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# Private Equity Challenge: Leveraging the highly integrated value chain of The Navigator Company – Buy-and-Build Strategy

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**Abstract**

This paper consists of a proposed Investment Committee Paper, for academic purposes only, studying a private equity deal, analyzing a Leveraged Buyout of The Navigator Company, a leading pulp and paper Portuguese manufacturer with a highly integrated value chain. By creating value with a strategic buy-and-build plan, operational enhancement initiatives and leveraging organic growth opportunities, an IRR of 23.1% and a MM of 2.8x can be achieved over a five-year investment period. Moreover, an individual in-depth analysis on buy-and-build is included.

**Keywords:**

Buy-and-Build, The Navigator Co., Private Equity, Pulp and Paper, Leveraged Buyout

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## Section A - Group Contribution – Investment Committee Paper Summary

### I - Company Overview

#### a - Company Profile

The Navigator Company (NVG), previously known as Portucel, headquartered in Setúbal, Portugal, was founded in 1953. It manufactures and markets pulp and paper products worldwide and stands as one of the significant and leading industrial Portuguese companies. NVG holds the position as the top producer of uncoated woodfree (UWF) printing and writing papers in Europe and ranks as the sixth largest globally. Additionally, the company is the largest producer of bleached eucalyptus kraft pulp (BEKP) in Europe and holds the fifth position worldwide.

It is an integrated producer of forest, pulp and paper, tissue, sustainable packaging solutions and bioenergy. The company's operations, conducted in advanced, large-scale factories equipped with state-of-the-art technology, position it as a standard for quality in the industry.

It concentrates its production in five large industrial centers located in Cacia, Figueira da Foz, Setúbal, Vila Velha de Ródão and Zaragoza having an installed capacity is around 1.6 million tons of paper, 1.5 million tons of pulp (80% integrated into paper), 130,000 tons of tissue and 2.5 TWh/year of electricity.

Open to the world, the products are destined for approximately 130 countries on five continents, especially Europe and the USA, thus achieving the widest international presence among Portuguese companies.

#### b - Business Model and Value Chain

NVG's business model stands in four main pillars. The first one is the company's state-of-the-art factories. With five factories distributed between Portugal and Spain, it produces pulp, paper, tissue reels and energy with the usage of cutting-edge technology, standing as the number one European UWF fine paper manufacturer by capacity, with the largest and most modern mills. Another pillar is its successful differentiation strategy. Moving its product mix to the higher-end spectrum of the market, an 11% price premium has been achieved in Europe as well as an increase in market share in Western Europe. Additionally, sustainability, innovation and talent development represent the third pillar of their business model. It embraces innovation through its products, including packaging and tissue, as well as through the pursuit of new business opportunities like the RAIZ Project. The fourth pillar is the production of resilient paper grades. NVG focuses on the production of UWF paper, known for being less exposed to digitalization.

NVG's integrated value chain moves from primary raw material production to distribution channels. The first stage of the production process starts in NVG's nurseries. There, more than 12 million plants come to life each year and after arriving to the right age, are moved to the forest to be planted. The company manages 106 000 hectares, of which 55% are owned and 45% leased, in Portugal, 14 000 hectares in Mozambique and 1 000 hectares in Spain. The totality of their forests is certified. Out of the species that are planted 73% are eucalyptus globulus.

After 12 years in the forests the wood is transported to the pulp mills where they are transformed into woodchip. In addition to the own produced wood, NVG also buys this material from other markets such as Brazil, Uruguay, and Chile. Approximately 32% of the wood supply came from outside of the Iberian Peninsula, in 2022. Next, the woodchip is converted into pulp which is the primary raw material of the factories. Part of the pulp production is sold to third parties (roughly 20%, depending on the market price) and the remaining is integrated in the value chain. With pulp, the company produces tissue paper, paper, and packaging. In parallel, it repurposes paper mill residue into biomass, and the produced energy is used to power its factories as well as sold to the national grid.

The final stage of the chain is the supply of the final products to a large network of distributors which sell them for various purposes. This integrated value chain is accompanied by innovation in all its stages.

### c - Product Portfolio

The final product portfolio divides into three main products: paper, tissue paper and packaging. There are nine UWF paper brands divided into office paper brands and brands for the printing industry (offset paper): NVG, Multi Office, Pioneer, Target, Discovery, Explorer, Inacopia, Soporset and Inaset. In the tissue paper segment, NVG owns one brand called Amoos and it is divided into personnel and home hygiene and professional hygiene products. Lastly, in the packaging segment, the company owns another brand: g-KRAFT.

### d - Management Team

The distinctive essence of NVG lies in its human and inclusive approach, encompassing more than 3 200 employees from around 30 nationalities. This fundamental aspect drives the company's unwavering commitment to investing in training and providing abundant opportunities to foster and recognize talent. The company’s CEO is António Pereira Redondo that has a chemical engineering background and more than 35 years of experience in NVG. His long journey in the company allows him to lead and drive the company to success.

### e - Financial Performance

Over the past recent years NVG’s financial performance has been steady and strong. Its revenue has largely increased in 2021 and 2022 mainly due to the sharp rise in the prices of commodities and due to the optimization of the company’s product mix. The gross margin is stable, ranging from 58% to 61%, the main reason for stability being the integrated value chain of the company. Its EBITDA more than double in 2022 and the EBITDA margin grew from 21% in 2020 to 30% in 2022, signaling operational efficiency. The company’s cash flows have been strong and their high cash balances allow easy adjustments to market conditions and commodities prices while providing funding for further developments and strategic acquisitions. Also, the strong cash flows contribute to the decrease in net debt levels observed in the past five years (44%).

## II - Market Overview

### a - Pulp and Paper

In 2022, Europe experienced record-high pulp prices, soaring by 21% since the beginning of the year. By August 29, 2023, prices stood at 803 USD/ton, although they had slightly decreased from their peak. The market has been driven mainly by supply-side factors such as temporary and permanent mill's downtime and closures to balance inventories, supply chain constraints which penalized the available supply of pulp in the market, and delays of some investment projects. In the next years, expectations point toward a potential price softening as capacity set to expand substantially over the next three years, with five projects contributing over 7.4 million tons of kraft pulp supply to the market. However, there are long-term concerns that could have an impact, such as ongoing global economic challenges, shifts in consumer behavior and potential escalations in geopolitical conflicts. Specifically, projections for the global BEKP market forecast a 4% CAGR, reaching $13.44 billion by 2027. Since 2018, global pulp demand has been steadily rising at a 1.7% CAGR, with BEKP experiencing the highest growth, while Softwood (SW) demand has either remained stable or declined.

The European graphic paper market is facing high prices and weakened demand, especially affecting coated paper. This situation primarily results from inventory destocking, reduced demand due to high prices, and a sustained, long-term decline in paper demand linked to digitalization and other factors since 2008. By August 29, 2023, PIX A4 B-copy prices had decreased to 1,136 EUR/ton. It is expected that the conditions leading to high prices may decline, including reduced production costs and decelerating demand due to high inventories. The industry's 'new normal' involves a structural decline in demand and strategic capacity rationalization to enhance companies' competitiveness. The UWF Paper demand is predicted to decline by 3.4% in North America and 3.8% in Western Europe by 2030. Nevertheless, the

UWF paper market displayed resilience in 2022 with a 0.3% increase, while coated papers experienced a decline of 2.5%.

**b - Tissue and Packaging**

Historically, the tissue and hygiene paper market has shown stability with minimal cyclicality, particularly in the At-Home tissue segment. Globally, it registered a total revenue of $339 billion in 2023, primarily driven by toilet paper comprising 32% of the market. Europe anticipates a growth rate of 4.15% CAGR, reaching approximately €71 billion by 2027. Among all segments, baby diapers demonstrate the highest growth potential, projected to increase by over 22.5% from 2019 to 2025. Key factors driving this growth include the Human Development Index, closely associated with improved sanitation access and healthcare availability, as well as increased consumer spending on household goods. Also, there's a willingness among consumers to invest more in everyday items for improved quality and sustainability. The market is forecasted to expand at a CAGR of around 20% until 2027, partly due to the demand for multi-layered tissue paper, as higher-quality products stimulate higher consumption volumes. In Portugal, there exists significant competition with some well-established companies such as Renova, Trevipapel, Suavecel, and Fapajal.

In 2022, the paper packaging market held a value of $381 billion and is projected to grow steadily at a CAGR of 4.68%, reaching $478 billion by 2028. The Asia Pacific region stands out as both the largest and fastest-growing market within this sector. The industry is mostly overpowered by polymers and metal packaging due to the challenges of packaging very heavy materials with paper packaging. The primary drivers in this market include the rising demand for eco-friendly alternatives to single-use plastics as well as the growing consciousness and willingness of consumers and governments to invest more in environmentally sustainable packaging solutions. E-commerce expansion emerges as a key driver, being one of the most popular eco-friendly packaging options. Additionally, food packaging presents substantial growth potential due to concerns regarding food safety and hygiene, which causes recycled fibre often not to be prioritized, which offers major opportunities for growth for virgin fibre producers.

### c - Competitive Landscape

NVG leads its industry main peers with robust operational efficiency, leveraging the highest EBITDA margin at 30% and achieving the industry's highest revenue growth (L5Y) of 10%. Compared to its peers, NVG maintains a stronger financial position, marked by a low net debt-to-EBITDA ratio, strategically positioning itself for further growth opportunities with high margins and minimal debt. Through a strategic product and brand differentiation approach, NVG has adjusted its product mix to target the high-end market. This shift has resulted in an 11% price premium advantage in Europe as of 2022. In the European UWF fine paper market, the top 10 companies have a combined capacity share of 88%, indicating substantial market concentration with NVG leading with 27% market share in European UWF fine paper by capacity, operating fully integrated mills. Within Europe, NVG accounts for 2 out of every 3 office paper reams exported. Moreover, the company plays a significant role in European exports to Latin America (86%), Africa (74%), and the Middle East (60%). When it comes to BEK Pulp, NVG has a 2.7% market share in Europe and 1% worldwide. The company focuses on the value-added segments in Europe, with 65% of its market pulp used to produce Decor and Specialty paper, compared to the industry average of 30% among European suppliers in this segment.

## III - Investment Thesis

Considering everything that has been stated so far, it is safe to say that NVG has a plethora of interesting characteristics that make it stand out from the competition while also making it an attractive target for a leveraged buyout in a private equity context. Out of those features, five are highlighted.

Firstly, the highly integrated value chain covering forestry to production of paper products delivers increased profit margins, cost synergies and acts as a hedge against fluctuations in pulp and paper prices. Secondly, the successful track record of the management team in dealing with challenging dynamics of the paper industry, with concreate examples that shows the team proactiveness for change and innovation through the development of new business and investment in R&D. On top of that, the company boasts a highly diversified product portfolio primarily focused on the premium market, enabling them to command higher prices and margins. This strategic positioning shields them to a significant extent from cyclical declines in demand. As stated in the previous section, the robust revenue growth (CAGR 18-22 approx. 10%), coupled with strong cash flows creates opportunities for further M&A. The company also maintains above-average profit margins, with an EBITDA margin of around 30%. Finally, since the industry in question is very capital intensive, with complex technological demands, and strict regulations, a natural entry barrier is established. Because of this, accessing resources and competing against established players' expertise and infrastructure presents significant challenges for newcomers.

To maximize value after the acquisition and deliver the targeted returns a carefully thought investment thesis was conceived. To that end, the proposed value creation strategies revolve around three main pillars:  Buy and build, organic growth, and operational enhancement. These initiatives are ranked from the riskiest to the safest in terms of desired impact.

Regarding the buy and build strategy, to this date NVG has not been very active in the M&A sector, nevertheless it acquired Gomà-Camps Consumer in 2023 as part of its ambitious growth and diversification plan for the tissue segment. This acquisition allowed NVG to strengthen its position in the Iberian market by increasing its market share, production capacity and reducing costs through economies of scale. In the first half of 2023, this acquisition contributed to 67% of the tissue revenue growth. If the acquisition had been made on January 1, 2023, the sales turnover for the first half would have been 3% higher. Nowadays, over 90% of NVG tissue Customers are based in Portugal, Spain and France.

The proposed investments in this area would be the acquisition of two European tissue paper manufacturers, EuroVast SpA and Accrol Group (UK, Italy and the Netherlands), gaining more exposure to relevant markets while also leveraging synergies through optimized raw material supply and streamlined operational costs. With this expansion the company would take advantage of the growth in tissue market, diversifying the portfolio and expanding the market reach with an increased capacity of 300k tons. On top of this, since the tissue market is highly fragmented there are some opportunities for consolidation by taking advantage of NVG's integrated value chain to leverage synergies and increase targets operational margins. The tissue paper tissue industry operates primarily within local spheres, making shipping a challenge, meaning that internationalization requires acquiring facilities to support expansion.

Additionally, when considering organic revenue growth, it is important to note that in 2021, NVG launched its packaging business which showed, from the beginning, great performances, with most of the revenues coming from paper bags. Of total current sales 81% of customers come from Europe, mainly the Iberian Peninsula and Italy. Currently NVG produces around 100k tons of paper packaging, while it's able to produce up to 250k tons. Due to the opportunities that this segment presents, leveraging its potential will generate high returns for the company. Focusing on "Consumer Excellence" will differentiate NVG from its competitors, thus increasing client loyalty and forging partnership with new important businesses. Centering the strategy only in the Iberian Peninsula, where NVG factories are present, is necessary for its successful implementation. The main focus of this strategy would be to retain top costumers by creating privileged relationships, offering attractive prices through the use of "digital pricing tools" and renegotiating contracts with costumers for longer terms thereby reducing revenue uncertainty. On top of this, to increase market share there should be an effort to create new partnerships with large businesses and large companies in the region.

Moreover, the group is constructing a new factory at the Aveiro industrial site to produce moulded cellulose parts, for the purpose of replacing plastic food packaging. It will have a capacity of 100 million parts, and production will start in the first half of 2024.

On the operational enhancement front, since Mr. António Redondo took on the role of CEO in 2020, there have been notable transformations within the company. These changes aim to enhance the company's competitiveness amidst significant fluctuations in logistics and operational costs. Having said this, it is believed that there is still room for further improvements. Through meticulous monitoring of NVG operations, the company's cash flow can be enhanced by refining NWC capital, especially by optimizing the cash conversion cycle. By implementing product mix adjustments and identification of lower turnover and future sales prospect products, an improved DIO could be achieved aligning more closely with industry-leading peers and a consequent drop in CCC. On top of this, it is important to mention that the NVG's Supplier Management Policy has strengthened relations allowing them to negotiate better terms and outperform the industry standards.

Furthermore, strategic M&A transactions can be leveraged to create synergies, leading to cost reduction. Lastly, curtail capital expenditure by prudently investing in essential areas such as maintenance and efficiency, to progressively move towards reaching the industry average (c. 3.5%).

## IV - Forecasted and Business Plan

This section aims to provide an overview of how the operating model is constructed and the reasoning behind the assumptions made. It should be noted that this section does not cover every aspect of the business plan in detail, but rather focuses on the most pertinent points.

The primary objective of the business plan is to project the financial information of NVG, which will serve as the foundation for developing the LBO model. The business plan encompasses a timeframe of 8 years, from FY23 to FY30, and is based on financial data gathered from 2016 to 2022.

### a - Revenue Model

NVG's financial forecast is based on growth strategies, market conditions, and estimations of the company's internal operations. The revenue forecast is divided into four categories, each representing a business segment: pulp, paper, packaging, tissue, and energy. The forecasted revenues are based on the expected price of each commodity and its expected sales. For instance, the price of pulp forecasted based on an estimated pulp market price (FOEX) calculated by regressing the price of pulp over time using historical prices from 2003 to 2022. Adjustments to the selling prices are also made since NVG sells its pulp at around 70% of the market price. This discrepancy might be explained by existing contracts with distributors and customers that have fixed prices. On the other hand, it sells its paper on average at around 106% of the pulp price. Regarding the volume of sales, it is assumed that NVG will sell around 20% of its production to third-party buyers and will be able to produce around 1550 thousand tons in 2030, approaching the maximum capacity of 1600 thousand tons. While paper sales are expected to decrease by 3%, because of declining market demand. In 2028, revenues coming from pulp and paper sales will be € 229 million and € 1307 million, respectively.

Packaging revenue forecast is divided into two parts: the current product lines, and the Molded cellulose product line, which production is set to start during the first half of 2024. Prices for current products are expected to increase at the long-term inflation rate of 3.4%, while the price for molded cellulose is set at 45 cents for 2024 and will increase to 55 cents in 2030. According to the organic growth strategy that will be implemented, sales in 2030 for the current product will be around 240 thousand tons, while sales for moulded cellulose will be around 90 million units, which corresponds to 90% of the production capacity. In total, the forecasted packaging revenue will amount to € 225 million in 2028 and € 285 million in 2030.

Tissue price will increase by 2% each year according to Statista, whereas sales volume is forecasted based on the maximum production capacity that will be reached in the year 2028. Finally, energy sales are forecasted based on the production capacity of 1540MWh and a price increase according to the estimated annual inflation rate. The total organic revenue of NVG will be € 2424 million in 2028.

Additionally, as part of the value creation strategies, NVG will acquire two tissue companies, Accrol Group, and EuroVast SpA in 2025. Revenues coming from the acquisitions are forecasted based on the projected tissue market size and the companies' expected market share. On average sales coming from acquisition will account for 35% of the total revenue.

### b - Expenses Forecast

Costs are categorized into three sections: cost of goods sold, external services, and suppliers, whose projections are based on the anticipated percentage of revenue which have been estimated using historical financial data from 2021 to 2023. Payroll costs are based on the number of employees, estimated to be the same as for 2019, and the average salary is expected to increase by 2% each year. Other operating income and expenses are also calculated based on the percentage of revenue from the historical period. However, they are adjusted to account for variation in CO2 gain and expenses, whose price is set to increase over the forecasted period, and for variation in the fair value of biological assets. Those assets are calculated based on the forecasted logging amount during the period, the growth of the plants in the forests, and the value of the newly planted areas. NVG capital expenditure is set to decline due to more conservative restrictions on capital spending that will only be used for maintenance and efficiency gain. This strategy will allow for a decrease in the capital spend per revenue to 3.5% in 2028, corresponding to the average of the industry. The same rationale is used to forecast Accrol CAPEX, while for EuroVast it will account for 1.1% of the revenue as was the case in 2022. The forecasted working capital for NVG is calculated based on the Days Inventory

Outstanding (DIO), Days Payable Outstanding (DPO), and Days Sales Outstanding (DSO) of the previous year. These measures provide estimations for the forecasted current assets and liabilities, allowing for the calculation of the Net Working Capital (NWC). In the case of NVG, it is forecasted that the DIO will decrease from 91 days in 2022 to 65 days in 2028. This decrease is attributed to operational enhancement initiatives that aim to align NVG more closely with industry-leading peers. By reducing the DIO, NVG will be able to improve its cash conversion cycle and subsequently its cash flow.

Finally, the organic EBITDA of NVG is projected to grow at a compound annual growth rate (CAGR) of 5.4% from 2023 to 2028, expanding 1.3 times and representing around 28% of the total revenue. However, with the integration of Accrol and EuroVast, the EBITDA margin will decrease to around 24%. Nevertheless, the total EBITDA shows a higher increase, growing at a CAGR of 8.5% over the forecasted period, while total revenue is forecasted to grow at a rate of 10% each year. This growth will result in a 1.5 times increase from 2023 to 2028, reaching a total EBITDA amount of €746.6 million in 2028.

## V - Valuation, Capital Structure and Returns

The valuation of NVG was conducted through a comprehensive application encompassing the following distinct methodologies: EV/EBITDA Trading Comparable based on 10-year window, current EV/EBITDA Trading Comparable, current P/E Trading Comparable, EV/EBITDA from Precedent Transactions, Discounted Cash Flow Gordon's Growth Model and Discounted Cash Flow Exit Multiple method. Thus, the determination of the Enterprise Value comes as a result of an equally-weighted average of the implied median EV/EBITDA multiples of the referred valuation methodologies. The majority of the data employed in this analysis were sourced from reputable databases, including Bloomberg, Mergermarket, and Orbis, ensuring a robust and reliable foundation for the valuation process. Regarding the selected peers, these are companies selected from the Pulp & Paper industry, most of them direct competitors of NVG, identified through extensive market research, amounting to a number of eight peers. Additionally, the derived entry EV / EBITDA multiple considers precedent-relevant transactions completed within the European space, during the last 8 years in the Pulp and Paper subsector, with deal values ranging from €5M to €2050 million. According to the results from the applied methodologies, NVG is valued at an Enterprise Value to EBITDA multiple of 8.8x, resulting in a company value of €4377.5 million.

Basing on the assumption that transaction fees amount to €87.6 million, which represent 2% of enterprise value, the total uses for this transaction reaches €4465.1 million. Taking this into account, this transaction will be financed with different types of debt financing and equity. Regarding debt capital structure, senior debt is composed solely by a TLB of €1940 million, contracted in euros and non-amortizing, and is planned to be procured from banks within the Iberian region, being selected based on their previous experience in similar deals and their ability to extend leverage up to a maximum of 3.9x EBITDA. Moreover, it is expected that the spread over a floating 3-month Euribor on a bullet Term Loan B should not be much higher than 4.5%. Additionally, a mezzanine instrument of €746.2m is also used to reduce the total equity contribution and in turn improve returns, increasing the leverage up to 5.4x EBITDA, priced at a spread of 8.5% if it is focused solely on cash interest. The equity investment consists of a subordinated loan of €1694.9 million, accruing deferred interest at 14% (PIK element) and ordinary shares of €84 million. The management team will have a total entry investment of €12 million, that will be split amongst sweet equity of 5% and a 0.46% stake of the subordinated loan. Overall, the total equity contribution is equal to 39.8% of the transaction volume.

Moving on to the return analysis, and considering the investment scenario, the LBO model predicts a money multiple of 2.8x and an IRR of 23.1% following a 5-year holding period (with the acquisitions of Accrol and Eurovast considered). In fact, through the execution of both buy & build acquisitions over a five-year investment period, the IRR is enhanced by a cumulative

3.9%, and money multiple experiences a 0.4x uplift. The primary contributor to value is Accrol, whose absence would lead to a 2.4% reduction in IRR. Conversely, forgoing the acquisition of Eurovast would result in a 1.4% decrease in IRR. The principal driver of value generation is the deleveraging impact, fueled by robust cash generation, which contributes €1148 million, that represents 35% of the overall value creation. Furthermore, inorganic growth, comprised by two strategic acquisitions in 2025, accounts for 27% of the total increase in equity value. Organic revenue growth, driven by diversification into faster-growing markets during the investment period contributes at 24%. Lastly, an organic EBITDA margin expansion, totaling €520.9 million, constitutes 16% of the aggregate equity value created. In comparison, the bank case is expected to generate a 1.9x MM and 14.2% IRR and the management case will deliver a 3.6x MM and 29.6% IRR.

## VI - Exit and Due Diligence

Within the framework of our outlined value creation strategy for NVG, several strategies were considered: trade sale, secondary sale, sale in parts, initiation of an IPO process. However, there are only two principal exit strategies highly recommended and that are worth considering. The first option, the trade sale, was considered the most appealing. It consists in engaging in a sale to a strategic buyer, which could be an European player consolidating its position or a strong Asian/American player trying to gain more exposure into the European market. It was considered as the most attractive exit strategy since, due to NVG's highly integrated value chain, Strategic buyers would likely pay a higher price due to synergies realization, taking also into account that there is a high prevalence of mergers and acquisitions in this industry. Multiple possible acquirers were analyzed and five are expected to show particularly strong interest in NVG, including major players in this industry such as Stora Enso Oyj and UPM-Kymmene Oyj. Both are big finish players in the pulp and paper industry that present a very high overlap of several end markets making NVG an attractive target for market consolidation, also being companies with strong financial profiles and acquisition history and experience. The second strategy considered is a secondary buyout, which is a sale to another Private Equity Fund, with enough dry power, after the holding period of 5 years given the high potential for added growth strategies. This is only possible because NVG may still growth potential by entering in new segments and expanding into broader markets, possibly attracting big PE funds, like Bridgepoint or EQT. Even though there is a relevant track record and interest of PE funds in the industry, and this type of buyout would allow for an immediate full exit, high interest from strategic buyers might lead to unattractive entry multiples from a PE perspective. Prior to transaction conclusion, commercial, financial and regulatory due diligence is crucial to uncover and minimize potential risks. Regarding commercial due diligence it is crucial to conduct an in-depth, to identify and understand potential red flags in M&A targets, since inorganic growth is key to NVG's value creation strategy and identify current and emerging trends that may impact the industry and the target's position within it as well as the projections for future market growth. It is also crucial to review financial forecasts and projections, analyze historical financial performance in various economic conditions and understand the impact of economic cycles on the business, especially in the trends of pulp market price, due to its impact on NVG's business model. Moreover, it is essential to assess compliance with current regulations and ESG considerations.

## Section B - Individual Contribution – Diogo Arruda- Buy-and-Build Strategy

### I - Value creation in Private Equity investments

Private equity (PE) investments are a type of alternative investment that involves investing in private companies that are not publicly traded. The goal of PE investments is to generate attractive returns on capital for investors by creating value in the portfolio companies. PE firms commonly cite three main strategies for creating value and increasing revenues and margins within their portfolio companies: deleveraging, multiple expansion, and operational enhancements. Deleveraging involves reducing the initial high level of leverage while the company is in the PE firm's portfolio. This requires that the company generates a strong and stable cash flow to pay down debt. Multiple expansion contributes to elevating the market value of the portfolio company by reinforcing a compelling growth narrative, refining strategies, or minimizing risk exposure. Operational enhancements generate value by fostering top-line growth through initiatives such as new product development, geographic expansion, improved pricing strategies and enhanced sales force management (Brigl et al., 2016). Value creation within PE investments involves a multifaceted approach aimed at increasing the worth of the invested companies. PE firms usually employ a combination of operational, financial and governance initiatives to enhance the value of their portfolio companies (Kaplan and Strömberg, 2009). Financial engineering aims to incentivize the management team by offering equity stakes and, at times, requiring their involvement in the investment process to align their interests with the investors'. Additionally, the significant leverage often used in PE investments serves the purpose of encouraging prudent resources and funds utilization and minimizing inefficiencies. PE firms reshape governance for better control and efficient decision-making. Boards in their portfolio companies are smaller, more dynamic, and make decisions faster. They promptly replace underperforming managers, ensuring performance-driven leadership. Operational enhancements involve optimizing processes, cost-cutting initiatives, strategic repositioning, acquisition opportunities and management improvements. Schlegel (2019) introduces a strategic lever for value creation in which PE firms opt to divest less significant or value-destructing business lines. Alternatively, another strategy involves combining various companies within a portfolio to form a more resilient and potent entity, often referred to as the "buy-and-build" strategy.

### II - Buy-and-Build Strategy

Buy-and-build strategies represent a distinct approach employed by PE firms to enhance the value of their portfolio companies through a series of strategic acquisitions and subsequent integration processes. This strategy involves an initial acquisition of a well-established platform company followed by subsequent acquisitions of complementary businesses, aiming to create a more robust and competitive organization, acting as an industry consolidator (Smit, 2001). The rationale behind buy-and-build strategies lies in leveraging synergies, economies of scale, and operational efficiencies. By acquiring businesses that complement the core activities of the platform company, PE firms seek to unlock additional value that may not be achievable through organic growth alone. Hoffmann (2008) cited O'Donnel's[1] breakdown of buy-and-build strategies, categorizing them into consolidation, build-up, missing link, and roll-up strategies. Consolidation refers to acquisitions—commonly horizontal or vertical—within mature or cyclical industries driven by the need for streamlining or optimizing operations. Build-up involves multiple acquisitions in highly fragmented markets, where each transaction, although relatively small, collectively reshapes the scale and scope of the existing business while carrying limited overall risk. The missing link strategy involves add-on acquisitions intended to enhance existing investments by filling gaps in product offerings or geographical reach. Roll-up strategy aims to implement the acquirer's successful business model into the acquired company.

[1] O'Donnell, M. (2001), p. 21

Buy-and-build strategy has been growing in popularity among PE investments. In 2022, approximately 72% of buyouts in North America consisted of add-on acquisitions. Among these, an increasing proportion supported buy-and-build strategies, enabling multiple arbitrage where General Partners (GPs) acquire smaller companies at lower multiples, consolidating them into a larger entity with an higher valuation. In 2003, only 21% of add-on deals were the fourth acquisition or more by a single platform company, a figure that has since risen to about 30% in recent years, with 10% involving add-ons being at least the tenth sequential acquisition for the platform company (MacArthur et al., 2019). The main performance drivers in buy-and-build strategies are multiple expansion and enhancing the operational process. Hammer et al. (2022) findings indicate that there aren't substantial differences in EBITDA margin growth between buy-and-build and non-buy-and-build deals since achieving bottom-line synergies is challenging, especially given that add-ons typically operate with lower margins than platform companies. Consequently, the acquisition of these companies is unlikely to lead to immediate profitability improvements for the consolidated entity. Indeed, due to the complexities of integrating add-on acquisitions, PE investors involved in the primary buyout might not fully realize the complete potential for value creation of a buy-and-build strategy within the investment period, typically ranging from 5 to 7 years, thus potentially compromising the IRR (Hammer et al., 2022). Moreover, these strategies exhibit stronger performance within fragmented and slower-growth markets. Data has shown that cross-border add-ons yield greater value than both domestic buy-and-build and standalone deals, thus being highly effective when used to internationalize the acquirer's business (Brigl et al., 2016). Often, this strategy allows PE firms to justify the initial purchase of a relatively expensive platform company by later integrating smaller and more affordable add-ons. Hammer et al. (2022) findings support the idea that there are higher prices for buy-and-build platforms as they show that PE investors pay enterprise values over sales that are up to 28% higher when the target company acts as the platform for a buy-and-build strategy compared to a target not involved in buy-and-build. By exploiting the multiple arbitrage, the PE firm minimizes its average acquisition cost while efficiently utilizing capital and expanding asset value through increased scale and operational scope (MacArthur et al., 2019). The buy-and-build strategy also offers PE firms the advantage of leveraging exit opportunities with strategic buyers. At the end of the investment period, the platform company combine synergies highly sought after by these strategic buyers. This increased value proposition drives them to offer higher prices, consequently elevating the returns for the PE firm. In industries where there exists a larger pool of strategic buyers, all with comparable size and capability to acquire the platform company, a highly competitive bidding environment is established. This competitive landscape significantly enhances the exit option value linked to the buy-and-build strategy (Bansraj and Smit, 2017).

### III - Add-on Acquisitions Integration

The effectiveness of a buy-and-build strategy relies significantly on the seamless operational integration of acquired companies. Post-deal signing, inexperienced management teams often face integration challenges that demand specialized expertise beyond their usual operational skills. Achieving successful integration entails a faster decision-making pace and a unique operational rhythm compared to standard operations, crucial for unlocking the full potential value. Successful integrators reexamine value drivers, pursuing substantial cost reductions and transformative shifts in productivity through technological leverage and enhanced operational standards. Within integration, PE firms' deal teams and portfolio companies assume distinct yet vital roles. The PE firm's team focuses on identifying synergies, installing proficient management, and overseeing performance, while the portfolio company's management drives the deal's objectives, operationalizes the merged entity, and ensures seamless transitions. Incorporating integration professionals within deal teams enhances governance and maximizes M&A synergies, especially in portfolio companies undertaking add-on strategies as it facilitates shared learning and optimal realization of M&A opportunities (Engert et al., 2021). While the idea of consolidating small companies in a fragmented industry is attractive, it's vital to thoroughly assess how these components align and do not underestimate the due diligence and integration process. Successful dealmakers consistently start the acquisition process with a solid and measurable thesis on how the deal will enhance the platform company's worth and operations in the future (MacArthur et al., 2023). Fuhrer et al. (2017) segment post-merger integration into four crucial dimensions: synergies, speed of integration, culture/change management, and project governance. Regarding synergies, the research revealed a positive correlation between developing a target operating model (TOM) and the depth at which functions are integrated. While cost synergies can be measured using historical financials targets, assessing revenue synergies is more challenging as it requires forecasting the consolidated firm's development. Successful integrations often happen quickly, as the period between the announcement and the first 100 days post-acquisition is when companies can make quick wins and adapt the combined company to maximize long-term value and not lose so-called integration *momentum*. Culture and change management were identified as pivotal aspects affecting the success of mergers and acquisitions. Addressing cultural differences systematically through performance measures, involving top management, and prioritizing cultural issues are vital for swift and effective integration. Establishing a strong project governance framework is foundational for post-merger integration as it optimizes resource utilization, defines functional authority, ensures role clarity and effectively manages time, resources, and budgets. In terms of KPIs, the study considers Return on Investment (ROI) as a robust measure of integration success as it incorporates a comprehensive assessment of multiple factors.

## IV - Impact of Buy-and-Build Strategy on PE Investments Returns

PE investments usually offers attractive returns, particularly to High-Net-Worth Individuals

(HNWI), although it often carries an higher risk compared to more traditional investments like ETFs. Recently, the returns from PE have been higher than many stock indexes such as the Russell 2000 and S&P 500. So far, it has been highlighted that well-executed buy-and-build strategies can create significantly more value than just standalone transactions by boosting the IRR, as spotlighted by Brigl et al. (2016), despite the fact that, as previously mentioned, PE firms typically pay a higher price for the platforms. They found that buy-and-build deals average a 31.6% IRR compared to 23.1% for standalone deals. Moreover, the characteristics of the platform company also influence investment returns. Deals involving smaller platforms[2] saw an average IRR of 52.4%, while standalone deals yielded 20.3%. Conversely, larger platforms, valued at over $290 million, underperformed compared to both smaller platforms and standalone deals. The study emphasizes that aiming to deepen the platform company's roots within an industry yields higher returns, with an average IRR of 43.5%, whereas diversifying the business results in a lower average IRR of 16.4%. Additionally, the experience of PE firms and the number of add-on acquisitions also impact the IRR. Firms with extensive experience in multiple add-on deals tend to yield higher returns. Those making multiple acquisitions achieved an average IRR of 36.6%, while those doing fewer deals had lower returns - 28.7% for medium-frequency acquirers and 27.3% for less frequent ones. Furthermore, deals involving just one or two add-ons achieved an average IRR of 35.5%, while those with more than two add-ons averaged 19.9%. In another paper, Grishunin et al. (2022) tested the performance of buy-and-build strategies compared to traditional PE-backed leveraged buyouts[3] regarding metrics, such as sales growth, ROA[4] and ROS[5]. They realized that using a buy-and-build strategy increases sales more than LBOs do. On average, annual sales with buy-and-build strategies are 28.73%

[2] Enterprise value of less than $70 million
[3] PE deals strategies that are not buy-and-build by its nature
[4] Return on Assets (EBIT-to-Total Assets)
[5] Return on Sales (EBITDA-to-Sales)

higher than PE investments with strategies that are not buy-and-build by its nature. Also, when buy-and-build strategies cross different industries, they tend to have lower ROA compared to LBOs. Lastly, when a reputed PE firm uses a buy-and-build strategy, it generally leads to better performance in sales, ROA, and ROS compared to commonly used LBOs.

## V - Buy-and-Build Exit Routes

Accordingly to Lubberdink (2017), despite platform companies growing in size after add-on acquisitions with the buy-and-build, there's no conclusive evidence that this strategy significantly increases the chances of an IPO exit. Instead, these companies are more likely to be sold to another PE firm (secondary buyout) rather than a trade sale. Also, it is observed that the post-exit performance of buy-and-build firms isn't heavily impacted by the chosen exit route, indicating that PE firms prioritize investor returns over long-term portfolio company performance after exit since they choose the route that maximizes investor's returns. Bles (2020) states that when considering the length of the investment period, it appears that the chances of a secondary buyout increase with longer holding periods. Furthermore, the influence of buy-and-build strategies on exit routes appears to decrease the probability of an IPO, although this relation loses relevance with the increase in the number of add-on acquisitions and the expansion of the dataset.

## VI - Acquisition Case Study: Gòma Camps S.L.U acquisition by The Navigator Co.

### a - M&A in the Tissue Sector

Exporting tissue paper products presents significant challenges due to factors such as logistics, transportation complexities and competition in the local market. The shipping process involves considerable costs, the risk of supply chain disruptions and the delicate nature of these products requires meticulous storage and handling to maintain their quality throughout the shipping journey. Also, establishing brand recognition in foreign markets, especially against local or global competitors, adds another layer of difficulty. Therefore, a buy-and-build strategy emerges as an interesting alternative for companies looking to expand in the tissue business. It overcomes the complexities of shipping and the substantial investments required for new facilities in foreign countries, which can also take longer. Through buy-and-build, access to additional product portfolios and customer bases offers a faster path to growth in the industry. Recent years have witnessed a surge in M&A activity within the tissue segment, particularly in Europe. These deals have brought substantial synergy benefits, improving the business landscape and enabling companies to achieve higher and consistent margins post-consolidation in Europe. In Europe, tissue acquisitions have predominantly involved smaller transactions, focusing on strategic acquisitions of individual mills or small companies. The industry's fragmented structure sustains ongoing M&A activity, with larger players frequently targeting smaller and mid-sized companies (Petäjä and Helin, 2017).

### b - Transaction Details

In March 2023, The Navigator Co. finalized the acquisition of Gòma Camps Consumers, S.L.U. as part of its ambitious plan to diversify its portfolio and expand within the tissue segment. The total consideration for the acquisition amounted to 60,951,811€, paid entirely in cash, without the need to incur any additional debt. This acquisition involved the entire capital of Gòma Camps Consumer, S.L.U., based in Zaragoza and Gomà Camps France SAS, located in Castres, France. These entities have been renamed Navigator Tissue Ejea, S.L.U. and Navigator Tissue France SAS, respectively.

### c - Transaction Rationale and Impact

The integration of this new facility has allowed The Navigator Co. to position itself as the second-largest Iberian producer of tissue and gain market share in a market where the company wants to reinforce its presence. It has added 35,000 tonnes of annual tissue paper production capacity, reaching a total of 165,000 tonnes per year. Additionally, it increased annual 'converting' capacity by 60,000 tonnes, now at 180,000 tonnes yearly. This integration has facilitated more efficient management and expanded the portfolio of Iberian clients. It contributed to boosting business in Spain and France, leveraging the strategic location in Zaragoza to capture operational synergies, such as cost reduction through economies of scale. The extensive expertise, talent, and long-standing experience of GC Consumer's professionals were also important factors that made the company move forward with this acquisition. Three months post-acquisition, these two companies contributed €30,172,331 to sales (representing c.23% of tissue revenues) and €4,325,853 to the Group's net profit (c.3% of the net profit for that period).

## VII - Conclusion

PE investments constitute a strategic approach to increase the value of privately held companies, generating robust returns for investors through the employment of several strategies such as deleveraging, multiple expansion, and operational enhancements. However, the buy-and-build strategy has emerged as a prominent method within this landscape. This strategy involves an initial acquisition of a platform company followed by the integration of add-on acquisitions, strategically aiming to fortify and consolidate market presence. This strategy leverages synergies and operational efficiencies, although its success isn't immediate due to complex integration challenges. Managing integration challenges demands specialized expertise beyond usual operational skills. Successful integration involves swift decision-making, reexamining value drivers for cost reduction, and leveraging technology for enhanced productivity. PE firms' teams focus on identifying synergies, while portfolio company management operationalizes the merged entity. Also, the incorporation of integration professionals is crucial to enhance governance and maximize M&A opportunities. Post-merger integration involves synergies, integration speed, culture/change management, and project governance. Establishing a target operating model aids in function integration, while addressing cultural differences systematically and solid project governance are crucial. ROI serves as a robust measure of integration success, encompassing various factors. The impact of the buy-and-build strategy on PE investment returns is substantial. Well-executed buy-and-build strategies boost IRR, showcasing a 31.6% IRR for these deals compared to 23.1% for standalone ones. Smaller platform deals outperform larger ones, focusing on industry depth yields higher returns, and experienced PE firms with multiple add-ons achieve superior returns. Buy-and-build strategies drive higher sales growth (28.73%) but may have lower ROA across industries compared to traditional leveraged buyouts. Reputed PE firms using buy-and-build strategies generally exhibit better sales, ROA and ROS. While the buy-and-build strategy leads to growth in platform companies after add-on acquisitions, it doesn't significantly raise the likelihood of an IPO exit. Instead, these companies tend to be sold to another PE firm (secondary buyout) rather than through a trade sale. Interestingly, the post-exit performance of buy-and-build firms isn't highly affected by the chosen exit route. This suggests that PE firms prioritize maximizing investor returns over long-term portfolio company performance post-exit, guiding their choice of exit route.

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