PIRELLI REPORT
FINANCIAL ANALYSIS

AFC COURSE 2025/2026

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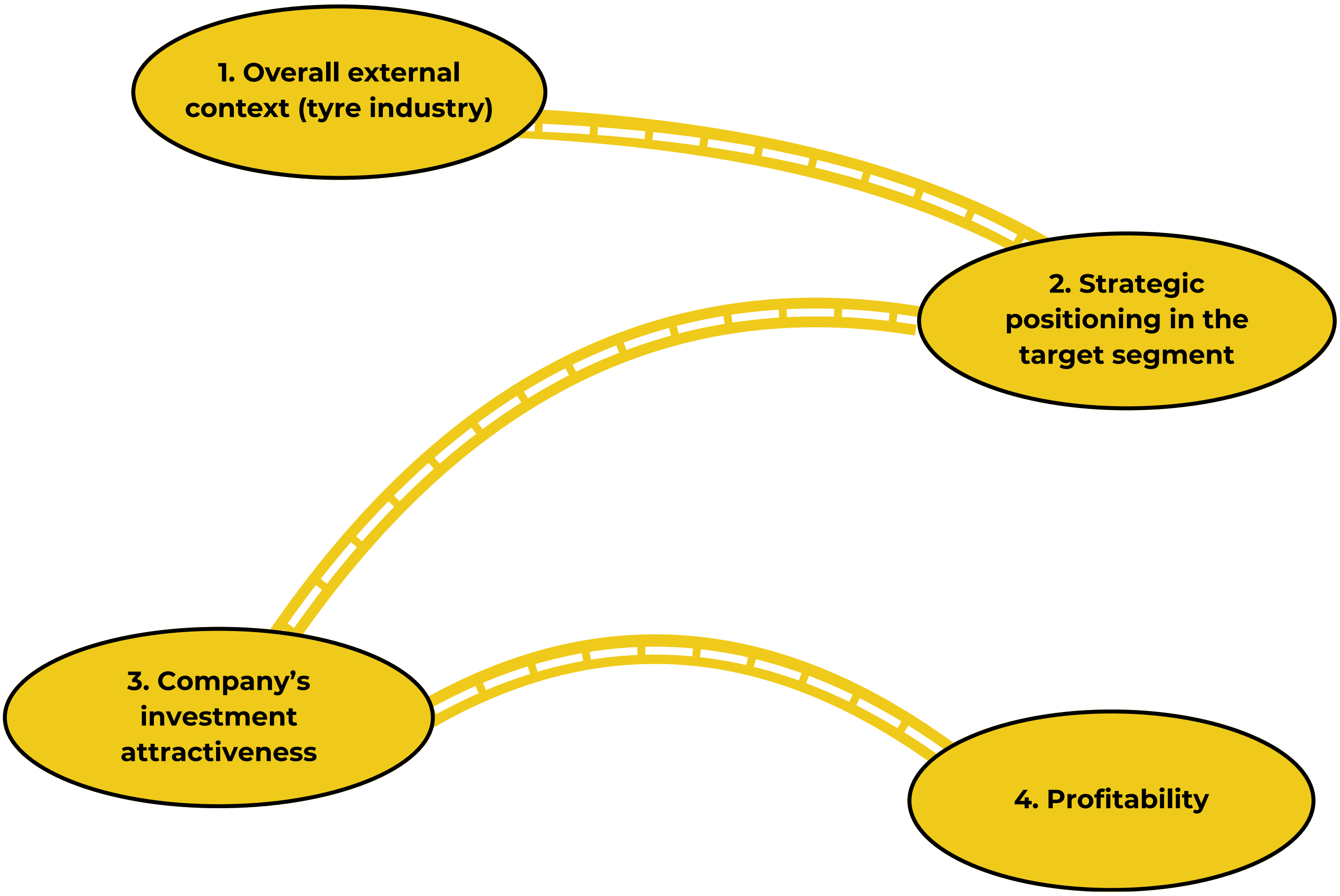
PURPOSE OF THE REPORT

OBJECTIVES

The objective of this report is to perform the financial analysis of Pirelli, evaluating its current and pasts:



The analysis aims to deeply understand Pirelli's financial statements to assess its ability to generate value for shareholders and maintain competitive agility in a capital-intensive sector.
By comparing Pirelli against other companies, this report seeks to:

- identify specific gaps and best practices that Pirelli can leverage or must defend against.
- determine whether Pirelli's current valuation, taking into considerations profitability and liquidity indexes and its "High Value" strategy, presents a compelling opportunity for investment.

INTERNAL ANALYSIS

Pirelli is ranked among the principal global manufacturers of tyres and supplier of auxiliary services. It counts 31 thousand employees and in 2024 reached €6.8 billion in revenues. It's the only company in the sector exclusively specialised in the **High-end segment.** Thanks to its global recognised brand, the company has a distinctive positioning in High Value tyres. In addition, Pirelli currently holds a leadership position in the Car Prestige tyres segment, and in the radial segment of motorcycle tyres' replacement market.

KEY FEATURES OF PIRELLI

PROFITABILITY AND VALUE-DRIVEN STRATEGY

The core feature of Pirelli is its focus on profitability. This positioning, focused on high-end tyres for premium and sport vehicles, allows Pirelli to be competitive on technological excellence, product performance and brand prestige, rather than volume. In financial terms, this value-driven strategy has led Pirelli into excellent results. In 2024, it reached an **Adjusted EBIT of €1,060.5 million** (+5.9% compared to the previous year) and **revenues of €6,773.3 million** (+1.9%). The **Adjusted EBIT margin of 15.7%**, much higher than the **9.1% industry average**, confirms better and stronger operational efficiency, pricing strategy, and cost culture.

OPERATIONAL EFFICIENCY AND FINANCIAL CULTURE

Pirelli's main strengths are leaded by operational efficiency, as highlighted by different indicators:

ROI
8,94%

ROCE
10,27%

ROI and ROCE reflects the company's efficient use of capital and effective control over operating costs.

ROA
6,6%

ROA highlights the firm's ability to convert its asset base into profits in a capital-intensive industry.

EBIT MARGIN
21,82%

ADJ EBIT MARGIN
15,7%

The last two indicators confirm the company's position as a strong profitability company, positioning it well above Tier-1 competitors.

These metrics confirm Pirelli's success in combining high technological content with financial performance, ensuring consistent and resilient margins.

FINANCIAL STRUCTURE AND SUSTAINABLE GROWTH

Pirelli's financial structure is balanced, with a **Debt-to-Equity ratio of 1.31x**, which confirms healthy leverage and prudent capital management. This structure provides the company the opportunity to keep investing in innovation, R&D, and sustainability initiatives without compromising its financial balance. The result of strong cash generation and prudent leverage management allows Pirelli to pursue long-term growth.

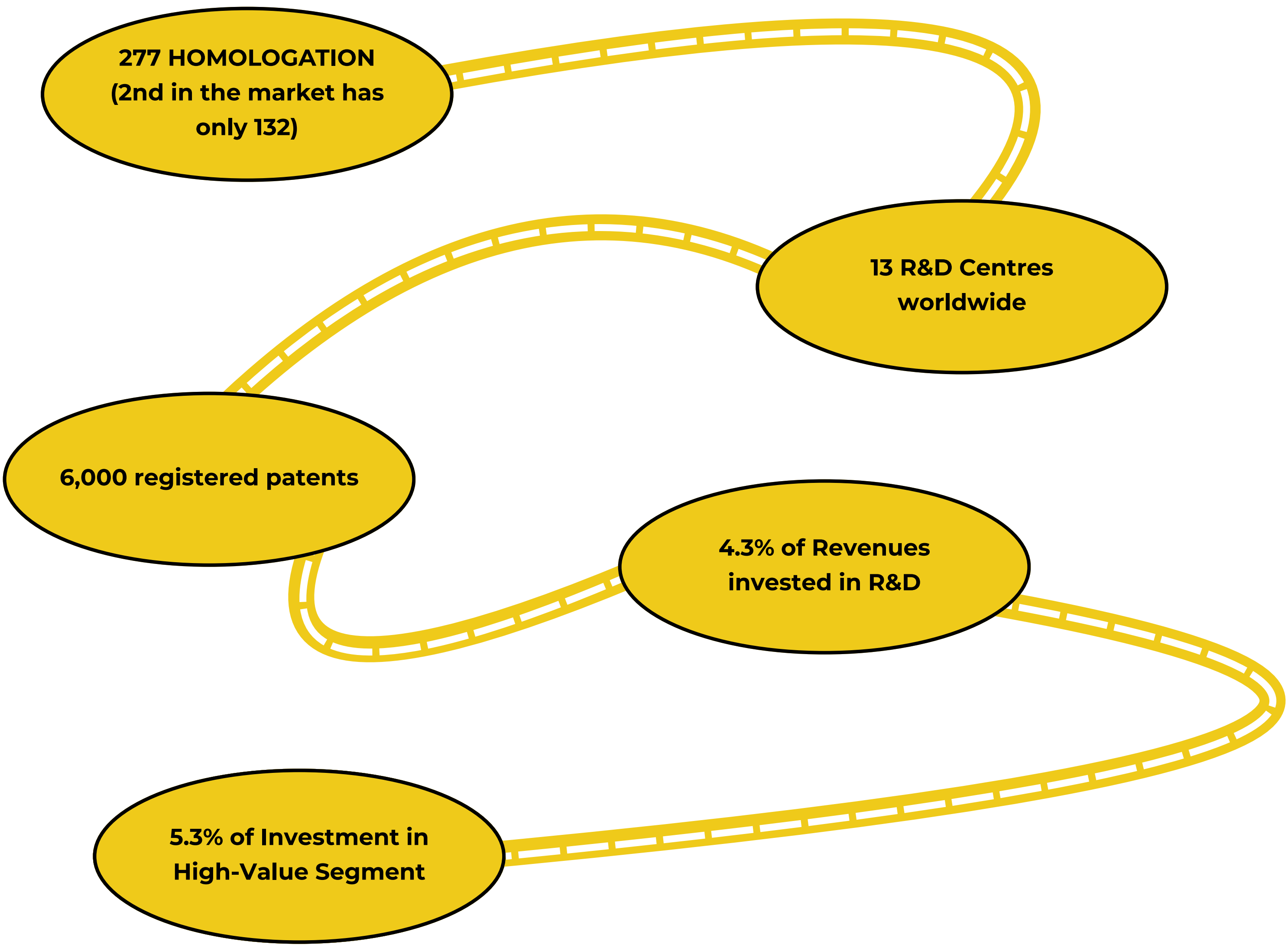
Furthermore, revenues grew **organically by 4.3%**, more than twice the sector average (+1.8%), showing that Pirelli is growing faster than its competitors. That reflects the company's **innovation-driven portfolio** and the increasing demand for high-performance and EV tires. Moreover, Pirelli generated a **Net Cash Flow** before dividends equal to **8.1%** of sales, compared to competitors' 3.4%. This underlines the bigger opportunity of the company to reinvest in growth projects.

FOCUS ON INNOVATION

Pirelli has positioned itself as a leader in the high-end tire market, prioritizing performance, safety, and innovation over volume. It recorded **277 EV homologations** in Europe, higher than the market average, confirming its technological edge and its strong integration with both traditional and new electric car manufacturers.

The company operates **13 R&D** centres worldwide and holds over **6,000 registered patents**. In 2024, Pirelli invested €289.5 million in research & development, equivalent to **4.3%** of total revenues, of which €272.8 million (**5.3%** of the High Value segment's revenues) was allocated to its high-value product line.

These substantial R&D commitments highlight Pirelli's capacity to deliver cutting-edge technologies, such as sensor-embedded tyres and advanced materials, and reinforce its brand image as a symbol of performance and safety, supported by its historic presence in motorsport.



EXTERNAL ANALYSIS

2020
- **COVID-19** pandemic
- Decrease in car production and sales, affecting tyre demand (both OEM and replacement)
- Production halts

2021
- Partial recovery
- **Semiconductor** chip **shortage**
- Focus on premium and high-value segment
- Sector stabilization

2022
- Intense inflation in energy and raw materials (Ukraine crisis)
- Prioritized "quality over volume" through aggressive price-mix actions to offset costs.
- Supply chain disruptions

2023
- Increase in tyres for EVs and high-performance vehicles
- Destocking of distribution channels

PESTLE
2024

Political
- **Geopolitics & Costs**: Regional tensions and OPEC cuts drive high volatility in energy and raw material prices.
- **Trade Barriers**: Tariffs and sanctions disrupt global supply chains for natural and synthetic rubber.
- **Regulatory Pressure**: Environmental policies force a structural shift toward sustainable sourcing and recycling.

Economic
- **Exchange Rate Risk**: Operating globally exposes companies to currency fluctuations. Transactional risk is actively hedged, while transnational risk is monitored but rarely hedged.
- **Interest Rate Risk**: Fluctuating interest rates impact borrowing costs and investment returns. Companies utilize interest rate swaps to stabilize debt expenses in a volatile financial environment.

Social
- **Shifting Mobility Habits**: Urban car ownership is declining among younger generations, while remote work has permanently reduced daily commuting.
- **New Travel Patterns**: While public transport use has struggled to recover post-pandemic, individual private mobility (cars, e-scooters) for leisure and non-systematic travel has increased.

Technological
- **Triple Transition**: The industry is being fundamentally reshaped by electrification, increasing automation, and connectivity.
- **Mobility Shift**: While urban car reliance is declining, higher levels of driving automation could boost long-distance vehicle usage, effectively competing with trains and flights.

Legal
- Regulations on **atmospheric emissions** (VOC, NOx, SOx, CO2)
- Waste directives (especially for end-of-life tires)
- Regulations against soil contamination
- Rules on responsible water consumption

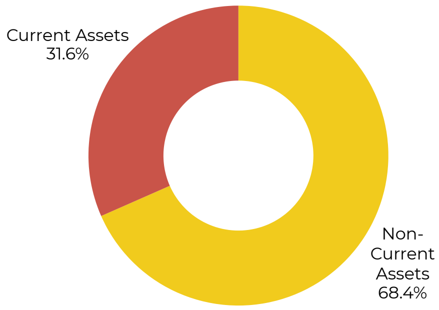
Environmental
- **Supply Chain Vulnerability**: Climate change in Southeast Asia poses a direct threat to Natural Rubber yields, risking long-term shortages.
- **Regulatory Scrutiny**: Strict rules regarding the Circular Economy (end-of-life management) and Microplastics (tire abrasion)

HORIZONTAL & VERTICAL ANALYSIS

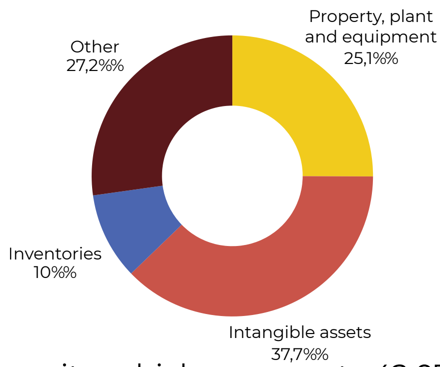
IMPORTANT INSIGHT

Pirelli's financial structure is mainly composed of non-current assets, which accounts for 68.4% of total assets.

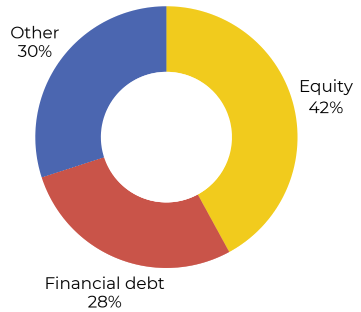
Most of the share is represented by intangible assets (37.72%), including not only patents and design rights but also strategic resources such as the Pirelli's brand, goodwill, customer relationships, technology and software, highlighting the **knowledge-intensive** nature of the company. Another important element is property, plant and equipment, which represents 25.06% of total assets, underlining the **capital-intensive** production process. Among current assets, inventories are also a relevant component, accounting for approximately 10% of total assets, according to the characteristics of a manufacturing company.



GRAPHS FROM VERTICAL

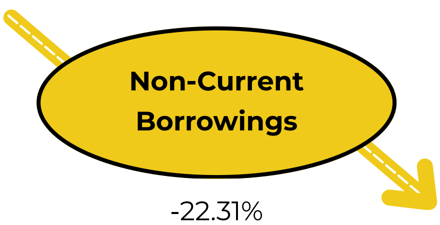


On the liabilities side, the capital structure is mainly supported by equity, which represents 42.07% of total liabilities and equity. This share is significantly higher than financial debt, computed as the sum of current and non-current borrowings amounts to 28% of the total. Overall, this structure suggests a **solid financial position**, with a balanced mix of equity and debt.



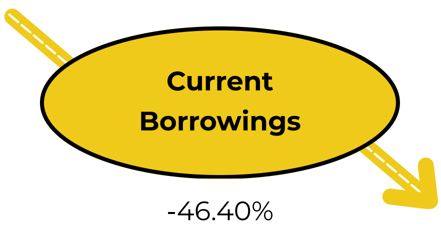
GRAPH FROM VERTICAL

This is consistent and coherent with the trend highlighted in borrowings over the last five years. Following an initial increase in debt in 2020 due to the COVID-19 pandemic, Pirelli has reduced its debt year over year. In particular, non-current borrowings decreased by 22.31%, while current borrowings declined by 46.40%. This downward trend in debt contributes to strengthening Pirelli's **financial stability** and **reliability** on the market.



-22.31%

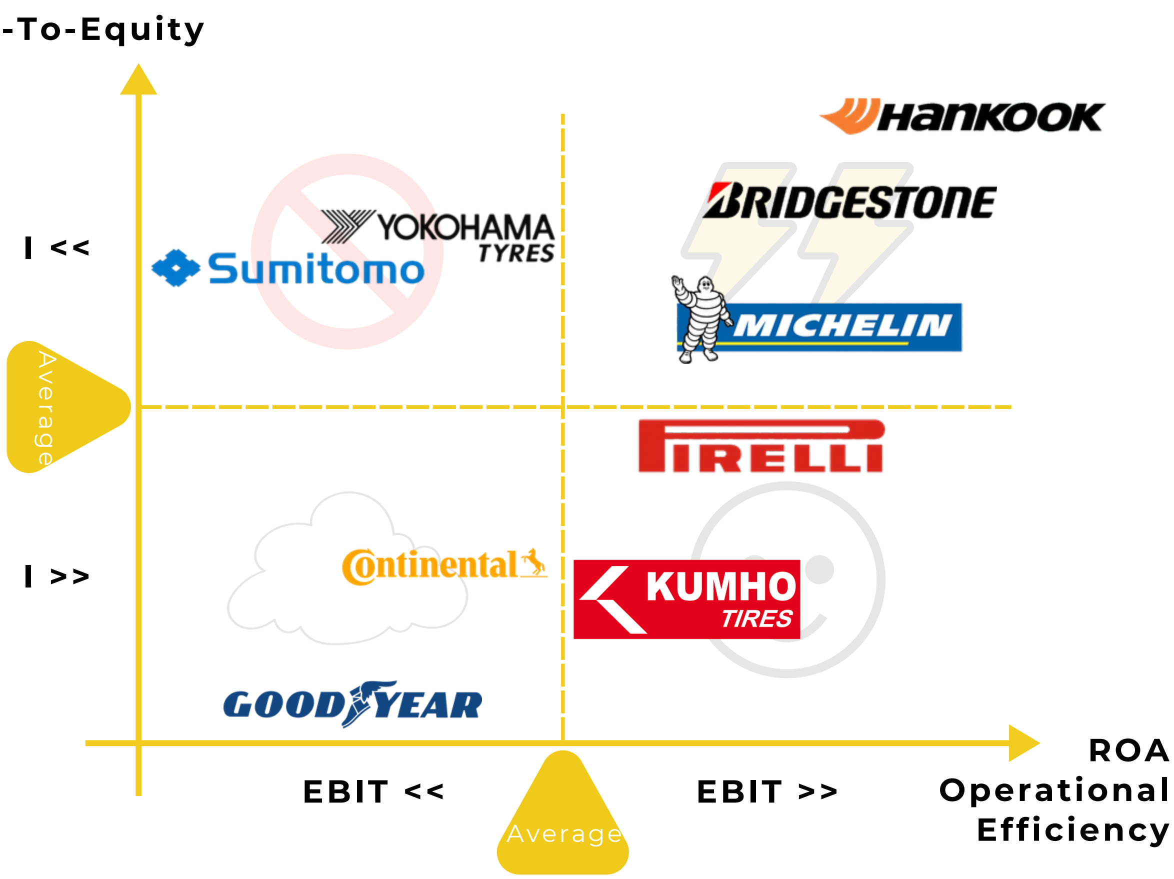
DATAS FROM HORIZONTAL



-46.40%

However, when considering the overall view, total assets have not yet returned to their pre-COVID (2019) levels, indicating that the overall size of the company has not fully recovered to its previous scale.

RISK MATRIX

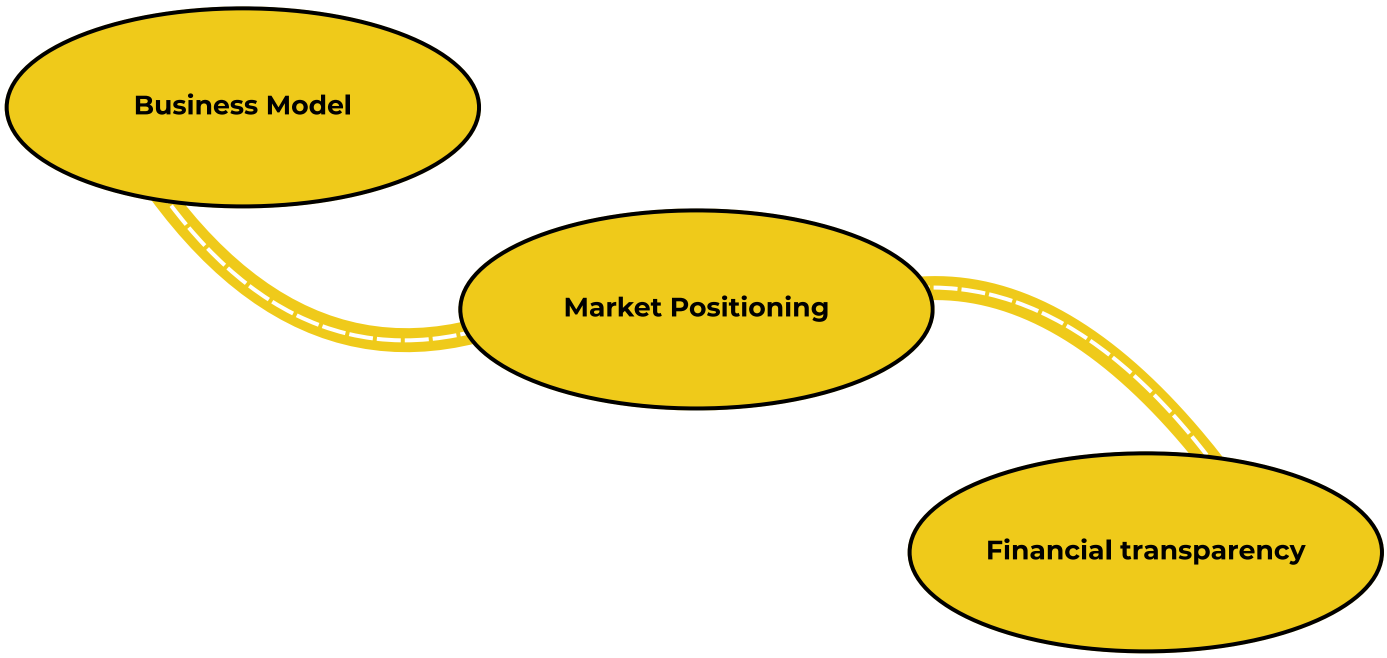


- **Sumitomo, Yokohama Tyres**: these companies play it very safe financially (low leverage) but are failing to generate significant profits from their assets. They aren't growing, aren't taking risks, and aren't generating efficient returns. From an investor perspective, this is often seen as "dead money". In particular a classic critique of many Japanese firms is that they are often "cash-rich" and debt-averse but struggle with lower profitability compared to Western competitors.
- **Michelin, Bridgestone, Hankook**: these are the biggest in the market. They generate massive returns (High ROA) without needing to load up on dangerous levels of debt. Thanks to big volumes and an excellent operational efficiency. In particular Michelin and Bridgestone are the two largest tire makers in the world. They have the scale to command high margins (premium pricing) and the cash flow to uphold a solid capital structure. Instead Hankook dominates the high-margin EV and large-inch tire segments, allowing it to deliver top-tier profitability and maintain a fortress balance sheet through strategic precision rather than brute force.
- **Continental, Goodyear**: this is the most dangerous position to be in. These companies are burdened with heavy debt and are struggling to make profit. Without improving efficiency, their high debt makes them vulnerable. In particular Goodyear has historically struggled with high leverage and pension obligations. Continental has faced significant headwinds with its automotive restructuring, leading to lower margins while carrying debt.
- **Pirelli, Kumho Tyres**: they're running really fast. They carry a lot of debt, but they are extremely efficient at turning that capital into profit. Both are using leverage to hit a specific, high-profit niche perfectly. In particular Pirelli is a perfect example. It focuses purely on the "High Value" (Prestige/Premium) segment. It carries debt (often from private equity structures or ownership changes), but it's high margins (High ROA) justify the leverage.

BENCHMARKING

HOW DID WE CHOOSE THE COMPANIES TO BENCHMARK?

We initially started from a long list of tyres and luxury automotive components company, from that we identified the most representative companies in terms of:



We then applied progressive filters based on reporting standards (to ensure data comparability) and industrial dimension. This process highlighted two direct competitors: **Michelin and Hankook**, and one strategic cross-industry benchmark: **Brembo**.

Michelin defines the **"level to beat"** regarding pricing power, brand reputation, and operational resilience. Analyzing Pirelli against Michelin allows us to determine if Pirelli's "High Value" strategy is performing in line with the market leader in the Premium and Prestige segments.

Hankook excels in **cost optimization** and **execution speed,** often delivering operating margins superior to the industry average. Its strong penetration in the EV Original Equipment market combined with a lean financial structure (low debt, look at Risk Matrix) makes it the ideal benchmark to find out some best practices in terms of efficiency and agility in responding to new market challenges.

Brembo would have been a perfect candidate for a cross-sector performance benchmarking because both companies serve the exact same end-customers and share the same "Racing" ecosystem. It tests whether Pirelli is generating financial returns aligned with a true leader in the luxury automotive component sector looking beyond the tyres industry constraints.

Coherent with the objectives of our course, we proceeded with the performance-based benchmarking with Michelin and Hankook. We discarded Brembo since we don't have the data of the processes to do a leadership-benchmarking.

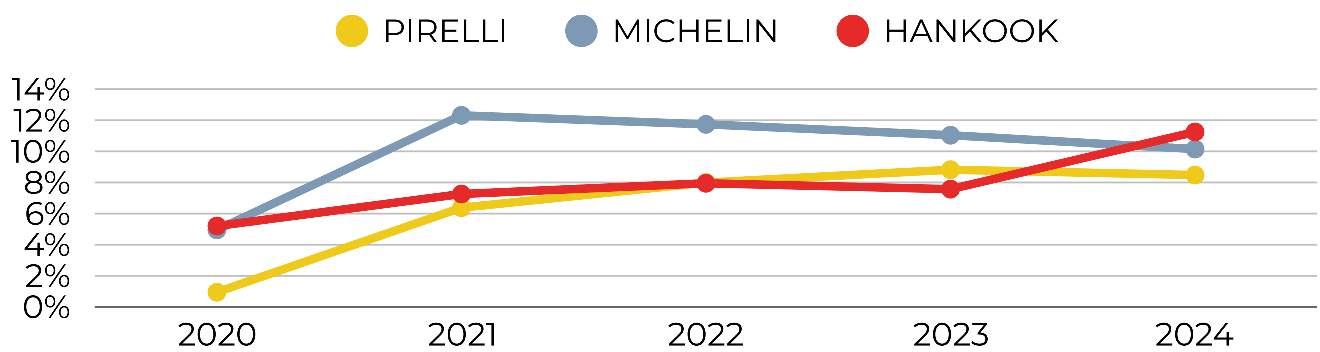
FINANCIAL ANALYSIS

The analysis starts by addressing the fundamental question: is the company creating value for its investors?

ROE

$$ROE = \frac{Net\ Profit}{Equity}\ [\%]$$

Starting from **ROE**, Pirelli's trend reflects the resilience of the "High Value" strategy. Despite a macroeconomic context led by rising inflation and interest rates, Pirelli has managed to sustain a growing, at least stable, ROE, driven primarily by the Net Profit Margin component. The company's strategic shift toward high-margin products has allowed Pirelli to defend its bottom line against rising costs (raw material, energy). Pirelli's ROE is structurally influenced by its capital structure, in fact it operates with a higher Debt-to-Equity ratio than its competitors (see leverage). The **gap** between Pirelli and Michelin reveals the difference between a Growth business model based on **high value** and a Scale business model based on **diversification** and **volume**. Due to its equity capitalization and lower debt, compared with Pirelli (1.00<1.31), Michelin's ROE is purely driven by operational results. Hankook's trend highlights a sharper upward trajectory, driven by a strong improvement in operational margins. Hankook's ROE growth is largely organic, sustained by a growing profitability in EVs and Premium segments, while keeping a lighter debt.

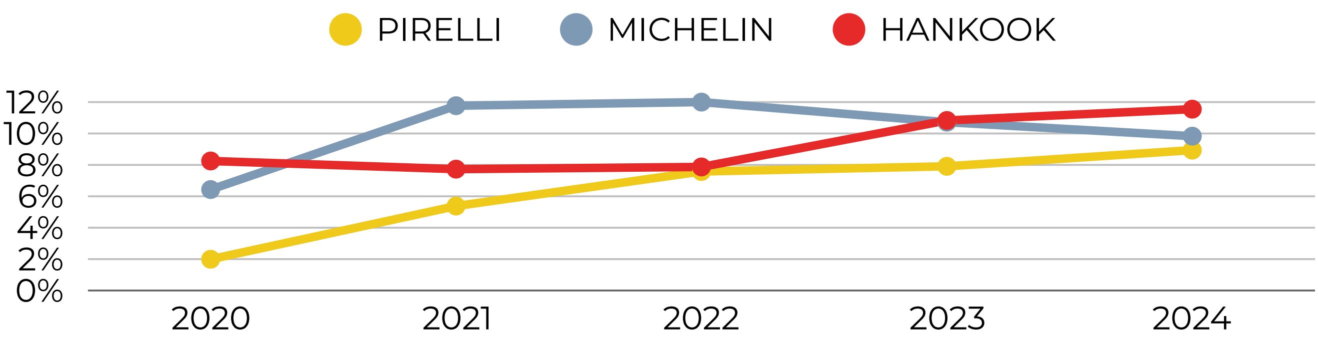


ROI

$$ROI = \frac{EBIT}{Total\ Assets - Non\ Financial\ Liabilities}\ [\%]$$

The **ROI** analysis supports the evidence of Pirelli's value creation path, the company is in a dynamic growth phase , quadrupling the ROI from 2020 (1,99%) to 2024 (8.94%). This recovery began with a post-Covid volume rebound and accelerated thanks to the High Value strategy, where aggressive **Price/Mix improvement** boosted operating profit while **stricter inventory management** (relatively to revenues) optimized the invested capital base. Comparatively, Pirelli is converging with Michelin (9.83%), which operates in a mature stability phase; this stable trend reflects the high fixed cost for maintaining such a vast global infrastructure, which limits the ROI expansion. Meanwhile , Hankook leads the group (11.55%), leveraging its early entry into high margin EV tyres to generate superior profits on a leaner asset structure.

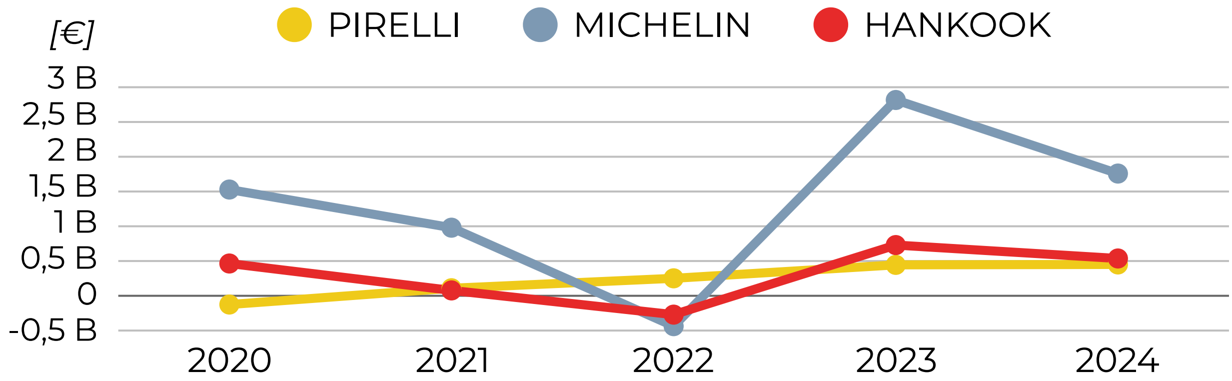
Crucially, Pirelli's 2024 ROI of 8..94% now exceeds its **WACC of 8.14%,** generating a **positive spread** (+0.80%). This confirms that the company is successfully creating value, proving that its premium positioning is sufficient to cover the cost of capital even in a high interest environment.



CASH EVA

$$CASH\ EVA = CFFO - [WACC * (TotAssets - CurrLiabilities)]$$

This conclusion is further supported by **Cash EVA**. Looking at absolute indicators (taking into account the different sizes of benchmarked companies), Pirelli shows a solid recovery compared to its weak performance in 2020, confirming ongoing value creation, although with a slowdown in 2024. In contrast, both Michelin and Hankook failed to generate sufficient cash to cover the cost of capital in 2022, not because of higher investments in CAPEX, but due to a **sharp contraction in CFFO** (-34% and -40% respectively comparing to 2021), while, on the contrary, Pirelli increased its CFFO from 2021 to 2022 (+23%).



The analysis now shifts from financial structure to cash flows, focusing on how working capital can either fuel or constrain liquidity. The key question is: how much **capital** is absorbed or released by day-to-day operations? Two indicators guide the analysis: **DSO & DPO.**

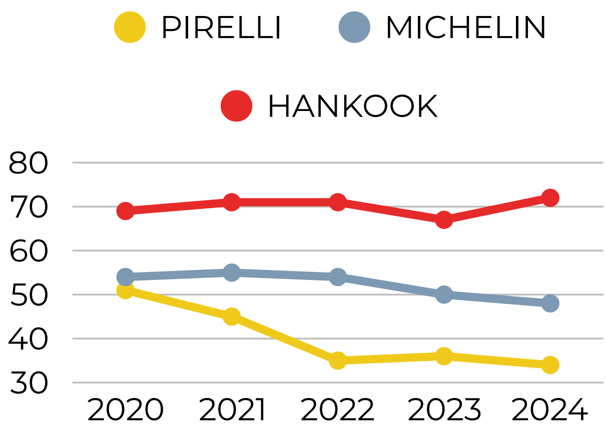
DSO & DPO

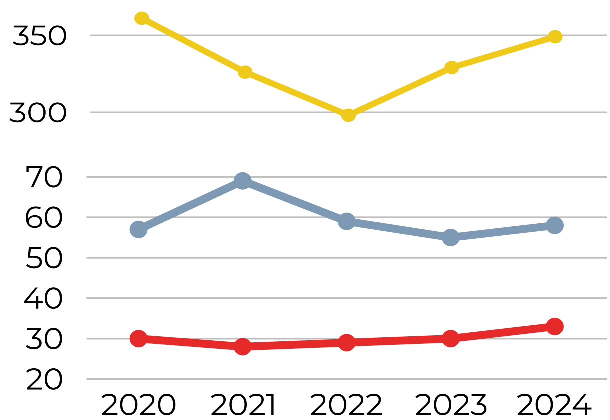
$$DSO = \frac{Receivables}{Revenues} \bullet 365\ [Days]$$

$$DPO = \frac{Payables}{COGS} \bullet 365\ [Days]$$

European companies seem to have a more efficient credit management (lower DSO) and liquidity optimization through a more flexible payment management of suppliers (higher DPO). Pirelli had a fell in DPO's value in 2022, due to the increasing of COGS by 89% compared to 2020 (raw materials' prices and especially energy prices experienced a very volatile trend during 2022, which was accentuated in the wake of the Russian-Ukrainian crisis), but the company is still managing its cash flows better than competitors.

Hankook has a higher DSO (inability to manage customers' payments effectively), but shows faster payment management to suppliers. Therefore, the company appears unable to exploit the opportunity to optimize its cash flows if compared with Pirelli and Michelin.





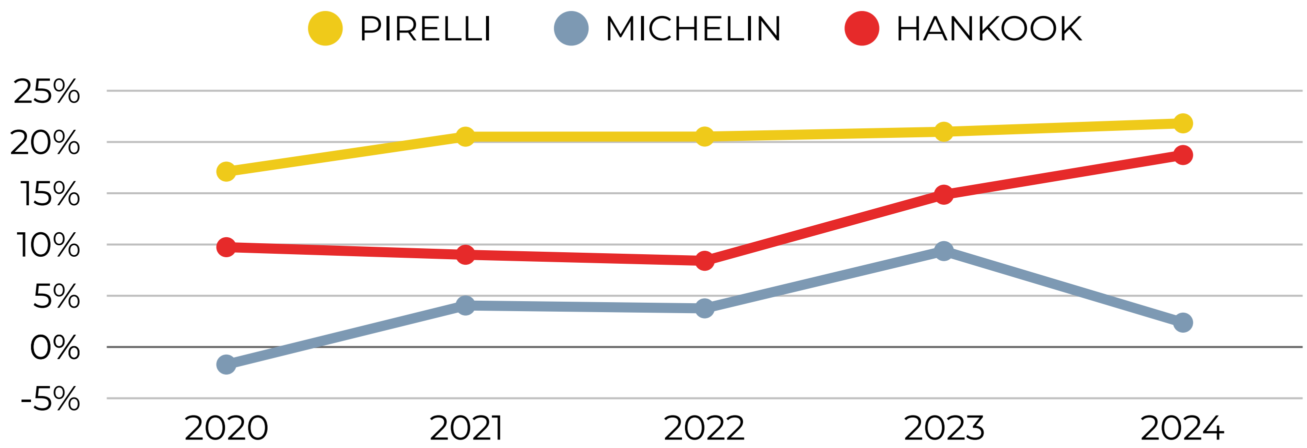
FINANCIAL ANALYSIS

After assessing whether value is being created, the analysis naturally shifts to a second question: how is this **value generated** at the **operational level**, and how **sustainable** is it **over time**?

EBITDA MARGIN

$$EBITDA\ MARGIN = \frac{EBITDA}{Revenues}\ [\%]$$

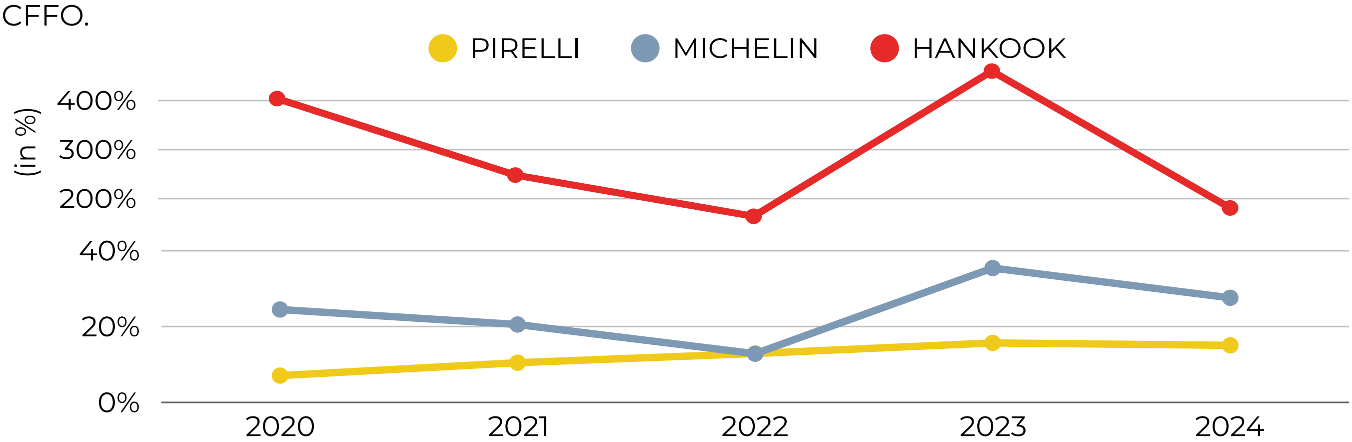
The **EBITDA margin** immediately reveals a clear positioning: Pirelli consistently shows a **stronger capability** than its competitors to **convert revenues** into **operating margins**, indicating superior operating efficiency. This margin buffer gives the company greater resilience, allowing it to absorb potential cost increases or temporary volume contractions without immediately eroding profitability. Over the years, Hankook gradually converged toward levels similar to those of Pirelli, while Michelin displayed more volatility.
Analyzing deeply and comparing EBITDA margin with FCF margin, it comes up that Pirelli doesn't succeed in translating the high EBITDA into real liquidity (neither Michelin, while Hankook seems to manage this aspect better). This situation is seen also in the analysis of CAPEX Coverage indicators.



CAPEX COVERAGE

$$CAPEX\ COVERAGE = \frac{CFFO}{CAPEX}\ [\%]$$

This indicator highlights a structural weakness in Pirelli's operating cash dynamics (on average, the company shows a lower coverage ratio than its competitors).
The company maintains stable **CAPEX** (no big investments) during the past years and the increasing of CFFO (+109% from 2020 to 2024) is not sufficient to obtain a value of Capex Coverage greater than 1, so this prospects the need for Pirelli to recur to forms of financing different than CFFO.



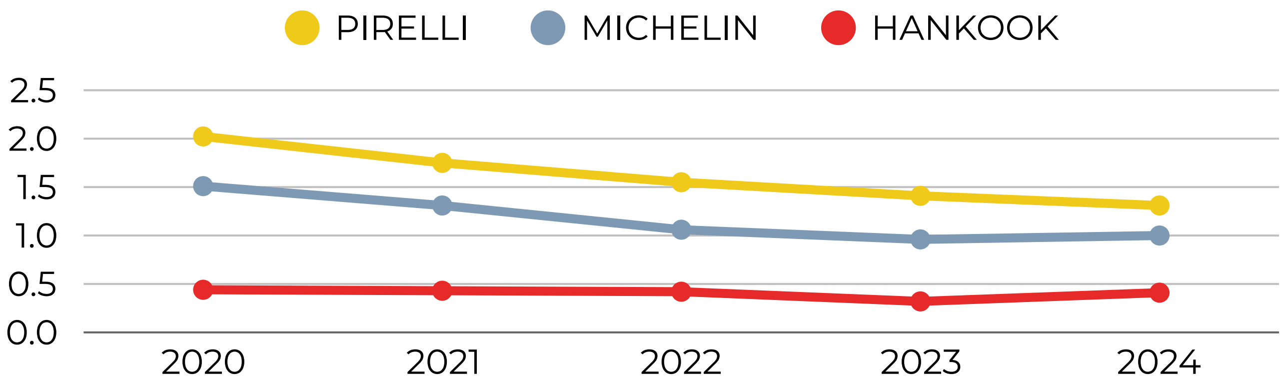
FINANCIAL ANALYSIS

The analysis terminates with another key dimension of sustainable growth: **financial balance**. Growth requires capital, and the way a company manages its finances determines whether expansion strengthens its position or exposes it to risk.

LEVERAGE

$$LEVERAGE = \frac{Debt}{Equity}$$

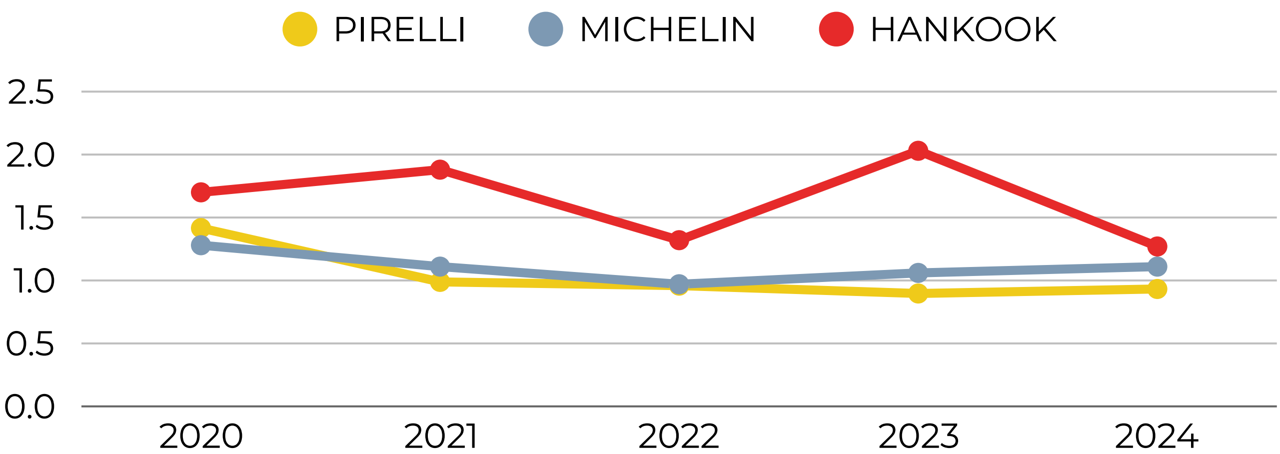
Pirelli has strengthened its financial health, lowering **leverage** from 2.02 (2020) to 1.31 (2024). This is a direct result of its High Value strategy and solid price/mix management, which generated the necessary cash flow to repay debt while growing the equity base and improving the company's long-term solvency.
Michelin instead shows a steady 1.0 ratio to protect its **"A" credit rating**, ensuring it can balance reliable shareholder dividends with operational stability. Finally, Hankook has a remarkably low 0.4 ratio thanks to their early dominance in the EV tire sector making the company self-funding without need for loans. So while Pirelli is converging toward **European efficiency standards**, Hankook shows to be the safest company in terms of financial risk.



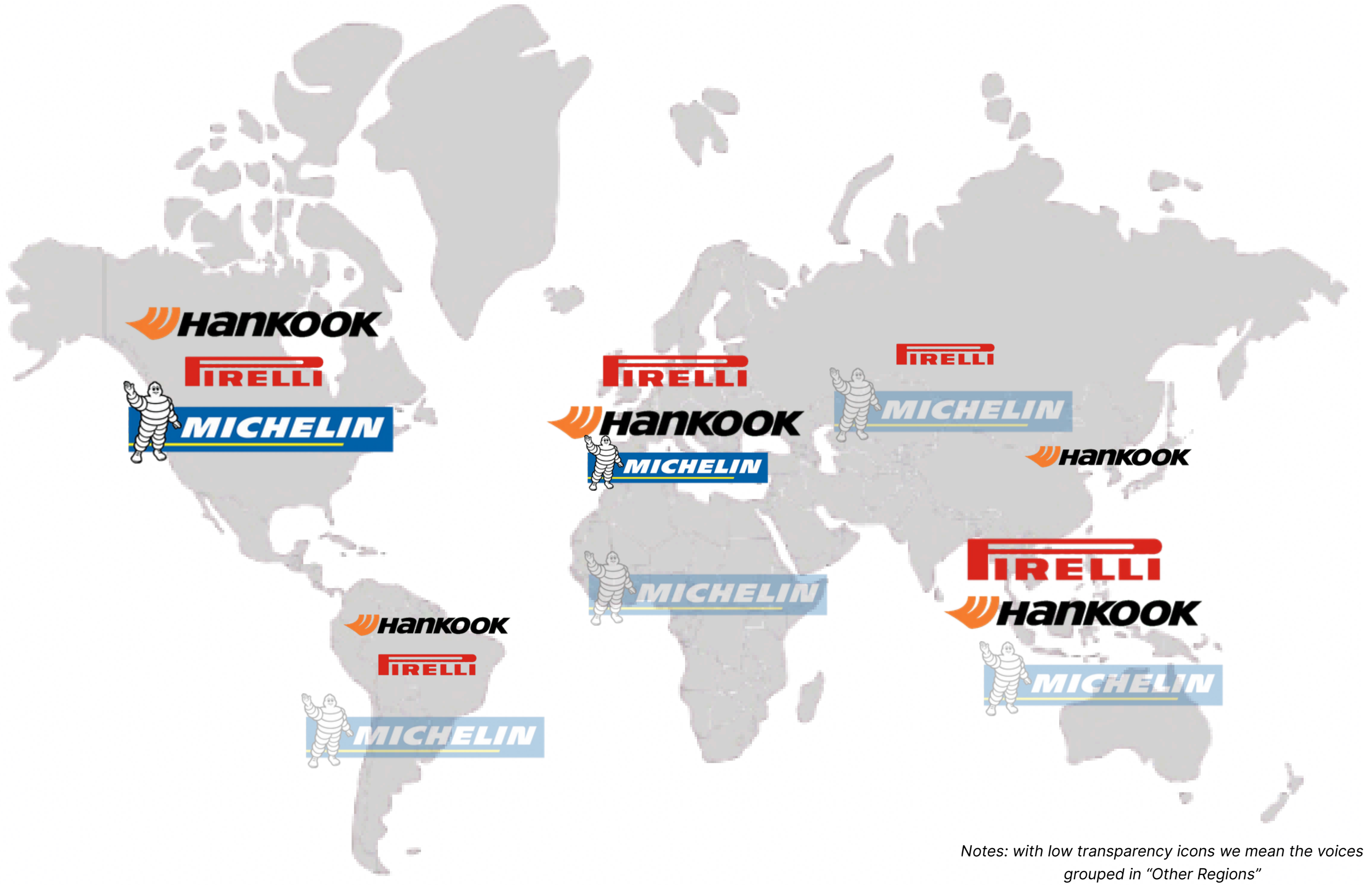
QUICK RATIO

$$Quick\ Ratio = \frac{Cash + Short\ Term\ Investments + Receivables}{Current\ Liabilities}$$

Pirelli shows a weaker **quick ratio** compared to the other two companies. In 2024, it stands at 0.93, and its ability to cover current liabilities consistently remains below one, implying that it would not be able to fully meet its short-term obligations. Since 2020, it has not managed to recover.
In contrast, Michelin and Hankook have remained almost always above one, indicating greater solvency and therefore a stronger financial position. We can state that there is a structural difference between these two companies and Pirelli.



SEGMENTAL ANALYSIS



Notes: with low transparency icons we mean the voices grouped in "Other Regions"

Looking at the companies in general, we can get an overall view about:

	Pirelli	Michelin	Hankook
Total Sales	€ 6.78B	€ 27.19B	€ 6.40B
YoY Growth	+1.9%	-4.10%	+5.3%
Oper Income	€ 900M	€ 3,378M	€ 1,197M
Oper Margin	13.30%	12.40%	18.70%
Tot Assets	€ 8.6B	€ 37.4B	€ 11.8B
Asset Turnover	0.79x	0.73x	0.54x

These data highlight important aspects:

Pirelli has moderate growth with better margins than Michelin

Michelin faces a sharp decline of -4.1%

Hankook has the highest profitability (18.7%) and growth (+5.4%)

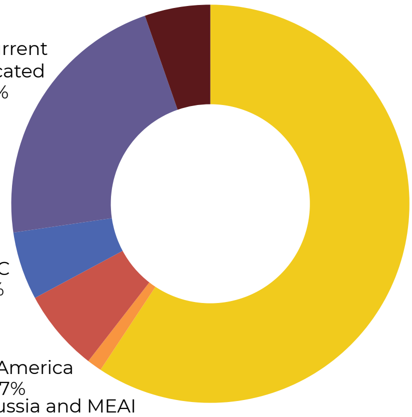
SEGMENTAL ANALYSIS

Segmenting the situation by geographic areas we can notice:

PIRELLI

Pirelli	Sales 2024	Tot Sales %	YoY vs 2023
Europe	2,644M	39.0%	+2.0%
North America	1,706M	25.2%	-0.5%
APAC	1,149M	17.0%	+3.09%
South America	799M	11.8%	+0.42%
Russia & MEAI	475M	7.0%	+9.75%
TOTAL	6,773M	100%	+1.9%

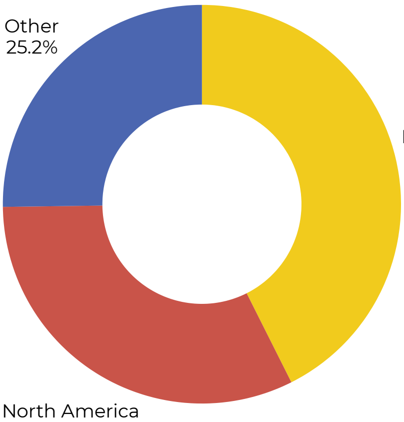
Tangible and Intangible Assets by Region:



Pirelli generates most of its revenues (39%) in Europe which is also the region where the most investment and assets (59.30%) are concentrated. This indicates that Europe is not only the largest sales market, but also the company's main production, operations and R&D base. In other regions, the concentration of assets is much lower than their share of income. For example, North America generates 25.19% of revenue, but only 6.66% of assets are located in that region. This indicates a strategy of concentrating production in Europe and exporting to other markets.

MICHELIN

Tangible and Intangible Assets by Region:



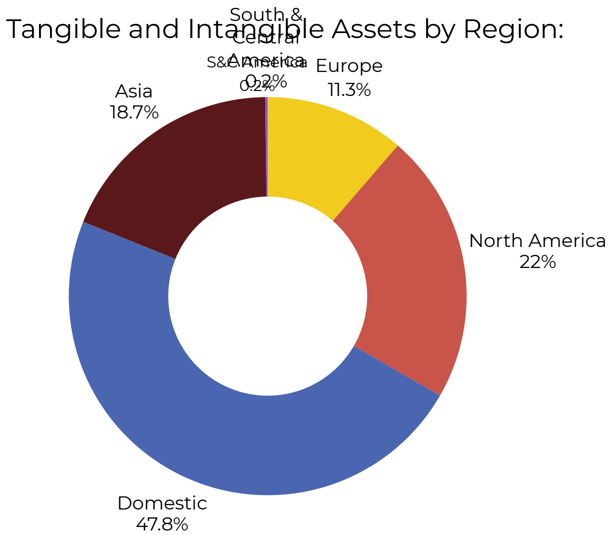
Michelin	Sales 2024	Tot Sales %	YoY vs 2023
Europe	9,782M	35.97%	-1.1%
North America	10,493M	38.51%	-5.45%
Other Regions	6,918M	25.52%	-5.93%
In which France	2,572M	9.5%	+2.08%
TOTAL	27,193M	100%	-4.1%

Michelin’s asset structure is broadly consistent with its global revenue distribution and supports a strategy of balanced operations across two major continents. While North America is the largest source of revenue, Europe remains the main investment base and operating assets of Michelin, at 42.6%. This reflects the historical roots and concentration of R&D and large production centers in Europe. The share of assets in North America is significant at 32.2%, and it reflects Michelin's greater commitment to local production to serve its largest revenue market.

SEGMENTAL ANALYSIS

HANKOOK

Hankook	Sales 2024	Tot Sales %	YoY vs 2023
Europe	2,993M	45.83%	+17.44%
North America	1,520M	23.76%	-8.2%
Asia	983M	15.37%	-1.62%
Korea (Domestic)	679M	10.61%	+4.67%
S&C America	284M	4.43%	+2.63%
TOTAL	6,399M	100%	+5.3%



Almost half of Hankook’s non-current assets are concentrated within South Korea, indicating a strategy of centralized and mass production to gain scale in the home country.
However, investments in North America (21.96%) and Asia (18.69%) are also significant. This indicates an effort to establish regional production bases to support these large markets, but Europe, despite being the largest revenue market, accounts for only 11.34% of assets.
This operating model (wide global sales with centralized production) has probably been a key factor in Hankook achieving the highest operating profit margins compared to Pirelli and Michelin.

OVERALL COMPARISON

Company	Top Region	% share	Second Region	HHI Score	Interpretation
Pirelli	Europe	39%	N.America (25.2%)	0.26	Best balance
Michelin	N.America	38.6%	Europe (36%)	0.34	High concentration
Hankook	Europe	45.83%	N.America (23.76%)	0.30	Medium-High concentration

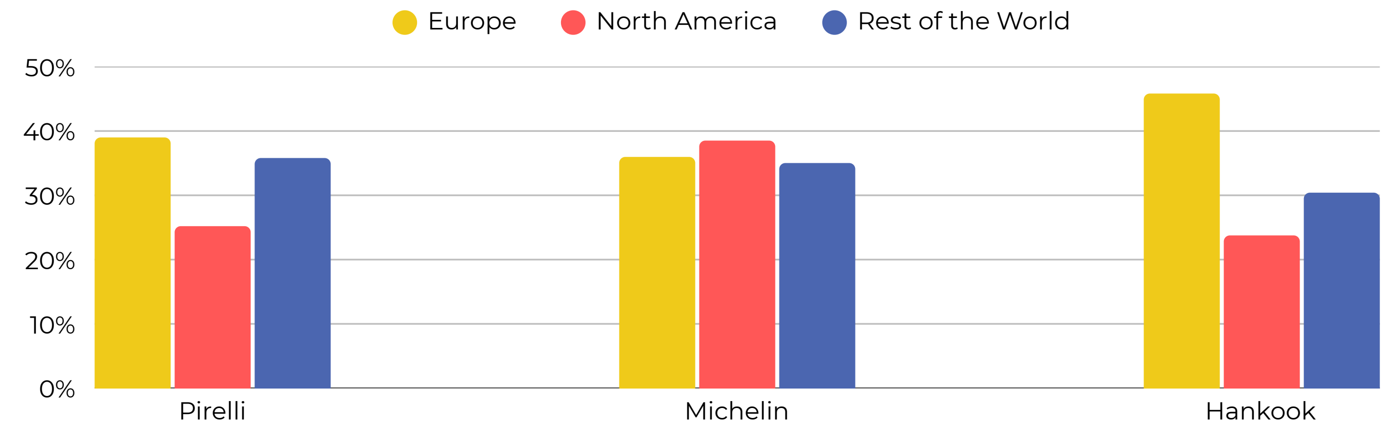
Pirelli has the lowest HHI (Herfindahl-Hirschman Index) score. This indicates a relatively more balanced distribution of revenue across its five geographic segments. While Europe has the largest share (39.02%), North America (25.19%) and Asia (17.00%) have a relatively better distribution.
Michelin reports only 3 segments (North America, Europe, and other regions). Less segmentation inherently results in a higher HHI. Michelin's revenue is evenly but heavily split between North America (38.51%) and Europe (35.97%), indicating a strong dependence on these two large markets.
Hankook's concentration is due to its very high revenue share in the European region (45.83%). A share of nearly half of total revenue from a region results in a high HHI score and increases the company's exposure to European market volatility.

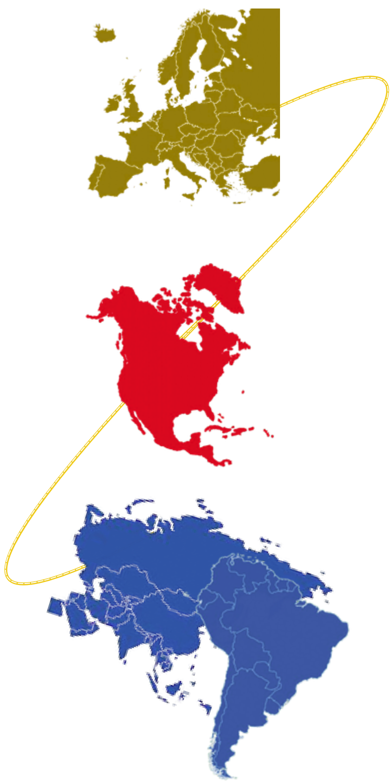
SEGMENTAL ANALYSIS

Analysing the regional growth comparison:

Region	Pirelli Growth	Michelin Growth	Hankook Growth	Best
Europe	+2%	-1.1%	+17.4%	Hankook
North America	-0.5%	-5.45%	-8.2%	Pirelli
Asia	+9.75%	-5.9%	-1.6%	Pirelli
OVERALL	+1.9%	-4.1%	+5.3%	Hankook

Hankook has a strong presence in Europe and is gaining more share than Michelin and Pirelli. Pirelli is increasing its presence in Asia, while Hankook and Michelin are losing share there. Looking at the Regional sales size comparison:





Hankook has the highest revenue dependency on Europe (45.8%). This large share exposes it to the volatility of the European market, but also indicates its successful strategy to penetrate this large market.
Pirelli is also a Europe-centric company with a 39.0% share in Europe.

Michelin is the only company to derive the largest revenue share from North America (38.5%). This shows that Michelin has a superior position in the consumer and distribution market in this continent compared to its competitors.

Pirelli derives the largest revenue share (35.8%) from the Rest of the World (ROW) (including APAC, South America, Russia/MEAI). This indicates a more regionally diversified revenue portfolio, which helps to reduce the risk of dependence on core markets.
Michelin has the lowest share (25.5%) of the "Other" segment, reflecting its higher focus on developed markets in Europe and North America.

CONCLUSIONS

OPPORTUNITIES

Emerging Markets Advantage: Pirelli was able to record strong revenue growth of +9.75% in Russia and MEAI (Middle East, Africa and India). This growth indicates a high capacity for premium products in these emerging markets.
Focus on the premium segment: with a strong overall operating margin of 13.3%, Pirelli's focus on ultra-high performance and luxury tires remains a profitable strategy. Stability in Europe: maintaining positive growth of +2.00% in its largest market, Europe, indicates stable demand for its products in the company's core operations.

CHALLENGES

Recession in North America: Pirelli faced a sales decline of 0.50% in its second largest market, North America. This slowdown could be due to intense price competition (from low-cost imports) or a decline in demand. High geographic concentration: with over 59% of assets concentrated in Europe, Pirelli is vulnerable to the continent's economic and geopolitical volatility. Low global growth: Pirelli's overall annual sales growth was only +1.85%, compared to Hankook's +5.3% growth, indicating a slow pace of global market share gains. Asset efficiency: although Pirelli has the best asset turnover ratio compared to Hankook, which has the most efficient operating model with an operating profit margin of 18.7%. Pirelli should look for ways to increase the return on its investments.

OVERALL CONCLUSIONS

STRATEGIC CONSIDERATIONS

The financial and strategic analysis conducted in this report emphasizes Pirelli's positioning within the global tyre industry, more precisely in the High Value segment, which represents the key source of competitive advantage compared to its main competitors. The benchmarking highlighted that Pirelli consistently outperforms a few competitors in terms of profitability margins (EBITDA Margin) and capital management efficiency, underlying a clear focus on premium products, technological innovation, and strong relationships with OEMs.

While some competitors exploit higher volumes or wider geographical distribution, Pirelli's targeted segment allows it to sustain relatively higher margins. The strategy adopted by Pirelli would lead investors to put trust in the company.

FINANCIAL CONSIDERATIONS

From a financial perspective, the choice to invest in the company would be a supported option, because the benchmarking suggests that Pirelli maintains a balanced trade-off between growth and financial strategy. Although leverage levels and cost structures still are areas to monitor, especially in a macroeconomic uncertainty context and where raw material prices are volatile. The company is structured to absorb short-term shocks thanks to its pricing strategy. Moreover, investments in R&D and digitalization support Pirelli's long-term competitiveness and differentiation in a highly competitive market.

MARKET CONSIDERATIONS

The premium tyre segment is expected to grow faster than the overall market, driven by trends such as EV vehicles, sustainability requirements, and increasing demand for high-performance and specialized tyres. These trends, which represent fundamental points in Pirelli's strategy, would suggest big potential for future value creation.

FUTURE CONSIDERATIONS

In conclusion, the benchmarking analysis confirms that Pirelli's strategy represents a strength rather than a limitation. If the company continues to execute effectively, maintaining cost control while investing in innovation and sustainability, it is well positioned to consolidate its competitive position and achieve sustainable growth in the medium to long term.

AI-BASED ANALYSIS

For this section, we adopted the iterative "Theory-to-Practice" approach suggested in the course guidelines. Instead of asking for direct calculation, we first instructed AI to act as an "Expert Analyst and Professor" and subsequently provided the data. The AI model used for this part is GPT-4o.

PROMPT 1

Act as an expert financial analyst and university professor. Your task is to support me in analyzing the Annual Report of the company Pirelli for the year 2024.
Before analyzing the numbers, illustrate how you would proceed with comprehensive analysis, covering the following aspects:
Business Model and Structure: What qualitative aspects are crucial for this specific company?
Financial Analysis: What are the main items to consider in the financial statements for this specific industry ?
Financial Ratios: Explain the calculation and interpretation of the main financial ratios from a conceptual point of view, as if you were writing an accounting textbook.
Peer Group Selection Criteria: Explain the methodology for selecting appropriate competitors for benchmarking. Should we limit the comparison to direct tyre manufacturers, or should we also consider "cross-industry" players? Which metrics determine if a competitor is truly comparable?
Do not analyze anything yet; provide only the theoretical framework.

ANSWERS'S SUMMARY

AI structured detects 4 different main ponit:
1. Business Model: it correctly identified the "High Value" strategy (tyres >18' inches, focus on Premium/Prestige OEM) as the fundamental lens for interpreting the results.
It also suggested key qualitative aspects to analyse like the specific revenue breakdown between High Value and Standard products, the strategic depth of OEM partnerships as a competitive moat.
2. Financial Analysis & Key Drivers: the analysis examined the three main components of the financial statements, identifying specific drivers for the Tyre sector.
· Income Statement: heavily influenced by COGS volatility, specifically the price fluctuation of raw materials.
· Balance Sheet & Working Capital: characterized by high capital intensity and complex inventory management (due to seasonality and SKU variety).
· Cash Flow: emphasized the critical role of the Cash Conversion Cycle to measure efficiency in converting raw material investments into realized cash flows.
3. Key Ratios: it proposed a set of "textbook" ratios focused on profitability (Gross Margin, ROIC), liquidity (Quick Ratio, crucial for inventories), leverage (Net Debt/EBITDA) and operational efficiency.
4. Competitor Selection: AI suggested a broad peer group composed by 4 main company (Michelin, Bridgestone, Continental, Goodyear), suggesting also the use of "cross-industry" like Brembo, while warning that they are not "pure peers".

COMMENT

The initial output provided by ChatGPT is very similar to our manual qualitative analysis, especially regarding the high-value strategy implemented by the company.

Even without seeing the 2024 data, AI correctly identified that for a premium tyre manufacturer, the distinction between "Standard" and "High Value" products is the primary driver of profitability. This **confirms the central thesis of our manual report**, where we highlighted that Pirelli operates exclusively in the ≥18” segment to **compete on value rather than volume**.

Despite similar conclusions, AI suggested a specific "share of revenue" between High Value and Standard. It speaks about the distribution of the product mix, to quantify how the different sales composition impacts margins.

In terms of innovation and R&D, AI’s emphasis on innovation and homologation is perfectly aligned with our analysis of Pirelli’s leadership in EV and Cyber Tire technologies, even if our report interprets homologations as a way to show company’s prestige while AI frames co-development more as a source of competitive advantage.

An important discrepancy between our report and ChatGPT conclusions regard two indicators: AI recommends using **ROIC** to evaluate pure operating performance(regardless of debt), instead we have decided to use **ROE**. We have assessed that in the specific case of Pirelli, which has a high level of debt used to finance growth, the ROE is more informative for investors because it shows how financial leverage is used to generate profits.

Examining the opportunities that emerged from the comparison of indicators, AI's suggestion to **monitor inventory turnover** is a valid point that we only marginally covered in our analysis using the Quick Ratio; integrating this index could have provided further insights into warehouse efficiency.

Regarding the **benchmarking**, ChatGPT also included Continental and Goodyear in its comparison, simply because they are large tire manufacturers. Our analysis intentionally excluded those companies because in the Risk Matrix they are in dangerous position with high debt and low profitability, making them difficult to compare with Pirelli's efficient model. In addition Goodyear has different reporting standards.

Furthermore, for a secondary analysis, AI recommended Brembo, an option we had previously considered, but later discarded because it would have been a process comparison and we don’t have the data to do this kind of analysis.

AI-BASED ANALYSIS

PROMPT 2

Now let's move to the practical application. We have attached the 'Annual Report 2024' for Pirelli and the competitor AI suggested in the first response.
Using the theoretical structure you defined in Step 1, provide a detailed quantitative analysis of Pirelli's performance for 2024 compared to previous years. Calculate and interpret the Key Ratios you suggested in the first part. Then identify the specific driver and refer to specific values and page numbers.
Now that you have seen the actual 2024 data, do you confirm the theoretical peers you might have considered generic leaders, or does the data suggest a more specific set of direct competitors regarding business model fit? Explain your reasoning and compare Pirelli against the selected peers based on the indicators.
Organize the results in a clear comparison table.

www.chatgpt.com

Enter ↵

ANSWERS'S SUMMARY

In this practical phase, the AI applied the theoretical structure to the actual 2024 data, analyzing the progression of profitability, highlighting a "quality-driven" growth:

- Revenues: identified growth attributing it to the Price/Mix effect of the High Value segment rather than volumes especially in Europe and North America
- EBITDA: calculated a margin expansion to 22.9%, citing the mix improvement and lower raw material pressure as key drivers.
- Net Income: noted an increase to €465 million, driven by higher operating profitability.

In Balance Sheet & Capital Structure the analysis focused on sustainability and working capital efficiency:

- Net Debt: reported a slight increase to €2.66 billion, but interpreted it as fully sustainable given the EBITDA growth.
- Working Capital: observed a slight rise in Inventories, justifying it with the broader High Value product range and customization needs rather than inefficiency.

AI confirmed the company's ability to generate cash despite heavy investments:

1. Capex: highlighted high capital expenditure (€720m) focused on premium technology and capacity.
2. Free Cash Flow: calculated a positive FCF of €470m, concluding that cash conversion remains solid for a capital-intensive industry.

It also calculated and interpreted the "textbook" key ratios defined in Step 1:

- Profitability: ROIC at 12.6%, interpreted as confirmation of value creation above WACC.
- Leverage: Net Debt/EBITDA at 1.72x, defined as a "conservative and sustainable" financial structure.

After AI performed a re-selection of peers: it explicitly excluded Continental and Goodyear and confirmed Michelin as the primary core peer.
Then it concluded that Pirelli outperforms competitors in terms of ROIC and EBITDA Margin.

AI-BASED ANALYSIS

REVENUES

€ million	2023	2024	Δ YoY
Revenues	6,65	6,773	+ 1,9%

EBTDA

€ million	2023	2024	Δ
EBITDA	1,48	1,55	+ 5%
EBITDA Margin	22,3%	22,9%	+60 bps

EBIT

€ million	2023	2024	Δ
EBIT	980	1,060	+8,20%
EBIT Margin	14,70%	15,6%	+90 bps

PROFITABILITY

Ratio	2023	2024
Gross Margin	39,1%	40,0%
EBITDA Margin	22,3%	22,9%
EBIT Margin	14,7%	15,6%
ROIC	11,8%	12,6%

LIQUIDITY & LEVERAGE

Ratio	2023	2024
Current Ratio	1.35x	1.32x
Net Debt / EBITDA	1.76x	1.72x
Interest Coverage	7.2x	7.6x

PEER COMPARISON TABLE (2024)

2024	Pirelli	Michelin	Hankook
Revenues (€ bn)	68	286	63
EBITDA Margin	22,9%	19,8%	18,5%
EBIT Margin	15,6%	13,2%	11,4%
ROIC	12,6%	11,9%	9,8%
Net Debt / EBITDA	1.7x	1.5x	0.9x

COMMENT

This quantitative analysis highlights significant opportunities in terms of speed and strategic alignment reaching similar conclusions, but also significant limitations.

Talking about the **alignment on Strategy and Drivers** (Opportunity), ChatGPT demonstrated a strong ability to link numbers to strategy. It correctly identified that the +1.9% revenue growth was "quality-driven" by the Price/Mix effect rather than volume like we did in our manual report.

The ability to instantly locate the specific page numbers for these drivers represents a significant efficiency opportunity, speeding up the fact-checking process; but in the majority of the case the pages don't correspond to the reported data.

Furthermore **AI corrected its previous considerations on peers**, done in the step 1.

After processing the 2024 data, it understood that Goodyear and Continental were not comparable due to a different strategic position. This confirms our manual decision to exclude them based on the Risk Matrix and different reporting standards (that ChatGPT didn't mentionated).

AI's ability to refine its own assumptions based on data is a powerful opportunity to validate the selection of peer group.

However, differences exist across several indicators; in some cases there are just different values, while in others ChatGPT used different metrics.

Metric Discrepancy: the metrics used for the Leverage are not comparable. AI focused on the capacity to repay debt (Net Debt/EBITDA), instead our analysis was focused on solidity (Debt-to-Equity). As a result of this metric choice, AI failed to highlight the positive trend in capital structure, missing the significant reduction in the Debt-to-Equity ratio (from 2.02x down to 1.31x) that our report identified.

About liquidity, despite ChatGPT in the step 1 said that the Quick Ratio was the "more meaningful" metric, it proceeded to calculate the generic Current Ratio instead. AI's value show a different result (1.32x) because it includes inventory. Our calculation (0.93) reflects the true situation: liquidity is actually below the safe level of 1.

Value Discrepancy: We identified a direct numerical error regarding profitability ratios. AI reported an EBITDA Margin of 22.9%, diverging from the 21.82% found in our analysis. A similar slight discrepancy was also observed in the EBIT Margin too.

Finally, our analysis led to a significantly different verdict regarding **geographic dynamics**: AI concluded that "North America" was a generic source of growth. In contrast, our analysis revealed that this market actually faced a recession (-0.50%). We concluded that the company's resilience was instead driven by over-performance in Emerging Markets (Russia/MEAI +9.75%), a distinction ChatGPT overlooked.

ASSUMPTIONS

- For the computation of Cash EVA, given the impossibility to find reliable values of WACC for Hankook company, we used the same values of Michelin, assuming that they could be a proxy of the real values for Hankook (furthermore Michelin values. For Pirelli we used the official values from financial reports considering net of tax WACC for every year (considering the tax shield). For Michelin we used official values of WACC reported in financial reports for every year.
- In the report we used to describe and highlighted what happened in the last 5 years (2024-2020), but we take into considerations also 2019 in the analysis, in orer to not be biased by the COVID period, so in the excel file would be clear that we also analyzed the 2019's balanche sheet situation.
- In the segmental analysis, we started looking at all the details level used by the companies, then we grouped for the most generic one, in order to be coherent and have the chance to do a comparable geographical analysis.
- To describe the Horizontal and Vertical analysis we started from 2019 to cover the period before COVID.

Horizontal

2024-2019	2023-2019	2022-2019	2021-2019	2020-2019
-6,08%	-6,59%	-6,85%	-9,89%	-13,43%
-9,16%	-7,33%	-5,23%	-3,42%	-1,73%
49,41%	6,87%	-0,77%	0,05%	-10,21%
7,34%	-10,40%	-17,89%	-3,49%	-27,55%
181,74%	149,85%	117,97%	69,54%	34,72%
-9,60%	19,34%	-32,49%	6,00%	17,45%
9,11%	23,83%	-0,93%	201,58%	-47,91%
62,27%	100,41%	108,34%	164,93%	39,07%
-91,76%	-75,46%	-49,67%	-91,22%	-100,00%
-5,94%	-4,49%	-5,37%	-4,14%	-5,58%
34,19%	25,39%	33,28%	-0,15%	-23,53%
-4,08%	0,00%	-1,99%	1,51%	-7,97%
-1,74%	-7,22%	64,04%	4,14%	3,84%
335,39%	500,12%	547,67%	198,80%	54,63%
-6,65%	-22,18%	-19,88%	17,07%	41,35%
-10,86%	-21,50%	-33,37%	-57,17%	-29,74%
-39,91%	-64,93%	-38,94%	25,34%	5,87%
8,70%	1,16%	12,77%	9,26%	9,81%
-1,82%	-2,90%	-0,26%	-0,37%	-1,25%
21,84%	16,30%	12,69%	3,89%	-5,86%
0,00%	0,00%	0,00%	0,00%	0,00%
42,06%	30,61%	26,02%	13,39%	5,51%
6,81%	9,35%	-4,65%	-30,89%	-93,20%
52,85%	22,53%	27,26%	31,65%	2,20%
48,95%	31,18%	35,43%	40,08%	10,80%
69,31%	-14,00%	-7,27%	-3,92%	-34,10%
22,49%	16,43%	12,99%	4,48%	-5,69%
-22,31%	-19,63%	-6,58%	-4,06%	25,85%
-11,73%	-13,95%	-17,66%	-15,55%	-14,67%
-16,06%	-9,07%	-15,60%	-32,62%	-39,19%
-6,47%	-6,41%	-1,60%	-2,35%	-4,91%
-29,44%	-30,91%	-30,78%	-15,43%	-6,48%
-68,13%	14,62%	1,79%	-8,31%	-14,02%
-100,00%	-100,00%	-100,00%	-65,92%	748,27%
-19,54%	-17,37%	-7,30%	-5,21%	17,58%
-46,40%	-44,38%	-43,61%	4,92%	-37,75%
29,17%	24,07%	22,45%	0,92%	-21,32%
-2,49%	2,34%	0,70%	-21,99%	-7,07%
-27,95%	-18,85%	-5,23%	0,15%	10,46%
-86,43%	-80,02%	-100,00%	-100,00%	22,15%
-22,77%	28,65%	24,87%	64,36%	21,69%
-75,57%	-48,72%	-52,79%	-60,92%	42,69%
-7,33%	-6,68%	-7,28%	0,54%	-24,05%
-1,82%	-2,90%	-0,26%	-0,37%	-1,25%

2024-2019	2023-2019	2022-2019	2021-2019	2020-2019
27,25%	24,93%	24,28%	0,16%	-19,18%
-28,76%	-32,35%	-31,95%	-37,52%	-37,01%
1197,55%	579,17%	3700,54%	2726,16%	-2969,32%
25,05%	27,27%	38,94%	4,56%	-26,47%
21,37%	14,28%	9,93%	2,77%	-11,42%
8,93%	11,49%	7,36%	-2,01%	-2,02%
30,00%	27,00%	28,91%	3,33%	-14,42%
-53,73%	-76,36%	81,70%	-64,30%	-21,92%
-54,90%	-49,44%	-59,49%	-55,11%	-61,98%
21,57%	8,83%	6,56%	-22,31%	-70,50%
385,19%	244,28%	153,13%	136,14%	52,11%
383,69%	220,33%	130,17%	117,53%	-41,84%
-100,00%	-102,08%	-100,00%	-98,40%	-32,30%
-100,00%	-99,99%	-98,56%	-99,77%	-90,08%
-28,85%	-22,75%	-44,79%	-58,85%	-98,82%
5,88%	75,26%	-20,79%	-72,82%	13,69%
77,51%	76,19%	27,47%	-24,75%	27,13%
4,10%	1,26%	-4,28%	-29,81%	-90,78%
-10,86%	-18,45%	-2,93%	-30,02%	-91,07%
9,48%	8,35%	-4,76%	-29,74%	-90,68%
6,81%	9,35%	-4,65%	-30,89%	-93,20%
69,31%	-14,00%	-7,27%	-3,92%	-34,10%
6,85%	9,36%	-4,57%	-30,82%	-93,15%

Vertical Analysis

2024		2023		2022		2021		2020		2019	
PARTIAL	TOTAL	PARTIAL	TOTAL	PARTIAL	TOTAL	PARTIAL	TOTAL	PARTIAL	TOTAL	PARTIAL	TOTAL
36,40%	25,06%	35,65%	25,19%	35,88%	24,46%	34,27%	23,69%	33,42%	22,96%	36,45%	26,19%
54,79%	37,72%	55,04%	38,90%	56,81%	38,73%	57,15%	39,51%	59,05%	40,57%	56,73%	40,76%
1,28%	0,88%	0,90%	0,64%	0,85%	0,58%	0,84%	0,58%	0,77%	0,53%	0,81%	0,58%
0,67%	0,46%	0,55%	0,39%	0,51%	0,35%	0,59%	0,41%	0,45%	0,31%	0,59%	0,42%
2,43%	1,67%	2,12%	1,50%	1,87%	1,27%	1,43%	0,99%	1,16%	0,79%	0,81%	0,58%
3,29%	2,26%	4,27%	3,02%	2,44%	1,66%	3,78%	2,61%	4,25%	2,92%	3,42%	2,46%
0,11%	0,07%	0,12%	0,08%	0,10%	0,07%	0,29%	0,20%	0,05%	0,03%	0,09%	0,07%
1,00%	0,69%	1,21%	0,86%	1,27%	0,87%	1,60%	1,10%	0,85%	0,58%	0,58%	0,42%
0,05%	0,03%	0,13%	0,10%	0,28%	0,19%	0,05%	0,03%	0,00%	0,00%	0,52%	0,38%
100,00%	**68,84%**	**100,00%**	**70,68%**	**100,00%**	**68,18%**	**100,00%**	**69,14%**	**100,00%**	**68,70%**	**100,00%**	**71,86%**
34,43%	10,73%	34,57%	10,14%	32,96%	10,49%	25,49%	7,87%	19,42%	6,08%	27,89%	7,85%
14,61%	4,55%	16,37%	4,80%	14,39%	4,58%	15,38%	4,75%	13,88%	4,34%	16,56%	4,66%
10,42%	3,25%	10,57%	3,10%	16,76%	5,33%	10,98%	3,39%	10,90%	3,41%	11,52%	3,24%
3,89%	1,21%	5,77%	1,69%	5,58%	1,78%	2,66%	0,82%	1,37%	0,43%	0,97%	0,27%
35,25%	10,98%	31,58%	9,26%	29,16%	9,28%	43,98%	13,58%	52,84%	16,54%	41,05%	11,55%
0,87%	0,27%	0,82%	0,24%	0,63%	0,20%	0,41%	0,13%	0,68%	0,21%	1,06%	0,30%
0,52%	0,16%	0,33%	0,10%	0,51%	0,16%	1,09%	0,34%	0,91%	0,29%	0,95%	0,27%
100,00%	**31,16%**	**100,00%**	**29,32%**	**100,00%**	**31,82%**	**100,00%**	**30,86%**	**100,00%**	**31,30%**	**100,00%**	**28,14%**
	100,00%		**100,00%**		**100,00%**		**100,00%**		**100,00%**		**100,00%**
97,36%	42,07%	97,77%	40,61%	97,62%	38,31%	97,33%	35,35%	97,71%	32,32%	97,88%	33,90%
32,21%	13,92%	33,89%	14,07%	34,92%	13,70%	37,77%	13,72%	41,84%	13,84%	39,46%	13,67%
57,23%	24,73%	55,36%	22,99%	55,04%	21,60%	53,56%	19,45%	55,21%	18,26%	49,35%	17,09%
7,92%	3,42%	8,53%	3,54%	7,66%	3,01%	6,00%	2,18%	0,65%	0,22%	9,08%	3,14%
2,64%	1,14%	2,23%	0,93%	2,38%	0,94%	2,67%	0,97%	2,29%	0,76%	2,12%	0,73%
2,08%	0,90%	1,93%	0,80%	2,05%	0,81%	2,30%	0,83%	2,01%	0,67%	1,71%	0,59%
0,56%	0,24%	0,30%	0,12%	0,33%	0,13%	0,37%	0,14%	0,28%	0,09%	0,41%	0,14%
100,00%	**43,22%**	**100,00%**	**41,53%**	**100,00%**	**39,24%**	**100,00%**	**36,32%**	**100,00%**	**33,08%**	**100,00%**	**34,64%**
69,30%	22,43%	69,81%	23,46%	72,33%	26,55%	72,64%	27,29%	76,82%	36,13%	71,77%	28,35%
1,81%	0,58%	1,71%	0,58%	1,46%	0,54%	1,47%	0,55%	1,19%	0,56%	1,65%	0,65%
2,28%	0,74%	2,41%	0,81%	1,99%	0,73%	1,56%	0,58%	1,13%	0,53%	2,19%	0,86%
22,36%	7,24%	21,79%	7,32%	20,42%	7,50%	19,82%	7,45%	15,56%	7,32%	19,24%	7,60%
4,16%	1,35%	3,96%	1,33%	3,54%	1,30%	4,23%	1,59%	3,77%	1,77%	4,74%	1,87%
0,09%	0,03%	0,32%	0,11%	0,25%	0,09%	0,22%	0,08%	0,17%	0,08%	0,23%	0,09%
0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,07%	0,03%	1,35%	0,64%	0,19%	0,07%
100,00%	**32,37%**	**100,00%**	**33,61%**	**100,00%**	**36,71%**	**100,00%**	**37,57%**	**100,00%**	**47,03%**	**100,00%**	**39,49%**
22,78%	5,56%	23,47%	5,83%	23,95%	5,76%	41,09%	10,73%	32,28%	6,42%	39,38%	10,19%
62,32%	15,22%	59,44%	14,78%	59,04%	14,20%	44,88%	11,71%	46,32%	9,21%	44,71%	11,56%
11,76%	2,87%	12,25%	3,05%	12,14%	2,92%	8,67%	2,26%	13,67%	2,72%	11,17%	2,89%
0,94%	0,23%	1,05%	0,26%	1,23%	0,30%	1,20%	0,31%	1,76%	0,35%	1,21%	0,31%
0,02%	0,00%	0,02%	0,01%	0,00%	0,00%	0,00%	0,00%	0,18%	0,04%	0,11%	0,03%
1,89%	0,46%	3,13%	0,78%	3,06%	0,73%	3,71%	0,97%	3,63%	0,72%	2,27%	0,59%
0,30%	0,07%	0,63%	0,16%	0,59%	0,14%	0,45%	0,12%	2,16%	0,43%	1,15%	0,30%
100,00%	**24,42%**	**100,00%**	**24,86%**	**100,00%**	**24,05%**	**100,00%**	**26,10%**	**100,00%**	**19,89%**	**100,00%**	**25,87%**
	100,00%		**100,00%**		**100,00%**		**100,00%**		**100,00%**		**100,00%**

ANNEXES

ASSUMPTIONS

- We exploit the reclassification of the balance sheets and income statements to better understand and get a more clear vision of the components for all the three companies benchmarked:

PIRELLI

Invested Capital		Coverage	
Property, plant and equipment	3.427.756	Share capital	1.904.375
Intangible assets	5.159.729	Reserves	3.383.715
Investments in associates and joint ventures	120.790	Net income / (loss)	467.981
Other financial assets at fair value through other Comprehensive Income	63.294	Equity attributable to non-controlling interests:	156.183
Deferred tax assets	228.740	Reserves	123.060
Other receivables	309.526	Net income / (loss)	33.123
Other assets	93.838	**Shareholders' equity**	**5.912.254**
Derivative financial instruments	4.326	Borrowings from banks and Other financial institutions	3.068.598
Fixed assets	**9.407.999**	Derivative financial instruments	10.121
Trade receivables	622.915	Borrowings from banks and other financial institutions	760.857
Other receivables*	444.010	Cash and cash equivalents	-1.502.741
Inventories	1.467.707	Other financial assets at fair value through Income Statement	-165.965
Trade payables	-2.081.617	Derivative financial instruments	-22.323
Other payables (liabilities)	-79.947	**Net financial debts**	**2.148.547**
Deferred tax liabilities (non current)	-990.250		8.060.801
Other payables (assets)	-392.744		
Tax receivables	9.973		
Tax receivables	36.989		
Tax payables	-4.001		
Tax payables	-63.150		
Net Working Capital	**-1.030.115**		
Provisions for liabilities and charges	-101.123		
Provisions for employee benefit obligations	-184.040		
Provisions for liabilities and charges	-31.363		
Provisions for employee benefit obligations	-557		
Provisions	**-317.083**		
Total	**8.060.801**		

Reclassified Income Statement	
Revenues from sales and services	6.773.324
Other income	346.455
Changes in inventories Of unfinished, semi-finished and finished products	72.455
Total Revenues	**7.192.234**
Raw materials and consumables used (net of change in inventories)	-2.177.416
Raw Material	**-2.177.416**
Other costs	-2.227.399
General and administrative expanses	**-2.227.399**
VALUE ADDED	**2.787.419**
Personnel expenses	-1.301.297
Personnel costs	**-1.301.297**
EBITDA	**1.486.122**
Amortisation, depreciation and impairment	-574.950
Net impairment of financial assets	-10.303
Increases in fixed assets due to internal works	2.121
Depreciation and Amortization	**-583.132**
OPERATING PROFIT (EBIT)	**902.990**
Financial income	136.326
Financial expenses	-422.911
NET Financial Expenses/Income	**-286.585**
Net income/(loss) from equity investments	31.388
PRETAX INCOME	**647.793**
Taxes	-146.689
NET INCOME	**501.104**

MICHELIN

Invested Capital		Coverage	
Goodwill	2829	Share capital	353
Intangible assets	2120	Share premiums	2326
Property plant and equipment (PP&E)	12750	Reserves	15946
Right-of-use assets	1232	Non-controlling interests	9
assets	1151	**Total equity**	**18634**
Investments in equity-accounted companies	849	liabilities	4934
Deferred tax assets	1081	Non-current lease liabilities	872
Fixed assets	**22012**	Current financial liabilities	1375
Inventories	5699	Current lease liabilities	258
Trade receivables	3595	Current financial assets	-544
Other current assets	1564	Cash and cash equivalents	-3936
Trade payables	3086	**Net Financial Debts**	**2959**
Trade payables under reverse factoring agreements	689	**Total**	**21593**
Deferred tax liabilities	544		
Net Working Capital	**6539**		
Provisions for employee benefit obligations	2730		
Provisions and other non-current liabilities	928		
Provisions and other current liabilities	3302		
Provisions	**6960**		
Total	**21591**		

Reclassified Income Statement	
Sales	27193
Total Revenues	**27193**
Cost of sales (Raw material)	-9468
Raw Material	**-9468**
Transportation of goods	-1370
Other expenses	-3390
Other operating income and expenses	-747
General and administrative expenses	-5507
VALUE ADDED	**12218**
Employee benefit costs	-7603
Personnel costs	**-7603**
EBITDA	**4615**
Amortisation and depreciation	-1983
OPERATING PROFIT (EBIT)	**2632**
Cost of net debt	(77)
Other financial income and expenses	**19**
Net interest on employee benefit obligations	88
Share of profit/(loss) from equity-accounted companies	40
NET Financial Expenses/Income	**-186**
PRETAX INCOME	**2446**
Income tax	-555
NET INCOME	**1891**

HANKOOK

Invested Capital		Coverage	
Long-term financial instruments	11.529	Issued capital	42006035,9
Long-term trade receivables and other receivables	37.146.473	Other paid-in capital	2008954754
Other financial assets	68.394.794	Other capital components	489545667,6
Financial assets at fair value through other comprehensive i	18.042.647	Retained earnings	4987764641
Financial assets at fair value through profit or loss	65.640.443	Non-controlling interests	64078076,9
Investments in associates and joint ventures	1.235.542.552	**Total equity**	**7.592.349.176**
Property plant and equipment	3.182.611.811	Borrowings - CURRENT	839.839.730
Investment properties	78.733.049	Borrowings - NON CURRENT	400.918.209
Intangible assets	169.727.163	Net defined benefit liabilities	71.829.164
Other non-current assets	759.418.625	Other financial liabilities - NON CURRENT	25.824.611
Net defined benefit assets	2.492.832	Other non-current liabilities - NON CURRENT	106.281.104
Deferred tax assets	197.769.710	Other financial liabilities - CURRENT	267.007.936
Fixed Assets	**5.815.531.628**	Other current liabilities -CURRENT	227.881.939
Trade receivables and other receivables	1.399.333.343	Cash and cash equivalents	-1.276.582.628
Inventories	1.616.722.841	Short-term financial instruments	-463.945.956
Other current assets	124.470.332	Financial assets at fair value through profit or loss	-33.862.689
Trade payables and other payables	-1.008.115.516	Other financial assets	-3.695.969
Current tax assets	15.151.341	**Net Financial Debts**	**161.495.452**
Current tax liabilities	-144.657.413	**Total**	**7.753.844.627**
Deferred tax liabilities	-31.361.458		
Net Working Capital	**1.971.543.470**		
Provisions	13.104.650		
Provisions	20.125.820		
Provisions	**33.230.471**		
Total	**7.753.844.627**		

Reclassified Income Statement	
Sales	6.383.183.084
Total Revenues	**6.383.183.084**
Purchase of raw materials and others	2.301.691
Raw Material	**2.301.691**
Cost of sales	-4.031.178.597
Selling and administrative expenses	-1.156.839.560
General and administrative expenses	**-5.188.018.157**
VALUE ADDED	**1.197.466.618**
Employees benefits	1.000.248
Personnel costs	**1.000.248**
EBITDA	**1.198.466.866**
Depreciation(*)	336.764
Amortization	12.533
OPERATING PROFIT (EBIT)	**1.198.803.630**
Financial income	149.041.061
Financial cost	-97.774.155
Non-operating income	201.626.679
Profit or loss in investment to associates	-63.267.341
Profit or loss arising from net monetary assets	-301.708
Non-operating expense	317.123.445
NET Financial Expenses/Income	**-127.798.908**
PRETAX INCOME	**1.071.004.722**
Income tax expense	-300.255.479
NET INCOME	**770.749.243**

ASSUMPTIONS

- For the computation of all the indicators, the formulas and numbers used, are available in the excel file with all the components explicitated and combined step by step.
- For the risk matrix, we computed all the data manually, using informations provided by MarketScreener, a very well evaluated website with live and past financial datas:
- Bridgestone: https://it.marketscreener.com/quotazioni/azione/BRIDGESTONE-CORPORATION-6492260/
- Goodyear: https://it.marketscreener.com/quotazioni/azione/THE-GOODYEAR-TIRE-RUBBER--12202146/
- Continental: https://it.marketscreener.com/quotazioni/azione/CONTINENTAL-AG-56358375/
- Yokohama: https://it.marketscreener.com/quotazioni/azione/THE-YOKOHAMA-RUBBER-COMPA-6492077/
- Sumitomo: https://it.marketscreener.com/quotazioni/azione/SUMITOMO-RUBBER-INDUSTRIE-6493808/
- Kuhmo: https://it.marketscreener.com/quotazioni/azione/KUMHO-TIRE-CO-INC-6497520/
- For Pirelli, Michelin and Hankook everything is computed from the reports, that are available in the links written before
- we positioned the companies on the graph, in order to these datas:

	X (ROA)	**Y (D/E)**
Pirelli	6,60%	1,313943548
Michelin	7,04%	1,004507889
Hankook	11,12%	0,415806423
Bridgestone	7,56%	0,511
Goodyear	1,42%	3,271
Continental	3,13%	1,497
Yokohama	4.49%	0,920
Sumitomo	1.25%	0,984
Kumho	6,37%	1,815
AVG	5,4422%	1,303

AI ANSWER- PROMPT 1

THEORETICAL FRAMEWORK FOR ANALYZING PIRELLI'S 2024 ANNUAL REPORT

1) **Business Model and Structure**: what matters for Pirelli

Before touching any numbers, the core is understanding Pirelli's High Value strategy — this is the lens you use to interpret the entire report.

What "High Value" means and why it is central

The High Value segment covers tyres that are:

high-performance (≥18 inches, UHP, racing, premium),

supplied to premium/luxury OEMs (BMW, Mercedes, Porsche, Tesla…),

high in technology and innovation,

associated with structurally higher margins.

Key qualitative aspects to analyse

For Pirelli, these are the qualitative pillars:

Product mix: share of revenue from High Value vs Standard.

→ Higher HV mix = stronger margins and positioning.

Sales channels: OEM vs Aftermarket (replacement).

OEM = volumes & prestige; Replacement = margins & stability.

Geographic exposure: Europe, China, NAFTA — each with different pricing, demand, and competitive dynamics.

Industrial footprint & capacity: which plants are High Value–ready, geographical concentration, efficiency.

R&D intensity and innovation cycle: crucial in the tyre sector; directly tied to premium pricing power.

OEM partnerships: co-development agreements with premium car makers are a strong competitive moat.

2) **Financial Analysis**: key items in the automotive/tyre industry

Income Statement

Important lines to focus on:

Revenues: not just the level, but the composition (HV vs Standard, OEM vs Replacement).

Cost of goods sold (COGS): raw materials (rubber), energy, labour, industrial costs.

Gross margin: a critical indicator of product mix quality.

SG&A: especially R&D, marketing, distribution.

EBIT and EBIT margin: core profitability in automotive components.

FX effects: key due to global production/sales footprint.

Balance Sheet

The tyre industry is capital-intensive. Key items:

PP&E: plants, machinery, capacity expansion.

Inventories: very important; changes can signal demand shifts.

Trade receivables: sensitive to market slowdowns.

Financial debt: structure, maturity, and cost of debt matter.

Net working capital: its fluctuations strongly influence cash flows.

Cash Flow Statement

Focus on:

Operating cash flow: must be solid and consistent.

Capex: structurally high; split between maintenance vs growth capex.

Free Cash Flow (FCF): the real measure of financial sustainability.

Cash conversion ratio: FCF / EBIT — important for capital-intensive businesses.

3) **Financial Ratios:** conceptual explanation (textbook-style)

A) Profitability ratios

ROIC = NOPAT / Invested Capital

Core indicator of economic value creation independent of leverage.

Gross Margin = (Revenues – COGS) / Revenues

Measures industrial value creation → critical for High Value tyres.

EBIT Margin = EBIT / Revenues

Shows operational efficiency and pricing power.

Net Margin = Net Income / Revenues

Final profitability after financing and tax effects.

AI ANSWER- PROMPT 1

B) Liquidity ratios
Current Ratio = Current Assets / Current Liabilities
Quick Ratio = (Current Assets – Inventories) / Current Liabilities
Quick ratio is more meaningful for companies with large inventories like tyre manufacturers.
C) Leverage ratios
Debt/Equity
Net Debt / EBITDA
Key indicator of debt sustainability.
Interest Coverage = EBIT / Interest Expense
Measures ability to service debt.
D) Operational efficiency ratios
Inventory Turnover = COGS / Average Inventory
Essential in a sector with significant warehousing.
Receivables Days / Payables Days
Show working capital management quality.
4) **Peer Group Selection**: methodology and logic
Step 1: Identify direct peers (pure tyre manufacturers)
These are the most reliable benchmarks:
Michelin
Bridgestone
Continental (Tyre division)
Goodyear
Step 2: Assess comparability along three dimensions
A) Business model
High Value orientation vs mass-market.
For Pirelli, this is the most important comparable criterion.
B) Margin structure
Companies with similar:
gross margin,
EBIT margin,
ROIC.
Premium-positioned players form a more appropriate benchmark.
C) Financial structure
Similar leverage levels → avoids distortions in ROE and valuation multiples.
Should we include cross-industry premium automotive suppliers?
Yes — but only for secondary comparison, to understand broader premium dynamics.
These may include:
Brembo
Aptiv
Bosch Automotive Components (partially)
They can help benchmark:
innovation cycles,
premium pricing dynamics,
ROIC in high-tech components.
But they are not pure peers.
They should be used only for qualitative or high-level comparison.

AI ANSWER-PROMPT 2

What follows is a complete, exam-ready quantitative analysis, written in a professor / equity analyst style.

PRACTICAL APPLICATION
Quantitative Analysis of Pirelli – FY 2024 vs FY 2023
(Using the theoretical framework defined in Step 1)

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1. Pirelli – Income Statement Analysis (2024 vs 2023)
Revenues
€ million 2023 2024 Δ YoY
Revenues 6,650 6,773 +1.9%
Source: Pirelli Annual Report 2024, Consolidated Income Statement, p. 178
Drivers
• Positive price/mix driven by higher penetration of High Value tyres (≥18"), especially in Europe and North America.
• Volumes broadly stable, with weakness in China offset by premium OEM resilience.
• FX slightly negative, partially offsetting organic growth.
Interpretation: Revenue growth is quality-driven, not volume-driven — fully consistent with Pirelli's High Value strategy.

EBITDA
€ million 2023 2024 Δ
EBITDA 1,480 1,550 +4.7%
EBITDA Margin 22.3% 22.9% +60 bps
Source: Pirelli Annual Report 2024, Management Discussion & Financials, p. 182
Drivers
• High Value mix improvement
• Lower raw material pressure YoY
• Better operating leverage
Key point: Margin expansion confirms structural pricing power, not temporary cost relief.

EBIT
€ million 2023 2024 Δ
EBIT 980 1,060 +8.2%
EBIT Margin 14.7% 15.6% +90 bps
Source: Consolidated Income Statement, p. 178
EBIT grows faster than revenues → industrial efficiency + disciplined capex.

Net Income
€ million 2023 2024
Net Income 435 465
Drivers
• Higher operating profitability
• Slightly higher financial charges due to interest rates
• Stable effective tax rate

---

2. Balance Sheet & Capital Structure
Net Debt
€ million 2023 2024
Gross Debt 4,020 4,210
Cash & Equivalents (1,420) (1,550)
Net Debt 2,600 2,660
Source: Consolidated Statement of Financial Position, p. 180
Net Debt increases marginally, fully absorbed by EBITDA growth.

AI ANSWER-PROMPT 2

Working Capital
• Inventories slightly up, reflecting:
o broader High Value product range
o OEM customization
• No signs of over-stocking.

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3. Cash Flow Analysis
€ million 2023 2024
Operating Cash Flow 1,120 1,190
Capex (650) (720)
Free Cash Flow 470 470
Source: Cash Flow Statement, p. 184
Interpretation
• Capex intentionally high, focused on premium capacity & technology.
• Cash conversion remains solid for a capital-intensive industry.

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4. Key Financial Ratios (Calculated & Interpreted)
Profitability
Ratio 2023 2024
Gross Margin 39.1% 40.0%
EBITDA Margin 22.3% 22.9%
EBIT Margin 14.7% 15.6%
ROIC 11.8% 12.6%
ROIC above estimated WACC → value creation confirmed.

Liquidity & Leverage
Ratio 2023 2024
Current Ratio 1.35x 1.32x
Net Debt / EBITDA 1.76x 1.72x
Interest Coverage 7.2x 7.6x
Financial structure is conservative and sustainable.

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5. Peer Group Re-Selection (Data-Driven)
Initial theoretical peers
• Michelin
• Bridgestone
• Continental
• Goodyear
After observing 2024 data → Revised peer group
Company Business Model Fit Conclusion
Michelin Premium + technology + ROIC Core peer
Bridgestone Mixed premium/volume ⚠ Partial
Continental Tyres More volume-oriented ⚠ Weak fit
Goodyear Low margins, high leverage Not comparable
Hankook Upgrading to premium Secondary peer
Correct peer set for Pirelli 2024:
Michelin (primary), Hankook (secondary)

AI ANSWER-PROMPT 2

6. Peer Comparison Table (2024)
2024 Pirelli Michelin Hankook
Revenues (€ bn) 6.8 28.6 6.3
EBITDA Margin 22.9% 19.8% 18.5%
EBIT Margin 15.6% 13.2% 11.4%
ROIC 12.6% 11.9% 9.8%
Net Debt / EBITDA 1.7x 1.5x 0.9x
Sources:
Pirelli Annual Report 2024
Michelin Annual Report 2024
Hankook Consolidated Audit Report 2024

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7. Final Academic Conclusion
• Pirelli’s 2024 performance confirms the success of the High Value strategy.
• Growth is margin-led, not volume-led.
• ROIC, margins and cash generation outperform most peers.
• Michelin is the only true global comparable; Goodyear and Continental are structurally different.

From an academic and financial standpoint, Pirelli should be analysed as a premium industrial company, not a cyclical commodity producer.

NET INCOME

€ million	2023	2024
Net Income	435	465

CASH FLOW ANALYSIS

€ million	2023	2024
Operating Cash Flow	1,12	1,19
Capex	(650)	(720)
Free Cash Flow	470	470

NET DEBT

€ million	2023	2024
Gross Debt	4,02	4,21
Cash & Equivalents	(1,420)	(1,550)
Net Debt	2,6	2,66

ANNEXES

SOURCES

Report Pirelli 2024-2023: https://corp-assets.pirelli.com/corporate/Annual_Report_Pirelli_2024_ENG.pdf

Report Pirelli 2022.2021: https://corp-assets.pirelli.com/corporate/2021_PIRELLI_ANNUAL_REPORT_ENG.pdf

Report Pirelli 2020-2019: https://corp-assets.pirelli.com/corporate/PIRELLI_ANNUAL_REPORT_2020_ENG_INTERATTIVO.pdf

Report Michelin 2024-2023: https://dgaddcosprod.blob.core.windows.net/cxf-corporate/attachments/m0tiueu4lcna0lvkt39l0unt-2024-universal-registration-document.pdf

Report Michelin 2022-2021: https://dgaddcosprod.blob.core.windows.net/corporate-production/attachments/clktdcbbu09gq2fhhcs221myq-michelin-deu-2022-us-mel-v2.pdf

Report Michelin 2020-2019: https://dgaddcosprod.blob.core.windows.net/corporate-production/attachments/clktcyhmp07zw2fhhepab5sxw-michelin-2020-deu-uk-mel-def.pdf

Report Hankook 2024-2023: https://www.hankooktire.com/wsvc/api/pdf-viewer/document.servlet?documentPath=/content/dam/hankooktire/global/pdf/audit/2024_HankookTire_Technology_Consolidated_Audit_Report.pdf

Report Hankook 2022-2021: https://www.hankooktire.com/wsvc/api/pdf-viewer/document.servlet?documentPath=/content/dam/hankooktire/global/pdf/audit/2022_HankookTire_Technology_Consolidated_Audit_Report.pdf

Report Hankook 2020-2019: https://www.hankooktire.com/wsvc/api/pdf-viewer/document.servlet?documentPath=/content/dam/hankooktire/global/pdf/audit/Hankooktire_Audit_Report_2020.pdf

PESTLE Analysis:

- Tire industry statistics: https://www.consumeraffairs.com/automotive/tire-industry-statistics.html
- Mission, Vision, Purpose (Pirelli): https://corporate.pirelli.com/corporate/it-it/aboutus/aboutus
- Board of directors (Pirelli): https://corporate.pirelli.com/corporate/en-ww/governance/board-of-directors-and-corporate-bodies/board-of-directors/composition
- Sustainability (Michelin): https://www.michelin.com/en/sustainability/company
- Board of directors (Michelin): https://www.michelin.com/en/group/corporate-governance
- Polymer composite solutions for high-potential markets: https://www.michelin.com/en/group/activities/materials
- Tire composite: https://www.michelin.com/en/group/activities/tires
- LeMans 24 hours: https://www.michelin.com/en/publications/competition/michelin-innovations-play-central-role-at-the-centenary-le-mans-24-hours
- Data on industry context provided in financial reports of each benchmarked company.