IOI ChartBook – Garmin (GRMN)

Despite a hot new product line, we think Garmin is headed south

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Three Things You Should Know About Garmin

- **Headwinds still exist, but Garmin's top-line is starting to grow again.**

  The shift of consumers away from purpose-built automotive GPS and towards GPS-enabled phones has hurt Garmin since 2009. However, a new fascination with wearable GPS-equipped fitness monitors among the public and healthy niche markets in Aviation and Boating has allowed several of Garmin's business lines to offset the weakness in automotive GPS solutions. Revenues have flat-lined for years at Garmin, but no more – the firm will generate decent top-line growth over the next few years, even in a worse-case scenario.

- **The company's fastest growing segments have maintained a relatively high profit margin despite an increasingly competitive market.**

  Margins for its Automotive and Marine segments have already fallen to what looks like a normalized level in the mid-teens percent operating margin range. Perhaps the newness of GPS wearables has allowed Garmin a little breathing room in the Outdoor and Fitness segments, because, so far, the firm has succeeded in holding onto mid-twenty percent operating margin range. While we think the firm's Aviation segment will retain high profitability, we expect competition in the wearables business to start to erode the capacity for Garmin to convert Outdoor & Fitness revenues to profit over the next five years.

- **The shares have a large proportion of insider ownership, so the effectiveness of a bearish strategy may be reduced.**

  Insider ownership of this $9 billion market cap company is high – with roughly 40% of the shares held by board members, managers, or their families. Some investors take this high of an ownership percentage as a bullish sign, so are hesitant to short the shares. Experienced short sellers are also generally leery about making bearish investments when the "float" of the shares (the shares actively traded by investors) is somehow restricted as in the case of high insider ownership. According to data from YCharts, only around 7% of the outstanding shares are presently sold short, which strikes us as a very modest short interest.

  On the other hand, the company is domiciled in Switzerland to take advantage of very low corporate income taxes in that jurisdiction. The firm can take advantage of both the foreign domicile's advantageous tax laws and the very liquid and well-regulated US capital markets due to a US rule related to concentrated ownership of shares. If US lawmakers or regulators change rules to punish such "tax inversions" as these, it is likely that the market would very rapidly reprice the shares lower.

  In general, the faddish nature of the firm's most visible product and its large insider ownership are both factors that work against a bearish position, in our opinion. This effect is partially offset by the possibility of a tax regulation-related downward repricing.

Valuation Overview

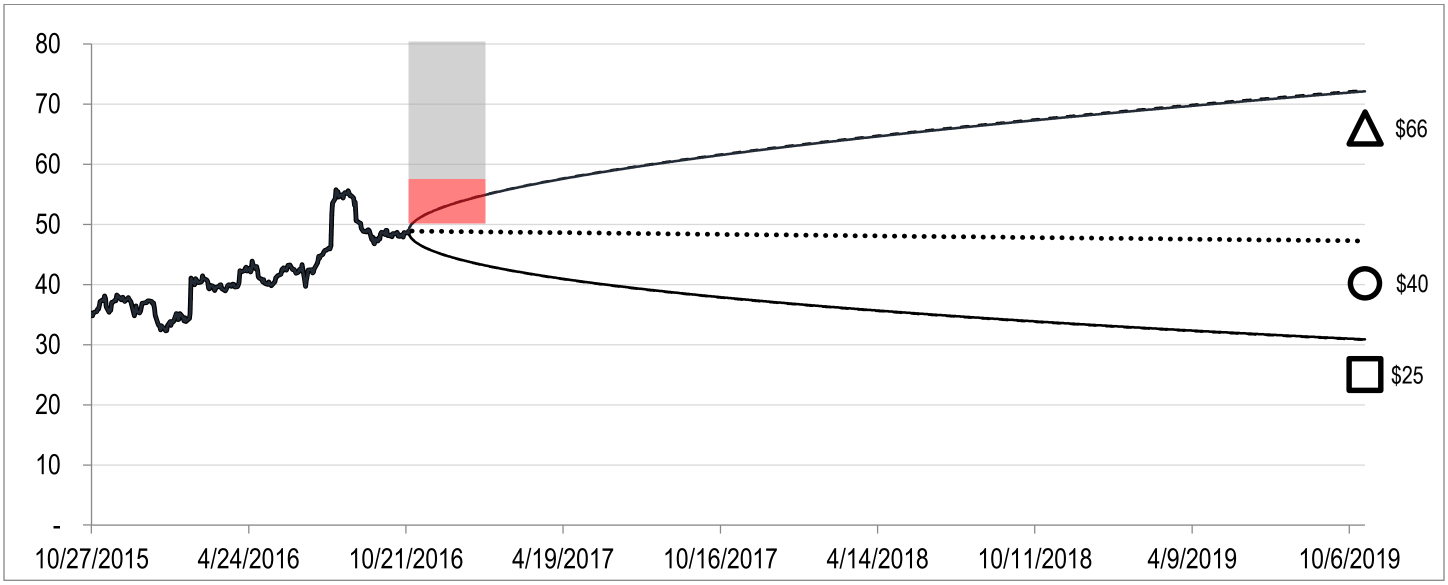


Figure 1. Source: YCharts, CBOE, IOI Analysis. Geometrical markers show IOI's best-case (triangle), worst-case (square), and equally-weighted average value (circle). Cone-shaped region indicates option market's projection of Garmin's future stock price. Shaded region represents the sale of a call option struck at $50 / share and the purchase of a call option struck at $57.50 / share on Garmin's stock. $7.50 total capital at risk in return for $1.69 in net cash inflow, implying an Effective Sell Price of $51.69 / share.

	IOI Best Case	IOI Worst Case	Historical Median
Year 1-5 Average Revenue Growth	7%	3%	-2% (5 & 10-year)
Year 1-5 Average Profitability	22%	15%	21%, 22% (5-, 10-year)
Year 6-10 Cash Flow Growth	7%	-5%	-19%

While there are several valuation scenarios above the present stock price, we believe these scenarios to be relatively unlikely, as they imply that the company will not face margin pressure for the next 10 years. Considering the growing ubiquity of GPS-enabled devices, and historical profitability trends for consumer electronics, we believe scenarios in which Garmin's profitability does not fall in the face of competition from Apple, Nike, Under Armour, and the like, is difficult to imagine.

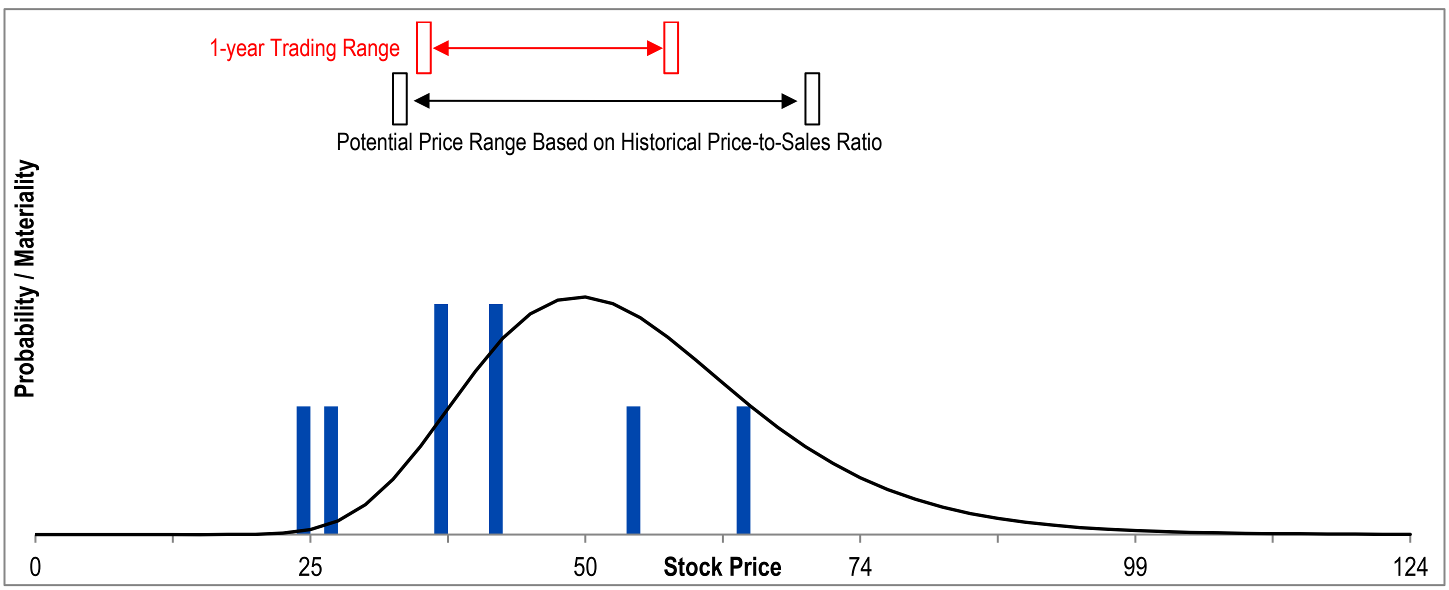


Figure 2. Source: CBOE, IOI Analysis

While two scenarios suggest fair valuation above the present stock price, six other scenarios suggest a fair value well below the present stock price. We consider the former scenarios much less likely than the latter for reasons that are explained in the body of this report.

Valuation Waterfall

Revenue Growth

In the best-case, we see Outdoor & Fitness expanding at a 15% rolling growth rate over the next five years and Auto shrinking at 17%. This O&F assumption includes three years at 20%+ growth – better sustained growth than historical. Worst-case sees O&F segment growth a bit weaker and Auto declines more prominent.

Profitability

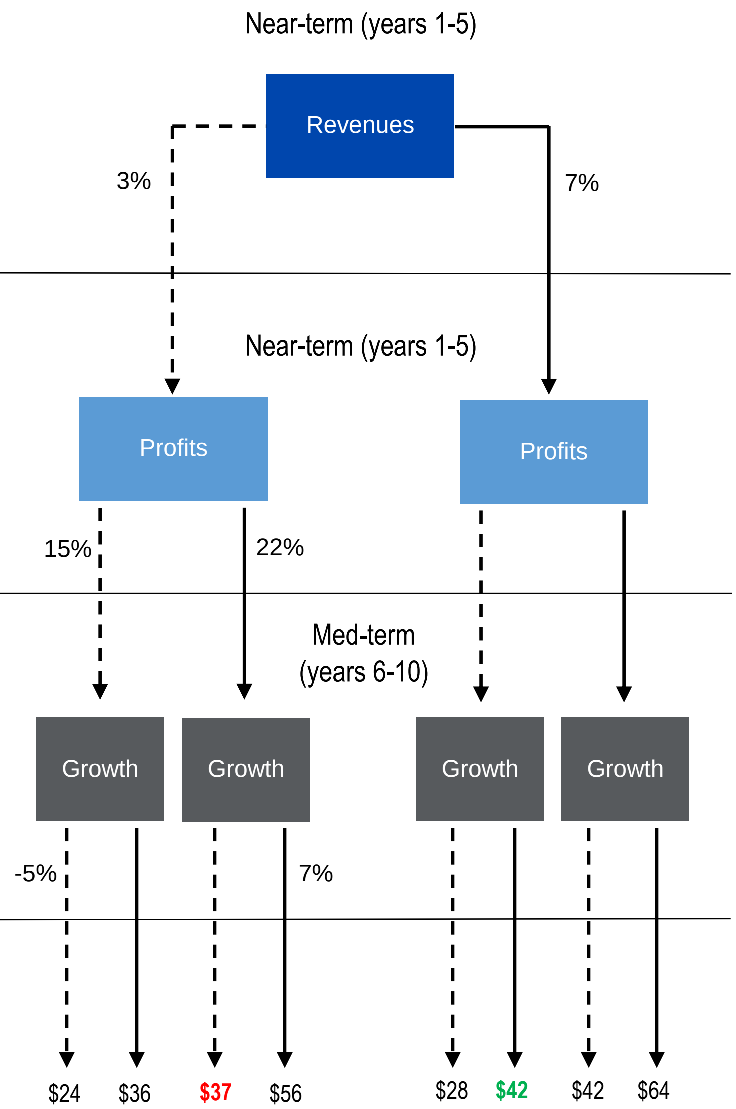
Best-case scenario assumes that O&F's present profitability levels are maintained over the next five years and that Aviation is able to maintain its high profitability as well. Worst-case scenario assumes that O&F OCP margin falls to 10% while Aviation remains high. We think the low-profitability case is relatively more likely.

Medium-Term Cash Flow Growth

Other than O&F, the markets in which Garmin is investing are niche ones with limited growth potential, in our opinion. If Garmin can continue its position as the premier supplier of wearable GPS devices for serious athletes or more fully exploit opportunities in Asia, and it can retain relatively high profit levels, its medium-term growth will be relatively quick.

Fair Value Range

Our fair value range extends from $24 to $64 / share with our most likely scenarios implying a range of $37-$42 / share. The present share price is likely boosted by optimism about the O&F line and by a limited "float" for the shares (i.e., many shares are held by insiders, so the remaining shares have lower liquidity).



Methodology

IOI analyses focus on three main valuation drivers: revenue growth, profitability, and medium-term cash flow growth. We estimate a best- and worst-case scenario for each of these drivers resulting in a total of $2^3 = 8$ fair value scenarios based on discounted cash flow methodology. Profitability is measured by Owners' Cash Profit (OCP) margin. We use a discount rate of 10% for large capitalization stocks.

A wide spread of lowest and highest fair values indicates a firm whose value is uncertain. Risk depends on the stock price's relationship to the valuation range.

Best-case scenarios are represented with a solid line; worst-case scenarios, with a dotted one.

Valuation Drivers

Revenue Growth

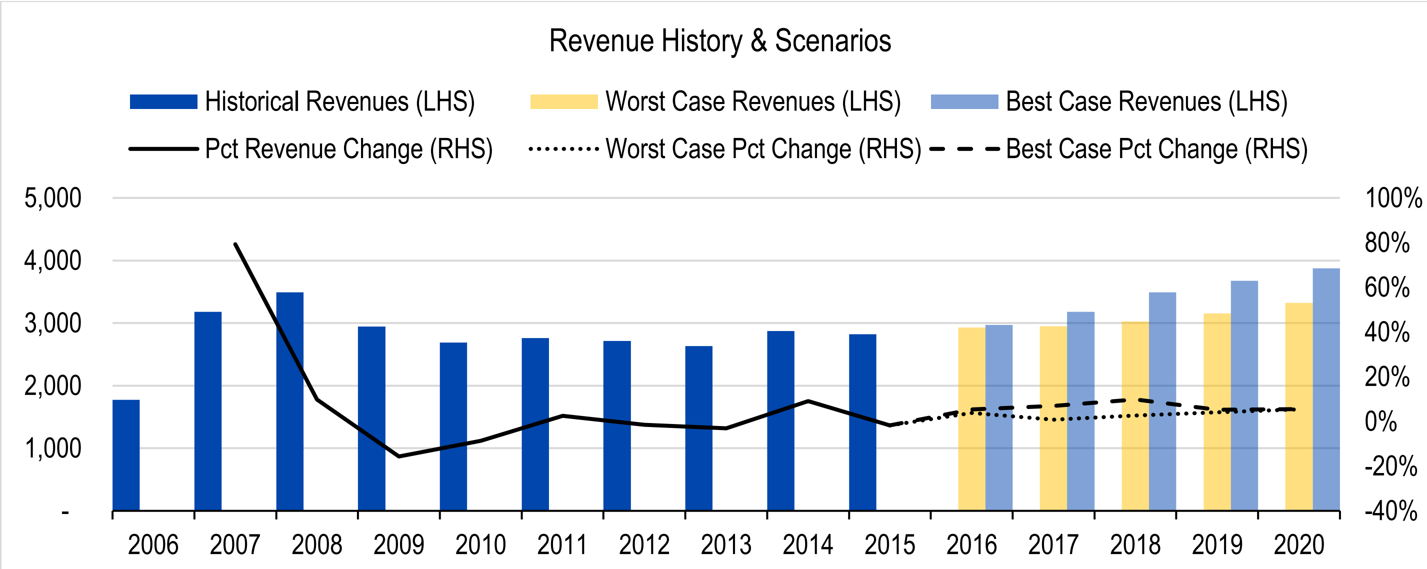


Figure 3. Source: Company Statements, IOI Analysis

Garmin's revenues have been flat since 2009 due to a market shift away from purpose-built automotive GPS systems toward GPS-enabled smart phones.

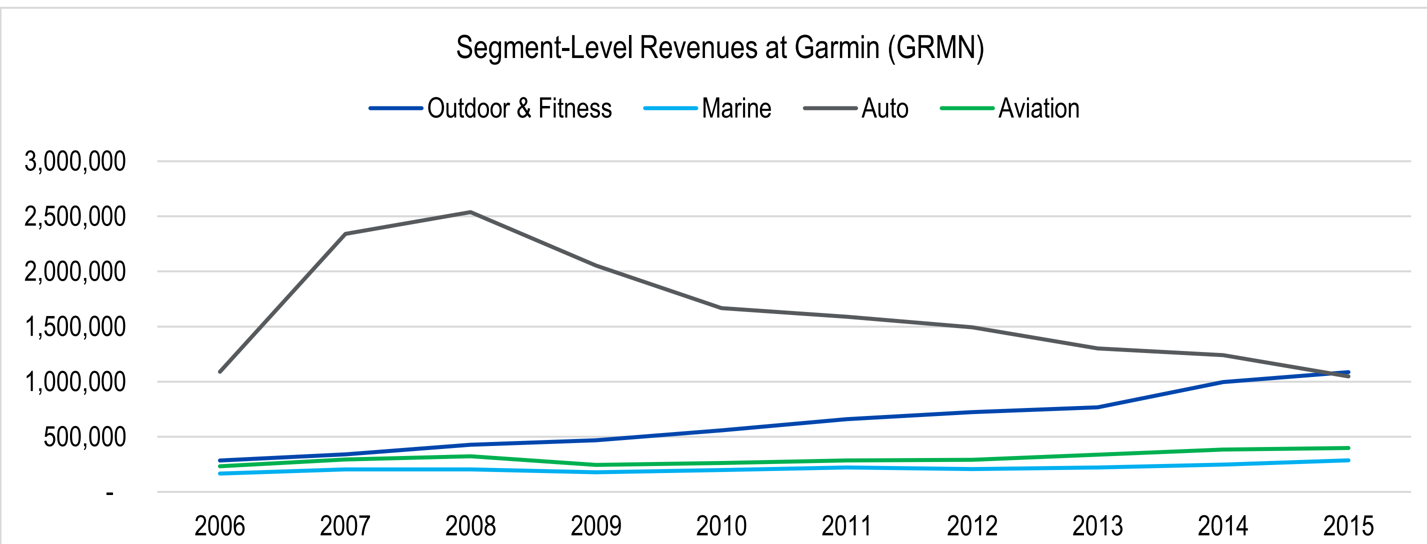


Figure 4. Source: Company Statements, IOI Analysis

The collapse of the automotive GPS market is visible in this graphic, as is the rise of Garmin's Outdoor & Fitness segments. The company has been acquiring more firms focused on products for customers with active lifestyles. While representing only a relatively small portion of revenues, the Aviation segment – the core of which was acquired from the package delivery service, UPS – is important for reasons we discuss in the Profitability section below.

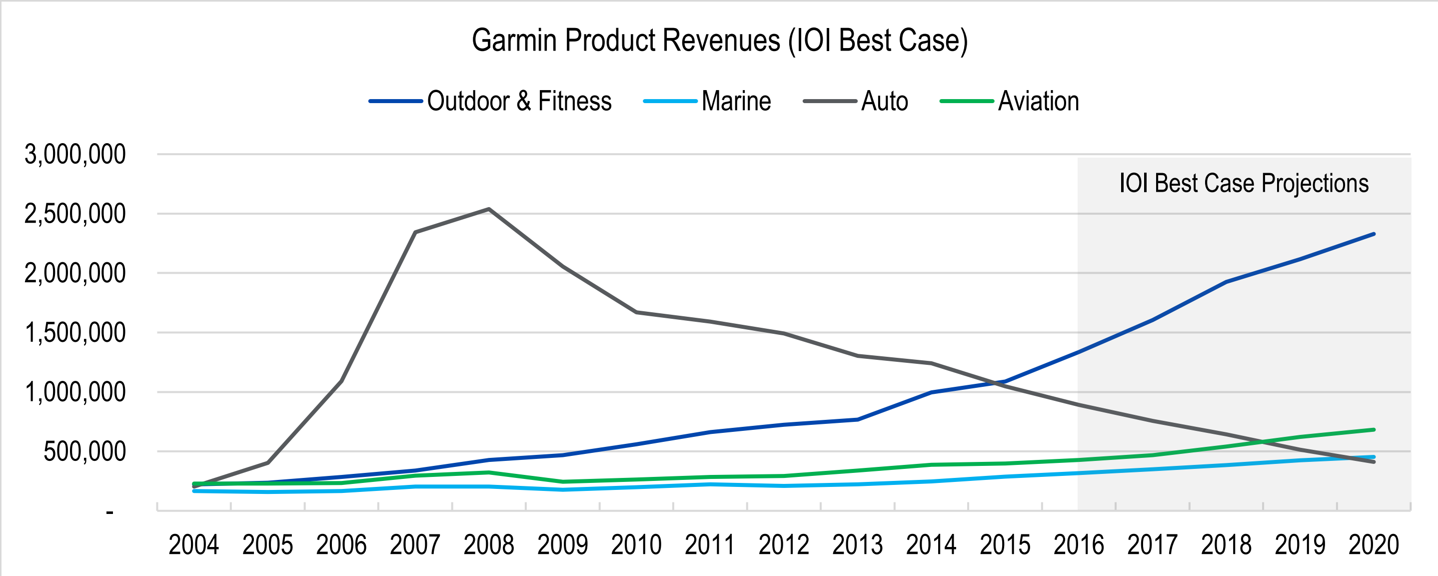


Figure 5. Source: Company Statements, IOI Analysis

In our best-case scenario, Garmin will be generating roughly a billion dollars more revenue in 2020 than it did in 2015, and it will derive the lion's share of its revenues from the Outdoor and Fitness segments. In this best-case assumption, the 16-year compound annual growth rate (CAGR) of Outdoor & Fitness business will be 16%. Fast, but not impossible, according to work by CSFB's Mauboussin.

Profitability

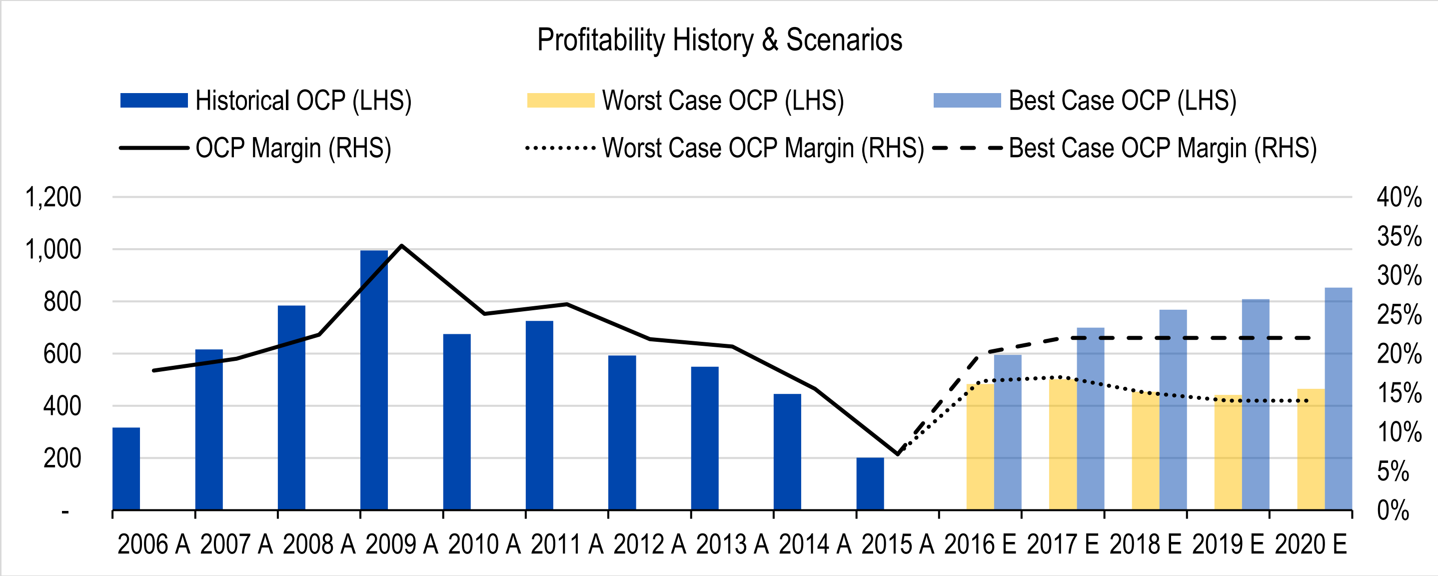


Figure 6. Source: Company Statements, IOI Analysis

Profitability, as measured by Owners Cash Profit (OCP), dipped in 2014 and 2015. The 2015 dip is likely partially an artifact of the way OCP is calculated (we start with Cash Flow from Operations, a line item which is influenced by changing current asset and current liability accounts), but the fact OCP's apparent downtrend suggests to us some underlying business weakness. OCP profitability for the first three quarters of 2016 has been just at 19.9% - a considerable improvement from the same time last year, but also down from its previous 20%+ levels.

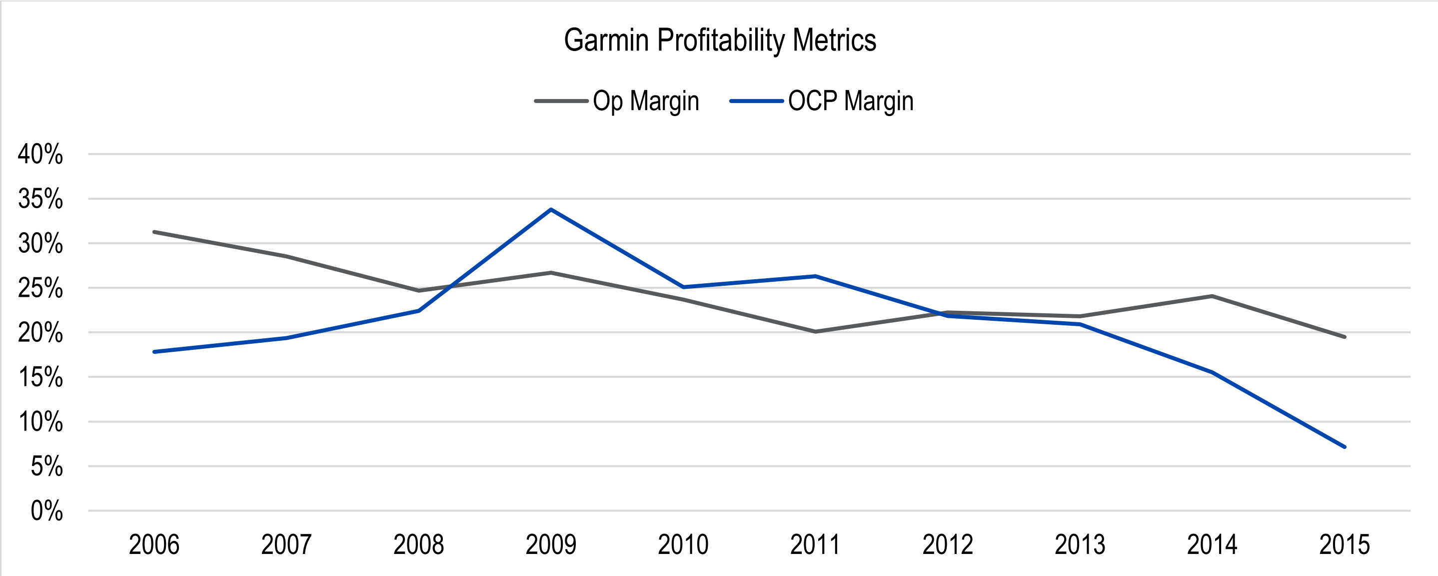


Figure 7. Source: Company Statements, IOI Analysis

Operating margin (earnings before interest and taxes) and OCP margin are generally within a few percentage points of one another. Because the firm reports its segment earnings on an operating margin basis, we first wanted to compare OCP to operating margin and understand any discrepancies between the two. We believe that the 2006-2008 period displays a time during which the firm was spending cash to build inventories for its popular car navigation systems, thus depressing OCP (building inventories counts as a cash outflow). In 2009, the firm slowed the pace of inventory building due to the financial crisis; reducing the amount of cash spent on building inventory boosted OCP. In contrast, the firm must have been able to retain pricing power on the products, since operating margin remained relatively high in 2009.

In 2014-2015, OCP dropped again due to a combination of increased taxes and building inventory – both factors which do not affect operating margin.

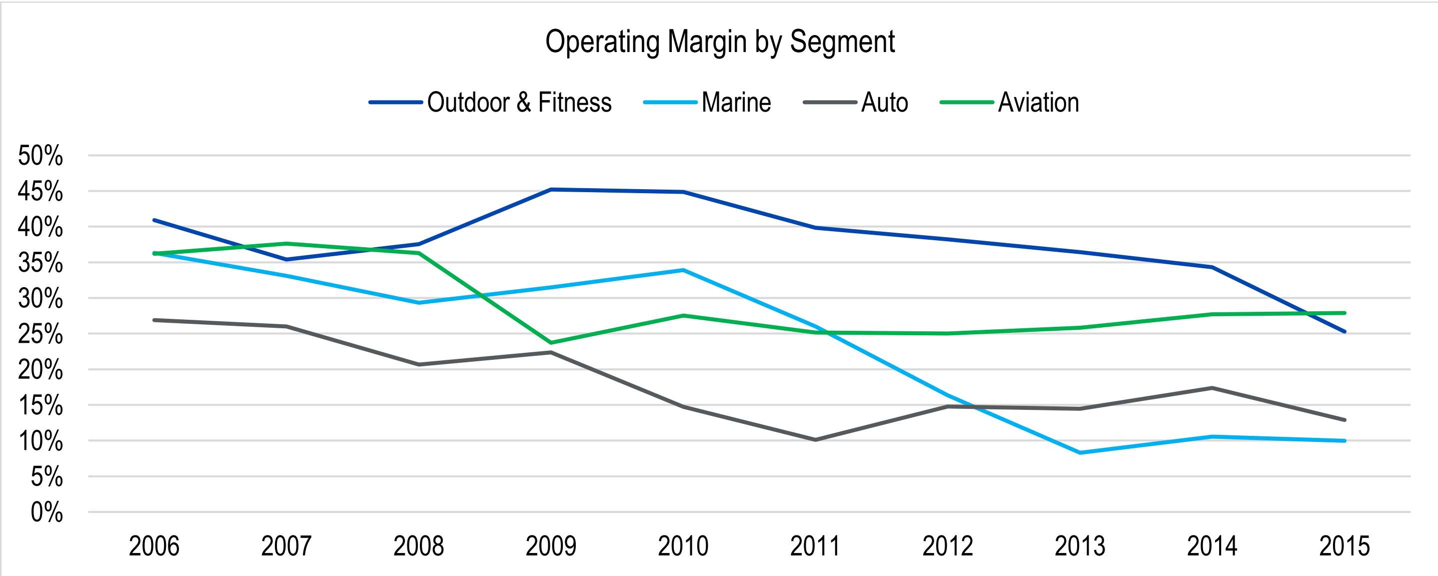


Figure 8. Source: Company Statements, IOI Analysis

Looking at the operating margin for each segment over time, we notice several things. First, ten years ago, all segments but Automotive generated margins above 35%. Automotive segment margins were already falling at that time due to increased competition. Also, note that Marine (light blue) and Auto (gray) margins have fallen substantially, and are now both dependably in the 10%-15% range. In contrast, Aviation (green) has maintained its margins above the 25% level since the 2009 dip. We believe that Aviation margins are likely to remain high, due to 1) the criticality of the equipment and 2) to Garmin's emphasis on well-integrated product suites and on excellent industrial design.

Our worst-case profitability scenario is based upon the assumption that Outdoor & Fitness's profit margins will more closely approximate the pattern of Automotive and Marine segments over the next five years; our best-case profitability scenario assumes that Outdoor & Fitness's margins will approximate those of the Aviation segment during this period. Of these two, we believe the former is more likely due to the numerous large competitors turning their attention to this market. That said, margin contraction this year is not notable. In the first three quarters of 2016, Outdoor & Fitness profit margins have run at 26.2%, compared to 26.6% during the same period last year – an insignificant drop.

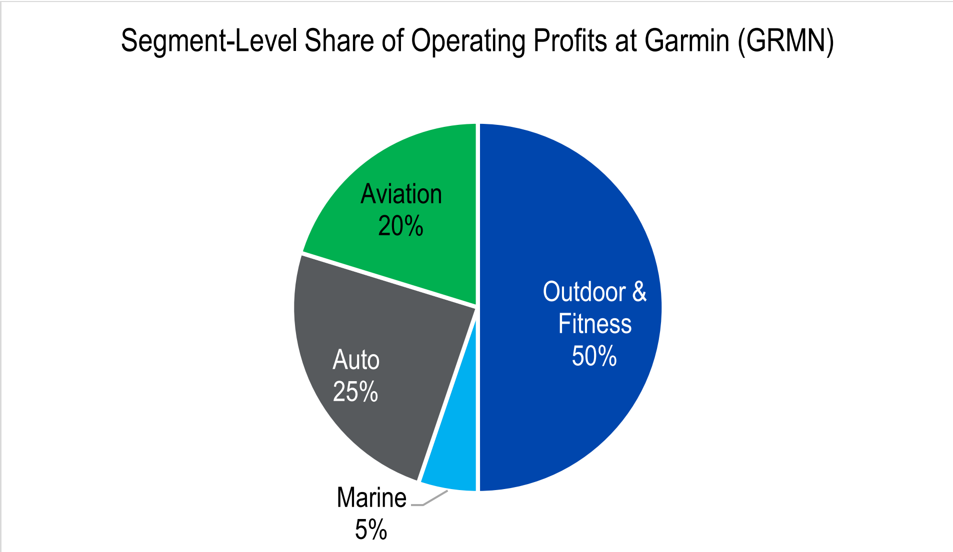


Figure 9. Source: Company Statements, IOI Analysis

It's clear from this pie chart how important both Outdoor & Fitness and Aviation is to Garmin. To the extent that Aviation is a niche market, and Automotive is a dying one, we believe that Outdoor & Fitness will be the most important business for Garmin over the next five years.

Investment Level

Expansionary Cash Flow is IOI's measure of investment spending net of asset sales and divestments.

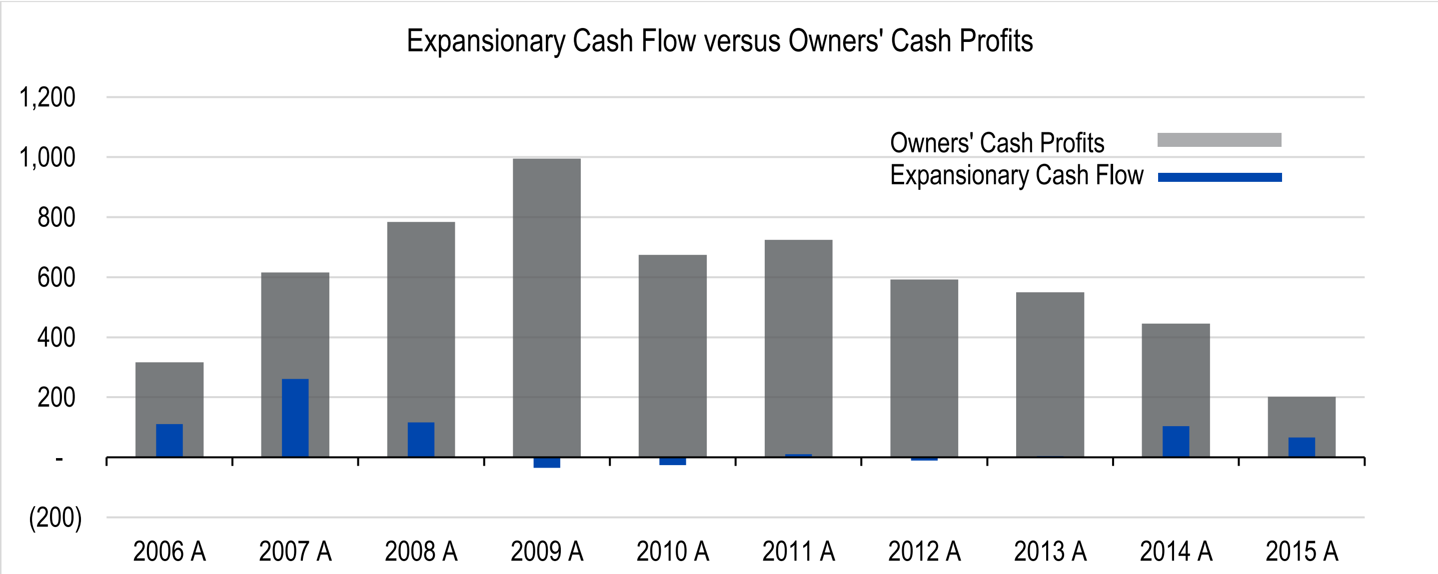


Figure 10. Source: Company Statements, IOI Analysis

In 2006-2008, Garmin spent 28% of its OCP on net investments. As the Automotive market went into decline, the management pulled back on investment spending and has started to invest again in 2014. Investment spending in 2014-2015 represented 26% of profits and is running at around half of that so far in 2016. Over the entire period, the firm has spent an average of 10% of profits on investments.

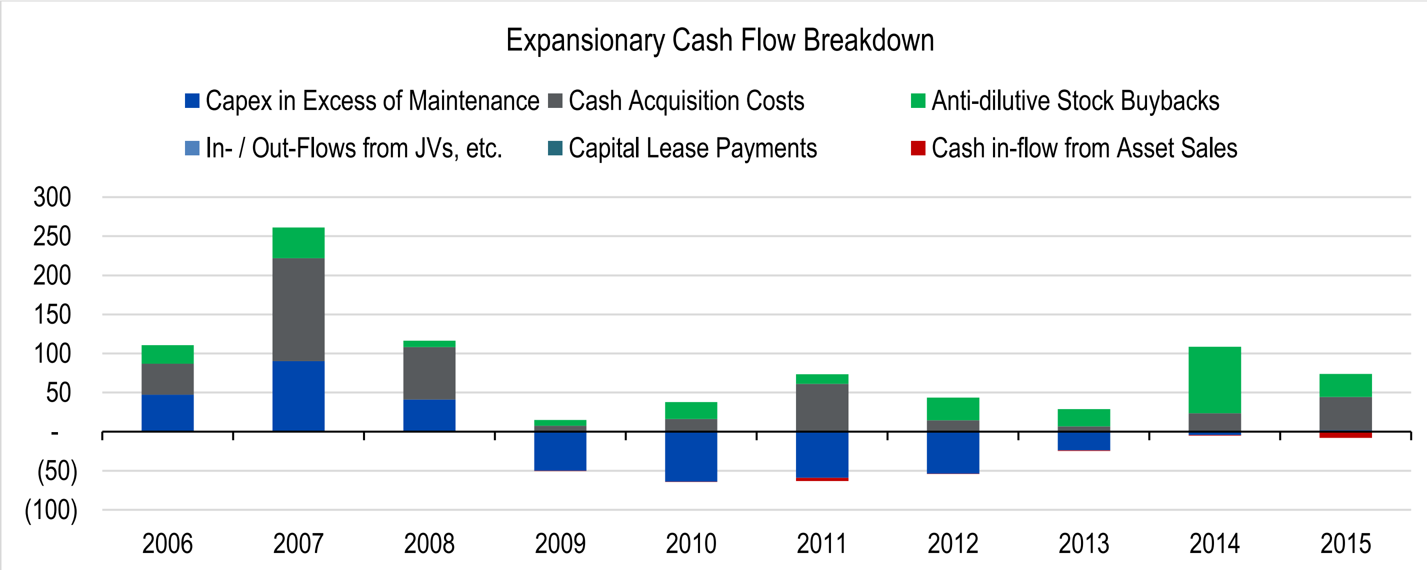


Figure 11. Source: Company Statements, IOI Analysis

The company has built its own production and distribution facilities around the world. It's main production facilities for most of its segments is in Taiwan. Aviation panel-mounted displays are manufactured at the company's Olathe, Kansas facilities. Considering the negative readings for "Capex in Excess of Maintenance" from 2009-2013, we suspect the firm was left with too much production capacity in Taiwan when the financial crisis hit. We believe that Automotive productive capacity has been realigned to meet Outdoor & Fitness production requirements.

The fact that Garmin is vertically integrated means that it has operational leverage. In other words, if sales volumes are high, profitability will be high because fixed production costs will be paid off at a certain volume level, and a large proportion of each additional unit sold will be converted into profit. Leverage is a double-edged sword, however, and if volumes fall enough, the hit to profitability will be disproportionately high.

In 2014, the firm issued about twice the number of shares that it usually does as compensation, leading to the relatively large outflow for "Anti-dilutive Stock Buybacks" that year. This bump may be due to Garmin's acquisition activity in 2014 and was not repeated in 2015.

Investment Efficacy

Corporate investments lead to profit growth. IOI measures profit growth versus the standard yardstick of nominal GDP growth to assess the efficacy of the company's past investments.

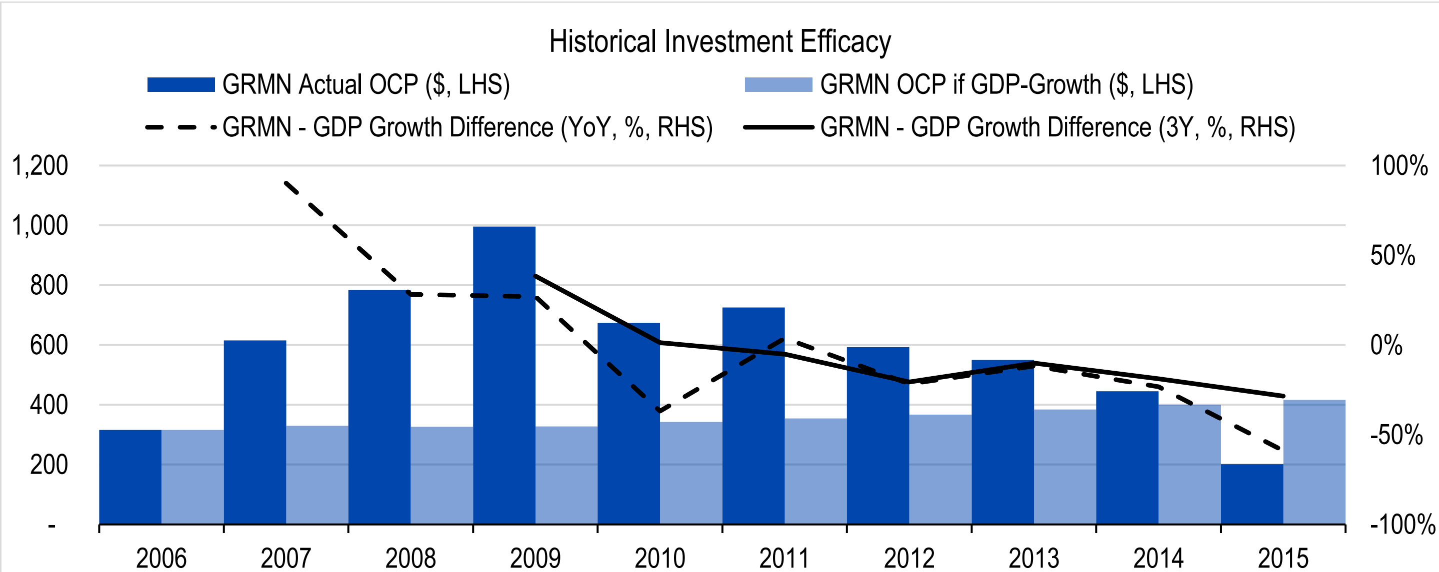


Figure 12. Source: Company Statements, Bureau of Economic Analysis, IOI Analysis

Profits grew very quickly in the 2006-2009 period, but fell nearly as quickly over the following years as consumers shifted toward GPS-enabled handsets. Garmin tried to partner with a handset maker to compete in this space as well, but to no avail. Taking the average of 2014 and 2015 OCP, the company's profits have dropped by around 70% since 2009.

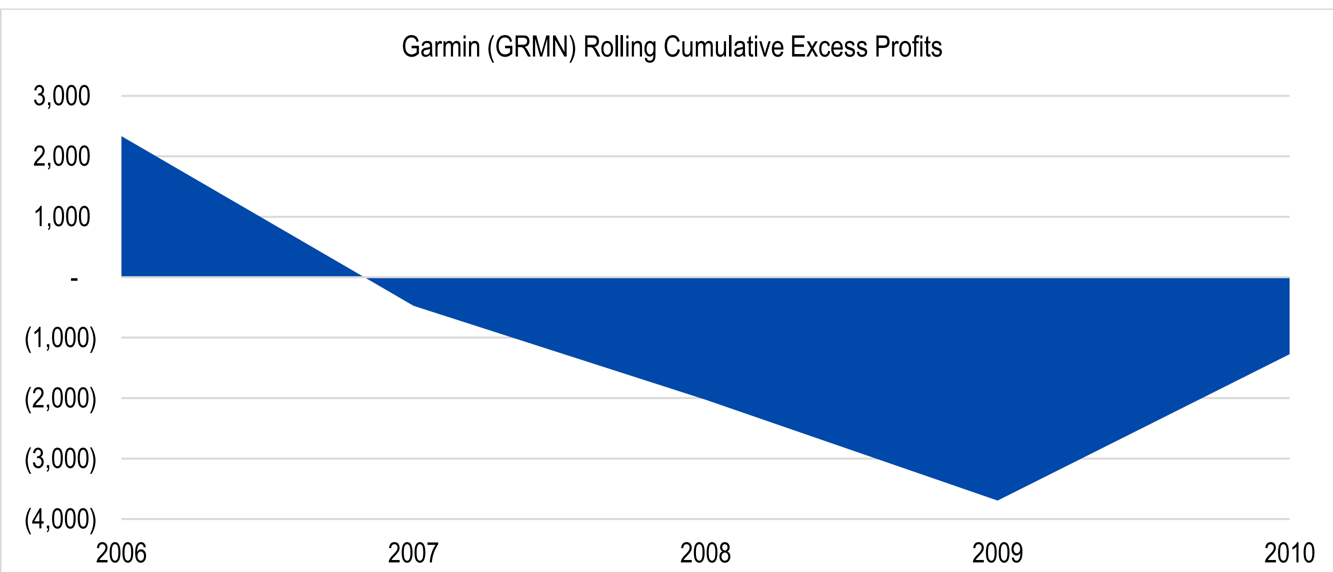
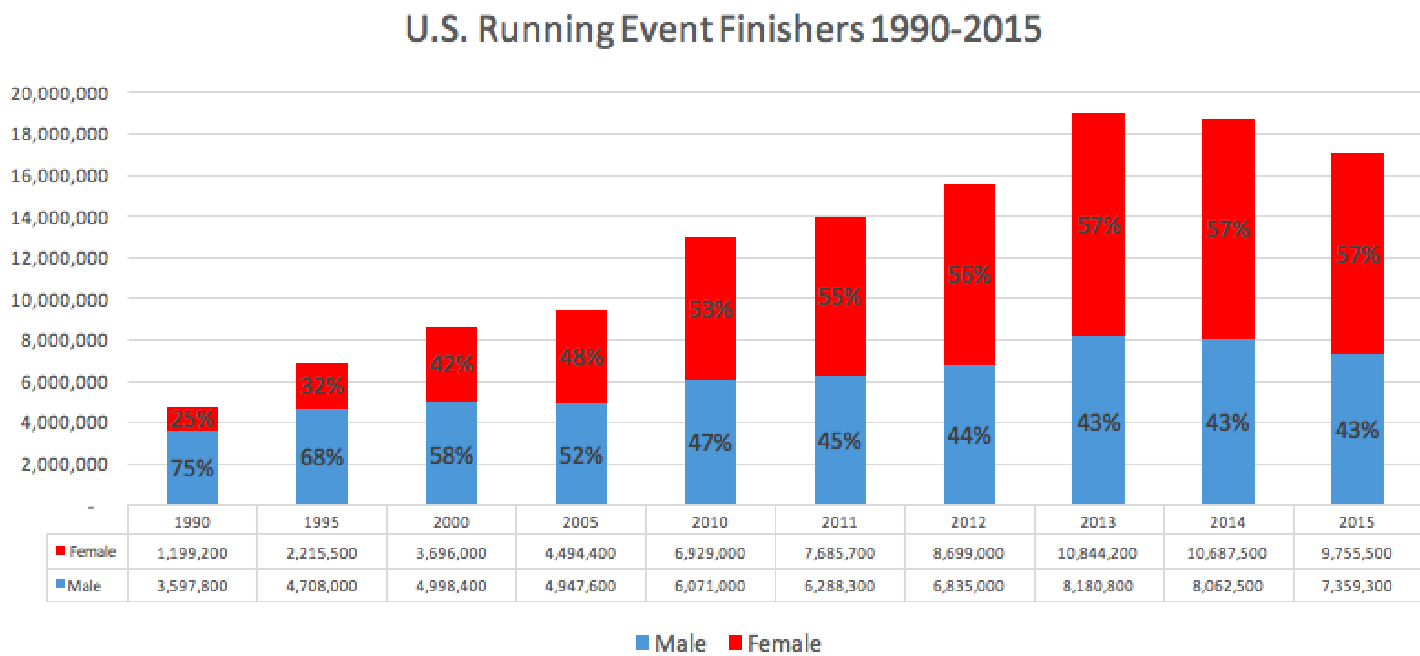


Figure 13. Source: Company Statements, IOI Analysis

This diagram requires a bit of explanation which may be found in [this article on the IOI website](). Even without reading through the full details of the calculation method, the story told by this graph is clear: the company has done a poor job of investing its owners' profits over the last 10 years and has destroyed value.

The key to the valuation, however, is not how the company invested in the past, but how it is investing now and how these investments will affect medium-term growth. The company is presently investing in all its businesses except Automotive, but its Outdoor and Fitness products have the widest commercial appeal. This business has a host of competitors, including Apple (Apple Watch Series 2) which is in a marketing partnership with Nike, Dutch company TomTom, down-market maker Polar, and upmarket competitor Suunto as well as traditional watchmakers like Timex and Casio. Garmin also competes with fitness band makers, including Under Armour, Samsung, Misfit, Fitbit, and Jawbone.

In our opinion, Garmin does have an advantage over other brands among very serious athletes. It is an aspirational brand for marathoners, tri-athletes, and ultra-marathoners. The problem from a commercial standpoint is that this market segment is narrow – only 3%-5% of all race running event finishers are marathoners – and the overall population of runners is in decline.



	1990	1995	2000	2005	2010	2011	2012	2013	2014	2015
Female	1,199,200	2,215,500	3,696,000	4,494,400	6,929,000	7,685,700	8,699,000	10,844,200	10,687,500	9,755,500
Male	3,597,800	4,708,000	4,998,400	4,947,600	6,071,000	6,288,300	6,835,000	8,180,800	8,062,500	7,359,300

Figure 14. Source: RunningUSA.org

According to RunningUSA.org, the median age of marathon runners is 36 years old for women and 40 years old for men and these ages have been fairly stable since 1980. According to Wikipedia, the population of US men and women in these age cohorts in five years will be larger than they are today, so Garmin may have a natural demographic advantage just as our medium-term period begins.

The real question in our mind is whether – with the significant competition and increasing ubiquity of wearable GPS devices – Garmin can continue to hold a dominant position in the niche market of very serious competitive runners and athletes. If it can, its medium-term growth is likely to be aided by the demographic tailwinds mentioned here.

Another possible source of growth for Garmin are Asian markets. At present, Asian revenues represent the smallest geographical proportion of Garmin's total revenues, but Garmin has recently made at least one Asian acquisition, and may be able to boost its growth through increased sales to that region.

Free Cash Flow to Owners

Free Cash Flow to Owners (FCFO) is the metric IOI uses to value companies. It equals Owners' Cash Profits less Net Expansionary Cash Flow.

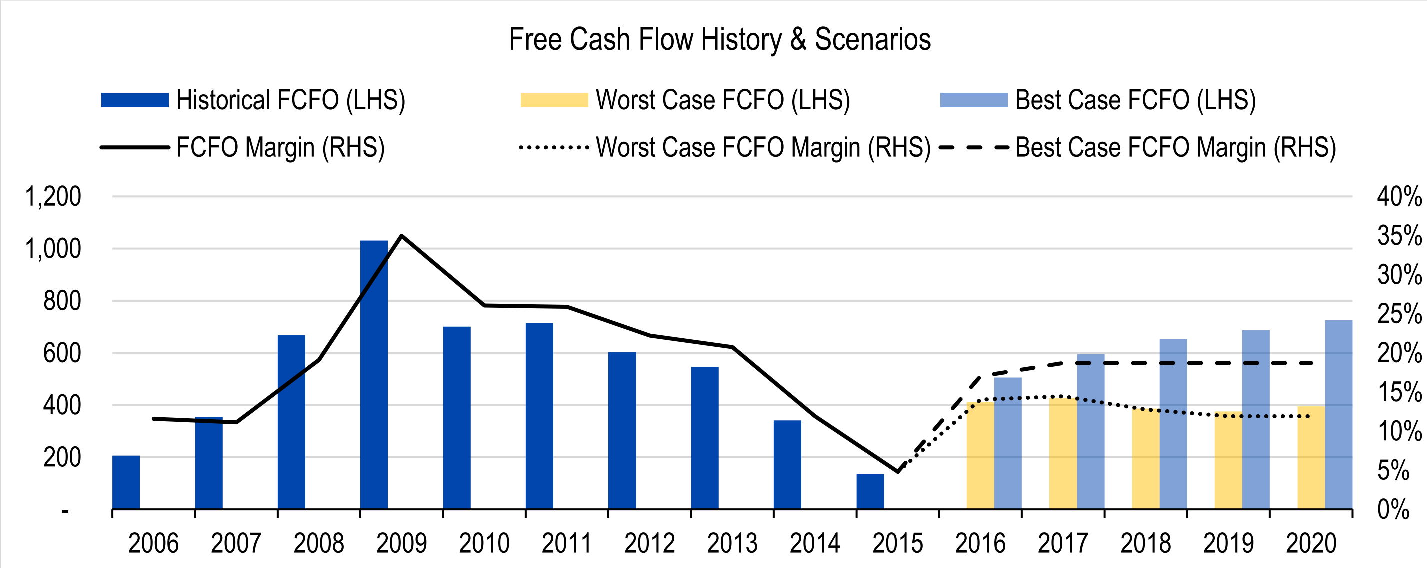


Figure 15. Source: Company Statements, IOI Analysis

Even our worst-case FCFO scenario shows the company generating a healthy $2 billion of cash over the next five years. Considering the competitiveness and the relative difficulty in creating differentiated products in the Outdoor & Fitness business, we do not see as robust of a rise in FCFO in the best-case as the company saw in the mid 2000s.