CFA Institute Research Challenge

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CFA Society Italy

Shadow Team

The CFA Institute Research Challenge is a global competition that tests the equity research and valuation, investment report writing, and presentation skills of university students. The following report was prepared in compliance with the Official Rules of the CFA Institute Research Challenge, is submitted by a team of university students as part of this annual educational initiative and should not be considered a professional report.

Investment Summary

We issue a HOLD recommendation. Our analysis is based on:

I. Low marginality levels, ROI 2023, calculated doing a proportion with the third trimester, is about 6,63% that is way lower of the pre-covid levels. The management of the Company is working to bring back the profitability to the previous levels, but it is not easily attainable due to the financial structure of the company;

II. Significant exposition to debt experienced in the last years. ROD 2023 is 4,38%, the second higher level experienced from the company after the 8,09% registered in 2020. The greatest concern about GVS rises from the company's exposition to debt, if the management won't be able to face it and bring it back to acceptable levels it would gravely impact the performance of the Company. Despite a good liquidity position of 129 million, a current ratio of 1.7085 and a Net Financial Leverage of 105,63%, with a Net Financial Position (NPF) of 385 million, the company may not be able to invest freely to finance projects or future acquisition.

III. Increasing geopolitical tensions. The recent wars and political tensions all over the world are affecting transportation expenses, specifically the Russia-Ukraine conflict and the Red sea tension that have significantly decreased world trade. (inserisci grafico, fonte: portwatch, fondo monetario internazionale)

IV. Risk. The company may be affected by: market condition (external factor like healthcare expenditures, energy and transportation costs and geopolitical tensions); internal factors (new products and acquisitions); financial elements (financial risk, which may include interest rate, currency and credit merit of the counterparties).

Business Overview

History

GVS is an industrial company, founded by Grazia Valentini in 1979, to produce filtering solutions in the clinical-healthcare sector. It roots its social and economic presence in Italy, ensuring nationwide presence with industrial plants of moderate capacity. Today, the company's corporate structure sees the founder's children in top management, particularly Massimo Scagliarini, serving as CEO. Under their guidance, the company has adopted a process of global production relocation, thus moving plants and expanding existing ones across almost the entire globe, also obtaining tax advantages in the respective countries.

Operations

The geographical distribution, linked to revenues, can now be divided as follows: North America 48%, Europe 27%, Asia 18%, Other countries 7%. This process can certainly be attributed to the numerous acquisitions made during their growth, a strategy that undoubtedly follows that of global expansion. Among the most important are the RPB and Haemotronic groups. Expansion beyond borders can have several advantages, besides fiscal ones, such as product diversification and cross-selling. GVS now encompasses three major macro Industries: Health & Safety; Healthcare and Life Sciences; Energy & Mobility, which account respectively for 63%, 20%, 17% of total revenues. Therefore, more than half of the revenues come

Current price*: € 6.14
Target price: € 5.83
Variation: -5.05%
Exchange: Italian Stock Eschange
Ticker: GVS.IM (BBG), GVS.MI (RIC)

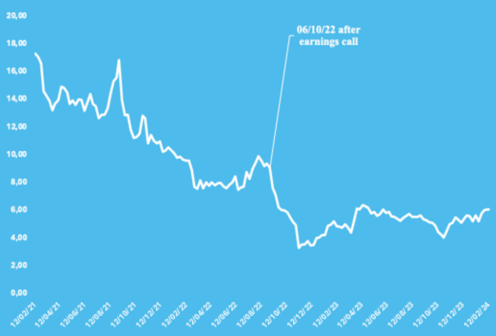
Main Shareholders:

Massimo Scagliarini: 60%
Ruth Wertheimer: 3.12%
Free Float: 36.88%

Shares Outstanding: **175,000,000**
Market Cap: **€ 1,074.50 Mil**

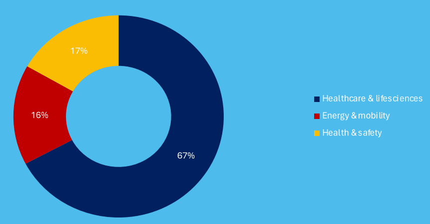
52 Week High: **€ 6.46 (+ 5.21.%)**
52 Week Low: **€ 4.00 (- 34,85%)**

Share Price – Exhibit 1



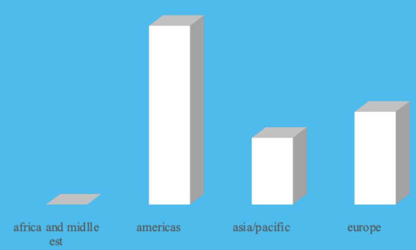
Source: FactSet

Revenues by Segment – Exhibit 2



Source: Company Data

Revenues by Geographic segments—Exhibit 3



Source: Company Data

from the sale of Healthcare & Life Sciences sector products, namely medical instruments such as medical bags, transfusion filters, IV bags, etc. These are presented to the market through a B2B approach, reserving their attention towards hospital companies, private clinics, healthcare associations, etc.

A fundamental aspect of production is certainly found in the supply chain management, which in GVS is done respecting the requirements placed by its management. Such requirements concern not only environmental impact and human rights, but also product innovation and customer satisfaction. The method used is that of local development, i.e., the valorization of suppliers close to production plants, in order to reduce the environmental impact of fuels and also optimize production. Partnerships with suppliers appear financially solid, the result of a division of labor and general organization. Thus, all regulations on product quality and safety are respected, ensuring a strong position in ESG rankings.

All this therefore leads the company to a position where it can enjoy tax advantages for each localized headquarters, subject to careful evaluation by stakeholders, for reasons of transparency and legality.

Industry Overview

HealthCare is considered a defensive sector thanks to its stability during negative cycles of the economy. GVS operates mainly in the industry of HealthCare Equipment and Supplies, specifically in the production of advanced filtration solutions, medical disposable applications and safety masks. This segment has shown a +15,39%[1] growth in the last 5 years (2017-2022), considering the S&P Composite 500 as the index benchmark. In particular, the outbreak of the coronavirus pandemic, in 2020, has generated 33,15%[2] of total return, consequently due to the huge amount of capital needed facing the epidemic. Conversely, in 2022, it registered a -23,36%[3] total return as a consequence of an unexpected increase in the costs of production (in particular raw materials and electricity costs) caused by the Russia-Ukraine conflict.

The market is characterised by elevated entry barriers due to the high costs of maintaining innovative processes needed for the device's production and the continuous R&D investments crucial to succeed in such a highly innovative environment. On the face of it, suppliers can adjust their prices according to economic cycles. The main players in the industry are Abbott Laboratories, Medtronic, Johnson & Johnson, Siemens AG and Stryker Corp.

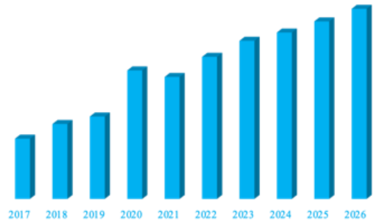
The factors contributing to the expansion of the industry are as follows:

Growth of HealthCare Spending

We define HealthCare (HC) spending as government and private expenses in healthcare. Analyzing the growth of HC spending as a percentage of GDP in the last twenty years, we can identify the USA as the biggest contributor to investments and spending in HC. The increase in HC expenditures consequently drives up demands for HealthCare Equipment and Supplies. "Over 2022-31 average National Health Expenditures (NHE) growth (5.4 per cent) is projected to outpace that of average GDP growth (4.6 per cent) resulting in an increase in the health spending share of Gross Domestic Product (GDP) from 18.3 per cent in 2021 to 19.6 per cent in 2031."[4]

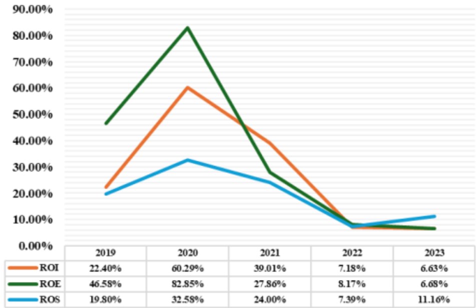
1. S&P Dow Jones Indices, S&P helth care equipment select industry index
2. S&P Dow Jones Indices, S&P helth care equipment select industry index
3. S&P Dow Jones Indices, S&P health care equipment select industry index
4. National Health Expenditure Projections 2022-2031

GVS Historical and Forecasted Revenues – Exhibit 4



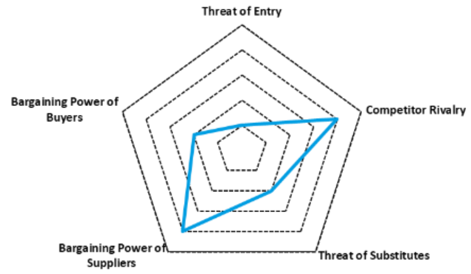
Source: Company Data, Team Estimates

GVS Financial Indicators Last 5 years – Exhibit 5



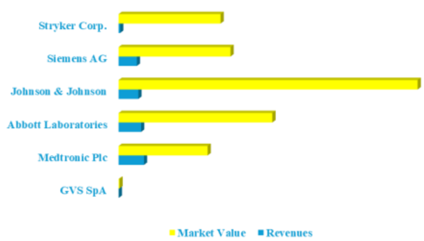
Source: Company Data, Team Estimates

Porter's Five Force Analysis – Exhibit 6



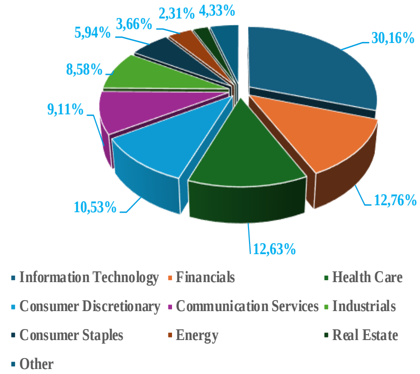
Source: Company Data, Team Estimates

Market Cap & Revenues of GVS and Comparables – Exhibit 7



Source: Companies Data, FactSet, Team Estimates

S&P 500 Composition, by Sector – Exhibit 8



Source: Companies Data, FactSet

Aging of population

"The number of people aged 65 years or older worldwide is projected to more than double, rising from 761 million in 2021 to 1.6 billion in 2050. The number of people aged 80 years or older is growing even faster."[5]
This phenomenon is due to the decrease in birth rate in most of the developed countries and the increase of HealthCare productivity, that led to an increase in life expectancy. An older population requires more treatment. In this context HealthCare industry could be considered one of the most valuable investment area in the long run.

HealthCare 4.0

Innovation technology could be considered a driving force for the expansion of this sector, mostly thanks to AI (Artificial Intelligence). These innovations will improve the efficiency of data analysis and led to a better prediction of illnesses. "The global market for artificial intelligence in the healthcare sector - last year (2020) - was valued at 8.2 billion dollars (6.8 billion in equity investments according to CB Insights estimates in the State of HealthCare" report) and is expected to touch $ 200 billion by 2030 , growing at a CAGR of 38.1% over the forecast period (2021-2030)." [6]

Global Warming

"According to the IPCC report, around 3.5 billion people – almost half of humanity at the moment of writing – live in areas highly vulnerable to climate change. According to WHO data, heat-related deaths among people over the age of 65 have increased by 70% worldwide in the last two decades"[7]. Global Warming is one of the most discussed problems nowadays because it can lead to a decline in life expectancy and extreme natural phenomena that could cause harm to human life and will drive HealthCare expenditures in the future.

Competitive positioning

Technology

The technology deveoped by GVS to filter solutions is not only innovative but multi-use and very efficient. This allows the company to offer a wide range of products for the filtration systems that distinguish it from other players.

R&D

The investments in R&D, 6% of the revenues in FY2022, are transversal to the engineering processes used within the 3 business areas. Despite being a good percentage of revenues, the investment in R&D is extremely low in absolute value, compared to the other players in the industry.

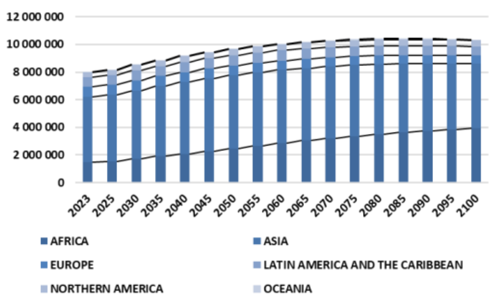
GVS in the World

Gvs completed 17 M&A transaction in the last 13 years, mainly oriented in North America and now, exploring Chinese markets. By expanding his presence in new markets and reducing the increasing efficiency of production, the company is poised to better its position in the market.

Investment Risks

The investment risks are derived from the operation of the company and are classified as Market, Company and Financial Risks as follows:

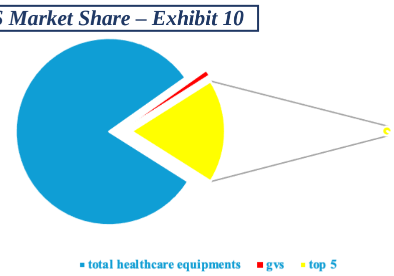
Forecasted Population per World Region – Exhibit 9



Source: UN, Team Estimates

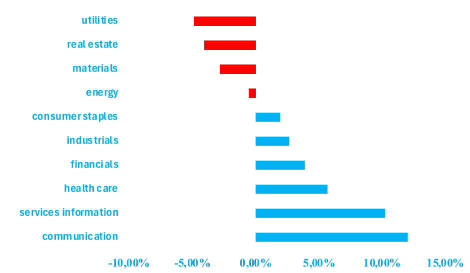
SWOT Analysis	
Strenghts	**Weaknesses**
- Versatility of Production: Use of flexible membranes for different kinds of filtration systems.	**- Elevate Debt Burden:** High interest expenses.
- Strong Relationship with Customers: Long-standing CR and low percentage of total revenues per single customer.	**- Low Absolute Marginal Impact of Product Lines on Sales:** Products characterized by low prices.
- Innovative, Effective and Wide Portfolio of Products: Own patented products, employed in various product lines.	**- High TurnOver:** Talent retention and knowledge consolidation problems.
Opportunities	**Threats**
- Expansion in New Markets: Addressing developing countries with growing Healthcare	**- Underestimation of Entrance Barriers:** Failing to identify correctly market requirements.
- Issuing of New Patents: New Patents expanding product lines.	**- Rising International Tensions:** Rise of Energy and Raw Material costs.
- Consolidating and Exploiting Synergies with Acquired Companies.	**- Failing to Organize and Accomplish Consolidation Plan.**

GVS Market Share – Exhibit 10



Source: FactSet, Company Data, Team Estimates

Sectors Growth – Exhibit 11



Source: FactSet, Team Estimates

5. United Nations, world social report 2023: leaving no one behind in an ageing world
6. Global Market Digital Health
7. WHO The global health community is calling for urgent action on climate and health at COP28

Market Risks

Probability of Manifesting | **Impact**

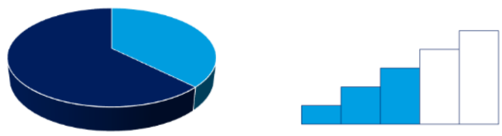
Decreasing Governmental Healthcare Expenditures

In contemplating reduced governmental healthcare expenditures, concerns for healthcare equipment companies arise. However, the impact may be less severe than expected. The ageing population in developed countries is set to drive increased healthcare needs, making significant spending cuts improbable. Despite the company's 30% sales exposure in Europe, the impact is moderated by the rising demand driven by an ageing demographic. Additionally, a shift towards heightened private expenditure in North America acts as a counterbalance, mitigating potential losses. While a decrease in governmental spending remains a risk, the overall probability of manifesting is deemed unlikely, with a manageable medium impact, as strategic market diversification can help the company navigate these challenges.

Surge in Energy and Transportation Costs:

The Healthcare Equipment industry is confronting the risk of surging energy and transportation costs due to the conflicts in the Middle East and Ukraine. While the ongoing war in the Middle East has severely disrupted the supply chain and transportation through the Red Sea, increasing expectations of a future surge in transportation and energy costs, the war in Ukraine has already impacted European companies creating an energy crisis. Both the aforesaid wars are expected, unfortunately, to continue throughout the first half of the year 2024, and given the instability of the current situation our team thinks that a comeback to "normality" can not be expected before the second half of 2025. Despite the acknowledgement of the company management of the aforesaid risk, a material solution has not been proposed yet, such as a medium/long-term energy deal to secure fixed prices. Thus, this risk is considered to have a very likely overall probability of manifesting and a high impact on revenues.

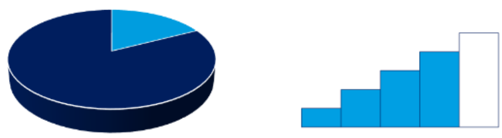
Geopolitical Global Tensions:



Given the recent expansion of the company into the Chinese market and the prevailing tensions between China and Taiwan, there is a potential risk of either a future conflict or heightened tensions, possibly resulting in sanctions on China. Such developments could significantly disrupt the operations in the country, leading to a not negligible impact on revenues. While our team does not anticipate a war in 2024, we foresee an escalation in tensions due to the recent election in Taiwan and the upcoming U.S. election at the end of 2024. We have assigned a 25% probability of these risks materializing, with a medium impact on generated revenues.

Company Risks

Failing in Integrating Acquired Companies:



The company is exposed to the risk of failure in the integration of the recently acquired businesses, potentially resulting in an increase in operating costs and losses on the invested capital. Recognizing these challenges, the company has taken proactive measures. The identification of entities with akin or complementary products and the formulation of a strategic plan to capitalize on synergies, not only in cross-selling but also in leveraging expertise to curtail operating costs, have been identified. Failure to integrate the diverse product lines could substantially impact the company's revenues, but it is the Team's opinion that the probability of such an eventuality happening is unlikely.

Failing in Introducing Successful Product Lines:

Given the commitment to introduce 31 new products between 2024 and 2025, there is a noteworthy risk in the eventuality of a failure to obtain patents or authorizations in certain markets. The company's patent track record highlights its innovation capabilities. However, the recent expansion in the Chinese market could lead the company to face new challenges in obtaining authorization for the production and reselling of newly developed products, leading to failure in the introduction of such or in slowdown of business development. The probability of the company failing to introduce new products to different markets, considering innovation as the company's core strategy, is unlikely. The impact of such an event would have a huge impact on revenue growth and lead to writedowns on R&D expenses.

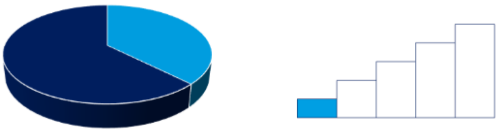
Financial Risks

Interest Rate Variation:

Despite the financial position of the company, which sees a high level of indebtedness, the company is well-positioned to benefit from the decrease in interest rates. Instead, in the eventuality of an increase in interest rates, the company would find itself in a worse financial position that could impact its liquidity management and interest costs. However such eventuality is considered to be very unlikely, and the relative impact in terms of revenues is considered to be small.

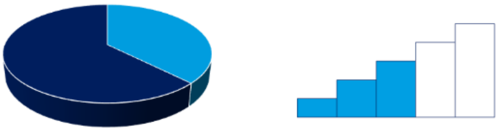
Related Parties Insolvency Risks:

Counterparty insolvency risk refers to the possibility that a related party may become insolvent, failing to meet its financial obligations. The impact of counterparty insolvency can be far-reaching, causing financial losses, and disrupting liquidity management and operations. However, GVS seems to hold a diversified portfolio of customers, of which none is responsible for more than 10% of total revenues. Moreover, the company's receivables turnover ratio is 55.5 days, which seems to represent a normal 60-day dilation of payments. While the probability of a manifestation of the insolvency risk is likely for some companies interacting with GVS, the impact of such is considered to be very small.



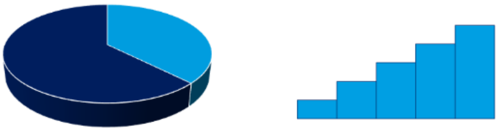
Exchange Rate Variation:

Given the significant exposure of the company to different currencies, and considering the uncertainty of the macroeconomic outlook, it must be considered the risk of substantial variation in the exchange rates. Despite the company's acknowledgement of such risk, it seems like the company has a small hedge against currency depreciation. However, the company is not covered by the risk of USD depreciation, to which the company is deeply exposed. Moreover, the eventuality of a cut in ECB interest rate preceding Fed, could lead to a USD depreciation. The probability of such is considered to be likely, with a medium potential relative impact in terms of revenues.



Risk of non-repayment of Debt:

The company may not be able to meet its debt obligations within the expected timeframe of 2 years. This delay may result in various consequences, such as financial penalties, higher interest rates, and a deterioration of the company’s creditworthiness. The company, in this scenario, may find itself grappling with a compromised financial position, strained relationships with creditors, and an elevated risk of facing legal actions. It becomes imperative for the company to address these challenges promptly to safeguard its financial stability and maintain a positive standing within the financial markets. The probablility of a non repayement of debt is likely, and the impact on revenues would be very high.



Financial Analysis

Performance analysis

In the last 5 years, GVS's sales have increased by a Compounded Annual Growth Rate (CAGR) of 13,5%, reaching a revenue level of €387,6 mln in 2022. The main driver behind this growth was the recovery from the Coronavirus crisis which led to a doubling of the Net Income of the society, bringing it from €59,0 mln to €136,4 mln.

In 2020, during the pandemic, GVS managed to generate more liquidity, primarily due to the increase of the EBITDA from the sale of surgical masks. That allowed the company to pay off some debts, improving the Net Financial Position (NFP), which decreased from €135 mln in 2019 to €35 mln in 2020. Furthermore, another enhancement stemmed from the IPO conducted in the same year, which increased the liquidity by €65 mln, as net cash flow from extraordinary activities.

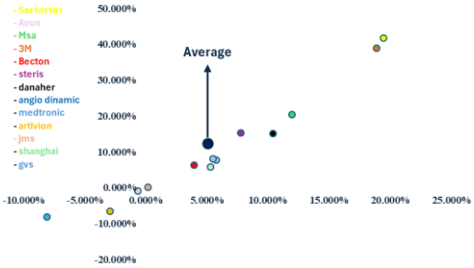
In 2021 the revenues remained similar to 2020's, about €258mln. However, the Adjusted EBITDA decreased, this may be attributed to factors such as changes in the product mix; an increase in the stock of end product and rising structural cost. Despite this, Adjusted EBIT still achieved a margin of 31.45% compared to the 39.45% of 2020.

In 2022 sales rose by 14,6% on an annual basis, trained by M&A activities, that resulted in the acquisition of Haemotronic and STT. Aligning the growth in turnover and excluding the revenues of the surgical mask in 2021 we observe a variation of 35%. The Adjusted EBITDA decreased, which can be attributed to the post-COVID normalization, which saw the economy and social activities returning to a state more similar to pre-pandemic levels. Additionally, the inflationary effect, caused by the expansive monetary policy led to a massive increase in the prices of goods and services. Net Financial Position and indebtedness experienced a substantial increase, primarily due to the financing of mergers and acquisitions. The fourth quarter closed with a significant reduction of €375 mln, thanks to good control of Net Working Capital (NWC) and operational liquidity.

Sales increased by 7.2€ mln, primarily driven by the Healthcare & Life Sciences (+9,35%) and Health&Safety (+7.6%) markets. Heamotronic, performed well, increasing his q-on-q sales by €3 mln (+11,6%). We saw a strong recovery of profitability, with an EBITDA of 22,1€ mln (with a 30% increase quarter on quarter) and an EBIT of 15,5€ mln (48,2% increase). The increase in EBITDA was mainly driven by the initial price hike from Q3 that led to a 3,5% increase in margin. In Q4 we can see an augment of EBITDA due to higher prices and the effect of operative leverage in the total sales volume, which increased by €6 mln. Net Financial Position decreased in Q4 thanks to a good cash flow generation and optimization of the Net Working Capital (NWC, obtained by adding the non-monetary elements at the EBITDA)

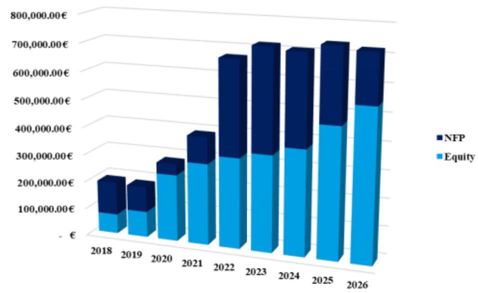
In the first 9 months of 2023, sales increased in the Healthcare & LifeSciences sector by 26%, and there was an increase of 9% in the health safety sector. The expected turnover for the entire year is around 425€ mln

ROI & ROE of GVS Peers – Exhibit 12



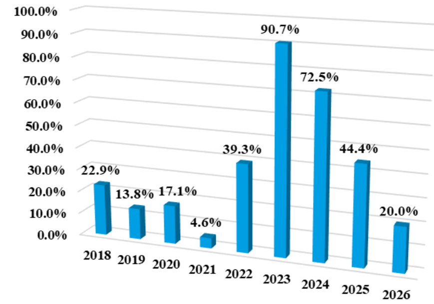
Source: FactSet, Company Data, Team Estimates

Net Invested Capital – Exhibit 13



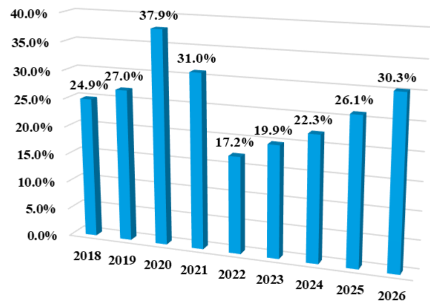
Source: FactSet, Company Data, Team Estimates

GVS Financial Expenses on EBIT – Exhibit 14



Source: FactSet, Company Data, Team Estimates

GVS EBITDA Margin – Exhibit 15



Source: FactSet, Company Data, Team Estimates

Valuation

We issue a hold position with a target price of 5,83 euros, that is -5,05% of the current price (10/02/2024), determined as an average of the prices of the different scenarios. It is motivated by: (i) low marginality levels; (ii) significant exposition to debt experienced in the last years; and (iii) increasing geopolitical tensions.

Asset Side Income Approach Valuation

Wacc

We estimated a WACC of 3,78%, specifically: (i) risk-free, considering the revenue of the 10-year treasury yield of the US, Germany and China weighted for the geographic share of revenue of the company. (ii) The equity risk premium is obtained by weighing the excess 10-year return of S&P 500, S&P 350 Europe and S&P 500 China, respectively to each risk-free rate. (iii) Beta. Considering the non-significance R-squared calculated with the S&P HC select equipment, we have chosen the MSCI Europe machinery that has an R-squared of 18%, suggesting the industrial nature of the company, located in the Health care equipment and Medical devices industry.

The cost of equity is calculated with the CAPM, reflecting the components illustrated before.

The methodology employed for evaluation adopts an asset-side income approach, as income streams are less susceptible to fluctuations stemming from extraordinary items (e.g., acquisition-related capital expenditures and associated debt). Additionally, by utilizing NOPLAT (Net Operating Profit Less Adjusted Taxes), the tax benefits resulting from the financial charges incurred by the company over the considered time frame are taken into account.

Terminal Value (TV)

To obtain the Terminal Value, two different scenarios have been hypothesized: (i) Prudent Scenario, in order to ascertain a stabilised and sustainable average cash flow over an indefinite timeframe, the average Net Operating Profit Less Adjusted Taxes (NOPLAT) was computed as the mean of NOPLAT figures documented by the company during the years 2017, 2018, 2019, and 2022. The justification behind utilizing historical data stems from the heightened probability that the company can replicate a performance akin to the historical average while omitting data from 2020 and 2021, as these years were deemed to be closely intertwined with the exceptionally favourable circumstances arising from the pandemic. (ii) Riskier Scenario, we have considered the 2023 NOPLAT, a proxy for the results the company will be able to achieve once the substantial debt is extinguished and after consolidating the position of the group, having integrated the newly acquired companies.

Subsequently, this average normal cash flow was compounded at a growth rate represented by 'g' of 0.75% and discounted accordingly.

The final prices in the two scenarios are respectively € 4,92 and € 6,73.

The Target Price is determined as an average of the results obtained.

2024: A year of uncertainty

In conducting our valuation, we adopted a conservative approach in light of the uncertain global economic outlook, primarily attributed to geopolitical tensions and climate change concerns, namely:(i) Disruptions in Red Sea traffic [insert graph]; (ii) Resilience of the Ukraine-Russian conflict; (iii) Potential drought in the Suez Canal due to climate change;In conducting our valuation, we adopted a conservative approach in light of the uncertain global economic outlook, primarily attributed to geopolitical tensions and climate change concerns, namely:(i) Disruptions in Red Sea traffic; (ii) Resilience of the Ukraine-Russian conflict; (iii) Potential drought in the Suez Canal due to climate change;

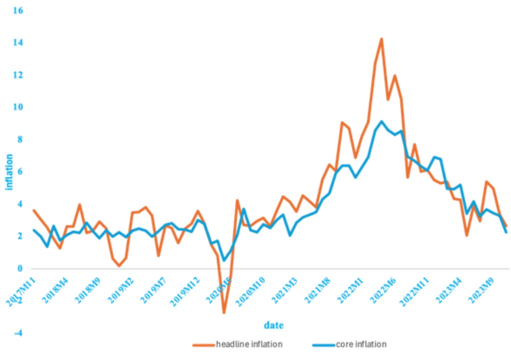
(iv) Unexpectedly lower inflation rates compared to projections; (v) Deepening property sector woes in China or, elsewhere, a disruptive turn to tax hikes and spending cuts could also cause growth disappointments.

Wacc components	
rf	2.7%
Rp esempio	4.49%
Beta unlevered	0.4
Ke	4.24%
Pre-tax cost of debt	4.61%
Tax rate	24.00%
After tax cost of deb	3.33%
WACC	3.78%

RISK FREE			
Geographic Area	Rev	RF	% of total
Nord America	188.59 €	3.91%	48.66%
Europa	102.26 €	0.14%	26.38%
Asia	67.15 €	2.68%	17.32%
Altri paesi	29.60 €	3.91%	7.64%

RISK PREMIUM		
USA	China	EU
6.68%	1.21%	3.75%
48.66%	17.32%	26.38%

General Inflation – Exhibit 16



Source: FactSet, Company Data, Team Estimates

Environemental, Social & Governance

"We are visionary and at the same time thoughtful and responsible. We want to create a sustainable future, determined to contribute innovative products to the well-being of society and reduce the impacts of our activities on a global scale."

\- Massimo Scagliarini, CEO GVS s.p.a.

Environemental

While GVS GHG emissions and waste generated have been increasing lately, Exhibit 18, in absolute terms the group is well positioned to catch up with its peers, in fact, the company's total energy consumption has been growing at a faster pace than its GHG emissions are, Exhibit 19. Moreover GVS has committed to reducing greenhouse gas emissions, water consumption, and waste generation by 50%, 25%, and 30%, respectively, by 2030. The management discussed about the effect of the recent acquisitions of the chinese companies, which increased emissions. In terms of efficiency, the company is still lagging behind industry peers in most of the indicators chosen by our team, Appendix 6, positioning itself in the 20th, 17th, 30th and 20th percentile in GHG emission, Energy Consumption, Water Withdrawal and Waste Generation efficiency respectively (where 20th percentile means that the company is more efficient than 20% of the industry peers). Despite its lagging position in efficiency terms, the company currently excell in recycling and renewable energy consumption, positioning itself in the 78th and 80th percentile respectively. Overall the company is better positioned than the median peer in the industry, furthermore, a forward-looking vision, considering a proactive strategy from the management could see the company postion improve significantly.

Social

GVS was founded in 1979 by an exceptional entrepreneurial woman: Grazia Valentini. Never losing its roots, the company, now, stands out as a leader in work inclusion, with a 46% of management position held by women Exhibit 20 . GVS commitment to social impact has been underscored by the issuance of ethics and compliance codes, such as:

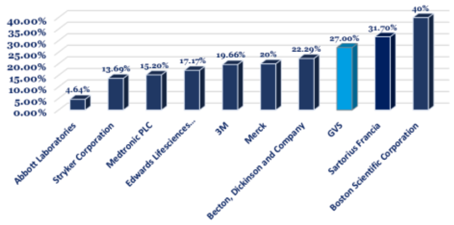
- ❖ Anticorruption policy, providing a whistleblower channel for employees;
- ❖ Supplier code of conduct, highlighting the standard requirements of supplier, including but not limited to the absence of child labor, right of collective bargaining and safety standards;
- ❖ Code of Ethics, underscoring the company values, principles and rules of conduct;
- ❖ UN Global Compact, identifying 6 of the 17 objectives: SDG3, SDG8, SDG9, SDG12, SDG13 and SDG16.

Despite GVS investments in its human resources, underlined by the financing of University Postgraduate Courses offered to Brazilian employees, the turnover rate is high, highlighted by the total count of termination of employment: 2266 compared to the count of new hiring: 2225 in FY2022, Exhibit 21. Overall, the company dedication to its human capital is a substantial variable for its growth, noticed by the management as one of the most significant priorities, nevertheless, the company failed to identify a clear set of actions and procedures aimed at improving the current situation.

Governance

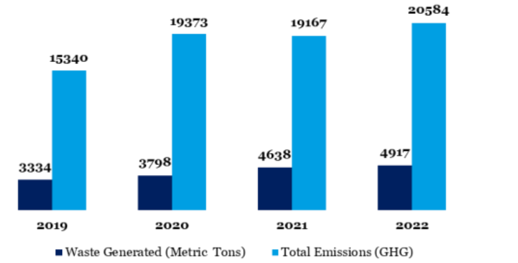
GVS is controlled by GVS Group s.r.l., controlled directly by the Scagliarini

Energy from Renewable Sources on Total Energy Consumption - Exhibit 17



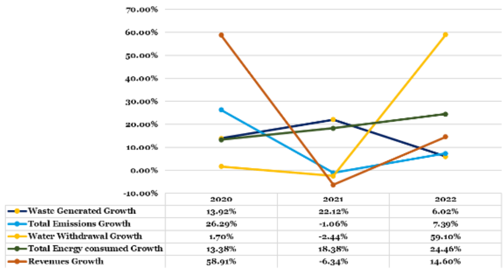
Source: Company Data, Sustainability Report

Last 4 years GHG Emissions and Waste Generated – Exhibit 18



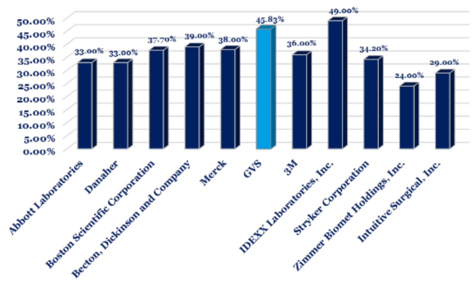
Source: Company Data, Sustainability Report

Environmental Impact Growth – Exhibit 19



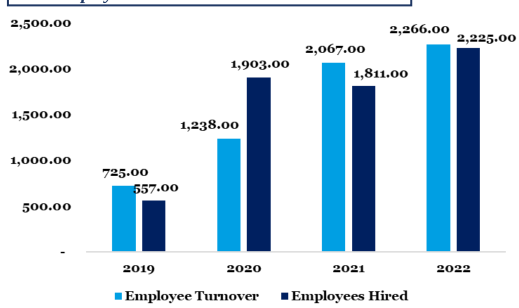
Source: Company Data, Sustainability Report

Percentage of Women in Management Positions – Exhibit 20



Source: Company Data, Sustainability Report

GVS Employees Hired and Turnover – Exhibit 21

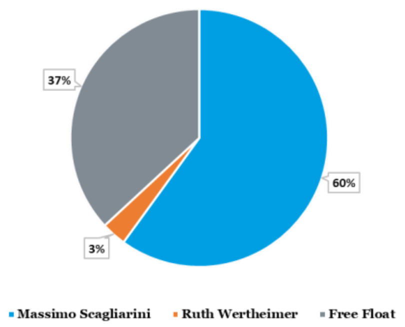


Source: Company Data, Sustainability Report family through the person of Massimo Scagliarini, current CEO of GVS s.p.a., son of Grazia Valentini, founder and former Chairman of the company. Despite the family owning the 60% of ordinary share capital, Exhibit 22, with a 73.68% of voting rights, the board of directors is composed by a majority of independent directors, including the Chairman, Alessandro Nasi, moreover, both the Nomination & Compensation Committee and the Control, Risk & Sustainability Committee are composed by a majority of independent directors. The recently approved remuneration policy points to two incentives plans:

- **Short Term Incentive (STI).** Which encompasses both performance and strategic objectives, including ESG related;
- **Medium – Long Term Incentive (LTI**). Which encompasses performance, strategic and shareholders objectives.

This last incentive is going to be financed by the issuing of new capital shares, at the end of the vesting period, 31 December 2025. Overall the governance structure of the company and the ongoing effort to improve it are to be considered on average among its peers.

GVS % of Ordinary Shares Capital – Exhibit 22



Source: Company Data, Sustainability Report

APPENDIX

Riclassification Balance Sheet *In Thousands of €*	2017	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E
net invested capital	**287.689,00 €**	**289.129,00 €**	**294.754,00 €**	**412.358,00 €**	**608.565,00 €**	**993.049,00 €**	**1.039.327,68 €**	**1.018.293,42 €**	**987.238,26 €**	**964.368,15 €**
cash and cash equivalents	42.388,00 €	45.551,00 €	58.542,00 €	125.068,00 €	136.893,00 €	135.169,00 €	126.869,70 €	119.678,39 €	103.750,60 €	107.220,78 €
account receivables	48.035,00 €	50.152,00 €	45.948,00 €	67.364,00 €	80.591,00 €	97.133,00 €	80.979,00 €	77.074,60 €	74.788,95 €	71.835,00 €
inventory	30.140,00 €	32.963,00 €	31.491,00 €	46.048,00 €	72.353,00 €	106.922,00 €	169.708,98 €	159.770,43 €	146.928,70 €	123.542,37 €
total current assets	**120.563,00 €**	**128.666,00 €**	**135.981,00 €**	**238.480,00 €**	**289.837,00 €**	**339.224,00 €**	**377.557,68 €**	**356.523,42 €**	**325.468,26 €**	**302.598,15 €**
property,plant and equipments net	106.314,00 €	106.845,00 €	110.166,00 €	99.417,00 €	238.163,00 €	517.837,00 €	519.120,00 €	519.120,00 €	519.120,00 €	519.120,00 €
intangibles	53.103,00 €	50.058,00 €	46.614,00 €	68.925,00 €	77.622,00 €	120.404,00 €	125.009,00 €	125.009,00 €	125.009,00 €	125.009,00 €
other assets	7.709,00 €	3.560,00 €	1.993,00 €	5.536,00 €	2.943,00 €	15.584,00 €	17.641,00 €	17.641,00 €	17.641,00 €	17.641,00 €
total non-Current	**167.126,00 €**	**160.463,00 €**	**158.773,00 €**	**173.878,00 €**	**318.728,00 €**	**653.825,00 €**	**661.770,00 €**	**661.770,00 €**	**661.770,00 €**	**661.770,00 €**
total non-Current assets	**286.012,00 €**	**289.129,00 €**	**294.754,00 €**	**412.358,00 €**	**608.565,00 €**	**993.049,00 €**	**1.039.327,68 €**	**1.018.293,42 €**	**987.238,26 €**	**964.368,15 €**
account payebles	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
current financial liabilites	55.750,00 €	66.550,00 €	70.014,00 €	85.689,00 €	111.586,00 €	536.567,00 €	218.033,81 €	262.548,93 €	277.518,74 €	293.197,64 €
Current Liabilities	**55.750,00 €**	**66.550,00 €**	**70.014,00 €**	**85.689,00 €**	**111.586,00 €**	**536.567,00 €**	**218.033,81 €**	**262.548,93 €**	**277.518,74 €**	**293.197,64 €**
long term debt	172.308,00 €	151.538,00 €	130.500,00 €	83.972,00 €	201.632,00 €	128.808,00 €	471.329,00 €	374.072,37 €	238.101,20 €	124.596,74 €
total shareholders equity	57.954,00 €	71.041,00 €	94.240,00 €	242.697,00 €	295.347,00 €	327.674,00 €	349.964,87 €	381.672,12 €	471.618,31 €	546.573,77 €
Total Liabilities and Equity	**230.262,00 €**	**222.579,00 €**	**224.740,00 €**	**326.669,00 €**	**496.979,00 €**	**456.482,00 €**	**821.293,87 €**	**755.744,49 €**	**709.719,52 €**	**671.170,51 €**

Appendix 1 : Reclassified Balance Sheet

Riclassification Income Statement variable costing *In Thousands of €*	2017	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E
Revenues	169.453,00 €	210.448,00 €	231.485,00 €	360.952,00 €	342.645,00 €	399.041,00 €	444.290,67 €	**467.473,11 €**	**498.672,48 €**	**534.062,98 €**
variable cost	53.957,67 €	68.021,00 €	73.782,00 €	101.528,00 €	103.752,00 €	147.448,00 €	155.524,76 €	157.857,63 €	160.225,49 €	162.628,87 €
contribution margin	**115.495,33 €**	**142.427,00 €**	**157.703,00 €**	**259.424,00 €**	**238.893,00 €**	**251.593,00 €**	**288.765,91 €**	**309.615,48 €**	**338.446,99 €**	**371.434,10 €**
fixed cost	81.793,33 €	89.765,00 €	95.487,00 €	121.062,00 €	132.563,00 €	184.161,00 €	205.861,58 €	212.037,43 €	218.398,55 €	224.950,50 €
EBITDA	**33.702,00 €**	**52.662,00 €**	**62.216,00 €**	**138.362,00 €**	**106.330,00 €**	**67.432,00 €**	**82.904,33 €**	**97.578,06 €**	**120.048,44 €**	**146.483,60 €**
EBITDA Margin%	19,89%	25,02%	26,88%	38,33%	31,03%	16,90%	18,66%	20,87%	24,07%	27,43%
depreciation e ammortization	13.611,00 €	18.493,00 €	16.552,00 €	19.365,00 €	23.990,00 €	38.478,00 €	32.858,00 €	32.858,00 €	32.858,00 €	32.858,00 €
EBIT	**20.091,00 €**	**34.169,00 €**	**45.664,00 €**	**118.997,00 €**	**82.340,00 €**	**28.954,00 €**	**50.046,33 €**	**64.720,06 €**	**87.190,44 €**	**113.625,60 €**
operative interest expenses	4.821,84 €	8.200,56 €	10.959,36 €	28.559,28 €	19.761,60 €	6.948,96 €	12.011,12 €	15.532,81 €	20.925,71 €	27.270,14 €
NOPAT	**15.269,16 €**	**25.968,44 €**	**34.704,64 €**	**90.437,72 €**	**62.578,40 €**	**22.005,04 €**	**38.035,21 €**	**49.187,24 €**	**66.264,73 €**	**86.355,45 €**
tax shield	798,96 €	1.198,80 €	1.046,64 €	794,40 €	710,40 €	2.168,16 €	3.809,76 €	5.520,00 €	5.280,11 €	3.600,00 €
NOPLAT	**16.068,12 €**	**27.167,24 €**	**35.751,28 €**	**91.232,12 €**	**63.288,80 €**	**24.173,20 €**	**41.844,97 €**	**54.707,24 €**	**71.544,85 €**	**89.955,45 €**
funding performance	-10.033,12 €	-4.093,24 €	-2.659,28 €	-13.150,12 €	4.316,20 €	-54,20 €	-19.960,77 €	-23.000,00 €	-22.000,47 €	-15.000,00 €
NI	**6.035,00 €**	**23.074,00 €**	**33.092,00 €**	**78.082,00 €**	**67.605,00 €**	**24.119,00 €**	**21.884,20 €**	**31.707,24 €**	**49.544,38 €**	**74.955,45 €**

Appendix 2 : Reclassified Income Statement Variable Costing

Riclassification Financial Statement *In Thousands of €*	2017	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E
EBITDA	**33.702,00 €**	**52.662,00 €**	**62.216,00 €**	**138.362,00 €**	**106.330,00 €**	**67.432,00 €**	**82.192,00 €**	**97.578,06 €**	**120.048,44 €**	**146.483,60 €**
other changes	2.355,00 €	-17,00 €	491,00 €	3.146,00 €	6.653,00 €	6.750,00 €	5.276,50 €	- €	- €	- €
change in net fixed asssets	-120.957,28 €	-13.420,52 €	-10.315,04 €	-43.523,88 €	-148.242,00 €	-256.428,00 €	-85.748,62 €	-32.858,00 €	-32.858,00 €	-32.858,00 €
change in net working capital	-6.254,00 €	-393,16 €	1.288,00 €	-14.102,28 €	-11.488,48 €	11.011,28 €	-10.093,72 €	11.207,57 €	12.607,03 €	12.722,48 €
tax expenses	-4.821,84 €	-5.486,00 €	-9.827,00 €	-16.277,00 €	-32.616,00 €	-9.846,00 €	-12.494,53 €	-15.532,81 €	-20.925,71 €	-27.270,14 €
FCFO	**-95.976,12 €**	**33.345,32 €**	**43.852,96 €**	**67.604,84 €**	**-79.363,48 €**	**-181.080,72 €**	**-8.373,84 €**	**60.394,81 €**	**78.871,76 €**	**99.077,93 €**
tax shield	699,60 €	1.225,68 €	1.259,04 €	1.190,16 €	705,60 €	1.176,72 €	2.854,96 €	5.520,00 €	5.280,11 €	3.600,00 €
FCFF	**-95.276,52 €**	**34.571,00 €**	**45.112,00 €**	**68.795,00 €**	**-78.657,88 €**	**-179.904,00 €**	**-5.518,88 €**	**65.914,81 €**	**84.151,88 €**	**102.677,93 €**
debt repayment	-24.879,00 €	-21.465,00 €	-27.633,00 €	-107.597,00 €	-20.827,00 €	-49.251,00 €	-67.013,75 €	-80.106,12 €	-78.079,19 €	-84.207,76 €
debt remuneration	-2.915,00 €	-5.107,00 €	-5.246,00 €	-4.959,00 €	-2.940,00 €	-4.903,00 €	-11.895,67 €	-23.000,00 €	-22.000,47 €	-15.000,00 €
start-up financing	142.496,52 €	- €	8.772,00 €	115.011,00 €	133.100,88 €	232.531,00 €	75.963,00 €	30.000,00 €		
FCFE	**19.426,00 €**	**7.999,00 €**	**21.005,00 €**	**71.250,00 €**	**30.676,00 €**	**-1.527,00 €**	**-8.465,30 €**	**-7.191,31 €**	**-15.927,79 €**	**3.470,18 €**
dividends	-9.219,00 €	-5.005,00 €	-8.329,00 €	-1.681,00 €	-22.722,00 €	- €	- €	- €	- €	- €
NCF	**10.207,00 €**	**2.994,00 €**	**12.676,00 €**	**69.569,00 €**	**7.954,00 €**	**-1.527,00 €**	**-8.465,30 €**	**-7.191,31 €**	**-15.927,79 €**	**3.470,18 €**

Appendix 3 : Reclassified Financial Statement

Valuation, Scenario 1

Wacc/Ko	2023
Equity	€ 349,964.87
Debt	€ 496,645.00
Interest expenses	€ 21,729.33
Tax rate	24%
Cost of debt percentage	4.38%
After tax cost of debt	3.33%
risk free rate	2.72%
Expected rp	6.62%
risk premium	4.49%
beta unlevered	0.4
EquityV/(B+Eqv)	0.684
FV	€ 1,029,310.98
WACC	3.78%

Implied Share Price Calculation	
Sum of PV of FCF	€ 199,613.60
Growth Rate	0.75%
WACC	3.78%
Terminal Value	€ 29,000.96
PV of Terminal Value	€ 963,630.68
Enterprise Value	€ 1,163,244.28
(+) Cash	193,618.70 €
(-) Debt	€ 496,645.00
(-) Minority Interest	
Equity Value	€ 860,217.98
Diluted Shares Outstanding (mm)	175000
Implied Share Price	**€ 4.92**

Reddituale asset side	2023	2024E	2025E	2026E
NOPLAT	41,844.97 €	54,707.24 €	71,544.85 €	89,955.45 €
Annual growth rate		30.74%	30.78%	25.73%
Compound growth rate				
Terminal growth rate				0.00%
TV (terminal value)				€ 29,000.96
WACC		3.782%	3.782%	3.782%
Year		1	2	3
Present Value Factors		0.9636	0.9284	0.8946
Present Value (NOPLAT)		€ 52,713.55	€ 66,425.26	€ 80,474.79
Sum of PV (NOPLAT)	€ 199,613.60			
PV (TV)	€ 963,630.68			
Enterprise Value	€ 1,163,244.28			
Net Financial Position	€ 303,026.30			
Equity Value	€ 860,217.98			

Appendix 4 : Asset Side Income Approach Valuation

Valuation, Scenario 2

Wacc/Ko	2023
Equity	€ 349,964.87
Debt	€ 496,645.00
Interest expenses	€ 21,729.33
Tax rate	24%
Cost of debt percentage	4.38%
After tax cost of debt	3.33%
risk free rate	2.72%
Expected rp	6.62%
risk premium	4.49%
beta unlevered	0.4
EquityV/(B+Eqv)	0.684
FV	€ 1,029,310.98
WACC	3.78%

Implied Share Price Calculation	
Sum of PV of FCF	€ 199,613.60
Growth Rate	0.75%
WACC	3.782%
Terminal Value	€ 41,844.97
PV of Terminal Value	€ 1,281,310.73
Enterprise Value	€ 1,480,924.33
(+) Cash	193,618.70 €
(-) Debt	€ 496,645.00
(-) Minority Interest	
Equity Value	€ 1,177,898.03
Diluted Shares Outstanding (mm)	175000
Implied Share Price	**€ 6.73**

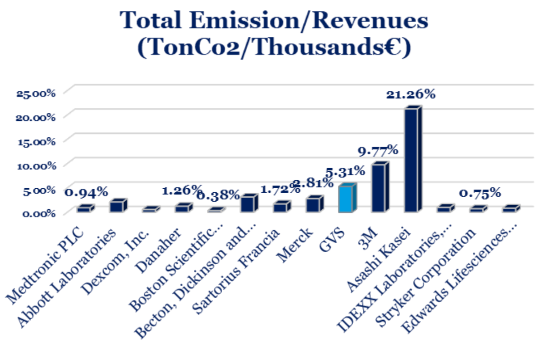
NOPLAT	41,844.97 €	54,707.24 €	71,544.85 €	89,955.45 €
annual growth rate		30.74%	30.78%	25.73%
compound growth rate				
terminal growth rate				0.00%
TV (terminal value)				€ 41,844.97
WACC	3.782%	3.782%	3.782%	3.782%
periodi in anni		1	2	3
Fattori di attualizzazione		0.9636	0.9284	0.8946
Valore attuale (NOPLAT)		€ 52,713.55	€ 66,425.26	€ 80,474.79
Sommatoria VA (NOPLAT)	€ 199,613.60			
VA (TV)	€ 1,281,310.73			
Enterprise Value	€ 1,480,924.33			
PFN	€ 303,026.30			
Equity Value	€ 1,177,898.03			

Appendix 5 : Asset Side Income Approach Valuation, Scenario 2

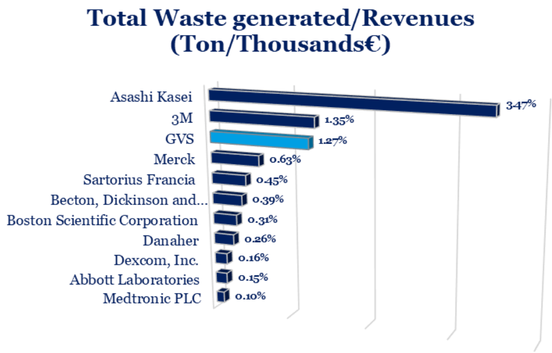
ESG

Company	Total Emission/Revenues (TonCo2/Thousands€)	Energy From renewable sources/Total Energy consumed	Total Energy Consumption/Revenues (GJ/Thousands€)	Total Water Withdrawal/ Revenues (CubicMeters/Thousands€)	Total Waste generated/Revenues (Ton/Thousands€)	Waste recycled or reused margin	Women in management roles percentage	Revenues (Thousands €)
Boston Scientific Corporation	0.38%	40%	11.47%	6.79%	0.31%	23.35%	37.70%	€ 12,682,000
Sartorius Francia	1.72%	31.70%	5.09%		0.45%	28.80%		€ 4,170,000
GVS	5.31%	27.00%	79.25%	29.17%	1.27%	60.22%	45.83%	€ 387,591
Becton, Dickinson and Company	3.14%	22.29%	37.54%	29.42%	0.39%	57.99%	39.00%	€ 18,877,000
Merck	2.81%	20%	14.76%	22.26%	0.63%		38.00%	€ 59,300,000
3M	9.77%	19.66%	86.21%	109.06%	1.35%	61.74%	36.00%	€ 34,200,000
Edwards Lifesciences Corporation	0.85%	17.17%	11.42%					€ 5,382,000
Medtronic PLC	0.94%	15.20%	10.21%	5.56%	0.10%	51.50%		€ 31,686,000
Stryker Corporation	0.75%	13.69%	11.28%	12.90%			34.20%	€ 18,449,000
IDEXX Laboratories, Inc.	1.01%	6.25%	6.79%	2.61%			49.00%	€ 3,367,000
Abbott Laboratories	2.13%	4.64%	32.52%	31.60%	0.15%	49.33%	33.00%	€ 43,653,000
Dexcom, Inc.	0.58%				0.16%	55.34%		€ 2,910,000
Zimmer Biomet Holdings, Inc.	1.29%					58.00%	24.00%	€ 6,940,000
Asashi Kasei	21.26%			1.36%	3.47%	75.20%		€ 17,307,700
Danaher	1.26%		17.57%	23.15%	0.26%		33.00%	€ 29,450,000
Corning Usa	26.49%		255.27%					€ 14,189,000

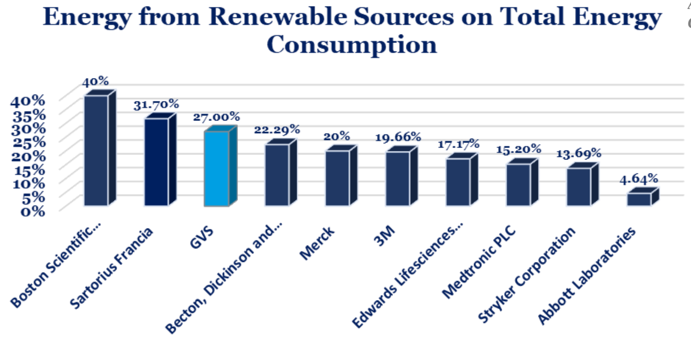
Appendix 6 : ESG Indicators for GVS and Peers Comparables



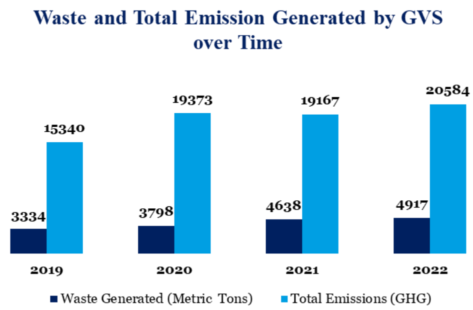
Appendix 7 : Total Emission on Revenues for GVS and Peers Comparables



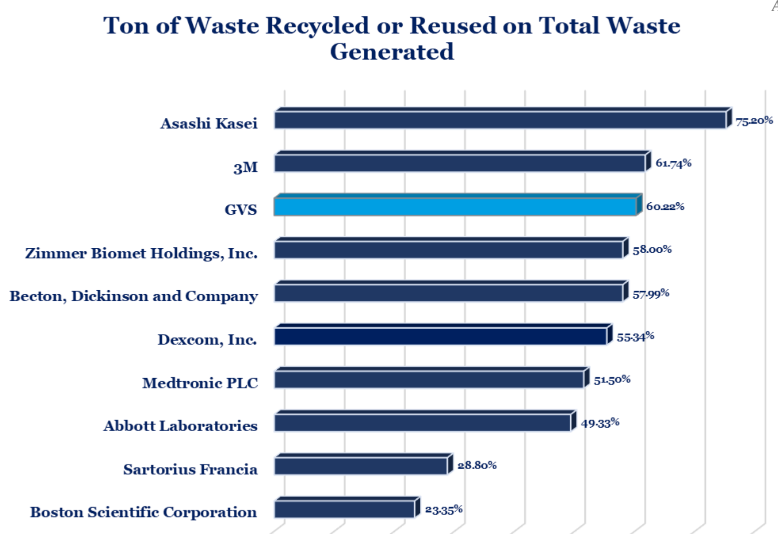
Appendix 8 : Total Waste Generated on Revenues for GVS and Peers Comparables



Appendix 9 : Energy Consumed from Renewable Sources on Total Energy for GVS and Peers Comparables



Appendix 10 : Waste and Total Emission Generated by GVS over Time



Appendix 11 : Waste Recycled or Reused on Total Waste Generated for GVS and Peers Comparables

Remuneration Policy	Key Managers			Exec-Directors	
	CEO	With Responsibility for Staff Functions	With Commercial Functions	With Responsibility for Staff Functions	With Commercial Functions
Short Term Incentive Plan (STI)	**150% - 165% of Fixed Remuneration**	**Depends on the manager: 50% - 100% for reaching KPI 75% - 150% for overperformance**		**To 100% of Fixed Remuneration for reaching KPIs 150% for overperforming**	
Group Performance Objectives	**90%**	**60%**	**40%**	**60%**	**40%**
EBITDA adjusted	45%	30%	20%	30%	20%
FCF	45%	30%	20%	30%	20%
Group Strategic Objectives	**10%**	**10%**	**10%**	**10%**	**10%**
ESG: Waste	10%	10%	10%	10%	10%
Individual Performance Objectives		**30%**	**50%**	**30%**	**50%**
Medium - Long Term Incentive Plan (LTI)	**70% - 80% of Fixed Remuneration**	**Depends on the manager: 35% - 65% for reaching KPI 0% - 150% for overperformance**		**To 45% of Fixed Remuneration for reaching KPIs 65% for overperforming**	
Ratio of Adjusted EBITDA to Adjusted Turnover	**30%**				
Period-end Net Financial Position	**30%**				
Relative Total Shareholder Return (TSR)	**20%**				
ESG Indicator	**20%**				

Appendix 12 : GVS Remuneration Policy for its Key Managers and Executive Directors

Appendix 13 : Peers Comparables' Financial Indicators

TAB_1 Peers Comparables Indicators Company Name	MKT CAP (M)	Sales (M)	ROI	ROD	ROE	CR	Net debt/equity
GVS	1015.875	427.204	5.750%	3.740%	7.740%	0.600	101.370%
Shanghai Titan A	544.256033	359.741982	5.300%	0.135%	5.810%	3.530	-19.240%
JMS	80.347905	438.509591	0.150%	0.001%	0.200%	1.920	36.290%
AngioDynamics	225.372899	305.551863	-8.070%	0.881%	-8.190%	2.170	6.340%
Artivion	655.887459	318.512074	-2.950%	1.595%	-6.530%	4.050	111.660%
Medtronic	106507.8474	29782.02624	5.520%	6.226%	7.990%	1.760	31.770%
Sartorius	20636.55467	3607.7	19.450%	0.079%	41.730%	1.100	119.370%
Danaher	160300.9344	27719.28457	10.430%	0.003%	15.140%	1.890	23.440%
STERIS	19844.2891	4901.204718	7.760%	0.059%	15.260%	2.060	49.570%
Becton, Dickinson	63773.451	18162.00977	3.930%	0.013%	6.350%	1.070	61.680%
3M Co	49072.47766	30701.59683	18.890%	0.009%	38.810%	1.540	211.050%
MSA Safety	6068.633982	1627.13963	11.980%	0.230%	20.430%	2.540	47.940%
Avon Protection	339.564346	228.572045	-0.670%	0.02	-0.940%	2.620	39.990%
Average	33005.03783	9121.46564	5.959%	1.179%	11.062%	2.07	63.172%
Median	6068.633982	1627.13963	5.520%	0.135%	7.740%	1.92	47.940%