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VISTA ALEGRE ATLANTIS INVESTMENT COMMITTEE PAPER – CAPITAL
STRUCTURE

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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 would likely 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.

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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 such as LVMH (LVMH 2021), Kering (Kering 2021), Richemont (Richemont 2021), Puig (Puig 2021), or Capri Holding (Holdings 2021) 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 and Gucci. In addition, **VAA has existing relationships with LVMH** and **understands their business mandate to maximize exit proceeds.** (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.

Capital Structure – Individual Component

Introduction

Capital structure is the **combination of equity and debt** that a company uses to **finance its operations**. It typically includes debt, equity, hybrid securities (a combination of debt and equity), and other financial instruments. Debt can be either a loan, a bond, or other financial instruments. For equity, it is either common or preferred shares.

When looking at debt, one can see that **debt financing** allows a business to leverage a small amount of capital for growth; its payments are usually tax-deductible – which reduces the cost of debt – the company can retain all ownership control and it is usually less costly than equity financing. On the downside, it encompasses interests (thus, the amount repaid will be higher than the amount borrowed), hence, being subject to interest rate risk; the payments must be made regardless of business revenues, and it can be risky for companies with volatile cashflows. Summing up, even though it has a **lower cost**, it has a **higher risk**.

As for **equity financing**, it allows no extra financial burden and eliminates the obligation of having to pay back. Nonetheless, it obliges to share profits with investors, by giving them a % of the company (which also implies having to consider their opinion when making decisions). Therefore, its **cost is higher** since shareholders **bear a higher risk** – they might not receive anything in return if the company cannot generate enough value. This cost is crucial to understand the optimal combination of equity and debt, this is, the **optimal capital structure**.

Furthermore, hybrid securities are a combination of debt and equity that allow a lower cost of capital than equity while still providing a certain degree of flexibility. However, they still encompass some risks, like interest rate risk and the firm's inability to make payments.

a. Sources and Uses

The sources and uses show how a company keeps track of where the money comes from and where it will be invested. We first determine the uses that consist of the purchase price (price paid for the acquisition of shares) and the fees paid to advisors for DD work, advisory, and banks for debt arrangement (some funds also pay a transaction fee to the General Partner). The sum of these two give us the required payments to acquire assets, this is, the total uses of funds. For VAA, we got a purchase price of €341M and fees of €20M, amounting to **€362M**. After this, we need to understand how to get the funds to pay for the transaction, this is, the total sources of funds. For this, senior debt, junior debt, and equity will be used. These definitions are made according to **repayment seniorities**, leading to **different risks** and **interest rates**. The cost of each instrument is connected to its risk and its risk to its hierarchy of capital structure.

i. Senior Debt

The **senior debt** is the debt that **ranks higher**, this is, which has the highest priority in a company's capital structure. This means that, in case of default, it gets paid before all other claims, including equity and subordinated debt. It can either be secured (backed by collateral such as property, inventory, or equipment, in case the borrower defaults) or unsecured (not backed by any collateral – it is riskier for lenders, hence, associated with higher interest rates). It typically has a fixed interest rate and a repayment schedule (including the monthly payments, interest rates, total amount of loan, and repayment date), allowing the borrower to plan its payments on time. Senior debt has the **lowest risk** since it is the first-ranking security, and it has the **lowest cost** since it has the lowest risk of default (its cost of capital is determined based on multiple conditions, namely, the creditworthiness of the borrower, the terms of the loan, and the current market conditions). It can be split into three tranches of debt: term loans A, B, and C – they have different levels of risk, typically having different repayment

schedules, interest rates, maturities, or default rates – and this is what allows lenders to **diversify their risk**. They can also be structured to provide lenders with additional protection in the event of default.

Term loan A is 0.5x EBITDA, and it is amortizing debt – the borrower pays a regular amount over a fixed period of time, reducing the total amount of the loan - it has 6-year maturity and an 8.29% interest rate. Term loan B is 1.5x EBITDA. It only has a bullet payment of 100% at maturity, 7-year maturity, and an 8.39% interest rate. Term loan C is 2.5x EBITDA, it also has only one bullet payment of 100% at maturity, 8-year maturity, and an 8.46% interest rate (Caetano 2022).

ii. Junior Debt

Junior debt is debt that ranks junior to senior debt, even though it still ranks senior to equity, this is, it has a **lower priority** in a company's capital structure than senior debt. This means that, in case of default, it only gets paid after all higher-ranking debt is paid, in this case, senior debt. As a result, it has a **higher risk than senior debt** and **lower than equity**, thus paying a **higher interest rate** than senior debt. It can also be secured or unsecured, but it typically is not backed by any collateral. Junior debt can take many forms - second lien (secured, typically used as corporate financing to help firms get additional capital), subordinated debt, high yield bonds (riskier, used for a quick capital rise, but more volatile and subject to default risk), or mezzanine.

The mezzanine debt has hybrid characteristics from debt and equity, this is, the lender can, in case of default, convert the debt to an equity interest in the company, covering the gap between debt and equity. It has a **higher cost than senior debt** since it has a **higher probability of default**, **higher interest rates**, and **higher returns** since it is **one of the riskiest types of debt**.

The interest can be cash paid or accrued. If the interest is cash, it is made on a regular basis and paid in cash; if it is accrued, we call it **PIK - payment-in-kind** - which refers to giving the issuer the opportunity of postponing dividend payments in cash and then offering a higher rate of return. It allows the borrower to make payments in the form of additional debt rather than cash. This is, by postponing payments, the borrower is increasing the principal amount of the loan by the amount of the interest postponed, meaning that further interests will be calculated based on the new amount of the outstanding loan. This allows the borrower to focus on repaying traditional debt faster, but it introduces more risk to the lender, which is then usually mitigated by having early payment penalties to maximize their potential earnings. Furthermore, it gives the company flexibility over the methods of payment and allows it to leverage capital through debt, and, for the borrower, the interests paid are tax-deductible, allowing a reduction in the cost of debt. On the downsides, it may lead to systematic payment postponement, it can dilute ownership if the interests are paid in equity, it is subordinated debt (ranks below other senior debt) and unsecured (it is only backed by the company's promise to pay), hence, being riskier; it has higher interest rates and higher risk and may lead to restrictions on further credit.

Overall, **mezzanine is the most expensive type of debt**, but still cheaper than equity since it has higher interest rates than senior debt but lower than equity.

For VAA's case, **mezzanine debt was not considered** in the proposed capital structure as it was **unnecessary to incur a risk for a needless return increase**, thus representing 0.0x EBITDA.

iii. Acquisition Credit Facility

are sufficient collateral in case of default and if the combined businesses generate enough cash to cover the loan. Our acquisition credit facility has a size of €96M to fund 70% of the acquisition and expansion. It has a 7.9% interest rate, 1.6% commitment fee – the fee charged

by the lender to compensate for its commitment to lending, since he cannot yet charge interests and has already committed the funds to the borrower: it is calculated on the undisbursed loan amount – it has a 2-year drawdown period (period where the borrower gets the funds) and a 4-year repayment period (the period the borrower has to repay the loan).

Moving to the **equity** part, we have **equity from the fund** – called **institutional strip** and including a **subordinated loan** and **institutional ords** - and **from the management** – called **sweet equity**. This balance must exist so that there are **interests alignment** – if the management also has risk, they will work harder to achieve results. Usually, they invest 1x to 2x their annual salary to balance skin in the game and performance incentives. The management incentives are the key reason why PE is successful: we are materially aligning the interests. This way, the fund ensures downside protection, and management cashes in significant amounts in-line with PE's returns.

iv. Subordinated Loan

Further explaining, we have a subordinated loan or preferred share, which we call a **Fixed Return Instrument (FRI)** since it has a fixed return of 16% in our case. It is junior to all debt claims but senior to all other claims, meaning that it only gets paid after all debt has been paid off in case of default. Therefore, it has a **higher cost than debt**, as the **risk of default is higher**. It is worth 4.9x EBITDA with a 9-year maturity and a 100% bullet payment at maturity, and it only has a PIK element of 16%.

v. Ordinary Equity

The other part of equity is **Ordinary Equity**, which is capital raised by issuing shares of stock to investors. It is typically riskier than debt since there is no payment guarantee and since they have voting rights, bad decisions from the company can affect them. We have total ordinary equity of €29.3M, accounting for 0.8x EBITDA, which can be further split into (i) **sweet equity**/ordinary shares, which is the bit where management will invest. In our case, the

management pays €1.3M - corresponding to 2 years of management compensation – for 5% of equity. The **envy ratio** allows us to determine the relationship between the price paid by the fund and the price paid by the management for their respective shareholding interest. It shows which of them – the fund or the management – paid more per share and helps assess the deal's attractiveness for each party. Since, as mentioned, the success of an LBO depends on management commitment and interests' alignment, the envy ratio helps to understand and divide the surplus of created value. It is part of the management incentives scheme to enable them to acquire shareholding interests at a lower target valuation price than the fund by issuing sweet equity – this creates a financial incentive for the management. The higher the envy ratio, the better the deal for the management, showing that the fund rewards the management for its ability to create value. Our envy ratio is 7.2, meaning the management is getting a better deal. The other part of the ordinary equity is called *(ii)* **institutional ords** (ordinary shares belonging to the institutional investors), where we have €27.9M of ordinary shares to institutional investors. As previously mentioned, the fund has two instruments, the **institutional strip**, which includes the FRI and the institutional ords, and amounts to €200.9M. This represents the fund and co-investors' equity injection. The differences arising between the institutional strip and the sweet equity are meant to create **motivation for management and retention until exit**.

Summing the total debt and equity, we get to the **total sources of funds of €362M**

The entry EV/EBITDA used to get the acquisition price was calculated in the valuation section and was 9.6x EBITDA, which we multiplied by the 2022 EBITDA. **Total funds are sourced from a 5.7x EBITDA equity contribution and leverage of 4.5x EBITDA** (excluding Acquisition Capex Facility).

b. Outputs

The proposed structure yielded a **strong growing cash cover** throughout the holding period (1.26x at entry and 1.63x in exit year) and an accelerated decrease after the exit year, corresponding to the repayment of senior bullet debt. This means that VAA is able to meet its obligations since the higher the ratio, the better the liquidity of the company (it has more cash to pay its liabilities). To calculate it, we divide the cash flow generated by the debt service (cash interests and debt repayments). *(See Table 14)*

The **interest cover ratio** measures the firm's **ability to pay its interest expenses**. It shows an accelerated trend (2.72x at entry and 4.77x at exit), driven by strong EBITDA growth. This suggests a high ability to meet interest payment obligations (the higher the ratio, the higher ability), and low default risk. We divide the EBITDA by net interest. *(See Table 14)*

Decreasing **Net Debt / EBITDA** over the holding period (4.03x at entry and 1.45x at exit), while the positive Net Debt/EBITDA covenant in the exit year implies debt to be repaid with exit proceeds beside the available cash balance. Since the lower the ratio, the higher the probability of paying off its debt, VAA shows an increased capacity to meet its obligations. *(See Table 14)*

c. Proposed Structures

Our financing structure was chosen according to the highest return yield scenario at the exit, in terms of **money multiple** (2.80x) – a measure of return on the investment; it provides an

indication of how much the investor will receive in turn for their initial investment, this is, the higher the multiple, the higher the return - and **IRR** (22.8%) – the discount rate that makes the NPV equal to zero.

To get to this conclusion, three other structures were tested, all assuming the maximum leverage of 4.5x (*See Table 15*):

- **Structure 1** with term loan A of 0.0x EBITDA, term loan B of 1.0x EBITDA, term loan C of 2.5x EBITDA, and mezzanine of 1.0x EBITDA, yielding a 6.44x management returns, 2.70x institutional returns and 22.0% IRR.
- **Structure 2** with term loan A of 1.5x EBITDA, term loan B of 1.0x EBITDA, term loan C of 1.0x EBITDA, and mezzanine of 1.0x EBITDA, yielding a 6.48x management returns, 2.71x institutional returns and 22.1% IRR.
- **Structure 3** with term loan A of 0.0x EBITDA, term loan B of 2.0x EBITDA, term loan C of 2.0x EBITDA, and mezzanine of 0.5x EBITDA, yielding a 6.74x management returns, 2.75x institutional returns and 22.4% IRR.

Overall, the proposed structure (named '*Structure 4*') is the best-case scenario, yielding the highest IRR and Money Multiple at exit – both for fund and management – at a reasonable leverage level. This allows meeting all debt covenants even in the stricter case (Bank Case).

d. Conclusion

After all, we converge towards the primary goal of the proposed analysis: **understanding the optimal capital structure for VAA**, which results in finding the best possible combination of debt and equity that results in the lowest WACC (weighted average cost of capital – this is, the average cost of raising equity and debt funding: this means that if the company is able to raise capital by paying fewer dividends and lower interest, it can maximize its value). This is

crucial to determine VAA's success and the sustainability of that success. Nonetheless, defining the optimal capital structure regards not only this **balance between debt and equity** but also many other **specific circumstances** and **goals of the company**.

As we have seen, the source of financing affects the value of the company, its risk of default, and some other aspects, and that is why its equilibrium is so relevant – on the one hand, equity is more expensive than debt, hence, should be reduced, on the other, debt carries a much higher risk for the company. Therefore, defining the most suitable weight for each of these sources translates into a laborious task and one of the **most challenging** due to its importance.

Even though the optimal capital structure contains some **theoretical aspects**, which will be standard for all firms, and which we have already talked about, the **key determinants are company-related**. An in-depth analysis of the firm will be crucial to complete this task. For that, we must look for the following:

- **Financial position** – a firm's ability to meet its obligations will impact the choice of source of capital
- **Risk tolerance** – Whether it is business risk (risk of decreasing revenue generation, demand, or supply, etc.) or financial risk (risk of the market changing like competition), a firm's ability to overcome those impacts will weigh in defining the optimal capital structure.
- **Operations plan** – higher sales and growth allow the firm to have higher headroom and more ability to pay interest, impacting the funding source.
- **Predictability of cash flows** – if a company can anticipate its downfalls, it can reduce debt accordingly and go for a better balance of debt and equity.
- **Size of company** – a well-established firm has much easier access to raising capital than an early-stage one, which affects the decision to source capital.

Adding to these, we have the **S&P rating**, which measures the company's ability to pay debt and other financial obligations. The rating is based on a series of factors, including the financial situation, the quality of the management team, business plan and the industry where it operates. The higher the grade, the more favourable the rating. For VAA, it has a **BBB-** rating, indicating that default risk is low. This rating will have an impact as for the debt conditions a company can get.

Taking everything into consideration, the proposed strategy considers the **intrinsic** and **extrinsic** aspects of VAA to further **optimize its capital structure** by balancing a 44% debt with a 56% equity capital raising. Those values allow VAA to **finance its operations and growth** while **keeping averse to a high degree of risk**, thus translating into the optimal capital structure for VAA in the current micro and macroeconomic context.

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
<i>% Growth</i>	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
<i>% Growth</i>	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%	Net debt (excess cash)		-61
Subordinated Debt				Debt Like Items		-20
Mezzanine	0	0,0x	0%	Purchase VAA		261
Total Debt	159	4,5x	44%	Equity		
Shareholder Loan (FRI)	173	4,9x	48%	Financing Fees	3,5%	11,9
Ordinary Equity	29,3	0,8x	8%	Arrangement Fees	2,3%	7,8
Institutional	27,9		95%	DD Fees	0,2%	0,7
Sweet Equity	1,3		5%	Fees	6,0%	20
Total Equity	202	5,7x	56%	Total Uses	100%	362
Total Sources	362	10,2x	100%			

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>	<i>6,44x</i>	<i>6,48x</i>	<i>6,74x</i>	<i>7,10x</i>
<i>Institutional Returns</i>	<i>2,70x</i>	<i>2,71x</i>	<i>2,75x</i>	<i>2,80x</i>
<i>IRR</i>	<i>22,0%</i>	<i>22,1%</i>	<i>22,4%</i>	<i>22,8%</i>

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%

Table 28 – Multiple Arbitrage in the Investment Case

Multiple Arbitrage – Investment Case						
Entry Multiple						
	2,8x	8,6x	9,1x	9,6x	10,1x	10,6x
Exit Multiple	8,6x	3,1x	2,7x	2,5x	2,3x	2,1x
	9,1x	3,3x	2,9x	2,6x	2,4x	2,2x
	9,6x	3,5x	3,1x	2,8x	2,6x	2,4x
	10,1x	3,7x	3,3x	3,0x	2,7x	2,5x
	10,6x	3,9x	3,5x	3,1x	2,9x	2,6x

Table 29 – Multiple Arbitrage in the Bank Case

Multiple Arbitrage – Bank Case						
Entry Multiple						
	2,3x	8,6x	9,1x	9,6x	10,1x	10,6x
Exit Multiple	8,6x	2,5x	2,2x	2,0x	1,9x	1,7x
	9,1x	2,7x	2,4x	2,2x	2,0x	1,8x
	9,6x	2,9x	2,6x	2,3x	2,1x	2,0x
	10,1x	3,0x	2,7x	2,5x	2,3x	2,1x
	10,6x	3,2x	2,9x	2,6x	2,4x	2,2x

Table 30 – LVMH's sales by region

Region	Sales (in €B)	%
Europe	€ 14B	22%
Asia	€ 27B	42%
North America	€ 17B	26%
Other	€ 7B	11%

Table 31 – Kering's sales by region

Region	Sales (in €B)	%
Europe	€ 4B	22%
Asia	€ 8B	44%
North America	€ 5B	28%
Other	€ 1B	6%

Table 32 – Richmond’s sales by region

Region	Sales (in €B)	%
Europe	€ 4B	23%
Asia	€ 9B	47%
North America	€ 4B	22%
Other	€ 2B	8%

Table 33 – Capri’s sales by region

Region	Sales (in €B)	%
EMEA	€ 2B	33%
Asia	€ 1B	17%
America	€ 3B	50%

Table 34 – Puig’s sales by region

Region	Sales (in €B)	%
EMEA	€ 2B	63%
Asia	€ 0,2B	6%
America	€ 1B	31%

Figure 1 – EBITDA bridge

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

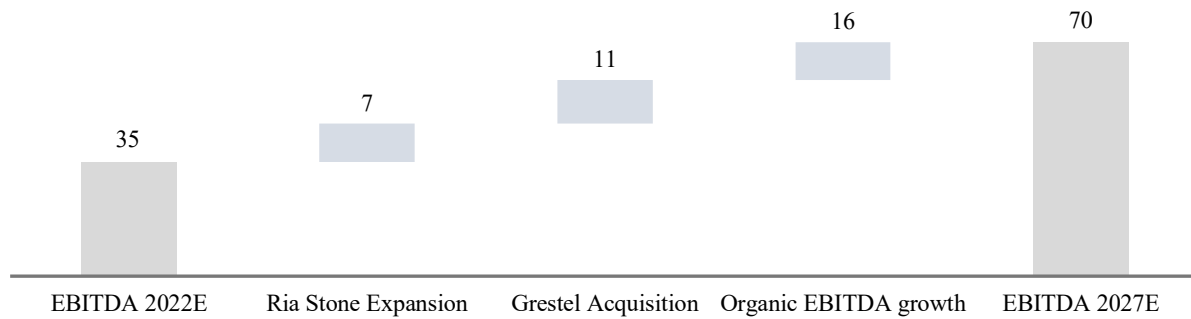


Figure 2 – Football Field Chart (EV/EBITDA Multiples)

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.

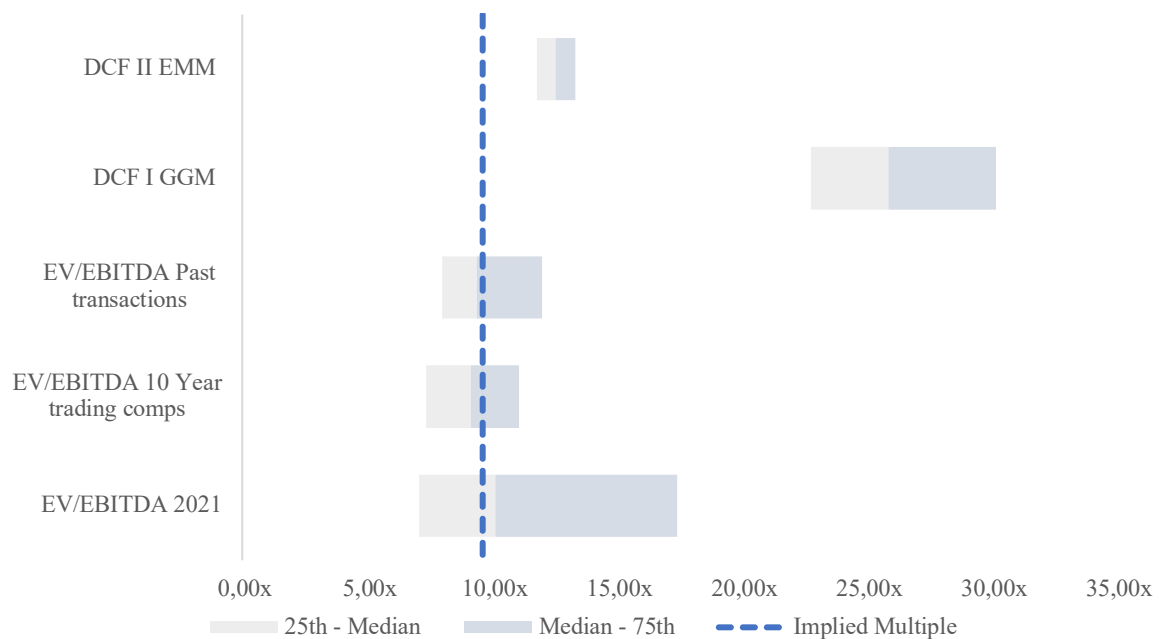


Figure 3 – Football Field Chart (Enterprise Value)

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.

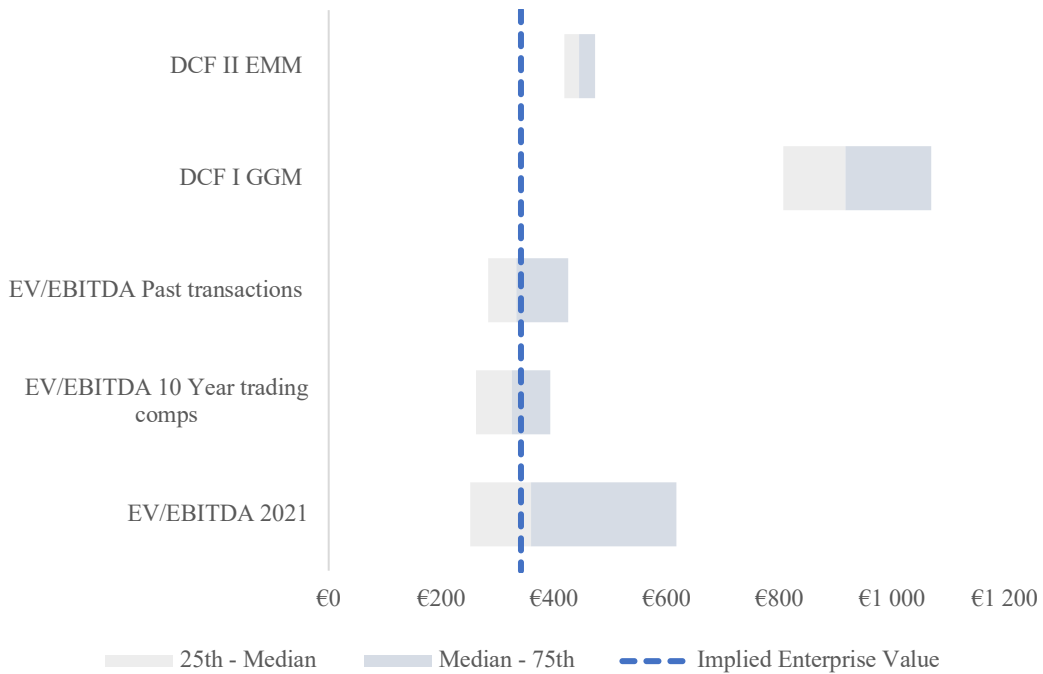


Figure 4 – Exit Waterfall

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.

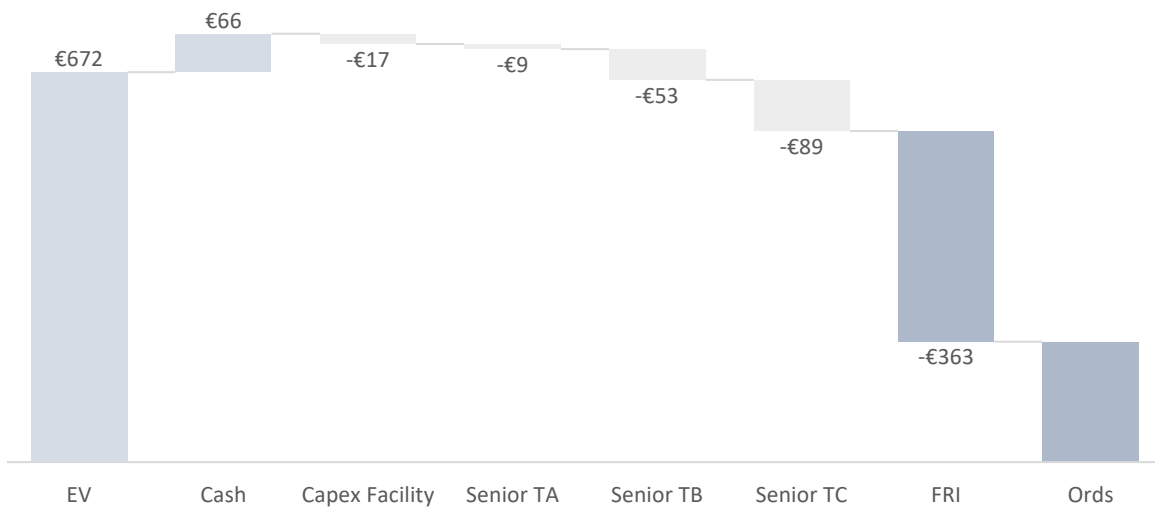


Figure 5 – Equity Returns

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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