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VISTA ALEGRE ATLANTIS INVESTMENT COMMITTEE PAPER – VALUATION

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Abstract

The proposed Investment Committee Paper is intended for academic purposes only. The project aims to study a private equity deal using a Leveraged Buyout (LBO) for Vista Alegre Atlantis (VAA), a market leader in the ceramic and glass tableware sector. Our goal is to understand how the LBO could be structured, what returns it could provide, and what exit strategies can be pursued. In addition, we will focus on analysing and forecasting the business plan and defining the optimal capital structure. The conclusion is that VAA is an attractive investment opportunity, able to leverage the market's growth.

Keywords

Private Equity, LBO, Valuation, Returns, Exit Strategy, Capital Structure, Tableware Market

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Company Overview

VAA is a prestigious Portuguese tableware company in the **ceramic** and **crystal** sector that operates in four segments: **crystal and glass, earthenware, porcelain, and stoneware**. It is an **export-oriented** company with a diversified multichannel distribution and the most **advanced** and **efficient factories** in the world, making constant investments to promote **energy efficiency** in its processes. Although companies in this sector have an above-average **ESG** risk, VAA performs better than the average of its peers in the sector's most relevant KPIs, namely in the environmental aspect (BPI 2021). The company has been a **strong financial performer**, with one of the **highest EBITDA margins** among its peers. Additionally, its industry-leading position, profitability potential, and B/S strength have led the company to re-emerge stronger after the pandemic. Regarding logistics, VAA has fast delivery across Europe, and privileged access to raw materials at short distances, allowing several cost savings. (BPI 2021)

The Portuguese group offers a **broad** portfolio of **differentiated** products that combine **high-tech** with **handcrafted** elements. These products are sold through various channels, 40% under its brand (33% at retail, 7% at horeca) and 60% under private label to critical customers, such as **IKEA** – the Ria Stone factory is fully used for IKEA production (CaixaBank BPI 2022).

VAA has evolved through time, and from a producer of **high-quality** luxury porcelain, the company has significantly diversified its portfolio to reach **more customers** while maintaining its quality standards. The industry can be segmented into two major groups: (1) the **low-mid-range** market and (2) the **high-end** market. The first segment looks for tableware out of necessity, often looking for smaller, simpler, and cheaper services for daily use – generally reaching a younger audience with relatively low income (e.g., people moving out of their parents' house or starting a small horeca business). On the other hand, the high-end segment seeks prestige, quality, and brand, while looking for broader services (e.g., organizing dinners) and having more than one service. This segment generally covers older and higher income

public, or big horeca players, looking for luxury brands and products. Overall, the low-end and the mid-market are increasing as the demand for smaller, cheaper, and simpler devices is higher. Although VAA is not represented in the low-end, it has contracts that allow it to sell pieces at more affordable prices. For the middle market, VAA offers luxury tableware collections at reasonable prices (e.g., Casa Alegre, Sagres Collection). (Barra 2021). Finally, the high-end market is VAA's initial and strongest market, the one for which the company is most recognized – more expensive and luxury products. Luxury has proven its resilience during recessions, with recoveries dramatically faster and more robust than the non-luxury sectors (Bloomberg 2022). Also, VAA is not the most expensive brand on the market; hence it may gain some **market share** through shifts in customer demand from more expensive brands to VAA products. Finally, VAA has been **successfully acquiring** attractive targets and developing **strategic partnerships**, reinforcing its position in the context of the sector, and of competing companies. The acquisitions of Cerutil and Faianças Artísticas Bordallo Pinheiro in 2018 allowed Vista Alegre to increase its scale and diversity. It should be noted that Grupo Visabeira owns 85.6% of VAA – 3.31% directly and 82.29% through Visabeira Indústria, which is 100% owned by Grupo Visabeira. (Vista Alegre Atlantis, SGPS, SA 2021)

Market Overview

The **global ceramic tableware** market is estimated to be worth **€10.7B in 2021 and to reach €21.0B in 2031**, growing at a **CAGR of 6.7%** until 2031 (Research, Transparency Market 2021). This market is **highly competitive** and dynamic and provides opportunities for players to build a stronger company's competitive position. This market includes dinnerware, cutlery, hotelware, bakeware, and others. On the other hand, the **global glass tableware market** is estimated to be worth **€7.8B in 2021 and to reach €10.9B in 2031, growing at a CAGR of 3.5% until 2031** (Research, Transparency Market 2021). The market is highly **consolidated**,

with a small number of large suppliers controlling most of the industry. Both markets are divided into **residential** and **commercial** sectors (e.g., horeca channel), and both markets have benefited from trends such as the emergence of **e-commerce**, production closer to end-markets, the **growing hospitality** and **home decor** industry, and, finally, the growing number of businesses opting for **durable handmade crockery** instead of mass-produced dinnerware (Research, Transparency Market 2021). Finally, the global ceramic and glass tableware markets have a worldwide presence, with the **United States being the largest importer and China being the largest exporter** (The Observatory of Economic Complexity 2020).

Looking in detail at the Portuguese tableware market, it has been growing and gaining presence worldwide (i.e., second largest ceramic tableware exporter), with AICEP playing a significant role as a financier to improve competitiveness, export capacity and attract foreign investment (European Funds AICEP 2022). The leading importers of Portuguese ceramic tableware are the US, Germany, and France, and Portuguese glassware are France, Angola, and Spain (The Observatory of Economic Complexity s.d.).

The industry has faced some **challenges** regarding its **high production costs**: (i) its **dependence on the energy supply** of natural gas and electricity – the current geopolitical conflict has led to high price volatility; (ii) its **personnel costs**, related to the specialized labour; (iii) the **volatility on its raw material prices**. In addition, VAA has invested heavily to achieve energy efficiency and climate neutrality, improving global competitiveness.

The prominent players in the sector are described in *Table 1*, along with their EBITDA margins.

Historic Financials

With the acquisition of VAA by Grupo Visabeira in 2009, the company's economic performance has been dramatically improving, despite adverse market conditions. Since 2014,

the company has shown **solid growth**, positively influenced by the acquisitions of Cerutil and Bordallo Pinheiro in 2018. VAA's efforts to offer an increasingly diversified range of high-quality products, increase its brand awareness, intensify its international presence, expand partnerships, and improve efficiency, involved significant investments over this period (i.e., around 30M€ in FY18 and 23M€ in FY19), but has also allowed the company to enjoy a robust financial performance in recent years. In fact, the factories expansions and the purchase of new equipment and technologies for the porcelain, crystal, glass, and stoneware sectors, have enhanced greater operational efficiency and reduced costs, reinforcing the positioning of Vista Alegre as the **owner of the most technologically advanced factories in the world** within the mentioned segments. With those investments now largely behind (i.e., CAPEX only accounted for 5% of sales in FY20 and FY21), VAA is entering a CF harvesting phase with positive and growing FCF. (Vista Alegre Atlantis, SGPS, SA 2021)

Although challenging trading conditions during the pandemic, in 2021 VAA sales recovered to close to pre-pandemic levels. For 1Q22 (a quarter already impacted by the Russia-Ukraine conflict), VAA recorded a yoy solid sales growth, reaching pre-pandemic levels (1Q19). As can be seen, even in challenging years, VAA can keep its EBITDA and gross margins high and stable, proving its resilient and solid business model. In FY21, its EBITDA margin reached 22%, the highest margin amongst its peers. (Vista Alegre Atlantis, SGPS, SA 2022)

As for cash flow, Vista Alegre reduced its net debt over the past years and has reached a bondholders agreement setting more relaxed covenants until 2023. Looking in detail at Vista Alegre revenues, porcelain and stoneware are the segments that contribute the most to its growth. Nonetheless, due to the pieces' superior strength, the demand for earthenware has been increasing significantly, mainly from the horeca sector. (BPI 2021)

Investment Thesis

Vista Alegre has been revealing its proven and resilient business model. It is a market leader with recognized and innovative products and one of the most significant and stable EBITDA margins in the sector. Moreover, it has a pool of qualified talent with a well-known and experienced management team and a recognized and adaptable business model, being the oldest and most successful Portuguese producer with a diversified range of products and end-markets. (Vista Alegre Atlantis, SGPS, SA 2021)

Since Grupo Visabeira's acquisition of VAA in 2009, remarkable enhancements have been developed. Notwithstanding, there is still room for operational improvement. Therefore, four key measures were identified: optimize net working capital levels; improve factory layout; maximize capacity utilization rate; and, finally, improve VAA's margin of the least profitable segment – Glass and Crystal – by making investments in innovation and automation in its factory.

Still, within the operational enhancement, it is expected that VAA will face capacity constraints due to the reactivation of retail and horeca channels (VAA Board of Directors 2022). To mitigate this risk, a Ria Stone expansion (double the plant's current installed capacity) is proposed. Ria Stone has vast potential as it has the highest factory standards in terms of automation as well as innovative single-firing technology (shorter lead times and reduced energy consumption). Besides, it is currently working at full capacity to satisfy VAA's primary client, IKEA (Vista Alegre Atlantis, SGPS, SA 2021). Since this factory was already expanded in the past, it gives us a good proxy for this strategy's returns and costs. This capacity expansion is expected to potentiate recurring solid cash flows to sustain a subsequent buy-and-build strategy.

The final two strategies – internationalization and end-market optimization – are accomplished in parallel with a buy-and-build strategy. By acquiring Grestel, a Portuguese

stoneware company that has two brands – Costa Nova (fashionable and juvenile brand) and Casafina (operating in the US for longer than 40 years) – VAA would not only strengthen its position in weaker end-markets and diversify its base, but also increase its international exposure, with a particular emphasis in the US, allowing it to gain market share.

Business Plan

The proposed business plan includes our value creation strategies and expected market growth, which will be analysed in terms of **revenues, costs, and cash generation**. Three cases were analysed (Bank, Investment, Management), being the ‘Investment’ case presented throughout the paper.

When looking at revenues, we see that **core revenues** are growing at a **CAGR of 5.29%**. The higher growth in the initial forecasts can be explained by: (i) the tendency of large retailers to increasingly bring the supply chain closer to the home market, which will lead to a gain in market share; (ii) the fact that FY21 revenues are almost at pre-pandemic levels, which is a positive indication of the underlying industry demand evolution; (iii) substantial past investments in crystal and glass production (increased capacity, efficiency improvement and modernization) carried out at the Alcobaça plant (€13.6M) explains its accelerated growth in FY22 (37%); (iv) increasing visibility of earthenware segment, due to new design trends (29% growth in 2022). (*See Table 2*) (BPI 2021)

Concerning the **high inflationary pressure** present in FY23, price adjustments were implemented, leading us to directly account for changes in inflation in this year. As for the **long-run**, market growth projections were considered, based on market potential and the long-term inflation rate – with Brazil and the US growing faster, at 3.1% and 2.3%, respectively. (Vista Alegre Atlantis, SGPS, SA 2021) (VAA Board of Directors 2022)

The proposed **add-on revenues** consist of the **expansion of Ria Stone** (incremental revenue accounting for **12% of total revenues**) and of the buy-and-build strategy for the **acquisition of Grestel** (incremental revenue accounting for **15% of total revenues**). (See Table 2)

Regarding **costs**, the current macroeconomic and geopolitical context increased COGS in FY22 by 26.7%. Nonetheless, as VAA is largely hedged against price fluctuations, with a variable cost-plus formula on the IKEA contract and electricity contracts, the cost increase is partially mitigated (VAA Board of Directors 2022). Furthermore, considering **past investments** of €7.2M in the **porcelain, stoneware, and crystal and glass** segment, COGS as a percentage of sales are assumed to be slightly lower in FY23 and FY24 for these segments. Subsequently, highly efficient processes and the already minimized cost structure leave small room for improvement, reflected in the stabilization of COGS as a percentage of sales (See Table 3). **Crystal and glass COGS** are the most **relevant decrease** – from 37.4% to 35.1% (as a percentage of revenues), as a result of the €3M invested in 2023 for automation and technology. However, the change in this ratio is limited since the segment requires very **demanding materials**. Regarding the SG&A ratio, we expect it to decrease slightly over the years.

Finally, although there are negative FCFs during FY23 and FY24 (i.e., mainly due to the acquisition of Grestel and the expansion of capacity at Ria Stone, which amounted to €55M and €38M, respectively), **solid cash generation is expected**. Additionally, excluding this acquisition and expansion CAPEX, **projections for FCF are expected to grow at 17.7% CAGR** over the investment period and reach €51M in the exit year. Through continued inventory management improvements and greater cash collection efficiency, DIO and DSO are expected to decline by 6% and 8%, respectively. Accordingly, the **NWC will decrease**. These strategies will translate into an **increase in investment**; hence maintenance CAPEX should evolve in line with the company's growth, reaching around €14M in the exit year, with

add-on strategies representing 56% of total maintenance. On the other hand, expansion CAPEX should reach €41M in 2023, reflecting the **increase in capacity at Ria Stone and the investments in crystal and glass automation works. Acquisition CAPEX** is expected to reach €54.6M in 2024, as a result of the **acquisition of Grestel**. (See Table 4).

In short, all these strategies contribute to the growth of VAA. Firstly, the Ria Stone Expansion is expected to reach €7.4M EBITDA in 2024, the Grestel acquisition €10.7M EBITDA in 2025, and the remaining EBITDA growth is expected to be organic – c. 47%. As a result, an overall increase in EBITDA is expected, from €35M in 2022 to €70M in 2027, which allows for a solid and healthy exit in 2027 (See Figure 1).

Valuation

The valuation of VAA was performed using five approaches: trading comparables, 10-year through-the-cycle comparables, selected precedent transactions, and two discounted cash flow (DCF) approaches – Gordon's growth model and exit multiples. The multiple used was the EV/EBITDA, which provides a clearer view of the company and its financial performance. Most of the values used in this procedure were extracted from Bloomberg, Thomson Reuters, and Orbis databases. For both comparables' methods, eight companies were selected based on industry, product offerings, and key financials. For the LTM approach, we collected 2021 multiples (See Table 5). Given the disparities in the relative sizes of the group, the median multiple was calculated, equalling 10.1x in 2021. For the 10-year cycle approach, multiples were collected from 2010 to current values – resulting in an average multiple of 9.2x multiples (See Table 5). Finally, thirteen transactions within the sector were considered for the approach of past transactions, where some of the requirements were to have similar business models, financial performances, and end markets multiples (See Table 6). The multiples paid by

acquirers for these transactions were then used to value VAA, which resulted in a median valuation multiple of 9.4x. Next, the investment value was determined based on the expected future FCF for discounted cash flows. The FCFs were deducted from the calculated WACC (i.e., 7.8%) and resulted in two multiples of 25.9x and 12.5x, respectively (*See Table 8 and Table 10, respectively*).

All the information collected was gathered in a football field graph, which summarizes the range of values of a business based on the various valuation methods used – the range varies from the minimum, passing through the quartiles and maximum (*See Figure 2 and Figure 3*). According to the analysis, comparable trading methods provided a close estimate given the context of the VAA, so they were considered with a higher weight of 45% for each method. The remaining 10% was distributed to precedent transactions. This weight discrepancy is a result of the difficulty in collecting information, as there was a small number of transactions carried out in the sector in recent years and a lack of detail about them. Also, market conditions change over time, and the recent recessions might compromise the accuracy of results. Finally, as DCFs were highly sensitive to future assumptions, they were not considered in the implied multiple. **As a result, VAA was valued at an EV/EBITDA multiple of 9.63x, resulting in a company value of €341M.**

Capital Structure

To determine the capital structure, the **sources and uses** of funds were computed (*See Table 11*). With an **entry multiple of 9.6x** retrieved from the valuation, the enterprise value equalled €341M. Together with fees equivalent to €20M, the **total uses amounted to €362M**. To sustain the uses, senior debt and equity were used. These amounts were defined according to the risk and seniority of each instrument. As senior debt gets paid first, the risk is lower, and

so is the cost. Senior debt includes three tranches: Term loans A, B, and C (*See Table 12*). The mezzanine debt was not considered in the proposed capital structure as it was unnecessary to incur a risk for a needless return increase. Furthermore, an acquisition credit facility was used (*See Table 13*)

On the equity side, there is equity from the **fund**, known as **institutional strip** – which includes a **subordinated loan** (or Fixed Return Instrument (FRI)) and **institutional ordinary shares** – and **equity from the management** team, known as **sweet equity**. (*See Table 12*)

The total **sources of funds amounted to €362M** and were achieved through an equity contribution of **5.7x EBITDA** and leverage of **4.5x EBITDA** (excluding Acquisition Capex Facility). The proposed structure generated a strong **and growing cash cover** (higher than 1) throughout the holding period, with an accelerated reduction after the exit year, corresponding to the repayment of senior bullet debt. Furthermore, the **interest coverage ratio**, ranging from 2.7x to 4.8x during the investment period, reveals a high **ability to meet interest payment** obligations and a **low risk of default**. On the other hand, the **net debt to EBITDA** has been decreasing over the years – from 4.0x in FY23. This downward trend is a combined result of the reduction in net debt and the increase in EBITDA, which is favourable for the company, as the **lower the ratio, the greater the probability that the company will be able to pay off its debt**. In addition, Vista Alegre **is meeting its financial debt covenant** of 5.0x. (*See Table 14*)

This financing structure was chosen by testing four scenarios, selecting the one with the highest exit return, and assuming maximum leverage of 4.5x (*See Table 15*). Overall, the proposed structure (‘*Structure 4*’) was the best-case scenario, yielding the highest IRR and Money Multiple at the exit, both for the fund and management. This allowed us to meet all debt covenants, even in the stricter case (i.e., bank case).

Returns

The LBO firm will seek to exit the investment within five years (in FY27).

Considering an exit multiple of **9.6x**, an **exit EBITDA of €70M** and an **enterprise value generation of €331M** throughout the holding period are expected. Hence, an initial investment of €182M corresponds to final proceeds of €571M, leading to an equity value generated of €389M during the same period.

One can divide the returns even further into institutional and management. The fund's returns can also be broken down into the subordinated loan that expects proceeds of €363M in FY27 and ordinary shares, responsible for €198M of the proceeds in the same year. Together they amount to €562M of total institutional proceeds, for an investment of €201M. This implies a **2.80x MM** and a **23% IRR** for the fund. Likewise, the management team also takes advantage of the investment, being highly rewarded. They are incentivized with a package that requires an entry investment of €1.3M in sweet equity and generates proceeds of €9.5M, implying a MM of 7.10x and IRR of 48% (*See Table 16*). The exit waterfall (*See Figure 4*) shows how the proceeds from the exit will be allocated to all shareholders in the company.

Even in the conservative case, we can still have an attractive multiple (2.33x) and IRR (18%) (*See Table 17*).

To break down the different returns' drivers, it is vital to acknowledge the three possible ways to generate returns in private equity: deleveraging, EBITDA growth, and multiple arbitrage. The multiple arbitrage is the most uncertain element and therefore is not considered in our analysis (assumed to be 0.0x).

From the original €187M invested, the **€392M generated** can be split into (*See Figure 5*):

1) 58M from cash generation in the business (net debt decreased from €137M to €101M, increasing total value creation at a multiple of 0.32x). Cash leveraging accounts for a 15% increase in equity value. In fact, VAA has been showing over time a solid ability to generate

cash (CAGR of 29% from FY18 to FY22) that is expected to persist in the future. (CaixaBank BPI 2022)

2) 341M from operating growth (EBITDA grow from €35M to €70M, increasing total value creation at a multiple of 1.82x), which can be further divided into:

(i) **Organic revenue growth:** achieved through market growth and internationalization. It is expected to contribute €100M (26%) to total value creation. Organic revenues grew from €145M at entry to €188M at the exit.

(ii) **Organic operating leverage:** EBITDA margin improvements at an organic level are expected to create €121M (26%). This growth is enabled through various internal restructurings (e.g., NWC improvements, investments in the crystal and glass segment, and Ria Stone Expansion).

(iii) **Inorganic growth:** Inorganic EBITDA is expected to create €110M at a multiple of 0.60x (28%).

As the inorganic growth is unpredictable and riskier, an analysis without the Grestel acquisition was made. This said, even without this strategy, our model is organically robust, generating a MM of 2.44x and 20% IRR.

Exit Strategy

After the end of the holding period, several exit strategies were considered: **strategic sale, secondary sale, IPO, and partial trade sale** (McKinsey 2022). The chosen strategy was a **strategic sale**, which consists of selling the company to a strong strategic player in the luxury tableware market. Beyond the various synergistic opportunities, there is a possibility of VAA consolidating its position in a different market, which would likely lead to a higher exit valuation. As the market is fragmented and shows solid M&A activity, this could translate into numerous potential buyers and an immediate subsequent exit without regulatory

requirements and costs related to other exit options (IPO). On the other hand, the process is slower and heavier, and the acquisition price is more significant.

The **most suitable buyer** must have a **strong** and **renowned brand**, an **unquestionable global presence**, and the **capacity to integrate VAA** products into its retail channels. In addition, VAA would benefit from the opportunity to cooperate with design studios to enhance the exclusivity of its collections, strengthening the brand's positioning as sophisticated and prestigious. Few companies could facilitate business consolidation in a market as fragmented as the luxury one, but we believe that **luxury conglomerates** have the profile and corporate objectives, since they are entering in the tableware sector to grab a bigger share of the global luxury goods market (Vogue 2021).

We looked in detail at **LVMH** and **Kering** group, as both companies stood out for being **stable, long-established** companies with **high investments** in consumer products and luxury and, most importantly, for having brands **already present in the tableware market**, such as Dior (LVMH) and Gucci (Kering). In addition, **VAA has existing relationships with LVMH** and **understands their business mandate to maximize exit proceeds**. For example, VAA is both used and sold in the **Louis Vitton Café** in Osaka, Japan. (Vitton 2022)

Both are European groups highly dependent on Asia, which makes them more fragile, thus, both would benefit from the acquisition of a target with lower logistical risks, carbon footprint, and transportation costs. Additionally, both have a historically successful record of 12 acquisitions in several countries (Mergr 2022). Notwithstanding, we believe **LVMH** stands out as the **safer choice**, as it has higher purchasing capacity, while having a recent strong focus on M&A, with three acquisitions in the last five years and an **already established relationship with VAA**.

Due Diligence

For a successful investment, a profound analysis of various areas is imperative. Therefore, starting from a **commercial** point of view, we must further investigate the following:

- (i) Market forecasts and trends, namely, macroeconomic outlook and key growth drivers; VAA's key segments' growth potential, and the overall market size. The upcoming recession, overestimations of market growth, and wrong assessment of risk/return value creation strategies might negatively impact forecasts.
- (ii) Competitive landscape and the source of competitive advantage (the emergence of more innovative product offerings by competitors) by analysing the competitors per segment and location and assessing barriers to entry into international markets.
- (iii) M&A targets, by performing a detailed analysis of the Grestel acquisition – margins, growth potential, and synergies: there may be challenges in the business integration and/or realization of synergies.

On a more **operational** side, one shall look at the following:

- (i) The value chain, where a profitability analysis per segment must be made, checking for inefficient business processes and investments needed to create value, and assessing the operational dependence of VAA on third parties. The possibility of not renewing valuable contracts, like IKEA's, can be a potential red flag by harming the operational performance of the firm.
- (ii) Major costs, drivers, and impacts on operations and margins, assessing opportunities to be explored (like digital platforms) and interpreting the impact of raw material price volatility on profit margins and their evolution. The cost structure can face challenges due to the ongoing increase in energy, fuel, and raw materials prices – nonetheless, VAA is being successful in largely mitigating these effects.

Thirdly, (iii) the **legal & tax perspective** is also crucial: by looking in depth at critical contracts, requesting a list of all current litigations in which VAA is involved, assessing compliance regarding licenses to produce and insurance of factory and workers, verifying legal requirements and EU environmental standards compliance and reviewing tax compliance and litigation by assessing unused tax opportunities.

Lastly, the **financial point of view** should focus on forecasting future NWC investment needs and CAPEX – maintenance and expansion (Grestel's acquisition, Ria Stone expansion, and Crystal investment), focusing on outstanding debt structure and contract terms, and understanding the terms and conditions of public funding – namely AICEP (European Funds AICEP 2022). We should look out for overestimation of forecasts and possible inability to repay debt/covenant breach. Regarding the valuation, an independent valuation should be requested to avoid potential bias while assessing potential buyers and exit routes and running sensitivity and scenario analysis to hedge against over/underestimation.

Valuation

a. Introduction

Valuation is a process of determining the present value of a company, investment, or asset. For an accurate estimation of the equity value of a company, investors use several tools and techniques that will be covered later. This procedure is often seen as the most crucial element of a successful investment decision. However, for the success of this process, we must be clear about our target investment criteria and return objectives.

There are various equity valuation models. Vista Alegre Atlantis (VAA) was evaluated using five methodologies: **Trading Comparables**, **10-year Through-the-Cycle Comparables**, **Selected Precedent Transactions**, and two **Discounted Cash Flows** approaches – calculation of terminal value through **perpetual growth** (i.e., Gordon's Growth Model) and **exit multiples**.

The multiple used for all methods was the EV/EBITDA. This multiple is a recurrent market metric and provides a clearer view of the company and its financial performance. In addition, it also covers the equity and debt components of the capital structure.

There were some limitations on the availability of public information, as VAA operates in an industry where most of its competitors are still privately owned. Most of the values used in this procedure were extracted from the Bloomberg, Thomson Reuters, and Orbis databases.

b. Trading Comparables

The first comparable approach is the most common, as multiples are easy to calculate and only look at current values. The trading comparables approach **compares** a company's **current value** and **financial performance** with **similar companies in the same industry**. The value of a company must bear some resemblance to other values in the same industry.

For the approach, nine comparable companies were selected based on industry, product offerings, and key financials. First, companies in the ceramics, crystal, and glass sectors were researched, as they were considered good reference companies for the VAA. Comparisons were then made at the level of product offers (i.e., if their business model and end-products were in tableware, giftware, home-décor...) and financials, as the **main objective of this approach was to have companies as similar as possible to VAA**. This research was also influenced by advice from VAA's head of investor relations. The comparable companies chosen were Baccarat AS, BHS Tabletop AG, Churchill China PLC, Degrenne, Fiskars OYJ ABP, Libbey Inc., Noritake CO LTD, Portmeirion Group PLC and, finally, Villeroy & Boch. After calculating the values of the EV/EBITDA multiples for the year 2021, it was decided not to consider the last company mentioned, Villeroy & Boch, as it presented a multiple well below the average for that year. Furthermore, Villeroy and Boch have not performed well financially in recent years, and the associated values may need to be more accurate.

Regarding some companies, it was not possible to find current values for the trading multiple as they were acquired and became private or underwent a merger. However, these companies were not immediately excluded, as some numbers could be used in the 10-year cycle approach, as will be discussed later.

Finally, given the disparities in the relative sizes of the selected group, the **median multiple** was considered the best indicator, reaching **10.1x for the year 2021** (*See Table 5*).

c. Trading Comparables 10-Year through the cycle

The second comparable approach considered a period of ten years. Thus, and for the same selected companies (again, excluding Villeroy & Boch for the same reason explained above), values were collected for the **multiple EV/EBITDA from 2010 until the present date – LTM**.

As in the first approach, given the disparities in the relative sizes of the selected group, the median multiple was considered the best indicator. In most cases, it is difficult to observe an implicit EV/EBITDA pattern of comparable companies over time. However, there was a relatively narrow dispersion of median multiples over the years considered, ranging from 6.56x in 2011 to 11.43x in 2015. Afterward, it stabilized at c. 8.4x until 2021, when it increased to 10.14x (*See Table 18, Table 19, and Table 20*).

In conclusion, the **Trading Comparables** method yields a **10.1x** average multiple for **2021**. This multiple corresponds to an **enterprise value of €359M**. Then, the **10-Year Through the Cycle** method yields a **9.2x** multiple when calculating the median multiple over the past ten years (*See Table 5*). This multiple corresponds to an **enterprise value of €325M**.

d. Precedent Transactions

Following the procedure above, the **price paid for acquiring similar companies** under similar circumstances is considered an indicator of the actual value of a company. This method is based on publicly available information that helps us understand how buyers value the industry.

On the one hand, this approach provides a general assessment of the demand for a given asset and an approximate valuation of it. On the other hand, as mentioned earlier, the quantity and quality of transactional information can sometimes be limited – current circumstances are being compared with those at the acquisition date. However, market conditions have changed significantly in recent years, due to the different macroeconomic and geopolitical effects on companies (e.g., the Ukraine-Russia conflict or pandemics). As a result, the number of competitors and their size or market demand may have changed. Nonetheless, the precedent

transaction approach still provides a solid basis for valuation. Concerning this transactional approach, several transactions involving companies similar to Vista Alegre were researched. From this research, **13 transactions within companies of the sector were considered**, where some of the requirements were to have **similar business models, financial performances, and end-markets over ten years** – a time horizon of ten years was considered, as transactions that occurred more recently are seen as more valuable for analysis.

Among these transactions, some were considered useful but less accurate than others, either due to the size of the deal (e.g., the value of the acquisition of Furlong Mills Limited was much lower than the MV of VAA) or due to their different business model (e.g., the deal of acquired company Hunter Douglas NV had a relevant dimension, but its main business is the manufacturing of window coverings and blinds). (*See Table 6*).

On the other hand, there were also very relevant acquisitions, which will be discussed below. The first is the acquisition of WWRd (a premium home and lifestyle products company with a focus on tableware, giftware, and interior decoration) by Fiskars in 2015 for €406M and with a multiple of 10.00x – despite the value of the business being much higher than the market value of Vista Alegre, c. €142M (Yahoo 2022), its multiple is around the expected market multiple values for Vista Alegre c. 10.8x (CaixaBank BPI 2022). Then, the acquisition of Filament Brands by Lifetime Brands (a global supplier of kitchenware, tableware, and other household products) in 2017 – with a business value of €277.47 and a multiple of 6.30x. Finally, the acquisition of Fortune Fountain Capital Ltd from Baccarat in 2017, worth €164M and with a multiple of 16.21x – Baccarat is one of VAA's main competitors, with the value of the deal being in line with the current market capitalization of Vista Alegre – 142M€ (Yahoo 2022).

These transactions (together with those in the appendix) were considered the most relevant in terms of usefulness for analysis. However, it is essential to highlight that there was difficulty

in collecting information, as there was a small number of transactions carried out in the sector in recent years and a lack of detail about them.

After selecting the previous transactions, the EV/EBITDA multiples of the provided transactions were collected. Then, the median multiple of the given distribution was calculated, following the same reasoning.

In conclusion, this method is similar to but different from the comparables approach, as it relies on the historical acquisitions of similar companies to derive values. This method produced a valuation **multiple of 9.4x**. This multiple corresponds to an **enterprise value of €333M**. (See Table 6).

e. Discounted Cash Flow

Discounted cash flow (DCF) is a method that aims to determine the value of an investment based on expected future cash flows (Fernando 2022). For the calculation of free cash flows, the following formula was used:

$$FCF = EBIT (1 - tax\ rate) + depreciation + amortization \\ - change\ in\ net\ working\ capital - capital\ expenditure$$

Values predicted in the core operating model were considered for the previous calculation.

The present value of expected future cash flows was calculated using a projected discount rate. Companies often use the weighted average cost of capital (WACC) as it includes the different risks associated with equity and debt financing. Hence, to determine the WACC of the company, the following formula was utilized:

$$WACC = \left(\frac{Equity}{Equity + Debt} \times r_E \right) + \left(\frac{Debt}{Equity + Debt} \times r_D \times (1 - Tax\ Rate) \right)$$

In this formula, the cost of each source of capital was multiplied by its relevant market weight, adding them together to determine the total value.

The cost of equity capital was obtained using the Capital Asset Pricing Model (CAPM) equation:

$$\text{Cost of Equity } (r_E) = \text{Risk Free Rate} + (\beta_E \times \text{Market Risk Premium})$$

Initially, the market risk premium (MRP) and the risk-free rate (Rf) were analysed. To obtain the MRP, the value of 5.5% was used, as recommended in a publicationⁱ written by Kroll, an American multinational financial consultancy firm (Kroll 2021). Then, to obtain the risk-free rate (T-bond), the value of 3% was considered, a yield equivalent to the 10-year government bond of Portugal (CNBC 2022).

After that, several calculations were made to obtain the leveraged beta of VAA. Therefore, there was a lot of research into the D/E ratios, tax rates, and leveraged betas of the nine peer companies mentioned above. With these values, the unlevered beta for each peer could finally be calculated. For this purpose, the following equation was used:

$$\text{Levered Beta} = \text{Unlevered Beta} \times \left[1 + (1 - \text{Tax Rate}) \times \left(\frac{\text{Debt}}{\text{Equity}} \right) \right]$$

Finally, with an unlevered beta for each comparable company, the median of these betas was calculated, obtaining an unlevered beta of 0.9 for VAA years (See Table 21). Then, the D/E ratio was computed by dividing the market value of his equity by the adjusted market value of the debt – which resulted in a D/E equal to 0.84 (See Table 22). Next, the VAA leveraged beta was calculated using the previous equation and the 21% tax rate, equivalent to 1.5. Finally, with the leveraged beta calculated, the market risk premium, and the risk-free rate, the cost of equity could be calculated by the CAPM equation – equalling 11.2% (See Table 24).

It should be noted that the market value of equity capital was calculated through the product of VAA shares in circulation by their quotation. In contrast, the market value of debt equalled the sum of the FY21 debt book value and the present value of operating leases (See Table 23). For the cost of debt, VAA's credit profile was analysed. Given that the VAA bond is

rated BBB- (Axesor Rating 2022), the expected spread was equal to 1.59% (Damodaran 2022) – (See Table 27). For the cost of debt, the expected spread was added to the risk-free rate (T-bond) of 3%, resulting in an estimated cost of debt of 4.5% (See Table 25).

Once the cost of capital sources and the debt/equity ratio were calculated, the WACC could finally be derived using the previously mentioned formula – equal to 7.8% (See Table 26).

1. Terminal Value

The DCF approach considers an additional CF projection beyond the initial forecast period, as it is anticipated that companies will continue to operate at the end of the initial forecast period – terminal value.

1.1. Gordon's Growth Model

This first approach to calculating terminal value considers perpetual growth and assumes constant dividend growth when valuing the company. Thus, this model should be used for stable business models when there are no significant changes in operations and returns. However, a potential disadvantage of this approach can be the difficulty of estimating a specific perpetual growth rate for a business.

According to this methodology, the terminal value of VAA was calculated through the following equation:

$$Terminal\ Value = \frac{FCF_n \times (1 + g)}{(r - g)}$$

For this calculation, the previous WACC of 7.8% and a terminal growth rate of 1.93% were used – the perpetuity growth rate given by the company. As a result, the terminal value amounted to 691 million euros. Then, all cash flows were discounted to the WACC and added

to the terminal value, achieving an **enterprise value of €917 million and an implied EV/EBITDA multiple of 25.9x** (See Table 7 and Table 8).

Finally, for the DCF approach, a sensitivity analysis was performed for the company value and subsequent EV/EBITDA multiple, varying the WACC discount rate [6.8%-8.8%] and the terminal growth rate [0.9%-2.9%]. As a result, these values increased with a higher terminal growth rate and decreased with a higher discount rate.

1.2. Exit Multiples

For this second approach, the first three approaches were used to estimate the exit multiple for the end of the projection period – Trading Comparables, Trading Comparables Over the 10-Year cycle, and Precedent Transactions.

Therefore, the median EV/EBITDA multiple for each transaction was collected to find the implicit multiple to be applied in this methodology. Then, according to the relevance of each method, a certain weight was assigned to its median multiple. Therefore, 45% was attributed to each comparable approach and the remaining 10% was distributed to the precedent transactions' method. This weight discrepancy is a result of the difficulty in collecting information, as there was a small number of transactions carried out in the sector in recent years and a lack of detail about them. Also, market conditions change over time, and the recent recessions might compromise the accuracy of results.

Considering this, an implied multiple of 9.63x was reached, equal to the assumed EV/EBITDA exit multiple since multiple arbitrages are not assumed. Thus, the terminal value was calculated using the following equation:

$$Terminal\ Value = EBITDA_n \times Implied\ EV/EBITDA$$

As a result, a terminal value of 464 million euros was achieved. Subsequently, all cash flows were discounted to the WACC and added to the terminal value, reaching an optimal

enterprise value of €445 million and an implied EV/EBITDA multiple of 12.5x (See Table 9 and Table 10).

Finally, for the DCF approach, a sensitivity analysis was performed for the company value and subsequent EV/EBITDA multiple, varying the WACC discount rate [6.8%-8.8%] and the exit multiple [8.6x-10.6x]. These values increased with a higher exit multiple and decreased with a higher discount rate.

Conclusion

All the information collected was gathered in a football field graph, which summarizes the range of values of a business based on the various valuation methods used – the range varies from the minimum, passing through the quartiles and maximum (See Figure 2 and Figure 3). According to the analysis, comparable trading methods provided a close estimate given the context of the VAA, so they were considered with a higher weight of 45% for each method. The remaining 10% was distributed to precedent transactions. Although the previous transaction method also provided a close estimate of VAA values, this weight discrepancy is a result of the difficulty of gathering information and changes in market conditions. Finally, as DCFs were highly sensitive to future assumptions, they were not considered in the implicit multiple – the results were far superior to those of the other approaches. As a result, **VAA was valued at an EV/EBITDA multiple of 9.63x, resulting in a company value of €341M.**

This calculated value was in line with the values estimated for the year 2022 by the company's report, which are slightly lower than the values for 2021 (CaixaBank BPI 2022). Therefore, these estimates were considered accurate for use in the project.

Appendix

Table 1 – Prominent players in the sector, along with their EBITDA margins

Key Players	EBITDA Margin
VAA	22%
Libbey	n.a.
Fiskars	16%
Villeroy & Boch	14%
Baccarat	20%
BHS Tabletop	n.a.
Portmeirion	11%
Noritake	11%
Churchill China	14%
Degrenne	n.a.

Table 2 – Projected Revenue Growth (Investment Case)

Revenues (€M)	2021	2022E	2023E	2024E	2025E	2026E	2027E
Porcelain	42,5	48,9	54,2	58,0	61,0	63,5	65,9
Stoneware	50,4	64,5	69,8	74,4	77,3	79,6	81,4
Crystal and glass	11,7	16,0	17,0	17,9	18,8	19,6	20,4
Earthenware	12,4	16,0	17,1	18,0	18,9	19,7	20,4
Core Revenues	117,0	145,4	158,2	168,4	175,9	182,4	188,1
% Growth	6,0%	24,3%	8,8%	6,5%	4,5%	3,7%	3,1%
Ria Stone Expansion	-	-	-	29,7	29,7	29,7	31,5
Buy-and-build	-	-	-	-	38,4	39,4	40,2
Add-ons Revenues	0,0	0,0	0,0	29,7	68,1	69,1	71,7
Total Revenues	117,0	145,4	158,2	198,1	244,0	251,5	259,8
% Growth	6,0%	24,3%	8,8%	25,3%	23,2%	3,1%	3,3%

Table 3 – Projected Costs and EBITDA Growth (Investment Case)

Costs (€M)	2021	2022E	2023E	2024E	2025E	2026E	2027E
Total COGS	38,6	48,9	51,8	54,4	56,7	58,9	60,7
COGS as % of Sales	33,0%	33,6%	32,8%	32,3%	32,3%	32,3%	32,3%
Core Gross Profit	79,8	96,5	106,4	114,0	119,2	123,6	127,4
SG&A	64,0	67,9	71,9	75,7	78,7	81,4	83,9
Core EBITDA	25,8	35,4	40,2	43,6	44,6	46,3	47,7
Ria Stone Expansion	-	-	-	7,4	7,9	8,4	10,7
Ria Stone Margin %	-	-	-	25,0%	26,6%	28,3%	33,9%
Buy-and-build	-	-	-	-	10,7	11,1	11,4
Buy-and-build Margin %	-	-	-	-	27,8%	28,1%	28,3%
Add-ons EBITDA	0,0	0,0	0,0	7,4	18,6	19,4	22,1
Group Cash EBITDA	25,8	35,4	40,2	51,0	63,1	65,8	69,8
<i>% EBITDA Margin</i>	22,0%	24,4%	25,4%	25,7%	25,9%	26,2%	26,9%

Table 4 – Projected FCF Growth (Investment Case)

FCF (€M)	2021	2022E	2023E	2024E	2025E	2026E	2027E	CAGR
Total EBITDA	€25,8	€35,4	€40,2	€51,0	€63,1	€65,8	€69,8	14,52%
Taxes	-€2,0	-€5,2	-€2,3	-€3,7	-€5,2	-€5,8	-€6,8	
Other adjustments to FCF	€0,5	€0,5	€0,6	€0,6	€0,6	€0,6	€0,6	
Maintenance CAPEX	-€6,0	-€6,0	-€6,0	-€7,5	-€13,6	-€13,7	-€13,8	
Expansion CAPEX	-	€0,0	-€41,0	€0,0	€0,0	€0,0	€0,0	
Acquisition CAPEX	€0,0	€0,0	€0,0	-€54,6	€0,0	€0,0	€0,0	
(minus) Changes in NWC	-€0,7	-€2,4	-€0,7	-€0,2	€0,3	€0,5	€0,7	
Free Cash Flow to Firm	€17,6	€22,4	-€9,3	-€14,5	€45,2	€47,4	€50,6	17,74%
% Growth		27%	-141%	-56%	412%	5%	7%	
Free Cash Flow to Firm (excl. acq. and exp. CAPEX)	€17,6	€22,4	€31,7	€40,1	€45,2	€47,4	€50,6	17,74%
% Growth		27%	42%	26%	13%	5%	7%	

Table 5 – Trading Comparables, 10-year Through-the-Cycle Comparables

Companies (without Villeroy & Boch)	2021	2021 Multiple Average	10 Year Median	10 Year Multiple Median Average
BACCARAT AS	7,49x	10,12x	14,58x	8,39x
BHS Tabletop AG	-	10,12x	4,02x	8,39x
Churchill China PLC	24,59x	10,12x	9,40x	8,39x
Degrenne	-	10,12x	9,50x	8,39x
FISKARS OYJ ABP	10,26x	10,12x	11,61x	8,39x
LIBBEY INC	-	10,12x	7,04x	8,39x
NORITAKE CO LTD	6,70x	10,12x	8,35x	8,39x
Portmeirion Group PLC	10,14x	10,12x	8,94x	8,39x
Median	10,14x		9,17x	

Table 6 – Precedent Transactions

Ann. Date	Target	Acquirer	Deal Value (million)	EV/EBITDA
13/10/2011	Universal Industries Corporation	Ethos Private Equity	€74,00	9,40x
21/05/2012	KCM Corp	Noritake Co Ltd/Nagoya Japan	€35,99	0,98x
01/12/2012	Royal Copenhagen	Fiskars	€66,00	8,00x
10/05/2015	WWrd	Fiskars	€406,00	10,00x
02/06/2015	LONGTU KOREA Inc	King Power International Group Co Ltd, LongTu Game HK Ltd,Far creative Ltd	€17,47	8,19x
14/12/2015	Jarden Corp	Newell Brands Inc	€16,0t	19,34x
21/03/2016	Hydro Flask	Helen of Troy	€192,00	12,00x
05/05/2016	Wax lyrical Limited	Portmeirion	€21,42	8,30x
06/02/2017	Baccarat	Fortune Fountain Capital Ltd	€164,00	16,31x
22/12/2017	Filament Brands	Lifetime Brands	€277,47	6,30x
25/02/2019	Furlong Mills Limited	Churchill China	€3,80	10,40x
17/07/2019	Nambé LLC	Portmeirion	€12,24	10,90x
31/12/2021	Hunter Douglas NV	Private Investor,3G Capital Inc	€390,27	7,34x
Median	9,40x			

Table 7 – DCF (Gordon's Growth Model) – Enterprise Value

		Terminal growth rate				
		0,9%	1,4%	1,9%	2,4%	2,9%
WACC	6,8%	€921	€989	€1,071	€1,172	€1,299
	7,3%	€861	€919	€987	€1,069	€1,171
	7,8%	€810	€859	€917	€985	€1,068
	8,3%	€764	€807	€857	€915	€984
	8,8%	€724	€762	€805	€855	€913

Table 8 – DCF (Gordon's Growth Model) – EV/EBITDA Multiple

		Terminal growth rate				
		0,9%	1,4%	1,9%	2,4%	2,9%
WACC	6,8%	26,0x	27,9x	30,2x	33,1x	36,7x
	7,3%	24,3x	25,9x	27,9x	30,2x	33,0x
	7,8%	22,8x	24,2x	25,9x	27,8x	30,1x
	8,3%	21,6x	22,8x	24,2x	25,8x	27,8x
	8,8%	20,4x	21,5x	22,7x	24,1x	25,8x

Table 9 – DCF (Exit Multiples) – Enterprise Value

		Exit Multiple				
		8,6x	9,1x	9,6x	10,1x	10,6x
WACC	6,8%	452	465	477	490	503
	7,3%	437	449	461	473	485
	7,8%	422	433	445	456	467
	8,3%	408	418	429	440	451
	8,8%	394	404	415	425	436

Table 10 – DCF (Exit Multiples) – EV/EBITDA Multiple

		Exit Multiple				
		8,6x	9,1x	9,6x	10,1x	10,6x
WACC	6,8%	12,8x	13,1x	13,5x	13,8x	14,2x
	7,3%	12,3x	12,7x	13,0x	13,3x	13,7x
	7,8%	11,9x	12,2x	12,5x	12,9x	13,2x
	8,3%	11,5x	11,8x	12,1x	12,4x	12,7x
	8,8%	11,1x	11,4x	11,7x	12,0x	12,3x

Table 11 – Sources and Uses

Sources	M€	x EBITDA	%	Uses	%	€ M
Senior Debt				EBITDA 2022		35
Term Loan A	18	0,5x	5%	Entry EV/EBITDA		9,6x
Term Loan B	53	1,5x	15%	Enterprise Value		341
Term Loan C	89	2,5x	24%			
Subordinated Debt				Net debt (excess cash)		-61
Mezzanine	0	0,0x	0%	Debt Like Items		-20
Total Debt	159	4,5x	44%	Purchase VAA		261
				Equity		
Shareholder Loan (FRI)	173	4,9x	48%			
Ordinary Equity	29,3	0,8x	8%	Financing Fees	3,5%	11,9
Institutional	27,9		95%	Arrangement Fees	2,3%	7,8
Sweet Equity	1,3		5%	DD Fees	0,2%	0,7
Total Equity	202	5,7x	56%	Fees	6,0%	20
Total Sources	362	10,2x	100%	Total Uses	100%	362

Table 12 – Debt and Equity Terms and Pricing

Instrument	Term (Years)	Type of Amort.	x EBITDA	€ Millions	Interest Rate
Term Loan A	6	amort	0,5x	18	8,29%
Term Loan B	7	bullet	1,5x	53	8,39%
Term Loan C	8	bullet	2,5x	89	8,46%
Shareholder Loan (FRI)	9	bullet	4,9x		16% PIK Element
Ordinary Share Institutional Investor				27,9	
Ordinary Shares Management				1,3	

Table 13 – Acquisition Credit Facility Details (Investment Case)

Acquisition Credit Facility	
Size	€96M
% Funded	70%
Interest Rate	7,90%
Commitment Fee	1,60%
Drawdown Period (years)	2
Repayment Period (years)	4

Table 14 – Proposed Covenants (Investment Case)

	2023E	2024E	2025E	2026E	2027E
Cash	26,1	32,5	41,8	52,9	66,1
Cash Flow	4,1	6,4	9,3	11,1	13,2
Cash Cover	1,26x	1,36x	1,47x	1,55x	1,63x
Interest Cover	2,72x	3,04x	3,56x	4,04x	4,77x
Net Debt / EBITDA	4,03x	3,80x	2,64x	2,08x	1,45x

Table 15 – Evaluated Capital Structures (Investment Case)

Instrument	Structure 1	Structure 2	Structure 3	Structure 4
Term Loan A	0,0x	1,5x	0,0x	0,5x
Term Loan B	1,0x	1,0x	2,0x	1,5x
Term Loan C	2,5x	1,0x	2,0x	2,5x
Mezzanine	1,0x	1,0x	0,5x	0,0x
Total Debt	4,5x	4,5x	4,5x	4,5x
Equity Contribution	5,7x	5,7x	5,7x	5,7x
Total Sources of Funds	10,2x	10,2x	10,2	10,2x
<i>Management Returns</i>	6,44x	6,48x	6,74x	7,10x
<i>Institutional Returns</i>	2,70x	2,71x	2,75x	2,80x
<i>IRR</i>	22,0%	22,1%	22,4%	22,8%

Table 16 – Institutional and management returns in the Investment Case

	2022	2023	2024	2025	2026	2027
Management Entry Value	€1	€1	€1	€1	€1	€1
Management Exit Value	€1	€1	€3	€8	€8,3	€9,3
Management MM	1,05x	0,84x	2,20x	5,85x	6,28x	7,10x
Management IRR		-16%	48%	80%	58%	48%
Institutional Investors Equity	€201	€201	€201	€201	€201	€201
Institutional Investors Proceeds	€202	€224	€294	€433	€488	€562
Fund Money Multiple	1,01x	1,12x	1,46x	2,16x	2,43x	2,80x
Fund IRR		11,6%	21,0%	29,2%	24,9%	22,8%

Table 17 – Institutional and management returns in the Bank Case

	2022	2023	2024	2025	2026	2027
Management Entry Value	€1	€1	€1	€1	€1	€1
Management Exit Value	€1	€0	€1	€5	€4,8	€4,9
Management MM	1,05x	0,21x	0,54x	3,96x	3,67x	3,72x
Management IRR		-79%	-27%	58%	38%	30%
Institutional Investors Equity	€201	€201	€201	€201	€201	€201
Institutional Investors Proceeds	€202	€207	€248	€381	€416	€467
Fund Money Multiple	1,01x	1,03x	1,23x	1,89x	2,07x	2,33x
Fund IRR		2,8%	11,0%	23,7%	19,9%	18,4%

Table 18 – 10-year Through-the-Cycle Comparables (I)

Companies (w/ Villeroy & Boch)	2010 Multiple	2011 Multiple	2012 Multiple	2013 Multiple
BACCARAT AS	14,88x	14,32x	17,18x	-275,97x
BHS Tabletop AG	1,42x	3,84x	3,97x	4,15x
Churchill China PLC	1,51x	5,00x	6,05x	7,12x
Degrenne	0,98x	9,50x	12,50x	11,03x
FISKARS OYJ ABP	17,02x	16,31x	16,81x	18,80x
LIBBEY INC	14,26x	6,59x	7,35x	6,71x
NORITAKE CO LTD	5,13x	8,25x	10,02x	12,28x
Portmeirion Group PLC	7,98x	5,25x	7,19x	8,97x

Table 19 – 10-year Through-the-Cycle Comparables (I)

Companies (w/ Villeroy & Boch)	2014 Multiple	2015 Multiple	2016 Multiple	2017 Multiple
BACCARAT AS	60,56x	16,73x	14,85x	13,68x
BHS Tabletop AG	2,28x	3,11x	4,07x	5,52x
Churchill China PLC	8,75x	10,35x	10,06x	11,50x
Degrenne	51,71x	56,22x	-22,39x	-11,05x
FISKARS OYJ ABP	10,50x	13,48x	10,53x	12,69x
LIBBEY INC	10,04x	10,56x	8,87x	6,73x
NORITAKE CO LTD	14,31x	12,29x	8,44x	8,53x
Portmeirion Group PLC	10,08x	8,11x	9,37x	8,90x
Median	10,29x	11,43x	9,12x	8,71x

Table 20 – 10-year Through-the-Cycle Comparables (III)

Companies (w/ Villeroy & Boch)	2018 Multiple	2019 Multiple	2020 Multiple	2021 Multiple
BACCARAT AS	15,62x	8,22x	6,31x	7,49x
BHS Tabletop AG	7,97x	8,94x	-	-
Churchill China PLC	8,69x	14,12x	47,31x	24,59x
Degrenne	-5,83x	-	-	-
FISKARS OYJ ABP	7,03x	8,68x	7,96x	10,26x
LIBBEY INC	6,61x	5,55x	-	-
NORITAKE CO LTD	7,21x	6,53x	5,52x	6,70x
Portmeirion Group PLC	8,52x	11,32x	19,54x	10,14x
Median	7,59x	8,68x	7,96x	10,14x

Table 21 – WACC through comparables – Debt-to-Equity, Tax Rate, Levered Beta and Unlevered Beta

Company name	D/E	Tax rate	Levered beta	Unlevered beta
BACCARAT AS	0,99	28,7%	1,0	0,6
BHS Tabletop AG	1,04	34,8%	0,3	0,2
Churchill China PLC	0,00	19,9%	1,7	1,7
Degrenne	0,12	24,8%	0,0	0,0
FISKARS OYJ ABP	0,35	22,9%	0,9	0,7
LIBBEY INC	-	-	-	-
NORITAKE CO LTD	0,07	22,0%	1,3	1,3
Portmeirion Group PLC	0,16	26,6%	1,8	1,6
Villeroy & Boch	0,30	29,2%	1,3	1,1
Mean - peers	0,38	0,26	1,04	0,89
Median - peers	0,23	0,26	1,15	0,90
VAA	0,84	21,0%	1,50	

Table 22 – WACC VAA MV Debt-to-Equity Structure

VAA MV D/E structure	
BV Equity FY21 (in €M)	68,6
Shares outstanding (in M)	167650
Share price (in €)	0,0008
MV Equity (in \$M)	134,1
BV Debt FY21 (in \$M)	105,094
PV of operating leases	7,4
Adjusted MV Debt	112,5
D/E	0,84

Table 23 – NPV of Operating Leases

Operating leases	2022	2023	2024	2025
Operating leases	2,2	1,7	1,4	2,6
Discount factor	1,05			
NPV	7,4			

Table 24 – Cost of Equity through CAPM

CAPM	
Levered beta	1,50
Market risk premium	5,5%
Risk-free rate (T-Bond)	3%
Cost of equity	11,2%

Table 25 – Estimated cost of debt

Cost of debt	
EBIT (in \$M)	9,3
Interest expense (in \$M)	-5,8
Interest coverage ratio	-1,6
Estimated bond rating	BBB-
Estimated default spread	1,59%
Risk-free rate (T-Bond)	3,0%
Estimated cost of debt	4,5%

Table 26 – WACC through comparables

WACC	
Weight of equity	54%
Cost of equity	11,2%
Weight of debt	45,6%
Cost of debt	4,5%
Tax rate	19,0%
WACC	7,8%

Table 27 – Bond rating and correspondent spread

Bond rating	
if rating is...	Spread is
D2/D	14,34%
C2/C	10,76%
Ca2/CC	8,80%
Caa/CCC	7,78%
B3/B-	4,62%
B2/B	3,78%
B1/B+	3,15%
Ba2/BB	2,15%
Ba1/BB+	1,93%
Baa2/BBB	1,59%
A3/A-	1,29%
A2/A	1,14%
A1/A+	1,03%
Aa2/AA	0,82%
Aaa/AAA	0,67%

Figure 1 – EBITDA bridge

Evolution of EBITDA on the investment period, Expected increase in EBITDA from €35M in 2022 to €70M in 2027.

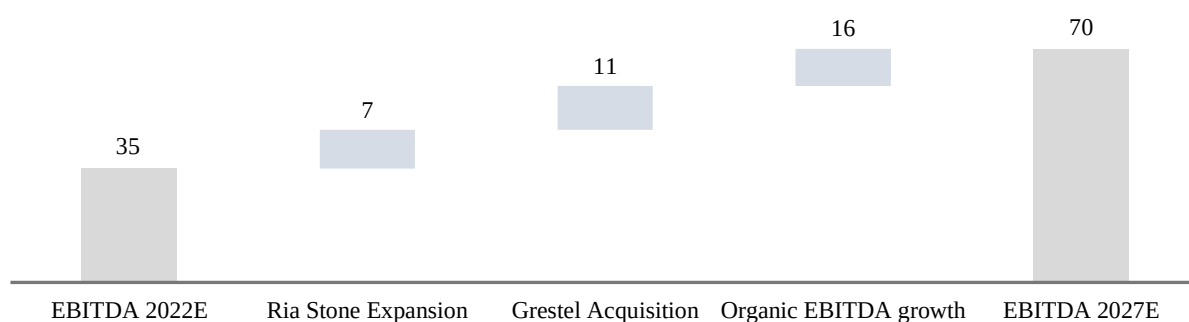


Figure 2 – Football Field Chart (EV/EBITDA Multiples)

Summary of the range of values of a business based on the five valuation methods. VAA was valued at an EV/EBITDA multiple of 9,63x.

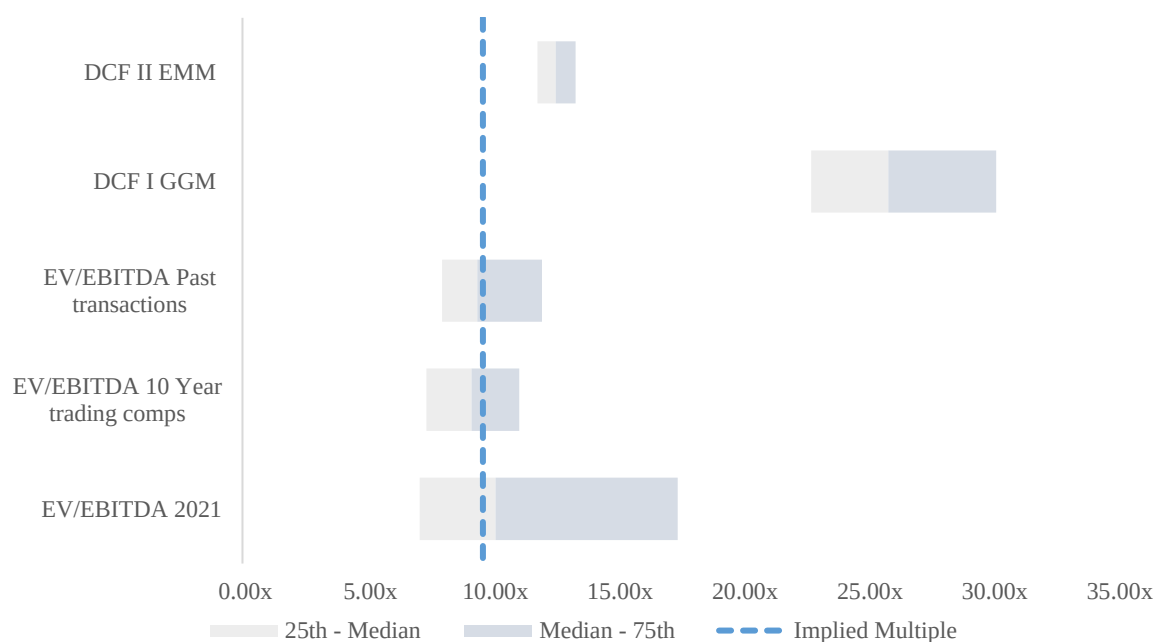


Figure 3 – Football Field Chart (Enterprise Value)

Summary of the range of values of a business based on the five valuation methods. Vista Alegre was valued at an enterprise value of €341 million.

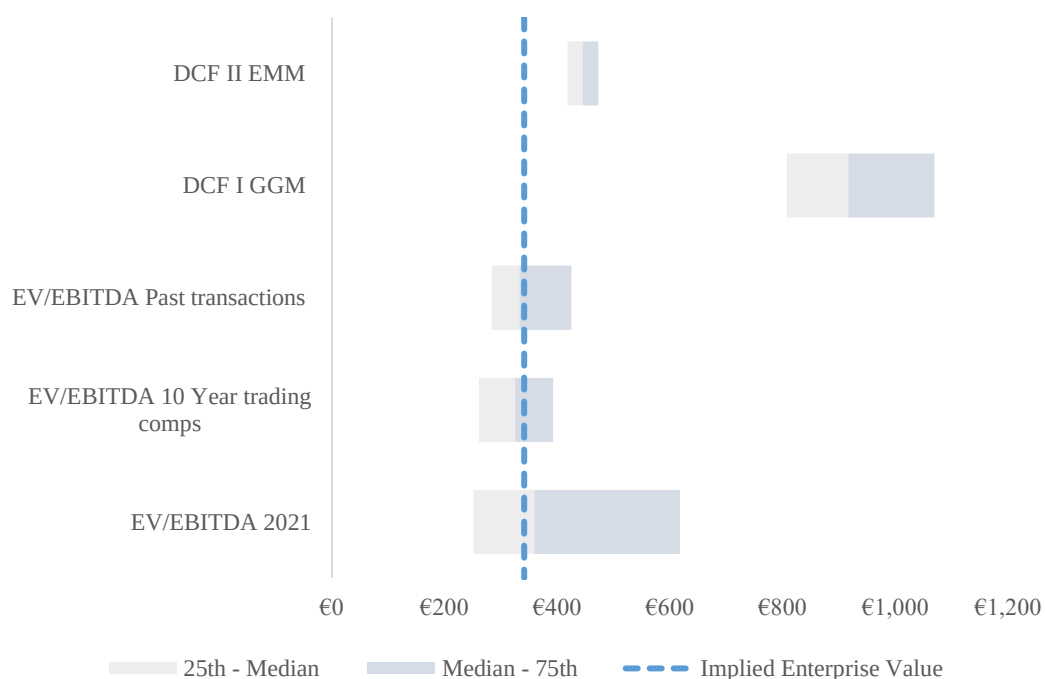


Figure 4 – Exit Waterfall

From the €672M generated in Enterprise Value, €562M corresponds to institutional proceeds and €9.3M corresponds to management proceeds. The remaining proceeds go to debt.

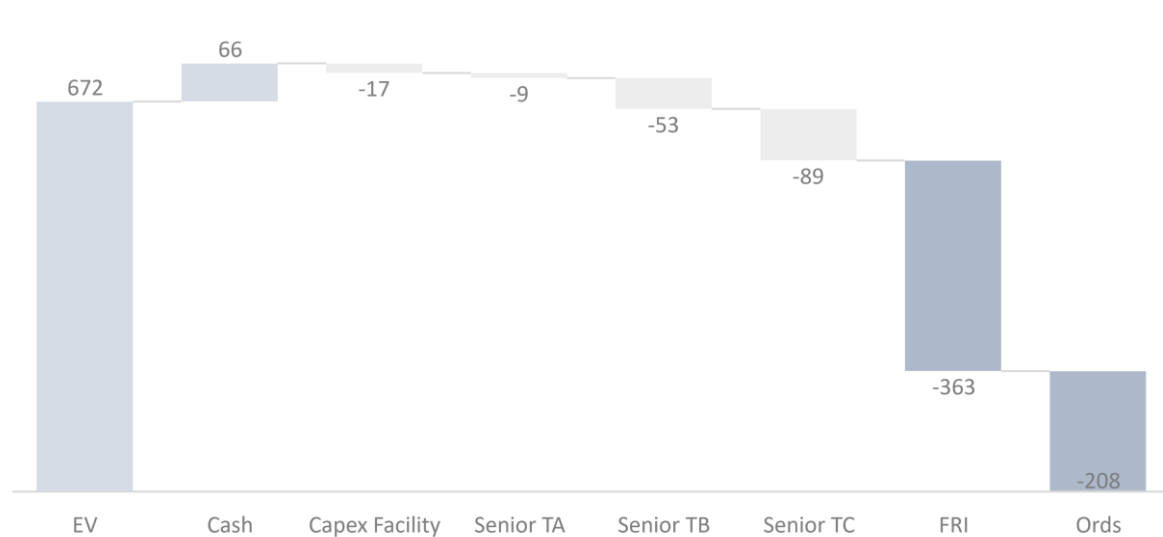
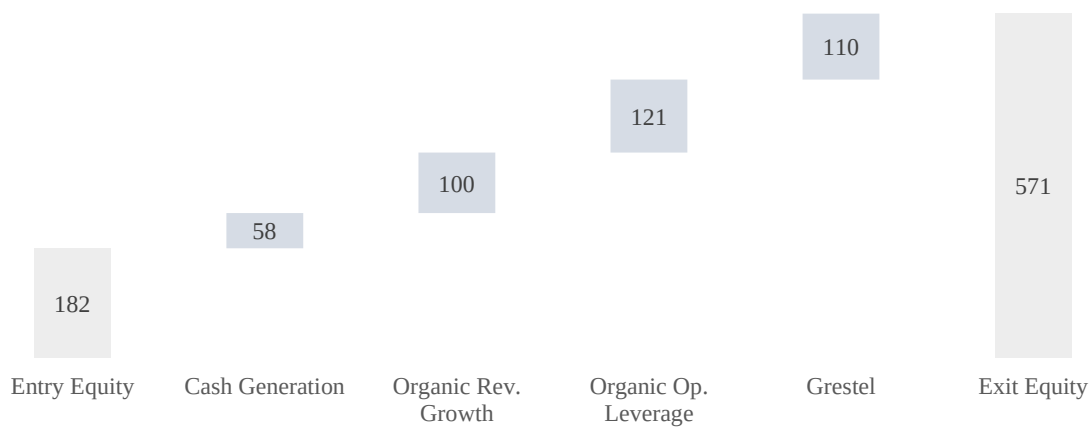


Figure 5 – Equity Returns

Organic operating leverage is the main driver for returns generation, responsible for 31% of value creation. Next is Grestel acquisition, creating 28% additional value.



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