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Beyond GPS:
Equity Research Garmin Ltd.

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A Project carried out on the Master in Finance Program, under the supervision of:

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This equity research report reviews Garmin Ltd., a technology company specializing in products for active lifestyles with extensive presence across outdoor, fitness, marine, aviation, and automotive markets. Garmin Ltd. is renowned for its exemplary profitability and strict cost control, outperforming its peers even amid challenging global conditions. The report recognizes the company's consistent revenue growth and solid profit margins. However, despite Garmin's impressive operational performance and strategic positioning in diverse markets, the stock appears overvalued. Utilizing valuation techniques such as DCF, CCA and scenario analysis, a year-end 2025 target price of \$139.43 is proposed, reflecting a potential 34% downside from the current market price. The recommendation is SELL, as the current valuation leaves limited room for upside, overshadowing the company's robust fundamentals.

Keywords: Equity Research, Garmin Ltd., Valuation

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This report is part of the “Equity Research Garmin Ltd.: Navigating Sustainable Growth” report (annexed), developed by Moritz Reusser (57863) and Lennart Hilbing (57868) and should be read as an integral part of it.

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Introduction

This document forms part of a joint equity research report focusing on the valuation of shares of Garmin Ltd., a global technology company specializing in active lifestyle products across the fitness, outdoor, aviation, marine and automotive markets. The report begins with a brief overview of Garmin's business model and stock performance. It proceeds by examining the macroeconomic landscape and analyzing Garmin's diverse operating segments. To gauge the company's standing, the analysis continues with a detailed review of the financial statements. Leveraging these financial insights and projections for macroeconomic and market trends, the report forecasts revenue and profitability across Garmin's segments. The valuation is performed using a Discounted Cash Flow model, supplemented by Comparable Company Analysis and a Dividend Discount Model. To navigate potential risks and uncertainties, the report incorporates scenario and sensitivity analyses, along with a Monte Carlo simulation. In the final step, the report addresses valuation risks and ESG factors to provide a comprehensive perspective. It concludes with a SELL recommendation, underscoring a projected downside risk for Garmin's shares based on the valuation and analyses conducted.

Company Overview

Registered in Switzerland with its operational headquarters in Olathe, Kansas, **Garmin Ltd.** (hereinafter referred to as "Garmin") is a global technology company specializing in products for active lifestyles. Founded in 1989, Garmin initially operated through its Taiwan-based parent company, Garmin Corporation. To enable its public offering on the Nasdaq in the United States, Garmin Ltd. was established in the Cayman Islands in 2000 as a holding company. Later, the company redomiciled to Switzerland. In December 2021, after 21 years, Garmin moved its listing to the New York Stock Exchange (NYSE), where it trades under the ticker symbol GRMN. Currently, Garmin employs more than 20,000 people across 35 countries. In the fiscal year 2024, the company is anticipated to report \$6,172 million in revenue. A significant milestone was recently achieved by surpassing lifetime sales of more than 200 million products worldwide. The final Saturday in December marks the end of Garmin's fiscal year, though the exact date may change from year to year.

Business Model and Product Overview

Garmin is a diversified technology company that has grown into a leading player in multiple global markets through its commitment to innovation, quality and operational excellence. It operates across five key segments: Fitness, Outdoor, Aviation, Marine and Auto, developing technological products and solutions

Focus on advanced technological products and solutions with vertical integrated supply chains.

designed to integrate seamlessly into customers' daily lives and enhance their experiences. One of Garmin's unique characteristics lies in its vertically integrated business model. By managing all phases of its operations - including research and development (R&D), manufacturing, distribution and customer support - Garmin achieves elevated product quality, cost efficiencies, efficient product innovation pipelines and streamlined production processes. With manufacturing and distribution facilities in Taiwan, China, the Netherlands, Poland and the United States, Garmin can effectively address the needs of the diverse, global customer base. This global presence not only ensures efficient logistics and cost management but also enables the company to cater to specific market demands across regions. Garmin's focus on long-term growth is underpinned by ongoing investments in infrastructure, technology and workforce. Its robust commitment to sustainability aligns with its business goals, fostering a resilient organization positioned to deliver enduring value to customers and stakeholders alike.

The release of the Global Positioning System (GPS) for civilian purposes marked the beginning of Garmin's business. In addition to GPS, many products utilize other global navigation satellite systems (GNSS). Today Garmin offers a broad range of products in its distinct segments:

The **fitness** segment features running, multisport and smartwatches, cycling products, fitness scales, monitors and an integrated fitness platform. In the **outdoor** segment, Garmin serves enthusiasts with adventure watches, InReach satellite communicators, handhelds, golf devices and Garmin's original automotive consumer line.¹ The **aviation** segment provides avionics solutions such as flight decks, flight displays, navigation systems, autopilots and safety technologies. The **marine** segment offers chartplotters, fishfinders, sonar systems, autopilots and radar solutions. Finally, the **auto** segment supplies hardware and software, including infotainment units and domain controllers.

Segment Revenue Share (2024E)

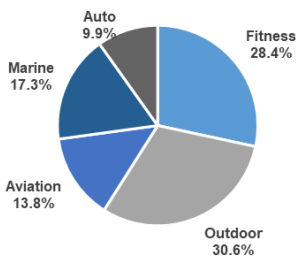


Figure 1: Segment Revenue Share 2024

To reach customers effectively, the company employs a dedicated distribution strategy. Products are offered through a wide range of sales channels, including indirect channels like a global network of independent retailers, dealers, distributors, installation and repair shops and original equipment manufacturers (OEM). Additionally, direct sales are made through the online store, company-owned retail locations and subscription-based connected services.

Garmin's **revenue** is reported by both business segment and geographic region. For the full year of 2024, the fitness segment is expected to contribute 28.4% of total revenue, while the outdoor segment is the largest, comprising 30.6% of total revenue. The aviation and marine segments are anticipated to yield significant contributions as well, at 13.8% and 17.3%, respectively, with the auto segment

¹ For consistency in analysis and forecasting, we reassigned the auto consumer segment to outdoor starting 2019, the first year it was reported separately from the auto OEM (from here on named "auto segment") business, despite Garmin officially reassigning it in 2023.

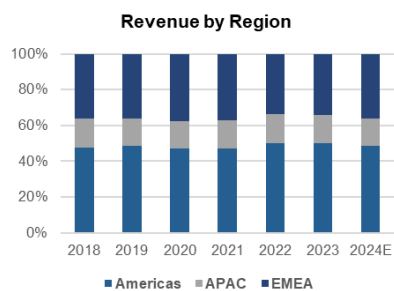


Figure 2: Revenue by Region 2018-2024

representing 9.9% of overall revenue. In terms of regional revenue distribution for FY 2024, Garmin generates 48.8% of its total 2024 revenue from the *Americas* region. The United States stands out as the only country contributing over 10% of total revenue, though the exact amount is unclear; it is expected to represent a significant share of the *Americas* region. The *EMEA* region (Europe, Middle East and Africa) accounted for 36.1% of total revenue, while the *APAC* region (Asia-Pacific) contributed 15.1%.

Over the years, Garmin has complemented its organic growth strategy with **acquisitions**, strengthening its core operations and enabling diversification into new technologies to seize growth opportunities. A notable example is the 2019 acquisition of Tacx, a leading manufacturer of indoor bike trainers, which expanded Garmin’s product portfolio in the fitness segment. This acquisition proved especially valuable during the COVID-19 pandemic, as demand for indoor training solutions surged. In recent years, among others, Firstbeat Analytics, DeLorme, FltPlan, Navionics and JL Audio have been the targets of the company’s acquisition strategy. Garmin’s acquisitions share a common characteristic: the exact details of each deal are not publicly disclosed, ensuring that specific terms remain confidential and unavailable to competitors.

Industry Analysis

Macroeconomic Environment

In recent years, the global economy has been impacted by transformative events. The COVID-19 pandemic in 2020 triggered an abrupt global economic downturn, causing GDP contractions in many regions and resulting in an overall decline of 2.6% in global GDP. This disruption was followed by a robust rebound in 2021, as countries began to recover and achieve catch-up growth, spurring renewed economic activity. In 2022, global GDP growth reached 3.8%, though certain industrialized regions, such as Western Europe, experienced slowing growth rates amid ongoing supply chain issues, inflation and energy price volatility. In 2023, economic performance remained largely positive across most regions, achieving a global growth rate of 4.1%, although a slight contraction was noted in the Middle East and Africa. Looking to 2024, the IMF anticipates a moderation in economic growth, with expansion slowing in several major regions. Americas and Europe, both essential markets, are projected to grow at a slower pace compared to other regions, reflecting more cautious consumer spending and tighter monetary policies as the global economy continues to adjust post-pandemic.[1]

Since 2022, the geopolitical landscape has been shaped by the war in Ukraine and the Israel-Gaza conflict, exacerbating global inflation and economic slowdowns. Energy prices surged as Europe grappled with dependence on Russian gas, while the Middle East instability further strained fossil fuel supplies. Efforts to secure

We do not see substantial macroeconomic influences on Garmin, due to proven past resilience and ability to pass on price changes to customers.

alternative suppliers and accelerate renewable energy projects have been hindered by competition and supply chain disruptions, keeping natural gas prices high. These challenges have raised costs and delayed production across industries. However, Garmin's annual report indicates limited exposure to these risks, as it lacks significant operations in the affected regions.

From a broader perspective, various raw material indices play a role in Garmin's production process, each reflecting distinct trends over the past few years. Many of these indices experienced a sharp peak in 2021, following a decline in 2019. After reaching this high point, the indices began to decrease, stabilizing by 2023. Nevertheless, they remain elevated, with some up to 160% higher than their pre-COVID-19 levels in 2019, indicating ongoing supply chain challenges and elevated costs. Looking at individual indices provides a deeper understanding. For example, crude oil, a key input for plastics production, saw a substantial 33% decline in 2020 as demand dropped globally. However, between 2020 and 2022, the crude oil index rose by 140%, reflecting heightened demand and supply disruptions. Similarly, the rare earth elements index, crucial for many high-tech components, started at 99 basis points in 2019 and surged to 295 by 2022. This rise highlights the increased demand and constrained supply for these essential materials in the electronics and technology industries.[2] Garmin's steady relative cost of goods sold (COGS), despite increased raw material indices, implies that these cost pressures were successfully passed on to its customers.

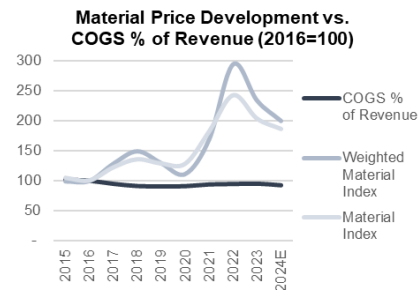


Figure 3: Material Price Development vs. COGS % of Revenue 2015-2024

Subcategories of the fitness segment are wearables, cycling products, tracker and scales and software.

Market Analysis

The **fitness market** is composed of various submarkets, e.g., gym equipment and wearable technology, each featuring distinct market participants. Garmin offers a broad range of products and is active in several submarkets of the fitness market, specifically wearables (running, multi-sport and smart-watches), cycling products, accessories (trackers and scales) and software.[3]

In 2003, Garmin introduced its first Forerunner model, marking the debut of wrist-based GPS sports trackers and effectively launching the wrist-based sports watch category. Over the subsequent years, the fitness watch sector and Garmin's product offering evolved from a niche to a broad consumer base, by introducing more versatile lifestyle smartwatches alongside purely fitness-focused products. The sector received a significant boost in 2015 with the launch of the first series of Apple Watches.[4] This development is reflected in the shipment figures for smart wearables, which, from 2014 to 2024, experienced growth with a compound annual growth rate (CAGR) of 34%. [5]

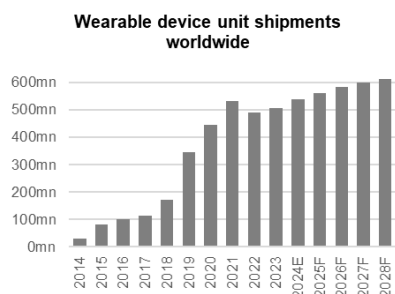


Figure 4: Wearable device unit shipments worldwide 2014-2028

Adjacent to the wearable submarket, the cycling market is another vital component of the fitness industry. This market can be divided into two main categories: bicycle sales and bicycle equipment sales. Garmin entered the equipment sector in 2005 with its first cycling computer, Edge. From 2015 to 2019, the total cycling market

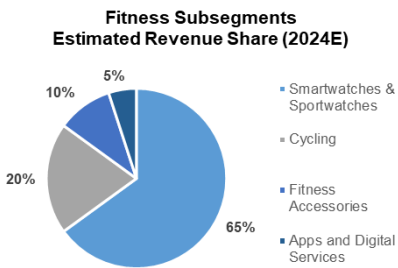


Figure 5: Fitness Subsegments Estimated Revenue Share 2024

grew from \$23.6 billion to \$38.2 billion in revenue. In 2020, the COVID-19 pandemic caused a significant boost, with revenues increasing by 42% to \$54.3 billion.[6] That same year, indoor cycling equipment from several companies, including Garmin's competitor Peloton, experienced remarkable growth, with Peloton doubling its revenue and continuing to grow into 2021. After this surge, the market growth stabilized and by 2024, revenue levelled off at \$62.8 billion. Today, Garmin offers a range of cycling equipment from cycling computers and power meters to indoor training equipment, primarily focused on ambitious recreational cyclists up to professional athletes.

In addition to equipment for sports, the fitness market also encompasses software applications and smart scales. The market for digital health applications began to expand significantly starting in 2017. It has shown steady growth over the ensuing years, with revenues increasing from \$0.21 billion in 2019 to approximately \$5.0 billion by 2024.[7] An upward trend is observed in the revenue generated from smart scales. This market segment grew from \$1.87 billion in 2019 to \$3.55 billion in 2024.[8]

To provide a comprehensive overview of the fitness market, it is crucial to consider the revenue developments in gym equipment and other sports-related markets. Nonetheless, since Garmin does not engage in these traditional fitness segments, these areas will not be covered. To navigate Garmin's absence from these traditional markets, a specific market has been built for the company. This tailored approach includes wearables, bicycles, scales, monitors and fitness software, aligning closely with Garmin's product offerings and strategic direction.

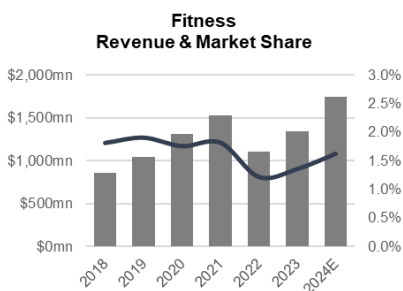


Figure 6: Fitness Segment Revenue and Market Share 2018-2024

When examining Garmin's market share from 2018 to 2022, it is evident that despite strong growth showcased by doubling the revenue in the last six years, the company has slightly underperformed the market. This underperformance is attributable to Garmin's commitment of providing high-quality products. By prioritizing quality over quantity, Garmin has positioned its products within more niche, high-end markets, which may contribute to a smaller overall market share but reinforces the brand's reputation for excellence and reliability.

Within the fitness segment, Garmin competes with a mix of tech giants and specialized brands. Companies like Apple, Fitbit (Google) and Samsung lead the smartwatch market, appealing to lifestyle users with sleek designs and general fitness features. For performance-oriented athletes, Polar and Suunto provide alternatives to Garmin's GPS-enabled wearables, while brands such as Xiaomi and Zepp Health offer low-cost wearables. Wahoo, SRAM, Zwift, Peloton and Bryton compete with Garmin in the segment of performance cycling products.

The **aviation industry** comprises commercial aviation, military aviation and general aviation, with Garmin primarily focused on general aviation, mostly consisting of business jets and piston-engine aircrafts.[12]

Diversified competitors in fitness segment, from small enterprise to large tech-company.

Over the last two decades, the aviation market has experienced significant growth, except for temporary setbacks, such as the 2009 financial crisis and the COVID-19 pandemic, which caused a 40% decline in industry revenue in 2020. [13] While recovery has been slow for the broader market, Garmin's niches in general aviation and rotorcraft proved more resilient, with business jet departures down by 28% and sales down by only 16% in 2020. [14] With the introduction of the first-ever FAA-certified GPS receiver, Garmin marked a significant breakthrough in the aviation sector and established itself as an industry pioneer. By 2001, the company had developed a robust portfolio of aviation products, including GPS-enabled navigation systems, VHF communication devices and the groundbreaking GNS 430/530 systems, which combined navigation, communication and mapping in compact units. Today, Garmin serves mostly business jets, helicopters and light-sport aircraft with advanced solutions such as integrated flight decks, avionics systems, automatic flight control systems and safety technologies like Autonomi™ and Smart Glide. The company also offers commercial off-the-shelf solutions and mission-optimized products for military and defense customers, broadening its market reach.

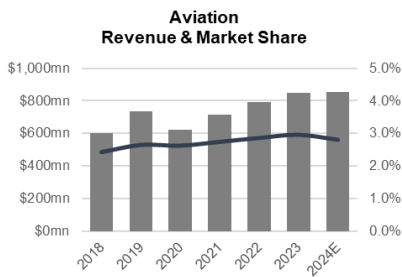


Figure 7: Aviation Segment Revenue and Market Share 2018-2024

Garmin focused niche, targeting for general aviation and rotorcraft, has a combined market valued at \$30 billion in 2024. In comparison, the broader passenger aviation market is nearly three times larger.[13, 15, 16] Within the target market, Garmin has grown its market share from 2.0% in 2020 to approximately 2.8% in 2024, by outperforming its peers in most years.

As Garmin offers very distinct products within the aviation segment, they compete with several other market participants. Companies like Honeywell Aerospace, Collins Aerospace (Raytheon) and Thales lead in integrated avionics systems for larger and business aircraft, while Avidyne and Aspen Avionics focus on retrofit solutions and smaller aircraft markets. In navigation and flight planning, ForeFlight (Boeing) and Jeppesen (Boeing) are prominent players, particularly in providing software and database solutions.

Trends

Examining current trends reveals those that have already impacted Garmin and will continue to shape its business. One key development is the advancement of artificial intelligence, which facilitates the use of data to refine products and better align them with customer needs. This innovation can be applied across Garmin's diverse product range. Similarly, advancements in connectivity technologies are reshaping industries by enabling faster and more reliable data exchange, fostering the growth of IoT ecosystems, real-time analytics and seamless device integration. Enhanced connectivity is driving innovation across sectors like transportation, healthcare and consumer electronics, making products and services like those of Garmin more interconnected and responsive.[22]

AI, connectivity and young emerging-market consumers drive innovation and growth opportunities for Garmin.

In addition, demographic shifts are poised to reshape global markets, with 75% of the consumers in emerging markets aged between 15 and 34 by 2030. Young consumers, particularly in countries like India and Saudi Arabia, exhibit strong economic optimism and a preference for premium products, being twice as likely to trade up to higher-priced brands than peers in advanced economies. Capturing the loyalty of these emerging market consumers will be crucial for future growth, requiring Garmin and other businesses to adapt their strategies accordingly.[23]

Financial Statement Analysis

Income Statement

Over the past six years, Garmin has effectively expanded its **revenue** base, growing from \$3,347 million in FY2018 to an anticipated \$6,172 million in FY2024, achieving a CAGR of 10.7%. This period has seen Garmin navigating dynamic market conditions with strong growth across its core segments, despite challenges posed by both economic shifts and the COVID-19 pandemic.

Focusing on specific segments, the **fitness** segment revenue saw a CAGR of 12.2% from 2015 to 2019, boosted by the acquisition of Tacx in 2019. During the first year of the COVID-19 pandemic, Garmin's fitness segment experienced a significant sales increase of 25.8%, driven largely by rising consumer interest in fitness wearables and equipment, including Tacx products. In 2021, Garmin maintained strong growth with a 16.4% increase, although the cycling growth trend began to slow down. After five years of growth, Garmin's fitness segment faced declines of -27.7% across all product categories in 2022. The downturn was reversed in 2023, bringing revenue back to 2020 levels. This upward trajectory is expected to continue with a projected growth rate of 30.2% in 2024.

Garmin's **outdoor** segment revenue experienced a CAGR of 25.4% from 2015 to 2018. Reclassification of the auto consumer segment in 2019, led to an overall increase of 58.4% in 2019. Without this strategic shift, the increase would have been 13.3%. In 2020, 2021 and 2022, Garmin's outdoor segment capitalized on the increased interest in recreation and outdoor activities, registering sales growth of 9.4%, 14.5% and 10.2% respectively, primarily driven by strong demand for adventure watches. Nevertheless, in 2023, the outdoor segment experienced a downturn, with revenue of adventure watches declining, resulting in an overall decrease of -4.1%. Despite this setback, a rebound is expected in 2024, with projected growth of 11.3%.

As a top-certified supplier of **aviation** equipment, Garmin experienced significant revenue growth in its aviation business segment, with CAGR of 16.6% from 2015 to 2019. However, the aviation industry faced a substantial pandemic setback in 2020, which also impacted Garmin's sales, leading to a decline of -15.3%. After this initial downturn, the segment began to recover in 2021, with sales increasing

Revenue grew with a CAGR of 10.7% between 2018 and 2024.

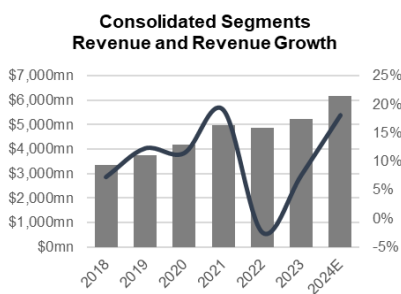


Figure 8: Total Revenue and Revenue Growth 2018-2024

by 14.4%. This recovery continued with growth rates of 11.3% in 2022 and 6.8% in 2023. For 2024, a modest growth of 1.0% is anticipated.

In contrast to other segments, the **marine** segment did not see any declines from 2015 to 2023. This segment capitalized on the pandemic and was bolstered by strategic acquisitions during that period. The marine sales saw a significant increase, with growth rates of 29.3% in 2020 and 33.0% in 2021. This development stopped in 2022 with a notably lower growth rate of 3.3%. Originally, 2023 was poised for a decline, but the acquisition of JL Audio, a major manufacturer of marine audio systems, led to an incremental growth of 1.4%. This acquisition is expected to continue boosting sales, projecting growth of 16.5% in 2024.

During the last few years, Garmin's auto segment was a challenging area, recording a CAGR of -15.8% from 2015 to 2018. In response, a strategic shift occurred in 2019 when Garmin transitioned its auto consumer products and focused on OEMs. This pivot, along with new products for auto OEMs, spurred a turnaround. Strengthened by solid connections and partnerships, the segment achieved impressive revenue growth, peaking at 49.1% in 2023.

Garmin's overall **operating margin** has experienced a gradual decline, shifting from 25.2% in 2019 to an anticipated 24.3% in 2024. This reduction is driven by a 0.9% rise in COGS and a 0.1% increase in operating expenses². The upward trend in COGS can be attributed to shifts in product mix, rising raw material costs and supply chain disruptions, which have impacted specific segments differently over time.

In Garmin's segments, the impacts of the pandemic and broader market trends on financial metrics are evident. COGS in the **fitness** segment increased following the acquisition of Tacx. Throughout the pandemic, the company was unable to reduce COGS to pre-acquisition levels, stabilizing at approximately 47%, with a spike in 2022 due to underutilized fixed costs. As a result, Garmin's gross margin has fluctuated between 49% and 59%. Examining operating expenses, a decrease was observed in 2020 and 2021, where they accounted for 29% of revenue. However, in 2022, operating expenses peaked at 40% of revenue, primarily due to increased spending on personnel. Since then, these expenses have been gradually decreasing, returning to more typical levels around 33%.

After Garmin shifted its auto consumer products, the COGS in the **outdoor** segment initially increased by 5% as a percentage of revenue. In subsequent years, this rise was mitigated and COGS returned to previous levels due to the diminishing weight of auto consumer products. The outdoor segment consistently delivered gross margins ranging from 60% to 66%. In terms of operating expenses, Garmin successfully maintained consistency in the outdoor segment, with

Profitability

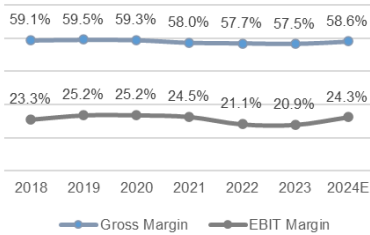


Figure 9: Gross Margin and EBIT Margin 2018-2024

² Encompassing advertising, selling, general and administrative (SG&A) costs and research and development (R&D) expenditures

Garmin maintained a stable EBIT margin in 2020 (first pandemic year) but faced declines in 2021 and 2022.

expenses hovering close to 30% of revenue. This management of operating expenses contributed to EBIT margins ranging between 30% and 36%.

Although the pandemic decreased revenue, its impact on the COGS in Garmin's **aviation** segment was minimal, with a 1% increase to 27%. By 2023, Garmin enhanced its efficiency, reducing COGS to 26% of revenue. Despite the minimal effect on COGS, pandemic-related developments led to a substantial increase in operating expenses relative to sales, from 39% to 51% in 2020. This rise was primarily due to heightened spending on R&D. The surge in operating expenses resulted in a decline in EBIT margin to 22%. Nevertheless, in the subsequent years, Garmin successfully elevated the EBIT margin back up to 25%.

After a period of decline from 2015 to 2019, the COGS in Garmin's **marine** segment began to rise, increasing from 40% in 2019 to 46% in 2023. This increase was influenced by pandemic-related effects and a shift in consumer preferences towards higher-cost products. In contrast, operating expenses followed a different trend. They initially rose, peaking at 44% in 2018, but subsequently fell to 29% by 2021. However, due to increased personnel and R&D costs, these expenses began to rise again, stabilizing at 32% in 2024. The fluctuations in COGS and operating expenses had a significant impact on profitability. The EBIT margin saw a notable improvement, climbing from 14.3% in 2018 to 27.9% in 2021. Although it has since adjusted to around 20% in recent years, this level still reflects a strong performance relative to earlier years.

Over the past decade, Garmin's **auto** segment has experienced a consistent increase in COGS, with notable spikes in 2019 and 2022. The COGS rose from 56% of revenue to an anticipated peak of 81% in 2024, largely due to a change in product mix that impacted profitability. Concurrently, following substantial investments in R&D for auto products, Garmin's operating expenses in this segment began to decrease after reaching a high of 74% of revenue in 2021. These factors have led to a challenging financial period for the auto segment, resulting in negative EBIT margins from 2019 through 2024. The negative margin worsened significantly to -46% in 2021 but is expected to break even in Q4 2024. This improvement reflects effective cost-control measures and economies of scale driven by increased revenue. Additionally, long-term contracts are anticipated to yield returns, capitalizing on the upfront R&D investments made in recent years.

In most segments, Garmin continues to achieve operating margins approximately twice as high as its competitors, underscoring its competitive advantage. The auto segment is the exception, where competitor margins are currently higher.

Garmin's net income has grown with a CAGR of 9.3% from 2019 to 2024, reflecting solid, consistent growth. This performance aligns with Garmin's strong gross and operating margins across its segments, allowing the company to achieve net profit margins significantly higher than its peers. Garmin's profitability has also benefited

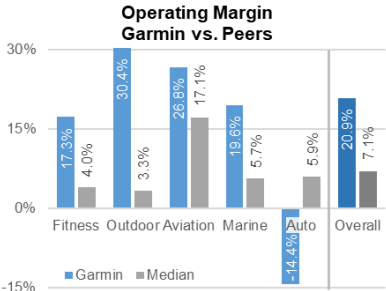


Figure 10: Operating Margin Garmin vs. Peers 2023

from favorable tax adjustments which reduce the income tax provisions. In 2023 Garmin profited from a revaluation of its Switzerland deferred tax assets resulting in a income tax provision of \$89 million.

Risk & Opportunities

Weaknesses and Risks

During the COVID-19 pandemic, Garmin saw a surge in demand for fitness and outdoor products, now accounting for 59% of total revenue and 73% of EBIT. This heavy reliance exposes Garmin to market saturation, seasonal purchasing patterns and intense competition. Sustaining market position requires continuous innovation amid pricing pressures.

Beyond these segments, aviation, marine and auto businesses are highly sensitive to economic downturns, with reduced demand for discretionary goods like airplanes, boats and high-end car systems during economic slumps. As pandemic-driven demand normalizes, risks of declining revenue and shifting consumer preferences further intensify vulnerabilities.

Garmin also faces technological risks, as its reputation relies heavily on innovation. Rapid advancements and disruption by competitors could weaken its competitive position. Cybersecurity risks are particularly significant, especially for health-monitoring devices that collect sensitive user data. A ransomware attack in 2020 severely disrupted Garmin's online services; fortunately, no customer data was compromised [24]. However, had customer data been breached, it would have significantly damaged Garmin's reputation, eroded customer trust and resulted in substantial legal and financial consequences.

Moreover, Garmin's reliance on Taiwan for manufacturing key products, including fitness, outdoor and marine devices, exposes it to significant geopolitical risks. China's claim over Taiwan and potential military action pose a critical threat to. Any conflict or instability in the region could severely disrupt production, leading to delays, higher costs and product shortages. Such disruptions would materially impact Garmin's operations, financial stability and market position.

Strength and Opportunities

One of Garmin's key strengths is its vertically integrated business model, which allows the company to manage most of its operations internally. This reduces costs, enhances operational efficiency and provides significant flexibility. Garmin's supply chain has further demonstrated robustness, with minimal disruption from post-COVID-19 supply chain challenges.

Complementing this is Garmin's strong commitment to R&D. In 2023, the company invested \$905 million in R&D, reflecting its ambition to lead in the consumer technology market. This focus on innovation solidifies Garmin's market position

and supports long-term growth.

Garmin's financial health is another core strength. The company operates without debt, has steadily increased its equity and maintains a significant cash reserve. This financial stability ensures that Garmin could continue paying shareholder dividends for six years, even without additional net income contributions.

Finally, Garmin benefits from a diversified product portfolio, reducing its vulnerability to downturns in specific markets. Strengthening its aviation, marine and auto segments has been a strategic priority, supported by partnerships with industry leaders such as BMW and Embraer. Recent acquisitions have further diversified its revenue streams, enhanced resilience and reduced dependence on individual market segments. Additionally, Garmin is well-positioned for global expansion, with opportunities to tap into emerging markets in regions like Asia-Pacific and South America, further broadening its customer base and reinforcing its long-term growth potential.

Strategic partnerships support Garmin's diversified revenue streams.

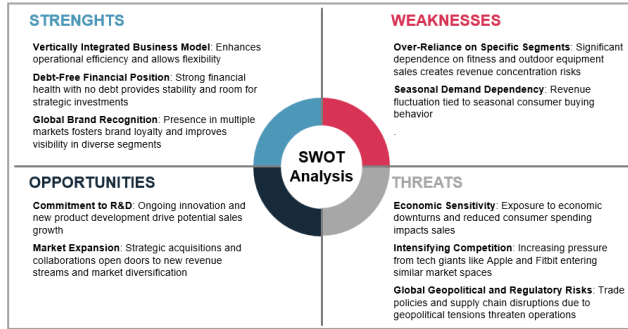


Figure 11: SWOT Analysis

Financial Projections

Revenue Forecast

The **fitness segment**, which is estimated to reach a revenue of \$3,761 million by 2030, is projected to grow at a CAGR of approximately 13.6%. This growth is driven by two primary value drivers: consumer spending on recreation and culture and spending towards health. These indicators are expected to grow at an average rate of 4.5% until 2029, after which growth is forecasted to gradually slow, stabilizing at slightly above 2% by 2040.[25]

After the disruptions in the fitness market caused by shifting consumer behavior during the pandemic, we expect Garmin's constructed fitness market, comprising its four key segments, to return to a path of steady growth. The wearables submarket is projected to grow rapidly, at 12% in 2025 and 9% in 2026, before aligning with the general growth rates of the market's value drivers.[5] Fitness accessories represent a smaller market but are expected to grow at a similar rate. Cycling, while a significant contributor to Garmin's fitness revenue, primarily focuses on road bikes and ambitious athletes rather than the larger recreational and commuting segments. Unfortunately, precise market forecasts for this niche are scarce. However, the broad bicycle market, including all subcategories, is

We project the fitness segment to reach a sales volume of \$3,761 million by 2030 with a CAGR of 13.6%.

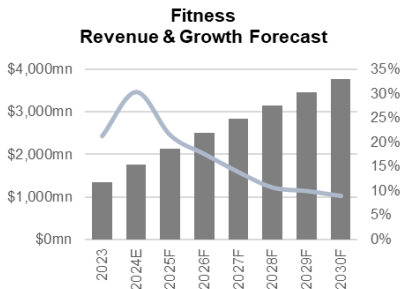


Figure 12: Fitness Segment Revenue and Revenue Growth Forecast 2023-2030

mostly saturated and projected to grow at a rate of 1.5% to 2.5% in the years to come [6]. Software, including apps and digital services, is projected to maintain growth at 37% in 2025 before quickly converging with general value drivers[7].

While Garmin's fitness segment was benefiting from the pandemic, it did lose ground in that period. In contrast, Garmin showed strong relative performance in 2023 and 2024, increasing its market share by 11% and 20%. This outperformance is expected to continue in the short to midterm. Nevertheless, creating a reliable revenue projection requires more than a simple market share forecast due to the disproportionate influence of the cycling market. While cycling makes up 60% of the total fitness market, it not only holds less relevance to Garmin but also incorporates largely non relevant submarkets related to commuting and regular bicycles. To overcome this inaccuracy, we weighed the growth rates of the individual submarkets (wearables, fitness accessories, cycling and software) to align with Garmin's revenue composition. By applying Garmin-specific markups or markdowns to account for competitive positioning and unique strengths, we derived a growth forecast tailored to Garmin's fitness segment. With this methodology, a segment growth estimate is created that better reflects Garmin's actual market dynamics and provides a solid foundation for projecting the company's performance in the fitness market.

By 2030, Garmin's **aviation segment** is expected to generate \$1,265 million in revenue, corresponding to a CAGR of 6.8%. The primary value driver for this sector is consumer spending on transportation. Garmin's avionics solutions cater to both OEM applications and retrofit installations in general aviation and rotorcraft markets, making it essential to evaluate these subsegments separately.

The general aviation market is expected to grow steadily, closely aligned with its value driver. This translates to a stable but gradually decreasing growth rate, averaging 4.8% annually until 2030.[16] In contrast, the rotorcraft market is anticipated to grow more rapidly, with an initial growth rate roughly 5% higher than its value driver, leading to a projected 10.4% growth in 2025. This higher growth rate is expected to converge with its value driver by 2030, reaching 4.5%.[15] The faster growth in rotorcraft is driven by technological advancements and increasing demand for aerial mobility in urban and remote areas.

Currently, Garmin holds a market share of approximately 2.8% in the combined general aviation and rotorcraft markets. With modest growth in market share, we estimate that Garmin will capture slightly above 3.0% by 2030, reflecting its continued innovation and competitive positioning in these segments.

Margin Forecast

Garmin's profitability has long been supported by COGS and operational expenses ratios that outperform its peers, leaving little room for further improvement.

We project the aviation segment to reach a sales volume of \$1,265 million by 2030 with a CAGR of 6.8%.

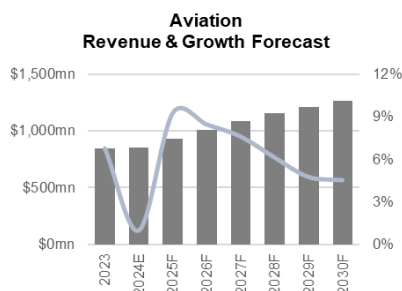


Figure 13: Aviation Segment Revenue and Revenue Growth Forecast 2023-2030

Concurrently, its demonstrated cost control during crises and uncertain periods underscores its ability to avoid descent in these metrics. Consequently, we expect these costs to remain stable and adopt the 5-year average as our forecast ratio. This approach yields anticipated gross margins for the fitness, outdoor, aviation and marine segments at 55.5%, 64.2%, 73.3% and 54.5%, respectively. For the auto segment, the focus is on achieving profitability by leveraging economies of scale, with gross margins expected to rise from 19% in 2024 to 28% by 2030, surpassing market averages due to competitive advantage through vertical integration as observed in the other segments.

A similar methodology is applied to operating expenses at the segment level. For the fitness segment, operating expenses are projected at 33.3% of revenue, outdoor at 30.5%, aviation at 48.2% and marine at 31.5%. These projections indicate stable, positive operating margins across these four segments. For the auto segment, operating expenses are expected to decrease over time, from 20.0% of revenue in the near term to 15.8% by 2030. This assumption is based on significant investments in R&D made in recent years, alongside anticipated cost efficiencies stemming from increased revenue and scaling operations due to long-term automotive contracts.

As a result, the estimated **EBIT margins** for the segments are: fitness at 21.2%, outdoor at 33.7%, aviation at 25.1%, marine at 24.1% and auto starting at 3.0% in 2025 and improving to 12.0% by 2030.

Garmin initially benefited from a lower effective tax rate following the relocation of its registered headquarters. However, the implementation of the global minimum tax rate in Switzerland has contributed to an anticipated increase over time. While the federal income tax rate in the United States remains at 21%, we expect that state income tax expenses cancel each other out in the long term and are therefore forecasted at 0%. The adjustments due to withholding taxes and U.S. Federal R&D credits are expected to continue at 3.0% and -2.2% respectively. Additionally, the foreign tax rate differential currently provides a significant benefit, projected at -9.2% in 2025. This benefit is expected to diminish gradually, decreasing to -6.2% by 2030. As a result, Garmin's effective tax rate is forecasted to rise incrementally, from 11.8% in 2025 to 14.8% by 2030.

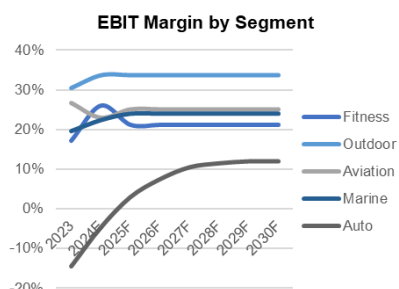


Figure 14: EBIT Margin Forecast by Segment 2023-2030

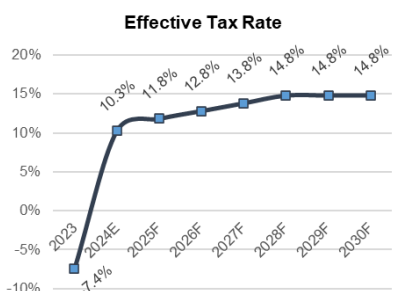


Figure 15: Effective Tax Rate Forecast 2023-2030

Valuation

Multiple Valuation

Valuing Garmin and its diverse business segments based on multiples is complex due to the absence of direct competitors with a similar product range across all its markets. When using **Comparable Company Analysis (CCA)**, the significant differences in valuation outcomes between a single peer group and segment-specific groups suggest that a unified peer group cannot adequately reflect

Garmin's diverse business model. The company's varied segments and unique operations require distinct peer groups for a more accurate representation, as their market dynamics and financial drivers differ considerably. In the fitness segment, we identified Xiaomi and Technogym as the closest peers, excluding Zepp Health due to its negative net income. Notably, major tech companies like Apple and Samsung, despite their presence in the fitness market, are not considered closest peers because their primary revenue streams come from other business segments. In the outdoor segment, TomTom, Thule and GoPro are identified as the closest competitors, each providing products targeting different outdoor activities but aligning closely with Garmin's activities. Other potential competitors such as Casio, Globalstar or Vista Outdoor are excluded due to various factors. The aviation segment peers are narrowed down to Innovative Solutions and Support, Safran and Textron, reflecting similar market and segment offerings. Honeywell Aerospace and Defense and Thales, despite being listed by Garmin as competitors, are not considered close peers due to their significant focus on military products and diverse product portfolio. In the marine segment, we consider Furuno, Johnson Outdoors and Brunswick as peers due to their focus on recreational boating and fishing, aligning them closely with Garmin's marine offerings. Lastly, in the auto segment, the closest peers to Garmin are identified as Aptiv, Continental and Visteon, with Panasonic being considered a competitor but not a close peer. Margins and rationale behind the consideration are shown in Figures 41, 42 and 47.

For the valuation, we employed the estimated Enterprise Value to EBITDA (EV/EBITDA), Enterprise Value to EBIT (EV/EBIT) and Price-to-Earnings (P/E) ratios for the next twelve months, as these metrics are assumed to be most suitable for our analysis. We excluded the Enterprise Value to Sales ratio due to its non-informative nature in this context. To provide a more meaningful comparison of the ratios across companies, we weighted the EV/EBITDA and P/E ratios at 40% each and the EV/EBIT ratio at 20%. This weighting scheme reflects the more comprehensive financial picture provided by EBITDA, as it accounts for variations in depreciation and amortization practices across different companies. To derive a range for the final share price, we calculated the minimum, 25th percentile, median, 75th percentile and maximum of the multiples for each segment. These figures were then combined to establish a comprehensive valuation range for the entire company. The consolidated analysis of all segments, adjusted by the weightings, suggests a **value of \$141.13 per share**, with a potential fluctuation range from \$117.34 to \$168.37.

	EV/ EBITDA	EV/ EBIT	P/E	Weighted
Weight	40%	20%	40%	
Fitness	36.77	43.17	47.76	42.45
Outdoor	36.63	61.13	75.40	57.04
Aviation	13.42	15.69	13.75	14.00
Marine	12.90	19.13	19.65	16.85
Auto	0.73	2.71	0.93	1.21
Non-Core	1.41	1.41		0.84
Net Debt	14.57	14.57		8.74
Share Price	116.43	157.79	157.49	141.13

Figure 16: Results of Multiple Valuation per Segment and Consolidated

Dividend Discount Model

The **Dividend Discount Model (DDM)** was employed to estimate Garmin's intrinsic value by analyzing its ability to return capital to shareholders through

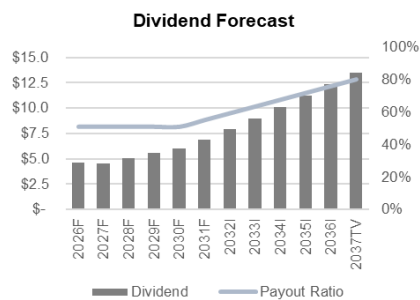


Figure 17: Dividend and Payout Ratio Forecast

dividend payments. This model incorporated a three-phase framework to reflect the company's evolving growth stages and dividend payout dynamics. Given the time lag between dividend declaration and payment, the calculations for dividend payments considered $\frac{3}{4}$ of the declared dividend for the current year and $\frac{1}{4}$ of the prior year's declared dividend. Additionally, with dividend declarations delayed by one year, the projected dividends for the period 2024 to 2037 were calculated accordingly. For 2026, the model included an extraordinary dividend alongside the regular dividend. In general, we project Garmin to maintain its 5-year average payout ratio throughout the forecast period, extending to 2030. Following that, we assume that the net income growth will converge gradually with a perpetual growth rate of 3%, consistent with the general economy. Concurrently, the payout ratio is expected to increase gradually to 80%, reflecting a reduced reinvestment rate and greater focus on shareholder returns.

Using this structured approach, the DDM produced an estimated target share price of **\$115.9** for year-end 2025. This valuation accounts for discounted dividends across the forecast and terminal periods, with the terminal value representing the company's long-term growth potential.

Valuation Risk

Garmin's strategic emphasis on consumer products introduces significant risks due to the inherently volatile nature of consumer preferences and variable spending on lifestyle goods. This unpredictability in market demand is further highlighted by Garmin's revenue composition, where the Outdoor and Fitness segments - its main consumer divisions - contribute about 59% of total revenue. Such reliance amplifies the financial impact of any shifts in consumer behaviour.

Moreover, Garmin faces substantial risks from the need for continuous investment in R&D to adapt to these changing preferences and to counter new competitors and technological advancements. The ongoing requirement for significant R&D spending could strain Garmin's financial resources and affect its profitability, especially under fluctuating market conditions.

The auto segment also presents considerable challenges. As some automotive manufacturers currently struggle, this could adversely affect Garmin's strategic objectives. Intense competition and these market difficulties render the growth prospects for Garmin's auto segment particularly precarious.

Adding to these challenges the geopolitical tension, especially concerning China and Taiwan, along with other international conflicts. These factors introduce a layer of uncertainty that complicates future projections and represents additional risks that are challenging to fully integrate into strategic planning.

Appendix