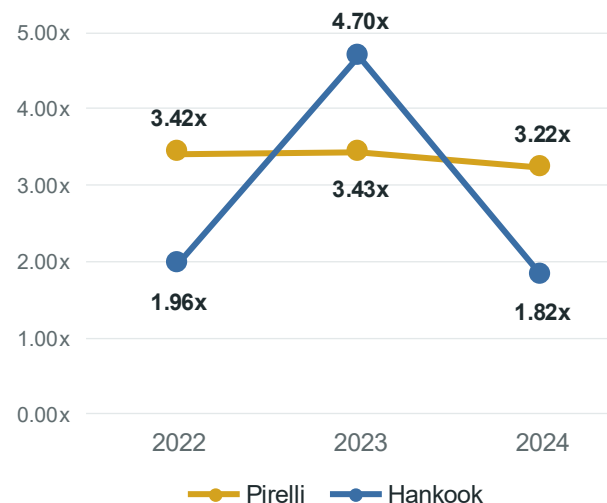
EBIT to net conversion

Hankook 2023: EBIT **+81%** but flat net profit (financial costs and **~38%** tax rate)

Hankook 2024: EBIT reaches the bottom line (**+49%** net profit), overtaking Pirelli

LIQUIDITY · CAPEX COVERAGE RATIO

Cash flow from operating activities / CAPEX



Cash flow vs CAPEX

Pirelli: OCF and CAPEX grew in step (**~+20%** in 2023), a stable **3.2–3.4x** typical of a mature asset base

Working capital

Hankook: precautionary raw-material stock-build hit 2022 OCF; its release drove the **4.7x** peak in 2023

Investment cycle

Hankook 2024: CAPEX **more than doubled** for new capacity

OVERALL

Both deliver **similar shareholder returns** and fund investment **entirely from operations**, but with opposite models. **Pirelli** is steady and uses **financial leverage** to boost ROE; **Hankook** combines stronger operations with a **low-risk, equity-heavy** structure, but its results below EBIT and its cash generation are more volatile.

Source: Pirelli and Hankook annual reports FY2022–2024; group calculations.

Cost of Capital & Valuation: Pirelli priced like its peers, Hankook below every method

COST OF CAPITAL CAPM · WACC

$Re = Rf + \beta_e \times (MRP + CRP)$
 $WACC = E/V \times Re + D/V \times Rd \times (1 - t)$

WACC Hurdle rate for new projects	7.61% Pirelli	5.88% Hankook
Equity beta (β_e)	1.18	1.03
Cost of equity (Re)	10.90%	7.48%
After-tax cost of debt	2.91%	2.56%
IMPLICATIONS - Country risk by domicile drives the gap - Pirelli's debt pushes its cost of equity above 10%		

VALUATION · DCF FCF 2025–29 + terminal value

5-year free cash flow plan discounted at WACC
Gordon terminal value, long-term growth **g = 2%**

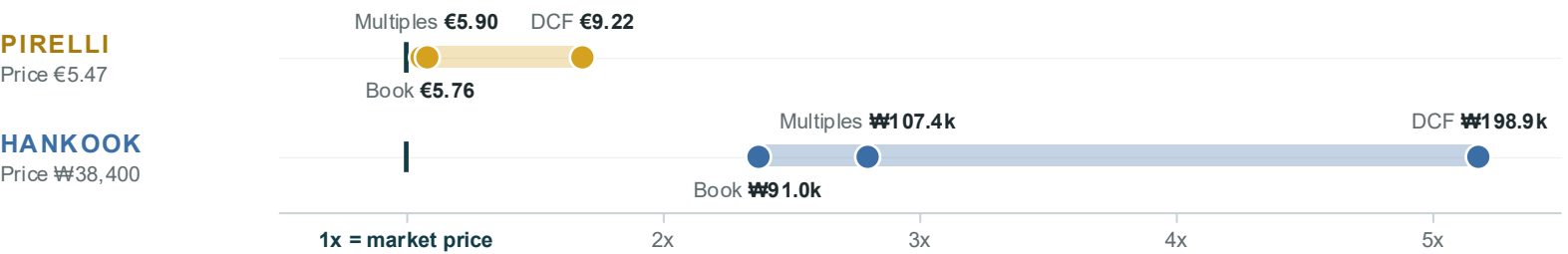
VALUE PER SHARE Upside vs 30/12/24 price	€9.22 Pirelli · +69%	₩198,912 Hankook · +418%
Enterprise value	€11.3bn	€15.0bn
Terminal value / EV	70%	84%
Sensitivity (WACC, g)	€7.6–11.9	₩154–298k
IMPLICATIONS - Growth pays at Hankook (ROIC 14%), not at Pirelli (8.8%) - Hankook priced as if no future after 2029		

VALUATION · MULTIPLES Sector peers, Jan 2025

Damodaran global Rubber & Tires averages
applied to 2024 results (EV/EBITDA, P/E, P/B)

COMPARATIVE VALUE Average of the 3 multiples	€5.90 Pirelli · +8%	₩107,373 Hankook · +180%
EV/EBITDA (sector 5.73x)	5.16x	1.90x
P/E (sector 10.92x)	11.69x	4.20x
P/B (sector 1.07x)	0.95x	0.42x
IMPLICATIONS - Pirelli priced like an average tyre maker - Hankook earns above its Re, yet trades at 0.42x book		

VALUATION COMPARISON



Source: Pirelli and Hankook FY2024 annual reports; Damodaran (Jan 2025); Bund 10Y and share prices at 30/12/2024; group calculations. Valuation date 31/12/2024.

OVERALL

Pirelli trades in line with its peers. Our DCF value holds only if its margins resist Asian competition.

Hankook trades below **every method** and has the lower WACC. The discount won't close without a **trigger**: governance, payouts, Hanon.

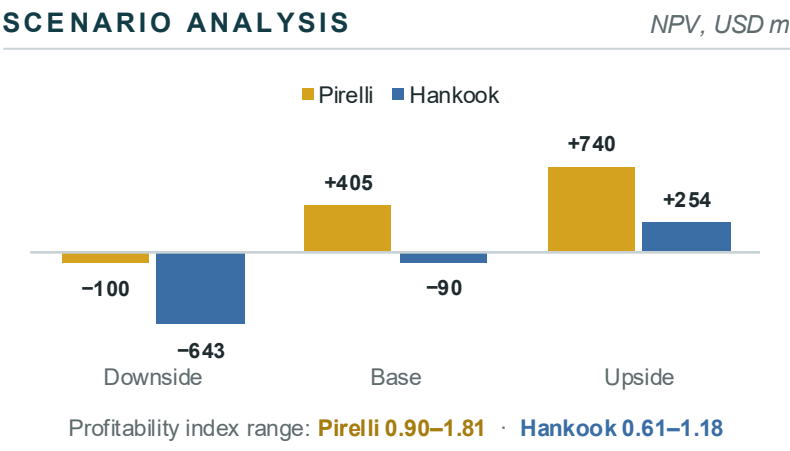
Investment Projects: Pirelli's US plant creates value, Hankook's doesn't

THE PROJECTS · TWO US CAPACITY EXPANSIONS

Local-for-local · valued at decision date

PIRELLI Rome, Georgia	\$1.2bn	+5.55m	2027–33	\$216	HANKOOK Clarksville, Tennessee	\$1.6bn	+6.5m	2023–26	\$246
	Expansion capex	Car tyres a year	Investment period	Capex per tyre		Expansion capex	Car + truck tyres a year	Investment period	Capex per tyre

BASE-CASE RESULTS		USD, 25-year horizon	
	PIRELLI	HANKOOK	
NPV (\$m)	+405	-90	
IRR vs WACC	12.2% vs 7.6%	5.3% vs 5.9%	
Profitability index	1.45	0.94	
Discounted payback	16.0 years	Not recovered	
Security index	34%	-8%	



WHY THE GAP

KEY DRIVERS

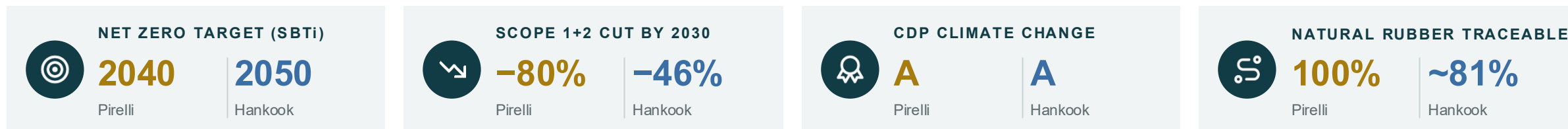
- Working capital**
31.5% of revenue ties up ~\$162m: without it, NPV would be about +\$72m
- Price vs capital**
\$165 vs \$95 per car tyre, on \$216 vs \$246 of capex
- Discount rate**
US-based rate (~7.4%): NPV falls to -\$300m

OVERALL

Pirelli invests in its premium core: the plant clears its WACC by 4.6 pp, has an NPV of about 7% of its market cap and stays positive until sales fall by a third. Hankook's plant does not cover its cost of capital, and with Hanon it diversifies into a larger but lower-margin business.

Source: Pirelli press release (Sep 2026); Hankook press release (Aug 2022); Goodyear 2024; company annual reports; group assumptions on prices, utilisation and margins. Values in USD, 25-year horizon.

Sustainability Assessment: equally credible, Pirelli deeper, Hankook broader



ESG APPROACH

	PIRELLI	HANKOOK
 Strategy	Product-led and vertical	Company-wide and horizontal
 Environment	First FSC tyres; mass tyre with 70%+ bio-based and recycled materials	-30% water and waste per unit, 80% eco-friendly products by 2030
 Social	Engagement index 83% ; injury rate -14% to 1.21 in 2025	20% female leadership by 2030; zero serious accidents target
 Governance	Sinochem 34.1% vs Camfin 25%; golden power limits Chinese influence	Chairman's 2-year sentence upheld in 2026
 Reporting	Mandatory CSRD	Voluntary ESRS , double materiality

CLIMATE RISKS & OPPORTUNITIES

-  **Physical**
 Shared SE-Asia rubber exposure; Hankook more **concentrated** (5 of 8 plants in Korea and China) compared to Pirelli that diversify physical exposure
-  **Geopolitical**
Pirelli: Russia plants, US tariffs **~€55m**
Hankook: Red Sea freight, **15%** US tariff, hedged by Tennessee
-  **Transition & regulatory**
Pirelli: tightening **EU** rules (carbon price, CSRD, EUDR)
Hankook: **dual burden**, Korea ETS + EU standards
-  **Opportunities**
 EV and recycled materials: **premium** for Pirelli, **efficiency** for Hankook

OVERALL

Same credibility (SBTi-validated targets, CDP A), different ambition: **Pirelli** goes faster on decarbonisation and rubber traceability, **Hankook** covers more ESG ground.

Source: Pirelli and Hankook sustainability reports 2024/25; CDP; company disclosures; group analysis.

Our call: Pirelli's quality is worth more than Hankook's discount

1 · WHAT THE PRICE SAYS

Price-to-book at 30/12/2024

0.95x

Pirelli

0.42x

Hankook

At first sight the choice is **Hankook**: it trades below every value we estimated, worth **~3x** its price at sector multiples

2 · WHAT THE ANALYSIS SAYS



Stability

Narrower ranges on every ratio

Pirelli



Capital allocation

Georgia +\$405m vs Tennessee -\$90m

Pirelli



Sustainability

Faster decarbonisation, traceable rubber

Pirelli



Governance

Hankook chairman's conviction upheld

Pirelli

3 · OUR INVESTMENT RECOMMENDATION

PIRELLI

Core holding

Long-term buy

HANKOOK

Hold

Wait for a catalyst

OVERALL

Hankook's discount is **real**, but its causes are **company-specific**. For Pirelli the investor pays roughly a **sector price** for **premium positioning, low-cash growth and a value-creating US plant**.

Source: group analysis based on sections 1–4 (ratio analysis, valuation at 31/12/2024, investment projects, sustainability assessment).

Before thanking you: an interactive dashboard of the whole analysis

1 · WHAT WE BUILT

To make the whole analysis easier to follow, we turned it into an **interactive dashboard** that brings sections 1–4 together. We included **three additional features**:



Project simulator

Change capex, prices, utilisation, margins or WACC and see NPV, IRR and payback of the Georgia and Tennessee plants recalculate.



New investment calculator

Enter another company's project to make a financial assessment and benchmark it against the two plants we analysed.



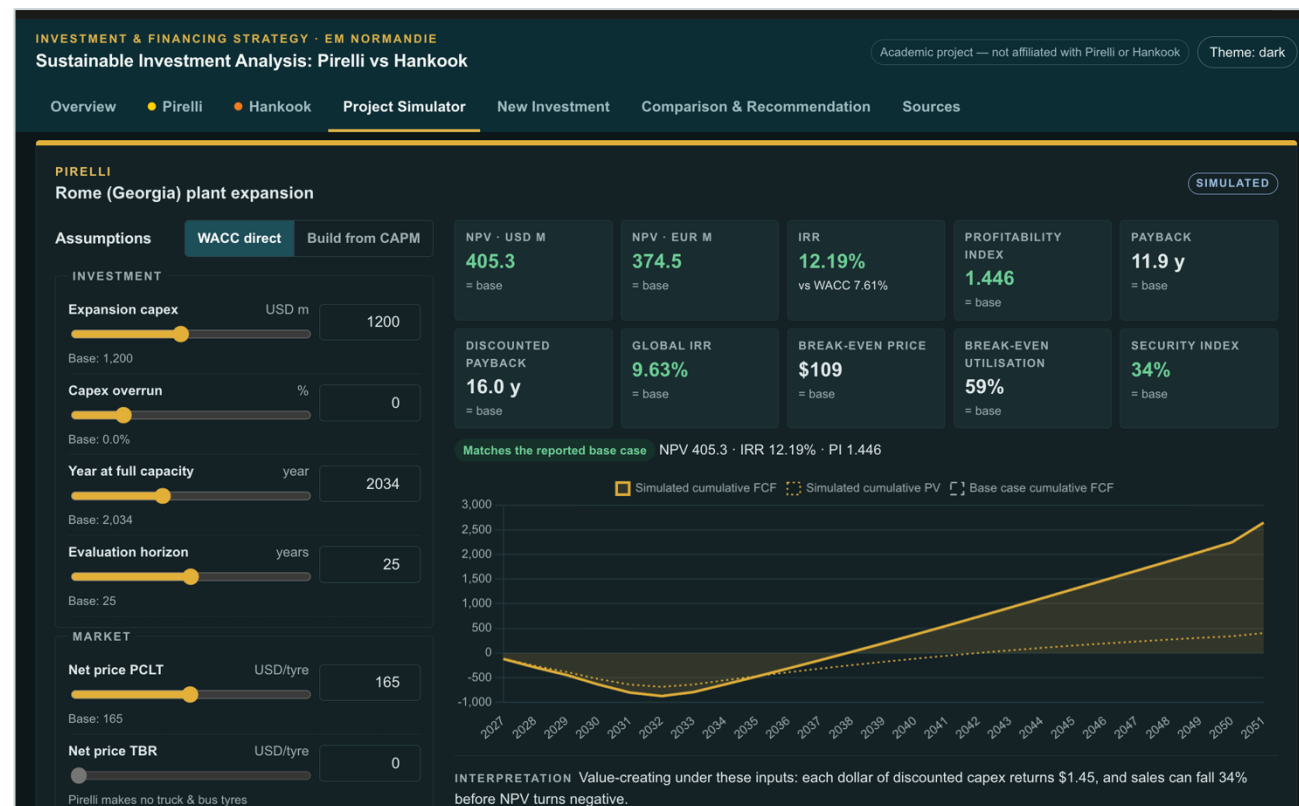
Live multiples

EV/EBITDA, P/E and P/B are recalculated with market prices three times each trading day (about 09:45, 13:30 and 17:50 CET): Pirelli intraday and at the Milan close, Hankook at the Seoul close. Prices may be delayed.

TRY IT LIVE

claude.ai/artifact/CR424VYHFqXCCBCaG5A2zT

2 · EXAMPLE: PROJECT SIMULATOR



Source: group dashboard built on sections 1–4 of the analysis. Screenshot: Project Simulator, Rome (Georgia) plant, base case.



PIRELLI VS HANKOOK · INVESTMENT AND FINANCING STRATEGY

Thank you

Questions & Discussion

Giuliano Cerullo

Nasser Kettani

José Tomás Solórzano

Niccolò Vitali

EM Normandie Business School · Financial Data Management · 2026/2027

