BEHIND THE NUMBERS
Quality of Earnings Analysis

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Garmin Ltd. (GRMN)
Earnings Quality Review

We are initiating coverage of GRMN with an initial earnings quality rating of 4- (Acceptable).

For an explanation of the EQ Review Rating scale, please refer to the end of this report.

Summary

Garmin (GRMN) has been beating forecasts but cut its outlook after 2Q22 results. The beats have become smaller, and it is facing several headwinds:

	2Q22	1Q22	4Q21	3Q21
Adjusted EPS	$1.44	$1.11	$1.55	$1.41
Beat	$0.01	$0.01	$0.12	$0.14
Rev Outlook $billions	$5.00	$5.50	$5.50	$4.95
G.Margin Outlook	56.7%	57.5%	57.5%	58.2%
Op. Margin Outlook	20.0%	22.8%	22.8%	24.0%

- Revenues are under pressure from rapid appreciation of the dollar, lapping hot demand coming out of Covid, and OEM production of autos.

- Margins are being pressured by higher wages, higher headcount, higher shipping costs, building out more capacity, and R&D related to new OEM contracts.

- Some of the measures Garmin is taking to build toward the future are hurting cash flow and margins at present. But, those actions may pave the way for better results within 2-3 quarters.

Overall, GRMN's accounting looks conservative with some transitory events occurring that may allow margins and revenue to eventually recover. Primarily these are impacting inventory and R&D spending.

What Is Strong

- Non-GAAP earnings are among the most conservative we have seen and we give GRMN high marks here. They do not add back even stock compensation or amortization of acquired intangibles. The primary adjustment is adding back FX gains and losses as the company manufactures and sells in several countries and then converts all to US Dollars. It has also added back large impacts from changes in Swiss tax law:

	2Q22	1Q22	2021	2020	2019	2018	2017
GAAP Income	$257.9	$211.6	$1,082.2	$992.3	$952.5	$694.1	$709.0
FX (G)/L	$22.4	$3.5	$45.3	-$2.8	$16.8	$7.6	$22.6
Tax impact of FX	-$1.7	-$0.4	-$4.7	$0.3	-$2.6	-$1.2	-$4.7
Other Tax Items				-$3.3	-$118.0	-	-$157.4
NonGAAP Income	$278.6	$214.7	$1,122.8	$986.5	$848.7	$700.5	$569.5
GAAP EPS	$1.33	$1.09	$5.61	$5.17	$4.99	$3.66	$3.76
NonGAAP EPS	$1.44	$1.11	$5.82	$5.14	$4.45	$3.69	$3.02

  - In 1Q17 and 4Q19, the Swiss tax code changed causing a revaluation of tax-deferred assets.

  - In 2Q20, GRMN had an intracompany transfer of intangible assets – which we have seen at many tech companies. This released the uncertain tax reserve allowance surrounding the asset and lowered the tax rate.

- GRMN does make acquisitions. As well as NOT adding back amortization of intangibles in earnings or transaction/integration costs into NonGAAP earnings, these deals also look more conservative on several other fronts:

  - Deals are fairly small and GRMN pays cash – **the company has no long-term debt.**

- GRMN does not put the full purchase price into Goodwill, which is not amortized. For two of the larger years for deals: 2020 had $148.6 million in acquisitions and only $14.2 million went to Goodwill and 2019 had $300.3 million in deals and only $89.5 million became Goodwill.

- **Intangibles are being amortized over 3-10 years and the amortization expense is not being added back to non-GAAP earnings. This should give GRMN a tailwind on earnings.** Amortization was $34.8 million in 2020 and $35.5 million in 2021. It is expected to fall to $31.7 million, $29.6 million, and $26.9 million for the years 2022-24. Every $2 million decline is about 1 cent in annual EPS.

- We see little concern with receivables. DSOs have remained consistent and ticked down slightly after Covid:

Receivable DSOs	4Q	3Q	2Q	1Q
2022			51.3	46.5
2021	55.2	48.8	50.6	47.4
2020	57.2	54.0	54.8	53.2
2019	58.4	54.4	55.6	53.8

Bad debt reserves are very low given the recession and slowing world growth rates. Garmin lists the reserve in the annual results:

	2021	2020	2019	2018
Bad Debt reserve	$7.1	$11.1	$6.8	$5.5
Net Receivables	$843.4	$849.5	$706.8	$569.8
Reserve %	0.8%	1.3%	0.9%	1.0%

If it had to boost it back to 1.3% - it would cost the company about 4 cents in EPS.

What Looks Weak

- Garmin watched its inventory fall during Covid and immediately thereafter and has suffered from being unable to fulfill all sales. When it does find necessary inventory it often has to pay up for it and expedite delivery. That has pushed down gross margins. GRMN is guiding to 56.7% for 2022 due to this pressure for a company that historically

sees 59%-60% gross margins. Every 100bp is worth about 24 cents in EPS. **(See detail below)**

- Inventory is intentionally being boosted to avoid shortages in stocks and enable it to wait for slower (cheaper) delivery. Garmin has taken inventory from 156 days after 2Q21 to 259 days after 2Q22. This is all by design. It is also taking price hikes where possible to offset FX pressure. Much of this is pressuring cash flow in the short term. Thus DSIs look high and cash flow looks weak. We think the building of inventory will start to slow and help both situations. Also, Garmin has not sought to boost payables at similar rates so that is not offsetting the cash drain of rising inventories. **(See detail below)**

- GRMN uses FIFO accounting. That normally works well with inflation, but building up inventory that costs more will take some time to work off before some of the lower shipping makes its way through the income statement. That could delay the recovery of gross margin. **(See detail below)**

- New OEM deals in the auto unit are causing fears of a write-down for the $80 million in goodwill at that unit. Higher discount rates to value Goodwill and continued losses there do not help that cause. We think investors may find that if a write-down occurs – it may impact more than Goodwill as Garmin has potential reimbursed developments costs in prepaid expenses that may come under valuation pressure as well as fixed assets. **(See detail below)**

- The OEM deals are money losers at the moment because preproduction and development costs are being expensed as R&D. R&D is now 35% of sales for this unit up from 20% two years ago. We expect that to moderate. Also, with car sales weak due to shortages of tech parts, cars with Garmin products aren't being sold at expected rates. While there are reasons an impairment could happen, we think the long-term potential of the income statement for this unit to improve with greater economies of scale and start-up investments declining could make this a driver for a turnaround for GRMN's results. **(See detail below)**

What to Watch

- Garmin has kept its effective tax rate very low with a combination of the Swiss tax rate being 14%, other jurisdictions having lower rates, and being able to release reserves against deferred tax assets as statutes of limitation expire. The effective tax rate has dropped from 15.5% in 2019 to 10.4% in 2020 and 10.3% in 2021. Guidance is for 8.5% in 2022.

  Can this last? They do seem to be adding more business to the United States with a higher tax rate. Also, GRMN lists a risk factor being discussions in Switzerland of moving to a global minimum tax rate of 15% in 2024.

- Garmin holds $1.8 billion in various bonds as available for sale marketable securities. The bulk of these securities mature in five years or less. Over 60% are corporate bonds. There are also municipal bonds, mortgage-backed securities, and commercial paper. With interest rates increasing and spreads widening on some classes of debt to the 10-year, **Garmin has seen the unrealized losses on this portfolio rise from $18.5 million to $93.0 million in the first half of 2022.** 3Q22 was may have seen this situation worsen. About $12 million in unrealized gains have also vanished.

  The company does not recognize unrealized market-related losses in the income statement. Only if a security is sold with a gain/loss realized or there is a credit issue with a security will GRMN report that in other income. We doubt they are buying junk bonds and believe much of the unrealized loss is related to interest rates moving up. **If Garmin holds to maturity, it may see very few losses here, but it is worth monitoring.**

- Garmin has deferred revenue and deferred costs. These relate to subscriptions for customers primarily to provide them with mapping data updates plus traffic reports and the costs to pay for the upgrades. For personal navigation devices, these deferred items are recognized over three years. For OEM devices for a car or plane, these deferred items may last 3-10 years. These items have always been fairly minor and the maturation of the personal navigation devices has seen it go down as other product areas have grown faster and diluted deferred revenue. The vast amount of revenue comes from selling the device. Deferred revenues represented only about 4% of revenues in 2020 and 2021.

Def. Rev Days Sales	4Q	3Q	2Q	1Q
2022			13.6	14.6
2021	12.5	15.9	15.6	19.0
2020	15.5	17.7	24.6	27.3
2019	22.1	26.3	27.5	34.9

Unlike many tech companies, GRMN deferred revenue doesn't drive the results to a huge degree. Software companies often have more than a full quarter in deferred revenue. It's less than $200 million here against $5 billion in total annual sales. It's worth watching if the new OEM contracts start to grow this figure again.

- Warranty reserves look good to us. The warranty programs run for 1-2 years for customers and the amount Garmin is accruing has been very close to what is being paid out. The total warranty balance has risen slightly with higher sales in 2021 and then dropped back with lower sales in 2022. What we will watch for is OEM contracts changing this model over time. If they become a larger part of the business, Garmin notes that those deals include warranties of 2+ years.

	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20	2Q20
Warranty Accrual	$14.2	$10.9	$22.1	$13.3	$23.0	$11.5	$19.9	$15.6	$13.7
Warranty Paid	-$14.9	-$15.6	-$19.5	-$15.0	-$17.7	-$14.8	-$17.2	-$14.9	-$13.7
Ending Reserve	$40.0	$40.7	$45.5	$42.9	$44.6	$39.3	$42.6	$40.0	$39.3

  - Note that in 2Q22 and 1Q22, GRMN beat forecasts by 1 cent. In 2Q22, it picked up 0.3 cents in EPS from declining warranty reserves and in 1Q22, it picked up 2.3 cents.

Supporting Detail

Inventories are Expanding Rapidly – by Design

Like many companies in the tech world, Garmin saw inventories back up early in Covid, then race out the door after that and they couldn't always be replaced in a timely manner. Normally,

it is a red flag to see inventory levels build continually. But in the case of Garmin, they are now doing it by design.

	4Q	3Q	2Q	1Q
2022 Inv.			$1,454.9	$1,339.5
2022 DSI			258.6	238.9
2021 Inv.	$1,227.6	$1,113.5	$938.6	$837.9
2021 DSI	180.3	204.3	156.4	177.0
2020 Inv.	$762.1	$821.4	$813.2	$790.2
2020 DSI	123.8	169.4	208.8	205.9
2019 Inv.	$752.9	$749.8	$648.1	$598.4
2019 DSI	148.0	186.0	155.4	173.2

DSI's jumped to 259 days up over 100 days y/y in 2Q22. Why is this? The biggest reason is they have done this is being unable to fulfill orders due to a lack of key parts. Here is the CEO from the last two conference calls:

In 2Q22:

*"**we continue to experience supply chain constraints, which limited the orders we could fill** in the quarter, specifically in marine and aviation."*

In 1Q22:

*"We performed very well during the quarter despite a combination of old and new headwinds. **Supply chain constraints persist, which limited the orders we could fill.**"*

At the same time, gross margin has been falling, which is hurting reported EPS:

Gross Margin	4Q	3Q	2Q	1Q
2022			58.7%	56.5%
2021	55.5%	58.4%	58.8%	59.8%
2020	58.5%	60.2%	59.3%	59.2%
2019	58.0%	60.7%	60.3%	59.0%

Expedited shipping rates are the key higher cost component. When scarce parts are located, Garmin needs them immediately to fulfill orders and book revenues. This is causing margin compression in late 2021 and early 2022. Here is the CFO in the 1Q22 and 4Q21 calls:

In 1Q22:

“Gross margin was 56.5%, 330 basis point decrease from the prior quarter. ***The decrease was primarily due to higher freight costs*** *and favorable impact of foreign exchange rates.”*

In 4Q21:

“Gross margin was 55.5%, 300 basis point decrease from the prior year quarter. ***Decrease was primarily due to higher freight costs*** *and favorable impact of foreign exchange rates.”*

Garmin is four quarters into building its inventory levels. This is by design. It wants to eliminate the shortages and for gross margin, be able to lower shipping costs. Consider the CFO quotes again:

In 2Q22:

“Inventory balance increased year-over-year to approximately $1.5 billion. ***We're executing our strategy to increase days of supply to support our increasingly diversified product lines, optimize the mix of ocean versus air freight shipments, and to carry sufficient levels of raw materials safety stock*** *to mitigate increased lead times.”*

In 4Q21:

“Inventory increased year-over-year to $1.2 billion. The increase was due to several factors including preparation for first quarter product launches, increased levels of indoor cycling products, expansion of our global manufacturing footprint and executing our strategy to increase supply to support our increasingly diversified product lines. ***During 2022, we expect our inventory balance to continue to grow to work to optimize the mix of ocean versus air freight shipments, produce efficient level of safety stock*** *to mitigate increased lead times and generally manage the supply of raw materials.”*

Our conclusions on the inventory increase:

- Guidance for 2022 is for a full-year gross margin of 56.7%, down 130bp from 2021's 58.0%. 2021 was also down 130bp from 2020. **100bp of gross margin represents 24 cents of annual EPS based on the current estimate of $5 billion in 2022 sales.** EPS is normally over $5.00 and guidance is $4.90 for 2022. They may be experiencing the worst of this situation right now.

- Garmin is also pointing to the strong US Dollar as a headwind for revenues and gross margin. It has countered this by raising prices. From the CEO's discussion of the matter after 2Q22, if the rate of change here moderates – this could also be setting the bar low after it cut gross margin forecasts by 80bp after the quarter:

  > *"First, the U.S. dollar strengthened significantly over the prior year relative to other major currencies and unfavorably impacted second quarter revenue by approximately $57 million.* ***Our strategy for managing currency fluctuations of this nature is to increase prices where we are able and reset pricing as we introduce innovative new products. We believe this approach is very effective in managing currency changes over the long term, but the rapid and relentless strengthening of the U.S. dollar will be a significant headwind for the remainder of the year."***

- Garmin uses FIFO accounting and it is raising prices. That should mean it is expensing already high-cost inventory. Plus, if expanding the inventory level is reducing some of the shipping costs, then the latest inventory purchased should have some lower cost to it. However, it will take time to burn through the higher-cost stocks, and that could delay a return of gross margin to the 59%-60% level.

- The inventory issues have been a major headwind for gross margin. However, within a quarter or two, Garmin could be seeing a good tailwind here with more sales fulfilled at higher gross margins owing to the FIFO accounting, price hikes, and having more inventory purchased at lower shipping costs. While it could take longer to get back to 60%, margin could be moving in the right direction by year-end.

Inventory Is Pressuring Cash Flow and Not Getting Help from Higher Payables

Adding 100 days of inventory doesn't come cheap. This is putting pressure on Cash from Operations:

	1H22	1H21	2021	2020
Inventory	-$294.8	-$177.2	-$476.5	$28.7
Accts Pay	-$29.8	$44.1	$108.9	$1.4
Accts Rec	$122.4	$103.9	-$19.1	-$108.9
Curr Liab	-$74.3	-$39.4	$70.0	$87.8
Curr Ass	$0.8	-$27.3	-$38.0	-$33.7
Chg Wrk Cap	-$275.7	-$95.9	-$354.7	-$24.7
CFO	$265.5	$598.0	$1,012.4	$1,135.3

Because Garmin has no debt, it is funding the inventory increase largely with current cash flow. It not growing payables at anything close to the rate of inventory growth.

Days Payable	4Q	3Q	2Q	1Q
2022			56.8	53.3
2021	54.4	58.5	50.7	53.0
2020	42.0	48.6	49.6	52.2
2019	47.4	58.4	51.5	49.3

New OEM Deals in Autos Are Pushing Up Costs and Pressuring Cash Flow

GRMN is facing several issues with OEM Auto deals and there are discussions about related risks by the auditors. From the macro standpoint, the auto contracts are to supply new products to car manufacturers. However, those manufacturers have the same supply chain issues in obtaining tech parts and have had trouble completing cars which delays some of GRMN's results too. As a result, GRMN is losing money in this sector:

Auto Unit	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21
Sales	$139.3	$138.3	$169.2	$138.1	$147.7	$124.5
Gross Profit	$56.2	$52.7	$60.4	$55.0	$63.0	$48.8
Op. Profit	-$15.3	-$20.0	-$14.7	-$24.1	-$5.6	-$21.0

The fear is that with goodwill having been assigned to the Auto unit with recent acquisitions and there being losses, GRMN will need to write down the $80 million of goodwill in this unit. We

would argue that the size of a write-down could be larger than just goodwill. Remember we noted earlier that GRMN is conservative on acquisitions. They have ramped up investment spending even after the acquisitions as they expanded the operations. Plus, they are committed to pre-production costs that are incurred as R&D. Here is the description in the 10-K:

> *“Preproduction design and development costs related to long-term supply arrangements* ***are expensed as incurred, and classified as research and development, unless the customer has provided a contractual guarantee for reimbursement of such costs****.* ***Contractually reimbursable costs are capitalized as incurred in the Consolidated Balance Sheets within prepaid expenses and other current assets*** *if reimbursement is expected to be received within one year, or within other noncurrent assets if expected to be received beyond one year. Such capitalized costs were approximately $67,349 and $63,610 as of December 25, 2021 and December 26, 2020, respectively.”*

GRMN does not break out capital spending by unit, but does break out R&D annually. Look at how much spending is going to Auto R&D:

Auto Unit	2021	2020	2019
Sales	$579.5	$460.3	$548.1
Gross Profit	$227.2	$206.6	$256.6
Op. Profit	-$70.7	-$18.6	$56.9
R&D at Auto	$204.2	$149.1	$107.2
R&D % Sales	35.2%	32.4%	19.6%
Total Deprecation	$104.5	$78.1	$71.9
Total Cap. Exp.	$307.6	$185.4	$118.0

R&D spending jumped from 20% of sales to 35% for autos. GRMN noted that less of this is being reimbursed, *“The auto increase in absolute dollars and as a percent of revenue was primarily attributable to higher engineering personnel costs driven by ongoing investments in auto OEM programs and a lower proportion of such costs being contractually reimbursable.”*

We could understand a potential write-down of assets for the auto unit given that car sales may be hurt by higher interest rates impacting consumers buying a car plus the impact of a higher discount used to value the goodwill. But we think investors should realize that there are more assets than Goodwill here. They have a sizeable portion of assets being held in prepaid expenses and there has been higher capital spending for more tangible assets now in place at the auto unit too.

In the big picture, we think even with an increased chance of a write-off here, the unit does have some promise for GRMN longer term:

- With sales impaired from lower car sales and just getting some of these plants up and running – this should be a big part of GRMN's gross margin pressure as they have lower plant utilization in this area. This is about 12% of sales and the gross margin is 40% versus 59% for the whole company last quarter. There is room for economies of scale to probably show considerable improvement.

- The high R&D spending here is what is pressuring operating income and it is full of preproduction and development costs – that should decline in the future and help profits. Plus if some of the R&D is reimbursed, cash flow and earnings will look better.

- It is doubtful that BMW is going to stop selling luxury cars with fancy tech items like what they contracted with Garmin to provide. This seems like a situation that should improve and a write-off would likely be ignored as a one-time event by the market.

Explanation of EQ Rating Scale

6- (Exceptionally Strong)- Indicates uncommonly conservative accounting policies to the point that revenue and earnings are essentially understated relative to the company's peers. Higher possibility of reporting positive earnings surprises

5 (Strong)- Indicates the company has no areas of concern with its reported results and we see very little risk of the company disappointing due to recent results being overstated from aggressive reporting in recent periods.

4 (Acceptable)- Indicates the company may have exhibited a minor “red flag”, but the severity of the issue is not yet a concern. Minimal risk of an earnings disappointment resulting from previous earnings or cash flow overstatement

3 (Minor Concern)- Indicates the company has exhibited either a larger number of or more serious warning signs than companies receiving a 4. The likelihood of an immediate earnings or cash flow disappointment is not considered to be high, but the signs mentioned deserve a higher degree of attention in the future.

2 (Weak) Indicates the company’s recently reported results have benefitted materially from aggressive accounting. Follow up work should be performed to determine the nature and extent of the problem. There is a possibility that upcoming results could disappoint as the impact of unsustainable benefits disappears.

1 (Strong Concern)- Indicates that the company’s recent results are significantly overstated and that we view a disappointment in upcoming quarters is highly likely

In addition to the numerical rating, the EQ Review Rating also include either a minus or plus sign. A minus sign indicates that our analysis shows the overall earnings quality of the company has worsened since the last review and there is a possibility the numerical rating will fall should the problem continue into upcoming quarters. Likewise, a positive sign indicates that the overall earnings quality is improving, and the company may see an upgrade in its numerical rating should the trend continue.

Key Points to Understand About the EQ Score

The EQ Review Rating is much more than a blind, quantitative scoring method. While we utilize proprietary adjustments, ratios, and methods developed over decades of earnings quality analysis, the foundation of all of our analysis is reading recent SEC filings, press releases, conference call transcripts and in some cases, conversations with managements.

The EQ Review Rating is not comparable to a traditional buy/sell rating. The Rating is intended to specifically convey the extent to which reported earnings may be over/understated. Fundamental factors such as forecasts for future growth, increasing competition, and valuation are not reflected in the rating. Therefore, a high score does not in itself indicate a company is a buy but rather indicates that recent results are a good indication of the underlying earnings and cash generation capacity of the company. A low score (1-2) will likely result in us performing a more thorough review of fundamental factors to determine if the company warrants a full-blown sell recommendation.

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